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FINAL REPORT:
RPP-WTP SEMI-INTEGRATED PILOT PLANT

JUNE 2005

SAVANNAH RIVER NATIONAL LABORATORY

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FINAL REPORT:
RPP-WTP SEMI-INTEGRATED PILOT PLANT

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NOMENCLATURE

AA	Atomic absorption (spectroscopy)
ACTL	Aiken County Technology Laboratory (part of WSRC/SRNL)
ADS	Analytical Development Section (part of WSRC/SRNL)
AP101	DOE Hanford Site Tanks 241-AP-101 simulated waste
AN102	DOE Hanford Site Tank 241-AN-102
AN107	DOE Hanford Site Tank 241-AN-107
AY102	DOE Hanford Site Combined Tanks 241-AY-102 and 241-C-106
BNI	Bechtel National, Inc.
CIX	Cesium Ion Exchange (Process) (part of the RPP-WTP Pretreatment Facility)
CFD	Computational Fluid Dynamics
CUF	Cells Unit Filter (bench-top cross-flow filter used with both radioactively cold and hot wastes)
°C	Degree Centigrade (or Celsius)
D	Diameter
DIF	Deionized and Filtered (0.1 micron) Water
DOE	United States Department of Energy
dP	Differential Pressure
DS	See Solids
EDL	Engineering Development Laboratory (part of WSRC/SRNL)
EPDM	Ethylene Propylene Diene Monomer
FEP	(Waste) Feed Evaporation Process (part of the RPP-WTP Pretreatment Facility)
ft	Foot
gm	Gram
gpm	Gallons per Minute
HLP	High Level (Activity Waste) Process
HLW	High Level (Activity) Waste
hr	Hour
i.d. or ID	Inside Diameter
IC	Ion Chromatography
ICPES	Inductively coupled plasma emission spectroscopy
ICPMS	Inductively coupled plasma mass spectrometry
IHLW	Immobilized high level waste (glass)
ILAW	Immobilized low activity waste (glass)
in.	Inch
IX	Ion Exchange
hr	Hour
l or L	Liter
LAW	Low (Level) Activity Waste
m	Meter
M	Molar (mol/L)
Mg	Milligram
min	Minute
ml or mL	Milliliter
mm	Millimeter
MTG/d	Metric tons glass/day
MW	microwave acid dissolution
NAS	Sodium Aluminosilicate

nominal	A "nominal" rating does not give an exact size to a filter medium, but rather an approximation to the expected performance of a filter. In the case of Mott, a nominal rated 0.1-μm filter means that approximately 95% of particles greater than 0.1 μm will not pass the filter.
NTU	Nephelometric Turbidity Unit
o.d. or OD	Outside Diameter
OLI/ESP	Environmental Simulation Program software package used in the SIPP task
Pa	Pascal
PDMS	Polydimethylsiloxane – portion of Antifoam used for tracking purposes
PSD	Particle Size Distribution
psi	Pounds Per Square Inch
psig	Pounds Force Per Square Inch Gauge
psid	Pounds Force Per Square Inch Difference
PWD	Plant Wash and Disposal (System)
QA	Quality Assurance
RLD	Radioactive Liquid (Waste) Disposal (System)
RPP	River Protection Project (at the DOE Hanford Site)
s or sec	Time: Second
SBS	Submerged Bed Scrubber – source of LAW and HLW melter recycle streams
SIPP	Semi-Integrated Pilot Plant

Solids

TS = Total Solids = Mass percent of all solids in a stable slurry whether dissolved or not
UDS = Undissolved Solids = Mass percent of solids in a stable slurry that are not dissolved
DS = Dissolved Solids = TS - UDS = Mass percent of solids in a stable slurry that are dissolved
SS = Soluble Solids = (TS - UDS) / (100% - UDS) x 100% = Mass percent of solids in only the supernatant portion of a stable slurry

SPF	sodium peroxide fusion HCl uptake dissolution
SRNL	Savannah River National Laboratory (part of WSRC)
SS	See Solids
SSM	Steady-State Matrix (Applies to Campaign I only – see Fig. 33)
Std Dev	Standard Deviation
Supernate	Supernatant (see below for additional explanation)
TLP	Treated (Feed) LAW Process (part of the RPP-WTP Pretreatment Facility)
TS	See Solids
TMP	Transmembrane Pressure (the average pressure drop across the thickness of the filter medium – perpendicular to the slurry flow.)
TRU	Transuranic
UDS	See Solids
UF	Ultrafiltration
UFP	Ultrafiltration Process (part of the RPP-WTP Pretreatment Facility)
V	Velocity of the slurry flow along the length of the filter tubes
VSL	Vitreous State Laboratory (of Catholic University of America, Wash. DC)
WGI	Washington Group International
WTP	Waste & Immobilization Treatment Plant
WSRC	Westinghouse Savannah River Company
XRD	X-ray diffraction

Also note: Within this report, supernatant refers to the liquid (undissolved solids-free) portion of a slurry sample. When referring to the ultrafiltration process, the permeate is synonymous with the slurry supernatant; either term can thus be used, but permeate will be the preferred term herein. For the evaporation operations, the liquid fraction of the slurry feed or Bottoms product will be called the supernatant.

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ABSTRACT

In August 2004 the last of the SIPP task testing ended - a task that formally began with the issuance of the RPP-WTP Test Specification in June 2003. The planning for the task was a major effort in itself and culminated with the input of all stakeholders, DOE, Bechtel National, Inc., Washington Group International, in October 2003 at Hanford, WA (Appendix A). This report documents the activities carried out as a result of that planning.

Campaign IV, the fourth and final step towards the Semi-Integrated Pilot Plant (SIPP) task, conducted by the Savannah River National Laboratory (SRNL) at the Savannah River Site, was to take the several recycle streams produced in Campaign III, the third step of the task, and combine them with other simulated recycle and chosen waste streams. (Campaign III was fed recycles from Campaign II, as Campaign II was fed by Campaign I.) The combined stream was processed in a fashion that mimicked the pretreatment operations of the DOE River Protection Project – Waste Treatment and Immobilization Plant (RPP-WTP) with the exception of the Ion Exchange Process. The SIPP task is considered semi-integrated because it only deals with the pretreatment operations of the RPP-WTP. That is, the pilot plant starts by receiving waste from the tank farm and ends when waste is processed to the point of being sent for vitrification. The resulting pretreated LAW and HLW simulants produced by the SIPP were shipped to VSL (Vitreous State Laboratory)[†] and successfully vitrified in pilot WTP melters.

Within the SIPP task these steps are referred to as Campaigns and there were four Campaigns in all. Campaign I, which is completely different than other campaigns, subjected a simulant of Hanford Tank 241-AY-102/C-106 (AY102) waste to cross-flow ultrafiltration only and in that process several important recycle streams were produced as a result of washing the simulant and cleaning the cross-flow filter. These streams were fed to subsequent campaigns and that work was the subject of the issued Campaign I interim report (Duignan et al., 2004a or Appendix I-1). The streams created in Campaign I were used for Campaign II, and during Campaign II more of the same recycle streams were produced, with the addition of recycle streams created during the pilot-scale ion exchange unit operation (Duignan et al., 2004b or Appendix I-2). Campaign III used the recycles from Campaign II and was the first campaign to use all the recycle streams (Duignan et al., 2004c or Appendix I-3).

The operation of each of the subsequent campaigns, i.e., II, III, and IV, while different from Campaign I, are very similar to each other, and can be best understood as the process of operating a series of Pretreatment Unit Operations in a somewhat prototypic manner. That is, while Campaign I studied the operation of a single, albeit important, Pretreatment Unit Operation, i.e., Ultrafiltration, subsequent campaigns were to study the four major unit operations that make-up the RPP-WTP Pretreatment Facility. They are: Waste Feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and the Treated LAW Evaporation Process (TLP). Each of the campaigns operated basically as a separate subtask, but as with Campaign I, the recycle streams produced in one campaign were fed into the subsequent campaign. Therefore, all four campaigns were

[†] Part of the Catholic University of America

chemically connected through these recycle streams, which carry over effects of the preceding campaign.

The results of Campaign IV operations are the subject of this fourth and final report. Separate reports were issued after each of the previous campaigns, but they were treated as interim because of being limited to the results obtained from a single campaign (or past campaigns) and further limited to only highlights of that single campaign. This final report not only discusses the Campaign IV results but compares those with the previous campaigns. Also included is a more comprehensive discussion of the overall task activities, as well as abridged versions of the full databases of the accumulated results and the equipment used during the year-long SIPP task.

SIPP is a limited version of the plant's pretreatment facility in that it tests pilot-scale unit operations of FEP, UFP, CIX, and TLP only. However, an integral part of SIPP is to produce the many recycle streams that must also be processed with the stored tank farm waste. That is, it is very important to know the impact that the recycle streams will have on the operation of the several unit operations so as to better model the plant's overall pretreatment throughput, leading to a production rate of stabilized waste.

Like the interim reports, this report will begin with a summary of the overall operation of the task done during Campaign IV to understand the layout of this report. This summary is then followed with highlights of the test results.

With input and review from Hanford, SRNL developed a steady-state OLI/ESP model of the RPP-WTP Pretreatment Facility operation. That model's principal role was to determine the amounts of simulated wastes needed for each of the four unit operations. In general, it did well, but was found to be off by approximately 15% in predicted SIPP volumes due to unknowns in the undissolved solids of the several simulants. (For a detailed discussion of model predictions differences see the Campaign II Interim Report, Duignan et al., 2004b or Appendix I-2; and Appendix B of this report.)

Each of the SIPP task interim reports contains many conclusions. The main conclusions of those reports, and those of Campaign IV, are listed below for this final report. All of the conclusions as they were reported in those interim reports can be found in this document at the end of each of the appropriate unit operations.

FEP Evaporation

- In Campaign IV a total of about 1119 kg of FEP, feed was concentrated down to 175 kg.
- The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C) and the entire evaporation process proceeded as designed.
- The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water and for this campaign the average evaporation rate was met or exceeded.
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.

- Mixing of the recycles in a different order for Campaign IV had no effect on the evaporation process as compared to the previous campaigns.
- The FEP feed and Bottoms concentrations for Campaigns III and IV were very similar, indicating that steady-state had been reached with respect to the recycle compositions.
- The precipitation of sodium oxalate in the FEP evaporator occurred in all three campaigns and accounted for most of the precipitated solids found. Dissolved oxalate, present in the feed, began to precipitate when approximately 53% of the feed had been evaporated. A total of about 90 wt% of the oxalate precipitated at the end of evaporation. The oxalate appears to have precipitated as the Na salt $Na_2C_2O_4$.
- The composition of the FEP feed was predictable by mass balance of the individual feed streams.
- Dissolved metals concentrations parallel the ratios in the AY102 simulant present in the recycles.
- About 25-40% of the dissolved Al in the feed to the FEP evaporator precipitated during mixing of the recycles, assumed to occur because of localized regions of low pH. Vigorous mixing when joining caustic and acidic recycle streams in the Plant Wash and Disposal System would help to minimize Al precipitation.
- About 56-61% of the aluminum was dissolved in the Campaign IV feed and the concentrate (Bottoms), which was similar to the Campaign III percentage. This dissolved Al fraction was less than 60-79% realized in Campaign II, resulting in more undissolved Al fed to the UFP.

UFP

- The performance of the GKN filter unit was similar to that of the Mott filter unit under steady state conditions. In addition, the permeate flux of the GKN filter unit during dewatering was the same as the Mott filter unit, within measurement uncertainty, for the same simulated waste mixture.
- In Campaign IV, using the GKN filter unit, the average, temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 20 wt% UDS was 0.013 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 17 wt% UDS was 0.016 gpm/ft^2.
- Permeate flux improved at higher slurry temperatures. At 19 wt% UDS, 40 psid TMP, and a slurry velocity through the filter of 12 ft/s, the permeate flux improved almost 75% at 45ºC compared to 25ºC.
- During the elevated temperature tests at a constant solids loading of 19 wt% UDS no significant changes occurred with respect to solids concentrations and particles sizes. As expected, as the simulant temperature increased from 25°C to 45°C the consistency of the slurry and the viscosity of the permeate decreased from 14 to 11 mPa•s and from 2.9 to 1.8 mPa•s, respectively, while the slurry yield stress increased approximately 10 to 12 Pa.

All Campaigns

- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 1 NTU. The Test Specification indicated a threshold of 2 NTU, therefore, the measured values indicated that the permeate was free of significant undissolved solids.
- The SIPP and previous UFP tests indicate that the magnitude of the permeate flux during acid cleaning of a filter appears to be more of a function of the waste dewatered than of the filter unit used, i.e., Mott or GKN.
- The increase in the adjusted permeate flux between the second and third acid cleaning steps was minimal in Campaigns II, III, and IV, possibly indicating that the third acid cleaning was unnecessary. The exception was Campaign I where whitish solids in the spent solutions of the first and second acid cleanings inhibited the permeate flux, requiring a third acid cleaning (and possibly a fourth) to reach steady conditions. The Campaign I simulant did not contain AP101 and FEP Bottoms, indicating that the necessity of a third acid cleaning was dependent on the waste dewatered.
- Cleaning the filter with 2 M nitric acid after dewatering was sufficient to increase baseline permeate flux to approximately an order of magnitude higher than that of average waste flux during dewatering. However, it was not sufficient to return the filter to pre-test flux levels. In previous campaigns, soaking the filter unit in 0.1 M NaOH for an extended period of time (2 months or more) typically regained the pre-test flux levels. The significance of "2 months or more" is that 2 months was typically the duration between successive SIPP campaigns.
- The compositions of the undissolved solid species in the washed sludges in Campaigns I-IV were similar, as expected. The soluble species concentrations in the slurry and permeate for Campaigns II-IV were similar, as expected.
- The balances on aluminum over the process were not consistent and could not be closed without additional analytical data.
- Ammonium in the first Campaign III 0.01M NaOH wash was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Approximately none of the ammonium in the second wash was retained.
- The antifoam agent did not have any observed macroscopic effects on the filter operations of the SIPP, which is also consistent with similar commercial industrial experience (Watts et al., 1995). However, since the filter was cleaned between each run, the effect of possible accumulation of antifoam on the filter media with no cleaning between runs was not determined.

CIX

- Pressure drops for the four cycles were low and the resin beds permeabilities were approximately the same as were measured for the 24-Inch Column Test with fresh resin (Fowley et al, 2004).
- The pressure drop across the columns during the flow of simulant generally increased with each cycle of the four cycles of operation.

- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of simulated waste were treated. In fact, in the worst case, Cycle 4, even after 190 BV of treated waste the lead column exit cesium concentration was less than 7% of the feed waste.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical difficulty of measuring very low cesium concentrations in five molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of simulated waste were treated. This limitation was acknowledged before the start of testing.
- The fraction of the original cesium in the simulant that was removed by the lead column generally decreased over the four cycles of testing.
- The masses of cesium in and out of the resin beds for all four cycles balanced to within measurement uncertainty.
- During cesium elution 97% of the Cs was removed during the first 3.4 BV.
- A post-test measurement of the dry mass of the SuperLig®644 resin found a ratio of resin in sodium form to resin in hydrogen form to be 1.19 and 1.22 for Columns 1 and 2, respectively.
- A pre-test particle-size distribution of the resin was found to be 78±4 wt% (Mesh > 30), 20±4 wt% (30 ≤ Mesh ≤ 40), and 2±1 wt% (Mesh < 40), where 95% confidence limits were used. A post-test PSD on the resin found no change in the Column 2 contents, indicating that no degradation of the resin occurred. The post-test PSD on the Column 1 resin was nominally larger. (84±4 wt%, 15±4 wt% and 1±1 wt%), although the error bars of the pre-test and post-test measurements overlap. There is no evidence for resin degradation in either column.

TLP Evaporation

The TLP was not used during Campaign IV but some overall SIPP conclusions are:

- The TLP operation met expectations by concentrating feed from a density of 1.1 kg/L to 1.4 kg/L or increasing the sodium concentration from approximately 2 M to 8 M.
- Foaming was not an issue, but when the required amount of antifoam was added, i.e., 1500 ppm, a region that can be best described as the disengagement of liquid and gas, decreased from approximately 2 ft to 1 ft.
- The lower demister pad remained free of solids throughout testing.
- The composition of products from the TLP matched what was expected from the mass balance.
- Tracking the fate of antifoam in the many simulant streams was not possible because of the ineffectiveness in the methods used to measure its concentration. However, it appears that an insignificant amount of antifoam was carried over into the evaporator condensates. This result was not surprising because of the high boiling point of the polyols fractions of the antifoam. Further, it appeared that the active component of the antifoam did not partition into the permeate stream, that is, it remained in the UFP sludge,

but the poor detection capabilities do not allow accurate quantification of the antifoam concentrations.

- The composition of the products from the TLP matched what was expected from the mass balance.
- No precipitation of solids was observed. (Feed had undissolved solids from LAW SBS recycle.)
- The concentration of aluminum in the TLP product from Campaign III was less than the result of Campaign II since the UF permeate contained less dissolved aluminum.

Note on Antifoam

In the filtration system, nearly all of the antifoam component polydimethylsiloxane (PDMS) remained in the washed concentrated sludge stream which is consistent with similar studies (Watts et al., 1995). Analysis indicates that very little if any of the PDMS was found in the UFP recycles or permeate. Nearly all of the PDMS was also retained in the FEP and TLP Bottoms concentrates, with no detectable PDMS in the condensates. Since PDMS is essentially insoluble, non-homogenous sub-samples, coupled with analytical recoveries of less than 80%, did not allow for accurate quantification of the PDMS for the purposes of process material balances in all the SIPP process streams. SRNL recommends that extraction of the entire samples before analysis should be investigated for any future antifoam analytical work. Furthermore, no conclusions about the fate of the polyol fraction of the antifoam could be made since this portion was not tracked. Future work on the fate of this antifoam fraction is warranted.

Observations from the SIPP task to the Overall Operation of WTP

The SIPP operations conducted at SRNL using simulated WTP startup feed performed well without any significant incidents that caused disruption of operations. All four unit operations (Evaporation FEP& TLP, Filtration-UFP, and Ion Exchange-CIX) performed nearly flawlessly and without significant unplanned downtime. The LAW and HLW supernate and slurry products produced by the SIPP were successfully vitrified by VSL (Matlack et al., 2005a, Matlack, et al., 2005b).

The SIPP met all success criteria with the exception of demonstration of a scaled throughput of 80 MTG/day of LAW and 5.4 MTG/day HLW. This criterion[†] was partially met by the SIPP in that both evaporators preformed at or above the evaporation rate necessary to meet the desired production rates. The pilot ultrafiltration system was not able to meet the production rates given a filter concentration end point of 20 wt% undissolved solids (UDS). However, glass production rates can be met for simulated AY102/C106 with AP101 slurries by reducing the target ultrafiltration concentration endpoint between 15.4 and 16.5 wt% UDS. After the wash cycle is completed, higher undissolved solids concentrations can be achieved by concentrating the UFP slurry after washing (flux rates are much higher during washing) without reducing the overall plant production rate. Therefore, concentrating less, to

[†] The pilot ion exchange testing was by design not required to meet full scale plant production rates (See Test Exception No. 7 in Section 1.2)

a lower UDS, will not necessarily have the effect of producing a more dilute feed to the HLW melter system. Concentrating to lower UDS does result in producing less LAW feed per unit of UF feed and does result in slightly more LAW (supernatant) being recycled to the Plant Wash and Disposal (PWD) System. Increasing the operating temperature of the ultrafiltration operation also proved to increase the filter production rate beyond the desired production rate goals.

The impact of recycle solutions on SIPP operation proved to have no macroscopic effects on the overall SIPP operation or the individual unit operations. While some solids (e.g. oxalate & aluminum) were found to precipitate in the Plant Wash & Disposal and FEP evaporator systems, none of the these solids proved to have an impact on the overall operation of the SIPP.

Given the limits (e.g. non-prototypical piping layouts, mixing systems, simulant chemical/physical properties vs. actual waste) of the testing described in this report, the full-scale WTP Pretreatment facility unit operations that were simulated by the SIPP should also perform well using AY102/C106 feeds. However, since not all start-up and operational risks can be fully anticipated or mitigated by SIPP testing, the following observations and lessons learned should be considered by the designers and operators of the WTP.

- Precipitation of aluminum, in some tank waste compositions can increase the total number of HLW canisters produced, therefore, additional sodium hydroxide maybe necessary to prevent unwanted Al precipitation.
- Ammonium, transferred from the Duratek LAW Submerged Bed Scrubber, will partition to the concentrated/washed HLW transferred to the WTP HLW melter system. The ammonium will likely recycle back to the WTP Pretreatment facility via the HLW SBS condensate system. Incorporation of ammonium chemistry into the WTP models should be implemented to assess the fate and impact of ammonium on the overall operations of the WTP. The potential to generate ammonium nitrate in the WTP vessel vent system should be evaluated. Consideration should be given to determining if the TLP evaporator condensate and LAW melter SBS condensates can be treated and disposed of separately rather than recycling these materials to the front end of the Pretreatment facility. This would also decrease the buildup of corrosive anions (e.g. Cl, F, SO_4) in the TLP system.
- Maintenance of the ultrafiltration system may dislodge solids and cause a loss in filter flux. WTP should consider cleaning the filter after maintenance is conducted. A detailed filter system performance monitor program maintained by the future WTP filter system engineers would reduce plant down time when filter flux performance issues occur.
- Decon solutions that are generated from hot cell equipment maintenance were not tested in the SIPP. These solutions can carry larger concentrations of glass formers, sludge, salts, and ammonium then the nominal recycles tested by the SIPP. WTP personnel should assess the impact of processing decon solution generated from maintenance activities to determine if any unwanted reactions (e.g. precipitation) will occur.

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1.0 TESTING SUMMARY

1.1 OBJECTIVES

This final report contains data from all four campaigns, i.e., Campaigns I, II, III, and IV, that comprised the SIPP task. Testing was done on pilot scale unit operations of the WTP Pretreatment Facility and ranged from just ultrafiltration (UFP) in Campaign I, to just feed waste evaporation (FEP) and UFP in Campaign IV, to all four operations, i.e., FEP, UFP, Ion Exchange (CIX), and treated LAW evaporation (TLP) in Campaigns II and III. As the task evolved the simulated waste streams became chemically more complex. Campaign I filtered a single Hanford waste 241-AY-102, which was followed by combining two waste streams, 241-AY-102 and 241-AP-101 with recycle waste stream in Campaigns II, III and IV. The objectives listed below are those given in the RPP-WTP Test Specification (Longwell, 2003). For completeness, however, only the body of work approved in the WSRC Technical Task and Quality Assurance Plan (Duignan, 2003c) is required to satisfy this task. Objectives not met because they were not agreed to in the Task Plan are so noted.

Overall Test Objectives	Objective Met (Y/N)	Discussion
1. Modify the design and operation of the existing pretreatment pilot facilities to extent necessary to mimic the WTP Pretreatment Facilities.	Y	Each of the four unit operations that comprise the SIPP test were either modified or built to meet planned operation.
2. Operate the (pilot) integrated facilities using simulated AY102 (Envelope A/D) and AP101 (Envelope A) waste feeds.	Y	Campaigns II, III, and IV involved the use of simulated AY102, AP101, and recycle streams.
3. Collect chemical and physical property data to be defined in the test plan then refine and validate the thermodynamic model(s) developed by SRNL.	Y	Sufficient property data were obtained to satisfy project needs as is evidenced by the customer-approved sample plan matrices that are included in Appendix D.
4. Demonstrate pretreatment production rates required to produce 80 metric tons per day of LAW glass and 5.4 metric tons of HLW glass. These are contract defined "expected" production throughputs for 5-day sprint runs listed in Table C.6-5.1 of the contract (DOE 2003). These required flow rates will be determined before testing begins by application of the appropriate scale factors to the unit operations that represent an equivalence of pretreatment throughput to meet maximum glass production.	N	The unit production rates were measured but the targets were not met. The SIPP task was limited to four separate unit operations that comprise the principal operations of the RPP-WTP Pretreatment Facility. The pilot FEP and TLP evaporation units exceeded the plant-modeled rate of 0.395 gpm. The pilot CIX was subjected to a test exception (described in Section 1.2), which changed this objective. As shown in Campaigns II, III, and IV, the pilot ultrafiltration permeate rate during Campaign IV dewatering from ~3 to 20 wt% UDS was 0.013 gpm/ft^2. This rate is below the target rate of 0.02 gpm/ft^2, but is representative of the filter process since a similar flux rate was obtained for Campaign I, with no recycle streams, and Campaigns II, III, and IV included several recycle streams. However, if some of the suggestions made in Section 2.10 to modify the UFP process of either concentration to less than 20 wt% UDS or operation at higher temperatures, then the stated productions rates may be attainable.

FEP/TLP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the Waste Feed Evaporator and the Treated LAW Evaporator using simulants derived from the integrated operation of the pretreatment pilot plant.	Y	Feeds during Campaigns II-IV for both the FEP and TLP evaporators included derived simulants or recycle streams produced during SIPP operations.
2. Recycle secondary waste generated from the pilot ultrafiltration operation and the pilot ion exchange unit operation to the evaporators.	Y	Recycle streams from the pilot ultrafiltration operation from Campaigns I, II, and III were fed to the FEP evaporator in Campaigns II, III, and IV, respectively.
3. Operate the pilot evaporator using simulated HLW Submerged Bed Scrubber solution, simulated Pretreatment Caustic Scrubbers, ion exchange recycle solutions, and ultrafiltration recycles generated from pilot operations.	Y	Campaign II, III, and IV used all the streams indicated.
4. Operate the pilot evaporator using simulated LAW Submerged Bed Scrubber solution and ion exchange treated feed to produce LAW feed solution.	Y	See the preceding response.
5. Compare the results (solubility, chemical, and physical properties, which will be indicated in the test plan) developed on the pilot scale with results developed by experiments conducted at the bench scale.	Y	Limited bench-scale evaporation tests are compared to SIPP results in Section 2.11.
6. Determine the chemical and physical properties of simulants evaporated at the pilot scale as a function of sodium concentration and temperature.	N	The approved task plan did not require these property vs. temperature evaluations. However, densities and sodium concentrations were measured and included in this report.
7. Evaluate the selected antifoam reagent performance in the evaporators.	Y	Antifoam was added to both evaporators and those results are discussed herein.
8. Evaluate the effect of in-leakage on air emissions.	N	This work was not included in the approved task plan due to cost.
9. Determine the chemical and physical properties of concentrated recycle and waste blends, which will be indicated in the test plan, to be sent for precipitation/ultrafiltration.	Y	The concentrated Bottoms streams were analyzed and discussed herein.
10. Operate the pilot evaporator unit assuming a full-scale WTP Pretreatment process flow rate of 80 metric tons of LAW glass per day and 5.4 metric tons of HLW glass per day (herein written as 80/5.4 MTG/d).	Y	Both evaporators were run at a rate of better than the plant rate of 0.395 gpm, which was based on a production rate of 80/6 MTG/d (Calloway, 2004).

UFP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate with prototypical wash/leach/wash/steps using simulated AY102 and AP101 and concentrated evaporator recycles.	Y	The approved task plan made the leach step optional, pending RPP-WTP guidance. Before testing began RPP-WTP decided against doing the leach step. All other objectives were met.
2. Operate with prototypical/recommended Ultrafiltration cleaning method.	Y	RPP-WTP recommended continued use of 2 M nitric acid for cleaning, which was done.
3. Determine the chemical and physical properties of the concentrated solids, washed solids, leached solids, and final solids product derived from each campaign.	Y	Properties of the concentrates were measured. However no leaching was performed as requested by the RPP-WTP customer.
4. Determine the chemical and physical properties of permeate, recycles, and cleaning solutions, which will be indicated in the test plan, derived from each campaign.	Y	Properties of those streams were measured and discussed herein.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	Y	A limited set of bench-scale filtration results are compared to SIPP Campaign I for AY102/C106 in Section 2.11.
6. Provide pump data (pump curves) for the high solid content slurries.	N	This requirement was not included in the approved task plan.
7. Demonstrate operation of the ultrafiltration unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	See response 4 to the Overall Test Objectives, above.
8. Evaluate the downstream effects of antifoam reagent. Determine the fate of the reagent by tracking its concentration through the integrated pilot.	N	The effect on filter flux seemed to be insignificant, but it is discussed herein along with that data used to track the antifoam.

CIX Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the pilot ion exchange unit using ultrafiltration permeate produced using simulated AY102 and AP101.	Y	This was done along with the Bottoms produced by evaporating the several recycle streams.
2. Operate the pilot ion exchange unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	Test Exception 24590-WTP-TEF-RT-03-069 required the pilot CIX show prototypic cesium removal. This required matching the Plant's treated waste residence time in the resin and not the full-scale flow rate. Therefore, this objective could not be met.
3. Demonstrate ion exchange column operating parameters using the recommended ion exchange resin.	N	See the answer to CIX Test Objective No. 2.
4. Determine the chemical and physical properties, which will be indicated in the test plan, of all ion exchange effluents.	N	Only Lead and Lag column effluents were measured for Cs concentrations to minimize cost since Campaign II had already made the complete set of measurements. The WTP approved list of measurements are shown in the Sample Plan given as Appendix D.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	Y	Limited bench-scale ion exchange tests are compared to SIPP results in Section 2.11.
6. Determine the chemical and physical properties, which will be indicated in the test plan, of blended ion exchange secondary wastes (pre-elution rinse and spent regenerant) that are recycled back to the waste feed evaporation system.	N	See response to Item No. 4 of CIX Test Objectives.
7. Determine the chemical and physical properties of ion exchange eluates, which will be indicated in the test plan.	N	See response to Item No. 4 of CIX Test Objectives.
8. Evaluate the potential effects of the evaporator antifoam reagent on ion exchange performance.	Y	The effect on ion exchanger seemed to be insignificant, based on good cesium removal.

1.2 TEST EXCEPTIONS

List Test Exceptions	Describe Test Exceptions
1. 24590-WTP-TEF-RT-02-025, Rev. 0, 20 May 2002	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
2. 24590-WTP-TEF-RT-02-046, Rev. 0, 01 Aug. 2002	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
3. 24590-WTP-TEF-RT-03-004, Rev. 0, 07 Feb. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
4. 24590-WTP-TEF-RT-03-037, Rev. 0, 30 Jul. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
5. 24590-WTP-TEF-RT-03-037, Rev. 1, 17 Sept. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
6. 24590-WTP-TEF-RT-03-054, Rev. 0, 17 Sept. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
7. 24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003	As of the completion of Campaign II there was no test exception to the SIPP task plan (Duignan et al., 2004). All of the listed test exceptions, 1 though 7, affect only a task plan dealing solely with ion exchange operation (Steimke, 2002). For completeness, all the test exceptions were listed but only this seventh test exception impacts SIPP test. As with all the other pilot unit operations, the pilot-scale CIX was to operate in a fashion to demonstrate the rate of glass production. However, RPP-WTP thought it was more important to demonstrate cesium removal efficiency. Therefore, the CIX was scaled to match LAW residence time only. The pilot unit was not used at a LAW flow rate that would demonstrate glass production rates. This seventh test exception describes how the pilot scale CIX columns would operate to demonstrate cesium removal. That removal efficiency is what is discussed herein.

1.3 RESULTS AND PERFORMANCE AGAINST SUCCESS CRITERIA

List Success Criteria	Explain How the Tests Did or Did Not Meet the Success Criteria
1. The integrated operation of the pretreatment process produces vitrification feed streams similar in chemical composition to those produced in bench scale experiments.	Bench scale experiments were not part of the SIPP scope. However, the SIPP task did produce both LAW and HLW feed streams with simulated waste and recycle streams that were processed in the same manner expected for the RPP-WTP Pretreatment Facility. The chemical composition obtained is that which is expected for the full-scale facility and therefore this criterion was met.
2. The integrated pretreatment process demonstrates a scaled throughput of 80 MTG/d of LAW and 5.4 MTG/d of HLW.	This success criterion was partially met in that both the pilot FEP and TLP operated at, or above the evaporation rate (0.395 gpm) necessary to meet the stated glass production rates. The pilot UFP realized a dewatering filter flux rate of 0.013 gpm/ft^2. This value is below the rate needed to meet the glass production rates, but is representative of rate obtained from bench scale test with actual waste. The pilot CIX rate purposely did not meet the full-scale plant rate as explained in Test Exception No 7 above.

1.4 QUALITY REQUIREMENTS

This work was conducted in accordance with the RPP-WTP QA requirements specified for work conducted by SRNL as identified in DOE IWO M0SRLE60. SRNL has provided matrices to WTP, demonstrating compliance of the SRNL QA program with the requirements specified by WTP. Specific information regarding the compliance of the SRNL QA program with RW-0333P, Revision 10, NQA-1 1989, Part 1, Basic and Supplementary Requirements and NQA-2a 1990, Subpart 2.7 is contained in these matrices.

1.5 R&T TEST CONDITIONS

List R&T Test Conditions	Were Test Conditions Followed?
1. SRNL shall prepare a specific test plan containing detailed information needed to implement (the) test specification. The test plan shall also include, as appropriate, references to documents that drive test documentation requirements to assure data integrity and reproducibility. This would include such items as detailed test procedures, instrument calibration, methods of data gathering, etc. The test plan shall indicate what methodologies will be employed to verify or validate data produced during testing activities. A draft test plan shall be submitted to WTP R & T for review and comment. Comments labeled "Mandatory" by the reviewer require a disposition. The changes in the test plan shall be provided electronically and clearly identified by redline/strikeout or highlighting to facilitate the review process. The final test plan must be approved by a WTP R & T representative prior to performing work.	As required, a test plan was developed (Duignan, 2003c) to meet the test specification. All analytes that could not meet the listed criterion were indicated in the task plan and approved before testing began. Documents that were available before and when the test plan was completed were referenced therein, but those that were not, e.g. procedures, calibration, are referenced in this final report. The test plan was submitted to WTP R&T for review and approval. All reviewers' comments were addressed and dispositioned, after which the report was approved by WTP R&T prior to testing, thus it became the principal document to carry out testing. This was part of the meeting content held in Hanford in October 2003 (Appendix A)
2. Volumetric waste-to-recycle ratios will be calculated using appropriate WTP's Aspen Custom Modeler (ACM) Model runs as a basis for the combined feed stream. The block diagram to be used for this work is depicted in Figure 1. Simulant AY102 feed rate will be established based on the requirement for scaled 6 MTG/d HLW production, and AP101 feed rate will be based on the additional requirement to produce scaled 80 MTG/d LAW production. Tankage required for execution of the work will be provided and incorporated as required by [SRNL]. Prior to initiation of the test campaigns, the system will be simulated using the OLI Environmental Simulation Program (ESP) models developed in previous completed evaporation tasks. The expanded waste feed evaporation model, which includes ultrafiltration and recycles, along with the treated feed evaporation model will simulate the pilot operations under minimum (48/3.2 MTG/d) and expected (80/5.4 MTG/d) operating conditions. Output of the models will then be compared to above referenced ACM model runs and the data obtained during the pilot operations. Results of this modeling effort will be discussed with WTP R&T personnel and approval of the path forward obtained **PRIOR TO START** of testing.	As required, SRNL developed an OLI model based on several sources, included ACM and sources for ACM prior to any SIPP testing. The modeling results were compared to ACM results by both SRNL and RPP-WTP personnel. The OLI results were scaled to SIPP operation to assist in completing a test plan and to determine waste stream and recycle stream volumetric needs. The model was also used to determine scaled flowrates of each of the four unit operation in order to know what operation rate were necessary to meet full-scale plant glass production rates of 80 MTG/d from LAW and 5.4 MTG/d from HLW. Those model results are discussed in Duignan et al., (2004b), Barnes (2004), and in Appendix B.

List R&T Test Conditions	Were Test Conditions Followed?
3. The LAW and HLW SBS recycles will be simulants generated from VSL/Duratek pilot melter testing.	Both submerged bed scrubber (SBS) recycle streams were obtained from VSL and used in the testing of Campaigns II, III, and IV.
4. The simulant waste feeds will be based on approved formulations developed under the WTP's waste simulant program participated in by SRNL.	The simulated waste feed AY102 was developed and validated by SRNL (Zamecnik, et al., 2004). It was filter tested at the bench scale against an actual waste sample. The formulation was approved by WTP R&T before its use. The formulation for the simulated feed AP101 was developed by Battelle (Russell et al., 2003) and approved by WTP R&T. All other waste streams used for SIPP are either recycle streams or derived from recycle streams.
5. Generation of initial ultrafiltration recycles will be accomplished by performing the work specified in *AY102 Simulant Pilot Scale Ultrafiltration and Washing Test*, 24590-PTF-TSP-RT-02-015 (Townson, 2002).	The production of these recycle streams was done during Campaign I (Duignan et al., 2004a or Appendix I-1).
6. An exception to the test matrix defined in (the Campaign I test) specification 24590-PTF-TSP-RT-02-015 will be to not perform certain tests specified in Appendix A, Table 1.1 (of that specification). The tests that will not be performed are (listed in the SIPP Test Specification, Longwell, 2003.)	This condition only applied to Campaign I operation, which had pilot-scale UFP test runs at steady-state UDS concentration. It was not applicable to subsequent campaigns.

1.6 SIMULANT USE

Many simulated waste streams were either used or produced during SIPP testing. Those include Hanford tank farm stored wastes, i.e., tank 241-AY-102/C-106, herein referred to as AY102, and tank 241-AP-101, herein referred to as AP101. During the process of making glass many recycle streams will be generated and processed. Those include streams from the: HLW and LAW Submerged Bed Scrubbers, Vessel Vent System, HLW Glass Canister Decontamination process, FEP and TLP condensate solutions, UFP wash permeate, UFP rinse solutions, UFP acid cleaning solutions, UFP loop flush solutions, CIX caustic LAW displacement solutions, CIX post elution rinse solutions, and CIX caustic regeneration solutions. These streams are discussed throughout this report.

1.7 DISCREPANCIES AND FOLLOW-ON TESTS

No discrepancies occurred during testing and no follow-on work is currently planned. This task involved four Campaigns and is referred to as the Semi-Integrated Pilot Plant (SIPP) task (Duignan, 2003c).

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2.0 DISCUSSION

2.1 INTRODUCTION

Bechtel National, Inc. (BNI) has been contracted by the Department of Energy (DOE) to design a Waste Treatment and Immobilization Plant (WTP) to stabilize liquid radioactive wastes that are stored at the Hanford Site as part of the River Protection Project (RPP). Because of its experience with radioactive waste stabilization, the Savannah River National Laboratory (SRNL) of the Westinghouse Savannah River Company (WSRC) is working with BNI and Washington Group International (WGI), to help design and test certain parts of the waste treatment facility. A major part of the waste stabilization process is the pretreatment of the wastes before vitrification, which will occur in the Pretreatment Facility where both HLW and LAW product streams will be handled. SRNL has constructed a Semi-Integrated Pilot Plant (SIPP), which imitates important unit operations of the pretreatment process. However, since the actual pilot-scale vitrification is not handled by SRNL, the pilot plant is referred to as semi integrated. After SIPP pretreats the waste streams into vitrification feed streams, they will be shipped to the Vitreous State Laboratory (VSL) of Catholic University of America to complete the entire process.

The subject of this final report is the testing of the four Campaigns that comprised the overall task. That testing involved all of the four principal unit operations that comprise the RPP-WTP Pretreatment Facility, i.e., Waste Feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and Treated LAW Evaporation Process (TLP). The operation and results of each of these unit operations are explained herein.

This technical baseline research and development work was initiated by a WTP test specification (Longwell, 2003) to test simulated non-radioactive wastes in pilot scale pretreatment unit operations in the Engineering Development Laboratory (EDL) of SRNL. While this report discusses the results of all four SIPP campaigns it principally deals with the fourth of a four-campaign task, since previous campaigns are discussed at length in the interim reports (Appendix I). Campaign IV differs from the Campaigns II and III in that a new cross-flow filter manufacturer was chosen by Bechtel while the task was ongoing. Because of the need to better quantify the performance of the new filter, Campaign IV was limited to only the UFP unit operation, as well as the FEP unit operation, which was needed to create feed for the UFP. The CIX and TLP unit operations were not used for Campaign IV.

The task first phase, Campaign I, was at one time a completely separate task (Townson, 2002) to filter a specific waste. Subsequently, that first campaign was incorporated into the SIPP task to eliminate duplication of effort and to produce several important recycle streams. While, Campaign I was limited to a single unit operation, ultrafiltration, and a single waste stream, i.e., AY102, the process of operating the filter unit allowed the production of many of the important recycle streams needed to carry out the more comprehensive phases, i.e., Campaigns II, III, and IV. After dewatering the single waste stream, the slurry was washed to produce one recycle stream. Then the filter unit was flushed, cleaned, and rinsed, thus

creating other important recycle streams. Besides producing recycles, the Campaign I single-waste filter results were then used to compare with filter results obtained after mixing that waste stream with others, i.e., AP101 and the many recycle streams. A further benefit to limiting Campaign I to a single waste stream was that the filter results could be compared to the pilot filter tests done with other single waste streams, (see Duignan, 2000a, Duignan, 2000b, Duignan, 2003a).

In summary, this report discusses not only Campaign IV results, but compares those results to the other unit operations' results done during Campaigns I, II, and III. There were many individuals involved and the information for each section was provided primarily by each of the principal investigators. They were:

Simulant development and sample analyses John R. Zamecnik
Simulant and sample handling – Michael R. Williams
Modeling – C. Dan Barnes (done before any testing began)
Consulting and managing – T. Bond Calloway
Technical Lead and overall reporting – M. R. Duignan
FEP operation – Zafar H. Qureshi
UFP operation – Mark D. Fowley
CIX operation – John L. Steimke
TLP operation – Duane J. Adamson

A summary of EDL task activities is as follows:

WGI Test Specification for UF Test Received – December 2002
WGI Test Specification for SIPP Received – June 2003
WSRC Task Technical & Quality Assurance Plan Approved – August 2003
Test Procedure Approved – October 2003
Received AY102/C106 Simulant – January 2004
Campaign I – 26 January to 12 February 2004
Campaign II – 12 April to 14 May 2004
Campaign III – 7 June to 9 July 2004
Campaign IV – 2 to 6 August 2004 (Pretreatment of GKN filter)
Campaign IV – 9 to 26 August 2004 (only SIPP FEP and UFP operations were tested)

2.2 THE PLAN

Initial planning for the Semi-Integrated Pilot Plant (SIPP) was to decide what to study. One of the first decisions was to limit the task to the RPP-WTP Pretreatment Facility since pilot melter facilities already existed at another site[†]. This is the reason that this task is referred to as "Semi Integrated," i.e., to indicate that vitrification is not part of the pilot operations at the Savannah River National Laboratory (SRNL). The next step was to decide which simulant(s) to test. Since the waste types at Hanford were broadly classified as envelopes A, B, C, and D (Eibling and Nash, 2001), therefore three campaigns were planned, one for each envelope,

[†] The Vitreous State Laboratory at Catholic University of America in Washington, DC.

except D. Envelope D is basically a sludge, which would not be processed alone, but would be mixed with some of the other envelopes. As such, each campaign would process a chosen simulated waste through the principal unit processes of the Pretreatment Facility. Those units are the Feed (Waste) Evaporator Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange (Process) (CIX), the Treated LAW Evaporation Process (TLP), and for Envelope C-types wastes, the Strontium-Transuranics (Sr/TRU) Precipitation Process.

Having a task that would test a range of possible waste types was a good comprehensive approach; however, to obtain meaningful operational data for the plant it was not just a matter of processing each of the different wastes once through each of the unit process. Steady state operation of the Pretreatment Facility would also have to include all the recycle waste streams. That is, in the process of separating the wastes into necessary components for further processing, other waste streams are produced. A few of those streams are: waste washings, filter cleaning and rinsing solutions, CIX regeneration solutions, HLW canister decontamination solutions, vessel vent solutions, submerged bed scrubber solutions from both the HLW and LAW vitrification facilities, etc. In steady state these recycle streams will be recycled to different locations in the Pretreatment Facility. Those streams need to be included to simulate the actual plant operation. This means that each of the campaigns would have to run many times until the effects of the recycle streams stabilized so that steady state operation is realized. After reevaluating the task needs, available funds and time, it was clear that the scope had to be reduced. It would be limited to processing a key waste stream with all the recycle streams and then processed enough times that steady-state operation would be attained. Focus was then directed to the wastes that the plant would use for commissioning, i.e., 241-AY-102/C-106, here referred to as AY102, and 241-AP-101, herein referred to as AP101. The first waste is the result of two waste tanks that have already been mixed together, AY-102 and C-106 and is classified as an Envelope A/D mixture. The second waste, AP101, is an Envelope A waste. With this waste mixture, all of the principal WTP Pretreatment Processes would be tested except the Sr/TRU Process because it did not include an Envelope C-type waste.

The SIPP task was dedicated to perform integrated processing of one selected waste stream combination that included recycle streams produced during the processing of waste through the four pilot-scale unit operations. As such, the testing of an “integrated” process is integrated in the sense of capturing the salient chemical processes, that is, it is important to note that the SIPP is not integrated with respect to time. The operation of the Pretreatment Facility is complex in both chemistry and time, but the many interconnected systems (e.g., piping, ventilation, etc.) and supporting processes (e.g., transfer tanks, pumps, water supply, etc.) that will exist in the plant to allow the four main unit operation to function were not included in SIPP because of schedule and expense. Just the scaling issues alone, for an entire Pretreatment facility, would have been an almost impossible task to accomplish. In short, running the four principal unit operations with simulated waste and recycle streams as chemically close as to what will result in the plant was accepted as the most efficient use of the time and money available. Time of operation was limited to the operation of each individual unit operation only, and not to their temporal interdependence on the supporting Pretreatment Facility operations, e.g. vessel fillings, waste testing and adjusting, waste transfers, line flushings, etc. However, prototypical hold times (see Appendix C) between

the four unit operations were included to provide sufficient time for precipitation of slow forming salts, e.g., Sodium Aluminosilicate and Sodium Fluorophosphates [specifically: $NaF_7(PO_4)_2$].

To reiterate, the SIPP task is the operation of four individual and separate pilot-scale unit operations, each successively processing a single waste stream combination, which is chemically connected through the feedback of recycle streams. The plan is described in the RPP-WTP test specification (Longwell, 2003), in the WSRC technical task plan (Duignan, 2003c), and was discussed amongst all the stakeholders before any testing began (see Appendix A). The task's original series of three campaigns was maintained, but instead of processing different waste types, only one type would be used. Each successive campaign introduced recycle streams produced from the preceding stream. To feed the initial campaign an extra campaign was added. This addition was actually an already planned ultrafiltration test (Townson, 2002). That test became known as Campaign I and it only processed a simulant of AY102. In this way the filtration results of Campaign I served three purposes: (1.) To generate a filtration data set for a single-waste type that could be compared to past single-waste filtration tests, (2.) to become a baseline for filtration of AY102 in order to determine how additions of AP101 and recycles to that waste effect filtration, and (3.) to produce a series of recycle streams to feed to Campaign II. The last reason was very important to SIPP because the UFP produces several important recycle streams, i.e., slurry washing permeate, sludge loop flushing, loop acid cleaning, and loop caustic rinsings. Campaign I results were published in Duignan et al., 2004a or Appendix I-1, Campaign II results were published in Duignan et al., 2004b or Appendix I-2, Campaign III results were published in Duignan et al., 2004c or Appendix I-3, and finally Campaign IV results are included in this report. As summary of all the campaigns is as follows:

Campaign I	UFP only with simulant of (AY102)
Campaign II	All four unit operations with simulant of (AY102) + (AP101) + recycle streams (normally the CIX also has recycle streams but since Campaign I did not test the CIX they were not included in Campaign II).
Campaign III	All four unit operations with simulant of (AY102) + (AP101) + 2nd generation recycle streams (but 1st generation CIX recycle streams).
Campaign IV[†‡]	Two unit operations (FEP and UFP) with simulant of (AY102) + (AP101) + 3rd generation recycle streams (but 2nd generation CIX recycle streams).

As shown in the preceding Section 1.1, on "Test Objectives," there were many objectives; the details of which will not be repeated here, but will be discussed in the appropriate later sections. However, the major goals were to better understand how each of the four pilot-scale unit operations process the waste[*], to study how the processes change with successively

[†] This report deals specifically with Campaign IV results, but generally covers all the SIPP work.
[‡] As of May 2004 RPP-WTP informed SRNL to change the scope of Campaign IV to test a new filter made by GKN, which was chosen instead of the Mott for the RPP-WTP Pretreatment Facility Ultrafiltration Process. The number of the unit operations was reduced from four to two for Campaign IV, those being the pilot-scale FEP and UFP so that GKN performance could be compared to the Mott.
[*] For example, the recycle streams for this campaign, Campaign IV, contained chemicals carried over from Campaigns I, II and III.

complex recycle streams, and to produce throughput data to benchmark computer codes being developed by Bechtel and others, and to predict and plan for, plant operation.

Figure 1 is a schematic of the overall SIPP operation. It is broken into the four unit operations and indicates both the salient chemical and time steps. The operations are listed in a chronological order, at least with respect to the SIPP test, with the top (FEP) section being first. Of course the plant will be much more complex. A very short summary of the overall operation is as follows:

1. FEP evaporates a combined mixture of recycles.
2. UFP filters a combined mixture of the FEP concentrated product (called Bottoms) and waste from the tank farm until the mixture reaches a target concentration. The UFP produces two streams: the permeate which is sent to the CIX for LAW processing, and the concentrated slurry. That slurry is then washed to remove many of the soluble solids after which it is sent to the HLW melter facility. The slurry washing and subsequent UFP filter cleaning produces a series of recycle streams that are sent back to the FEP for processing.
3. CIX takes the permeate from the UFP and removes most of the soluble, but radioactive, cesium. When the resin in the lead CIX column is regenerated, recycle streams are created which are either sent back to the FEP or forward to the TLP for processing.
4. TLP takes the CIX product, which still has very low levels of radiation, and evaporates most of the water before it is sent to the LAW melter facility.

The evaporation of the many combined recycle streams in the FEP will be operated in a continuous sense, in that after it fills the UFP preparation tank for one filter train (there will be two separate filter trains), it will feed the preparation tank for the other filter train. However, the FEP must ultimately be a batch operation because it will be receiving waste from recycle tanks (PWD = Plant Wash and Disposal System) that will be batched through the FEP only after the feed is adjusted for pH and tested for acceptance.

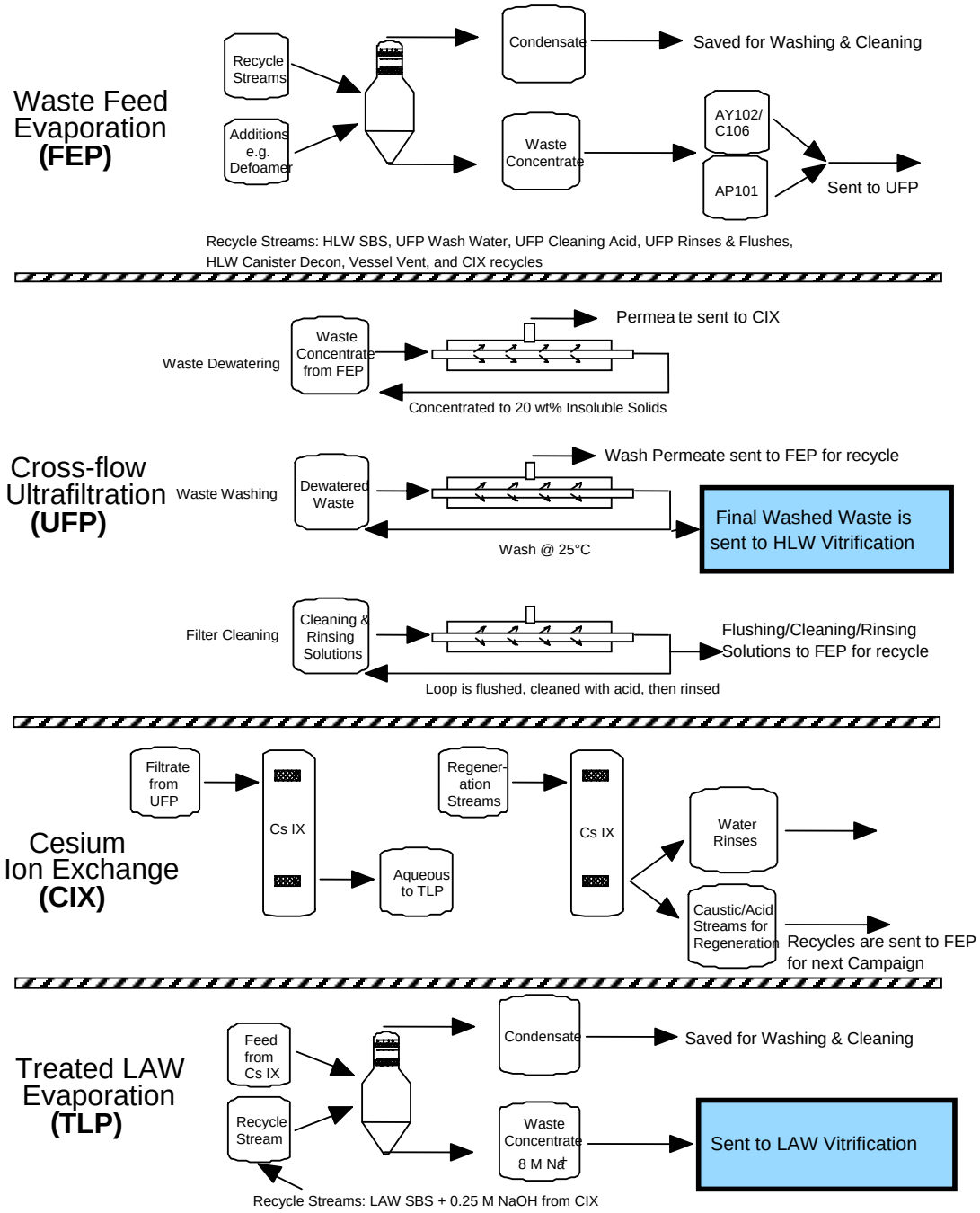

Figure 1. Schematic of the overall task operation taken from the task plan

When the UFP feed and preparation tanks are full and ready for processing, the filtration can commence. This process is also batch, but the feed tank must be continuously fed with new feed as dewatering is ongoing. The feed tank will have a base volume of 21,550 gallons into which approximately 1000 gallons will be transferred from the preparation tank. Each time the feed tank level drops to 21,550 gallons another batch of 1000 gallons will be transferred until the dewatered slurry reaches its target solids concentration. For this task, the target was 20 wt% undissolved solids (UDS). This dewatering process is shown in the UFP section of Figure 1 as the top filtration loop. The middle loop illustrates the washing and leaching of the final concentrated slurry batch. (Note: For SIPP, the leaching process was not performed as requested by RPP-WTP (Calloway, 2004)). After the concentrated waste is washed, it is then joined with the concentrated CIX eluate before being sent to the HLW melter for further processing, but for the SIPP, the washed slurry is simply drummed to be shipped for processing in a pilot HLW melter. With the loop de-inventoried, the final loop shows that the UFP undergoes caustic rinsing and acid cleaning, in preparation for the next batch.

For the plant, the CIX does not necessarily have to wait for the entire filtration process to end. There are several filter permeate tanks to feed the CIX and they receive permeate from each of the two filter trains. However, for SIPP the CIX can begin after a fixed amount of permeate is produced from the UFP, which is approximately 200 bed volumes. A bed volume is the volume of space occupied in a CIX column by the resin, including the interstitial spaces among the resin particles. The plant will process a minimum of 100 bed volumes (~ 30,000 gallons) of permeate before an CIX column is regenerated, which completes one CIX cycle; each of the SIPP campaigns contained two CIX cycles. Originally, the SIPP CIX was to demonstrate the design throughput rate of treated waste, like the other pilot unit operations, but it was thought more important[†] to use it for chemical testing to show cesium removal efficiency. This meant the important parameter would be a prototypic residence time for permeate in the resin, or 3 bed volumes per hour. For the 6-inch diameter pilot scale column, this resulted in a very low flow rate (~0.031 gpm), which is more than two orders of magnitude slower than the plant design flowrate of 15 gpm. SIPP used 200 bed volumes per cycle (approximately 400 bed volumes per campaign) because several past tests had indicated that cesium breakthrough will occur only at higher volumes of feed than the original plant design of 100 bed volumes. It was very important to identify the number of bed volumes of feed processed before cesium breakthrough and subsequent resin regeneration. The third section of Fig. 1 shows two columns because of the two processes that occur within CIX: the first process is the removal of cesium, the second process is a series of steps to regenerate the resin.

The final section of Fig. 1 shows the TLP operation. The CIX product is mostly 5 M solution in sodium, which is diluted to 2 M in sodium when the product is mixed with recycle streams to make TLP feed. Then the TLP concentrates the feed sodium up to 8 M. This is the last step before the treated LAW stream is sent to the LAW melter facility. Along the way, several recycle streams are created in the UFP and the CIX, as well as from other sources, like the submerged bed scrubber quencher streams from both the HLW and LAW melter

[†] Test Exception No. 24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003

facilities. These recycle streams are either fed back to the FEP evaporator or forward to the TLP evaporator in the process, which then repeat. For the SIPP, this repeating results in the subsequent campaigns.

2.3 THE COMPUTATIONAL MODEL

A full explanation of the computation assistance obtained at the beginning of SIPP has already been described in detail elsewhere (Duignan et al., 2004b or Appendix I-2, Barnes, 2004, and Appendix B) and will not be repeated here. However, it is important to know how the computational modeling was used for this task to understand its role for Campaign IV. The model served two purposes: 1. To determine how much slurry to use and, 2. To estimate the mix ratio of feeds (simulated wastes and recycle streams) for each of the unit operations. The Test Specification (Longwell, 2003) requested that the WTP Aspen Custom Modeler (ACM) Model be used to obtain the bases for the combined feed streams, i.e., the feed mix ratios. With the feed stream obtained in this manner an OLI Environmental Simulation Program (OLI/ESP) was used to determine the steady-state operation for each unit operation in each of the campaigns.

In concept, the operation of the SIPP is straightforward, but determining the exact simulant needs was quite complicated because of the differing scales of each pilot-scale unit operation and because of the chemical interaction among the recycle streams from all the campaigns. A very important part in developing the test matrix of the task plan was knowing how much simulant to use and how should all the different waste and recycle streams be mixed together. That need was satisfied by computationally predicting SIPP streams for all four campaigns. As an added benefit, once the model was made, it would be possible to evaluate changes in simulant volumes and mixing ratios to determine if the entire SIPP process comes to steady state. Steady state could be shown, at least chemically, by demonstrating that the products produced in SIPP change insignificantly from one campaign to the next.

Table 1 shows the results of the OLI/ESP model that includes WTP accepted mixture ratios for combined feed streams from the ACM model. The principal value in the entire figure is the initial "batch" size of the UFP feed tank. In Table 1 this batch size for the SIPP is shown in red as 140 liters and is listed as "UF1 SLURRY (batch at 20 wt% UDS)." This waste volume is very significant because for this pilot-scale task it represents the batch size of HLW sent for HLW vitrification. When this batch is dewatered to some predetermined concentration of undissolved solids (it was 20 wt% for SIPP), then the permeate produced during dewatering will be the batch size of LAW sent for CIX processing, which subsequently is mixed with recycles streams to be evaporated in the TLP unit operation before finally being sent to LAW vitrification.

Table 1. Feeds and products for planning SIPP developed for OLI/ESP computer model*

WTP Process	Stream Type	Stream Name	Campaign (in Liters) I	II	III	IV
FEP	Feed Recycle Streams	UFP & CIX RECYCLEs (previous campaign)	N/A	583.1	602.8	602.8
		HLW (Submerged Bed Scrubber)	N/A	190.6	190.6	189.9
		PVP (Vessel Vent System)	N/A	220.7	220.7	220.0
		HLW DECON	N/A	114.6	114.7	114.3
	Products Produced	FEP CONDENSATE (to be process wash)	N/A	996.0	980.6	984.9
		FEP COOLED BOTTOMS (UFP feed)	N/A	114.4	150.8	144.9
UFP Feeds	Feed	AY102 WASTE (at 12 wt% UDS)	253.5	252.4	242.2	241.4
	Feed	AP101 WASTE (at ~ 8 M Na^+)	N/A	671.3	674.4	672.1
UFP	Products Produced	UF1 FILTRATE (routed to CIX, then TLP)	113.5	922.3	952.2	943.7
		UF1 SLURRY (batch at 20 wt% UDS)	140	116.8	116.4	116.1
	Batch Waste Washing	FEP COND WASH (0.01 M NaOH)		281.1	281.5	280.7
		19 M NaOH (to adjust FEP COND)		1.8	0.2	0.2
		TOTAL CAUSTIC WASH	338.6	282.5	281.6	280.8
	Filter Rinsing & Cleaning	FEP COND ACID (2 M HNO3)		86.1	85.8	85.6
		12 M HNO3 (to adjust FEP COND)		17.0	17.0	16.9
		TOTAL ACID CLEANING	122.5	102.2	101.9	101.6
		FEP CONDENSATE TO CAUSTIC RINSE		101.8	101.5	101.2
		19 M NaOH (to adjust FEP COND)		0.5	0.5	0.5
		TOTAL CAUSTIC RINSE (0.1 M NaOH)		102.2	101.8	101.5
		TOTAL CAUSTIC RINSE (for FEP recycle))	117.1	97.6	97.3	97.0
	Final Filter Products	HLW SLURRY (to HLW melter)	138.1	110.8	110.3	110.0
		TOTAL FEP RECYCLE (for next campaign)	583.1	602.8	604.8	602.3
CIX	Column Regeneration Products Produced	CIX 0.1 M NaOH RINSE (for FEP recycle)	N/A	36.9	38.1	37.8
		CIX DI WATER (for FEP recycle)		36.9	38.1	37.8
		CIX 0.25 M NaOH (for FEP recycle)	N/A	40.0	41.3	40.9
		CIX 0.25 M NaOH (for TLP recycle)	N/A	36.9	38.1	37.8
TLP	Feeds wFiltrate	LAW SBS (Submerged Bed Scrubber)	N/A	833.0	832.9	830.2
	Products Produced	TLP CONDENSATE (to be process wash)	N/A	1214.1	1231.4	1224.9
		TLP COOLED BOTTOMS (to LAW melter)	N/A	589.3	603.4	598.1

*Campaign IV did not used the CIX and TLP unit operations due to a scope change

This SIPP batch of 140 liters† for Campaign I was arbitrarily chosen, but once chosen all other volumes were the result of SIPP processing. The choice was made by using existing test facilities, where the pilot UFP could contain 140 liters and still have enough room to feed in more slurry until dewatering is complete. Knowing this batch size, using the feed stream ratios from the ACM model, and the chemical makeup of the base waste slurry, i.e., AY102/C106 and AP101, the OLI/ESP model could then be iterated among all of the campaigns to result in the numbers shown in Table 1. Note that the batch size of 140 liters, with 20 wt% UDS, changes from Campaign I to a value of approximately 116 liters (with 20 wt% UDS) for all the other campaigns, and as such, the 116-liter volume was taken as equivalent to the full scale UFP batch‡ size in those campaigns. The difference between the batch size for Campaign I (140 L) and the subsequent campaigns (116 L) was not well

† For WTP this batch size was 18,000 gallons when this task began, but it currently stands at 21,550 gallons. In fact, for Campaign I operation, the 18,000-gallons size was valid and used for scaling purposes, but with Campaign II and all subsequent campaigns the latter volume was used.
‡ Same as the above footnote

understood when the task was planned but because the sophisticated OLI/ESP software includes all the steady state chemistry of the processed wastes, which included dozens of compounds. It was assumed that differences in the starting waste slurries resulted in this "discrepancy." That is, Campaign I only processed a single waste, AY102, while the other campaigns included also AP101 and the concentrated recycle streams from the FEP. The inputs for the known waste chemistries, of the starting feeds, were checked many times to verify accuracy, therefore the difference was assumed to be real. In any case, the purpose of the model was to be used as a tool to plan the task and procure needed quantities of simulant, therefore further investigations on the (~15%) difference[*] were not thought necessary. The simulated waste products were procured with enough safety margin to cover any problems if, for instance, shortages occurred during experimentation.

As shown in Figure 1, once the UFP is finished concentrating, the waste is washed with approximately 0.01 M NaOH. The plant will hold the slurry volume constant and feed in two volumes of the caustic solution, each volume approximately equal to the volume of slurry, before sending the waste to the HLW Vitrification Facility. While the plant will hold the UFP volume constant, the model resulted in slightly smaller volumes, see the line in Table 1 entitled, "HLW Slurry (to HLW melter)." due to computational requirements. These are the simulated processed feeds for HLW vitrification. The other highlighted lines in Table 1 are: "AY102 WASTE (at 12 wt% UDS)," which was the amount of feed AY102 simulant needed; "AP101 WASTE (at ~ 8 M Na)," which was the amount of feed AP101 simulant needed; "UFP & CIX RECYCLEs (previous campaign)," which was the portion of recycle streams carried over from the previous campaign to be mixed with other recycle streams that did not come directly from one of the four unit operations; finally, the last line contains the volumes of LAW that are treated through all four unit operations and are ready as feed for LAW vitrification.

Another feature included in Table 1, but not obvious, is the feed proportions used for each unit operation, which were supplied by the ACM model. For each of the campaigns, the proportions are slightly different, but not significantly so. The feed for the FEP was made up from only recycle streams and the volumetric proportion of each of the streams used is shown in Table 2.

While the proportions in Table 2 are close to the recycle stream values in the planning table shown as Table 1, they will not be exactly the same because of last minute changes, round off numbers, and uncertainties in some of the streams.

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[*] In fact, the actual discrepancy was not understood until after Campaign III was complete and analysis of the SIPP data was underway. The problem turned out to be something that could not be easily resolved a priori because of the OLI/ESP. For the software package to converge on a solution the anion and cation charges of ALL simulant analytes must balance. Unfortunately, the simulated wastes streams contained many unknown complex insoluble solids compounds for which ion charge balances had to be assumed. Those assumptions caused the resulting volumetric difference once a slurry was concentrated to 20 wt% undissolved solids. This is a clear example of the current limitations of computational models and the need for benchmarking to experimental results of complex interactions.

Table 2. Percent contribution for each of the recycle streams to the total FEP feed

List of Recycle Streams Used for SIPP and Verified by WTP	Percentage of Recycle to FEP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) HLW SBS	n/a	17.1%	17.5%	17.4%
(2) Vessel Vent	n/a	19.7%	20.3%	20.2%
(3) HLW Can. Decon	n/a	10.3%	10.5%	10.5%
(4) UFP Recycle (0.01 M NaOH)	n/a	30.3%	21.7%	21.6%
(5) UFP Recycle (0.1 M NaOH)	n/a	10.5%	9.0%	8.9%
(6) UFP Recycle (2 M HNO3)	n/a	11.0%	9.4%	9.4%
(7) UFP Recycle (3 Loop Flushes)	n/a	1.2%	1.2%	1.2%
(8) CIX Recycle (0.1 M NaOH)	n/a	0.0%	3.4%	3.5%
(9) CIX Recycle (DI Water)	n/a	0.0%	3.4%	3.5%
(10) CIX Recycle (0.25 M NaOH)	n/a	0.0%	3.7%	3.8%
Total Feed to the FEP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made from melter testing at another location: VSL***
(2) and (3) were made for each campaign
(4) to (10) were products of unit operations
* Campaign I only used a single simulated waste with no recycles in a single unit operation, i.e., UFP.
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

There were many routes to operating the UFP, but for SIPP, and initial plant operation, it was thought prudent to only use the FEP to process recycle streams and the UFP would be the starting point for tank farm wastes. One major benefit of this method was that it minimizes undissolved solids in the FEP and thus hopefully minimizes condenser fouling that would affect operational efficiency. This means that the feed for the UFP had three waste sources, one of which came from the FEP after the recycle streams were concentrated to a target density. The other two were mentioned above. Their individual contributions to the UFP feed are shown in Table 3.

Table 3. Percent contribution for each of the UFP feed streams

Feed Streams Used for SIPP in the UFP and Verified by WTP	Percentage of Streams to UFP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) FEP Bottoms	0%	11.1%	14.3%	13.8%
(2) AY-102/C-106	100%	24.3%	22.6%	22.8%
(3) AP-101	0%	64.6%	63.1%	63.4%
Total Feed to the UFP	100%	100%	100%	100%

Notes:
Source of Streams: (1) was concentrated from recycles in the FEP
(2) outside vendor, but finalized in EDL**
(3) came from an outside vendor
* Campaign I only used a single simulated waste: AY102/C106
** EDL = Engineering Development Laboratory of the Savannah River National Laboratory of the Westinghouse Savannah River Company where SIPP pilot-scale testing was performed.

As with the recycle percentages in Table 2, the percentages in Table 3 are slightly different than what is shown in Table 1. Those differences are mostly attributed to volumes actually created during experimentation. The computational volumes were not expected to be exact and while the values in Table 3 were used for SIPP, the actual plant mixture may still be different as its design continues to evolve.

One product of the pilot-scale UFP is the permeate produced during dewatering. This waste stream is then sent on to the CIX in its preparation for LAW vitrification. As this task evolved, the pilot-scale CIX operation was disassociated from measuring volumetric throughput to measure glass production, because WTP thought it more important to understand the cesium removal performance of the chosen resin, SuperLig®644. This requirement made the amount of permeate important, because cesium removal was to be measured. Since each SIPP campaign had two CIX cycles and each cycle required 200 bed volumes (BV) of feed, therefore it was necessary to have 400 BV of feed for each campaign, excluding Campaign I. A bed volume is the space occupied in an ion exchange column by settled resin. For the pilot-scale CIX that volume was approximately 2.3 liters, making the produced number of bed volumes 401, 414, and 410[†] for Campaigns II, III, and IV[†], respectively. This can be seen in the Table 1 line entitled, "UF1 FILTRATE (routed to CIX, then TLP."

[†] While this volume of CIX feed was created, it was not used since Campaign IV scope was modified to only test with the FEP and the UFP unit operations. That campaign was limited to determining the filter performance the GKN filter.

Finally, the proportions of different feeds for the pilot-scale TLP were needed. Those are shown in Table 4. Note, that the scope of Campaign IV changed to only test the GKN filter performance, therefore the CIX and TLP unit operations were not used and Table 4 only represents the original plan

Table 4. Percent contribution for each of the TLP feed streams*

Feed Streams Used for SIPP in the TLP and Verified by WTP	Waste Stream Vol. % to TLP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) LAW SBS (from LAW melter)	n/a	47.4%	45.7%	45.8%
(2) 0.25 M NaOH (recycle from CIX)	n/a	0.0%	2.1%	2.1%
(3) Treated LAW from CIX	n/a	52.6%	52.2%	52.1%
Total Feed to the TLP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made from melter testing at another location: VSL***
(2) comes from a regenerated IX column
(3) comes from CIX after Cs is removed
* Campaign I did not employ the pilot-scale TLP
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

*Campaign IV did not use the TLP unit operations due to a scope change, but Table 4 shows the originally planned usage.

As with Tables 2 and 3, the percentages in Table 4 differ slightly than those from Table 1 because of limitations in the model, but all the values were sufficient to plan and begin testing.

2.4 THE OVERALL SIPP TEST MATRIX

To allow the reader to understand how Campaign IV was done without having to refer to any of the other SIPP reports, a portion of the overall test plan explanation is repeated here from the Campaign III report. With the plan in place and the planning results from the computational model, an overall test matrix was established. The following matrix was not the last word on how each of the unit operation was to run, but it was the starting point for each of the unit operations to develop individual test plans, as well as the simulant mixing and sample plans. As the task began with Campaign I (Duignan, et al., 2004a), and then on to other campaigns, the matrix continued to evolve as WTP needs changed, therefore, this test matrix may be slightly different than the individual test plans. However, it is instructive

here to illustrate the overall operation of SIPP. That is, a global explanation is first given to better understand SIPP in its "integrated" form, which is then followed by discussions on each of the individual unit operations and their results.

That matrix is shown in pieces in the following series of figures:

[Note that , Table X >> Table Y means: table x indicates the wait time before using slurry in the table y unit operation.]

Table 5 (simulant aging) >> Table 6 (pilot FEP unit operation)
Table 7 (simulant aging) >> Table 8 (pilot UFP unit operation)

[The following tables are shown for completeness but the CIX and TLP unit operations were cancelled for Campaign IV]
Table 9 (simulant aging) >> Table 10 (pilot CIX unit operation – first cycle)
>> Table 11 (pilot CIX unit operation – second cycle)
Table 12 (simulant aging) >> Table 13 (pilot TLP unit operation)

These nine figures are in chronological order of performance.

First, Tables. 5, 7, 9, and 12 were included to show hold-up time intervals between unit operations, especially because they were not part of the computational model, which was done at steady state. In an attempt to mimic the periods that waste "waits" before being processed in each unit operation, some prototypic times were included in SIPP.

Table 5. Hold period before pilot-scale FEP begins[†]

	Pre-FEP Hold Times (stipulated by WTP)										
	Minimum hold time between the time recycle stream mixture and beginning evaporation.			2	days						

Waste aging may affect many processing steps, for example, the post-UFP precipitation was a key issue for the ion exchange system. Using the appropriate WTP plant hold times allowed this issue to be resolved. The many reasons for specific hold times are given in Appendix C. As an example, Table 5 allows time for the mixed multiple recycle streams to age. Recycle streams are fed from several different sources to the Plant Wash and Disposal System tanks that will feed the Waste Feed Evaporation Process. The recycle streams come in at different rates and then need to be adjusted for pH as the acid and alkaline streams merge in order to mitigate the precipitation of solids or gels. After the adjustment, the FEP is fed, but because of the large scale, the transfer times are not insignificant. As explained in Appendix C, the time associated in the pre-evaporation process is approximately 2 days and therefore, once the SIPP FEP feed of recycle streams is adjusted properly it is held for that number of days before evaporation begins.

[†] Blanks in all tables in this report are intentional.

For each of the unit operations, a hold time is set after the appropriate feed is made ready. In summary those simulated minimum hold times are:

After joining recycle feeds and before processing in the FEP – 2 days
After making FEP Bottoms and before joining it with other UFP feeds – 2 days
After joining waste feeds and before processing in the UFP – 2 days
After producing UFP permeate and before processing in the CIX – 4.5 days
After joining treated LAW with recycle streams and before processing in the TLP – 2 days

Table 6. Pilot-scale FEP test matrix with the colored columns representing Campaign IV

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
FEP	Locate Feeds	(1) HLW SBS	n/a	n/a	17.1%	50.4	17.5%	50.4	17.4%	50.2	
		(2) Vessel Vent	n/a	n/a	19.7%	58.3	20.3%	58.3	20.2%	58.1	
		(3) HLW Can. Decon	n/a	n/a	10.3%	30.3	10.5%	30.3	10.5%	30.2	
		(4) UFP Recycle (0.01 M NaOH)	n/a	n/a	30.3%	89.5	21.7%	62.4	21.6%	62	
		(5) UFP Recycle (0.1 M NaOH)	n/a	n/a	10.5%	30.9	9.0%	25.8	8.9%	25.7	
		(6) UFP Recycle (2 M HNO3)	n/a	n/a	11.0%	32.4	9.4%	27	9.4%	26.9	
		(7) UFP Recycle (3 Loop Flushes)	n/a	n/a	1.2%	3.50	1.2%	3.50	1.2%	3.50	
		(8) CIX Recycle (0.1 M NaOH)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(9) CIX Recycle (DI Water)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(10) CIX Recycle (0.25 M NaOH)	n/a	n/a	0.0%	0	3.7%	10.6	3.8%	10.9	
		Total	n/a	n/a	100.0%	295.3	100.0%	287.7	100.0%	287.7	
FEP	Evaporate at	Condensate produced =		0.0	gallons	266.3	gallons	262.2	gallons	263.4	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm	Concentrate produced =		n/a	gallons	30.6	gallons	40.3	gallons	38.8	gallons
		Time to concentrate (@ 0.395 gpm) =		n/a	hours	11.2	hours	11.1	hours	11.1	hours
FEP Recycle Stream Notes:											
(1) SBS HLW recycle: This a vendor-supplied stream. Use as is.											
(2) Vessel Vent recycle:Is made to match collection from VVS. Caustic is added to demineralized water to 0.1 M NaOH.											
(3) HLW Canister Decontamination recycle: Is made to match Decon Stream. The expected concentration of contaminates needS to be added to model stream.											
(4) UFP Wash Water recycle: This scaled recycle washes the scaled concentrated filtered sludge. Use as is.											
(5) UFP caustic recycle: UF surface area is rinsed therefore this recycle must be adjusted to have correct concentration of sludge material.											
(6) UFP acid recycle: UF surface area is cleaned, therefore this recycle must be adjusted to have correct concentration of dissolved sludge material.											
(7) After UFP waste washing the loop will be flushed with 2,100 gallons of process water. This stream will be adjusted for the estimated sludge content expected.											
(8) CIX caustic recycle from initial step to regenerated column by replacing treated LAW with 0.1 M NaOH. Use as is.											
(9) CIX neutral recycle to remove 0.5 M HNO3 from column. Use as is.											
(10) CX caustic recycle the first portion of 0.25 M NaOH used to regenerate IX column. Use as is.											
Non-prototypicality Note:											
Many RPP-WTP tank-to-tank transfers will be done with steam jets that will create an undetermined amount of condensed steam. These addition are neglected.											

Once the recycle streams were mixed in the planned proportions, Table 2, and the appropriate hold time was realized, then the FEP test matrix, shown in Table 6, was performed. The goal was to concentrate the feed stream so that it had a sodium molarity of 5, but the "visible" target was an evaporated slurry density of 1.266 g/cc at 50°C and 1 psia (which is 1.252 g/cc at 1 atm). Density was used because the WTP will only be able to control concentration by measuring density.

Table 7. Hold period before pilot-scale UFP begins

	Inter-Unit Operations Hold Times (Stipulated by WTP)		
	Minimum hold time between the receipt of the FEP concentrate to the time it is mixed with waste simulants AY102/C106 + AP101	2	days
	Minimum hold time between the time of making = FEP concentrate + AY102/C106 + AP101, and beginning dewatering.	3	days

When the FEP was complete its slurry product was held for 2 days, Table 7, before being mixed in the planned proportions, Table 3, with the simulated wastes of AY102 and AP101. Completing this mixture started another 3-day clock before starting the UFP.

While processing the waste through the UFP is complicated with several activities involving the washing of the concentrated slurry to the cleaning of the filter loop (see Table 8), the basic operation is to separate the waste feed stream into a HLW product, containing all of the undissolved solids, and its supernatant, containing most of the cesium. This was done by dewatering the feed from a concentration less than 5 wt% to 20 wt% undissolved solids. The details of the UFP operation will be discussed in the appropriate subsection of this report. One feature that is not immediately obvious is the process containing an internal hold time. Dewatering in WTP will be a relatively lengthy process because filtration is very slow and the volumes are very large. While the waste is waiting to be processed through the UFP, it will be sitting in the feed preparation tank, which feeds the feed tank. During this process period, chemical reactions may still be occurring within the waste and crystallization or precipitation may result. In an attempt to capture these transient phenomena, a waiting period was inserted in the dewatering process of the pilot UFP. The period is a 12-hour hold time, which is arbitrary, but is loosely connected to the planned plant operational time of the UFP, and was acceptable to the WTP project.

Table 8. Pilot-scale UFP test matrix with the colored columns representing Campaign IV

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
UFP	Locate Feeds	FEP Bottoms	0.0%	0	11.1%	30.6	14.3%	40.3	13.8%	38.8	
		AY102/C106	100.0%	67	24.3%	66.7	22.7%	64	22.8%	63.8	
		AP101	0.0%	0	64.6%	177.4	63.1%	178.2	63.4%	177.6	
		Total	100.0%	67	100.0%	274.662	100.0%	282.4901	100.0%	280.172	
		Inhibited water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
	Filter at	Time for baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
	0.02 gpm/ft2	Starting simulant volume =	Camp I used ~75 gal	67	gallons	274.662	gallons	282.4901	gallons	280.172	gallons
	or 0.134 gpm	Time to cool to 25°C before use =	to obtain ~25 wt%	0	hours	0	hours	0	hours	0	hours
	for a 6.71 ft2	Concentrate produced at 20 wt% =		37.0	gallons	30.9	gallons	30.8	gallons	30.7	gallons
	filter area	Permeate produced =		30.0	gallons	243.8	gallons	251.7	gallons	249.5	gallons
		Total time to concentrate =		3.7	hours	30.3	hours	31.3	hours	31.0	hours
		Time for first half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Hold for 12 hours =		12	hours	12	hours	12	hours	12	hours
		Time for second half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Time for steady-state matrix =	(Campaign I only >>)	13	hours	n/a	n/a	n/a	hours	n/a	hours
	1st Wash >>	Wash water (0.01 M NaOH,) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
		Wash Notes: 1. Campaign I wash vol. = waste vol. x 21.77/18, but recent WTP change now is waste vol. x 21.77/21.55 and will be used for Campaigns II>IV.									
		2. Campaign I concentrated waste to 24 wt% UDS during dewatering therefore the UDS was reduced to 20 wt% before washing.									
		Time for initial wash =		5.6	hours	3.9	hours	3.9	hours	3.9	hours
	2nd Wash >>	Wash water (0.01 M NaOH) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
	Made 60%	Time for final wash =		3.5	hours	2.4	hours	2.4	hours	2.4	hours
	faster than the	Volume to remove for Max wt% =	(Campaign I only >>)	21	gallons	n/a	gallons	n/a	gallons	n/a	gallons
	1st Wash from	Time to concentrate =	(Campaign I only >>)	2.6	hours	n/a	gallons	n/a	gallons	n/a	gallons
	the Campaign I										
	test. That is,	**Washed Concentrate for HLW vitrification**		36.5	gallons	29.3	gallons	29.1	gallons	29.1	gallons
	0.134x1.6 =										
	0.214 gpm	Rinse water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		Rinse 1 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Rinse 2 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Time for final water baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
		Total Continuous Time per Campaign =		38.4	hour	46.6	hour	47.6	hour	47.3	hour
Non-prototypicality Note:											
The 12-hour hold time between half batches during scaled dewatering is an attempt to capture some of the precipitation dynamics that will occur in the waste during concentration. However,											
full-scale dewatering will take hundreds of hours therefore not all dynamics will happen.											

The pilot-scale UFP produced permeate would have been needed for the next step in the SIPP operation, i.e., pilot CIX, if Cycle 5 and 6 were performed. After the UFP produced the permeate it would need to age at least 4.5 days, as shown in Table 9.

Table 9. Hold period before pilot-scale CIX begins*

	Inter-Unit Operations Hold Time (stipulated by WTP)		
	Minimum hold time between the receipt of the UFP permeate to the time it is processed by the CIX	4.5	days

*The used of CIX unit operation was for Campaign IV was removed from the task scope

As in Campaign III, if the pilot CIX operation were done then the campaign would have been broken in two parts because it was necessary to run with two complete ion exchange cycles, which allowed both CIX columns to take turns as the lead or the lag column. This is the reason there are two CIX tables, i.e., Tables 10 and 11. The basic difference between them is that the lead column in the first cycle of operation, Table 10, became the lag column in the second cycle, Table 11. The permeate produced during a pilot UFP campaign was sufficient to satisfy the CIX need for two cycles of 400 bed volumes of feed (~900 liters). Each cycle included the processing of 200 bed volumes of UFP permeate and then the lead column would undergo regeneration for use in the next cycle as the lag column. The colored portion of Table 10 highlights the work that would have been done for Campaign IV.

Table 10. Pilot-scale CIX (1st half) test matrix with the colored columns representing Campaign IV*

				Campaign I		Campaign II		Campaign III		Campaign IV	
				Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes	
Process	Action	Feeds									
Cs IX	Locate Feeds	Total UFP permeate feed		n/a	n/a	243.8	gallons	251.7	gallons	249.5	gallons
		This permeate must wait at least 48 hours after being created from the UFP before being treated.									
		Both the lead and lag columns start cycle I filled with 0.25 M Na									
		Water used for eluate, water buffer, and 0.25 M Na must be made from fresh distilled water									
		Water used for 0.1 M Na solution can come from evaporation condensates									
		There will be two columns referred to as A & B									
Cs IX	Treat Waste	Cs IX Test No.				**1**		**3**		**5**	
	Simulant and	Lead>Lag Column =		n/a	n/a	A>B		A>B		A>B	
	regenerate as	Cycle I (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
	indicated	Number of BV (BV ~ 0.617 gal.) >>>	Column I.D. = 5.5 inches	n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate	Bed Height = 6.0 inches	n/a	n/a	3.0	BV/hour	3.0	BV/hour	1.5	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	68.0	hours	134.8	hours
		Regeneration									
		Column to be regenerated and eluted =				A		A		A	
		0.1 M NaOH displacement									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	1.0	BV/hour	2.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	15.0	hours	7.5	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			87.0	hours	81.6	hours	155.9	hours

*The used of CIX unit operation was for Campaign IV was removed from the task scope

Campaign IV would have included pilot CIX Cycles 5 and 6. Once again, Campaign I did not include any ion exchange work, which explains why Cycle 1 began in Campaign II, Cycle 3 began in Campaign III, and Cycle 5 would have started in Campaign IV. At the end of each campaign both columns were filled with 0.1 M NaOH to keep the resin stable for the next campaign. This inter-campaign period would be no less than 5 weeks.

Table 11. Pilot-scale CIX (2nd half) test matrix with the colored columns representing Campaign IV*

Cs IX		Cs IX Test No.				**2**		**4**		**6**	
		Lead/Lag Column =		n/a	n/a	B>A		B>A		A>B	
		Cycle 2 (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	4.5	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	45.3	hours	67.4	hours
		Regeneration									
		Column to be regenerated and eluted =				B		B		A + B	
		0.1 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	0.5	BV/hour	1.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	30.0	hours	15.0	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			102.0	hours	66.5	hours	88.5	hours
			Total CIX Campaign Flow Time =			189.0	hours	148.1	hours	244.5	hour
						7.9	days	6.2	days	10.2	days
			Total Volumes for Campaigns II, III, and IV:				Totals				
				BV	Gallons		Available for				
			0.1 M NaOH	18.0	11.1		recycles	11.1			
			DI Water	36.0	22.2			22.2			
			0.5 M HNO3	90.0	55.5			0.0			
			0.25 M NaOH	36.0	22.2			22.2	Per Campaign		
							Total	55.5	18.5	gallons	
Non-prototypicality Note:											
Scaled CIX testing will be determining cold cesium breakthrough by using a range of BV flow rates which bound the full scale unit. However, the superficial liquid velocity of the plant is											
approximately 5 cm/min, which is 5 to 13 times greater than the range to be used at the pilot scale.											

*The used of CIX unit operation was for Campaign IV was removed from the task scope

The final step in the SIPP was once again to evaporate the waste. The now treated simulated LAW product from the CIX was mixed with two recycle streams shown in Table 4. After mixing, the resulting solution was held before processing, Table 12.

Table 12. Hold period before pilot-scale TLP begins*

	Pre-TLP Hold Times (stipulated by WTP)									
	Minimum hold time between the time recycle and waste streams are mixed and beginning evaporation.				2	days				

*The used of CIX unit operation was for Campaign IV was removed from the task scope

The operation of the pilot TLP, Table 13 would have been similar to the pilot FEP, Table 6. However, in the TLP the goal was to concentrate the feed stream so that it had a sodium molarity of 8. Once again the “visible” target was an evaporated slurry density of 1.360 g/cc

at 50°C and 1 psia (which is 1.395 g/cc at 1 atm). Density was used because the WTP will only be able to control concentration by measuring density. A large difference between the pilot FEP and TLP operations was the quantity of concentrated product produced. For the FEP, the final volume of the concentrate could be completely contained within the confines of the evaporator (<50 gallons), but for the TLP the concentrated volume was approximately 3 times larger. That is, the FEP was shut down just when steady-state waste concentration was reached. For the TLP, steady-state waste concentration was reached well before the waste feed was exhausted. This meant the TLP produced a continuous waste stream after the TLP contents reached the steady-state density target. The only significant impact this difference had on operation was to the defoamer chemical added to the waste. The concentration of defoamer was to be maintained at 1500 ppm, therefore, once the TLP reached steady state and concentrated waste was being removed, defoamer was periodically added.

Table 13. Pilot-scale TLP test matrix with the colored columns representing Campaign IV*

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
TLP	Locate Feeds	Simulant	n/a	n/a	52.6%	243.8	52.2%	251.7	52.1%	249.5	
		(Recycle 1) SBS LAW	n/a	n/a	47.4%	220.1	45.7%	220.1	45.8%	219.3	
		(Recycle 2) 0.25 M NaOH from CIX	n/a	n/a	0.0%	0	2.1%	10	2.1%	10.1	
		Total	n/a	n/a	100.0%	463.862	100.0%	481.7901	100.0%	478.872	
TLP	Evaporate at	Condensate produced =		0.0	gallons	320.8	gallons	325.3	gallons	323.6	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm										
		Concentrate produced for LAW vitrification		n/a	gallons	155.7	gallons	159.4	gallons	158.0	gallons
		Time to concentrate =		n/a	hours	13.5	hours	13.7	hours	13.7	hours
TLP Recycle Stream Notes											
(1) SBS LAW recycle: This a vendor supplied stream. Use as is.											
(2) Caustic IX regeneration recycle: This stream should have the appropriate concentration of caustic, I.e., 0.25 M NaOH. Use as is.											

*The used of CIX unit operation was for Campaign IV was removed from the task scope

The timetable for Campaign IV is listed in Table 14. It started on the day indicated, i.e., Monday, 9 August, 2004, but since this schedule was published before the test began minor changes occurred. However, those changes were insignificant. Campaign IV had pre-test activities which were different from the other Campaigns. A new filter from GKN was obtained due to a change in the RPP-WTP plant equipment. Before the filter could be tested it was subjected preconditioning to put it a similar used form as the Mott filter used in the previous campaigns. The preconditioning occurred from 2 to 8 August and those activities will be described in the UFP section of this report.

The only other aspect of the test not shown in all the matrix tables is the disposition of the water products. That is, the treated waste from the past campaigns using the TLP was drummed to be sent to VSL for LAW melter operations and the washed concentrated slurry from the UFP was drummed to be sent to VSL for HLW melter operation. The other product is all the boiled off and condensed water from both evaporation operations. Those waters were mixed together, as they will be in the plant and then a portion is reused to make rinse solutions for the UFP and displacement solution for the CIX.

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Table 14. Pilot-scale schedule for Campaign IV

Dates	Campaign	Start Date		**Personnel Nomeclature:**					Notes:	(1) Hold times are included to mimick times that				
based on	I	26-Jan-04		da=D.Adamson, ma=M.Armstrong, db=D.Burns, vb=V.Bush,						the plant is filling/transfer between unit operations.				
a 10-week	II	12-Apr-04		md=M.Duignan, df=D.Foreman, mf=M.Fowley,						Those times begin when a mixture is FIRST made,				
estimate	III	7-Jun-04		jm=J.Mills, zq=Z.Qureshi, mw=M.Williams, jz=J.Zamecnik						therefore mixing times are also included.				
from	IV	2-Aug-04	<Original							**(2) X = Official start of Campaign IV with FEP**				
18-May-04		Campaign IV												
\/ \/ \/ \/ \/	Day	Date	Unit Op	Activity	Expt	Backup	Non-E.	Backup	Unit Op	Activity	Expt	Backup	Non-E.	Backup
2-Aug-04	Mon	X - 7	preUFP	New Filter Receipt/Inspection	mf	md	ma	df						
3-Aug-04	Tue	X - 6	preUFP	New Filter Soak	mf	md	ma	df						
4-Aug-04	Wed	X - 5	preUFP	New Filter Soak	mf	md	ma	df						
5-Aug-04	Thu	X - 4	preUFP	Replacement/Checkout of Filter	mf	md	ma	df						
6-Aug-04	Fri	X - 3	preUFP	Baseline/Precondition Filter	mf	md	ma	df						
7-Aug-04	Sat	X - 2	preUFP	Precondition Filter	mf	md	ma	df						
8-Aug-04	Sun	X - 1	preUFP	Precondition Filter	mf	md	ma	df						
9-Aug-04	Mon	**X (note 2)**	UFP	Rinse/Clean (2 M HNO3)	mf	md	ma	df	FEP	Mix Recycles	jz/mw	mw/jz	df	vb
10-Aug-04	Tue	X + 1	UFP	Rinse/Clean (2 M HNO3)	mf	md	ma	df	FEP	Admin Hold (1)				
11-Aug-04	Wed	X + 2	UFP	Baseline	mf	md	ma	df	FEP	Evaporation	zq	da	jm	vb
12-Aug-04	Thu	X + 3	UFP	Admin Hold (1)					FEP	Product Transfers	zq	da	jm	vb
13-Aug-04	Fri	X + 4	UFP	Mix UF feeds	jz/mw	mw/jz	df	vb	FEP	Clean Equipment	zq	da	jm	vb
14-Aug-04	Sat	X + 5	UFP	Admin Hold (1)										
15-Aug-04	Sun	X + 6	UFP	Admin Hold (1)										
16-Aug-04	Mon	X + 7	UFP	Dewater	mf	md	ma	df						
17-Aug-04	Tue	X + 8	UFP	Dewater	mf	md	ma	df						
18-Aug-04	Wed	X + 9	UFP	Steady-state	mf	md	ma	df						
19-Aug-04	Thu	X + 10	UFP	Steady-state	mf	md	ma	df						
20-Aug-04	Fri	X + 11												
21-Aug-04	Sat	X + 12												
22-Aug-04	Sun	X + 13												
23-Aug-04	Mon	X + 14	UFP	Transfers/Wash	mf	md	ma	df						
24-Aug-04	Tue	X + 15	UFP	Wash	mf	md	ma	df						
25-Aug-04	Wed	X + 16	UFP	Rinse/Clean	mf	md	ma	df						
26-Aug-04	Thu	X + 17	UFP	Baseline	mf	md	ma	df						

2.5 THE PRINCIPAL WASTE SIMULANTS*:* AY102 AND AP101 (AUTHOR – ZAMECNIK)

Together with the pilot-scale FEP concentrated recycle streams, the waste feed for the pilot-scale UFP contained two simulated Hanford waste streams: tank 241-AY-102/C-106 referred herein as AY102, and tank 241-AP-101, referred herein as AP101.

The composition and properties, including the distribution of species between the solid and supernatant phases, of AY102 simulant has been previously described (Duignan et al., 2004a or Appendix I-1; Zamecnik, et al., 2004). This simulant was blended at SRNL from fractions manufactured by Optima Chemical (Douglas, GA) and additional reagents, as described in the references. The AP101 simulant formulation was defined by Pacific Northwest National Laboratory (Russell, et al., 2003) and the simulant was manufactured by Optima Chemical. The measured total slurry compositions of both of these simulants are shown in Table 15 (as previously shown in Duignan et al., 2004b or Appendix I-2, and 2004c).

Table 15. Measured Simulant Compositions

All values mg/L except as noted.	AY102 Slurry		AP101	
Total Solids (wt%)	26.80		31.94	
Undissolved Solids (wt%)	11.75		0.00	
Supernatant Solids (wt%)	17.05		31.94	
Density kg/L	1.240		1.279	
Ag	624		37.3	
Al	15996	17484*	7469	6932*
B	<165		<142	
Ba	293	255	<1.53	
Bi	6.93		0.0576	
Ca	1131	1500	23.0	
Cd	46.8		<3.9	
Ce	366		<127	
Co	151		<15.6	
Cr	632	634	179	175
Cs	18.7		6.02	
Cs	<17		<19.6	
Cu	77.9	81.8	<5.86	
Fe	35836	35216	76.4	68.4
K	373		30568	
La	305		13.9	
Li	<24.8		<21.1	
Mg	379	373	5.51	
Mn	7812	7638	3.00	
Mo	<17		<10.6	
Na (ICPES)	84283		127900	
Na (AA)	91760		129179	
Na average	88021		128540	
Na (M)	3.83		5.59	
Nd	847		<72.9	

Table 15 continued

All values mg/L except as noted.	AY102 Slurry		AP101	
Ni	1151		357	
P	1748	1600	269	
Pb	1662	1593	<156	
Pr	170		0.0223	
Rb	4.60		6.06	
S	892	899	1599	1426
Si	11016		329	
Sr	279	292	<1.18	
W	<84.7		<97.7	
Y	50.8		0.0728	
Zn	81.3		5.95	
Zr	484		<5.86	
bromide	69.4		<128	
chloride	165		1530	
fluoride	43.4		28.0	
formate	389		1380	
nitrate	319		105000	
nitrite	4228		33400	
oxalate	9213		1550	
phosphate	3807		1150	
sulfate	1860		3740	
acetate	415		1727	
citric acid	<81.8		<104	
formate	264		1432	

* Some rows two measurements. Those are the result of using two different dissolution methods.

2.6 PILOT WASTE FEED EVAPORATOR (AUTHORS - QURESHI, WILLIAMS & ZAMECNIK)

The Waste Feed Evaporator Process, or FEP, is the first unit operation in the RPP-WTP Pretreatment Facility that a waste (< 5 M Na) will see on start up. However, if the incoming wastes or waste blends are greater than 5 M Na, the FEP evaporators are used to concentrate WTP recycle streams for blending with the fresh tank waste. Since the AY102 and AP101 have sufficient sodium concentration, the SIPP FEP operations only included evaporation of SIPP recycles. The SIPP FEP Bottoms stream was then mixed with simulated waste streams, i.e., AY102 and AP101, which would normally come from the Hanford Tank farm to produce a feed stream for the Ultrafiltration Process (UFP) unit operation.

This section will explain the pilot-scale FEP unit operation that was done as part of Campaign IV testing. The process started with the preparation of the FEP feed product, which was a mixture of many recycle streams in a predetermined fashion, see Table 2. A chemical explanation of the feed (recycle) stream formation will be followed by a short description on how feed formation was handled just before FEP operation and then how the waste stream was handled during and after its concentration. The following section

will discuss the physical equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made for the FEP unit operation.

2.6.1 Chemical Description of the Pilot FEP Feed Stream (Author – Zamecnik)

2.6.1.1 Generation of the Recycle Streams

The feed for the FEP was a series of recycle streams to be produced from operating the RPP-WTP Pretreatment Facility. The basis for the quantities of each recycle used was described in the Campaign II report (Duignan et al., 2004b or Appendix I-2). The condensate used (that in WTP would come from the Radioactive Liquid Waste Disposal System or RLD) to generate all of the recycles from Campaign II to Campaign III employed condensate from only the Campaign II FEP evaporator, except for two synthetic streams, which used a condensate mixture that came from combining the TLP and FEP products.

The UFP pump loop recycle was approximated by mixing 4.6L of washed concentrated slurry with 8.6L of RLD condensate from the FEP evaporator, both from Campaign III. The pump loop recycle from Campaign III to Campaign IV was made using the same proportions of Campaign III material. The residual rinse in the filter loop that would be present at the start of the first 0.1M NaOH rinse was made from approximately 0.1L of washed concentrated slurry and 12.5L of FEP condensate. The UFP feed tank heel prior to each rinse and acid cleaning step was targeted to give the correct undissolved solids loading. Note, in the SIPP the amount of rinse and acid used is greater, on a proportional basis, than in the WTP. To account for using more rinse or acid, a proportionally larger heel is left.

The ejector heel of 500 gal of washed concentrated slurry left after slurry washing was simulated by the approximately 22L of washed concentrated slurry that remained in the system after draining. Note that this quantity of slurry holdup was much higher than previously assumed (~4L). To this 22L of slurry, 105.2L of caustic rinse 1 (~0.1M NaOH), made from RLD condensate, was added. The resulting diluted slurry still had more solids than would be representative of the UFP tank after Caustic Rinse 1, so the recycle to Campaign IV needed to be diluted 1:1 with fresh caustic rinse solution. The heel from caustic rinse 1 to acid cleaning 1 was made from three quantities (1.) 10L of the diluted slurry from caustic rinse 1, (2.) the ~1.6L of this slurry retained in the system, and (3.) 10L of 0.1M NaOH caustic flush. This scheme is shown in Fig. 2. The RLD condensate was essentially water, with the only significant impurity being ammonium ion at about 458 mg/kg.

In the subsequent rinsing and cleaning steps, the ejector heel was approximated by putting back about 20L of the drained solution plus the ~1.6L retained in the system. The 21.6L of heel in each step, mixed with 94.6L of caustic rinse or acid is the same ratio as the heel + filter loop (500 + 700 gal) remaining in the WTP to the rinse amount (5250 gal); both ratios are 0.228.

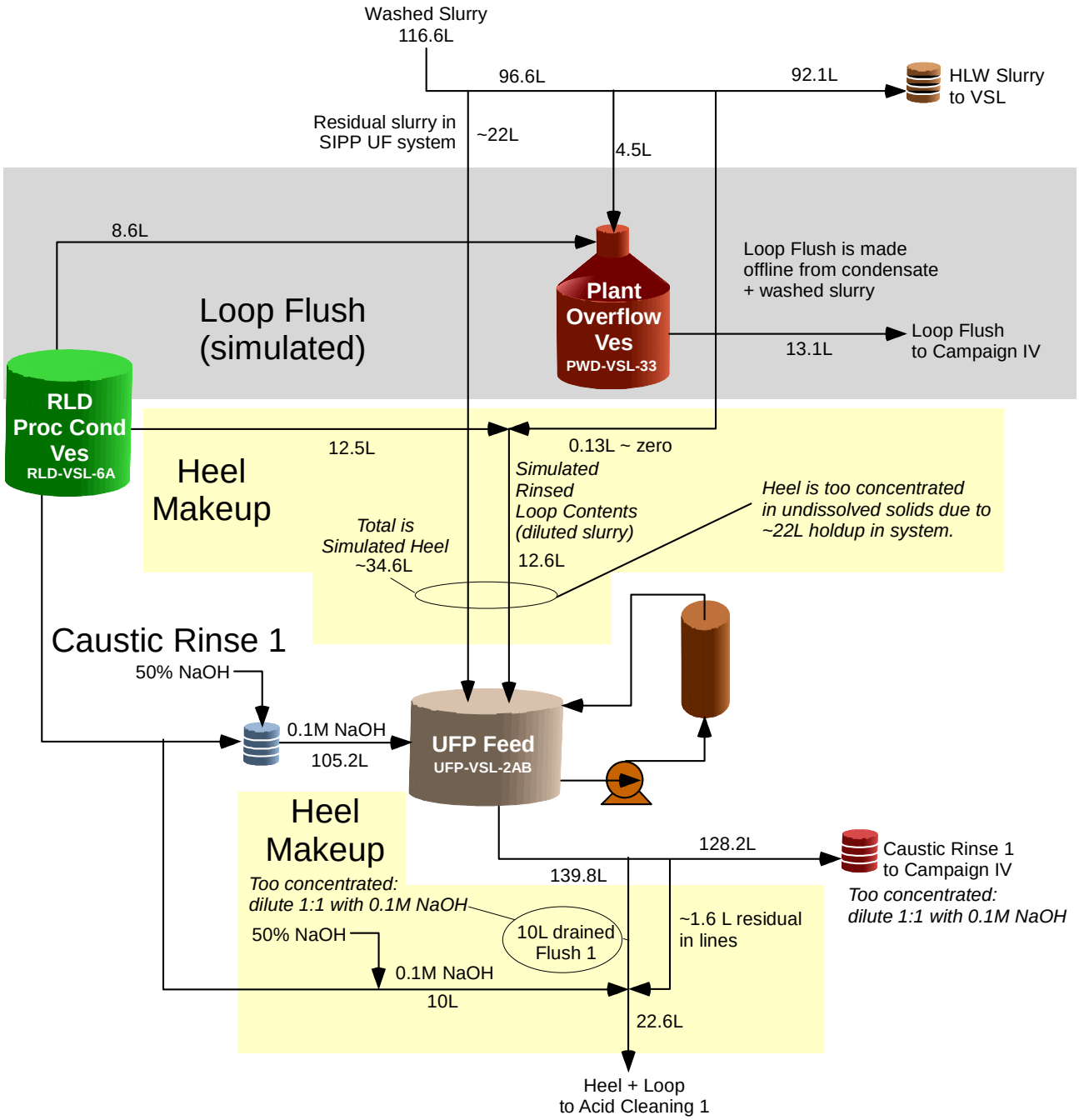


Figure 2. Generation of Caustic Rinse 1 Recycle

2.6.1.2 FEP Feed Mixing

Figure 3 shows a schematic of the FEP feed blending, and the amounts used are also shown in Table 16. The basis for the quantities of each recycle used was described in the Campaign II report (Duignan et al., 2004b or Appendix I-2). The condensate used (RLD) to generate all of the recycles from Campaign III to Campaign IV used the combined condensate from the Campaign III FEP and TLP evaporators. All of the recycles used

were from Campaign III except for the synthetic recycles and the HLW SBS condensate from Duratek. For the CIX recycles, some synthetic recycles were used where there was insufficient material available. The approximate actual volume of the combined feeds was 1081 L versus the target of 1090 L. The UFP recycles were arbitrarily split between the PWD-VSL-15 and PWD-VSL-16 tanks. Into PWD-15 were added the first 22 washes permeate, then Caustic Rinse 1, then 0.1M NaOH prepared from condensate, and then the first and second acid cleaning solutions. The amount of Caustic Rinse 1 added was not the total amount needed, but was the amount that would give closer to the correct undissolved solids in the recycle stream when combined with the 21.3L of 0.1M caustic prepared from condensate. This 0.1M caustic was added to approximate what would have been added if Rinse 1 would have had the correct undissolved solids content. (Due to the slurry holdup in the SIPP filter, the correct UDS concentration in the first caustic rinse cannot be achieved. The UDS content had to be adjusted externally to the system.) The wash permeates (117.7 L each) were to have been 140.8L per the OLI model[†], but this much permeate was not made in Campaign III (per the model), so the total wash permeate recycled was about 46L less than the model. This difference was not made up by adding any reagent solutions.

Next, the Campaign III Ion Exchange recycles were added. These consisted of the displacement solution (~0.1M NaOH) that was displaced from the column by the pre-elution rinse. The post elution rinse displaced by the regeneration solution (~water), and the 0.25M NaOH regeneration solution from the column. There were insufficient amounts of all of these recycles, so synthetic recycles were generated. The amounts of recycles available were insufficient because the CIX unit operation was not scaled the same as the other unit operations in the SIPP. The amount of actual and synthetic recycles is shown in Fig. 3 and Table 16. Table 16 also shows the Campaign III quantities. The 36.7L of 0.1M NaOH synthetic recycle was made from the RLD condensate containing ammonium.

The PWD-16 tank recycles were made of the permeate from the second 22 washes, the second and third caustic rinses, and the third acid cleaning; 0.25L of additional 50 wt% NaOH was needed for pH adjustment. Note that the recycles were combined differently to make the PWD-15 and PWD-16 solutions in Campaign IV than in the previous campaigns. The recycles were combined differently to minimize the amount of added NaOH required since NaOH added to neutralize recycles is not counted as waste sodium. <u>The results shown Section 2.6.5 for the FEP evaporation indicate that mixing the recycles differently had no apparent impact on the evaporation process</u>. The elemental and anion compositions of the Campaign III recycles are not presented since they were not measured except for the solids contents, density, and acid or base content. These

[†] As mentioned in the footnote to Table 1, after the modeling was done, and subsequent to completing Campaign I, the WTP UFP feed-tank batch size was increased from 18,000 gallons to 21,550 gallons. However, the criterion to determine the volume of washing water per batch was not changed, which was Volume = Volume of one Permeate Receipt tank = 21,770 gallons. This means the amount of water used to wash the batch was relatively smaller, that is, 21,770/21,550 = 1.01 instead of 21,770/18,000 = 1.209. Since the pilot-scale UFP batch size was ~117 L, then the wash volume would be 117 x 1.01 = 118L instead of 117 x 1.209 = 1.41L.

measured quantities for the UF recycles are shown in Table 17. The synthetic HLW recycles were made up from reagents to approximate the expected compositions. The vessel vent liquid was 0.1M NaOH, while the HLW canister decon liquid was 0.15M NaOH and 0.29M $NaNO_3$.

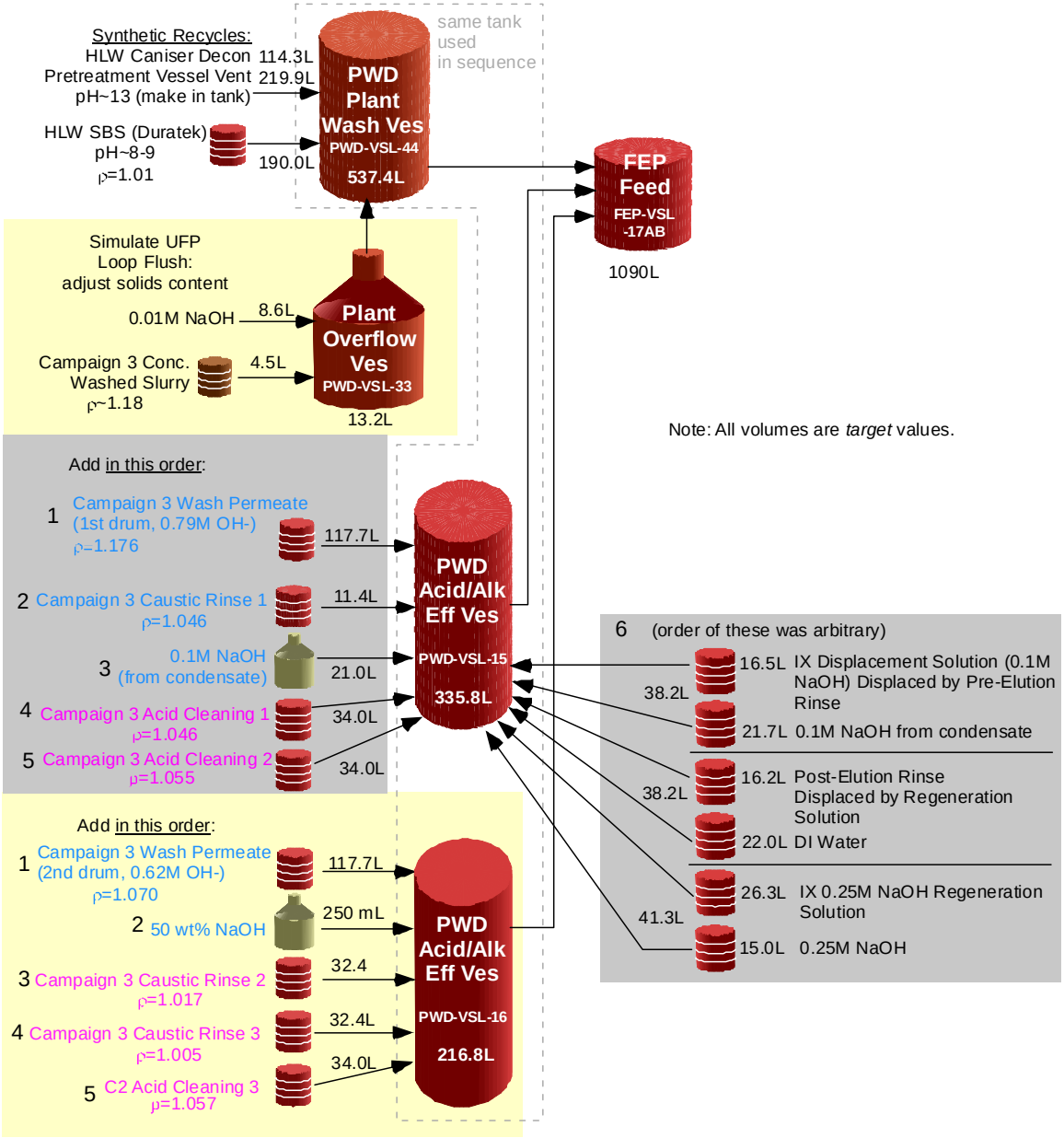


Figure 3. FEP Feed Blending of Recycle Streams

Table 16. Recycle Streams*

Stream	Campaign III Source	Campaign IV Volume (L)	Campaign III Volume (L)	Campaign II Volume (L)
HLW SBS Liquid	Duratek	190.0	190.8	190.8
Vessel Vent Liquid	synthetic	219.9	220.7	220.7
HLW Canister Decon Liquid	synthetic	114.3	114.7	114.7
UFP Recycle – Wash Permeate	Camp. III	235.4	236.2	338.8
1st 22 Washes Permeate		117.7	118.1	169.3
2nd 22 Washes Permeate		117.7	118.1	169.3
UFP Recycle - 0.1 M NaOH Rinse	Camp. III	97.2	97.7	117.0
1st Rinse		11.4	11.2	18.2
2nd Rinse		32.4	32.6	49.5
3rd Rinse		32.4	32.6	49.5
Additional 0.1M Caustic		21.0	21.3	0
50 wt% caustic	synthetic	0	0	11.55
UFP Recycle - 2M HNO_3 Cleaning	Camp. III	102.0	102.3	122.5
1st Cleaning		34.0	34.1	37.5
2nd Cleaning		34.0	34.1	37.5
3rd Cleaning		34.0	34.1	37.5
50 wt% caustic	synthetic	0.25	0	0
UFP Recycle - UF Loop Rinses	Camp. III	13.1	13.1	13.2
RLD condensate		8.6	8.6	8.6
Washed Concentrated Slurry		4.5	4.5	4.6
CIX Recycles	Camp. III	117.7	113.5	0
Displacement Solution displaced by Pre-Elution Rinse		16.5	0	0
0.1M NaOH (insufficient Displacement Solution)	synthetic	21.7	36.7	0
Post-Elution Rinse displaced by Regeneration Solution		16.2	19.0	0
DI Water (insufficient Post-Elution Rinse)	synthetic	22.0	17.7	0
0.25M NaOH Regeneration Solution		26.3	2.0	0
0.25M NaOH (insufficient Regeneration Solution)	synthetic	15.0	38.1	0
TOTAL		1090	1089	1129

* This table does not show the recycle streams organized by order added. See Fig. 3 for this information.

Table 17. Composition of Wash Permeate Recycles to FEP Evaporator

	Wash Permeate 1				Wash Permeate 2				Caustic Rinse 1			
Campaign:	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total Solids (wt%)	10.94	20.66	20.83	20.78	3.73	8.89	8.80	8.96	9.71	7.46	6.26	6.50
Undissolved Solids (wt%)	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	8.27	5.09	4.27	4.31
Supernatant Solids (wt%)	10.94	20.66	20.64	20.78	3.73	8.89	8.80	8.96	1.57	2.50	2.08	2.29
Density (kg/L)		1.177	1.176	1.176		1.071	1.070	1.071	1.075	1.057	1.046	
Total Base (M)		1.41	0.79	1.71		0.48	0.62	0.62	0.0450		0.201	0.238
or Total Acid (M)												

	Acid Cleaning 1 *				Acid Cleaning 2				Acid Cleaning 3			
Campaign:	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total Solids (wt%)	1.07	2.36	1.50	1.58	0.18	0.67	0.48	0.50	0.05	0.13	0.10	0.15
Undissolved Solids (wt%)	0.09	0.12	0.12	0.08	0.00	0.00	0.07	0.05	0.00	0.00	0.00	0.08
Supernatant Solids (wt%)	0.98	2.24	1.38	1.50	0.18	0.67	0.41	0.45	0.05	0.13	0.10	0.08
Density (kg/L)	1.056	1.051	1.046	1.048	1.062	1.055	1.055	1.056	1.063	1.055	1.057	1.055
Total Base (M)												
or Total Acid (M)	1.56	1.20	1.10	1.19	1.95	1.61	1.63	1.68	1.98	1.74	1.78	1.69

	Caustic Rinse 2				Caustic Rinse 3			
Campaign:	I	II	III	IV	I	II	III	IV
Total Solids (wt%)	0.83	0.66	0.75	0.80	0.76	0.81	0.86	0.95
Undissolved Solids (wt%)	0.00	0.13	0.12	0.04	0.00	0.13	0.03	0.03
Supernatant Solids (wt%)	0.83	0.53	0.63	0.76	0.76	0.68	0.83	0.92
Density (kg/L)	1.009	1.016	1.017	1.016	1.003	1.004	1.005	1.005
Total Base (M)					0.002			
or Total Acid (M)	0.158	0.449	0.420	0.396		0.0623	0.0393	0.045

2.6.2 Simulant Handling (Author – Williams)

For the following description of how the recycle FEP feed stream was made at the test location, see Fig. 3. A 760-liter tank was used to mix pilot-scale quantities of simulated HLW recycles that were then transferred to the pilot-scale FEP Feed Tank, which was represented by the plant tank: FEP-VSL-17AB. On 17 Augusts 2004, pilot-scale quantities of HLW Canister Decon and HLW Vessel Vent solutions were synthesized by combining 328.8 liters of deionized and filtered (DIF) water with 2.99 kg of 50 wt% NaOH, 2.76 kg of sodium nitrate, and 191.9 kg of HLW SBS Quencher solution from VSL. At this stage, the mixing tank represented the plant tank: PWD-VSL-44. To this mixture, the contents of mock plant tank PWD-VSL-33 (Plant Overflow Vessel) were added, which contained 5.31 kg of Campaign III concentrated washed HLW slurry and 8.6 liters of Campaign III FEP condensate. After mixing the entire contents of the mock PWD-VSL-44, and -33, they were transferred to the FEP Feed Tank on 18 August, 2004. The Campaign IV simulant activities were documented in the laboratory notebook (Williams, 2004).

On 18 August, the then empty 760-liter mixing tank was used as a plant mock PWD-VSL-15 tank and was filled with caustic and acid recycle streams from Campaign III. To that tank, the first of two drums of wash permeate was added, drum No. RM-03-269, which contained 133.0 kg of material. Then 21.0 kg of 0.1M NaOH from condensate and the Campaign III 0.1 M caustic flush recycle stream and Campaign III Acid Cleaning 1 and 2 recycle streams were added from three drums referred to as Caustic Flush 1, and Acid Flush 1 and Acid Flush 2, respectively. The amounts added from drums Nos. RM-03-281, RM-03-302, and RM-03-309, were 11.9 kg, 35.6 kg, and 35.9 kg, respectively. The material remaining in the drums was returned to storage. The Campaign III CIX recycles were added next including 21.7 kg of 0.1M NaOH from condensate, 16.8 kg of Displacement Solution (0.1 M NaOH) displaced by Pre-Elution Rinse, 15.6 kg of Post-Elution Rinse displaced by Regeneration Solution, 22.0 kg of DI Water, 26.6 kg of 0.25M NaOH Regeneration Solution, and 15.0 kg of 0.25M NaOH from DI Water. The target pH for this mixture was to be greater than or equal to 12, and since the pH was measured at 13 no additional NaOH was added. The contents of this mock PWD-VSL-15 mixing vessel were then added to the mixture in the FEP Feed Tank, also on 18 August.

Once again the 760-liter mixing tank was empty and this time it would represent the plant PWD-VSL-16 tank to receive the remaining caustic and acidic recycle streams. That solution has to be adjusted to be alkaline before being joined to the caustic contents of the FEP feed tank. Specifically, the empty tank was first filled with 121.4 kg of 0.1 M NaOH wash permeate from the second of two drums of wash permeate recycle, drum No. RM-03-270. A container of 250 ml of 50 wt% NaOH was added to the Wash Permeate from Campaign III. While the tank agitator was running three drums of recycled Campaign III spent Caustic Flush 2, Caustic Flush 3, and 2 M nitric acid UFP cleaning solution were added with constant stirring. From the drum (referred to as Caustic Flush

2) No. RM-03-268 an amount of 33.0 kg was transferred and from RM-03-312 (referred to as Caustic Flush 3) an amount of 32.6 kg was transferred. Finally, an amount of 35.9 kg was transferred from RM-03-310 (referred to as Acid Cleaning 3) to the PWD-VSL-16 mixing tank. The acid/caustic mixture was transferred to the FEP Feed Tank on 23 August to start the clock on a 2-day holding period before evaporation began. The total material mixed in the pilot-scale FEP unit operation Feed Tank, Fig. 4, and subsequently sent to the FEP Evaporator, was 1,118.8 kg. Further, the pH of the feed checked with pH paper, indicated a pH>13, which was the same as measured in the previous Campaigns.

Figure 4. Pilot-scale FEP Unit Operation Feed Tank

After evaporation started on 25 August, and during the first 30 minutes of operation, 278.4 g of Dow Corning Q2-3183A antifoam were added in three batches of 92.8 g each. Note that, per the vendor's recommendation the antifoam was diluted to a 10:1 ratio with deionized and filtered water (DIF) before the addition was made. At the end of FEP testing, a total of 174.6 kg of concentrate "FEP Bottoms" were produced with a density of 1.258 gm/ml, as measured by densitometer at 20°C.

2.6.3 Pilot FEP Equipment (Author – Qureshi)

Three FEP evaporation campaigns (Campaigns II, III and IV) were performed in the Pilot-Scale Evaporator designed and constructed for the RPP Project. The evaporator is located in the Engineering Development Lab. of the Savannah River National Lab (SRNL).

Figure 5 shows a schematic of the Pilot Scale Evaporator test facility. The evaporator is a forced circulation evaporator where heat is added in the reboiler. No evaporation occurs in the reboiler due to hydrostatic pressure head. The evaporator vessel is kept under vacuum (1.0 to 1.2 psia or 6.9 to 8.2 kPa) and the boiling temperature for water is about 105°F (41°C) at this pressure. The simulant has a boiling point temperature elevation of about 11°F (6°C). Thus the entire evaporation process occurs at moderate temperatures (100 to 120° F or 38 to 49°C). The evaporator vessel is about 27 feet tall with a nominal inside diameter of 17 inches, Fig. 6. The evaporator is designed to evaporate up to 0.6 gpm (23 lpm) of water.

The evaporator test facility consists of many sub-systems. Hardware descriptions of the facility, sub-systems, and key equipment are alphabetically described below.

2.6.3.1 Antifoam System

The evaporator recirculation loop has an injection port where antifoam agent is injected. Under normal operating conditions the pressure in the evaporator vessel vapor space is 1 psia, and despite the hydrostatic head of the concentrate, the absolute pressure at the injection port is below atmospheric pressure. The required amount of antifoam agent is diluted in a 1-liter bottle. Through a tube and a ball valve, this diluted antifoam agent is sucked in to the evaporator feed. Under certain conditions where full vacuum is not achieved yet and a positive pressure exists at the injection port, the diluted antifoam agent is injected using a large graduated syringe. See Fig. 7.

2.6.3.2 Concentrate Loop

This loop consists of a concentrate removal pump, flow meter, and a 500-gallon concentrate receipt tank. Under steady evaporator operations, the liquid level in the evaporator vessel is kept within minimum and maximum level limits. The evaporator is fed continuously and the concentrate is removed at a predetermined rate from the evaporator vessel to maintain the liquid level. However, for small batches, the evaporator is fed at a constant rate without removing any concentrate. The entire inventory of the concentrate is accumulated in the evaporator vessel until the target density is reached. At that point if the liquid level exceeds the maximum limit, concentrate is removed to bring the level to the lower limit. For the three SIPP FEP campaigns, all the concentrate was accumulated in the evaporator vessel and drained at the end of the test period.

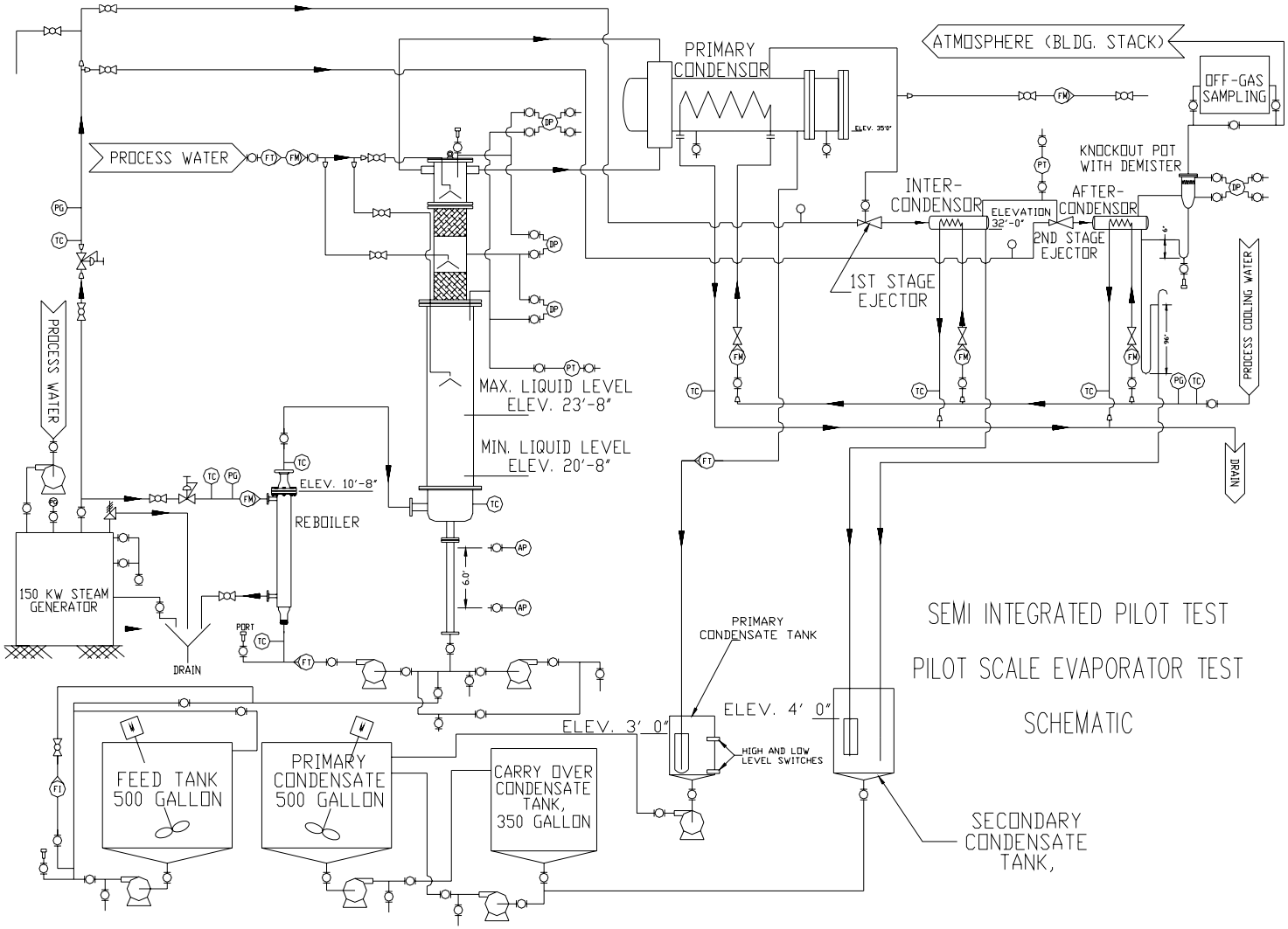
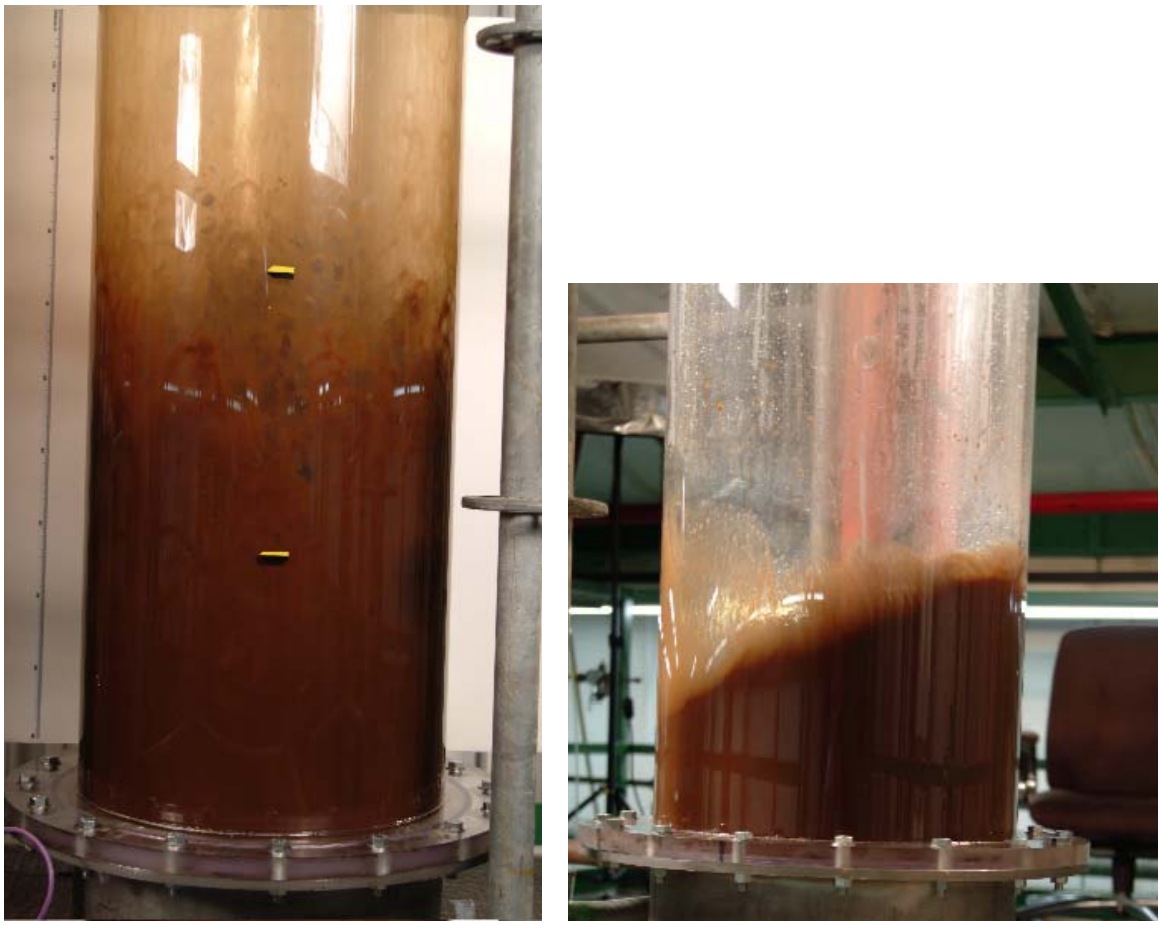


Figure 5. SIPP Pilot-Scale FEP/TLP Unit

Figure 6. SIPP Pilot-Scale FEP/TLP Unit: The bottom half of the 15-foot tall Acrylic Section with Ongoing Evaporation



(a) Before Defoamer Addition (b) After Defoamer Addition

Figure 7. SIPP Pilot-Scale FEP/TLP Unit: Evaporating

2.6.3.3 Evaporator Recirculation Loop

This loop consists of a 100 gpm variable speed drive centrifugal pump, flow meter, reboiler and the evaporator vessel. Note that the heat is not added directly to the evaporator vessel. Instead, heat is added via a vertical reboiler that is essentially a shell and tube heat exchanger. Low pressure steam condenses on the shell side and the concentrate passes through the tube side. The outlet of the tube side is about 10 ft below the boiling surface. Due to this hydrostatic head, no boiling occurs in the reboiler. The concentrate enters the evaporator vessel through the side wall and discharges vertically through a 2-inch diameter pipe. The discharge point is about 2 feet below the boiling surface. Due to low pressure, the saturated concentrate flashes. The vapor is disengaged near the boiling surface and leaves the evaporator vessel at the top. The liquid is drawn at the bottom by the main recirculation pump. The water vapor passes through two mist eliminator pads to remove any entrained droplets.

As stated, the evaporator vessel is about 27-foot tall with a nominal inside diameter of 17 inches. The bottom 12 feet of the vessel is stainless steel and the top 15 feet is acrylic, as seen in Fig. 6. Of the bottom 12 feet, the stainless steel vessel is only 2 feet high and the remaining height of 10 feet is taken up by a 2-inch stainless steel pipe. The boiling surface is maintained in the lower part of the acrylic section. The minimum and maximum liquid levels in the acrylic section are 5 and 40 inches, respectively. The designed capacity of evaporator vessel is about 30 gallons.

2.6.3.4 Feed Loop

This loop transfers the feed from the feed tank to the evaporator recirculation loop upstream of the main recirculation pump. It consists of the feed tank, a 10-gpm centrifugal feed pump, flow meter, and 1-inch PVC piping. Downstream of the feed pump, the feed can go either through a 1-inch PVC line or a ¼-inch stainless steel line with 0- to 1-gpm flow meter and a throttling valve. For initial transfer of feed, the large 1-inch line is used. Once the desired liquid level is achieved in the evaporator vessel and boiling process starts, feed is transferred through the smaller line with flow meter to monitor the feed rate.

2.6.3.5 Jet Pump

The evaporator operates under vacuum (1.0 – 1.2 psia). A two-stage steam driven jet pump maintains desired vacuum in the evaporator vessel. Steam from the steam generator is supplied at 110 psig to the two stages of the jet pump. The jet pump has its own set of condensers, inter and after-condenser. A separate tank catches the condensate from the jet pump condensers. The condensate from the first stage of the jet pump is discharged to the condensate catch tank via a dip tube because the inter-condenser operates under vacuum. The condensate from the after-condenser discharges directly into the catch tank without any dip tube since this condensate is already at a few inches of water above the atmospheric pressure.

The suction side of the first stage of the jet pump is connected to the primary condenser. Any non-condensable gases and some carry over vapor from the primary condenser are sucked into the jet pump. The vacuum level is adjusted by an air bleed in to the suction line via a throttling valve. The jet pump performance degraded slightly once during an early shakedown and it was attributed to some machining debris lodged in the jet pump nozzles. However, full performance returned after a thorough cleaning of all lines.

2.6.3.6 Primary Condensate Loop

The primary condensate loop includes the primary condenser, a 1-inch clear PVC transfer line, a water-filled dip tube, primary condensate catch tank, transfer pump and a 350-gallon primary condensate storage tank. The lower end of the 1-inch condensate line is placed in the dip tube to maintain vacuum in the condenser which is placed about 35 feet above the lab floor. The primary condenser is a shell and tube type heat exchanger with water vapor condensing on the shell side and coolant water flowing through the tubes. As the vacuum is built up, water from the dip tube is sucked into the condensate line. The distance between the top of the dip tube and bottom of the primary condenser is designed to be about 32 feet. This allows sufficient water column in the

clear PVC tube corresponding to the vacuum level. Under steady operation this water column is maintained and the condensate flows out of the dip tube into the catch tank. Once the water level is about 1 foot in the catch tank, a transfer pump automatically transfers the condensate to the 500-gallon tank. The transfer pump is controlled by two limit switches installed 1 foot apart on the catch tank.

2.6.3.7 Process Water Loop

The process-water loop includes house-water supply lines to the primary condenser, the inter-condenser, and the after-condenser. Each supply line has flow meters, ball valves and throttle valves to adjust the flow rates. Typically, the house water temperature is around 68 to 72°F (20 to 22°C). The temperature rise through the condensers is 5 to 9°F (3 -5°C). The cooling water is discharged to the building drains after flowing through the condensers.

2.6.3.8 Secondary Condensate Loop

This loop collects condensate streams from the two jet pump condensers. All the steam supplied to the two stages of the jet pump and any carryover water vapors from the primary condenser are condensed and constitute the secondary condensate. They are collected in the secondary condensate tank. The secondary condensate is either drained through the building drains or transferred to the primary condensate tank.

2.6.3.9 Steam Generator

An electric steam generator (Electro-Steam Model LB-150) supplies steam to the reboiler and the jet pump. The supply pressure is 110 – 120 psig. Steam to the reboiler is throttled down to a 3-5 psig. Steam to the jet pump is not throttled. Steam and condensate coming out the reboiler is drained through the building drains. Condensate coming out of jet pump condensers is collected in the secondary condensate tank.

2.6.3.10 Spray Water

Three water spray nozzles are provided in the evaporator vessel. Two 1-gpm conical spray nozzles are installed above each of the demister pads to wash them out as needed. The third spray nozzle is provided to clean the acrylic portion of the evaporator vessel. This nozzle is attached to a vertically traversing wand that allows washing of acrylic wall at any height.

2.6.4 Pilot FEP Operation (Author – Qureshi)

Typically, each campaign evaporated about 300 gallons of water in an 8- to 10-hour period from waste simulant. Feed tank supplies the simulant to the evaporator. The evaporator is designed to evaporate at a rate of up to 0.6 gpm of water. The water vapor is condensed in the primary condenser. Under steady conditions, the concentrate is removed from the recirculation line and collected in a drum. The condensate from the primary condenser is collected in the primary condensate tank. Several sample and injection ports are provided to draw samples and inject antifoam agent as needed.

All test data were acquired by a data acquisition system (DAS) and an abridged set of those data for Campaigns II, III, and IV are listed in Appendix H1. Manual data and observations were recorded in the lab notebook issued for this task. (Qureshi, 2004)

Prior to starting the SIPP evaporation campaigns, the evaporator system was disassembled, cleaned, inspected and reassembled. The system was found to be free of any material defects, fouling and malfunction from previous evaporation runs. After assembly of the system the following tests were performed to ensure proper operation of the evaporator.

2.6.4.1 Experimental Facility Leak Testing

Objective – Determine if the system can hold vacuum, i.e., air in-leakage rate is acceptable.

Test Sequence

i) Isolated the Evaporator Recirculation (ER) Loop from rest of the system by closing appropriate valves.

ii) Disconnected the First Stage Ejector line from the primary condenser and connected a vacuum pump at the primary condenser discharge.

iii) Filled water in Evaporator vessel to the maximum operating liquid level (about 40 inches in the lower acrylic section).

iv) Filled up the primary dip tube reservoir with water.

v) Started and operated the vacuum pump until the water level in the dip tube is about 31 feet of water.

vi) Verified that there was no air bubbling into the system.

vii) Verified that the system can hold vacuum for about 30 minutes.

vii) Test complete.

2.6.4.2 Evaporation Test with Water

Objective - To shake down the system and its components using water as test fluid prior to the chemical runs.

Test Sequence

i) Isolated the Reboiler and the Jet Pump from the Steam Generator.

ii) Started the Steam Generator.

iii) Filled the Feed Tank with Process Water to about 25% level (about 125 gallons).

iv) Using the Feed Loop pump FL-PU1, transferred water from the Feed Tank to the evaporator vessel to a level about 40 inches in the acrylic section.

v) Filled the primary condensate and secondary condensate dip tubes with water.

vi) Started the Jet Pump Vacuum System.

vii) Started the main recirculation pump and started supplying steam to the Reboiler.

viii) Adjusted steam to the Reboiler to limit the system temperature below 60 C.

ix) Once the system pressure dropped to about 1 psia, boiled water for about 30 minutes.

x) After completing the water boiling test, turned off the steam supply to the Jet Pump and the Reboiler and shut down the Steam Generator.

xi) Test complete.

2.6.4.3 SIPP-Feed Evaporation Process (FEP)Tests

Objective - To perform pilot scale tests of the Feed Evaporation Process.

Three evaporation campaigns were performed as a part of SIPP test program. These campaigns are designated and II, III and IV. The FEP was not used for Campaign I. During the evaporation process for each campaign, several liquid samples were drawn per sample matrix provided in Appendix D. Typically, these samples included feed, concentrate, primary condensate and secondary condensate. The samples were analyzed for their chemical composition. The analytical results for all evaporation campaigns are discussed and compared in Section 2.6.5. An abridged version of the operational data are given in Appendix H1.

Test Sequence

All test campaigns were performed following EDL approved work instructions written specifically for SIPP operations. Pertinent sequence of operations is provided below.

i) Started Steam Generator and the Data Acquisition System.

ii) Ran the Feed Tank mixer for about 30 minutes.

iii) Using the Feed Loop Pump, transferred feed from the Feed Tank to the evaporator vessel to about 24" level in the clear section.

iv) Filled the primary condensate and secondary condensate dip tubes with water.

v) Supplied process water to the Jet Pump condensers to about 5 gpm each and started the Jet Pump by supplying steam to the two jets. The evaporator pressure starts dropping at this point. It took about 10 minutes to reach the target vacuum levels.

vi) Supplied process water to the Primary Condenser to about 30 gpm.

vii) Started the main recirculation pump and turned on the steam to the Reboiler.

viii) Once the feed reached the saturation temperature and boiling started, maintained the liquid level in the evaporator by feeding the appropriate amount of feed using the feed pump.

ix) Recorded all the temperature, pressure and flow date via DAS. Additionally, video taped the action near the boiling surface as needed at different times

x) Antifoam agent was added to the recirculation loop at the beginning of the evaporation campaign.

xi) Drew liquid samples according the sample matrix.

xii) Continued evaporation process until the target density for each campaign was reached.

xiii) Once the evaporation campaign was complete, the steam generator was shut down and all the concentrate was transferred into a 55 gal drum.

xiv) After removing all the concentrate, filled the system with water (~30 gallons) and rinsed it thoroughly by running the recirculation pump. This rinse water was transferred to a drum. Subsequent water rinses were performed as needed to clear out the system.

xv) Test complete.

2.6.5 Pilot FEP Discussion of Results

2.6.5.1 Experimental Observations *(Author – Qureshi)*

For the three FEP campaigns, important test parameters are summarized in Table 18. The feed compositions and mixing process are described in section 2.6.1.2.

Table 18. Operating Parameters for FEP Campaigns

Parameters	Campaign II	Campaign III	Campaign IV
Date	4-14-2004	6-9-2004	8-25-2004
Total Feed Mass	2580.1 lbs (1170.3 kg)	2452.0 lbs (1112.2 kg)	2466.5 lbs (1118.8 kg)
Feed Density @ 20 C, 1 atm	1.015 g/ml	1.0352 g/ml	1.0345 g/ml
Evaporator Pressure	1-1.2 psia	1-1.2 psia	1-1.2 psia
Average Boiling Temp	45-50 C	45-50 C	45-50 C
Test Duration	8.25 hrs	7.5 hrs	7.75 hrs
Average Boil-off Rate	0.54 gpm (123 kg/hr)	0.55 gpm (125.6 kg/hr)	0.54 gpm (121.8 kg/hr)
Total Antifoam Added (1)	1516 ppm	1630 ppm	1594 ppm
Final Concentrate Density @ 20°C, 1 atm (2)	1.25 g/ml	1.257 g/ml	1.258 g/ml
Final Concentrate Mass	405.2 lbs (183.8 kg)	375.0 lbs (170.1 kg)	384.9 lbs (174.6 kg)

(1) The listed concentrations are based on the volume (at 20°C and 1 atm) of pilot FEP concentrate obtained at the end of each campaign. However, the target antifoam concentration was 1500 ppm for the concentrated FEP slurry at 50°C and 1 psia. Based on the pilot FEP working volume of 40 gallons (151.4 L) and a target concentrate density of 1.226 g/ml at 50°C and 1 psia, the mass of antifoam added in each campaign was 151,400 g x 1.226 g/mL x 1500 ppm = 278.4 grams
(2) The FEP final target density at the operation conditions of 50°C and 1 psia was 1.226 g/ml and at ambient conditions of 20°C and 1 atm was 1.252 g/ml, as per the OLI/ESP model.

2.6.5.2 FEP Waste Products (Author – Zamecnik)

Table 19 shows the FEP feed and concentrated Bottoms total and dissolved (supernate) compositions. The slurry elemental compositions were measured on microwave acid and sodium peroxide fusion HCL uptake dissolutions. The slurry anion compositions were measured on diluted slurry that was filtered after dilution, so any water-dissolvable salts present should have been dissolved. The feed samples were taken from the feed tank prior to the evaporation, while the Bottoms samples were taken from the recirculation line sample tap at the completion of the evaporation. All samples remained at room temperature until analyzed (within approx. 30 days).

The mass ratios (g in Bottoms/g in feed as %) of total species in the Bottoms slurry to the feed slurry are also shown. Deviation of these ratios from 100% indicates the uncertainty in the analyses since none of the species measured are lost during the evaporation (except for small amounts of entrainment). Water is the only significant species removed.

Comparison of the supernate / slurry composition ratios indicate that Ca (dissolved: 28 to 3%) and oxalate (158 to 25%) precipitated. Based on amount of oxalate precipitated and te Na ratio (95 to 91%), some Na was also precipitated with the oxalate. The supernate / slurry ratio for Cr would also seem to indicate that some Cr also precipitated; this ratio in

the feed was 88% and was 81% in the Bottoms. However, the analytical uncertainty of the feed and Bottoms analyses is large enough that the difference between 88 and 81% is not significant; replicate analyses are needed to improve these values. Similarly, the apparent drop in the Al ratio from 61 to 56% is also inconclusive.

Generally, the data show that the material balance closes within about ±20% for the more abundant species. The feed contains partially dissolved Al, Ca, Li, Mg, Na, P, S, and Si; the remaining elements are totally undissolved. The ion analyses appear to show complete dissolution, but the analytical values are suspect. The elemental analyses show that some P (phosphate) and S (sulfate) are not dissolved. Fluoride would also be expected to be partially undissolved since some was added as CaF_2.

Table 19. Composition of Campaign IV FEP Evaporator Streams

All units mg/kg unless otherwise noted	Feed Total Slurry	Feed Supernate	Supernate/ Slurry (%)	Bottoms Total Slurry	Bottoms Supernate	Supernate/ Slurry (%)	Bottoms/ Feed Total Slurry (%) *	Bottoms/ Feed Supernate (%) *
Total Solids (wt%)	4.98	4.78		31.52	29.68		96	
Undissolved Solids (wt%)	0.21	0		2.61	0		188	
Supernatant Solids (wt%)	4.78	4.78		29.68	29.68			
Density (kg/L)	1.035			1.257				
Ag	17.2	<0.58		39.0	1.48	4	34	
Al	751	457	61	4865	2705	56	98	89
B	74.7	97.7	131	334	628	188		97
Ba	3.20	<0.02		21.9	<0.02		103	
Ca	14.0	3.87	28	114	3.47	3	123	14
Cd	0.693	<0.03		4.63	<0.02		101	
Ce	<8.31	<1.49		25.1	<1.23			
Co	<0.20	<0.09		<0.34	<0.07			
Cr	22.6	19.8	88	155	126	81	103	97
Cu	0.808	<0.10		7.98	<0.08		149	
Fe	374	<0.09		2870	<0.07		116	
K	1550			6030	10342	172	59	
La	3	<1.35		27.3	<1.11		155	
Li	20.8	0.478	2	128	0.339	0	93	
Mg	7.90	0.438	6	79.8	<0.13		153	
Mn	71.1	<0.02		537	<0.01		114	
Mo	<2	0.980		2.7	6.58	244		101
Na	13641	12959	95	85941	78043	91	95	91
Nd	9.02	<0.50		68.0	<0.41		114	
Ni	11.0	<0.12		84.6	0.27	0	116	
P	68.8	50.8	74	415	374	90	91	111
Pb	<13.2	<1.33		123	6.46	5		
S	161	131	81	891	835	94	84	97
Si	124	7.54	6	1097	42.9	4	133	86
Sr	8.02	0.08	1	59.1	0.547	1	111	98
Ti	1	<0.27		8.43	<0.22		89	
Zn	10.3	<0.72		79.8	<0.59		117	
Zr	5.31	<0.09		36.9	<0.08		105	
bromide	<67	<96.7		<76.0	<79.6			
chloride	131	(371)	283	934	1201	129	108	49
fluoride	11	(27.1)	246	67.0	149	222	92	83
formate	98	(221)	226	578	915	158	89	63
nitrate	19800	21760	110	112000	125696	112	85	87
nitrite	2270	2756	121	14000	15274	109	93	84
oxalate	873	(1383)	158	4350	1074	25	75	12
phosphate	312	(786)	252	2120	2291	108	103	44
sulfate	304	(787)	259	2090	2235	107	104	43
ammonium	<89			<99				

* Ratio of mass in Bottoms to mass in feed; should equal 100% for total slurry

The results for B and the anions are suspect. The feed anion concentrations in the supernate (shown in parentheses) are greater than in the slurry, which is not possible. Comparison of the supernate/slurry ratios for the feed and Bottoms indicate that some Ca, Cr, Na and oxalate precipitated. The difference in the Al ratio (61 vs. 56) is too small to conclude if any Al precipitated. As in the previous campaigns, the oxalate appears to have precipitated as sodium oxalate, lowering slightly the amount of dissolved Na. Whether or not precipitation of phosphate occurred could not be determined because the P and phosphate analyses data are inconclusive. The S and sulfate results are also inconclusive. The ammonium concentrations in the feed and concentrate were both below the detection limit. The ammonium in the condensate was 61 mg/L.

The concentrations of the more prevalent species in the FEP streams for Campaigns II-IV are compared in Table 20. The Campaign III and IV undissolved solids concentrations are essentially equal, while the total and supernatant solids for Campaign IV are about 1 wt% higher than in Campaign III. The Campaign II UDS values are slightly higher, whereas the total and supernatant solids are lower. The elemental and anion concentrations of the Campaign III and IV feeds and concentrates are similar. The supernate/slurry wt% values for Campaign IV are also similar to Campaign III, showing that the distribution between the undissolved and dissolved species is similar. These results indicate that the SIPP process was at steady-state with respect to the chemical composition of the recycles.

About 56-61% of the Al was dissolved in the Campaign IV feed and concentrate compared to 53-56% in Campaign III. This difference is small and may be totally due to analytical uncertainty. Both of these values are smaller than the Campaign II values of 60-70%. Therefore, the fraction of dissolved Al in Campaign IV was definitely less than in Campaign II but similar to or slightly higher than Campaign III. The dissolved Cr in Campaign IV was 81-88%, which is very similar to the Campaign III values of 80-81%.

Table 20. Comparison of Selected Species in Campaigns II-IV FEP

All units mg/kg unless otherwise noted	Campaign II			Campaign II			Campaign III			Campaign III			Campaign IV			Campaign IV		
	Feed Slurry	Feed Supernate	(1)	Bottoms Slurry	Bottoms Supernate	(1)	Feed Slurry	Feed Supernate	(1)	Bottoms Slurry	Bottoms Supernate	(1)	Feed Slurry	Feed Supernate	(1)	Bottoms Slurry	Bottoms Supernate	(1)
Total Solids (wt%)	4.72	4.44		28.95	26.73		4.93	4.71		30.75	28.82		4.98	4.78		31.52	29.68	
Undissolved Solids (wt%)	0.29	0		3.03	0		0.23	0		2.70	0		0.21	0		2.61	0	
Supernatant Solids (wt%)	4.44	4.44		26.73	26.73		4.71	4.71		28.82	28.82		4.78	4.78		29.68	29.68	
Density (kg/L)	1.037	1.036		1.261	1.214		1.035	1.038		1.255	1.231		1.034			1.257	1.237	
Al	920	548	60	5470	3823	70	811	452	56	5255	2781	53	751	457	61	4865	2705	56
Ca	206	1.13	1	355	<0.05	0	24.5	2.84	12	111	6.66	6	14.0	3.87	28	114	3.5	3
Cr	51.0	19.6	38	188	124	66	25.4	20.4	80	156	126	81	22.6	19.8	88	155	126	81
Fe	835	<0.08	0	4600	<0.07	0	635	<0.09	0	3910	<0.07	0	374	<0.09	0	2870	<0.07	0
Mn	156	<0.02	0	942	<0.02	0	134	<0.02	0	828	<0.01	0	71.1	<0.02	0	537	<0.01	0
Na	15800	13402	85	94200	88151	94	13300	13623	102	79400	80159	101	13641	12959	95	85941	78043	91
Ni	208	0.38	0	909	0.29	0	15.1	<0.12	0	128	0.72	1	11.0	<0.12	0	85.0	0.27	0
P	<160	123		889	906	102	65.3	54.8	84	444	396	89	68.8	50.8	74	415	374	90
S	219	91.9	42	720	651	90	133	135	102	813	829	102	161	131	81	891	835	94
Si	371	5.29	1	1580	31.3	2	147	9.06	6	1560	65.9	4	124	7.5	6	1097	42.9	4
Sr	13.6	<0.01	0	68.9	0.332	0	9.25	0.04	0	54.1	0.20	0	8.02	0.08	1	59.1	0.055	1
chloride	83						147	132	90	1150	1100	96	131	(371)	283	934	1201	129
fluoride	11						<17	11.6	>68	93	36	39	11.0	(27.1)	246	67.0	(148.8)	222
formate	39						86	78.3	91	732	667	91	98.0	(221)	225	578	(915)	158
nitrate	14465						19700	17101	87	120000	121912	102	19800	(21760)	110	112000	(125696)	112
nitrite	487						2240	2058	92	14400	14422	100	2270	(2756)	121	14000	(15274)	109
oxalate	1520				972		1070	976	91	3860	924	24	873	(1383)	158	4350	1074	25
phosphate	563						363	303	83	2270	2279	100	312	(786)	252	2120	2291	108
sulfate	257						350	318	91	2260	2191	97	304	(787)	259	2090	2235	107

(1) All these columns are the ratio of the two preceding columns in percentage, i.e., (Supernate / Slurry) x 100%

Table 21 presents the material balance on undissolved solids and oxalate for Campaigns II-IV. For these campaigns, the increase in undissolved solids can be accounted for by the decrease in dissolved oxalate if the oxalate precipitates as sodium oxalate. Some of the oxalate was probably also precipitated as calcium oxalate, but the amount of calcium present was very small, so most of the oxalate would have precipitated as the Na salt. For each campaign, there was a decrease in the dissolved Na, but the decrease was on the order of the analytical uncertainty.

Table 21. Mass Balance on FEP Solids (1, 2)

		Campaign IV			Campaign III			Campaign II		
		Feed	Bottoms	Change (Bottoms - Feed)	Feed	Bottoms	Change (Bottoms - Feed)	Feed	Bottoms	Change (Bottoms - Feed)
1	Undissolved Solids (wt%)	0.21	2.61		0.23	2.70		0.29	3.03	
2	Undissolved Solids Mass (g)	2368	4446	+2078	2567	4600	+2033	3345	5626	+2281
3	Dissolved Oxalate as $Na_2C_2O_4$ Mass (g)	2375	279	-2096	1653	239	-1413	2603	265	-2338
4	Dissolved Oxalate Mass (g)	1559	183	-1376	1085	157	-928	1710	174	-1536
5	Total Solids Mass (g)	56.1	53.7	-2.4	54.8	52.3	-2.5	54.1	53.8	-0.3
6	Total Solids (wt%)	4.98	31.52		4.65	28.70		4.63	29.80	

(1) $\text{Row } 3 = \text{Row } 4 * \frac{MW(Na_2C_2O_4)}{MW(C_2O_4^{-2})}; \text{MW} = \text{molecular weight}$

(2) The difference in the wt% solids values is of no value, so these cells are grayed out above.

2.6.6 Pilot FEP Conclusions

2.6.6.1 Experimental Conclusions (Author – Qureshi)

Campaign IV

The SIPP FEP Campaign IV was run on 25 Augusta, 2004. A total of 1118.8 kg of feed was concentrated down to about 174.6 kg. The entire evaporation process proceeded without any equipment failure or operational difficulty. The average evaporation rate during this campaign was around 0.54 gpm.

Similar to the earlier campaigns, no significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 foot. This height is significantly less than the 5-foot distance to the lower demister pad. However, during start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. Any air injection into the recirculation loop would generate instantaneous froth of 3 to 4 feet that would subside as soon as air is cut off.

Several liquid samples of feed, concentrate, primary condensate and secondary condensate were pulled during the campaign, see Appendix D.

The following conclusions were extracted from the Interim Reports of Campaign III (Duignan et al., 2004c or Appendix I-3) and Campaign II (Duignan et al., 2004b or Appendix I-2)

Campaign III

The SIPP FEP Campaign III was run on 7 June, 2004. A total of 1112.2 kg of feed was concentrated down to about 170.1 kg. The entire evaporation process proceeded without any glitch or equipment failure. The average evaporation rate during this campaign was around 0.55 gpm.

No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 foot that is significantly less than the 5-foot distance to the lower demister pad. However, during start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.

The concentrate density was measured by three methods as described above. Density measurements by the density meter were used to reach the target density goal of 1.257 g/ml at 20 C.

Campaign II

During SIPP FEP Campaign II run on 14 April, 2004, a total of about 1169.7 kg of feed was concentrated down to about 185.4 kg. The feed was evaporated under vacuum (1 psia) at moderate temperatures (~ 50 C). The entire evaporation process proceeded as designed. The evaporator was designed to evaporate up to 0.6 gpm of water. The average evaporation rate during this campaign was around 0.54 gpm.

No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 foot that is significantly less than the 5-foot distance to the lower demister pad. However, during start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.

2.6.6.2 Waste Products Conclusions (Author – Zamecnik)

Campaign IV

- Mixing of the recycles in a different order for Campaign IV had no effect on the evaporation process as compared to the previous campaigns.
- The FEP feed and Bottoms concentrations for Campaigns III and IV were very similar, indicating that steady-state had been reached with respect to the recycle compositions, as indicated by the model in Appendix B.
- The precipitation of sodium oxalate in the FEP evaporator occurred in all three campaigns and accounted for most of the precipitated solids found. That is, while more that 90% of the oxalate was dissolved in the FEP feed less than 25% of the oxalate was still dissolved after reaching the target Bottoms concentration.
- About 56-61% of the aluminum was dissolved in the Campaign IV feed and the concentrate (Bottoms), which was similar to the Campaign III percentage. This dissolved Al fraction was less than 60-79% realized in Campaign II, resulting in more undissolved Al fed to the UFP.

The following conclusions were extracted from the Interim Reports of Campaign III (Duignan et al., 2004c or Appendix I-3) and Campaign II (Duignan et al., 2004b or Appendix I-2)

Campaign III

- As seen in Campaign II, a large portion of the dissolved oxalate in the feed was precipitated, probably as sodium oxalate.
- The oxalate concentration in the FEP feed in Campaign III was less than that in Campaign II, which is consistent with the higher oxalate concentration in the Campaign I slurry.
- About 25-40% of the dissolved Al in the feed to the FEP evaporator precipitated during mixing of the recycles, assumed to occur because of localized regions of low pH. Vigorous mixing when joining caustic and acidic recycle streams in the Plant Wash and Disposal System would help to minimize Al precipitation.
- The fraction of dissolved aluminum in Campaign III FEP concentrate (Bottoms) was less than in Campaign II, resulting in more undissolved Al fed to the UFP.

Campaign II

- The composition of the FEP feed was predictable by mass balance of the individual feed streams.
- Dissolved metals concentrations parallel the ratios in the AY102 simulant present in the recycles.

- Dissolved oxalate, present in the feed, began to precipitate when approximately 53% of the feed had been evaporated. A total of about 90 wt% of that oxalate precipitated at the end of evaporation. The oxalate appears to have precipitated as the Na salt $Na_2C_2O_4$.

2.7 PILOT ULTRAFILTRATION (Authors – Fowley, Williams & Zamecnik)

The RPP-WTP Ultrafiltration Process (UFP) will remove entrained solids from a combined HLW and LAW feed. The solids are removed to protect downstream cesium ion exchange (CIX) beds and to meet the specifications for LAW product. In addition, the RPP-WTP UFP will concentrate the removed solids as a slurry to minimize storage requirements for HLW and to enhance HLW vitrification efficiency.

The SIPP UFP concentrated and removed solids from combined simulated waste feed to produce two products; concentrated slurry for vitrification, and filtered permeate for the ion exchange process. The SIPP UFP waste feed consisted of a mixture of FEP Bottoms (made up of concentrated recycle streams) and simulated wastes of AY102 and AP101. The recycle streams were included in the SIPP UFP (to a limited extent) to mimic actual WTP operation.

The Campaign IV UFP tests were different from previous campaigns in that the filter unit chosen by RPP-WTP was from a different manufacturer than the one use in all previous testing. D C Fabricators, Inc. provided a new filter unit consisting of GKN sintered metal filter tubes. The filter media used in the previous campaigns (I, II, and III) was manufactured by the Mott Corporation. Both filter media were sintered 316L stainless steel with a nominal 0.1 micron porosity and made from the same size tubes. Further information about the new GKN filter unit is provided in Section 2.7.3.1 and Appendix F.

Table 22 shows the SIPP UFP Campaign IV test matrix. The numbering of the tests has been maintained and sequentially adjusted from Campaign I (Duignan, et al., 2004a). Several tests were eliminated prior to Campaign I and between Campaign I and II, which produced numerical gaps between several of the test numbers. The steady state tests X.07, X.08, X.09, and X.10 (X representing the campaign) were added back to the matrix, along with two additional steady state tests prior to Campaign IV to provide comparison with the Mott filter. In addition, seven higher-temperature tests were added to the matrix to determine the effect of slurry viscosity on permeate flux.

Table 22. Campaign IV UFP Test Matrix

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
4.00A	Pre-test baseline A[1]	10	11	25	20
4.00B	Pre-test baseline B[1]	20	11	25	20
4.00C	Pre-test baseline C[1]	30	11	25	20
4.03A	Dewater first half of slurry[2]	40	12	25	960[8]
4.03B	Dewater second half of slurry[2]	40	12	25	2300[8]
4.07	Steady State @ 24wt%	30	9	25	30
4.08	Steady State @ 24wt%	30	13	25	30
4.09	Steady State @ 24wt%	50	13	25	30
4.11	Steady State @ 24wt%	40	11	25	30
Steady5	Steady State @ 24wt%	50	13	25	30
Steady6	Steady State @ 24wt%	50	15	25[7]	30
Temp1	High temperature test @ 20 wt%	40	12	30	30
Temp2	High temperature test @ 20 wt%	40	12	37.5	30
Temp3	High temperature test @ 20 wt%	40	12	45	30
Temp4	High temperature test @ 20 wt%	40	12	35	30
Temp5	High temperature test @ 20 wt%	40	12	25	30
Temp6	High temperature test @ 20 wt%	50	15	37.5	30
Temp7	High temperature test @ 20 wt%	50	15	45	30
Wash 1	Slurry wash 1[3]	40	12	25	379[8]
Wash 2	Slurry wash 2[3]	40	12	25	229[8]
4.18A	Caustic rinse 1[4]	20	11	25	30
4.18B	Acid clean 1[5]	40	11	25	90
4.18C	Acid clean 2[5]	40	11	25	90
4.18D	Acid clean 3[5]	40	11	25	90
4.19A	Caustic rinse 2[4]	20	11	25	30
4.19B	Caustic rinse 3[4]	20	11	25	30
4.21A	Post-test baseline A[6]	10	11	25	20
4.21B	Post-test baseline B[6]	20	11	25	20
4.21C	Post-test baseline C[6]	30	11	25	20

1. The pre-test baseline tests were conducted with 0.1 M NaOH solution made from de-ionized, filtered (0.1 µm) water.
2. The slurry was dewatered to 20 wt% undissolved solids or greater.
3. The slurry was washed with 0.01 M NaOH solution made from FEP condensate.
4. The caustic rinse consisted of 0.1 M NaOH solution made from FEP condensate.
5. The acid clean consisted of 2 M HNO_3 solution.
6. The post-test baseline tests were conducted with spent caustic rinse 3 solution and repeated with 0.1 M NaOH made from de-ionized, filtered water.
7. Test temperature was maintained as close to 25 deg C as possible within the limits of the system.
8. Run time estimated from previous campaigns.

The remainder of this section will detail the pilot-scale UFP unit operation conducted as part of Campaign IV testing and compare results from all four SIPP campaigns. The process started with the preparation of the feed product. The chemical explanation of the feed stream formation will be followed by a short description on how feed formation was handled just before UFP operation and then how the waste stream was handled during and after its separation. The following section will discuss the physical equipment used to filter the waste and how the test was run. Finally, the results will be discussed and conclusions made.

2.7.1 Chemical Description of the Pilot-Scale UFP Feed Stream (Author – Zamecnik)

The ultrafiltration feed slurry was made from the FEP evaporator Bottoms, the AY102 simulant, and the AP101 simulant. No extensive characterization of this feed was performed; only solids and density measurements were made. Figure 8 and Fig. 9 show schematically how feed was processed through concentration, washing, rinsing and cleaning steps were performed. These steps were essentially the same as used in Campaigns II and III, with some quantities adjusted to give more correct solids loadings in the recycles.

2.7.2 Simulant Handling (Author – Williams)

Before testing began the simulants were prepared, which would be needed to create recycle streams from the UFP. Preparations of the simulated waste feed were then performed so as to have the accepted proportions of the constituents as per the OLI/ESP model (see Table 3).

After the dewatering portion of pilot-scale UFP testing, the slurry was adjusted in order to have a target solids concentration of 20 wt% undissolved solids (UDS) before washing began, as required by the Test Specification (Longwell, 2003). The UFP produced 117 L of concentrated slurry at ~24 wt% UDS and approximately four 55-gallon drums containing permeate. Therefore, some of the 24 wt% slurry was removed and approximately 25 L of permeate were added back to the slurry to maintain the slurry volume at 117 L while attaining 19 wt% UDS. This section describes how the simulants were made and adjusted at the test location.

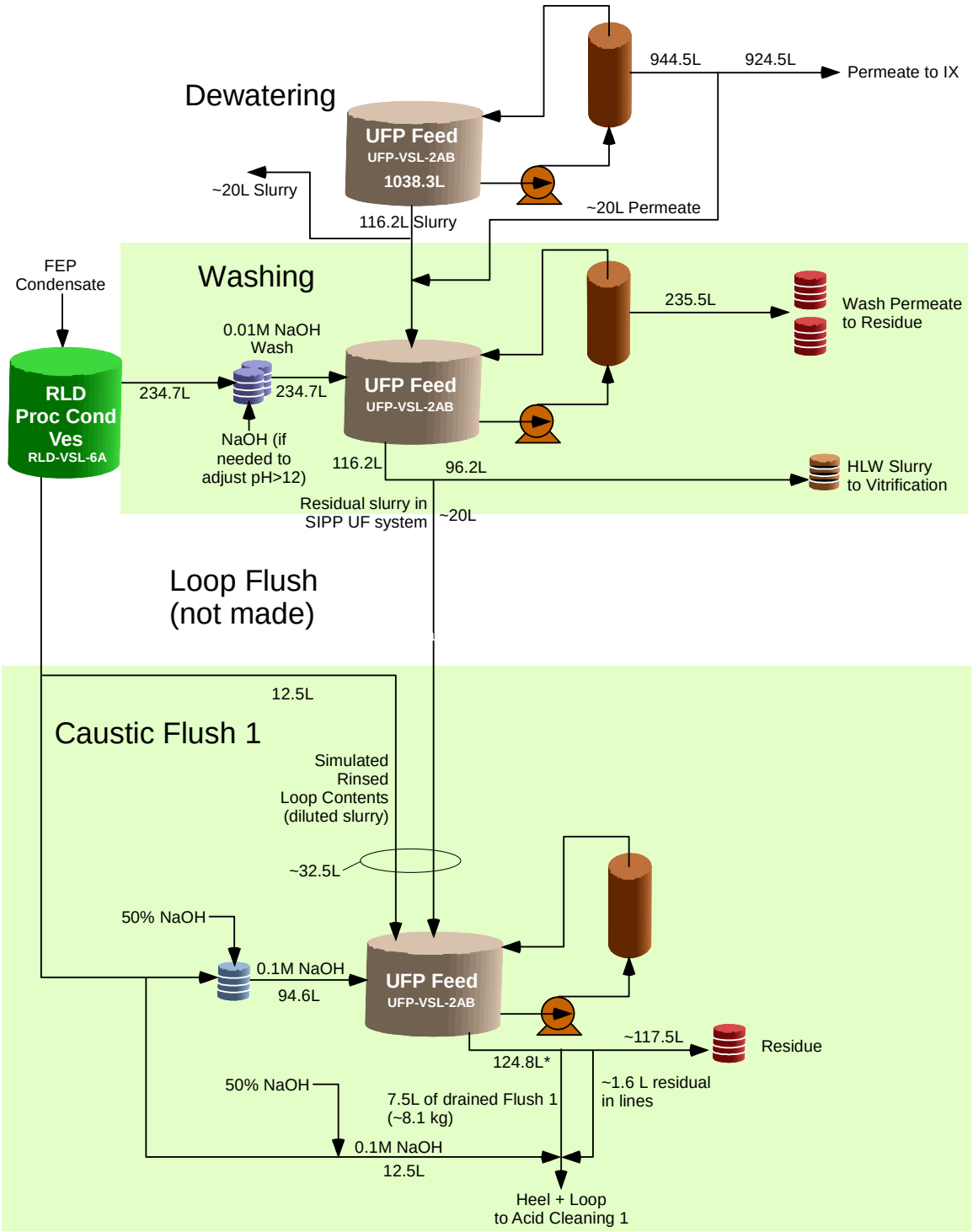


Figure 8. Schematic of Ultrafiltration Process – Page 1

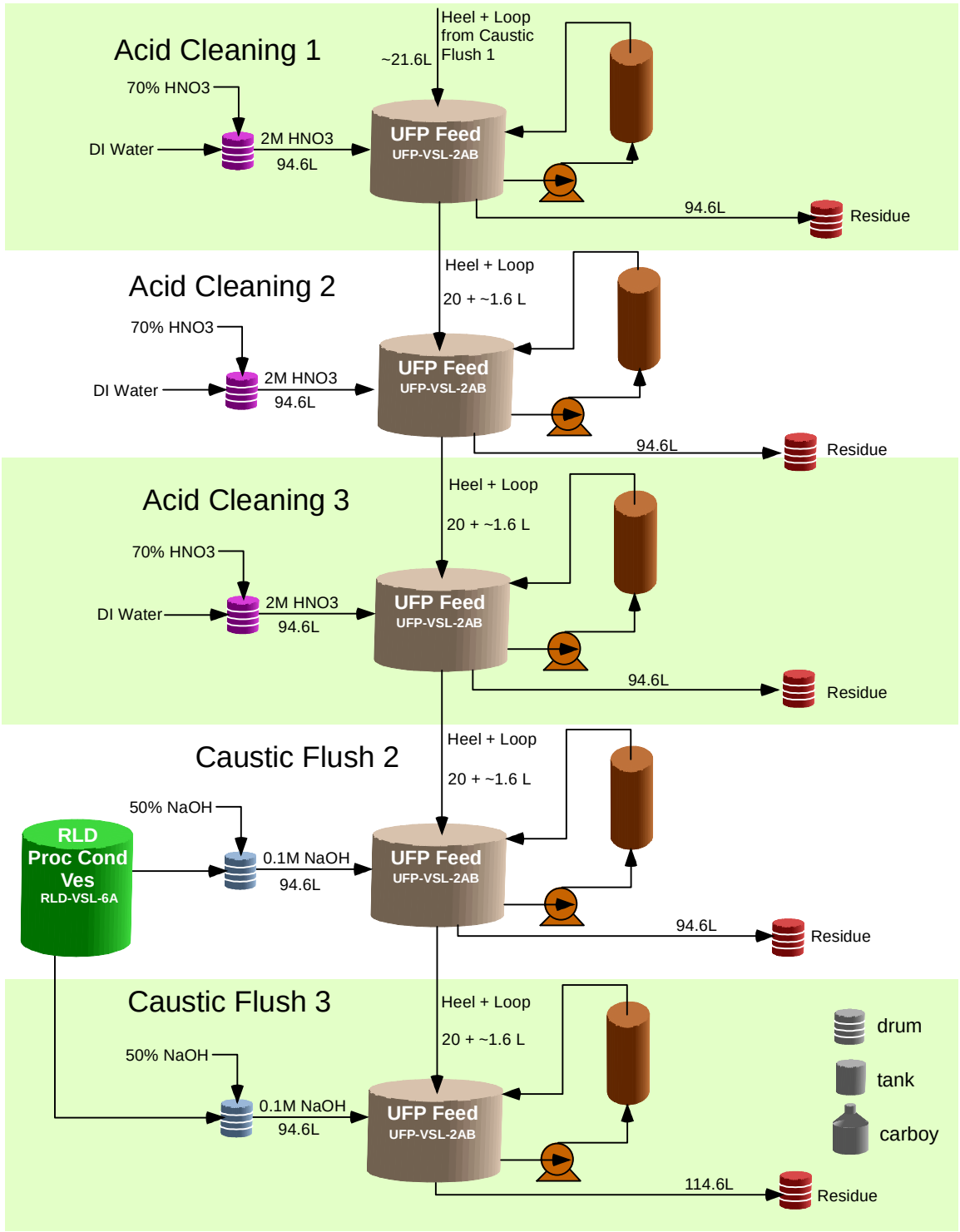


Figure 9. Schematic of Ultrafiltration Process – Page 2

2.7.2.1 Preparing for UFP Recycle Streams

Refer to Fig. 3 (blending of recycle streams) and Figs. 8 and 9 (schematic of UFP) to better understand the following descriptions of feed preparations and use.

In preparation to create the UFP wash-water recycle stream on 17 August 2004, two 55-gallon drums, labeled "Campaign 4-UFP First or Second Wash," were each filled with 117.4 kg of Campaign III RLD condensate into which were added 187.8 grams of 50 wt% NaOH to attain a caustic concentration of 0.01 M NaOH[†]. The loop rinse recycle stream from Campaign III for use in Campaign IV, was made in one carboy labeled "PWD-VSL-33" and was filled with 8.6 liters of Campaign III FEP and TLP condensate. This carboy received 4.5 liters of washed Campaign III HLW slurry after washing. To create the UFP "Heel" sludge recycle stream another carboy was filled with 12.5 liters of Campaign III FEP and TLP condensate to await receipt of washed slurry. To create rinse water recycle, three 55-gallon drums, labeled "Campaign 4-0.1M NaOH for UFP Caustic Flush 1, 2 or 3," were each filled with 94.6 liters of Campaign III FEP and TLP condensate in the Caustic Flush 1 drum and 94.6 liters of FEP condensate in the Caustic Flush 2 and 3 drums. Those drums were made to have a caustic concentration of 0.1 M NaOH by adding 766.8 grams of 50 wt% NaOH in the Caustic Flush 1 drum and 766.8 grams of 50 wt% NaOH into each of the Caustic Flush 2 and Caustic Flush 3 drums. The final UFP recycle stream created was for acid cleaning. It was made by using three 55-gallon drums labeled "Campaign 4-UFP Acid Cleaning 1, 2 or 3," which were each filled with 94.6 liters of DI water. To make the acid concentration 2 M HNO_3, 17 kg of 70% HNO_3 were added into each of those drums.

2.7.2.2 Preparing UFP Feed

In preparation for pilot-scale UFP unit operation, AP101 simulated waste, which was prepared by Optima, was mixed with the FEP Evaporator Bottoms and the AY102/C106, or simply AY102, simulated waste in the UFP Primary Mixing Tank. This tank represented the plant tanks UFP-VSL-1A/B. Three major components of the AY102 simulant were also made by Optima, but those components were joined, and its final preparation was made, at the EDL test location in a separate mixing tank (UFP Secondary Mixing Tank) on 24 May in order to have just the right mix. The final adjustment is shown in Table 23:

[†] The concentration of 0.01 M NaOH was nominal. The real target was to have a pH of at least 12. Due to the high acid content of the EDL water supply the initial addition of 117 grams of the 50 wt% NaOH to the 141 liters of water still indicated a pH below 12. To be safe the amount of caustic was increased to 187.8 grams which theoretically gave a concentration of 0.02 M NaOH and a pH = 12.3. It measured as pH >12.

Table 23. UFP Feed Constituent: AY102 Simulant

Material	Mass Added (g)
Wet Additions	
AY102 Supernatant Simulant by Optima	66,800
Precipitated Sludge Solids by Optima	238,200
NAS, sodium aluminosilicate (wet) by Optima	27,900
Dry Additions	
$Al(OH)_3$	5,660.0
Al_2O_3	2,015.2
Calcium Phosphate Tribasic	135.0
SiO_2	3,650.0
$RbNO_3$	0.46
Total	344,360.66

After samples were taken, AY102 simulant in excess of the target volume of 63.8 gallons was removed. That volume was indicated by the OLI/ESP model to be used for Campaign IV and is shown at the top of Table 8. With AY102 ready, the final UFP feed preparation could be completed. The 63.8 gallons (304.5 kg) of AY102 simulant were transferred to the UFP Primary Mixing Tank. To this slurry, 174.6 kg of FEP Bottoms made in the pilot-scale FEP were transferred to the UFP Primary Mixing Tank on 27 August. The last addition was 860.5 kg of AP101 simulant, which was also completed on 27 August. The total feed in the UFP Primary Mixing Tank was 1,339.6 kg before samples were removed for analysis.

After the UFP Primary Mixing Tank contents had settled over the weekend of 28 to 29 August, 15.8 liters of supernatant was decanted from the tank surface on 30 August, which was used to fill the permeate system of the pilot-scale UFP test facility on start up. Subsequently, the UFP Primary Mixing Tank, Fig. 10, was mixed for one hour and samples taken before initiating the transfer to the UFP Slurry Reservoir, Fig. 11, to begin dewatering operations on 30 August.

Figure 10. UFP Primary Mixing Tank (Volume ~ 1000 liters) which represents the RPP-WTP UFP Preparation Feed Tank

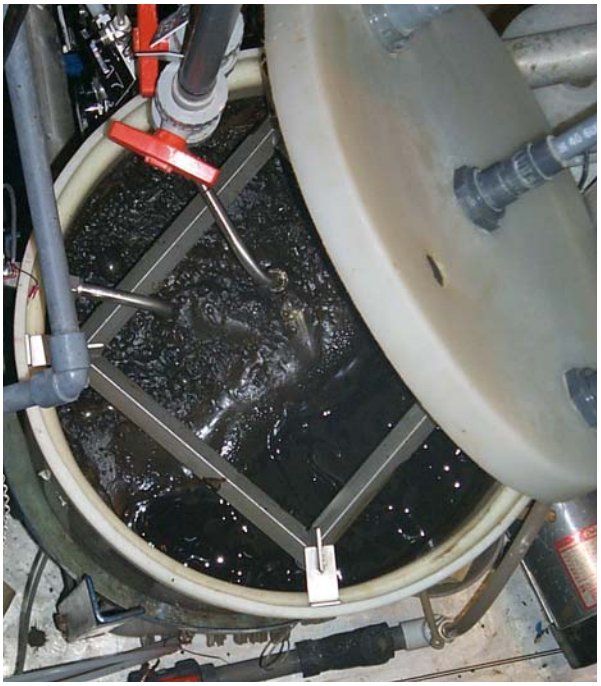


Figure 11. UFP Slurry Reservoir (Volume ~ 100 liters) which represents the RPP-WTP UFP Feed Tank

2.7.2.3 Adjusting the Final UFP Products

The slurry produced by the UFP filter was concentrated to greater than 24 wt% UDS by 2 September. To bring the fixed-volume batch of slurry back to washing target of 20 wt% UDS, slurry was removed and permeate was added back. After the newly diluted slurry was well mixed, samples were taken and the measured solids concentration turned out to be 19 wt% UDS. The concentrated slurry remaining in the UFP test rig was then washed in two phases using the 0.01 M NaOH wash water from drums labeled "Campaign 4-UFP First or Second Wash" on 1 and 2 September. The water used to wash the slurry was collected in 55-gallon drums for disposal after samples were taken. The final washed HLW concentrated slurry had a density of 1.22 gm/ml. After the slurry loop was drained to begin the cleaning cycle, the residual slurry was added to the carboy containing 12.5 liters of condensate to represent the simulated rinsed loop contents to the addition of the Caustic Flush 1 material.

The HLW concentrated and washed slurry was transferred to a 55-gallon drum labeled "Campaign 4 Concentrated Washed HLW Slurry" on 15 September for its shipment to VSL for eventual vitrification. The permeate produced by the UFP during dewatering was placed into six drums labeled "Campaign 4-CsIX Permeate Feed" and placed in storage.

On 7 September the filter rinse-clean-rinse sequence began. The contents of the carboy labeled "UFP Heel" were returned to the empty slurry reservoir as well as the contents from the drum marked "Caustic Flush 1" to rinse the UFP flow loop. After rinsing, all of the contents of the slurry reservoir were pumped to a drum, except 20 liters which was pumped to the carboy labeled "UFP Heel" to make the next heel. The drum was labeled "Campaign 4-Caustic Flush 1 Residue" and stored for eventual disposal. The 20 liters of "UFP Heel" were returned to the slurry reservoir along with first acid cleaning solution. This cycle repeated itself for all the Acid Cleanings 1, 2, 3 and Caustic Flush 2 and 3, that is, 20 liters of each of the preceding rinse/cleanings, simulated heel material, were fed with the next batch of cleaning or rinsing. The cleaning and rinsings were completed on 8 September. The drum contents produced were stored in drums labeled "Campaign 4-Acid Cleaning 1 or 2 & 3 Residual" and "Campaign 4-Caustic Flush 2 or 3 Residual" for eventual disposal.

2.7.3 Pilot UFP Operation and Equipment (Author – Fowley)

2.7.3.1 Test Equipment

Filter Unit

The SIPP UFP filter unit (Figs. 12, 13, 14, and 15) was manufactured by D. C. Fabricators, Inc. to meet RPP-WTP specifications (Townson, 2002, Longwell, 2003).
The filter unit had the following physical characteristics:

- 7 filter tubes with each having an inside diameter of 0.5-inch
- 92.4-inch porous length for each filter tube
- Stainless steel construction
- Nominal rated 0.1 micron filter element

The filter unit was prototypic in most of its features. The filter unit was not prototypic in three features: it only had 7 tubes instead of 241 tubes, it was mounted vertical instead of horizontal, and while the backpulse system functioned prototypically, the system design was different because of scaling. In general, filter performance data from the pilot test rig was assumed to well represent those that will be obtained in the full-scale unit.

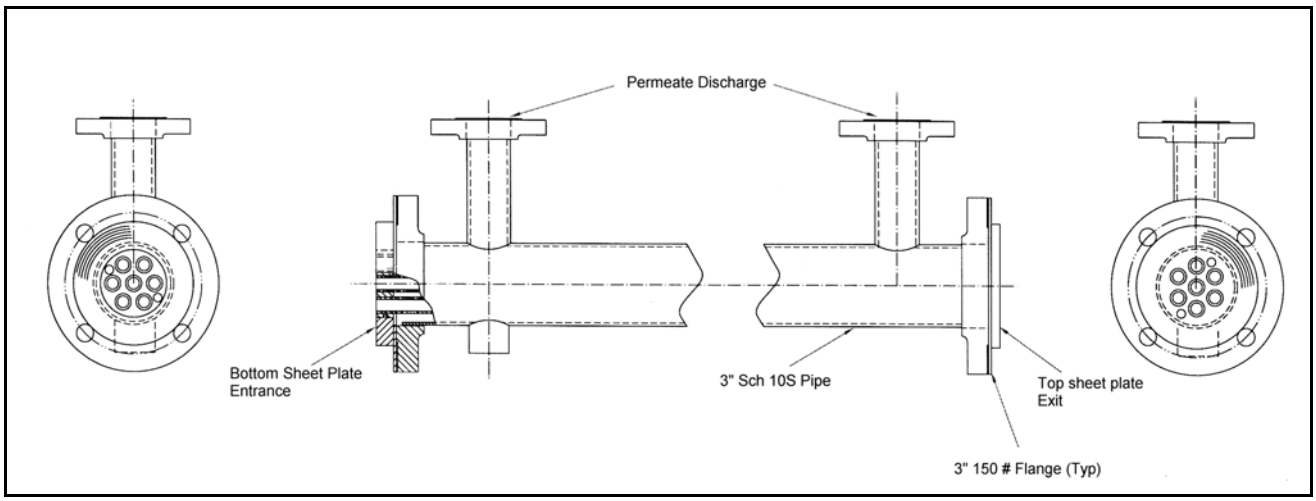


Figure 12. GKN Filter Unit

Figure 13. Filter-Tube Bundle

a) Bulkhead 1

b) Bulkhead 2

c) Bulkhead 3

d) Bulkhead 4

e) Bulkhead 5

Figure 14. Filter Tubes and Bulkhead Stabilizing Plates

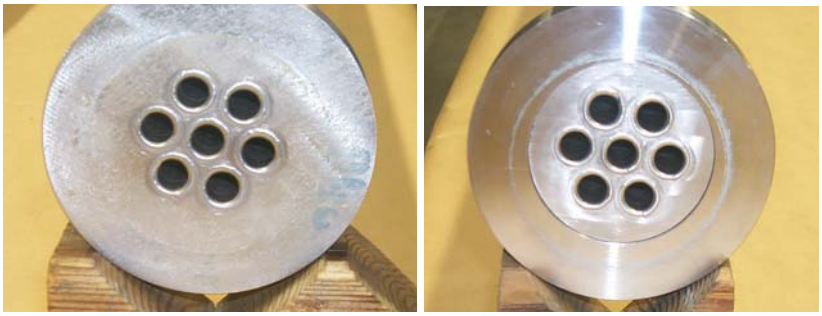


Figure 15. Exit (Left) and Entrance (Right) Tube Sheets of the Filter Tube Bundle

Table 24 compares the physical characteristics for the filter units of the GKN, used in Campaign IV, and Mott, used in Campaigns I, II, and III. As can be seen, the filter units are similar in most of their characteristics. Further dimensional information regarding the GKN and Mott filter tubes is given in Appendix F.

Table 24. Dimensional Comparison of Mott and GKN Filter Units

Parameter	Mott	GKN	Units
Nominal rating	0.1	0.1	micron
Number of tubes	7	7	
Filter construction	sintered metal - 316L	sintered metal - 316L	
Active porous length	90.0	92.4	inches
Tube ID - specification	0.5	0.5	inches
-measured	0.488	0.495	inches
Tube OD - specification	0.625	0.625	inches
- measured	0.654	0.687	inches
Tube Thickness	0.083	0.096	inches
Approximate filter area	6.8	7.0	sq. ft. (based on ID)
Overall housing length	92.0	101.25	inches

The GKN filter unit was constructed mainly of 316L stainless steel. Five bulkheads were equally spaced along the length of the tube bundle (Figure 14) and connected with ¼" diameter rods to provide support and proper spacing of the tubes. The entrance tube sheet had a removable annular section to facilitate removal of the tube bundle from the housing. The annular section and the sealing o-ring are seen at the bottom left side in Figure 13. The permeate side of the filter unit had an internal volume of about 8.5 L. Permeate exits the unit, normal to the axis, through two 1.5" schedule 40 pipes at either end of the housing. In the pilot-scale test rig only the upper pipe (nearest the unit exit) was used for dewatering, the lower pipe was isolated with a valve.

Figure 16 shows the construction of the GKN filter tube. A GKN sintered metal tube is made to a standard length. A stainless steel nipple is bonded to the ends of the tube to facilitate end connections or extra lengths. Two GKN sections were welded together to obtain the overall length required in the SIPP UFP test rig. End connections were welded to the ends of the filter tube assembly for attachment to the tube sheets. The tube-to-tube junction is shown in Figure 14c) and the end connections at the tube sheets are shown in Figure 17. The nipples of the GKN created the extra overall housing length (101.25" vs. 92.0") compared to the Mott. The tubes of the Mott were welded together without the use of nipples.

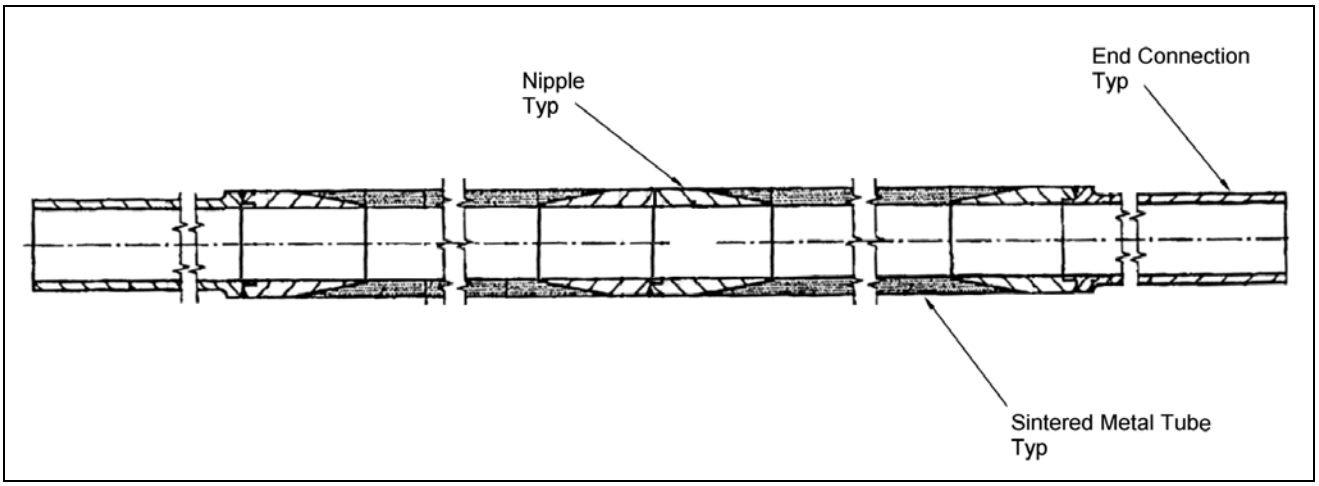


Figure 16. GKN Sintered Metal Filter Tube for the SIPP UFP

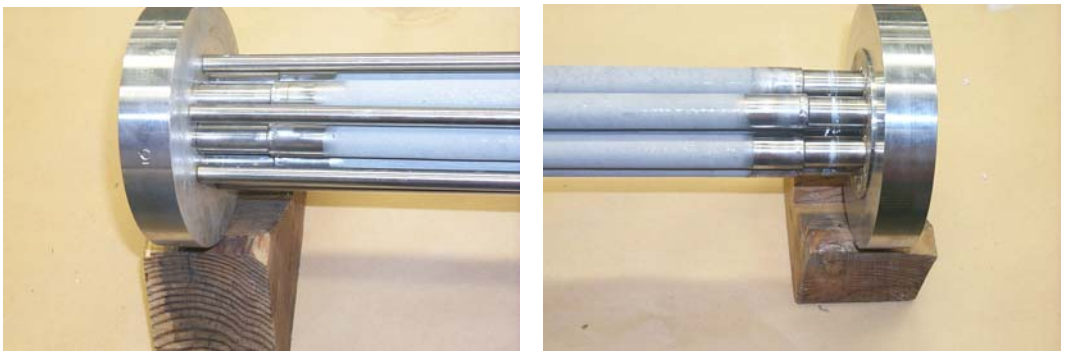


Figure 17. Exit and Entrance Tube Sheets showing Tube Ends Connections

The filter unit and associated hardware represent the pilot-scale UFP test rig. A schematic diagram of the test rig is shown in Fig. 18. The pilot-scale test rig was designed to have the following:

- Maximum axial velocity through filter tubes of 4.6 m/s (15 ft/s)
- Maximum transmembrane pressure (TMP) of 60 psid
- Maximum axial velocity to be achievable at the maximum TMP
- Instrumentation to monitor the axial velocity, the permeate flow rate, the TMP, and the slurry temperature
- All materials compatible with the high-caustic simulants and the 2 M nitric acid cleaning solution

All specifications were met or exceeded.

Test Rig

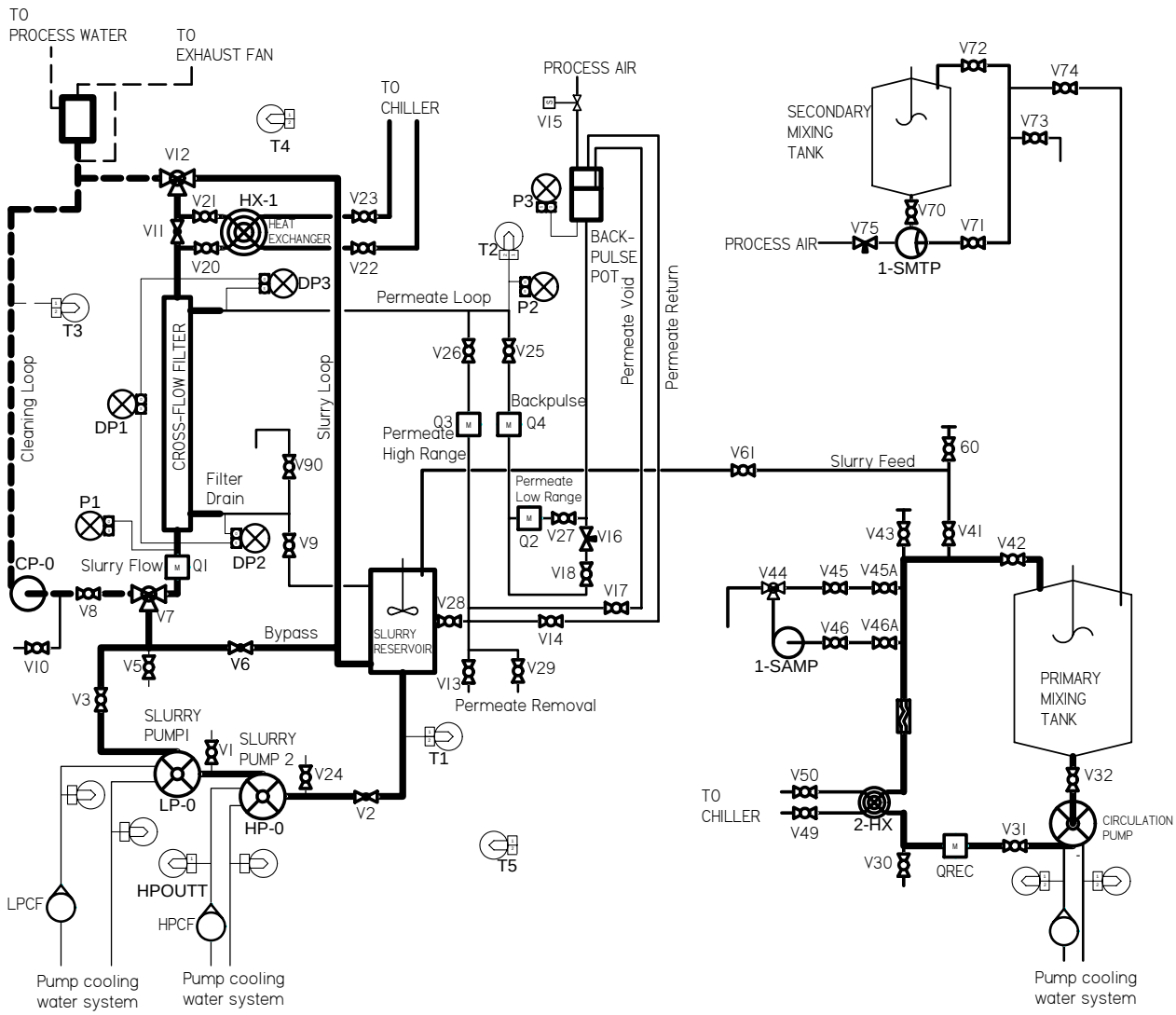


Figure 18. Schematic of the Campaign IV Pilot-Scale Test Rig

Valves in Fig. 18 are described below:

V1: Slurry drain valve – pump 1
V2: Slurry reservoir isolation valve - slurry
V3: Slurry pump isolation valve
V5: Slurry sample valve
V6: Slurry recirculation valve
V7: Slurry directional valve
V8: Not used – see below
V9: Permeate drain valve – to slurry reservoir

V10: Not used – see below
V11: Slurry flow control valve
V12: Not used – see below
V13: Permeate drain valve – to collection drum
V14: Permeate return isolation valve
V15: Pulsepot pressurization valve
V16: Permeate flow control valve
V17: Pulsepot void valve
V18: Backpulse actuation valve
V19: Not used – see below
V20: Heat exchanger inlet valve
V21: Heat exchanger discharge valve
V22: Heat exchanger coolant inlet valve
V23: Heat exchanger coolant discharge valve
V24: Slurry drain valve - pump 2
V25: Permeate isolation valve – low flow
V26: Permeate isolation valve – high flow
V27: Permeate low flow meter isolation valve
V28: Slurry reservoir isolation valve - permeate
V29: Permeate sample valve
V30: Primary mixing tank drain valve
V31: Primary mixing tank pump isolation valve
V32: Primary mixing tank isolation valve
V41: Slurry feed control valve – primary mixing tank
V42: Slurry circulation control valve – primary mixing tank
V43: Slurry transfer valve - alternate
V44: Slurry feed sample valve
V45: Slurry feed sample control valve - discharge
V45A: Slurry feed sample isolation valve - discharge
V46: Slurry feed sample control valve - inlet
V46A: Slurry feed sample isolation valve - inlet
V49: Heat exchanger coolant inlet valve – primary mixing tank
V50: Heat exchanger coolant discharge valve – primary mixing tank
V60: Feed line drain valve
V61: Slurry feed isolation valve
V70: Secondary mixing tank isolation valve
V71: Secondary mixing tank pump isolation valve
V72: Slurry circulation control valve – secondary mixing tank
V73: Slurry sample valve - secondary mixing tank
V74: Slurry feed control valve – secondary mixing tank
V75: Air control valve – secondary mixing tank positive displacement pump
V90: Permeate drain line - spare

Note: Valves V8, V10, V12, and V19 are for the cleaning loop. The cleaning loop was not used for SIPP, but was used for tests previous to SIPP, and is not described in this report.

The instrumentation on the pilot-scale test rig is described in Section 2.7.3.3 and in Appendix G2.

The pilot-scale test rig stood 25 feet tall and was serviced by a two level mezzanine (Figure 19). The test rig was mainly constructed of 300 series stainless steel pipe, mostly schedule 40, but some schedule 10. The pilot-scale test rig was composed of three basic flow loops; the slurry loop, the permeate loop, and the cleaning loop (not used). The slurry loop was the primary flow path for circulating slurries and contains the filter unit and the pumping system. The pumping system consisted of two 10-hp Galigher® Series 1000 slurry pumps connected in series. The impeller and impeller housing were lined with EPDM to be compatible with both the high caustic slurry and the 2 M nitric acid cleaning solution. A recirculation loop was part of the slurry loop and was used to bypass slurry around the filter unit. The recirculation loop was primarily used during start up.

The permeate loop started at the filter housing, contained a backpulse pot and ended at the Slurry Reservoir (see Fig. 11). It consisted mostly of 3/8" stainless steel tubing, but had some 3/8" polyethylene tubing, which permitted flow visualization. The backpulse pot and associated tubing provided a pulse of permeate flow in the reverse direction to knock off built-up slurry cake on the inside of the filter tubes. Discharge valves were located in the permeate loop near the Slurry Reservoir to facilitate the extraction of permeate from the system (either for dewatering or sampling).

The backpulse pot and the method of backpulsing were designed to mimic plant operation. Extensive testing was conducted prior to the SIPP campaigns (Duignan, 2003a) to assure that the backpulse system matched, as closely as possible, reguirements specified by the RPP-WTP customer.

The SIPP UFP test rig was slightly modified to accommodate the new GKN filter unit. As listed in Table 24, the overall housing length of the GKN was 9 ¼ inches longer than the Mott filter unit. The stainless steel spool piece below the slurry flow meter (Q1, reference Figure 18) was shortened accordingly. In addition, the permeate loop was modified to fit the slightly different locations of the permeate discharge flanges.

The Primary Mixing Tank (see Fig. 10) was used to mix the combined simulated wastes during feed preparation and to transfer the mixture to the Slurry Reservoir before and during dewatering. The tank was mechanically agitated and included a slurry recirculation loop to provide additional mixing and to facilitate the transfer to the Slurry Reservoir. Pumping for the recirculation loop was provided by a 10-hp Galigher® Series 1000 slurry pump with an EPDM liner on the impeller housing and impeller. A sampling system was included in the recirculation loop to allow acquisition of a representative sample.

Figure 19. Picture of the Pilot-Scale Test Rig

The Secondary Mixing Tank was used to prepare and transfer the AY102 simulated waste to the Primary Mixing Tank during feed preparation. The tank was mechanically agitated and included a product recirculation loop to provide additional mixing and facilitate the transfer to the Primary Mixing Tank. Pumping for the recirculation loop was provided by a diaphragm pump with a stainless steel and Teflon wetted parts. A sample port was located in the recirculation loop to obtain representative samples.

2.7.3.2 Operating Procedure

All UFP testing activities were performed using an approved field procedure (Duignan, 2004a). The field procedure described generic activities regarding the operation of the test rig (filling, draining, dewatering, backpulsing, sampling, etc.). Work guidances were written for daily operation of the test rig. The work guidances referenced the field procedure and specified the order of the generic activities for completing a test number or series of test numbers in the test matrix. The following sections describe some of the generic activities in the SIPP UFL operating procedure. Reference Fig. 18 for the following descriptions.

2.7.3.2.1 Test Preparation

As part of the test preparation, a pre-test equipment inspection was conducted to ensure safety and proper operation at the beginning of each campaign. Specifically, a visual inspection was conducted looking for equipment leaks, damaged wires, loose nuts and bolts, and other unusual situations. M&TE readouts on the DAS were checked for unusual readings. In addition, solution quantities were verified to ensure on-schedule and uninterrupted operation. Any work involving the chemical solution of the SIPP UFP (pre-test inspection and normal operation) required the appropriate Personal Protective Equipment (PPE). This included safety glasses, a lab coat, and chemical resistant gloves. Any work involving concentrated forms of caustic or acidic solutions required the PPE listed above plus a chemical apron and a face shield. Work around the test rig that did not require interaction with any chemical solutions required safety glasses only, which was the minimum EDL requirement.

The M&TE was checked to ensure proper operation prior to the start of each series of tests or as required. The pressure transducers were isolated and data was recorded as a zero check. The thermocouples outputs displayed on the DAS were verified prior to testing. The DAS-displayed flow rate was verified prior to start-up as a zero check.

The pressure transducer impulse lines were typically flushed with DIF (or 0.1 M NaOH depending on what was in the test rig) at the end of each campaign to clear any slurry that may have accumulated in the lines during testing. After flushing the lines were procedurally refilled with a specific quantity of DIF water using a micropump.

2.7.3.2.2 Test Rig Draining

The test rig was completely drained (slurry loop and permeate loop) or partially drained (slurry loop only) depending on the specific need of the test. The test rig was drained through valves V1 and V24 (slurry loop) using a drain line to a collection drum and through valve V9 (permeate loop), which emptied to the Slurry Reservoir. The slurry pumps were started and a low flow rate was set (10 gpm). The slurry drain valves (V1 and V24) were opened to start the draining process. If the permeate loop was to be drained then valve V9 was opened when the level in the Slurry Reservoir dropped below the reservoir discharge. Air pressure (10 to 20 psig) was applied to the backpulse pot to help clear the permeate loop. Draining was enhanced by connecting a pump to the drain line from valve V1 and V24.

2.7.3.2.3 Test Rig Filling

The test rig was filled by one of several ways via the Slurry Reservoir. 1) Slurry (simulant) was typically transferred to the Slurry Reservoir from the Primary Mixing Tank (dewatering). 2) Some solutions were pumped from storage drums to the Slurry Reservoir (slurry washing and test rig rinsing and cleaning). 3) Other solutions were poured into the Slurry Reservoir from carboys (slurry adjustment). The more involved method (1) utilized the Primary Mixing Tank slurry circulation loop. The slurry circulation control valve (V42, reference Fig. 18) was throttled to pressurize the circulation loop. Slurry was transferred by opening the slurry feed control valve (V41).

Prior to slurry pump start-up, the Slurry Reservoir was filled to at least 75 L and the pump cooling system was activated. The pumps were started and initially set to a low flow rate (10 - 20 gpm). The heat exchanger system was started at this point. Slurry flow bypassed the filter unit (via the recirculation loop) initially and while the Slurry Reservoir was filled to the required batch level, i.e., 117 L. Next, slurry was slowly introduced to the filter unit by closing the slurry recirculation valve (V6).

The permeate flow was started by slowly opening permeate low flow meter isolation valve (V27). At this point the permeate loop was circulating flow back to the Slurry Reservoir (permeate recirculation mode). Dewatering began when permeate was diverted from the Slurry Reservoir to a collection drum using the slurry reservoir isolation valve (V28) and the permeate drain valve (V13). A 3/8” polyethylene tube was used between the drain valve and the collection drum.

A volume of 16L of supernatant from the Primary Mixing tank was added to the Slurry Reservoir to account for the permeate needed to fill the Permeate Loop prior to the start of a dewatering test. If called for, the test rig was shut down at this time by closing valve V27 to isolate the Permeate Loop, de-energizing the pumps, and closing valve V3 to isolate the Slurry Loop. The test rig was ready for testing at this point.

2.7.3.2.4 Operation Mode

The test rig could be operated in closed mode (not dewatering) or open mode (dewatering) depending on the requirements of the test. In closed mode permeate flow was directed to the Slurry Reservoir by closing the permeate isolation valve V27 and opening the permeate return valve V14 (and Slurry Reservoir isolation valve V28). The permeate mixed with the slurry in the Slurry Reservoir, which maintained the slurry at a constant concentration. In open mode permeate flow was directed to a collection drum through the permeate discharge valve V13, typically to a collection drum. As permeate flows to the collection drum the solution in the Slurry Reservoir was replenished by adding more simulant from the Primary Mixing Tank to maintain the batch volume.

2.7.3.2.5 Backpulsing

The steps and pertinant valve positions for conducting a backpulse are shown in Table 25. A backpulse was performed by first stopping dewatering (closing V13 and V14, reference Fig. 18) and closing the permeate low flow isolation valve (V27). The backpulse pot was then partially evacuated to create an air pocket (openning V17, V28 and V15); the permeate in the pulse pot was evacuated to the Slurry Reservoir. The air pocket was pressurized to 40 psig above the pressure of the slurry loop by regulating the air pressure to V15.

Table 25. Procedure to Operate the SIPP Backpulse System

Mode \ Valve	Permeate Flow, Dewatereing (V27)	Permeate Flow, Backpulse (V18)	Process Air (V15)	Permeate Collection (V13 / V14)	Feed Vessel Return (V17 / V28)
Dewatering	Open	Closed	Closed	Open	Closed
Stop Dewatering	Closed	Closed	Closed	Closed	Closed
Void Pulse Pot	Closed	Closed	Open	Closed	Open
Pressurise Pulse Pot	Closed	Closed	Open	Closed	Closed
Isolate Pulse Pot	Closed	Closed	Closed	Closed	Closed
Backpulse	Closed	Open	Closed	Closed	Closed
Resume Dewatering	Open	Closed	Closed	Open	Closed

The backpulse valve (V18) was opened and closed for a short period of time (Table 26) to force permeate from the pulse pot back through the filter media to dislodge the cake from the filter walls. The pressure drop through the permeate loop (from the backpulse pot to the filter unit) was controlled by the permeate flow control valve, V16. Valve V16 was a needle valve; the valve setting was optimized during a previous filter test, before the SIPP campaigns (Duignan, 2003a). Dewatering was resumed after the backpulse was completed by openning V13, V14, and V27.

Table 26. Pilot.Scale Test Rig Backpulse Duration

Pressure at the filter (P1), psig	10	20	30	40	50	60	70
Duration of Pulse, seconds	9	11	12	14	15	17	18

2.7.3.2.6 Sampling

Filtrate was sampled through the permeate sample valve V29. Prior to sampling, the V29 valve and discharge tube was cleared of old permeate by momentarily opening the valve. This ensured a representative sample. The slurry was sampled through slurry sampling valve V5. In previous filtration tests the slurry was sampled from the Slurry Reservoir using a Coliwasa sampler. This method involved some risk since the Slurry Reservoir contained a mechanical agitator to provide adequate slurry mixing (possibility of breaking the glass Coliwasa by impact with the agitator blades). Through comparative sampling it was determined that a sample obtained from valve V5 was sufficiently similar to a sample obtained with a Coliwasa from the Slurry Reservoir. The sampling method was changed to the V5 method after this determination to eliminate the risk.

2.7.3.2.7 Work Guidances

Several work guidances were used per campaign to complete the testing specified in a test matrix. A work guidance was written for typical campaign activities such as; 1) test rig and M&TE checkout including the pre-test baseline test, 2) the first stage of dewatering, 3) the second stage of dewatering, 4) the first slurry wash, 5) the second slurry wash, 6) rinsing and cleaning the test rig, and 7) the post-test baseline test. Other work guidances were written for campaign specific activities such as steady state testing, high temperature testing, and the installation and check out of the GKN filter unit or for off-normal activities not specified in the test matrix.

2.7.3.3 Measurement Uncertainty

The Measurement and Test Equipment (M&TE) used on the pilot-scale test rig were calibrated using approved calibration procedures and NIST traceable standards. Calibrations were conducted before and after the SIPP campaigns to accurately determine instrument uncertainty and to qualify the SIPP campaign data. In addition, each channel of the Data Acquisition System (DAS) was calibrated before and after the SIPP campaigns and was included in the M&TE uncertainty analysis. The M&TE uncertainty analysis process was conducted using approved statistical methods (Coutts, 1991).

2.7.3.3.1 Pressure, Flow, and Temperature Measurements

Pressure measurements were made with Rosemount® differential pressure transmitters (model # 1151) and gauge pressure transmitters (model # 1144), which uses a variable capacitance principle method of pressure measurement. Flow rate measurements were made with Fisher-Porter® magnetic flow transmitters (model # 10D1475). Temperature measurements were made with Omega® Type E thermocouples with ungrounded, stainless steel sheaths. The pressure, flow rate and temperature raw data are shown in Appendix H2 for each test of Campaigns I to IV.

The calculated uncertainties of all EDL controlled M&TE are shown in Table 27. Further detail of the DAS and M&TE calibrations is provided in Appendix G. The uncertainties shown in the table represent the greatest value of before and after campaign calibrations. Typically (but not always), the after campaign calibration yields the greatest value since it includes the error associated with a zero and/or span shift of the M&TE electronic output that may have occurred between calibrations.

Table 27. SIPP UFP Measurement and Test Equipment

Description	Designation	Range	M&TE #	M&TE & DAS Uncertainty
Slurry Loop Temperature	T1	0-100 ºC	TR-02929	+/- 0.90 ºC
Permeate Loop Temperature	T2	0-100 ºC	TR-02927	+/- 0.85 ºC
Cleaning Loop Temperature	T3	0-100 ºC	TR-02930	+/- 0.85 ºC
Atmospheric Temperature Upper Test Rig	T4	0-100 ºC	TR-02925	+/- 0.90 ºC
Atmospheric Temperature Lower Test Rig	T5	0-100 ºC	TR-02926	+/- 0.85 ºC
Slurry Loop Pressure	P1	0-100 psig	TR-02917	+/- 0.15 psig
Permeate Loop Pressure	P2	0-151 psig	TR-03115	+/- 0.50 psig
Backpulse Pot Pressure	P3	0-151 psig	TR-00532	+/- 0.25 psig
Pressure Drop through Filter	DP1	0-26 psid	TR-03495	+/- 0.05 psid
Transmembrane pressure Upper Flange	DP2	0-101 psid	TR-03553	+/- 0.15 psid
Transmembrane pressure Lower Flange	DP3	-11-101 psid	TR-03109	+/- 0.20 psid
Slurry Flow Rate	Q1	0-100 gpm	TR-20350	+/- 0.50 gpm
Permeate Flow Rate Low Range	Q2	0-1.2 gpm	TR-20353	+/- 0.01 gpm
Permeate Flow Rate High Range	Q3	0-15 gpm	TR-03721	+/- 0.10 gpm
Backpulse Flow Rate	Q4	0-5 gpm	TR-03276	+/- 0.03 gpm

It is important to note that the uncertainties listed in Table 27 represent the uncertainties of the M&TE and DAS only. They are considered systematic uncertainties (i.e. consistent and measurable). Other factors (operator error, measurement assumptions, environmental factors, etc.) were considered incidental or insignificant and were not included in the measurement uncertainty values presented in the test results section. For example, the slurry

temperature, measured only in the slurry loop upstream to the slurry pumps, was assumed to represent the average slurry temperature. Almost certainly, heat was added to the slurry by the pumps and removed by the heat exchanger creating isolated temperature gradients in those areas. In addition, there was an ambient temperature disparity (typically 2ºC) from the top of the slurry loop to the bottom due to the height of the test rig (the test rig was located in a high-roofed area of the EDL that had natural temperature gradients along it's elevation). These effects were assumed to be insignificant due to the relatively quick slurry loop velocity (slurry residence time was minimized) and the thorough mixing in the slurry loop and Slurry Reservoir (temperature variations minimized).

Measurement uncertainty was also evident as random fluctuations in the raw data. Significant fluctuations were seen in pressure and flow rate data during some tests that involved slurry (dewatering and slurry washing). The data from these tests are presented in the test results section as figures. The magnitude of the fluctuations can be seen (and quantified) directly from the figure. Any calculated value from this data, such as the mean value, will include the random fluctuation in the measurement uncertainty where appropriate. Some figures in the test results section show mean values from other tests (baselines tests, steady-state tests, higher-temperature tests). In these figures the measurement uncertainty due to random fluctuation or unsteady operation is stated or is shown as error bars in the figure (calculated as 2X the standard deviation of the value). Typically, the mean values and other raw data calculations will omit process interruptions such as backpulses and supply drum exchanges.

Data averages, standard deviations and other statistical information are presented in the raw data shown in Appendix H2 (bottom of the raw data file). In some cases the standard deviation of a particular parameter may seem abnormally large. This was due to the calculation being about the mean value of that parameter for the entire test. The parameter may naturally vary during the course of the test (such as permeate flux during dewatering), creating a large standard deviation about the mean value. In these cases a better representation of the standard deviation would be about a curve fit of the parameter, which is not presented in the raw data.

2.7.3.3.2 <u>Calculated Quantities</u>

The measurement uncertainties (95% confidence level) of the important calculated quantities are shown below in Table 28. Two uncertainties are shown, the uncertainty based on the M&TE and DAS, and the uncertainty based on (2X) the standard deviation about the mean value due to the data scatter. The table also shows the result of combining these two uncertainties (by the root-sum-square method), which is only relative to a mean value. The uncertainty based on the M&TE and DAS applies to individual data points in the raw data (Appendix H2). The uncertainties based on the M&TE and DAS were derived from the variables in the governing equations using the method of propagation of errors [described in the EDL uncertainty and calibration analysis manual (Coutts, 1991)].

The measured values in the table are taken from two different Campaign IV test points that represent opposite ends of the operational spectrum (relative to transmembrane pressure and slurry velocity). Those tests points are, 1) the first point of the pre-test baseline test (4.00A),

and 2) run 7 of the high temperature test (Temp7). The uncertainty based on the M&TE and DAS can be applied to other tests and campaigns by interpolation (or extrapolation as the case may be) between the measured values shown in the table. Note that large "% of reading" uncertainties (double-digit) occur for some of the calculated quantities in test number Temp7. The large values are primarily due to the data scatter.

Table 28. Uncertainties of Calculated Quantities for Campaign IV

Calculated Quantity	Filter Tube Slurry Velocity (V)		Transmembrane Pressure (TMP)		Adjusted Permeate Flux (F_C)	
Units	ft/sec		psid		gpm/ft2	
Governing Equation	Q1/A		(dP2 + dP3)/2		(Q2/A) * $e^{[2500*((1/(273+T))-(1/298))]}$	
Test Number	4.00A	Temp7	4.00A	Temp7	4.00A	Temp7
Measured Values	10.7	14.8	10.0	50.1	0.174	0.016
Uncertainty M&TE + DAS (+/-)	0.18	0.22	0.13	0.13	5.20E-3	9.23E-4
% of Reading	1.7	1.5	1.3	0.3	3.0	5.8
2 X Std. Dev. Of Data (+/-)	0.06	2.0	0.26	0.59	2.44E-3	2.59E-3
% of Reading	0.6	**13.5**	2.6	1.2	1.4	**16.2**
Combined Uncertainty (+/-)	0.19	2.02	0.29	0.60	5.74E-3	2.75E-3
% of Reading	1.8	**13.6**	2.9	1.2	3.3	**17.5**

2.7.3.3.3 <u>Density, Viscosity and Turbidity Measurements by EDL</u>

The density of the slurry and permeate were determined by mass and volume measurements from a calibrated platform scale and volumetric flask. The viscosity of the permeate was measured by a Cannon-Fenske viscometer. The turbidity was measured by a digital turbidity meter. The uncertainty of the EDL measured quantities (95% confidence level) is shown below. The density uncertainty was determined through calibration of the scale and flask, and by comparison to ACTL measurements. The uncertainty of the viscometer was from the manufacturer specifications. The uncertainty of the turbidity meter was from calibration with turbidity standards.

Slurry or Liquid Density	=	± 0.6% of reading
Liquid Viscosity	=	± 0.2 % of reading
Turbidity	=	± 0.2 NTU

2.7.3.3.4 Data Acquisition System

The electronic output of the M&TE was logged by a PC based DAS consisting of a DELL OptiPlex GX300 PC with National Instruments® LabView® for Windows software, version 6i. Data files were renamed, typically, every two hours to prevent the loss of a significant amount of data. To verify proper operation of the M&TE a zero flow check was performed at the beginning of each test or series of tests (as directed by the Work Guidance). Other pertinent test information such as observations, non-critical calculations, chronological events, etc. was recorded in the laboratory notebook (Duignan, 2004b) and on video tape or photograph as needed. All documents, video, and electronic media for this test activity are stored and maintained by the Engineered Equipment and Systems (EES) Department Document Control System per EES procedure L9.1-2006 in Job Folder # EES-23041.

2.7.4 Pilot UFP Discussion of Results

2.7.4.1 *Experimental Observations* (Author – Fowley)

The experimental observations of the Campaign IV SIPP UFP are presented in this section. Figures and tables are provided to aid the discussion. The SIPP UFP raw data from Campaigns I to IV are presented in Appendix H2.

2.7.4.1.1 Pre-test Activities

2.7.4.1.1.1 Final Baseline of the Mott Filter

Prior to the installation of the GKN filter unit a baseline test was conducted with the Mott filter unit from Campaign III, using fresh 0.1 M NaOH. As seen in the test matrix (Table 22), a baseline test consists of three separate test points at the same slurry flow rate and different levels of TMP (nominally 10, 20, and 30 psid). These test parameters have been consistent throughout the SIPP campaign. The baseline test primarily provides a means of judging the effect of filter cleaning after dewatering, but can also be used to judge filter performance (with 0.1 M NaOH and DIF water) between campaigns.

The primary purpose of the Mott baseline prior to Campaign IV was to quantify the change in the baseline flux of the Mott after it had been soaking in a mild caustic solution (0.1 M NaOH) since the end of Campaign III (22 June). As mentioned in previous Interim Reports, the flux typically improves after the filter has been idle in a mild caustic solution (0.1 M NaOH in this case) for an extended period of time (for more than a year before Campaign I, for approximately 11 weeks between Campaigns I and II, and for approximately 6 weeks between Campaigns II and III. For Campaign IV the filter was changed.). The results of the baseline are shown in Figure 20, along with Campaign III pre- and Post-test baseline results for comparison. The figure shows that the flux levels increased to Campaign III pre-test levels after the extended soaking in 0.1 M NaOH.

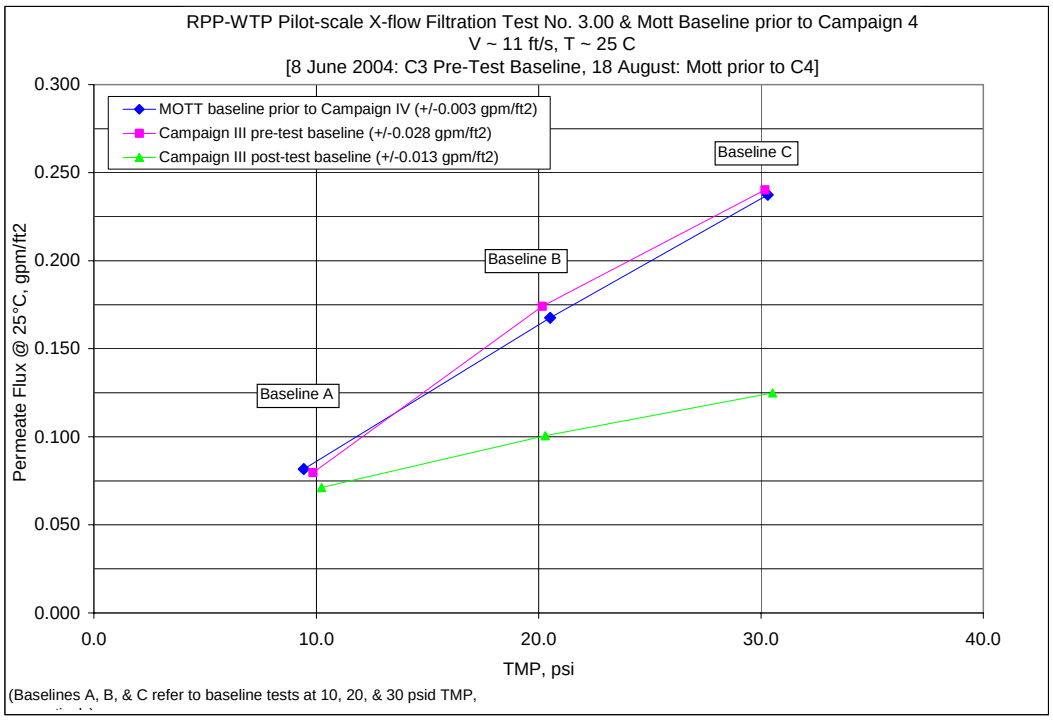


Figure 20. Baseline of Mott Filter prior to Removal

2.7.4.1.1.2 Preconditioning the GKN Filter

The GKN filter unit was received from the manufacturer in "pristine" condition. Before it was used for dewatering it was "preconditioned" in a manner similar to the Mott (when it was pristine). The purpose of preconditioning was to put the filter in a "used" condition and involved extended operation with a slurry with multiple backpulses. The preconditioning period was approximately 12 hours and while the exact number of backpulses was not fixed, six were preformed. Backpulsing was used to accelerate filter fouling, since after the filter cake is dislodged it is the smallest solid particles that tend to be the first to return to form the filter cake.

The series of tests that surrounded the preconditioning, and encompassed the "pre-test activities" are listed in Table 29. The original plan for the pre-test activities was to conduct a DIF water and 0.1 M NaOH baseline with the GKN filter unit prior to preconditioning, conduct the preconditioning, and clean the filter. As described later in this section, and shown in the table, additional tests were performed as warranted.

Table 29. Test Matrix for Pre-Test Activities

Activity	Test Solution	Trans-Membrane Pressure (psid)	Slurry Loop Velocity (ft/s)	Slurry Loop Temp. (ºC)	Run Time (min)
Post-Campaign III Baseline - Mott	0.1 M NaOH	10, 20, 30	11	25	20 ea
Install GKN Filter Unit	n/a	n/a	n/a	n/a	n/a
Pre-preconditioning Baseline 1A	DIF Water	10, 20, 30	11	25	20 ea
Pre-preconditioning Baseline 1B	0.1 M NaOH	10, 20, 30	11	25	20 ea
Clean with Acid	0.5 M HNO_3	10, 20, 30	11	25	20 ea
Pre-preconditioning Baseline 2A	DIF Water	10, 20, 30	11	25	20 ea
Pre-preconditioning Baseline Point	DIF Water	5	11	25	20
Pre-preconditioning Baseline 2B	0.1 M NaOH	10, 20, 30	11	25	20 ea
Preconditioning	Old AN-102R2 Simulant	40	12	25	Note 1
Caustic Rinse 1	0.1 M NaOH	20	11	25	30
Acid Clean 1	2.0 M HNO_3	40	11	25	90
Acid Clean 2	2.0 M HNO_3	40	11	25	90
Caustic Rinse 2	0.1 M NaOH	20	11	25	30
Caustic Rinse 3	0.1 M NaOH	20	11	25	30

1. The preconditioning duration was as long as possible without impacting the Campaign IV schedule. Multiple backpulses were performed. Run time was ~12 hours and six backpulses were performed.

Prior to installation and preconditioning the GKN filter unit was disassembled for dimensional and visual inspection (Appendix F). While the tube bundle was being inspected the filter housing was installed in the pilot-scale test rig to verify the test rig modifications for the new filter unit and to flush the housing with a cleaning solution containing Alconox® (cleaning detergent). Afterwards the test rig and housing were flushed three times with de-ionized filtered (DIF) water.

Following the Alconox® cleaning the housing was removed, the tube bundle was inserted and the filter unit was installed in the pilot-scale test rig. The test rig was filled with 100 L of DIF water and left overnight to allow air to migrate out of the filter media. A baseline test was conducted the following day using the DIF water. The results of the baseline test are shown in Fig. 21. The flux levels were initially normal (compared to a Campaign III pre-test water baseline); but the rate of increase in flux with TMP was lower than that in Campaign III (the curve was flat). The rate of increase in the Campaign III baseline was ~0.01 gpm/ft^2 for every 10 psid of TMP. The rate of increase in the Campaign IV baseline was ~0.002 gpm/ft^2 for every 10 psid of TMP, lower by a factor of 5.

NaOH was then added to the DIF water in the test rig to make a 0.1 M solution and another baseline test was conducted. The results of the baseline test with 0.1 M NaOH are also shown in Figure 21. The flux levels from the 0.1 M NaOH baseline test were lower than the DIF water results and much lower than the pre-test flux levels from previous campaigns (ref. Figure 20). In addition the rate of increase in flux with TMP was low (the curve was also flat).

It was apparent that the filter media was not sufficiently clean, or that the GKN filter unit had poor performance when compared to the Mott filter unit. Poor performance of the GKN was improbable; therefore the filter unit was cleaned by conducting a baseline test with a 0.5 M HNO_3 solution. The results of the baseline are also shown in Fig. 21. The flux levels were initially low (~0.10 gpm/ft^2 at 10 psid TMP) but increased considerably (~0.75 gpm/ft^2 at 30 psid TMP). The considerable increase in flux implied that the baseline with 0.5 M HNO_3 successfully cleaned the filter.

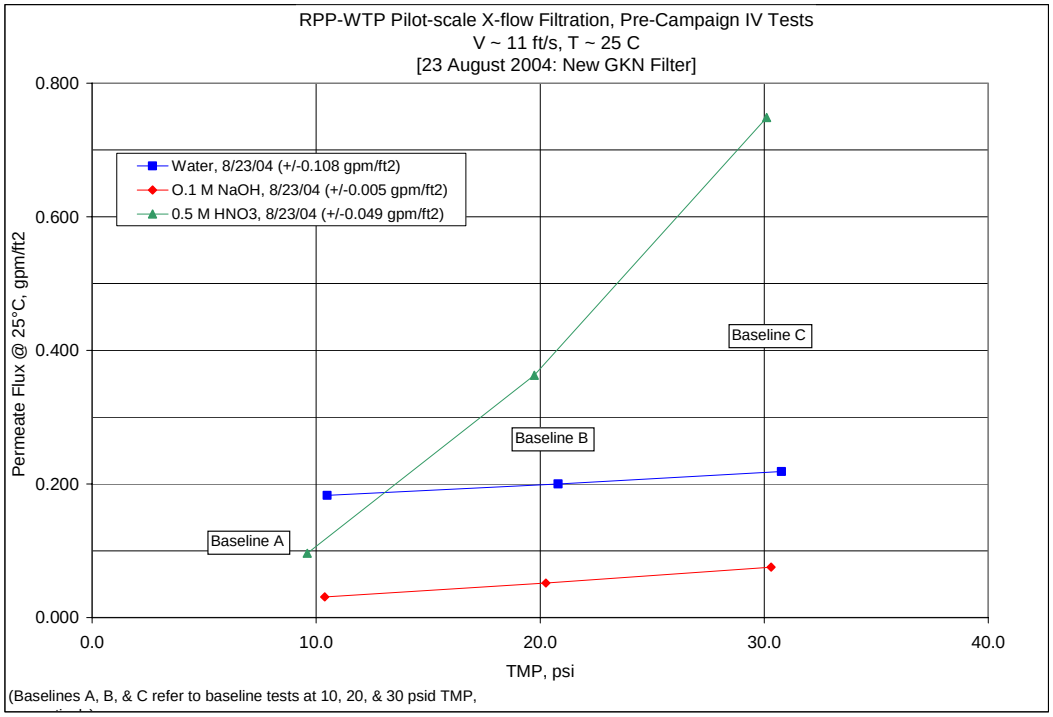


Figure 21. Initial Baselines of GKN Filter after Installation

Note that the uncertainty of the average values from the water baseline on 23 August is much higher than the other baselines. In this baseline the corrected permeate flux was not stabile; the flux was continually decreasing during the baseline test point. This was the first baseline following the cleaning with Alconox. This behavior was typically associated with solids being removed from the filter media with a backpulse and then re-depositing during continued operation. The low flux of the ensuing 0.1 M NaOH baseline and the significant increase in flux of the 0.5 M HNO_3 implied that the filter performance was indeed hampered by solids in the system.

Following the acid baseline test the filter unit was flushed twice with DIF water. Another set of baseline tests were conducted with DIF water and 0.1 M NaOH. While conducting the baseline with DIF water an addition baseline point was conducted at 11 ft/s and 5 psid TMP. This point was comparable to a point from a pre-SIPP Mott test, when the Mott was pristine. The results of the two baseline tests, and the additional point, are shown in Fig. 22.

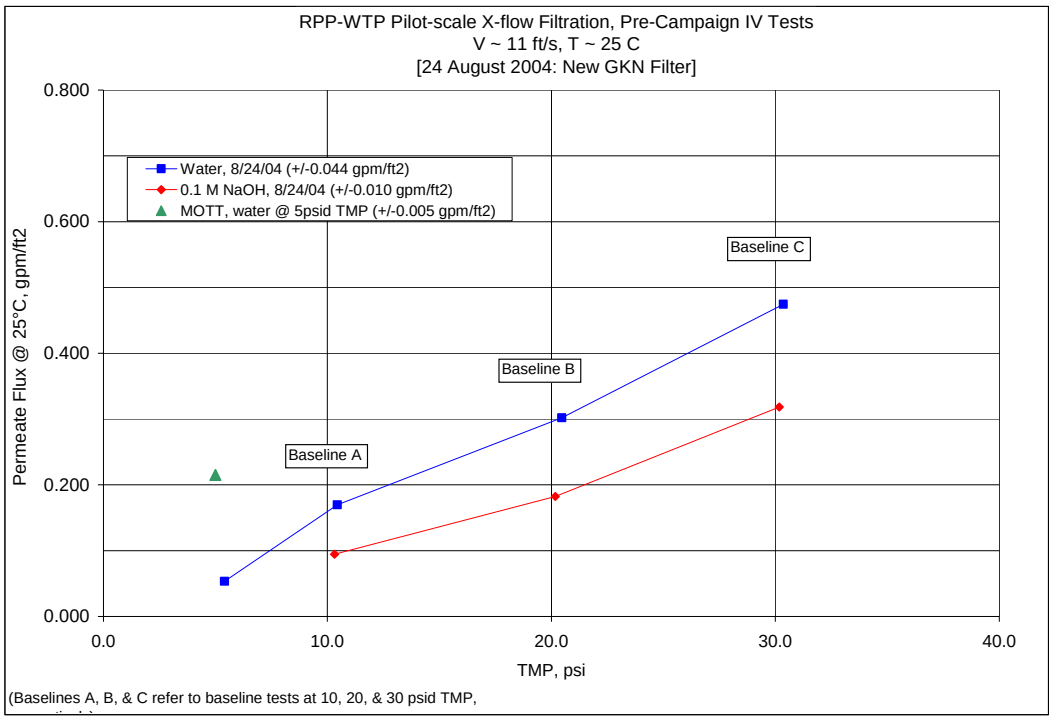


Figure 22. Baselines of GKN Filter after Cleaning with Acid

The results from the DIF water and 0.1 M NaOH baselines were much improved compared to the results of the preceding acid baseline (reference Fig. 21). The flux level of the additional DIF water baseline point (11 ft/s and 5 psid TMP) was lower than that of the Mott by a factor of 4. However, it has been noted in other campaigns that the results of baseline tests do not necessarily define the filter performance with slurry. A comparison to the Mott with slurry is presented later in this section.

The improved baseline results indicated that the GKN filter unit was ready for preconditioning. A volume of 75 L of AN-102R2 precipitated simulant was added to the pilot-scale test rig for preconditioning. This simulant was prepared in the Fall of 2002 and used in the RPP Pilot-Scale Precipitation test (Williams and Steeper, 2004). Records indicated that the solids concentration of the simulant was 20 wt % UDS. Given the age of the simulant some solids (carbonates) had most likely precipitated from solution, but it was suspected that not enough had precipitated to affect the wt% UDS. AN-107 precipitated simulant was used to precondition the pristine Mott filter. Both AN102R2 and AN-107 simulants are Envelope C waste material and contain significant quantities of organic material which has most challenged the filter in the past.

The preconditioning process involved operating the test rig in permeate recirculation mode, that is the permeate was recirculated back to the Slurry Reservoir so that the slurry concentration did not change during the operation. Preconditioning lasted two consecutive days for a total run time of 11 hours and 48 minutes. The test rig sat idle for 15 hours and 12 minutes overnight, between days. One backpulse was conducted on the first day and five were conducted on the second day. The adjusted permeate flux during the preconditioning is

shown in Fig. 23. The six backpulses are signified in the figure as outliers in the flux data. Included in the figure are the dewatering results from Campaign III for reference.

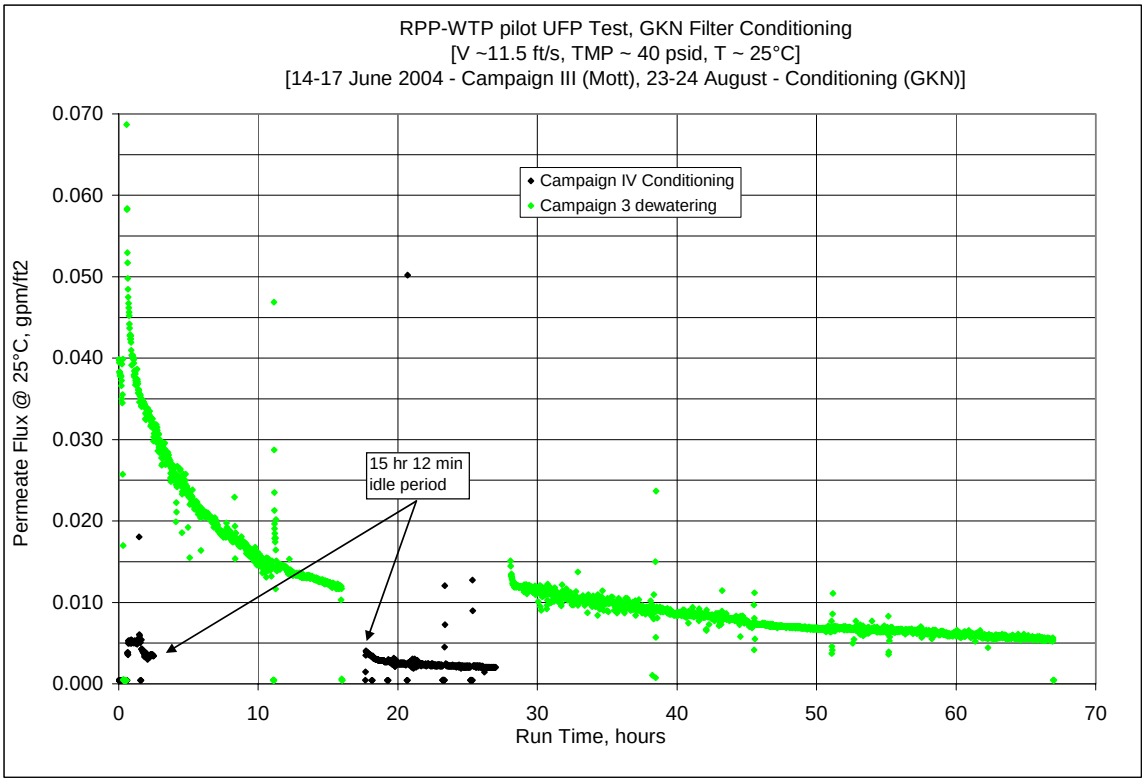


Figure 23. Preconditioning of the GKN Filter with 20 wt% AN-102

Following the preconditioning operation the filter unit was rinsed with 0.1 M NaOH and cleaned with 2.0 M HNO3 in a fashion similar to test points 4.18 and 4.19 (however, heels were not included in each solution, reference Section 2.7.4.1.6). Only two acid cleanings were conducted. In both acid cleaning stages the test conditions of 11 ft/s and 40 psid TMP could not be attained. At 11 ft/s and maximum pumping system output, the greatest TMP attainable was ~24 psid for both cleanings. The permeate flux was ~3 times greater than that seen during the second acid cleanings of Campaign II and III (0.95 gpm/ft^2 vs. 0.35 gpm/ft^2). The high flux created a higher pressure in the permeate loop than that seen during the second acid cleanings of Campaign II and III (33 psig vs. -1 psig). Basically, the filter media did not provide the flow resistance necessary to attain the required TMP. The high flux of the acid cleanings possibly indicated that the filter was too clean, that is the preconditioning failed to foul the filter to a significant depth.

The filter flux results when using the rinse and cleaning solutions that followed the preconditioning are shown on Fig.24. First note the severely diminished flux of the first caustic rinse, indicating that the rinse solution and backpulse had little effect on the filter cleanliness. Then note the significant increase in flux from the first caustic rinse to the first acid cleaning, indicating that the solids obstructing the filter were dissolved and removed. There was not a notable increase of the flux from the first acid cleaning to the second,

indicating that the filter was cleaned almost to the fullest extent by the first batch of 2.0 M HNO_3. Since the second cleaning did not result in further improvement of permeate flux the planned third acid cleaning was not conducted, which also allowed the start up of Campaign IV sooner.

As seen in the figure, there was a reduction of flux from the second acid cleaning to the second caustic rinse. This was typical of all previous clean-rinse operations and was due to the heel (1.6 L, in this case) of acid solution that remained in the test rig after the second acid cleaning solution was drained. The caustic solution precipitated solids from the residual acid solution, which reduced the permeate flux.

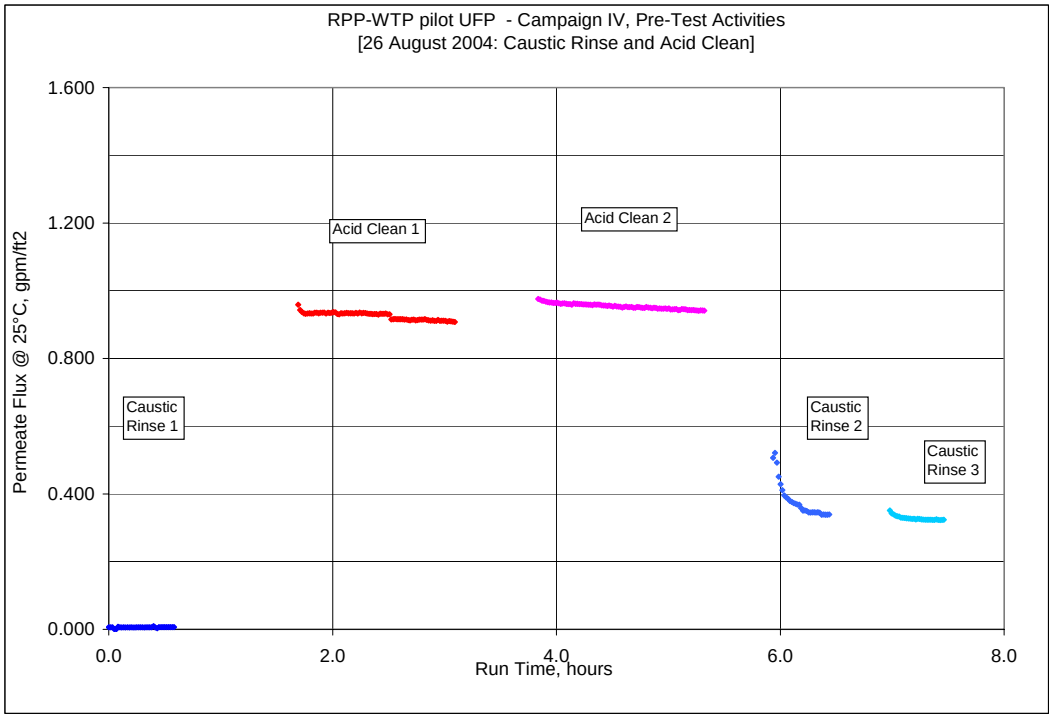


Figure 24. Pre-Test Acid Cleaning of Filter Unit, Permeate Flux vs. Run Time

Following the rinse and clean operation the test rig was flushed twice with DIF water. The GKN filter was considered ready for Campaign IV testing after the flushes. A volume of 100 L of 0.1 M NaOH was then added to the test rig to conduct the pre-test baseline tests (test numbers 4.00A, B, and C). The results of the pre-test baseline are shown and described in Section 2.7.4.1.5.

2.7.4.1.2 Slurry Concentration (Dewatering)

Dewatering started Monday, 30 August. The waste simulant in the Primary Mixing Tank was not agitated during the weekend before the 30th so that solids would settle out and allow supernatant to be drawn from the top of the mixture. The supernatant was added to the slurry reservoir prior to the initiation of dewatering to account for the volume of permeate necessary to fill the permeate loop (~16 L). Doing so would assure the correct solids weight % of the waste simulant in the Slurry Reservoir after the slurry and permeate loops were completely filled and ready. After the supernatant was removed, the simulant was thoroughly agitated for one hour prior to the initial transfer of slurry to the slurry reservoir.

Per the test matrix, the dewatering was conducted in two stages. The delineation between the stages was approximately one-half of the expected permeate removed from the simulant (476 liters). A hold period, a minimum of 12 hours, was inserted between the stages to purposely extend the dewatering process. The hold period made the SIPP dewatering duration more comparable with the RPP-WTP dewatering duration, during which some waste instabilities (precipitation) could affect the UFP feed. The first stage was completed in about 15 hours and finished in the early morning of 31 August, the second stage was completed in about 38 hours and finished in the early morning of 2 September. The entire dewatering process, including the hold, and downtime for sampling, took approximately 66 hours. Excluding the hold, and sampling downtime, dewatering took a little over 53 hours (Campaign II ~53 hours, Campaign III ~ 55 hours).

A volume of about 1048 L of combined waste simulant was dewatered to 117 L to obtain a final concentration of 23.5 wt% UDS. The RPP-WTP UFP will concentrate waste to approximately 17 wt% UDS. However, all of the campaigns of SIPP have a target of at least 20 wt% UDS and, if possible, 25 wt% UDS to obtain information at an upper bound. The Campaign IV dewatering test was stopped after about 53 hours when a rough estimate of concentration indicated 25 wt% UDS (a real-time analysis of concentration was not available; therefore the concentration was extrapolated with previous concentration results). A volume of 914 L of permeate was collected in drums during dewatering. Approximately 16 L of permeate remained in the permeate loop and about
1 liter of samples (slurry) were taken during dewatering.

2.7.4.1.2.1 Test Results

Figure 25 shows the adjusted permeate flux for the entire slurry dewatering process. The flux was adjusted for temperature, as required by the RPP-WTP test specification, to account for the effect of viscosity.

The adjustment equation is:

Adjusted Flux = Flux (gpm/ft^2) * $e^{(2500 \text{ x } ((1/(273+T))-(1/298)))}$

where Flux = permeate flow rate/approximate filter area, and T = slurry temperature in degrees Celsius

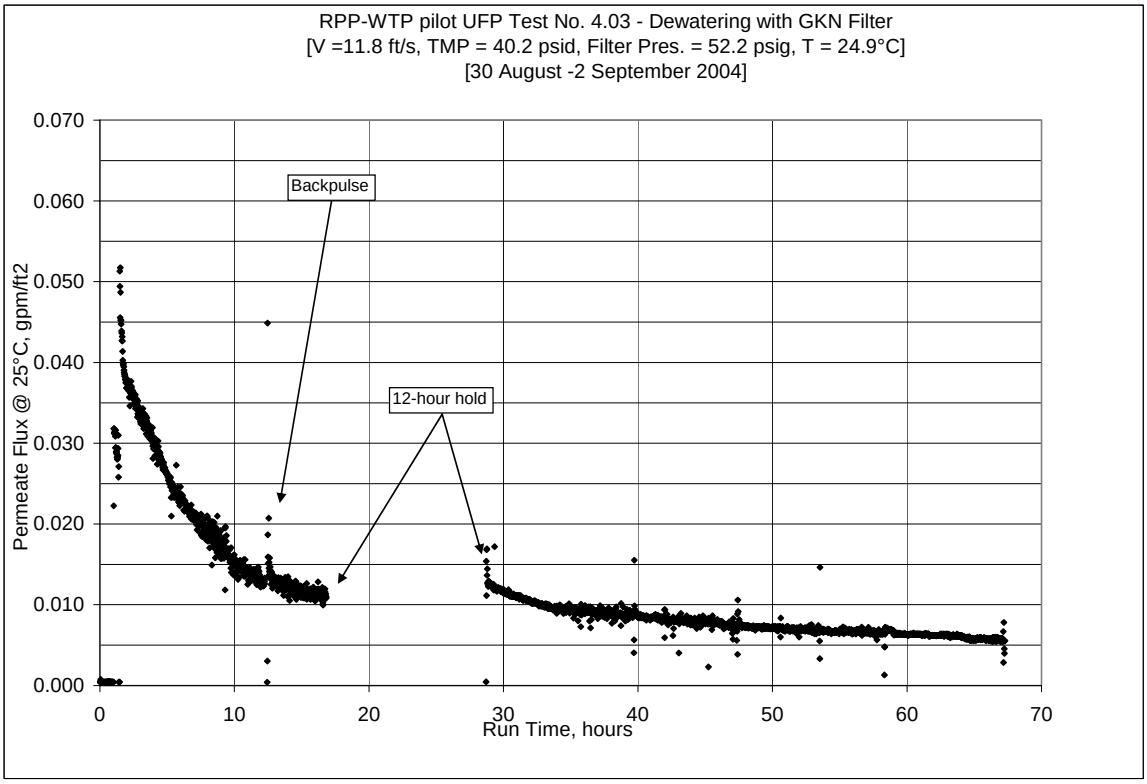


Figure 25. Dewatering of UFP Feed, Permeate Flux vs. Run Time with GKN filter

The data outliers seen in the figure were mainly from process disruptions; backpulsing, sampling, and exchanging permeate collection drums. The data scatter (or fuzziness) of the permeate flux output was from fluctuations in the permeate flow rate. Fluctuations were noticed when gas bubbles were seen in the permeate discharge line. This phenomenon was also observed (to a greater extent) during slurry washing. A detailed discussion of the bubbles is provided in the slurry washing section (Section 2.7.4.1.5).

2.7.4.1.2.2 Backpulse

Dewatering started with a backpulse. Another backpulse was conducted at approximately 11 hours into the first stage of dewatering. The flux recovery from the second backpulse was poor and as a result backpulsing was not attempted for the remainder of the dewatering process. Backpulses were always performed during the dewatering of the SIPP campaigns and poor recovery was evident in all.

The permeate flow rate and some test rig pressures during the backpulse at 11 hours are shown in Figs. 26 and 27, respectivley. The time interval shown on these figures are independent of the run time shown on other figures. The backpulse started after 60 seconds, and the backpulse duration was 15 seconds in this case (i.e. the backpulse valve, V18, was opened and closed for about 15 seconds, reference Table 26). The air pocket in the pulse pot was pressurized to about 40 psig above the slurry loop pressure, prior to the backpulse (seen as P3 –P2 in Fig. 27). The asymptotic decrease of the permeate flow and pressures are indicative of the SIPP backpulse system, which was designed to be prototypic of the RPP-WTP backpulse system (Duignan, 2003a). Figure 27 indicates that the filter pressure (P1) is not affected by the backpulse (since it is dominated by the pump discharge pressure) but the pressure drop through the filter is slightly affected. The permeate loop flow valve (V27) was opened to re-establish dewatering after the backpulse (effect not shown in the figures).

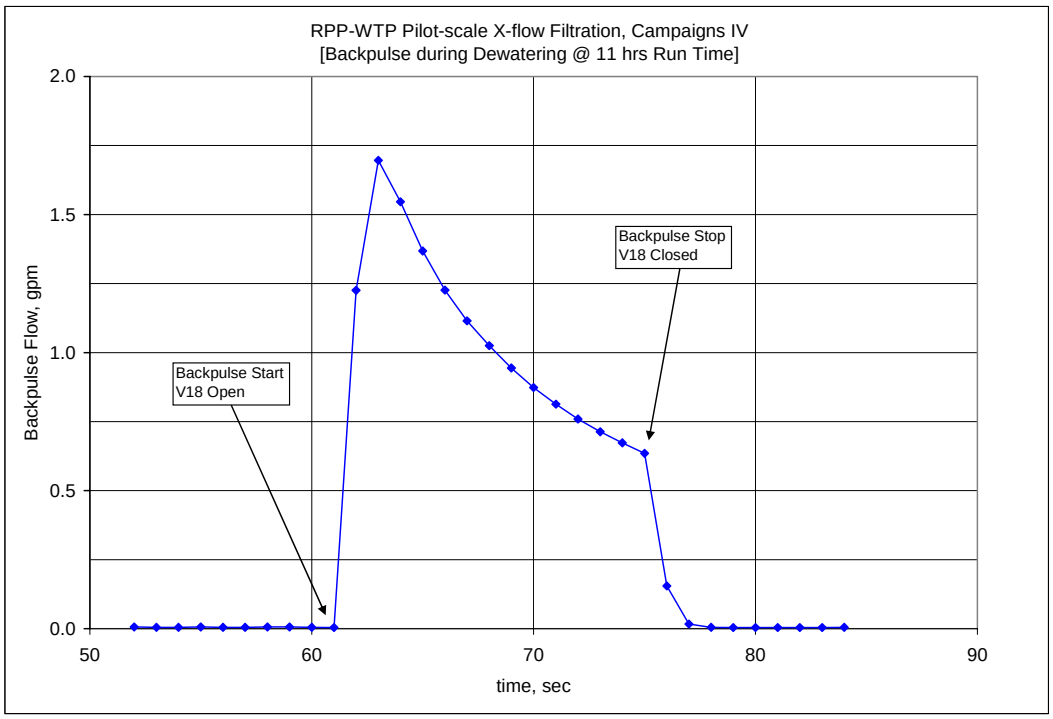


Figure 26. Permeate Flow during Dewatering Backpulse

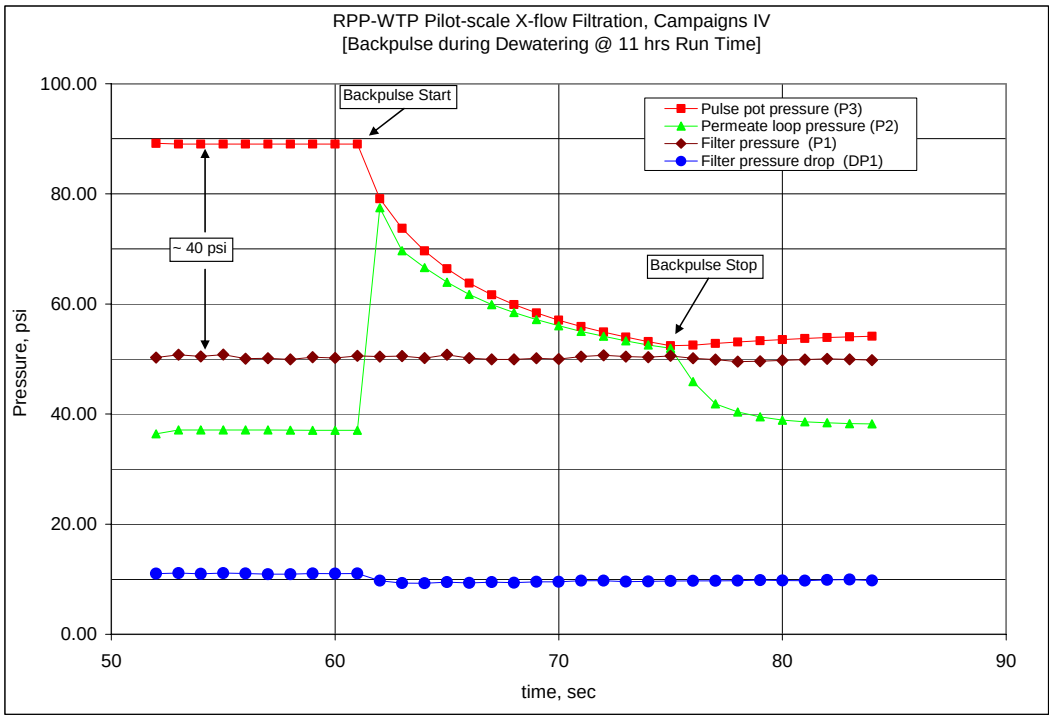


Figure 27. Test Rig Pressures during Dewatering Backpulse

2.7.4.1.2.3 Slurry and Permeate Samples

Samples of concentrated slurry and permeate were taken during the dewatering process in accordance to a sampling plan, Appendix D. Samples were taken at approximately 159 liters, 317 liter, and 476 liters of permeate removed for each of the two dewatering stages. Permeate density, viscosity, and turbidity, as well as slurry density, were measured in the EDL soon after the samples were taken. The results of these measurements are shown in Table 30. Additional permeate and slurry samples taken at the periods listed above were sent to Aiken County Technology Laboratory (ACTL) for measurements of density, yield stress, consistency, and weight % solids [total solids (TS), undissolved solids (UDS), dissolved solids (DS), and supernatant solids (SS)]. The results of the separate samples are presented in Section 2.7.4.2.1. Note that the permeate and slurry densities were measured at both EDL and ACTL.

Table 30. EDL Measured Data during Dewatering of the AY102+AP101+FEP Bottoms Simulant

Target Volume of Permeate Produced	Cumulative Weight of Permeate Produced	Slurry	Permeate			
		Density	Density	Viscosity	Temp	Turbidity
L	kg	gm/mL	gm/mL	mPa-s	ºC	NTU
Day1 158.7	196.65	1.28	1.25	2.28	25.0	0.23
317.3	390.25	1.31	1.25	2.28	25.0	0.20
476.0	586.95	1.34	1.25	2.29	26.3	0.37
Day 2 158.7	783.55	1.38	1.25	2.32	24.9	0.35
317.3	980.10	1.43	1.25	2.33	24.6	0.23
476.0	1142.40	1.46	1.25	2.36	25.0	0.38

The density of the slurry increased during dewatering as the lighter permeate was removed from the heavier solids. The permeate density remained constant. The turbidity measurements of the permeate were significantly lower than the test specification threshold of 2 NTU and, therefore, the permeate was considered acceptably free of undissolved solids. The permeate viscosity (and permeate temperature) fluctuated slightly throughout the process.

2.7.4.1.2.4 Slurry Concentration

Another way to visualize the dewatering results is to track permeate flux with the concentration of UDS. Figure 28 shows the adjusted permeate flux versus wt% UDS concentration using the GKN filter and for comparison, the dewatering data from Campaigns I, II and III are also shown. The data trend of Campaigns II, III and IV are almost identical and the data tend of Campaign I was similar. The simulant for Campaign I contained only AY102 and was 12.5 wt% at the beginning of dewatering. The consistent performance of the UFP during Campaigns II, III, and IV indicates that; 1) the performance of the GKN filter unit was comparable to that of the Mott, 2) the rinsing and cleaning process with 0.1 M NaOH and 2.0 M HNO_3, respectively, restored the filter unit to a repeatable performance (Mott), and 3) the addition of AP101 and FEP Bottoms to the AY102 had little effect on filter performance (Mott).

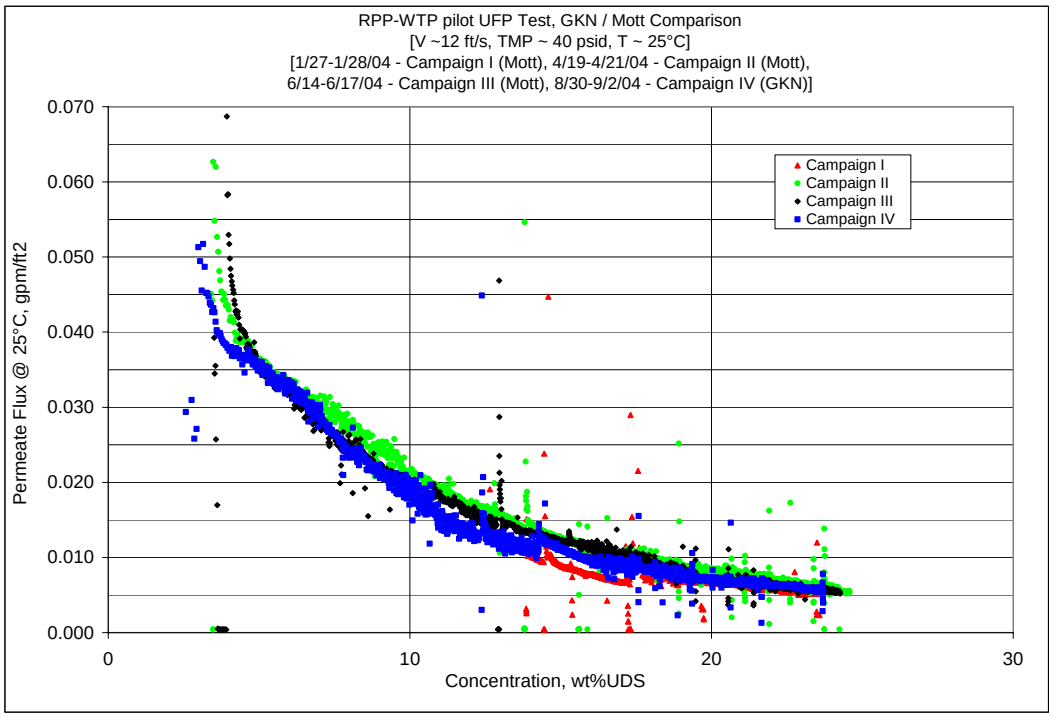


Figure 28. Dewatering of UF Feed – Campaigns I , II, III (Mott Filter) and IV (GKN Filter), Permeate Flux vs. Concentration

The average, temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was ~0.011 gpm/ft^2 for Campaign IV. This flux value for Campaigns II and III was also ~0.011 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 20 wt% UDS was 0.013 gpm/ft^2 for Campaign IV. This flux value was slightly higher for Campaigns II and III, 0.015 gpm/ft^2 and 0.014 gpm/ft^2 respectively. The average, temperature-adjusted permeate flux when dewatering from ~4 to 17 wt% UDS was 0.016 gpm/ft^2 for Campaign IV. This value was again slightly higher for Campaigns II and III, both 0.018 gpm/ft^2. These results indicate a similarity between the GKN and Mott filter units.

Of course, the data in Fig. 28 are instantaneous results and it is useful to look at the cumulative mean fluxes. For the three SIPP campaigns that dewatered from below 5 wt% UDS to over 20 wt% (i.e., Campaigns II-IV) Fig. 29 shows mean filter fluxes at each point along the solids concentration abscissa.

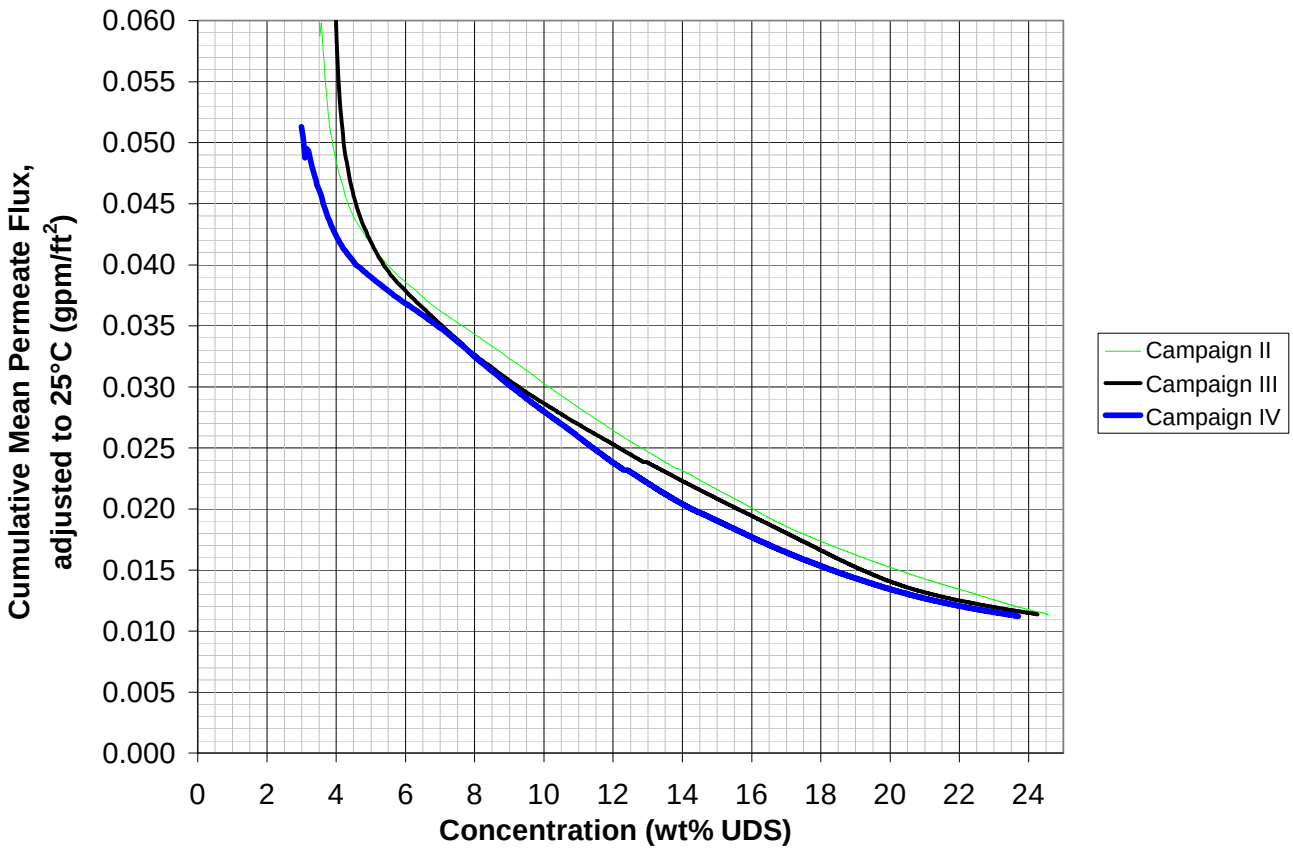


Figure 29. Dewatering of UF Feed – Campaigns II, III (Mott Filter) and IV (GKN Filter), Cumulative Mean Permeate Flux vs. Concentration

2.7.4.1.3 <u>Testing at Steady-State Solids Loading</u>

Six steady state tests were conducted with the GKN filter unit following dewatering to compare with steady state tests conducted with the Mott filter unit. Steady state tests with the Mott were conducted in Campaign I with AY102 slurry dewatered to approximately 24 wt% UDS. Campaign IV steady state tests were conducted with slurry (AY102/AP101/FEP Bottoms) also dewatered to 24 wt% UDS.

The Campaign IV steady state tests are listed in the test matrix (Table 22) and the test plan is shown in Fig. 30, with the Campaign I steady state test points for comparison. As seen in the figure, four of the six Campaign IV tests are duplicates of Campaign I. The remaining two Campaign IV steady state tests are; a repeat of test 4.09 (Steady5), and a new test to provide useful data at a high TMP and slurry velocity (Steady6).

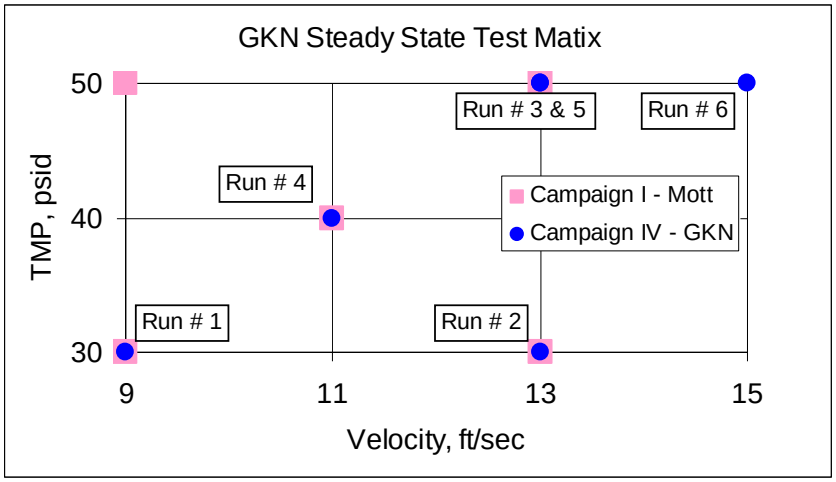


Figure 30. Campaign I and IV Steady State Test Matrix

All of the Campaign IV steady state tests were conducted at 25 ºC. However, test number 4.09 and Steady6 were conducted at 31 ºC (the heat exchanger was unable to remove a sufficient amount of the system heat to maintain 25 ºC). The mean value of the adjusted permeate flux data from the steady state tests are shown in Fig. 31. The steady state test results from the Mott filter unit are also shown in the figure. Note that the performance of the GKN filter unit was similar to the Mott at comparative data points. Also note that the Steady6 test indicated that a higher slurry velocity through the filter yields a higher permeate flux, as seen by all cross-flow filter tests done in the past.

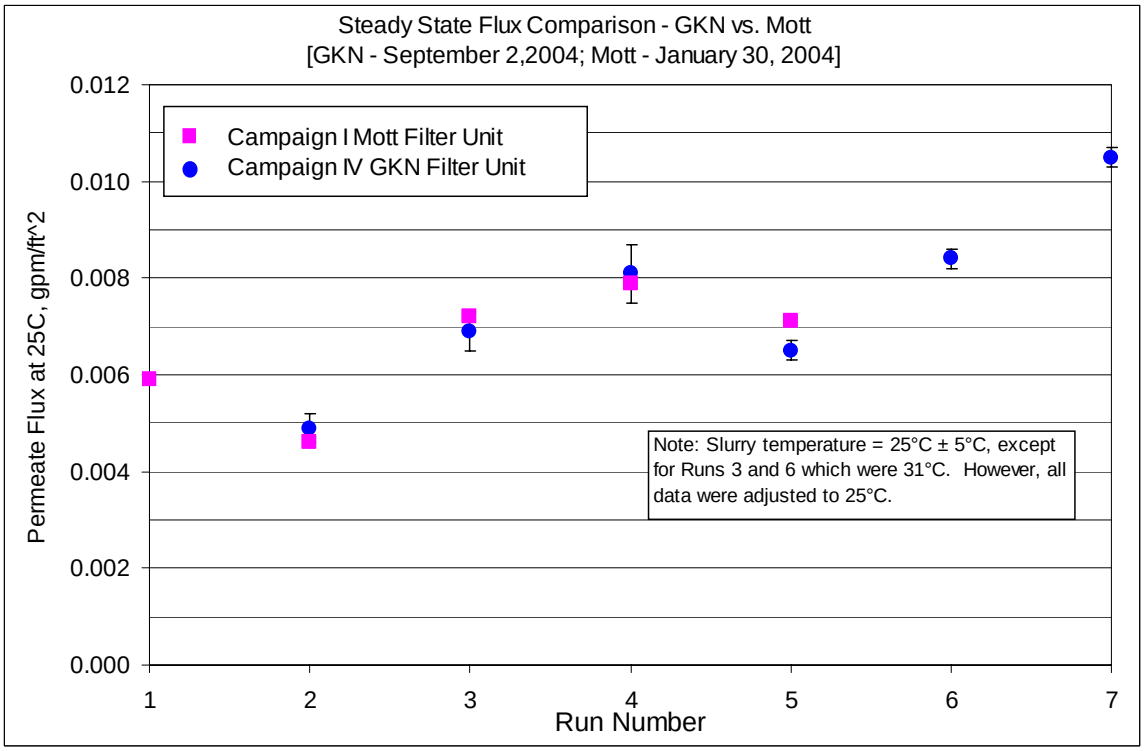


Figure 31. Campaign IV Steady State Tests at 24 wt% UDS

(See theTable 31 for the flow conditions)

Table 31. 24 wt% UDS Steady State Test Comparison Data shown in Fig. 31

	Mott Filter Steady State Test				GKN Filter Steady State Test			
Run Number	Campaign I Test Number	Slurry Velocity ft/s	TMP psid	Permeate Flux @ 25°C gpm/ft^2	Campaign IV Test Number	Slurry Velocity ft/s	TMP psid	Permeate Flux @ 25°C gpm/ft^2
1	1.10	8.8	50.6	0.0059				
2	1.07	9.0	29.4	0.0046	4.07	8.9	29.6	0.0049
3	1.08	13.1	29.0	0.0072	4.08	13.4	30.4	0.0069
4	1.09	12.4	50.6	0.0079	4.09	12.6	50.0	0.0081
5	1.11	10.9	40.8	0.0071	4.11	10.8	39.6	0.0065
6					Steady5	13.1	50.3	0.0084
7					Steady6	15.4	50.0	0.0105

2.7.4.1.4 Testing at Steady-State Solids Loading and at Elevated Temperatures

Following the steady state testing, the 24 wt% UDS slurry was adjusted to ~19 wt% UDS by removing slurry and adding permeate. The target wt% UDS for the adjustment was 20 wt%, however, transfer irregularities caused the adjustment to be lower than the target concentration.

Tests were conducted with the 19 wt% slurry at higher slurry temperature to determine the effect on permeate flux. The high temperature tests are listed in the test matrix (Table 22). Higher slurry temperatures were attained by reducing the cooling flow to the heat exchanger. The higher temperature was expected to reduce the viscosity of the slurry, and permeate, and increase the permeate flux.

The mean value of the permeate flux data from the high temperature tests are shown in Fig. 32. The mean value of the adjusted permeate flux data of each high temperature test is also shown in the figure (adjusted to 25 ºC with the equation shown in Section 2.7.4.1.2.1). The flux level increased in all of the cases with a slurry temperature above 25 ºC. At the two 45 ºC points the flux level increased greater than 70 % above the 25 ºC level.

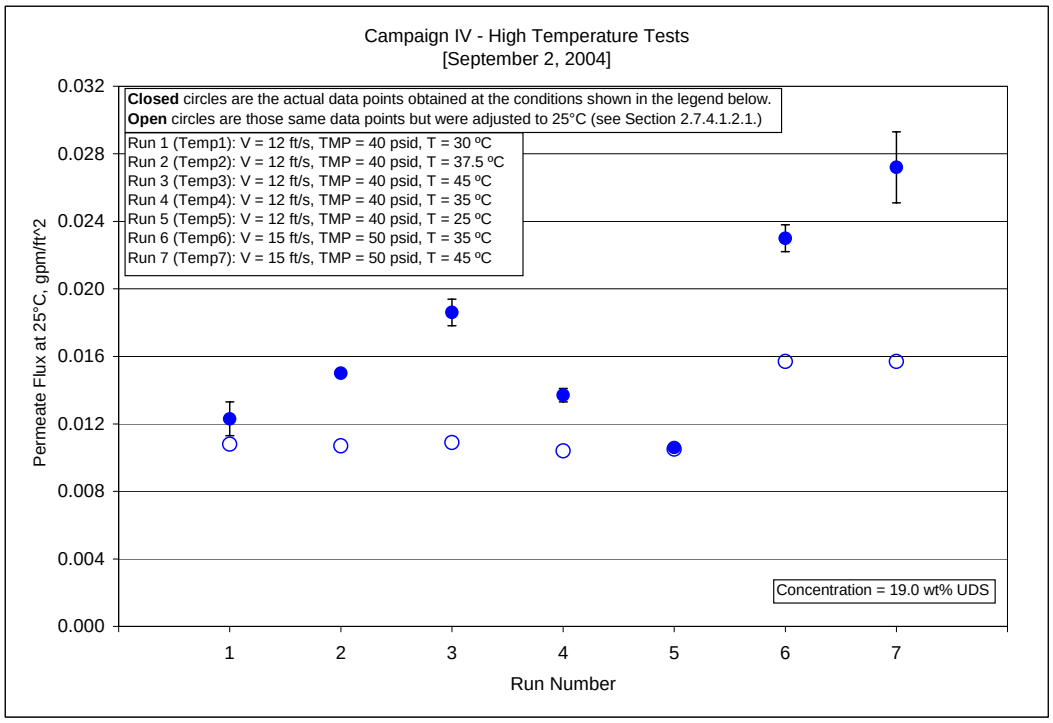


Figure 32. Campaign IV High Temperature Tests (data are listed in Table 32)

Table 32. 19 wt% UDS Steady-State Test Data at Higher Temperature shown in Fig. 32

Run Number	Slurry Velocity ft/s	TMP psid	Temp. (°C)	Permeate Flux	
				Actual gpm/ft2	Temp. Adjusted gpm/ft2
1	12	40	30	0.0123	0.0108
2	12	40	37.5	0.0150	0.0107
3	12	40	45	0.0186	0.0109
4	12	40	35	0.0137	0.0104
5	12	40	25	0.0106	0.0105
6	15	50	35	0.0230	0.0157
7	15	50	45	0.0272	0.0157

The varying conditions make it difficult to determine the effect of temperature of filter flux. However, in Fig. 33, by using data from Fig. 31 [Run 7@ 24 wt% UDS at 25°C] and Fig. 32 [Run 6 (at 35°C) and Run 7 (at 45°C) both@ 19 wt% UDS] the effect of temperature is seen at the flow conditions of V = 15 ft/s and TMP = 50 psid. Unfortunately, both data sets were done at different concentrations of undissolved solids. If Run 7@ 24 wt% UDS were done at 19 wt% UDS then the flux in Fig. 33 for that point would be higher.

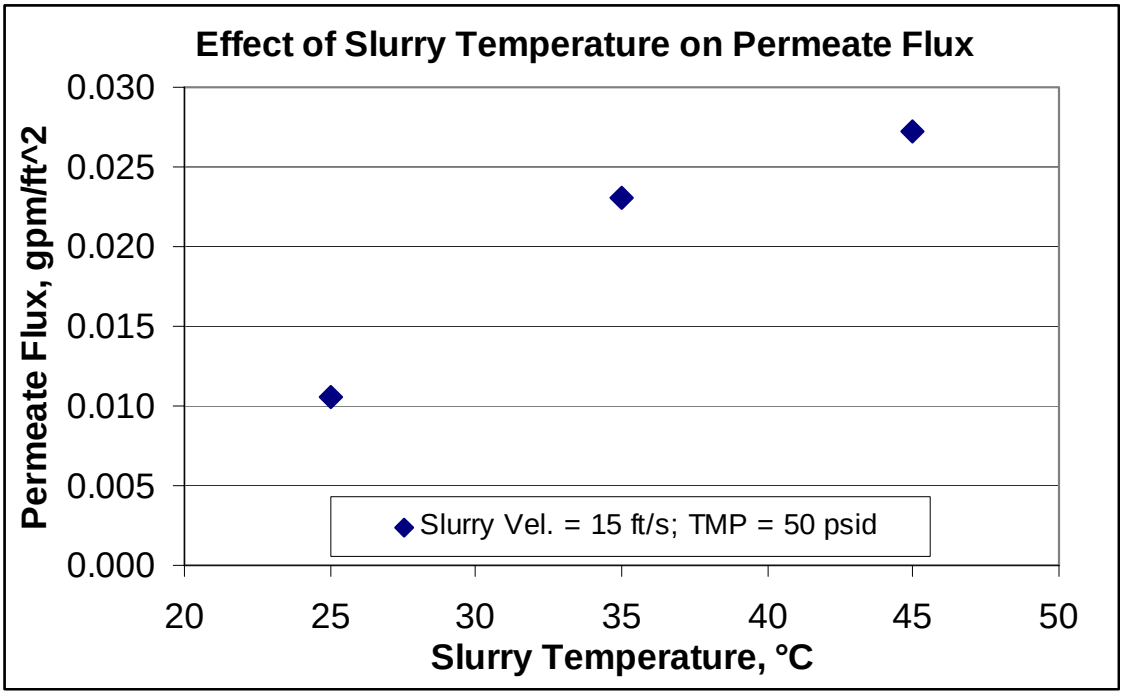


Figure 33. By using the data from Fig. 31 (Run 7@ 24 wt% UDS) and Fig. 32 (Runs 6 and 7@ 19 wt% UDS) the effect of temperature is seen at the flow conditions of V = 15 ft/s and TMP = 50 psid. Figure 31a.

2.7.4.1.5 <u>Slurry Washing</u>

In the full-size design, the filtration batch size is 21,550 gallons in the RPP-WTP UFP. The concentrated slurry is washed twice with 21,770 gallons of wash solution using 22 mini-batches of approximately 1,000-gallon each. The filtration batch size was 116.8 L in the pilot-scale SIPP UFP. To mimic the RPP-WTP process, the concentrated slurry was washed twice with 118.0 L using 22 mini-batches of 5.4 L each. In each of the two washes, a backpulse precedes the addition of the first mini-batch. The SIPP UFP wash solutions were made with condensate from the FEP evaporator.

A mini-batch of washing solution was pumped directly to the Slurry Reservoir from a drum. Adding a mini-batch raised the slurry reservoir to about 122 L. The slurry was dewatered until the Slurry Reservoir level reached about 117 L, and then another mini-batch was added. This basic procedure was repeated until the washing process was complete.

The wash permeate was collected in drums for storage and later use if needed. The washed slurry was removed from the test rig and stored in a drum. The washed slurry would eventually be vitrified in the Vitreous State Laboratory at Catholic University of America, located in Washington DC. The test rig was rinsed and cleaned after the slurry washing.

2.7.4.1.5.1 Test Results

Figure 34 shows the adjusted permeate flux of the first washing. The flux increased from approximately 0.012 to 0.018 gpm/ft^2 during the first wash cycle (50% increase). The flux increased in the first wash of Campaigns I, II and III by 53%, 64% and 42%, respectively. Figure 35 shows that the adjusted flux continued to increase during the second wash, from approximately 0.022 to 0.027 gpm/ft^2 (23% increase). The flux increased in the second wash of Campaigns I, II and III by 32%, 25% and 16%, respectively.

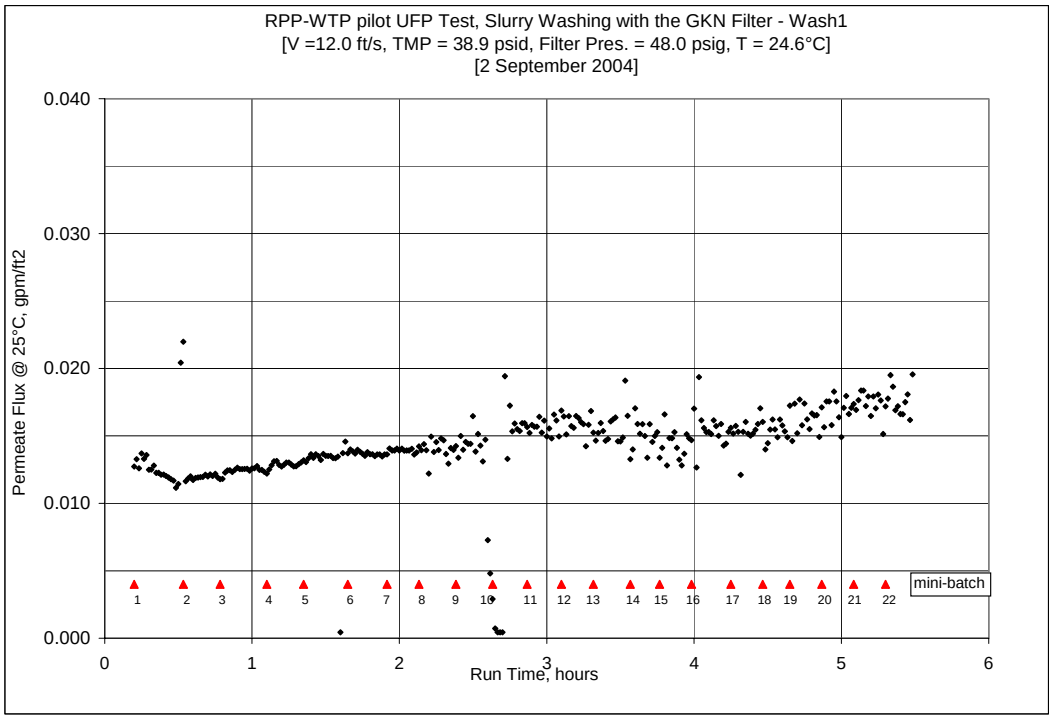


Figure 34. 1st Washing of Concentrated Slurry with 22 Wash Mini-batches

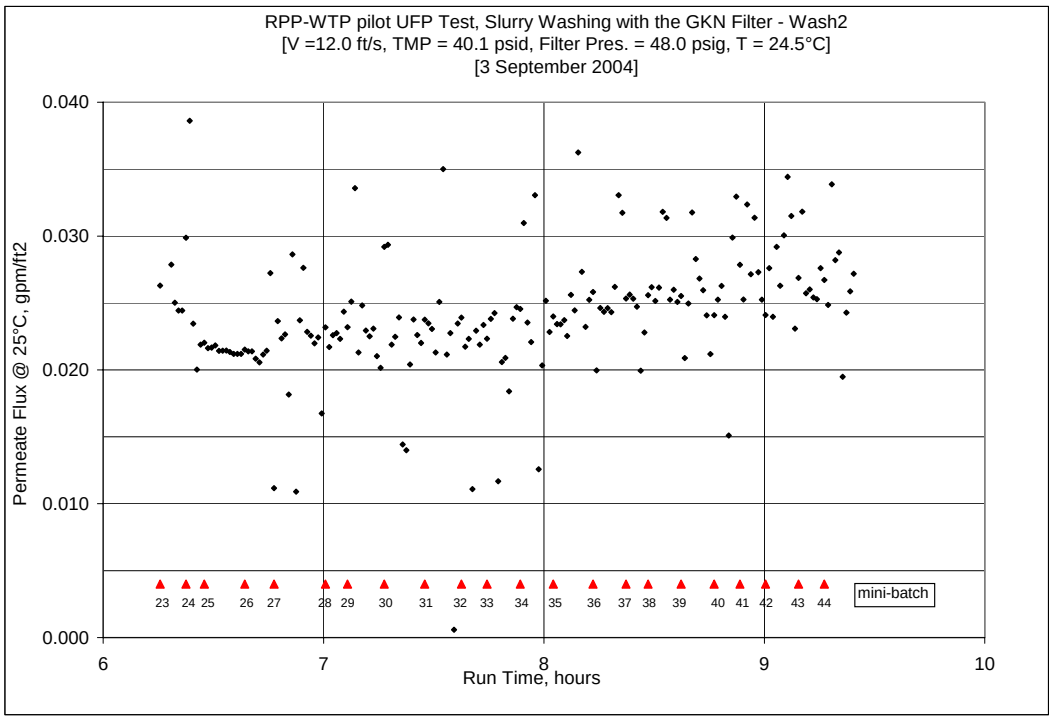


Figure 35. 2nd Washing of Concentrated Slurry with 22 Wash Mini-batches

2.7.4.1.5.2 Data Instability

Note in Fig. 34 that the initial flux readings are relatively stable and become progressively unstable during the first wash, and more so in the second wash (Fig. 35). This instability was systematic to the pilot-scale test rig and was attributed to gas bubbles in the small ID tubes of the permeate loop. The bubbles were small in volume at the start of the first wash but became larger and appeared more frequent as the wash progressed. Fluctuations in the permeate flow rate appeared to correspond to bubbles observed in the polyethylene section of the permeate loop, which started at the pulse pot and ending at the permeate collection drum. Similar data fluctuations were noticed in the pressure measured at the backpulse pot (P3).

During normal operation the gauge pressure at the backpulse pot was negative (~6 psig vacuum, P3 reference Fig. 18) due to the siphon created by the height of the backpulse pot above the permeate discharge. The vacuum at the backpulse pot would introduce air into the permeate loop if a leak existed. However, the permeate loop and filter unit were hydrostatically tested for leaks after Campaign III. The test did not reveal a leak.

A possible explanation for the gas bubbles is that the negative gauge pressure at the backpulse pot forced dissolved gasses out of the permeate. The bubbles were observed at the discharge of the backpulse pot and appeared to flow with the permeate to the collection drum. Another possible explanation is that the air is pulled into this section of the permeate loop during sampling (opening sample valve V29, reference Fig. 18). The slow moving permeate (less than 1 ft/s in the discharge line) was not able to sufficiently clear the line

when dewatering continued after each sampling period (the discharge line would maintain oscillating air bubbles). The full-size WTP will have larger discharge pipes and higher permeate flows, which will continue to flow when a new charge of washing water is added. Because of the larger size and design of the full-size WTP UFP the instabilities attributed to the gas bubbles in the pilot-scale SIPP UFP are not expected to be a prominent in the plant unit, if at all. However, it is important to note that since the UFP tank will be partially mixed with sparging, there is the potential of entraining gas bubbles into the filter loop. The presence of gas bubbles in the loop has the potential of increase the loop pressure drop since two-phase (gas-liquid) flow is harder to push than one without gas. Also, gas may create filter problems by diverting flow from some of the many filter tubes by causing higher resistances within the filter walls.

2.7.4.1.5.3 Permeate Flux Increase Between Washes

In all of the campaigns to date, the adjusted flux increased from the end of the first wash to the beginning of the second wash. During the two wash cycles there was a period of time that filtering was stopped. This occurred either by shutting the permeate valve and then the pumps when washing was scheduled for different days (Campaigns I and II), or by shutting the permeate valve, but the pumps were left running when the second washing was to continue on the same day (Campaigns III and IV). For Campaigns III and IV there was still a period between the first and second washes due to the need of sampling and time to set up the next batch of caustic washing solutions. In both cases, at the start of a second wash, and initiation of filtration, a backpulse was made. The durations between the end of the first wash and the beginning of the second wash were 11 hours and 52 minutes in Campaign I, 10 hours and 42 minutes in Campaign II, 1 hour and 37 minutes in Campaign III, and 43 minutes in Campaign IV. As just stated, the first and second washes of Campaigns III and IV were conducted with very short non-filtering periods; and the washes of Campaigns I and II were conducted on consecutive days, with significant non-filtering periods. At the start of the second wash the adjusted flux increased 18% in Campaign I, 8% in Campaign II, 30% in Campaign III, and 31% in Campaign IV over the flux at the end of the first wash. It was believed that solids entrained in the filter media continued to dissolve during the non-filtering time, creating an improved flux after filtration was restarted and backpulsed to initiate the second wash. However, since the flux improvement was the same order of magnitude whether the time between the two washes were 12 hours or 43 minutes, a larger effect on flux improvement may have been the rearrangement of the filter cake from the simple action of stopping, starting, and backpulsing. During the first wash the filter cake is formed within the first 30 to 60 minutes. The solids that comprise the formed, packed filter cake are pressed against the filter substate which would minimize their movement and participation in the washing process. At the end of the first wash the filter is stopped. After the stated idle time the filter is restarted and backpulsed when, it is assumed, a considerable amount of the filter cake, if not all, is separated from the filter wall, which then mixes with the rest of the washed slurry. The new cake that forms during the second wash will contain solids that were thoroughly washed and changed through dissolution, thus changing their morphology allowing the formation of a more permeable filter cake. In light of this experience, WTP may significantly increase the permeate flux while washing if backpulsing is used throughout

the process. However, this is only recommended if washing is immediately followed by acid cleaning because increasing the backpulse frequency generally leads to faster filter fouling. When a filter is backpulsed the smallest solid particles in a slurry are the first to form the filter cake, which would increase the chance of exposing the filter to particles that could better depth foul the filter walls.

The total increase in flux from the beginning of the first wash to the end of the second wash was 125% for Campaign IV. The total increase was 107%, 127% and 142% for Campaigns I, II, and III, respectively.

Figure 36 shows the linear curve fits of the adjusted permeate flux of the first and second slurry washes for Campaigns I to IV. The linear curve fits are shown to eliminate any ambiguity caused by the data scatter. To facilitate comparison, the idle time between the washes of Campaigns I, II and IV are modified to match to the start of the second wash of Campaign III. As seen by this figure and given the % increases in flux of the washes and idle time, the GKN filter unit appeared to perform in a similar fashion to the Mott filter unit.

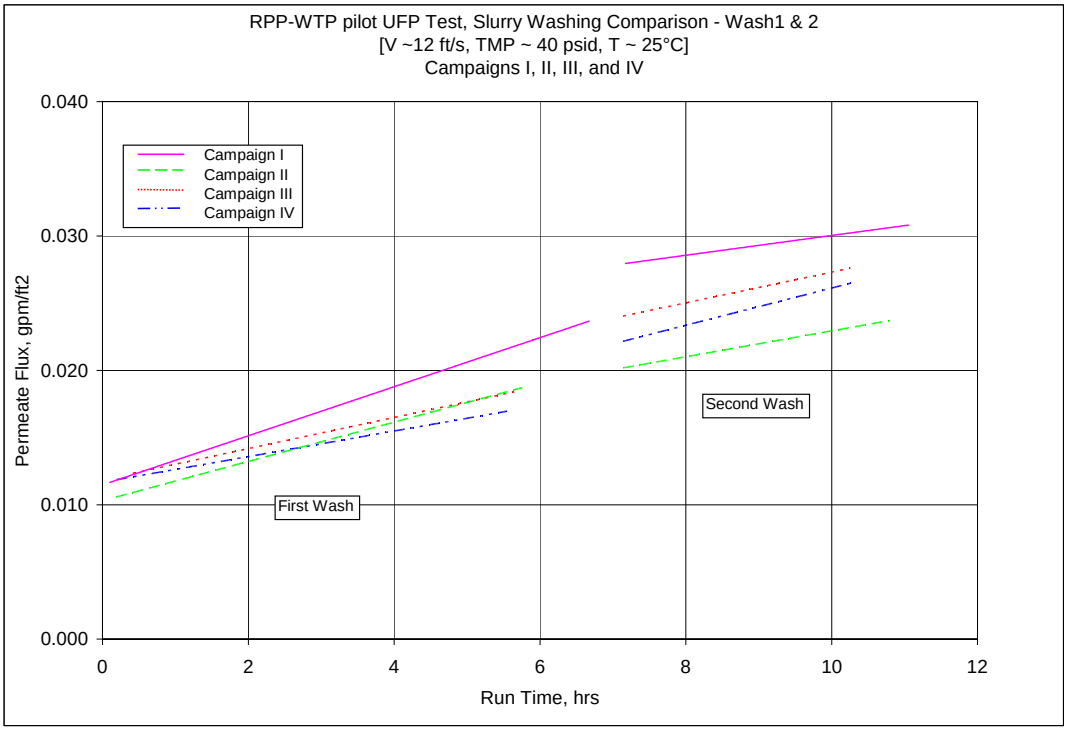


Figure 36. 1st and 2nd Washing of Concentrated Slurry, Campaigns* I, II, III, and IV

Note on Fig. 36: The measurement and curve-fit uncertainty is below.\
Campaign I – 1st wash, +/- 0.004 gpm/ft2; 2nd wash, +/- 0.009 gpm/ft2
Campaign II – 1st wash, +/- 0.003 gpm/ft2; 2nd wash, +/- 0.007 gpm/ft2
Campaign III – 1st wash, +/- 0.005 gpm/ft2; 2nd wash, +/- 0.007 gpm/ft2
Campaign IV - 1st wash, +/- 0.005 gpm/ft2; 2nd wash, +/- 0.010 gpm/ft2

Note that the duration of the first wash for Campaign I does not coincide with the durations of the other campaigns. The washes of each campaign were conducted using similar procedural steps (specified in a Work Guidance). Chronological notes in the laboratory

notebook indicated that the duration of a mini-batch in Campaign I was (on average for Wash 1) 2-3 minutes longer than in subsequent campaigns. There are several possible reasons for the extra time: 1) Taking samples and adding wash solution in Campaign I was conducted by a single technician; in Campaigns II-IV these tasks were performed by two technicians. 2) The process of taking samples and adding wash solution was more familiar by Campaign II and the subsequent campaigns, enhancing the efficiency of the sampling process. 3) The number of samples was reduced in Campaigns III and IV. The duration difference was also evident in the second wash of Campaign I and to a limited extent in the second wash of Campaign II.

2.7.4.1.5.4 Permeate Samples

Throughout the washing, permeate samples were taken at the end of wash numbers 1, 5, 9, 13, 17, and 22, for both washes per the sampling plan (Appendix D). These sample periods are important because while both slurry and permeate samples were taken at the same time, they are not matched samples. The permeate flux was very low and the permeate loop lengthy. It took approximately 30 minutes for permeate created at the filter to flow to the sampling point. Therefore, a permeate sample represents the permeate filtered from the slurry 30 minute previously while the slurry sample represents the slurry at the moment of the sample. However, the slurry and permeate samples can be appropriately matched by knowing the delay time.

To match the slurry sample taken at the end of each wash, the test rig was operated (in permeate recirculation mode) for an additional 30 minutes. At the end of the 30 minutes a permeate sample was taken. The analysis of the slurry and permeate samples taken during the washing are presented in Section 2.7.4.2.3.

2.7.4.1.6 <u>Filter Rinsing and Cleaning</u>

Following slurry washing, the slurry was drained from the test rig and the process of rinsing and cleaning the filter and test rig began. The test rig was rinsed and cleaned at 25°C ±5°C with the following sequence:

- 0.1 M NaOH rinse for 30 minutes
- 2.0 M HNO_3 cleaning for 90 minutes
- 2.0 M HNO_3 cleaning for 90 minutes
- 2.0 M HNO_3 cleaning for 90 minutes
- 0.1 M NaOH rinse for 30 minutes
- 0.1 M NaOH rinse for 30 minutes

The rinse solutions were made using condensate from the FEP Evaporator. The acid solutions were made from DIF water. Each solution was pumped into the Slurry Reservoir from a drum. A separate, empty drum was positioned to receive the wash permeate during each sequence.

At the end of a particular sequence step the solution was drained from the test rig to a drum and the subsequent solution was added. For each of the rinsing and cleaning steps, it was necessary and important to have a heel, representative of what is expected in the full-scale

plant, since it affects the chemistry of each subsequent solution. Therefore, a quantity of the previous solution was added back to each new solution to represent that heel.

The heel for the first caustic rinse consisted of a mild caustic solution (12.5 L), representing the filter-loop rinse and the residual slurry remaining in the test rig after washing (estimated to be 20-22 L and represents the concentrated slurry that will remain in the UFP filter loop and feed tank after the slurry is washed and drained). This produced a total heel of 34.5 L (max), and combined with the 94.6 L of 0.1 M NaOH produced a wash volume of about 129 L (actually about127 L, accounting for the volume change upon mixing). This was larger than the normal batch size of the SIPP UFP (117 L) and was unique because of the large volume of residual slurry. The 20-22 L of residual slurry produced a greater wt% solids in the pilot-scale test rig than that expected in the RPP-WTP UFP at this stage in the process. By increasing the wash volume the excess wt% solids were kept to a minimum (3.6 wt% UDS vs. 1.8 wt% UDS in the WTP – see the footnote to Section 2.7.4.2.4.).

The wt% UDS for the first acid cleaning was corrected back to the expected value (1.8 wt%) with the next heel. The heel for the first acid cleaning consisted of 7.5 L of spent solution from the first caustic rinse, 12.5 L of 0.1 M NaOH (made from FEP evaporator condensate), and residual solution left in the test rig (estimated to be 1.6 L). The total heel for the first acid wash was about 21.6 L. The volume of 2 M acid cleaning solution was 94.6 L, creating a batch size of approximately 117 L.

The heel for each subsequent solution consisted of 20 liters of the spent, previous solution and the residual solution remaining in the test rig (estimated to be 1.6 L). This produced a total heel of 21.6 L. This heel added to the typical volume of subsequent cleaning or rinse solutions (94.6 L) produced a batch size of approximately 117 L.

2.7.4.1.6.1 Test Results

The adjusted permeate flux for the first caustic rinse is shown in Fig. 37. A backpulse preceded the first mild caustic rinse. Figure 38 (a) shows a settled sample of the first rinse solution (pH~13). Note the large amount of UDS. As indicated in Table 33, the concentration of the UDS was 4.3 wt%. Table 33 gives the solids history obtained during Campaign IV testing; it is similar to the rinsing and cleaning solids results for the preceding three campaigns. It shows that the wt% TS of the 1st acid cleaning solution was reduced from the 1st caustic rinse, and was further reduced in the 2nd and 3rd cleaning. The amount of UDS remaining in the first caustic rinse of Campaign II and III was about 5% and 4%, respectively. The results in Table 33 indicate that the acid cleaning solution was actually about 1.70M and not the target 2.00M. The total solids content of the second and third caustic rinses is higher than the third acid cleaning due to neutralization of the nitric acid. The acid cleaning solutions are HNO_3, which evaporates when dried for total solids analysis. When the acid is neutralized with NaOH, it forms $NaNO_3$, which does not evaporate during the solids determination.

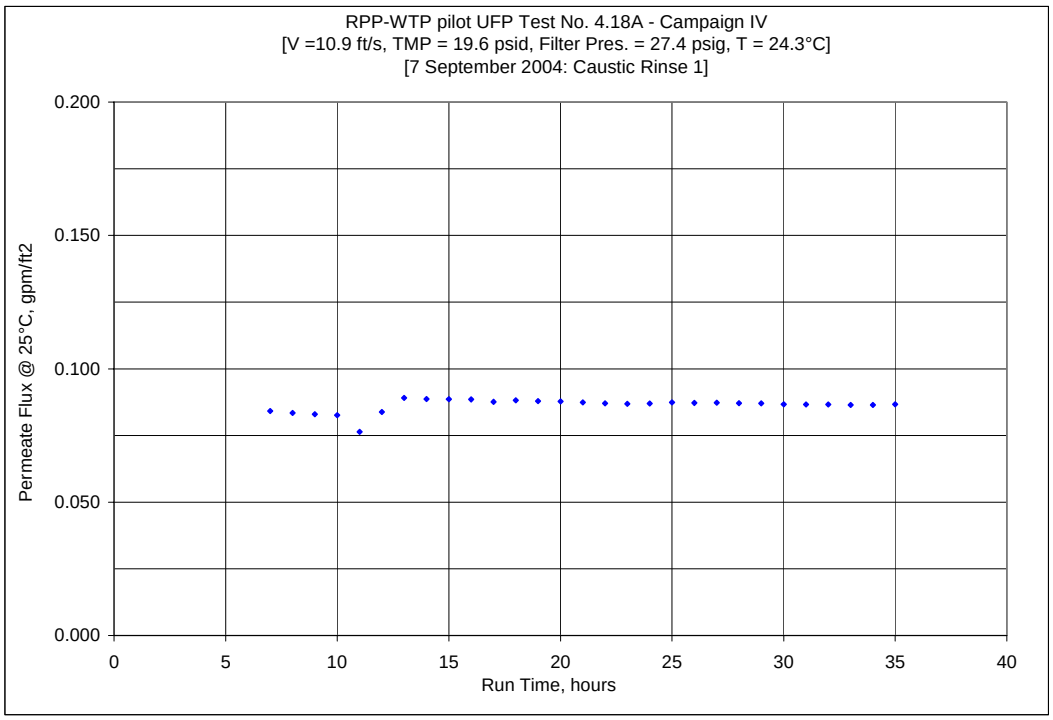


Figure 37. 1st Caustic Rinse of the SIPP UFP

Three acid cleanings followed the first caustic rinse. Figure 38 shows the adjusted permeate flux results for all three acid cleanings. A backpulse preceded each cleaning, which accounts for the higher initial flux at the beginning of each cleaning. The time gaps between the cleanings represent the times necessary to remove the old cleaning solution from the test rig and add a new cleaning solution and heel. The flux also improved between the first and second acid cleanings. This implies the residual acid solution in and on the filter media continued to dissolve solids and that backpulsing prior to cleaning removed stuck-on or lodged material. The flux did not improve between the second and third cleanings, which implies that the maximum effect of the nitric acid was realized in the second cleaning.

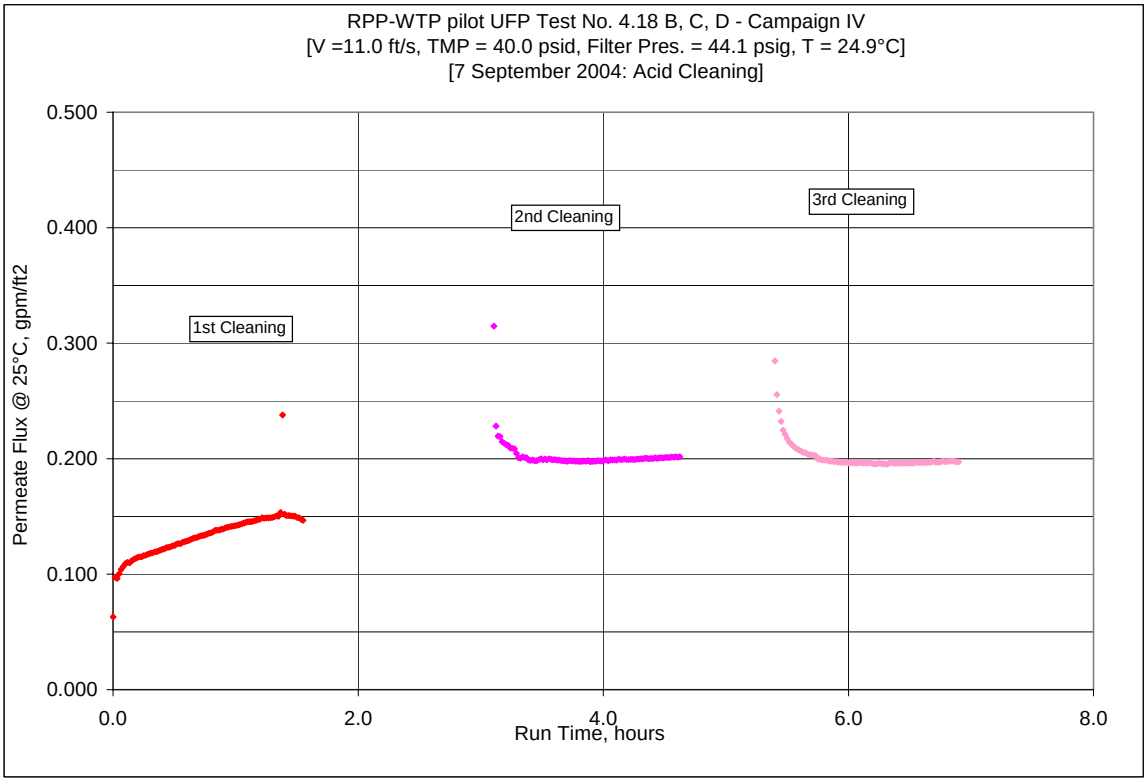


Figure 38. Acid Cleaning of the SIPP UFP

Figure 40 (b), (c), and (d) show samples of the spent acid cleaning solutions from Campaign IV. Note that the first acid cleaning solution was stained. In addition, there are small amounts of a fluffy, whitish solid on the bottom of the bottle. Spectral analysis of the whitish solid in Campaign II indicated a composition of alumina, silica and diaoyudaoite, $NaAl_{11}O_{17}$ (Duignan et al., 2004b or Appendix I-2). The 2nd and 3rd acid cleaning solutions are relatively clear. The 2nd acid cleaning solution had a very small amount of solids collected on the bottom of the bottle. The 3rd acid cleaning solution was visibly free of solids. The wt% UDS results of the cleaning solutions in Table 33 are so close to zero that the results are inconclusive. The molarity of the cleaning solutions shown in the table indicates the effect of the heel.

The acid cleanings were followed by two mild caustic rinses. Figure 39 shows the adjusted flux of the last two rinses and reveals that the permeate flux of the second caustic rinse (or the first rinse after acid cleaning) was notably less than that of the third acid cleaning (ending values of ~0.195 gpm/ft^2 vs. ~0.095 gpm/ft^2). This trend was seen in Campaign I, II and III and was attributed to the caustic solution precipitating solids from the acid heel. The volume and concentration of the acid heel was enough to make the second caustic rinse acidic (0.4 molar acid). Furthermore, the volume and concentration of the second cautic rinse heel was also enough to make the third caustic rinse slightly acidic (0.05 molar acid). The adjusted flux during the third caustic rinse continued to decline as more solids precipitated from the more-neutral solution. At the end of the last rinse the flux had dropped to ~0.08 gpm/ft^2, which was lower than previous campaigns but still greater than the average Campaign IV

dewatering flux of ~0.011 gpm/ft^2. Samples of the rinse solutions are shown in Figure 40 (e) and (f) and they appear to be clear. Further chemical analyses of the rinse and cleaning solutions are provided in Section 2.7.4.2.4.

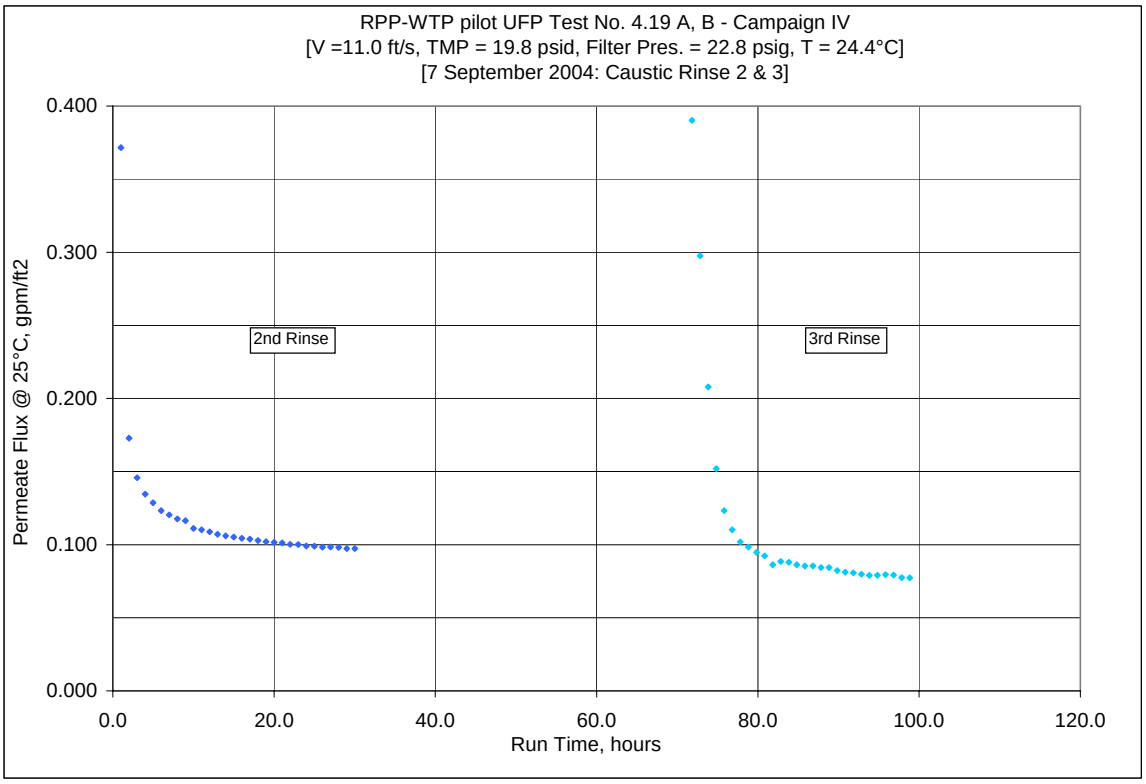


Figure 39. 2nd and 3rd Caustic Rinses of the SIPP UFP

(a) (b) (c) (d) (e) (f)

Figure 40. Campaign IV Caustic Rinse and Acid Cleaning Samples

(a) first caustic rinse, (b) first 2 M nitric cleaning, (c) second 2 M nitric cleaning, (d) third 2 M nitric cleaning, (e) second caustic rinse, (f) third caustic rinse

Table 33. Total Solids (TS) and Undissolved Solids (UDS) Concentrations of the Spent Rinse and Cleaning Solutions from Campaign IV (also see Table 44)

Step	**TS**	**UDS**	**Base or Acid (after addition)**	**pH***
	wt%	wt%	M	---
First Caustic Rinse 0.1 M NaOH	6.51	4.32	0.2 base	13.3
First Acid Cleaning 2.0 M HNO_3	1.57	0.06	1.19 acid	<1
Second Acid Cleaning 2.0 M HNO_3	0.47	0.02	1.68 acid	<1
Third Acid Cleaning 2.0 M HNO_3	0.15	0.08	1.69 acid	<1
Second Caustic Rinse 0.1 M NaOH	0.76	0.00	0.40 acid	<1
Third Caustic Rinse 0.1 M NaOH	0.94	0.02	0.05 acid	1.3

* Estimated from base or acid molarity

The third caustic rinse solution was left in the test rig and was used for the post-test baseline test. After the baseline test the caustic solution was removed from the test rig and stored in a drum. The post-test baseline results are presented in Section 2.7.4.1.7.2.

2.7.4.1.6.2 Acid Cleaning Comparison

Figure 41 shows the permeate flux of the entire rinse and clean process for Campaigns I, II, III and IV. The Campaign I trend was different during the acid cleanings but similar during caustic rinses. As noted previously, the slurry of Campaign I was AY102/V106 only, where the slurry of Campaigns II and III was a mixture of AY102/C106, AP101 and FEP Bottoms. Furthermore, the Campaign I acid cleaning samples visibly contained a greater amount of the whitish solids than the Campaign II and III samples, most likely the cause of the lagging permeate flux.

The Campaign II and III data are very similar in trend and magnitude. The Campaign IV flux during the 2nd and 3rd acid cleanings was lower than the Campaign II and III flux levels, possibly indicating that the acid cleaning of the GKN filter was not as effective as that of the Mott. Figure 42 shows the permeability during the second acid cleaning (or for an equivalent period) of multiple tests (SIPP and before) for the GKN and the Mott (40-inch and 90-inch filter units). From this perspective the magnitude of the Campaign IV acid flux appears appropriate. The figure implies that the flux during acid cleaning was more a function of the waste simulant dewatered than the filter element used. For example, the tests using an organic-based Envelope C simulated waste, i.e., AN-102, with filter velocities from 6.5 to 12 ft/s, had permeabilities ranging between 0.02 and 0.042 gpm/ft^2/psi, while the tests using a non-organic-based Envelope D simulated waste, i.e., AY-102/C-106, with filter velocities of 11 ft/s, had permeabilities below 0.01 gpm/ft^2/psi.

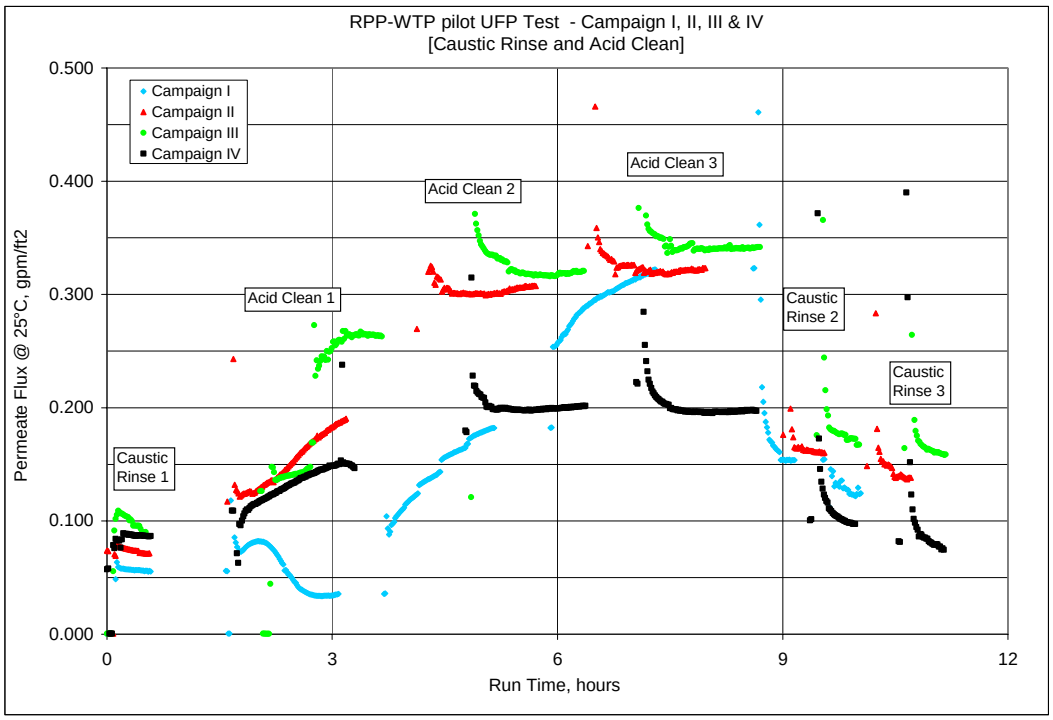


Figure 41. Filter Rinse and Clean, Campaigns I, II, III, and IV

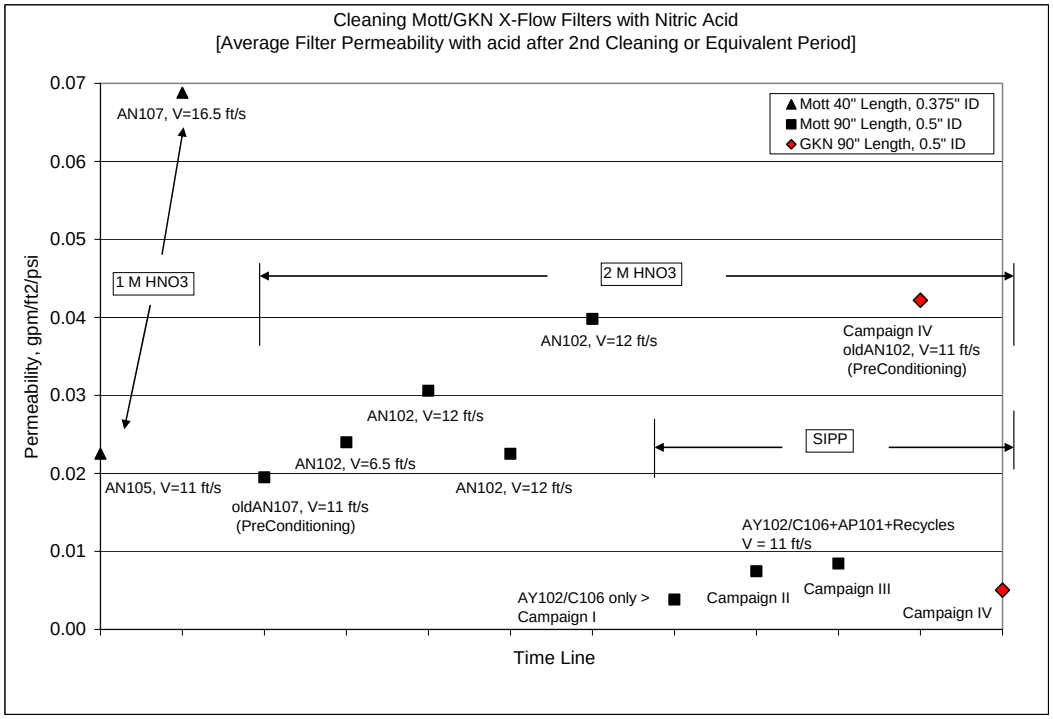


Figure 42. Comparison of Permeability at 25°C during Acid Cleaning of Various Ultrafiltration Tests

2.7.4.1.7 Filter Baselining

2.7.4.1.7.1 Pre-test Filter Baseline

A pre-test baseline test (test numbers 4.00A, B, and C) was conducted with the GKN filter unit after it was preconditioned, rinsed with 0.1 M NaOH and cleaned with 2.0 M HNO_3. The solution for the pre-test baseline was fresh 0.1 M NaOH. The adjusted flux results of this baseline are shown in Fig. 43. The pre-test baseline results are favorable and indicate an effective cleaning with the 2.0 M HNO_3. The results of the baseline test conducted prior to the preconditioning are also shown in the figure (conducted on 8/24/04 with 0.1 M NaOH solution), as well as the pre- and post-test baseline results from Campaign III (Mott).

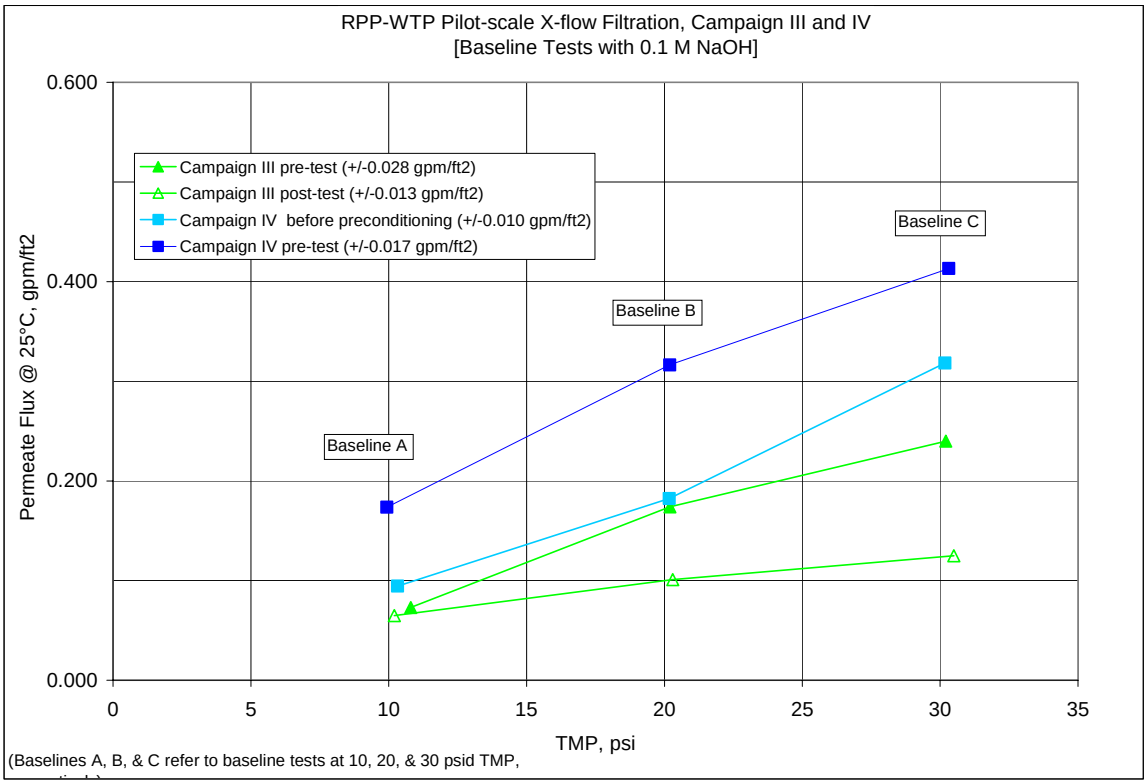


Figure 43. Baselines, Campaign III Pre- & Post-test and Campaign IV Pre-test

2.7.4.1.7.2 Post-Test Filter Baselines

Two post-test baseline tests were conducted at the end of Campaign IV, after the 3rd rinse of the rinse-clean operation (test numbers 4.18 and 4.19). The first was conducted with the 3rd rinse solution, and the second was with fresh 0.1 M NaOH. The 3rd rinse solution included the 21.6 L heel from the 2nd rinse solution. Residual nitric acid in the heel made the 3rd rinse solution slightly acidic (0.05 molar acid). The results of the post-test baseline tests are shown in Fig. 44, along with the Campaign IV pre-test baseline results for comparison.

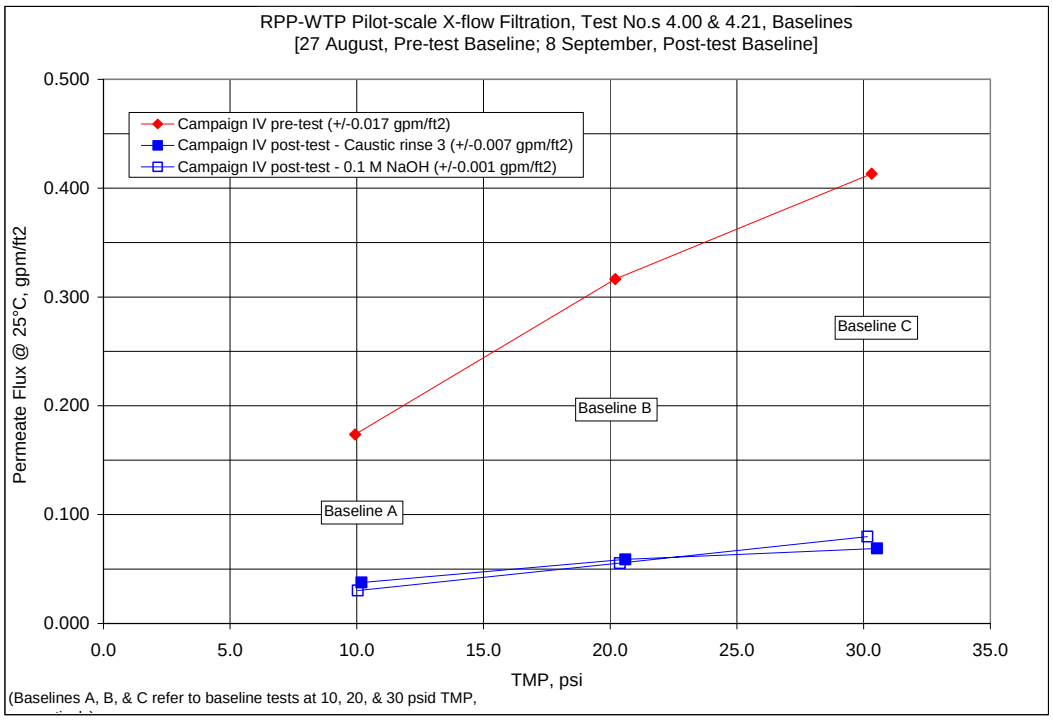


Figure 44. Pre- and Post-Test Baselines for Campaign IV

As expected the post-test baseline results show an adjusted flux lower than the pre-test baseline flux (and the curve was flatter), indicating that the filter was not completely cleaned. Note that the post-test baseline results from the test using the 3rd rinse and the test using the fresh 0.1 M NaOH are comparable.

Dual post-test baseline test were conducted in Campaigns II, III, and IV. The results of these dual tests are shown in Fig. 45. Note that there was no specific trend in the results regarding the magnitude of the flux when comparing the baseline of the 3rd rinse to that of the fresh 0.1 M NaOH. In Campaign II the flux is higher for the 0.1 M NaOH. In Campaign II the flux was higher for the 3rd caustic rinse. In Campaign IV the fluxes were comparable.

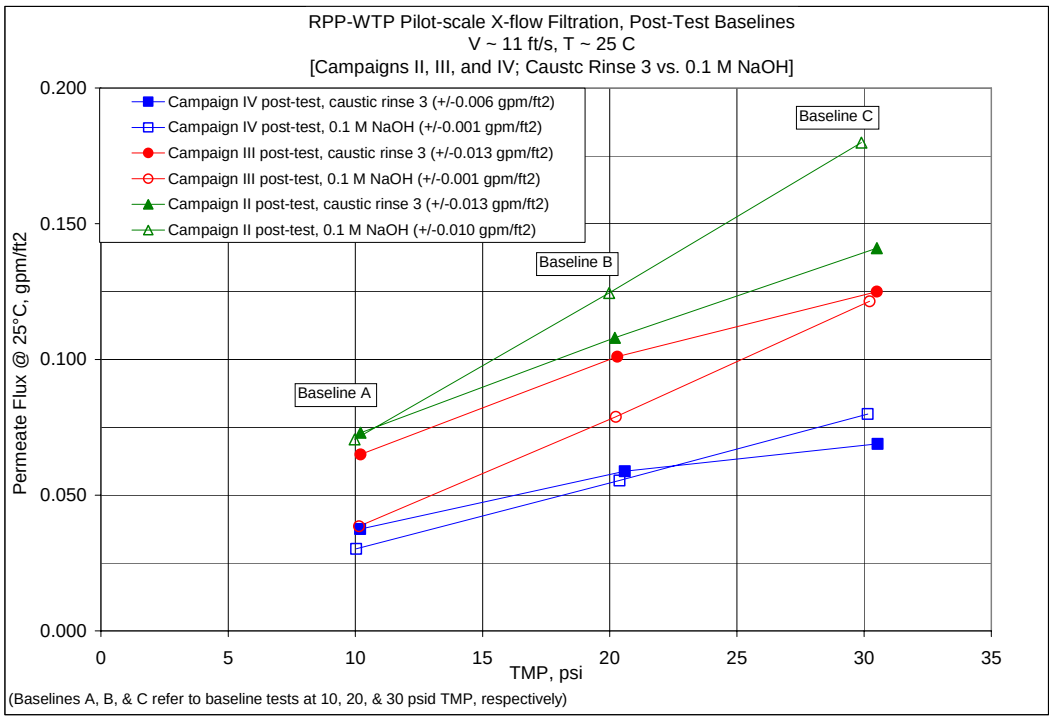


Figure 45. Post-Test Baseline Solution Comparison, Campaigns II – IV

2.7.4.1.7.3 Baseline Comparison

Figure 46 compares the pre- and post test baselines for Campaigns I through IV. Campaign I pre-test was omitted (it was significantly higher, most likely due to having been soaked in 0.1 M NaOH for over a year). Two pre-test baselines from Campaign III are shown; the first was prior to a pump repair, the second was after (the pump liner and impeller was replaced on each slurry pump). Note that in each campaign the post-test flux was lower than the pre-test flux indicating that the filter was never cleaned to pre-test condition.

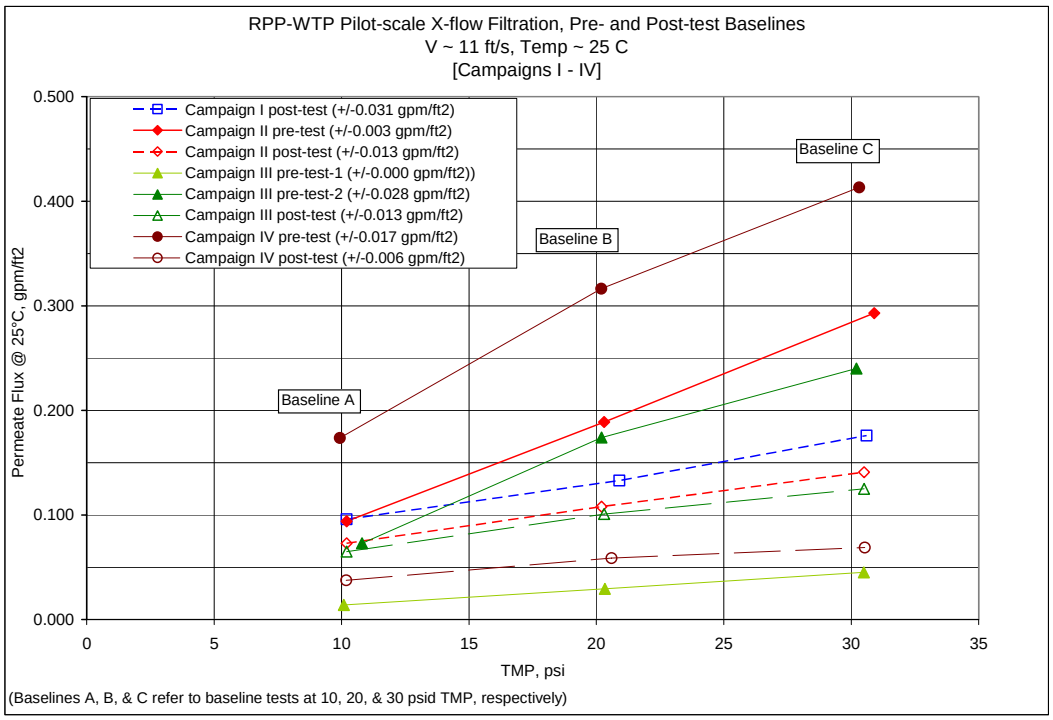


Figure 46. Comparison of Pre- and Post-Test Baselines, Campaign I – IV

2.7.4.2 UFP Waste Products – Chemical Analysis (Author – Zamecnik)

This section gives more in-depth chemical analyses for the results just presented in the preceding section, Section 2.7.4.1. In some cases the repetition is unavoidable, but it also facilitates better understanding of the many aspects of the UFP unit operation.

2.7.4.2.1 <u>Dewatering</u>

Table 34 shows the concentrations of the concentrated unwashed slurry for Campaigns I, II, and III (the Campaign III composition is calculated) and permeate for Campaigns I, II, III, and IV. Because of the extensive analyses done for Campaign II and that the dewater filter performance were the same in both Campaigns II and III, no slurry concentrations were done for Campaign IV to minimize cost. Note that one of the most significant differences between Campaigns II, III, and IV is the permeate Al concentrations. This also held true for the washed slurry; therefore a discussion of the aluminum concentrations will be given in that section. The Campaign I data differ significantly from the other campaigns because Campaign I did not include the AP-101 simulant, whereas the others did. The Campaign III calculated values are also likely to have more uncertainty since they were calculated from the material balance.

Table 34. Concentrated Total Slurry and Permeate Compositions

	----------Slurry----------			----------Permeate from UF----------			
Campaign:	I	II	III*	I	II	III	IV
Total Solids (wt%)	36.91	45.37	46.27	17.09	28.15	28.27	28.24
Undissolved Solids (wt%)	23.90	23.51	24.90	0	0	0	0.00
Supernatant Solids (wt%)	17.09	28.58	28.46	17.09	28.15	28.27	28.24
Density (kg/L)	1.357	1.470	1.448	1.168	1.243	1.248	1.248
(All values mg/kg Ag	1037	990	1070	<0.51	<0.48	0.761	0.686
unless otherwise noted) Al	19117	17550	22158	7252	5670	5136	5192
B	188	<151		<0.10	70.1	85.7	89.7
Ba	477	444	409	<0.03	<0.03	<1.3	<0.018
Ca	2280	1905	2046	1.73	<0.05	<3.6	1.25
Cd	63.5	70.6	71.6	<0.03	<0.03	<0.04	<0.016
Ce	516	551	513	<1.2	<1.1	<1.0	<0.69
Co	59.0	<15	212	<0.14	<0.13	<0.11	<0.034
Cr	845	772	799	128	132	139	138
Cu	129	134	120	<0.05	0.30	<0.03	0.029
Fe	58417	55750	53984	0.16	1.42	1.36	0.63
K	330	13000	20885	297	17051	16346	15785
La	407	478	477	<0.17	<0.16	0.849	<0.15
Li	0	90.9	91.8	<0.34	0.93	1.72	0.79
Mg	617	639	618	<0.01	<0.01	<0.24	<0.010
Mn	12650	12300	11669	<0.02	0.02	<0.02	<0.014
Na	60800	89230	109462	60017	90483	88141	89744
Nd	1288	1370	1267	<1.5	<1.4	<1.5	<0.33
Ni	1750	1840	3135	0.58	0.303	0.247	0.25
P	1263	672	103	1190	643	554	551
Pb	2793	2625	2507	<1.4	1.35	<0.36	<1.36
S	680	862	1857	539	965	905	925
Si	17983	15821	17999	17.0	43.6	42.1	48.1
Sr	500	451	454	0.24	0.06	0.162	0.077
Ti	22.0	10.9	66.4	<0.05	0.07	0.10	0.065
Zn	458	151	178	<0.03	2.45	2.37	4.57
Zr	797	745	722	<0.05	0.69	1.43	0.31
bromide	33.3	<29	97.5	48.8	<8.0	<80	<80.1
chloride	98.0	738	45.9	163	973	1082	1178
fluoride	39.0	52.0	18.4	38.5	23.3	44.9	55.3
formate	168	700	467	299	981	1066	1090
nitrate	224	49700	37079	336	68606	72917	108173
nitrite	3107	14100	10559	3827	20268	23077	21955
oxalate	14133	23800	18351	2748	600	658	897
phosphate	2693	1070	846	2877	1987	1963	2027
sulfate	1427	2080	209	2106	2727	2853	2732
total inorganic carbon (TIC)	15133	3347	3456	12586	6233	6859	
total organic carbon (TOC)	15300	5973	13734	2483	1609	801	
total carbon (TC)	30433	9320	17190	15068	7842	7660	
carbonate from TIC	75667	16735	17279	62928	31166	34295	
free hydroxide						19343	

* Calculated by material balance; values for anions & elements that are predominantly soluble are subject to more uncertainty than other species ; neither analyses nor material balance calculations for Campaign IV were performed.

2.7.4.2.1.1 Solids Concentrations during Dewatering

The total, undissolved, and supernatant solids contents and the slurry densities during the concentration of the slurry for all four campaigns are summarized in Table 35 as a function of the amount of permeate removed. The supernatant solids content should be approximately the same for Campaigns II, III and IV. The actual mean values are the same within the analytical uncertainty of approximately 0.13 wt%.

Table 35. Solids Content of Slurries during Ultrafiltration Dewatering

Permeate Removed (L)	Total Solids (wt%)	Undissolved Solids (wt%)	Slurry Density (kg/L)	Supernate Solids (wt%)
Campaign IV				
0	29.87	2.60	1.268	28.00
158	33.35	6.91		assumed to be 28.40
313	36.16	10.83		
470	38.71	14.39		
628	40.72	17.20		
785	43.37	20.90		
915	45.42	23.60	1.448	28.56
Diluted	41.96	18.96	1.409	28.39
Campaign III				
0	30.54	3.23	1.273	28.22
158	33.54	7.51	1.270	28.14
316	36.39	11.31	1.345	28.28
474	38.95	14.79	1.377	28.35
632	41.51	18.52	1.408	28.22
790	43.44	21.02	1.366	28.39
915	46.03	24.59	1.457	28.44
Diluted	42.71	20.37	1.423	28.06
Campaign II				
0	30.59	3.22	1.276	28.28
144	33.30	7.00		28.27
287	35.83	11.21	1.320	27.73
463	38.70	14.89	1.360	27.98
617	41.99	19.53	1.390	27.91
771	44.00	22.38		27.86
885	45.80	23.51	1.470	29.14
Diluted	42.53	20.80	1.410	27.44
Campaign I				
0	27.35	12.53	1.269	16.94
27	29.21	14.63	1.279	17.08
53	30.98	16.80	1.302	17.04
80	32.92	19.06	1.326	17.12
107	34.72	21.26	1.333	17.09
133	36.30	23.12	1.367	17.14
160	36.88	23.71	1.358	17.26
Diluted	33.19	19.63	1.329	16.87

The UDS measurements for each campaign are plotted in Fig. 47 versus permeate removed normalized on the final permeate volume. For Campaigns II, III, and IV, the TS, UDS, and densities are similar, as expected; the values for Campaign I are different because the feed slurry was limited to only AY102.

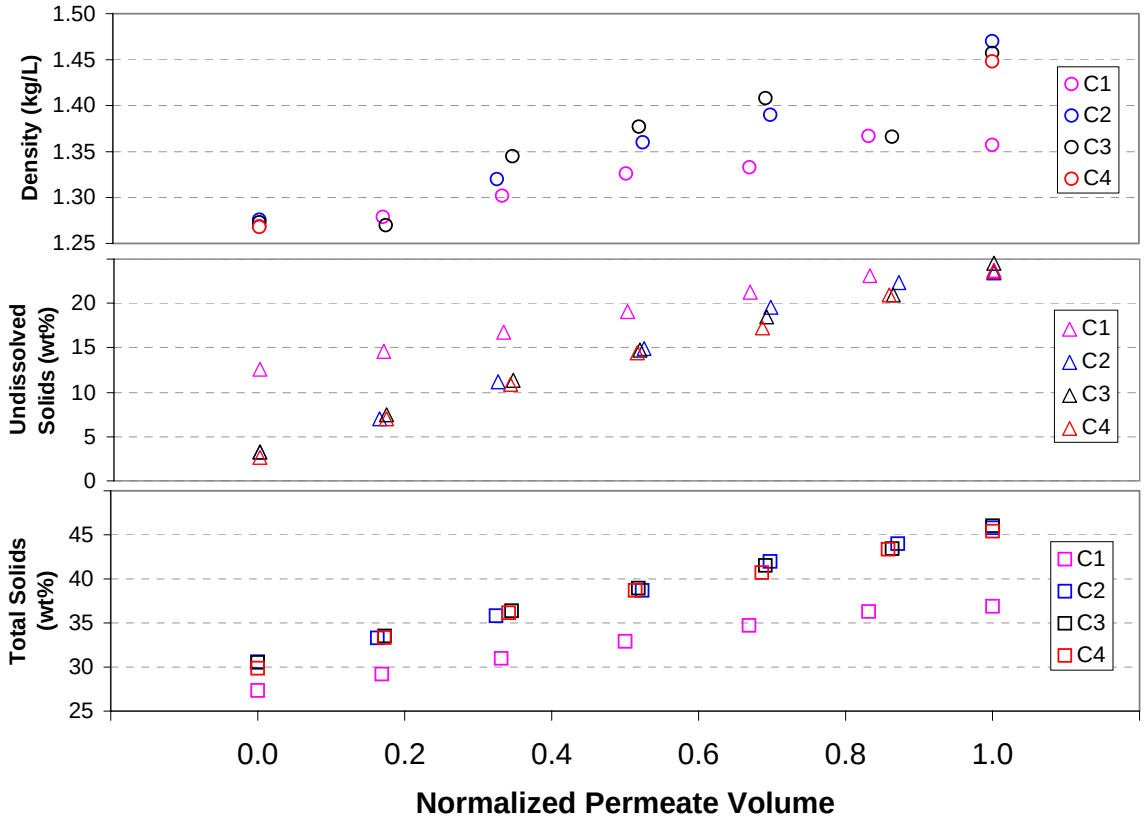


Figure 47. Slurry Solids and Density versus Normalized Permeate Volume

For Campaign IV, upon completion of concentrating the slurry, the final undissolved solids (UDS) content was 23.6 versus the target of 20 wt%[†]. Because the final concentrated slurry was at greater than 20 wt% UDS, the batch of ~117L of slurry was diluted by first removing a calculated amount of slurry and then adding back permeate, as was done in the previous campaigns. The slurry was actually diluted back to about
19.0 wt% UDS.

[†] As mentioned the Abstract, and discussed in detail in the Campaign II report (Duignan et al., 2004b), the OLI/ESP model was slightly off in predicting target values because of the difficulties in handling the complex chemical combinations of the simulated wastes. To produce the target amount of permeate during dewatering [see Table 1, Row "UF1 Filtrate (routed to CIX, than TLP)] all of the UFP feed had to be processed, which resulted in the solids content of the UFP concentrate to be 24.6 wt% UDS. However, the Test Specification (Longwell, 2003) required washing to be done on a UFP product at 20 wt% UDS and therefore, the concentrate was diluted to that value.

2.7.4.2.2 Steady-State Tests with Elevated Temperature – Effects on Slurry

2.7.4.2.2.1 Solids Concentration during Elevated Temperature Tests

The test matrix, Table 22, shows that two sets of tests were done at steady-state solids loadings: One set at 24 wt% UDS and 25°C and another set at 20 wt% UDS with temperatures from 25°C to 45°C. The first set, done at 24 wt% UDS, was performed to compare to Campaign I test results, as was discussed in Section 2.7.4.1.3. The second set was done after the slurry was prepared for the washing tests by diluting the concentrated simulant from 24 to 20 wt% UDS (the 20 wt% was estimated during the tests from previous solids measurements, but the actual the measured concentration turned out to be 19 wt% UDS). Therefore, just before the washing tests began the second set of tests at steady-state solids loading was done at 19 wt% UDS. These higher-temperature filter flux results were discussed in Section 2.7.4.1.4 and shown in Fig. 32. Here, the results of the analytical measurements are discussed.

Table 36 relates the slurry sample number to each of the steady-state solids loading tests done at 19 wt% UDS. Along with the samples names (to relate to the overall sample test matrix in Appendix D), the table lists the temperature, linear velocity, and relation test matrix (Table 22). The measurements made include the physical properties total solids, undissolved solids, supernatant solids, particle size distribution, and rheology in order to to determine if the temperature had any effect on these properties.

Table 36. Simulant Samples Taken During Temperature Tests

Sample Name: Slurry	Temperature (°C)	Linear Velocity (fps)	Comment
CON2-ADJ	25.0	12	slurry properties before test
T-30-SL	30.0	12	Temp1 from Table 22
T-37.5-SL	37.5	12	Temp2 from Table 22
T-45-SL	45.0	12	Temp3 from Table 22
T-35-SL	35.0	12	Temp4 from Table 22
T-25-SL	25.0	12	Temp5 from Table 22
T-37.5(15)-SL	37.5	15	Temp6 from Table 22
T-45(15)-SL	45.0	15	Temp7 from Table 22
Permeate			
CIX-FEED	25.0	12	permeate properties before test
T-30-PE	30.0	12	Temp1 from Table 22
T-37.5-PE	37.5	12	Temp2 from Table 22
T-45-PE	45.0	12	Temp3 from Table 22
T-35-PE	35.0	12	Temp4 from Table 22
T-25-PE	25.0	12	Temp5 from Table 22
T-37.5(15)-PE	37.5	15	Temp6 from Table 22
T-45(15)-PE	45.0	15	Temp7 from Table 22

Table 37 shows the solids contents measured from samples taken during the tests. The variation in the solids contents measured is within the normal uncertainty of the measurements, so there was no apparent change in the solids contents due to the temperature tests. Note that the UDS and supernatant solids contents were measured on samples that were filtered at room temperature. Therefore, changes in the solids distribution between dissolved and undissolved that may be present at the test temperatures might not be seen when the samples are all cooled to room temperature.

Table 37. Solids Content of Samples from Temperature Tests

Sample* (C4-UF-...-ACTL)	Supernatant Solids (wt%)		Total Solids (wt%)		Undissolved Solids (wt%)		Mean Supernatant Solids (wt%)	Mean Total Solids (wt%)	Mean Undissolved Solids (wt%)
CON2-ADJ	28.29	28.48	41.99	41.93	19.10	18.81	28.39	41.96	18.96
T-25-SL	28.43	28.07	42.01	42.08	18.97	19.48	28.25	42.05	19.23
T-30-SL	28.52	28.39	41.88	41.97	18.69	18.96	28.46	41.93	18.83
T-35-SL	28.30	28.22	41.98	42.15	19.08	19.41	28.26	42.07	19.24
T-37.5-SL	28.52	28.33	41.92	42.01	18.75	19.09	28.43	41.97	18.92
T-37.5(15)-SL	28.77	27.58	42.00	42.07	18.57	20.01	28.18	42.04	19.30
T-45-SL	28.72	28.03	42.14	42.04	18.83	19.47	28.38	42.09	19.15
T-45(15)-SL	28.99	28.15	42.31	42.11	18.76	19.43	28.57	42.21	19.10
						Mean:	**28.36**	**42.04**	**19.09**
CIX-FEED	28.27	28.24					28.26		
T-25-PE	28.53	28.55					28.54		
T-30-PE	28.42	28.54					28.48		
T-35-PE	28.54	28.55					28.55		
T-37.5-PE	28.38	28.51					28.45		
T-37.5(15)-PE	28.51	28.42					28.47		
T-45-PE	28.55	28.42					28.49		
T-45(15)-PE	28.53	28.52					28.53		
						Mean:	**28.47**		

* Supernatant and undissolved solids measured on samples filtered at room temperature

These results do show that there was no permanent change in the solids ratios. Figures 48, 49, and 50 show graphically the solids concentrations versus test number. All of the values measured are for the most part randomly distributed about the mean. The total solids do appear to increase slightly during the test, which may be due to a small amount of evaporation, but the increase is within the uncertainty of the measurements.

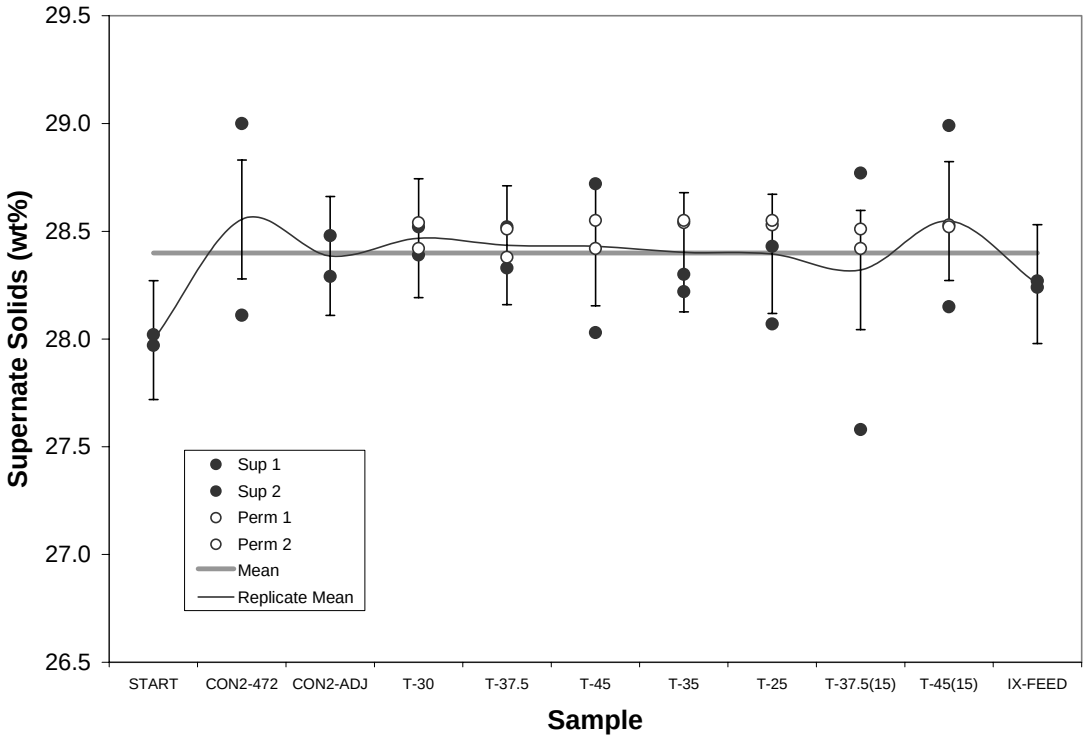


Figure 48. Supernatant Solids vs. Sample for Temperature Tests

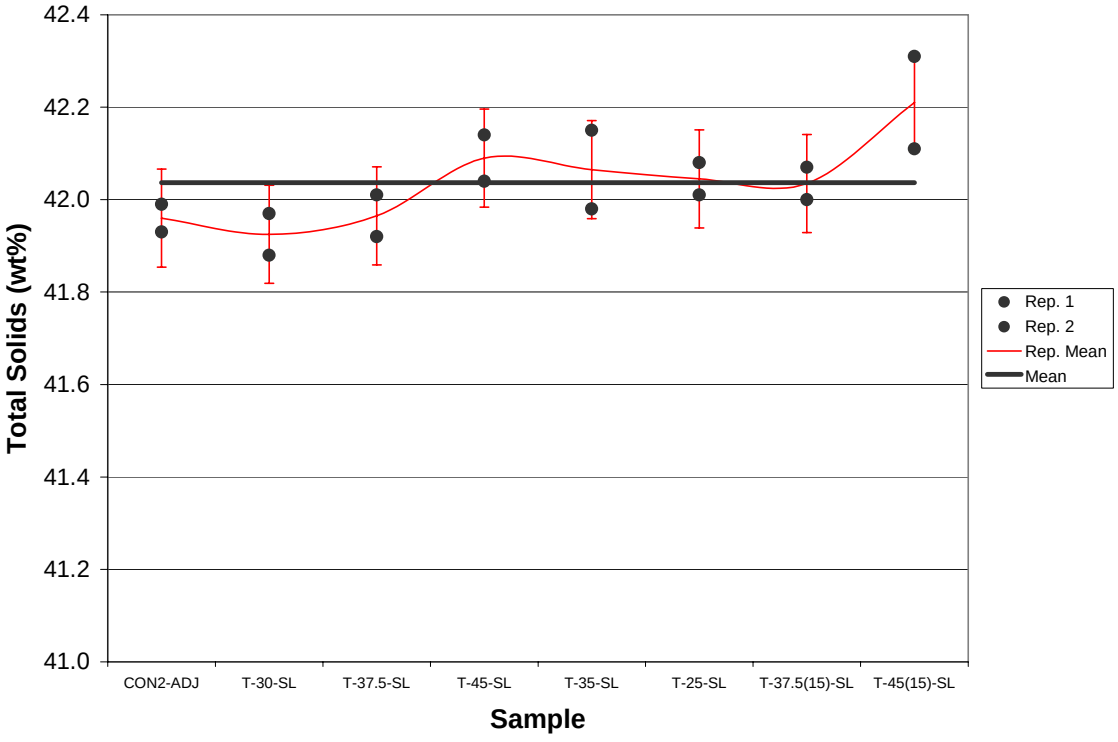


Figure 49. Total Solids vs. Sample for Temperature Tests

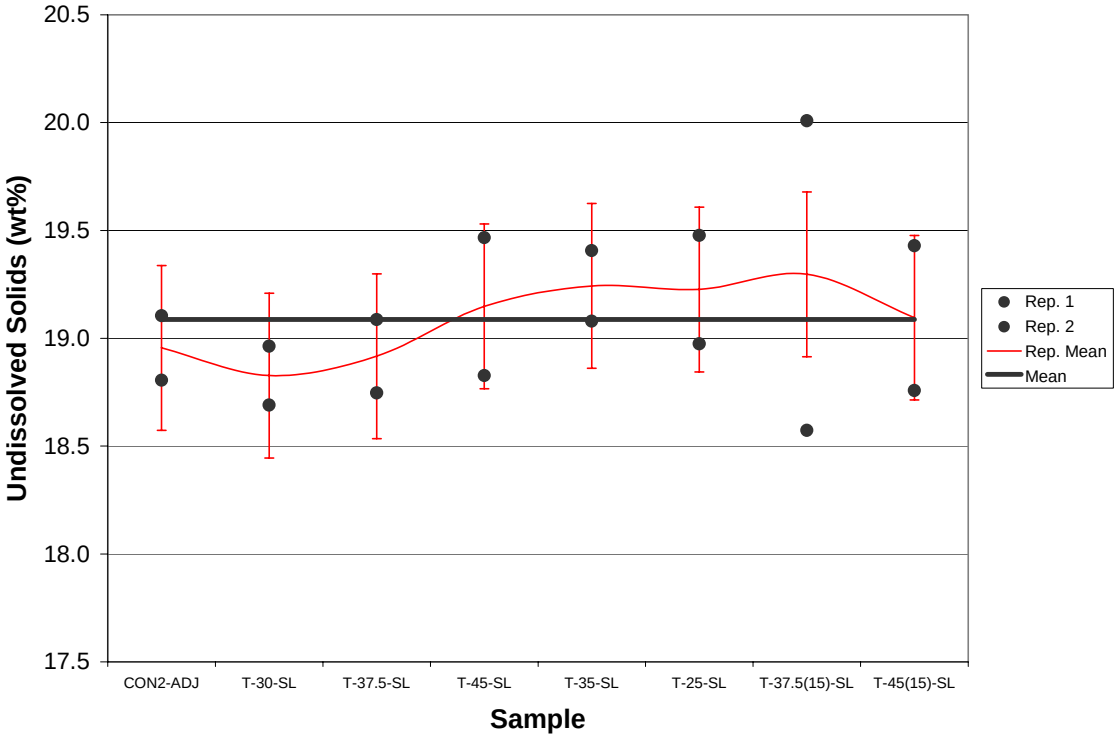


Figure 50. Undissolved Solids vs. Sample for Temperature Tests

2.7.4.2.2.2 Particle Size during Elevated Temperature Tests

The particle size distribution (PSD) data for each of the samples is plotted in Fig. 51. These data show that no significant change in the PSD occurred during the tests. The initial PSD showed some bimodal character that disappeared during the tests, but the differences were small. As with the solids measurements, the PSD at the actual test temperature could have been different, but was found to be the same when measured at room temperature. The raw data sheets can be found in Appendix E.

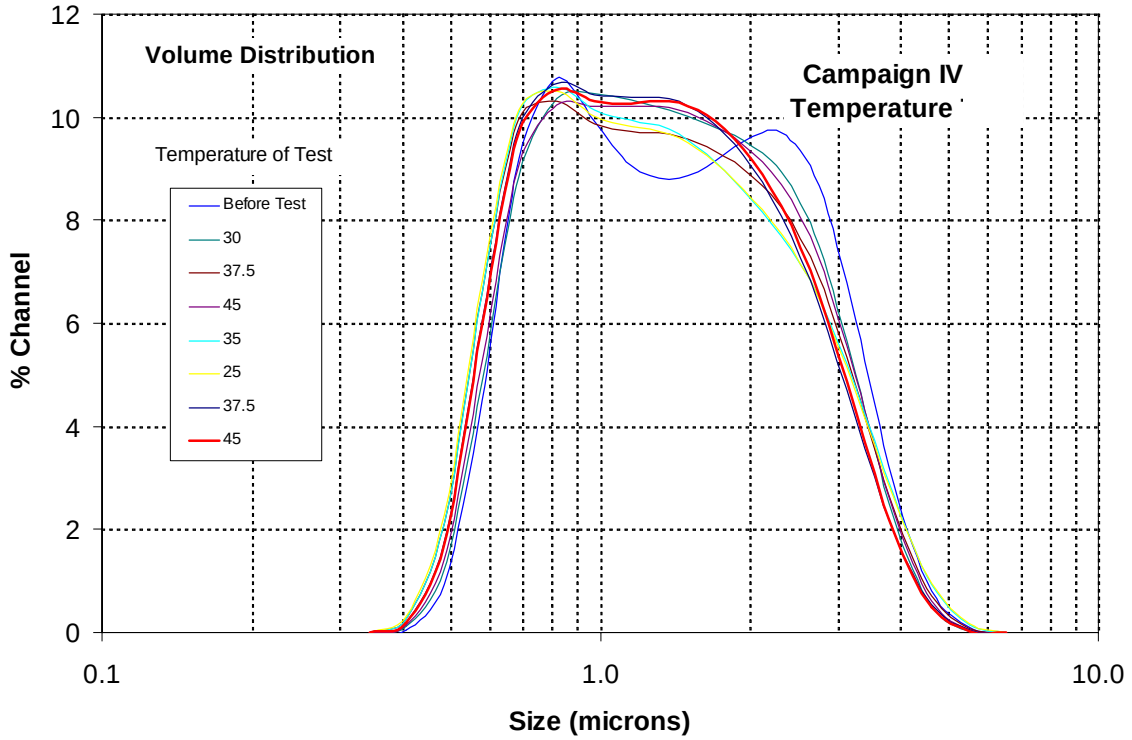


Figure 51. Volume Particle Size Distribution During Temperature Tests

2.7.4.2.2.3 Rheology during Elevated Temperature Tests

The rheological properties of consistency and yield stress for the slurry samples and viscosity for the permeate samples were measured at both room temperature and the test temperatures. These results are shown in Tables 38 and 39 and Figs. 52 and 53. The results show that there was no measurable change in the either the yield stress or consistency of the slurry samples at 25°C; the same applies to the viscosity of the permeate at 25°C. The consistency of the slurry and the viscosity of the permeate both decreased linearly with temperature. The yield stress of the slurry was found to increase linearly with temperature.

Table 38. Yield Stress and Consistency of Slurry From Temperature Tests
(see Table 34 for key to Sample Names)

Sample Name	Measured ***@ 25℃*** Yield Stress (Pa)				Measured ***@ 25℃*** Consistency (mPa•s)					Measured @ ***Temp*** Yield Stress (Pa)				Measured @ ***Temp*** Consistency (mPa•s)				***@25℃***		***@Temp***	
																		YS	Cons	YS	Cons
(C4-UF-...-ACTL)	Up 1	Dn 1	Up 2	Dn 2	Up 1	Dn 1	Up 2	Dn 2	***Temp***	Up 1	Dn 1	Up 2	Dn 2	Up 1	Dn 1	Up 2	Dn 2	Mean	Mean	Mean	Mean
CON2-ADJ	8.65	8.18	8.75	8.50	14.35	14.50	14.00	14.01										8.52	14.22		
T-25-SL	10.45	8.90	10.05	8.91	13.69	14.81	13.95	14.68										9.58	14.28		
T-30-SL	10.10	8.84	9.81	8.81	14.13	14.87	14.55	15.06	30.0	9.84	9.40	9.84	9.40	13.95	14.10	13.55	13.70	9.39	14.65	9.62	13.83
T-35-SL	10.57	8.91	10.00	8.87	13.51	14.85	13.99	14.75	35.0	10.63	9.96	10.24	10.02	12.63	13.08	13.22	13.21	9.59	14.28	10.21	13.04
T-37.5-SL	10.54	8.69	10.14	8.67	13.25	14.75	13.71	14.79	37.5	11.30	10.22	11.15	10.26	11.57	12.25	11.78	12.21	9.51	14.13	10.73	11.95
T-37.5(15)-SL	10.60	9.00	10.01	9.15	13.95	15.08	14.76	15.25	37.5	11.30	10.22	11.15	10.26	11.57	12.25	11.78	12.21	9.69	14.76	10.73	11.95
T-45-SL	9.85	9.14	9.43	9.04	14.48	14.79	14.83	14.87	45.0	12.04	11.24	12.03	11.45	10.60	11.30	10.83	11.33	9.37	14.74	11.69	11.02
T-45(15)-SL	10.19	9.17	9.85	9.30	13.99	14.67	14.78	14.98	45.0	12.42	11.50	12.53	11.71	10.64	11.35	10.66	11.38	9.63	14.61	12.04	11.01

Total Solids: 42.04 wt%; UDS: 19.09 wt%

Table 39. Consistency (mP•s) of Permeate From Temperature Tests
(see Table 34 for key to Sample Names)

Sample Name	Measured ***@ 25℃***			Measured ***@Temp***		***@25℃***	***@Temp***
(C4-UF-...-ACTL)	Up 1	Dn 1	***Temp***	Up 1	Dn 1	Mean	Mean
CON2-ADJ	2.86	2.84				2.86	
T-25-SL	2.88	2.92				2.90	
T-30-SL	2.88	2.91	30.0	2.55	2.57	2.90	2.56
T-35-SL	2.85	2.86	35.0	2.25	2.28	2.86	2.27
T-37.5-SL	2.85	2.86	37.5	2.08	2.19	2.86	2.14
T-37.5(15)-SL	2.85	2.89	37.5	2.17	2.11	2.87	2.14
T-45-SL	2.85	2.83	45.0	1.82	1.78	2.84	1.80
T-45(15)-SL	2.91	2.90	45.0	1.81	1.75	2.91	1.78

Total Solids: 28.40 wt%

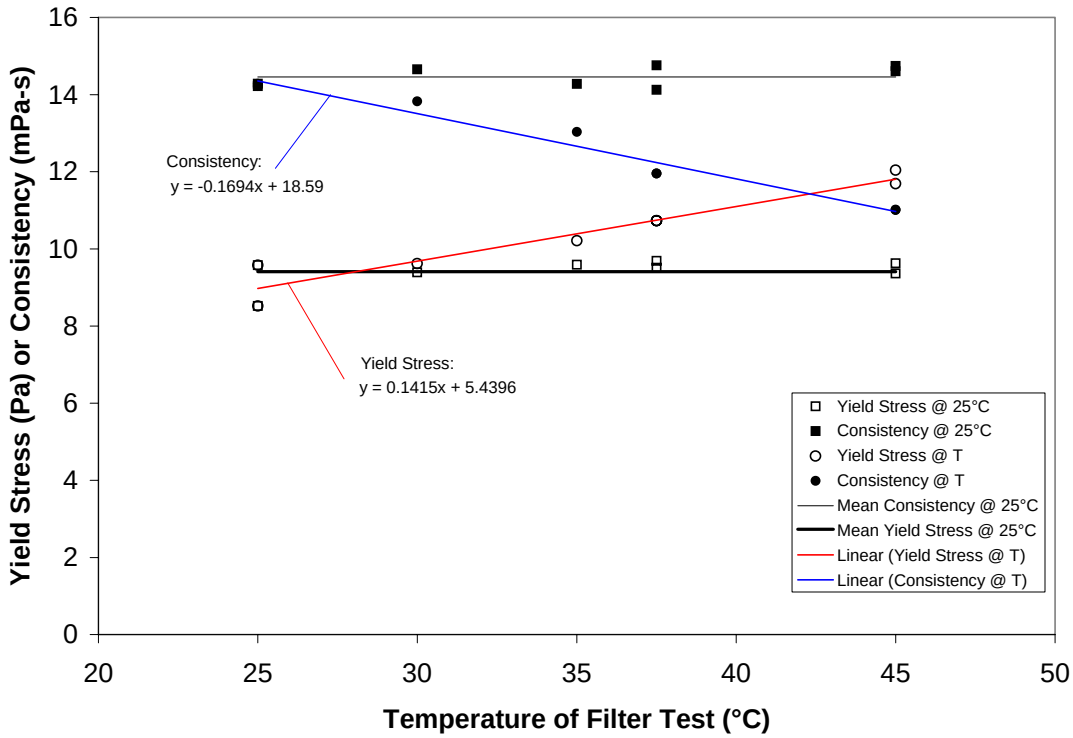


Figure 52. Yield Stress and Consistency of Slurry Samples

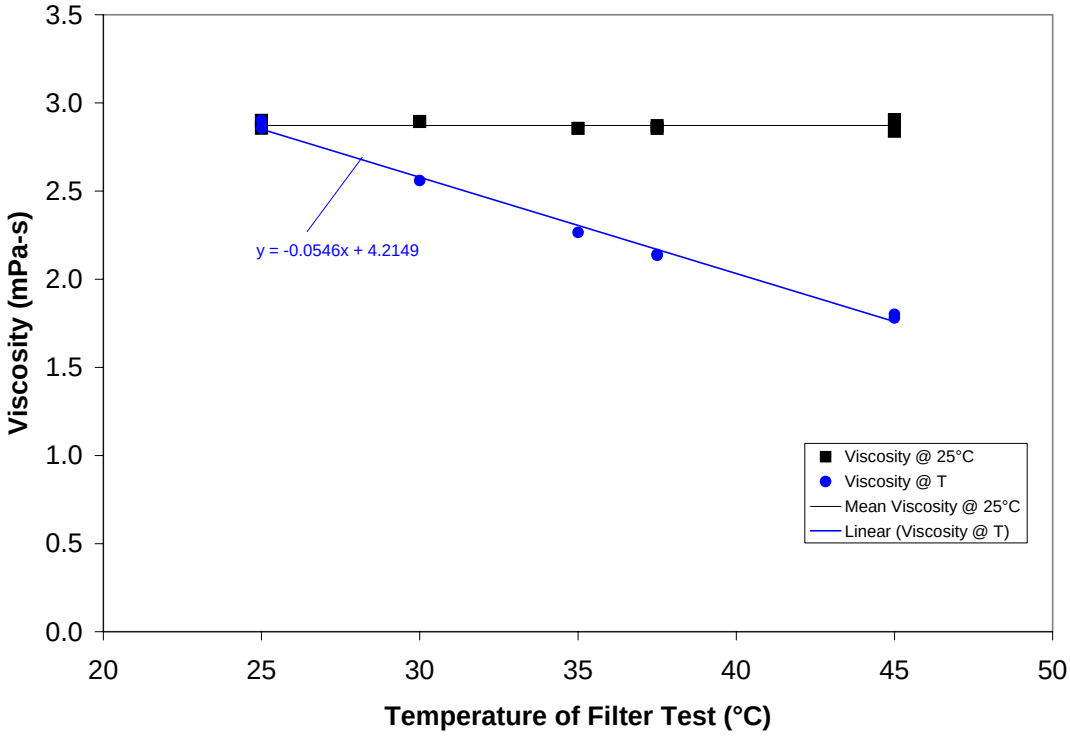


Figure 53. Viscosity of Permeate Samples

2.7.4.2.3 Washing the Concentrated Slurry

After the dilution, the slurry was washed with 22 discrete additions of ~5.35L of approximately 0.01M NaOH, followed by an additional 22 similar washes. The target total amount of wash water used was about 234.7L. Leaching of the solids with NaOH was not performed per WTP instructions. Table 39 summarizes the composition of the washed slurry after all 44 washes for all four campaigns. Table 41 shows limited characterization of the permeate composites from the first and second 22 washes and compares these same analyses to Campaigns I-III values. The Campaign II and III values for solids and density are similar, as expected. The total base values are different because the recycle compositions (FEP concentrate) to Campaign II and III were different.

The compositions of the Campaigns II-IV washed total slurries measured by the microwave acid (MW) and sodium peroxide fusion HCl uptake (SPF) dissolutions are shown in Table 40. These values were expected to be essentially the same since the starting slurries were expected to have similar compositions. The majority of the undissolved components for these campaigns came from the AY102 simulant, with a smaller (and comparable amount) from the FEP evaporator Bottoms. A trace amount of solids also came from the AP101 simulant for both campaigns. Examination of the data in Table 40 shows that the compositions are indeed similar, with the exception of aluminum, which was higher than expected in Campaign III. The anions in Campaign IV were comparable to Campaign II, with both being higher than Campaign III.

Table 40. Comparison of Campaigns I to IV Washed Slurry Compositions

	Campaign I			Campaign II			Campaign III			Campaign IV
Total Solids (wt%)	21.99			26.56			26.72			25.41
Undissolved Solids (wt%)	20.55			22.22			22.05			20.76
Supernatant Solids (wt%)	1.81			5.59			5.99			5.87
Density (kg/L)	1.183			1.214			1.192			1.180
pH (measured with pH paper)	13			14			14			14
Method of Dissolution: Elements by ICPES mg/kg:	MW*	SPF*	Mean / Best	MW*	SPF*	Mean / Best	MW*	SPF*	Mean / Best	MW*
Ag		970	970		804	804		904	904	262
Al	12000	15500	13750	12400	13100	12750	16800	19300	18050	13000
All units mg/kg B		130	130		<150	<150		149	149	
unless otherwise noted Ba	419	460	440	408	384	396	450	410	430	446
Ca	1880	2240	2060	1890	2000	1945	1810	2070	1940	1919
Cd	70.0	70.0	70.0	74.2	47.0	60.6	72.0	51.0	61.5	77.8
Ce	166	620	393	123	497	310	427	518	473	605
Co	13.0	30.0	21.5	<13	<45	<13	<8.4	<8.0	<8	23.4
Cr	689	700	695	620	573	597	583	567	575	592
Cu	123	130	127	133	113	123	128	119	124	123
Fe	52400	52000	52200	55000	45800	50400	50800	48900	49850	53196
K	84.0		84.0	3859		3859	3490	3890	3690	3770
La	152	460	306	128	386	257	378	421	400	434
Li	<33	<40	<33	95	78	87	76.0	104	90	78
Mg	554	550	552	640	509	575	565	555	560	611
Mn	11700	11600	11650	12200	10100	11150	11300	10900	11100	11600
Mo	<16	<20	<16	<17	<25	<16	19.0	<17	0.90	<22
Na	14000		14000	28300		28300	25500		25500	26300
Nd	500	1270	885	372	1150	761	1180		1180	1270
Ni	1720		1720	1680		1680	1600		1600	1740
P	822	470	646	240	319	280	370	337	354	266
Pb	2320	2390	2355	2670	2170	2420	2900	2790	2845	2540
S	186	270	228	194	489	342	151	284	218	171
Si	14900	15600	15250	17200	14600	15900	11670	16600	14135	15410
Sr	405	450	428	446	410	428	374	420	397	441
Ti	9.0	10.0	9.5	14.8	11.0	12.9	<27	<24	<24	14.6
Zn	118	180	149	145	133	139	151	150	151	185
Zr	697	330	514	718	652	685	693	690	692	722
Soluble Ions:				Undissolved Sample						
bromide	<78			<27.9			51.3			<90
chloride	8.00			99.4			69.5			92.0
fluoride	6.00			19.0			17.4			14.0
formate	<78			154			106			95.0
nitrate	12.0			7875			6457			8010
nitrite	172			2315			1714			2240
oxalate	1450			15749			11010			13900
phosphate	397			150			137			216
sulfate	80.0			338			237			313
Carbon:				Total Sample						
total inorganic carbon (TIC)	1630			1020			886			
total organic carbon (TOC)	2250			6070			3129			
carbonate (from TIC)	8150			5100			4429			
oxalate (from TOC)	8250			22245			11456			

*MW: microwave acid dissolution; SPF: sodium peroxide fusion HCl uptake

Table 41. Comparison of Wash Permeate Composites from Campaigns I-IV

	Campaign IV		Campaign III		Campaign II		Campaign I	
	1st 22 Washes	2nd 22 Washes	1st 22 Washes	2nd 22 Washes	1st 22 Washes	2nd 22 Washes	1st 22 Washes	2nd 22 Washes
Total Solids wt%	20.78	8.96	20.83	8.80	20.66	8.89	10.94	3.73
Undissolved Solids wt%	0	0	0.24	0	0	0	0	0
Supernatant Solids wt%	20.78	8.96	20.64	8.80	20.66	8.89	10.94	3.73
Density kg/L	1.176	1.071	1.176	1.070	1.177	1.071		
ammonium	<10	12	<200	1270				
Total Base M	1.71	0.62	0.79	0.62	1.41	0.48		

2.7.4.2.3.1 Aluminum and Ammonium Concentrations

As previously mentioned, the aluminum concentration changed during the campaigns. As shown in Table 42, in Campaign III, there was more Al in the UFP slurry and less in the permeate than in Campaign II, which was attributed to precipitation of Al in the recycle blending. This conclusion was supported by a material balance on the mixing of the recycle stream that showed that the amount of dissolved Al in the FEP feed was less than expected. The results for Campaign IV are similar. Also note that as the amount of Caustic Flush 1 recycled was made more correct from Campaign II, III, and IV, there was less total Al in the FEP. Less dissolved Al in the FEP product would then result in more Al in the slurry and less in the permeate, as was seen in Campaign III when compared to Campaign II. However, the Campaign IV washed slurry value of 13000 mg/kg does not appear to be consistent with the permeate value of 5192 mg/kg. Without analyses of the UFP feed and concentrated slurry compositions for Campaigns III and IV, it is not possible to resolve this discrepancy.

For the permeate, most of the other major species had similar concentrations in Campaigns II, III, and IV (K, Na, nitrite, phosphate, sulfate). The nitrate measured in Campaign IV was significantly higher than for Campaigns II and III; this value appears to be in error. The major undissolved species in the Campaign II and Campaign III slurries were also of similar concentration (Ca, Fe, Mn, Pb, Si, Cr, Nd). The Na and K are higher in Campaign II and Campaign III than in Campaign I due to the contribution of the AP101 simulant.

Table 42. Comparison of Aluminum Concentrations in Ultrafiltration

Concentrations in mg/kg

Process Stream	Campaign II	Campaign III	Campaign IV
FEP Feed Slurry	920	811	751
FEP Feed Supernate	548	452	457
% Dissolved	60	56	61
FEP Concentrate Slurry	5470	5255	4865
FEP Concentrate Supernate	3823	2781	2705
Wt% Dissolved	70	53	56
Conc. UFP Slurry	17550	22158*	
UFP Permeate	5670	5136	5192
Washed Slurry	12750	18050	13000

* calculated

The ammonium concentrations in several of the process streams were measured. Table 43 shows the streams, the concentrations, and the amount in grams in each stream. The material balance closes very well for Campaign III, but not for Campaign IV. In Campaign IV, the amount of ammonium in the wash permeates is much lower than expected based on the estimated wash water concentration (369 mg/kg estimated from the concentration of the Campaign III combined (RLD) condensates at the end of Campaign III.). Since this value was not measured, it appears that it must have been significantly less than expected. Although the UFP feed value is not available for Campaign IV, it should be small since it is a combination of the simulants (with no ammonium) and the FEP Bottoms.

Table 43. Comparison of Ammonium Concentrations for Campaigns III-IV

Process Stream	**Campaign III Ammonium (mg/kg)**	**Campaign IV Ammonium (mg/kg)**
FEP Feed	<71	<89
FEP Bottoms Concentrate	<53	<99
FEP Evaporator Condensate	65	61
UFP Feed	<9	
Permeate (CIX Feed)	<160	<80
0.01M NaOH Wash (estimated)	458	369
Wash Permeate 1st 22 Washes	<85	<10
Wash Permeate 2nd 22 Washes	342	12
Washed Slurry	372	70
UF Material Balance	**Ammonium (g)**	**Ammonium (g)**
UFP Feed	1	
0.01M NaOH Wash (estimated)	108	87
Feeds	**109**	**87**
Wash Permeate 1st 22 Washes	<12	<1
Wash Permeate 2nd 22 Washes	43	2
Washed Slurry	52	10
Products	**<107**	**<13**

2.7.4.2.4 Filter Rinsing and Cleaning

Upon completion of the slurry washing, the filtration unit was drained and then cleaned. These cleaning steps are shown in Figs. 9 and 10. Limited analyses of the rinsing and cleaning solutions were performed in Campaigns III and IV. Table 44 shows the solids content and acid or base content of the rinsing and cleaning solutions for all of the campaigns. The solids contents and densities for all campaigns are similar. The Campaigns II, III, and IV acid and base concentrations are also very similar but differed for Campaign I due to use of different quantities of acid and base in the cleaning process.

The undissolved solids content of the caustic rinse 1 solution was decreased from Campaign I to Campaign IV as the remaining slurry heel amount was adjusted to be closer to the scaled target[†] of 3.6 wt%. As such the Caustic Rinse 1 for Campaigns III and IV would then be diluted 1:1 with 0.1M NaOH to create the recycle streams for the next campaign to get to the RPP-WTP estimated UDS concentration of 1.8 wt%. The actual Caustic Rinse 1 values obtained in Campaign I, II, III, and IV UDS were 8.27, 5.09, 4.26 and 4.31 wt%, respectively (see Table 44). The Caustic Rinse 1 streams from Campaigns I to III stream were then diluted appropriately to obtain 1.8 wt% UDS before their use as recycles. Of course, the Campaign IV Caustic Rinse 1 was discarded since SIPP was at its end. Moreover, the supernatant (dissolved) solids content in Campaigns II, III, and IV was higher than in Campaign I due to the higher content in the simulant slurry. This higher dissolved solids content also resulted in higher total solids in the Campaigns II, III, and IV cleaning solutions.

Note that the Campaign I heels were each about 10.5-12 L, whereas in the remaining campaigns, the heels were approximately 22L. Small amounts of undissolved solids in the acid cleaning solutions were indicated by the analyses, but these results were not consistent with visual examination of the solutions. Due to the approximately ±0.11 wt% uncertainty in the total solids measurements and ±0.22 wt% in the UDS, the measured values for low solids are inconclusive. Visual examination gives a better indication of the presence of solids; however, it does not give a good indication of the wt% of solids since the density of the settled solids can vary significantly.

[†] The estimated UDS for the Plant Caustic Rinse 1 Heel was 1.8 wt%, but due to differences in scale between SIPP and the Plant this concentration was not obtainable. The smaller scale indicated that the SIPP Heel concentration would be approximately double that of the Plant. Therefore, for SIPP the Caustic-Rinse-1-Heel-Solids target was set at 3.6 wt% UDS. Once the Caustic Rinse 1 stream was produced and before its use as a recycle stream to make feed for the FEP, the stream would then be diluted with 0.1 M NaOH to obtain the needed 1.8 wt% UDS. (Also refer to Section 2.7.4.1.6.)

Table 44. Filter Cleaning Solutions

	Caustic Rinse 1[d]				Acid Cleaning 1[a]				Acid Cleaning 2			
Campaign:	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total Solids (wt%)	9.27	7.46	6.26	6.50	1.07	2.36	1.50	1.58	0.18	0.67	0.48	0.50
Undissolved Solids (wt%)	8.27	5.09	4.26	4.31	0.09	0.12	0.12	0.08	0	0	0.08	0.05
Supernatant Solids (wt%)	1.57	2.50	2.08	2.29	0.98	2.24	1.38	1.50	0.18	0.67	0.41	0.45
Density (kg/L)	1.075	1.057	1.046		1.056	1.051	1.046	1.048	1.062	1.055	1.055	1.056
Total or Free[b] Base (M)	0.0450[b]	NM	0.201	0.238								
or Total Acid (M)					1.56	1.20	1.10	1.19	1.95	1.61	1.63	1.68
pH[e]	13	13	13	13	1	<1	<1	<1	1	<1	<1	<1

	Acid Cleaning 3				Caustic Rinse 2				Caustic Rinse 3			
Campaign:	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total Solids (wt%)	0.05	0.13	0.10	0.15	0.83	0.66	0.75	0.80	0.76	0.81	0.86	0.95
Undissolved Solids (wt%)	0	0	0	0.08	0	0.13	0.12	0.04	0 [c]	0.13	0.03	0.03
Supernatant Solids (wt%)	0.05	0.13	0.10	0.08	0.83	0.53	0.63	0.76	0.76	0.68	0.83	0.92
Density (kg/L)	1.063	1.055	1.057	1.055	1.009	1.016	1.017	1.016	1.003	1.004	1.005	1.005
Total Base (M)									0.002 [b]			
or Total Acid (M)	1.98	1.74	1.78	1.69	0.158	0.449	0.420	0.396		0.062	0.039	0.045
pH	1	<1	<1	<1	1	<1	<1	<1	12	1.2	1.2	1.2

[a] acid cleaning solutions total and undissolved solids contents do not include nitrate from nitric acid (evaporates during measurement)
[b] estimated from pH
[c] solids visible, but not quantifiable
NM: not measured
[d] caustic rinse 1 for Campaigns III and IV diluted 1:1 with 0.1M NaOH in recycle stream
[e] pH values were obtained: For Campaign I using pH paper at the test site, for Campaigns II and III pH meter from samples, and for Campaign IVby estimating from the base/acid molarities.

2.7.5 Pilot UFP Conclusions

2.7.5.1 ExperimentalConclusions (Author – Fowley)

A summary of the overall conclusions for the SIPP UFP are as follows:

- The performance of the GKN filter unit was similar to that of the Mott filter unit under steady state conditions. In addition, the permeate flux of the GKN filter unit during dewatering was the same as the Mott filter unit, within measurement uncertainty, for the same simulated waste mixture.
- In Campaign IV, using the GKN filter unit, the average, temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 20 wt% UDS was 0.013 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 17 wt% UDS was 0.016 gpm/ft^2.
- Permeate flux improved at higher slurry temperatures. At 19 wt% UDS, 40 psid TMP, and a slurry velocity through the filter of 12 ft/s, the permeate flux improved almost 75% at 45 ºC compared to 25 ºC.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 1 NTU. The Test Specification indicated a threshold of 2 NTU, therefore, the measured values indicated that the permeate was free of significant undissolved solids.
- The SIPP and previous UFP tests indicate that the magnitude of the permeate flux during acid cleaning of a filter appears to be more of a function of the waste dewatered than of the filter unit used.
- The increase in the adjusted permeate flux between the second and third acid cleaning steps was minimal in Campaigns II, III, and IV, possibly indicating that the third acid cleaning was unnecessary. The exception was Campaign I where whitish solids in the spent solutions of the first and second acid cleanings inhibited the permeate flux, requiring a third acid cleaning (and possibly a fourth) to reach steady conditions. The Campaign I simulant did not contain AP101 and FEP Bottoms, indicating that the necessity of a third acid cleaning was dependent on the waste dewatered.
- Cleaning the filter with 2 M nitric acid after dewatering was sufficient to increase baseline permeate flux to approximately an order of magnitude higher than that of average waste flux during dewatering. However, it was not sufficient to return the filter to pre-test flux levels. In previous campaigns, soaking the filter unit in 0.1 M NaOH for an extended period of time (2 months or more) typically regained the pre-test flux levels. The significance of “2 months or more” is that 2 months was typically the duration between successive SIPP campaigns.

The following conclusions were extracted from the Interim Reports of Campaign III (Duignan et al., 2004c or Appendix I-3), Campaign II (Duignan et at., 2004b), and Campaign I (Duignan et at., 2004a)

Campaign III [for the Mott Filter]

- The average, temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 20 wt% UDS was 0.014 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 17 wt% UDS was 0.018 gpm/ft^2.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower 0.5 NTU. The Test Specification indicated a solids-free threshold of 2 NTU, therefore the measured values indicated the permeate was free of significant undissolved solids.
- Submerging the filter in a mild caustic solution over an extended period of time may improve flux. Likewise, it is probable that submerging the filter in a mild acid solution over an extended period of time will also improve flux.

Campaign II [for the Mott Filter]

- The average permeate flux when dewatering from ~4 to ~24 wt% was 0.011 gpm/ft^2.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower 0.5 NTU, indicating that the permeate was practically free of solids.
- The turbidity of the permeate from dewatering increased with time (days), indicating that solids were precipitating out of solution.

Submerging the filter in a mild caustic solution over an extended period of time may improve flux. Likewise, it is probable that submerging the filter in a mild acid solution over an extended period of time will also improve flux.

Campaign I [for the Mott Filter and for the single simulant of AY102/C106]

- Average permeate flux when dewatering from 12 to 24 wt% was 0.008 gpm/ft^2.
- At no time did the permeate turbidity measure to be higher than 0.5 NTU and, therefore, the permeate was considered always free of solids.
- Steady-state solids concentration confirmed that the best permeate flux is obtained with the slurry axial velocity was at or above 11 ft/s.
- When washing a batch of waste, which was concentrated to 20 wt% UDS, with two equal batches of 0.01 M NaOH solution, the consistency was reduced by one-half, but the yield stress remained statistically constant.
- When washing, many elements like sodium and aluminum were reduced by almost an order of magnitude. Some species in the undissolved solids actually did dissolve, like

oxalate and fluoride, causing the concentration of undissolved solids to decrease as the dense supernatant was replaced with caustic water.

- When the filter became plugged with highly concentrated solids, recovery was possible for the vertically mounted filter by backpulsing after the downstream slurry valve was closed.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pretest cleanliness.

2.7.5.2 Waste Products Conclusions (Author – Zamecnik)

A summary of the overall conclusions for the SIPP UFP are as follows:

- During the elevated temperature tests at a constant solids loading of 19 wt% UDS no significant changes occurred with respect to solids concentrations and particles sizes. As expected, as the simulant temperature increased from 25°C to 45°C the consistency of the slurry and the viscosity of the permeate decreased from 14 to 11 mPa•s and from 2.9 to 1.8 mPa•s, respectively, while the slurry yield stress increased approximately 10 to 12 Pa.
- The composition of the undissolved solid species in the washed sludges in Campaigns I-IV were similar, as expected. The soluble species concentrations in the slurry and permeate for Campaigns II-IV were similar as expected.
- The balances on aluminum over the process were not consistent and could not be closed without additional analytical data.
- Ammonium in the first UFP slurry wash with 0.01 M NaOH in Campaign III was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Approximately none of the ammonium in the second UFP wash was retained in the slurry.
- The antifoam agent did not have any observed macroscopic effects on the filter operations of the SIPP, which is also consistent with similar commercial industrial experience (Watts et al., 1995). However, since the filter was cleaned between each run, the effect of possible accumulation of antifoam on the filter media with no cleaning between runs was not determined.

The following conclusions were extracted from the Interim Reports of Campaign III (Duignan et al., 2004c or Appendix I-3) and Campaign II (Duignan et al., 2004b or Appendix I-2)

Campaign III

- The composition of the undissolved solid species in the washed sludges in Campaigns I-III was similar, as expected. The supernatant portion species Na and K were higher in concentration in Campaigns II and III than in Campaign I due to the presence of the AP101 simulant.
- The aluminum in the Campaign III washed slurry was higher due to their being more undissolved aluminum in the FEP concentrate than in Campaign II.

- Due to higher undissolved aluminum in the FEP concentrate, the Campaign III permeate from the concentration step (CIX feed) had less aluminum than in Campaign II.
- Ammonium in the first 0.01M NaOH UFP wash of Campaign III was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Approximately none of the ammonium in the second wash was retained.

Campaign II

- UFP produced permeate showed no tendency for post-filtration precipitation. (However, AY102-only permeate from Campaign I did post-precipitate after 2 months.)
- OLI/ESP models of the AY102 sludge need to incorporate oxides, e.g., Al_2O_3, and hydrates, e.g., FeOOH, in order to close mass and charge balances.
- Washing of concentrated slurry raised its yield stress from about 10 to 15 Pa, but lowered the consistency from about 23 to 13 mPa•s.
- Campaign I data indicated that the yield stress of unwashed slurry is reduced upon extended pumping.
- Washing data matched previous SRNL and literature leaching and washing data for soluble washable species (see Table 40).
- Use of a more concentrated NaOH solution for the third caustic flush during filter cleaning may be warranted since the pH of the spent third wash was acidic.
- At least 96% of the antifoam remained in the HLW sludge slurry after filtration.

2.8 PILOT CESIUM ION EXCHANGE (Authors – Steimke &Williams)

The CIX unit operation was not used during Campaign IV activities, which were limited to FEP and UFP unit operations so that the new filter from GKN could be tested. However, for completeness the majority of Campaign III report (Duignan, et al., 2004c) is repeated here, as well as measurements made after that report was issued. New information includes measurements of the mass of dry resin on both a sodium and hydrogen basis and the resin particle size distribution.

The Cesium Ion Exchange Process, or CIX, is the third separation technology unit operation in the RPP-WTP Pretreatment Facility that the waste stream will pass through on startup. This was true for SIPP because the chosen waste type, Envelope A/D, will not be subjected to precipitation before filtration in the RPP-WTP Pretreatment process. The SIPP CIX operation removes cesium from a mixture of the liquid LAW stream coming from the UFP before it is sent to the TLP for further evaporation and eventual LAW vitrification.

The ion exchange resin used in this test was SuperLig®644, which is designed to remove cesium from caustic radioactive waste that is at a 5-molar concentration in sodium. It is manufactured by IBC Advanced Technologies. Pilot scale testing of this resin was first performed in the Engineering Development Laboratory in the year 2000 (Fowley et al., 2004). That earlier testing was intended to be focused primarily on the chemical performance of the resin on a pilot scale (more than one liter of resin); however, the pressure drop across the resin beds was unexpectedly high. Testing for the next three years was redirected to the hydraulic performance of the resin. The hydraulic issues were resolved to the satisfaction of RPP-WTP (River Protection Program Waste Treatment Plant) (Fowley et al., 2004).

In 2003, Test Exception 24590-WTP-TEF-RT-03-069 called for resumed chemical testing of SuperLig®644 resin at a pilot-scale for six chemical cycles, which would be incorporated into the four Campaigns of the SIPP task (Duignan, 2003c). A cycle is the process whereby the Cesium Ion Exchange unit operation treats enough LAW solution until the lead CIX column accumulates enough cesium to require regeneration, then it is regenerated. Later, the goals of the SIPP task were modified that reduced the number of ion exchange cycles to four; Cycles 1 and 2 would be done in Campaign II and Cycles 3 and 4 in Campaign III of the SIPP task. There were no CIX operations during Campaign I of SIPP. This report includes all four cycles of testing reported in Duignan et al.(2004b) and Duignan et al., (2004c), as well as measurements that came available only after the Campaign III report was issued.

For the actual RPP-WTP a cycle would entail the treatment of a minimum of 100 Bed Volumes (BV = a resin bed volume of 415 gallons (1571 liters) under normal operating conditions, which is subject to change) until the lead column of the three-column ion exchanger will contain enough accumulated cesium to require its regeneration. That lead column is then taken off line to be regenerated while a waiting fourth column is valved-in for the CIX to continue further LAW treatment. That fourth column, containing

reconditioned resin, is put in the last position (called the polishing position) of the three-column CIX unit and the column that had been in the second position (referred to the lag position) becomes the new lead column, and so forth. The pilot scale CIX unit operation, of the SIPP task, had only two columns, the lead and lag positions. The pilot operation consisted of the treatment with approximately 190 BV (BV = 2.34 liters) of simulated LAW, which was then followed by the regeneration of the lead column. A new cycle begins with the newly regenerated lead column in the lag position.

This section will explain the pilot CIX unit operation that was performed as part of Campaign III testing, but Campaign II results are also included to compare the results. An abridged form of the operational raw database can be found in Appendix H3. The process started with the preparation of the feed product, which is permeate created in the UFP. An explanation of the chemical makeup of the feed stream will be followed by a short description on how feed was handled just before CIX operation and then how the waste stream was handled during and after ion exchange. That section will be followed by a discussion of the experimental hardware and how the test was run. Finally, the results will be discussed and conclusions made.

2.8.1 Chemical Description of the Pilot-Scale CIX Feed Stream

The feed for the pilot-scale CIX unit operation was the permeate produced by simulant waste dewatering in the pilot-scale UFP unit operation. The chemical make-up of that feed was described in detail in Section 2.7.4.2.1 and will not be repeated here. Refer to that section and specifically to Tables 34 for information on the CIX feed (simulated LAW) stream, which was the permeate produced during the UFP dewatering operation.

2.8.2 Simulant Handling (Author – Williams)

2.8.2.1 Initial Preparations

Before beginning the CIX Campaign III test, the solutions to be used to regenerate the lead column were made ready. Those solutions were:

1.	0.1 M NaOH	Displaced the LAW in CIX column while maintaining high pH to prevent precipitation
2.	Deionized Water	Pre-elution rinse – Displaced the 0.1 M NaOH from CIX column
3.	0.5 M HNO_3	Eluent – Displaced water and stripped Cs ions from resin by replacing them with hydrogen ions. Note: eluent is pumped into the column and eluate flows out of the column.
4.	Deionized Water	Post-elution rinse – Displaced acid eluate from column
5.	0.25 M NaOH	Displaced water and regenerated the resin by replacing hydrogen ions with sodium ions

The regeneration caustic, 0.25 M NaOH, required a volume of 47.8 liters and it was made from DIF water and 50 wt% NaOH. Then it was stored in the Caustic Supply Tank

before 25 May 2004. A large quantity of displacement caustic solution, 0.1 M NaOH was made with condensate and it was stored in a carboy labeled "Campaign 3-0.1 M NaOH for CsIX." From this carboy 28.7 liters were removed and made ready for Campaign III before 2 June by adding it to the 0.1 M Caustic Supply Tank. To strip the cesium ion-exchange (CIX) resin of Cs ions, 70.1 liters of 0.5 M HNO3 was made from DIF water and 70% HNO3 and was placed in the Eluent Supply Tank before 2 June.

2.8.2.2 Handling of Pilot-scale CIX Feed LAW Simulant

The Simulant Supply that was produced during pilot-scale UFP operation was split into two equal parts for Cycle 3 and 4 of CIX operations. Both cycles processed 194 Bed Volumes (BV) (~453 liters) of fresh simulant. The treated simulant was transferred to the pilot-scale TLP Evaporator Feed Tank from CIX operations.

2.8.2.3 Handling CIX Regeneration and Campaign III CIX Recycle Streams

The flow rate and duration of each of the chemical streams, was set by communication from RPP-WTP. The different chemical effluents from the column/s were collected in different containers, either jugs or tanks. There is a transit time for a fluid to pass through a column or columns, depending on flow rate. For Campaign III, the effluent hose was moved from one container to another after the transit time had elapsed, where the transit time was based on a plug flow calculation through the columns.

2.8.3 Pilot CIX Equipment (Author – Steimke)

2.8.3.1 CIX Resin Columns

Figure 54 is a picture of the two columns during Cycle 3 Regeneration and Fig. 55 is a schematic of the two ion exchange columns and peripheral equipment. The design is also documented in WSRC drawing EES-23041-R4-001.

Figure 54. Pilot-scale CIX columns: The left column (COLUMN 1) is undergoing resin regeneration during Cycle 3 operation

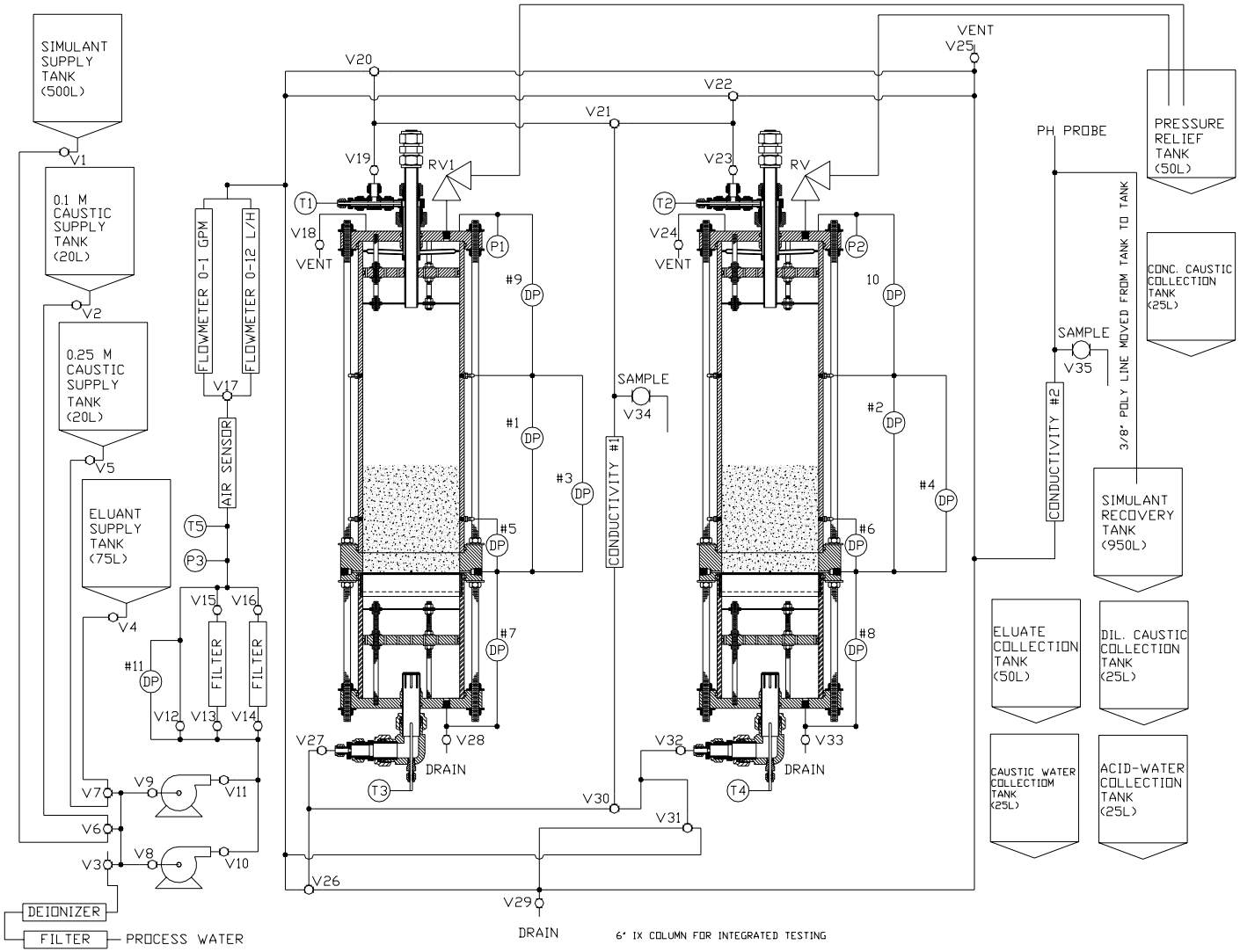


Figure 55. Schematic of Ion Exchange Facility for Integrated Testing

Two ion exchange columns were designed and constructed for the SIPP task. The columns had an inside diameter of 5.5 inches and a target resin height in fully swollen sodium form of 6 inches[†], giving a height to diameter ratio of 1.1, the same ratio as for the WTP columns. Other hardware included pumps, tanks, flowmeters, pressure transducers, other instruments and a data acquisition system (DAS).

Each column had a liquid filled length of 23.75" (or an internal volume of 9.24 liters ~ 4 BV). The following hardware is positioned inside the column with the following elevations with respect to the wedge screen (also known as: V-wire screen), that supports the resin and note that the total liquid filled length of each column is 23.75", i.e., 16.75"-(-7.00").

Elevation	Column Hardware Description
16.75"	Top of liquid filled space
16.00"	Flow distributor with six perforated arms
14.75"	Perforated PVC plate with thirty seven 3/64" holes
13.25"	Perforated stainless steel plate with 3/32" holes on a 5/32" triangular pitch
0"	Wedge screen (Vee wire screen) with 0.010" slots to support resin
-2.0"	Perforated stainless steel plate with 3/32" holes on a 5/32" triangular pitch
-3.50"	Perforated PVC plate with thirty seven 3/64" holes
-7.00"	Bottom of the liquid filled space

The purpose of the flow distributor and the two plates below it was to generate a more gradual transition of density when relatively dense simulant was introduced to the top of the column on top of lighter liquid. The purpose of the wedge screen was to support the resin while resisting plugging. The purpose of the bottom two plates was to generate a more uniform flow field in the event upflow operations were needed, however, the normal flow direction was down.

By opening the proper valve, feed could be drawn from one of five supply tanks, which contained either: LAW simulant, displacement 0.1 M NaOH solution, DIF water for rinsing, eluent 0.5 M nitric acid solution, or regeneration 0.25 M NaOH solution. The solutions were pumped by one or two gear pumps connected in parallel. Most of the time only one pump was sufficient, but two-pump operation was required for upflow. The facility contained two flowmeters in parallel, a high range flowmeter for upflow with a range of 0 - 1 gpm and a low range flowmeter for normal operation with a range of 0 - 12 L/hr. Valves allowed upflow or downflow through one column or two columns in series. The effluent line from the columns contained a pH probe, a conductivity probe and a thermocouple. A hose connected to the effluent line was placed in the appropriate collection jug for every step of the cycle. There were six collection jugs, one for each of the six steps of the cycle.

[†] The actual resin height is not fixed. As explained in the following sections, and shown in Table 48, the height resin in the columns changes from 6.25 inches, when the columns are initially filled, to as short as 5.4 inches after multiple resin regenerations.

2.8.3.2 The Data Acquisition and Safety Circuitry

A Dell computer with LabVIEW™ software was used to acquire data, control the flow rate, and shut down the flow if any measured pressure exceeded the setpoint of 20 psig. There was also a pressure relief valve set at 45 psig connected to the top of each of the two columns. The discharge line of the pressure relief valves was a hose leading to a jug. There was also a spill detector with a sensor placed below the columns on the floor of the containment for the facility. Any spill would disconnect power to the pumps. There was also an air detector in the line leading from the solution supply tanks to the pump. Any air in the line would disconnect power from the pumps. A manual bypass switch was used to start the pump/s when there was initially air in the line. The air detector was used because oxygen can damage the wet resin, particularly when it is in a caustic state.

2.8.3.3 The Ion Exchange Resin

To prepare the CIX resin, SuperLig®644, for use, it was taken from the 250-Gallon Batch (C-01-11-05-02-35-60). The resin was chemically pre-treated by washing with water, treating it in 0.5 M nitric acid, washing with water, treating it with 0.25 M sodium hydroxide and washing it with water. The pre-treated resin was then wet sieved under a nitrogen atmosphere to remove particles finer than 40 mesh by using a 35-mesh USF screen with openings of 500 microns.

2.8.3.3.1 <u>Method of Resin Addition to the Columns</u>

A tank with an agitator was temporarily connected to the top of a column. The column was completely filled with 0.25 M NaOH solution, the top tank was partially filled and the valve between them was closed. Resin was added to the top tank to form a 30% by volume slurry and the agitator was energized. The bottom of the column was connected to pump suction. Pump discharge was connected to a waste container. The valve was opened and the pump was simultaneously run to create a downward velocity of 14 cm/min (flow rate equal to 0.58 gpm) which deposited a resin bed with the target average resin height of 6 inches. However, the initial resin deposition resulted in a crater about 1 inch deep in both columns. An upflow for two minutes at 13 cm/min was used to level the top of the resin beds. This process was repeated with the second resin bed. This was followed by pre-conditioning of both beds for thirty minutes with a flow rate of 15 cm/min of 0.25 M NaOH solution. At this time, both beds had a resin height of 6.25 inches. The columns were then ready for SIPP operation.

2.8.3.3.2 <u>Dry Resin Mass on Sodium and Hydrogen Bases</u>

At the end of Campaign III testing 0.25 M NaOH solution was pumped through both columns followed by a rinse of deionized water. The tops of the columns were removed and full penetration “punch” samples (100 mL per column) were taken of the resin to determine the particle size distribution. Those results are explained the following section. Once samples were taken, the resin was removed from both columns. The resin from each column was stored in separate carboys for archiving and to determine the resin dry mass on both sodium and hydrogen basis for each column.

The method used to determine the dry resin mass on a sodium basis was as follows: First, since months had elapsed, the resin was again treated with 0.25 M NaOH solution and then carefully rinsed with deionized water. The total contents of the wet resin from each carboy was separately filtered to a damp state and the damp resin was weighed and then mixed using a rolling drum. From the mixed damp resin four half gram samples were collected. Those samples were weighed damp, then vacuum oven dried and weighed again to determine the ratio of dry mass to damp mass. Finally the average ratio from the four samples was applied to the damp mass of the entire inventory of one column to get the sodium form dry mass in that column. The sodium form dry masses for Columns 1 and 2 were 642 grams and 713 grams, respectively, both ± 2%. By rinsing and soaking four more half gram samples in 0.5 M HNO_3 followed by more rinsing in deionized water, a similar procedure was followed to determine the resin dry mass on a hydrogen basis. The hydrogen form dry mass was compared to sodium form dry mass because PNL usually lists dry mass on a hydrogen basis. The sodium dry mass was 119%±3% and 122%±2% of the hydrogen form dry mass for the two columns, respectively.

2.8.3.3.3 Resin Particle Size Distribution

As mentioned above, before archiving the resin, a 100 mL sample was removed from each column using the accepted "full penetration punch"-method procedure for a particle analysis. The resin from those samples was wet sieved to compare to the wet-sieve particle size distribution (PSD) previously obtained on pre-test resin. The resulting particle size distributions by percentage mass are listed in Table 45. The uncertainties listed are 95% confidence limits and are based on a series of replicate particle size measurements performed at SRNL.

Table 45. Particle Size Distribution of the SuperLig®644 used for SIPP

Mesh size	Pre-test wt%	Post-test, Column 1 wt%	Post-test, Column 2 wt%
Greater than 30	78.1±4.0	84.3±4.0	78.2±4.0
30 – 40	20.0±4.0	14.5±4.0	19.9±4.0
Less than 40	1.9±1.0	1.2±1.0	1.9±1.0

The wet-sieved PSD of the resin taken from Column 2 matched exactly to that of the pre-test results, thus indicated that no degradation occurred during the four cycles of SIPP CIX unit operation; each cycle processing approximately 200 BV of simulated LAW. The nominal results from Column 1 appeared to show a small shift to larger particle sizes from the post-test analysis. An additional sample/analysis was conducted with a similar result, an apparent small shift in the PSD to larger particles. An increase in resin PSD has not been seen in the past after other multi-cycle operations, e.g., see Fowley et al., 2004. This small shift in the resin PSD could be due to measurement uncertainty, a sampling bias, or possibly a bias in splitting the resin batch between Columns 1 and 2 during initial column loading that resulted in a slightly larger average resin particle size in Column 1, as compared to Column 2. Considering the measurement uncertainties, all

three particle size distributions may actually be the same. In any event, it is clear there is no evidence for resin particle breakdown.

2.8.4 Pilot CIX Operation (Author – Steimke)

2.8.4.1 Chemical Testing

Each cycle of chemical testing had the following six chemical steps all in downflow: 1) LAW simulant, 2) 0.1 M NaOH displacement solution, 3) DIF water, 4) 0.5 M nitric acid eluent solution, 5) DIF water, and 6) 0.25 M NaOH regeneration solution. The total volume of LAW simulant used for each cycle was about 190 BV and simulant was always passed through both ion exchange columns connected in series. One BV was equal to 2.34 liters. All steps other than the simulant step were conducted through one column only. The 0.1 M NaOH step and the subsequent deionized water step (pre-elution rinse) were conducted at a flow rate of 3 BV/hr for one hour. The volume used for the elution step was 15 BV. The post-elution rinse was run at a flow rate of 1.4 BV/hr for 2.25 hours. The regeneration step was run at a flow rate of 3 BV/hr for 2 hours. (See Table 10 for Cycle 3 and Table 11 for Cycle 4. The information in the shaded columns of Cycle 5 and 6 of those tables would have been for Campaign IV if CIX testing continued.)

The six different chemical solutions were collected in separate jugs or tanks by moving the discharge hose of the columns. In Campaign II, for Cycles 1 and 2, the plan was to move the hose based on observing the change in the pH and/or conductivity probes. This proved to be difficult to implement. Therefore, in Campaign III, for Cycles 3 and 4, the timing for moving the hose to a different container was based on a plug flow calculation of when the liquid front would reach the column discharge.

There was a 39 day period between the end of Cycle 2, part of Campaign II testing, and the start of Cycle 3, part of Campaign III testing. At the end of Cycle 2, the lag column was Column 1 and it contained simulant and the lead column, Column 2, which was regenerated, contained 0.25 M NaOH. At the request of RPP-WTP, both columns were displaced with 0.1 M NaOH and the resin soaked in that solution until the start of Cycle 3 for Campaign III testing. At the conclusion of all testing, the contents of both columns were displaced with 0.1 M NaOH solution.

2.8.4.2 Test Matrix Highlights

The entire CIX test matrix is shown in Tables 10 and 11 with each cycle operation occurring on the dates listed in Table 46. For convenience some key parameters are listed below for Campaigns II and III:

- Cycles 1, 2 and 3 had a simulant flow rate of 3 BV/hr. The simulant flow rate for Cycle 4 was 4.5 BV/hr.
- Cycles 1 and 4 had an eluent flow rate of 1 BV/hr. The eluent flow rates for Cycle 2 and 3 were 0.5 BV/hr and 2.0 BV/hr, respectively.
- Column 1 was the lead column for Cycles 1 and 3. Column 2 was the lead column for Cycles 2 and 4.

Table 46. Cycle Dates of Operation

Cycle	Start date	Finish date
1	4/26	5/4
2	5/4	5/12
3	6/21	6/29
4	6/29	7/7

2.8.5 Pilot CIX Discussion of Results (Author – Steimke)

2.8.5.1 General Results

This section presents an overview of the results. The following sections give the results and an abridged version of all the SIPP CIX operation raw data are in Appendix H3.

The CIX facility was used to run four ion exchange cycles, where a cycle consisted of six chemical steps. Table 47 lists the volumes of fresh LAW simulant that were pumped through the two beds connected in series. At 2.34 liters per bed volume, these volumes translate to about 190 BV. In addition, the final 9 liters of simulant that were pumped into the lead column, Column 1, for Cycles 1 and 3, were added to the fresh simulant in the simulant supply tank for use in Cycles 2 and 4 to mimic WTP operation.

Table 47. Highlights of the Pilot-Scale CIX Cs removal efficiency†

Cycle	Fresh simulant volume, L	Fresh simulant volume, BV	Percent cesium removal by lead column	Percent cesium removal by both columns
1	428	183	99.45 ± 0.25	99.6± 0.6
2	437	187	99.54± 0.25	99.8± 0.6
3	453	194	98.70± 0.15	99.6± 0.6
4	453	194	98.34± 0.17	100.0± 0.6

The lead column removed more than 98% of the cesium and the lag column removed most of the remaining cesium. Note that the percentage of cesium removed by the lead column, generally decreased over the course of four cycles. Because of the measurement uncertainty no trend could be discerned for cesium removal by both columns in series.

During ion exchange operation, the axial pressure drop was measured for both resin beds. The maximum pressure drop occurred during the simulant step, because the simulant has about three times the viscosity of the other solutions. Pressure drops generally increased over the four cycles. The pressure drop across the bottom 3” of the resin column was also measured. That pressure drop was close to half of the total pressure drop for 6” of resin. This implies a resin bed with uniform permeability and no significant flow channeling in the bed.

A cesium mass balance was performed for all four cycles. The cesium masses in and out of the columns agreed within the accuracy of the ICP-MS (inductively coupled plasma mass spectroscopy) used for measuring cesium in 5 molar sodium solution. During elution of each of the lead columns fifteen bed volumes of 0.5 M nitric acid were used. After only the first three BV, about 90% of the cesium was eluted from the bed.

2.8.5.2 Hydraulic Observations

Table 48 summarizes some important hydraulic results, including pressure drop, from Campaign III (Cycles 3 and 4) and Campaign II (Cycles 1 and 2) so that the complete set of cycles can be compared. Note, that the simulant had a density of 1.25 g/mL.

† The data shown in Section 2.8.5.3.4, from Tables 51 and 52, were used to calculate the percentage removal of cesium by two columns in series listed in Table 47. The percentage was calculated as the total cesium mass entering the column minus the sum of the cesium in the simulant out and the final simulant, all divided by the total cesium entering.

Table 48. Hydraulic Summary

Cycle	Simulant ΔP Col. 1 inches H2O	Simulant ΔP Col. 2 inches H2O	Resin height in simulant, Col. 1, (inches)	Resin height in simulant, Col. 2, (inches)	Simulant superficial velocity, Col. 1, (cm/hr)	Simulant superficial velocity, Col. 2, (cm/hr)
1	0.6 (Lead)	0.5 (Lag)	5.6	5.8	46	46
2	0.6 (Lag)	0.7 (Lead)	5.4	5.7	46	46
3	1.0 (Lead)	0.7 (Lag)	5.6	5.9	46	46
4	1.2 (Lag)	1.3 (Lead)	5.7	5.8	69	69

Figure 56 plots the flow rates during Cycle 1, typical results, for all six solutions used. The large fluctuations in flow rate for the two water rinses occurred because the DIF water used lacked sufficient ions for the magnetic flowmeter to achieve a steady reading. However, flow checks using a volumetric cylinder and stopwatch showed that the average flow reading was correct. Figures 57 and 58 plot the pressure drops across the lead and lag column resin beds during Cycle 1. It was necessary to adjust the raw pressure drop data by the following method because the pressure drops to be measured were small. The flow was intentionally stopped about eight times per cycle and the DAS recorded the zero flow readings for the differential pressure gages. Later the raw differential pressures were corrected by the zero flow readings so that the final differential pressures were equal to zero when the flow was zero. The magnitude of the corrections was comparable to the differential pressures measured.

Figure 55 shows the locations of the pressure measurements. There were duplicate measurements of the pressure drop across the entire resin bed and one measurement of the pressure drop across the bottom 3 inches of the resin bed. The duplicate pressure drop measurements agree. The highest pressure drops were for the simulant step because of its higher viscosity. The pressure drop across the bottom 3 inches was about half of the total pressure drop, as expected. The total pressure drop across the bed for simulant was about 0.6 inches of water. By way of comparison, the 24-Inch Column Test (All-In Test) (Fowley et al., 2004) had a pressure drop for Cycle 1 of 16 inches of water for a resin height that was four times as great and a superficial velocity that was seven times as great (5 cm/min vs. 0.75 cm/min). The 24-Inch Column Test pressure drop was 27 times as large, which agrees well with the product of the resin height ratio (4) and the velocity ratio (7).

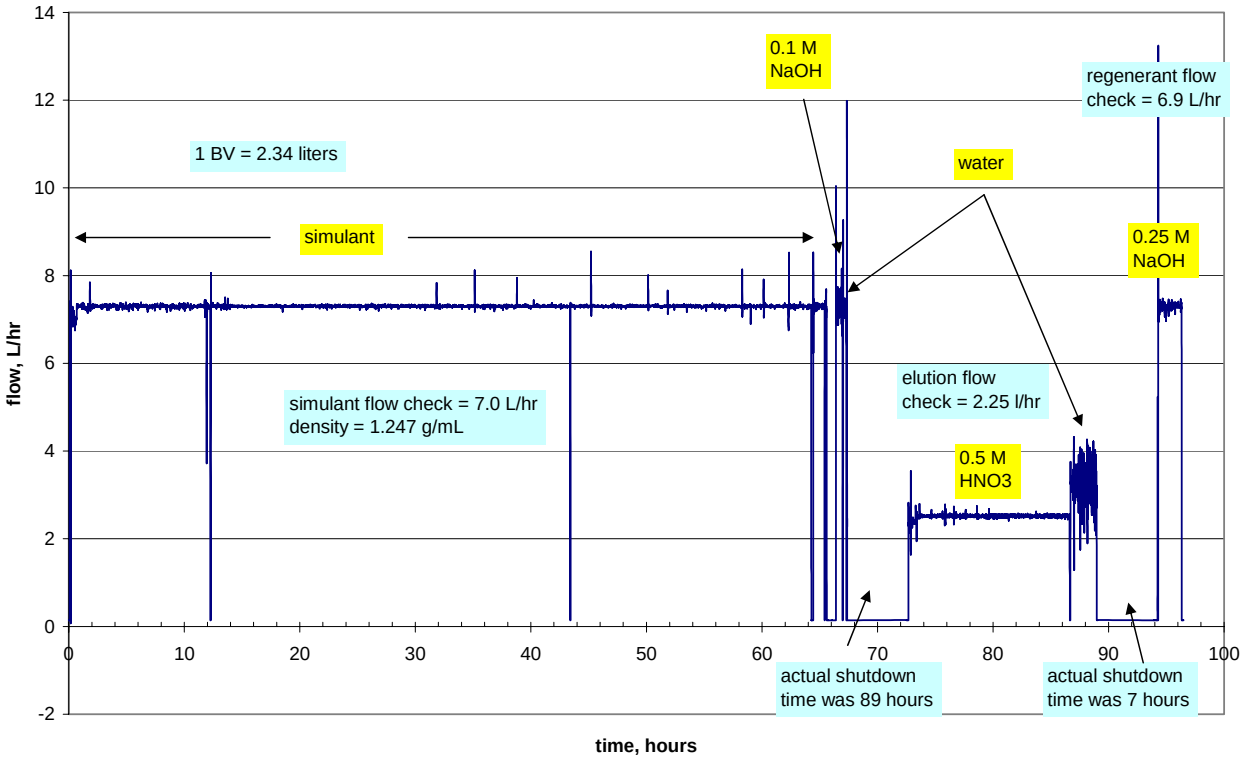


Figure 56. Flow rate During Cycle 1

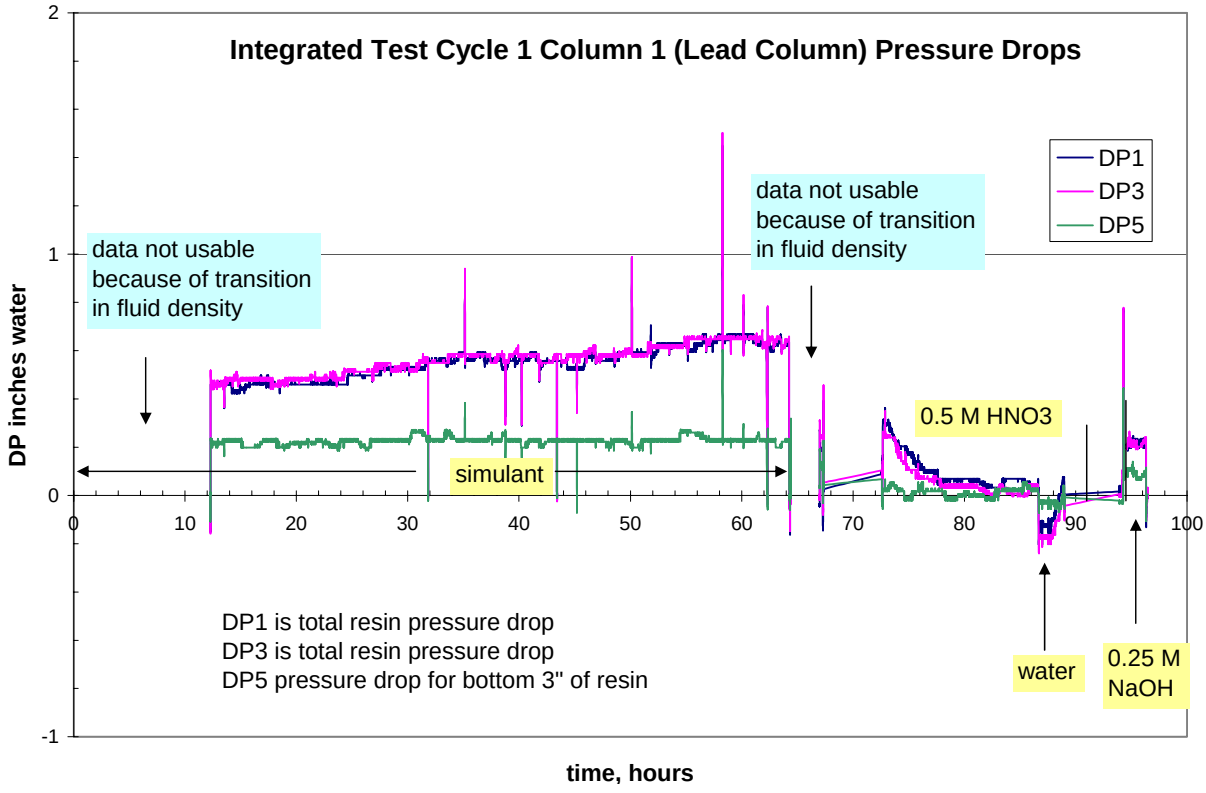


Figure 57. Pressure Drop Across Resin Bed for Lead Column and Cycle 1

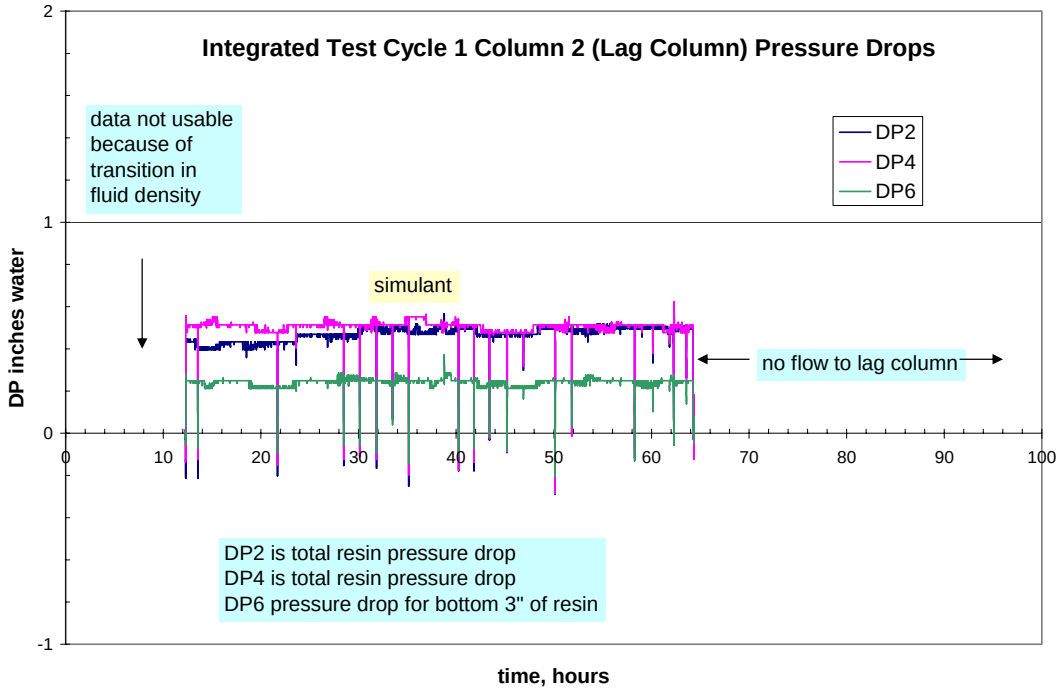


Figure 58. Pressure Drop Across Resin Bed for Lag Column and Cycle 1

Resin bed heights during Cycle 1 are plotted in Figure 59. The plot shows the expected variation with the smallest resin bed height during the elution step.

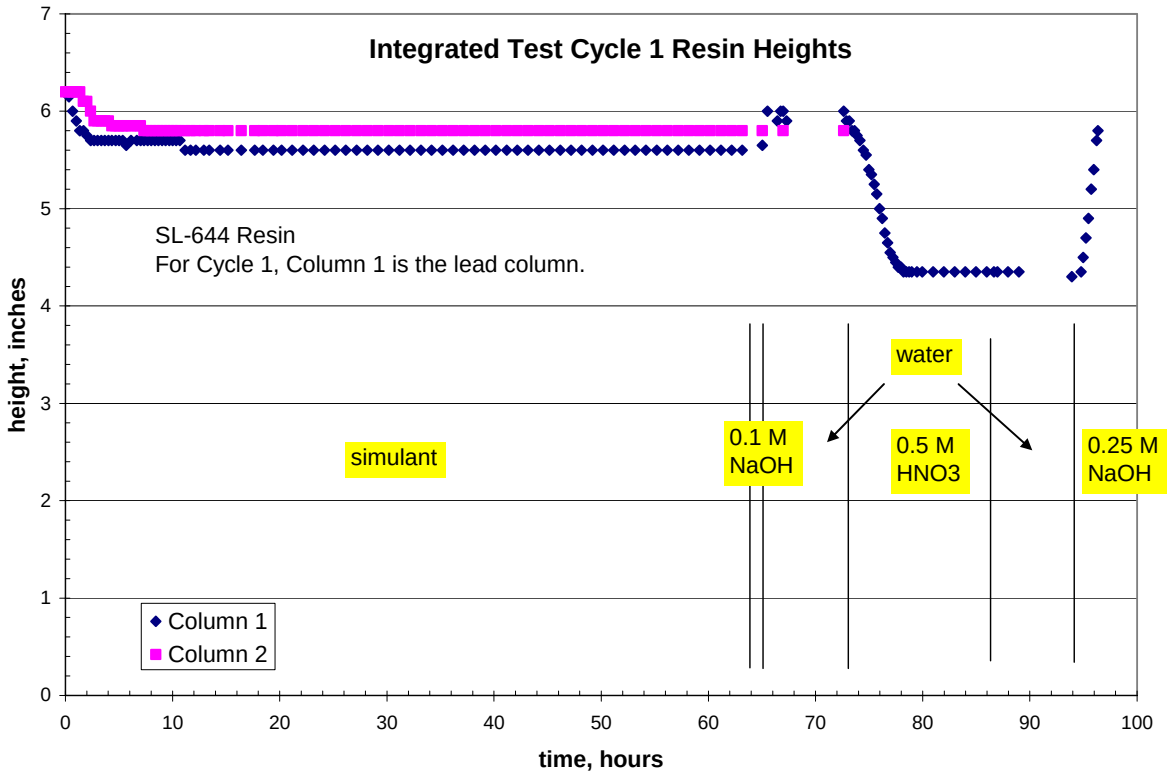


Figure 59. Resin Bed Height During Cycle 1

Table 49 lists the volumes of the different solutions. Note that some of the "introduced" volumes were less than the internal volume of the column, which implies that some solutions could not fully displace the previous contents in the column.

Table 49. Comparison of the Volume for Each of the CIX Regeneration Process Solutions to the Internal Volume of Pilot-scale CIX Column

Regeneration Process Solution	Volume Introduced into Column	Internal Internal Volume of the pilot-scale CIX column
	BV	BV
0.1 M NaOH	3	4
Water	3	4
0.5 M HNO3	15	4
Water	3	4
0.25 M NaOH	6	4

Figures 60 and 61 show the measured pH and conductivity of the column effluent as a function of bed volume for Cycle 1. The X axis for these plots is cumulative volume reaching the exit of the column expressed in BV. The pH plot has the expected shape, with one exception. The particular pH probe used was designed to have a range from zero to 12; we did not find a pH probe with a wider range that would also withstand long immersion in our solutions. Therefore, the probe read about 12 for solutions with pH that high and higher. The timing for changes in pH agrees well with the times computed using a plug flow calculation for when a new solution would reach the column exit. During the regeneration step with 0.25 M NaOH, the pH increased to almost 12, implying that the caustic wave had broken through the column.

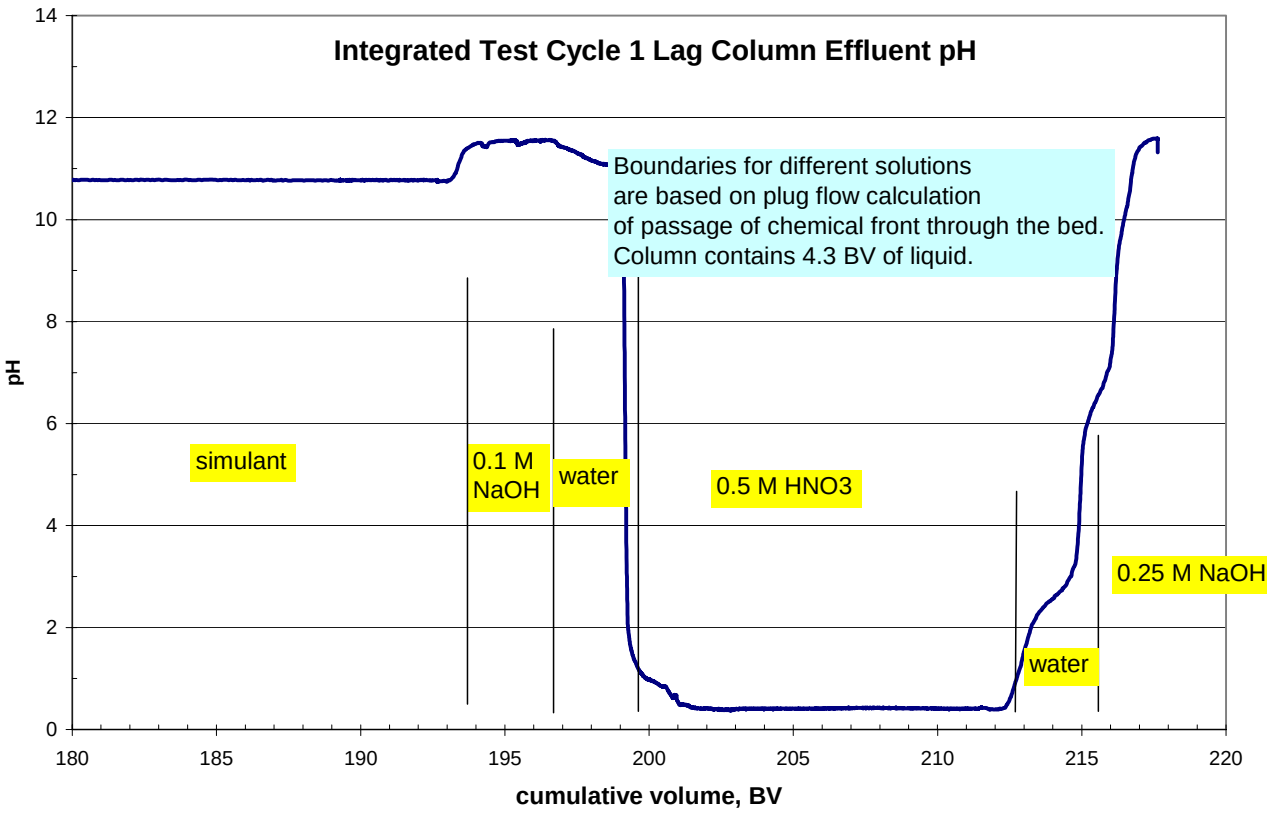


Figure 60. Effluent pH During Cycle 1

The conductivity probe reading, plotted in Fig. 61, told a somewhat different story than the pH probe. The conductivity plot has a noisier appearance than the pH plot because electrical conductivity is roughly proportional to ionic concentration and pH is proportional to the logarithm of hydrogen ion concentration. There are definite spikes in the measured conductivity at the simulant and 0.1 M NaOH transition and also at the acid and water transition. Conductivity of an aqueous solution increases with temperature. These spikes may have occurred as a result of heat of mixing. After acid is introduced to the column, most of the change in conductivity occurs in the first 3.5 BV, however, the conductivity appears to be changing slowly during the remaining period that acid flows through the column. The resin may continue to consume small amounts of acid after the first 3.5 BV. When 0.25 M NaOH is introduced to the column, the conductivity reading never increased very much. This implies that nearly all of the sodium ions in the NaOH solution are loaded on the resin and nearly all of the hydroxide ions react with residual hydrogen ions on the resin to form water.

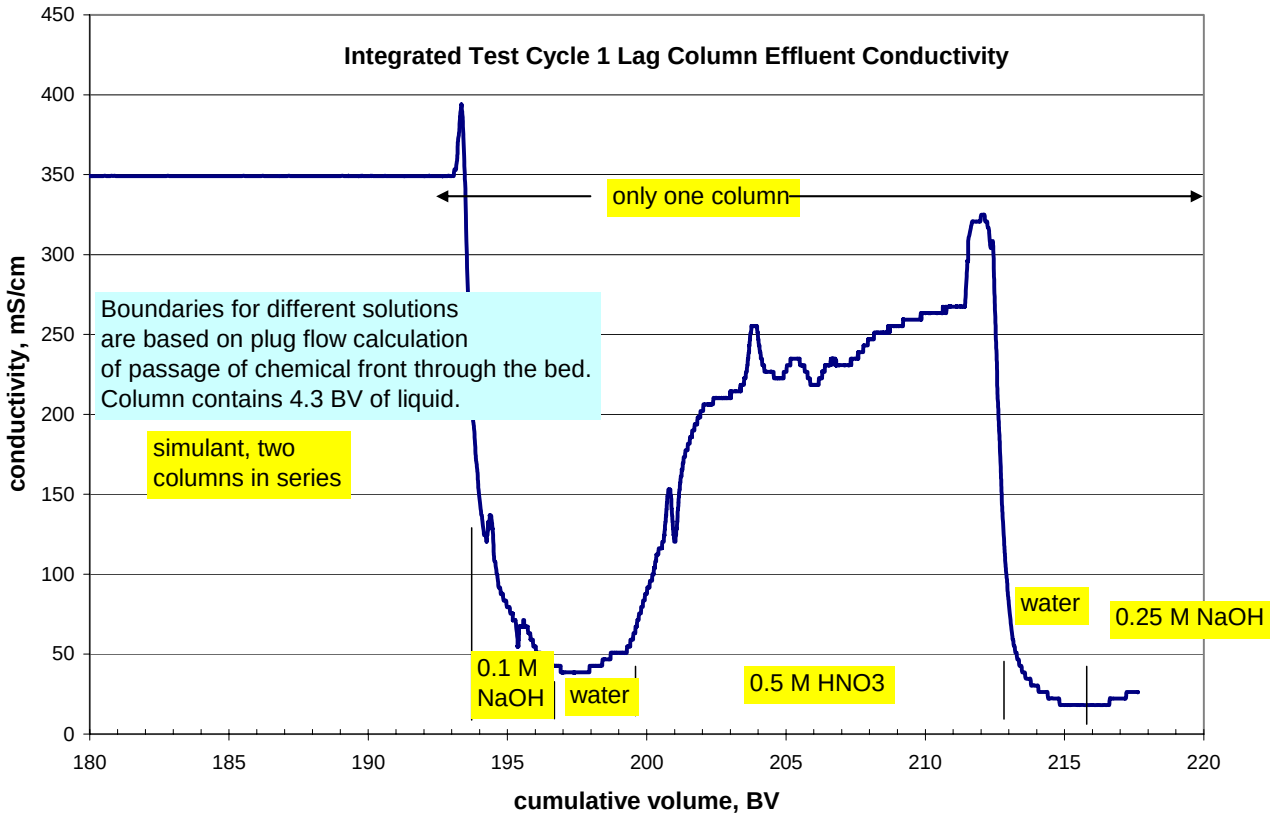


Figure 61. Effluent Conductivity During Cycle 1

Table 50 shows the response of the conductivity probe and pH probe when inserted into beakers of the various solutions. This table can be used to estimate how closely the transient conductivity and pH approached the steady state values. Note that the SI unit of the conductivity, milliSiemens/cm, was formerly referred to as mmho/cm

Table 50. Probe Responses for Standard Solutions

solution	Conductivity, mS/cm	pH
DI water	<5	5 to 9
0.1 M NaOH	35	11.1
0.25 M NaOH	76	10.9
0.5 M HNO3	250	0.42

2.8.5.3 CIX Chemical Observations

2.8.5.3.1 Measurement Uncertainty

The purpose of the resin is to remove cesium from LAW solutions that contain a mixture of constituents and are 5 M in sodium. Evaluation of the effectiveness of the resin requires the measurement of cesium concentration under challenging conditions, that is, with a high concentration of sodium. The samples must be heavily diluted to reduce sodium concentration to a manageable level, which also dilutes cesium. The Analytical Development Section (ADS) of SRNL claimed an accuracy of ±20% of the stated value for these cesium measurements. Because of the large sodium concentration the accuracy was checked using spiked samples a well as blanks that were 5 M in sodium. The results are shown in Fig. 62.

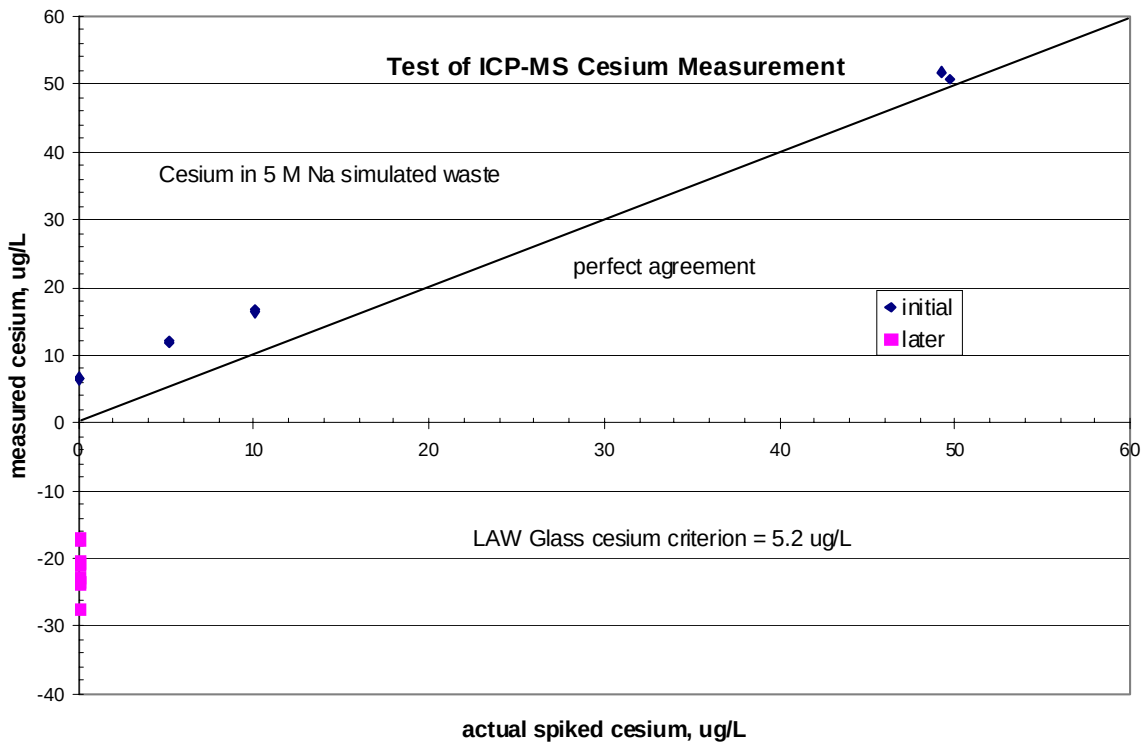


Figure 62. Test of Ability of ICP-MS to Measure Cesium

The initial results were encouraging and indicated a bias of less than 10 µg/L of cesium concentration for very low concentrations and less than 10% uncertainty for concentrations of 50 µg/L. Based on the initial results it appeared possible to correct for the bias. Unfortunately, later samples were analyzed to have negative concentrations as low as -27 µg/L. Of course, negative concentrations are physically impossible, but provide useful information about the accuracy of the measurement. Therefore, no effort was made to correct for bias and measurement uncertainty was treated as random. Previous measurements (Steimke, 2002), not plotted, for concentrations greater than

7000 µg/L confirmed a measurement uncertainty of ± 10% for higher concentrations. Therefore, the estimate for the uncertainty of cesium concentration measurements in this program is: ± (10% reading + 30 µg/L), which is expressed for 95% confidence limits.

It should be noted that, even the originally indicated bias of 10 µg/L was insufficient to meet SIPP needs. Before SIPP began, the original criterion for when a Lead column would need regeneration was when the cesium concentration of the exiting LAW stream from the lead column would exceed one-half the incoming concentration, i.e., 50% breakthrough. For Campaign III, the simulated LAW feed cesium concentration was 7760 µg/L [see Cs concentration column in the fresh simulant in row of Table 50], therefore, detecting a concentration 3880 µg/L accurately would have been no problem. However, that criterion changed to a much more stringent one. The new criterion is based on when the exiting stream of the Lag Column would contain a concentration of greater than 5.2 µg/L of cesium. Unfortunately, while some ADS cesium measurements appear to detect concentrations to better than 5 µg/L, as already stated, the actual ADS uncertainty is estimated to be ± (10% of a reading + 30 µg/L of cesium). This implies that the detection limit for cesium was 30 ug/L. This relatively large uncertainty must be kept in mind when evaluating such low concentrations. However, changes in cesium concentration throughout a cycle are expected to indicate when the cesium concentration is increasing in the exiting Lag Column stream.

2.8.5.3.2 Cesium Removal Effectiveness

Simulant is pumped through the lead column where most of the cesium is removed and then enters the lag column, where additional cesium is removed. Figure 63 shows the cesium concentration exiting the lead column for the four cycles, as a function of bed volumes passed.

Initially, the cesium concentration was low, or perhaps really zero when considering analytical uncertainty, and then increased. There is a general trend to more cesium escaping the lead column with additional cycles. Note that the lead column resin is fresh for Cycles 1 and 2 and has been eluted and regenerated for Cycles 3 and 4. For all four cycles the final effluent cesium concentration was less than 7% of the inlet simulant feed concentration. Note that in Cycle 2, Column 2, the lead column, was more effective at removing cesium from the simulant, than Column 1, the lead column in Cycle 1. This is consistent with the measurement that Column 2 had more mass of resin than Column 1. The data in Fig. 63 were used to calculate the percentage of cesium removed by the lead column, as listed in Table 47. Piecewise linear fits were passed through the data for each cycle and the area under the fit was computed. Uncertainty was calculated in the following way. Each point plotted in Fig. 63 has error bars. However, the magnitude of the uncertainty associated with the fit was assumed to be less by a factor of the square root on the number of points used to make the fit.

Figure 64 shows the cesium concentration exiting the lag column. Considering the uncertainty in the analytical measurement of cesium, all of the measurements may really be zero. However, the measurement uncertainty does not allow determination of whether the RPP-WTP criterion, i.e., cesium concentration less than 5.2 µg/L from the lag column, is satisfied. The concentration measured for one sample, the sample collected at

175 BV for Cycle 4 was not plotted because it was so much higher than for the other samples. This sample was analyzed twice for cesium concentration and the results were 1190 µg/L and 1630 µg/L.

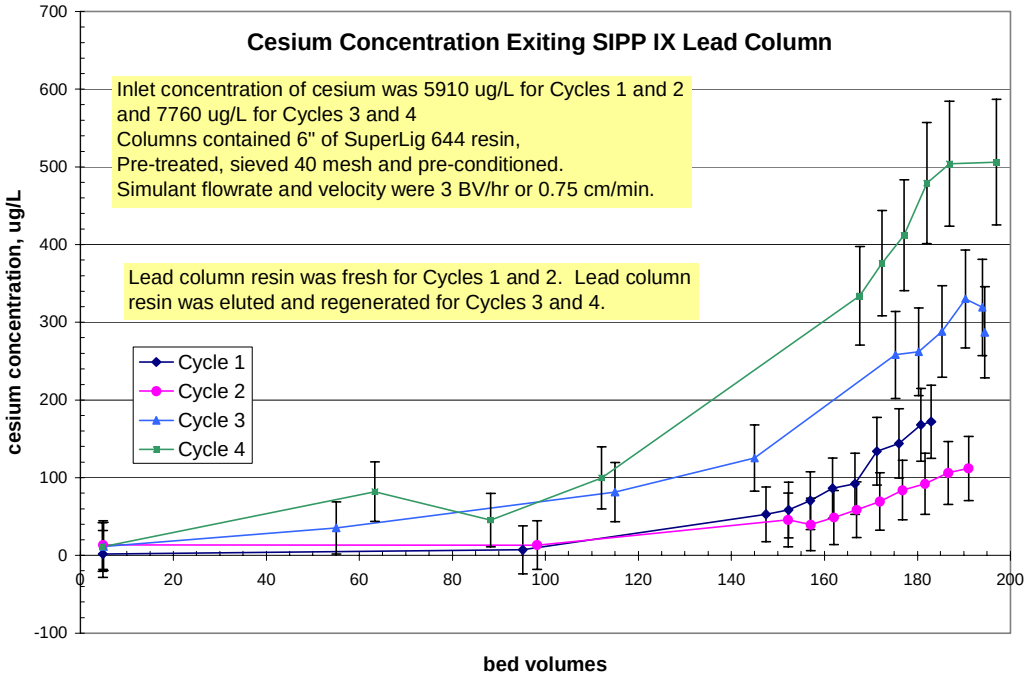


Figure 63. Cesium Concentration in Simulant Exiting Lead Column

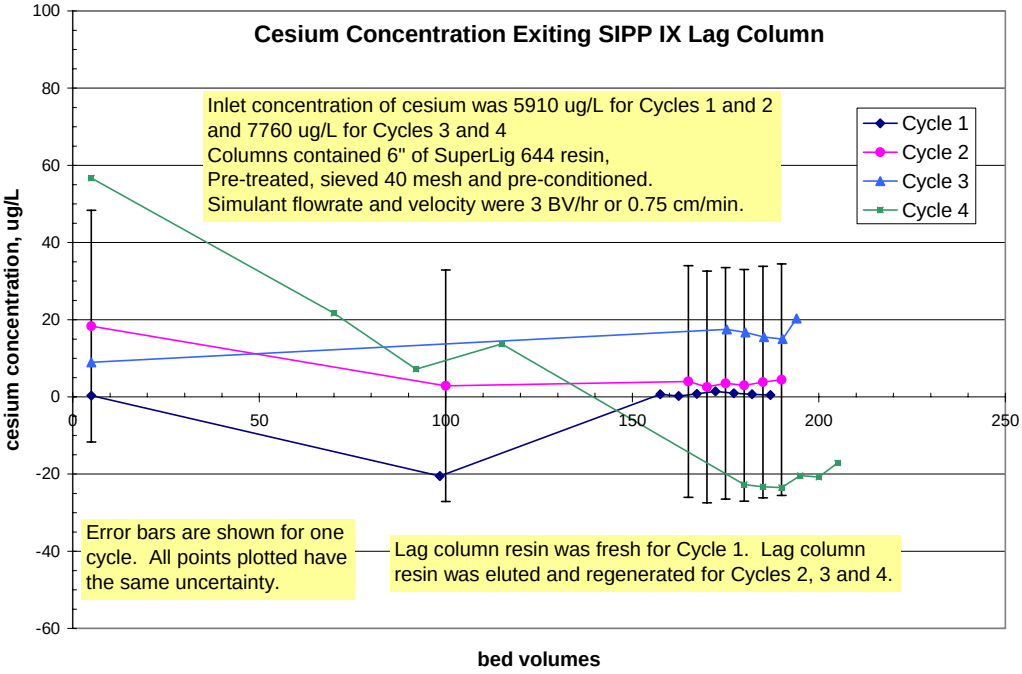


Figure 64. Cesium Concentration Exiting Lag Column

2.8.5.3.3 Elutions of Resin Beds

In all four cycles the lead column was eluted with 0.5 M nitric acid followed by regeneration with 0.25 M NaOH. For Cycles 1, 3 and 4 samples were collected of the eluate at regular intervals. Cesium concentrations are plotted in Figs. 65, 66, and 67 as a function of cumulative cesium removed.

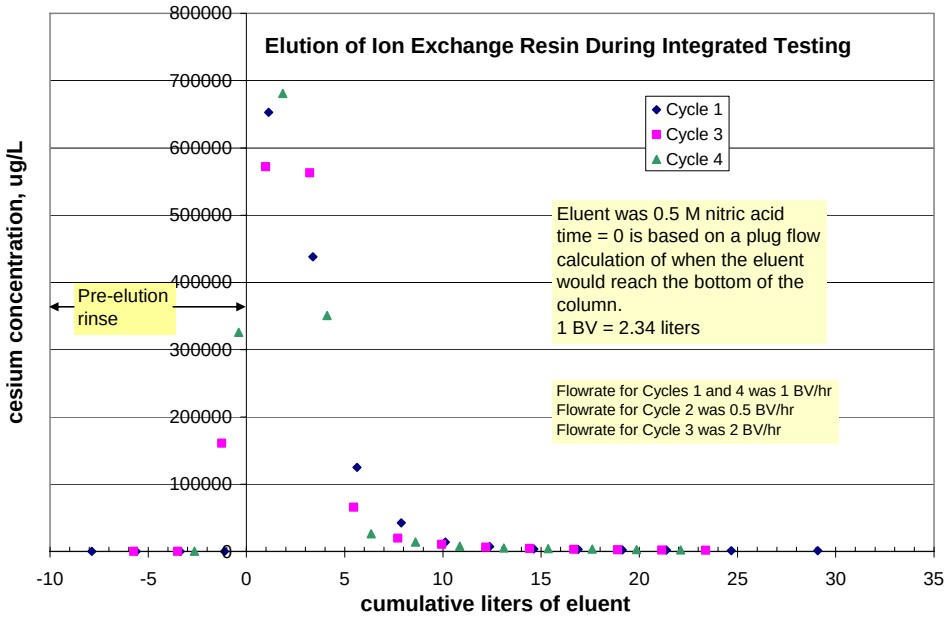


Figure 65. Elution Plot, Linear

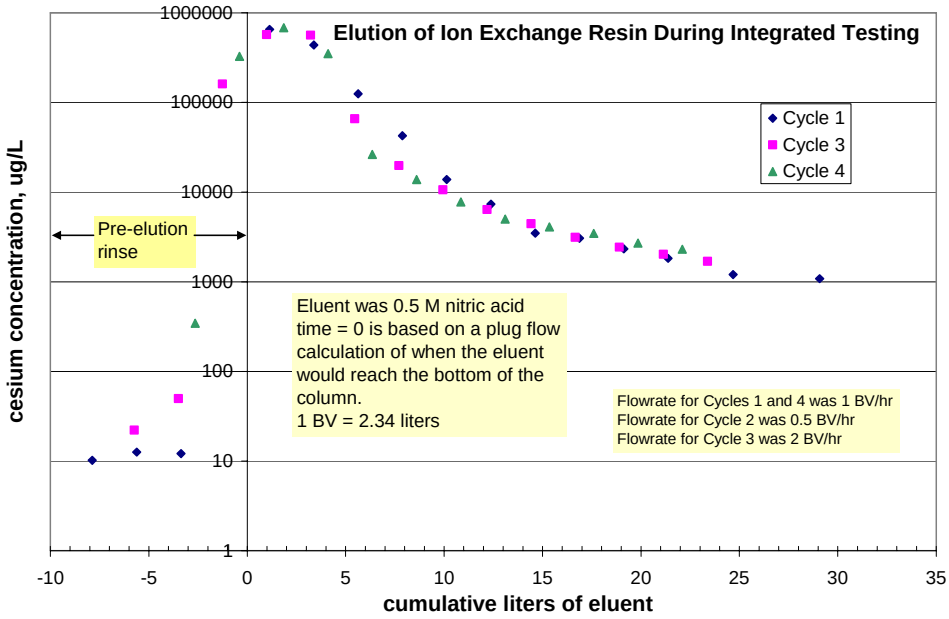


Figure 66. Elution Plot, Logarithmic

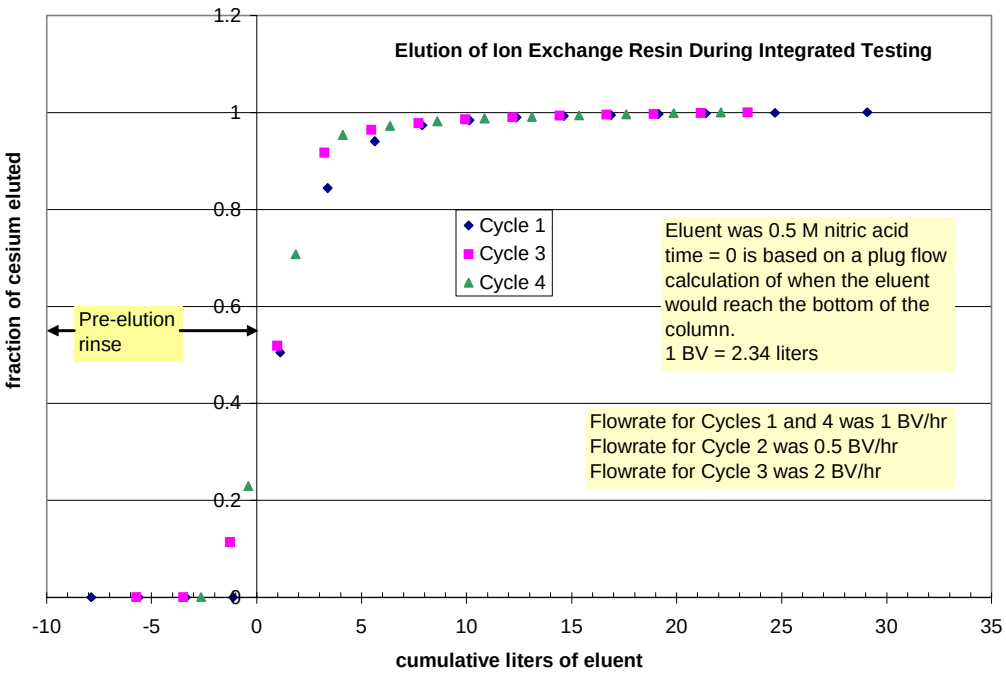


Figure 67. Cumulative Fraction of Cesium Removed during Elution

Zero volume refers to the time when a plug flow calculation indicated that acid first reached the outlet of the column. There is no obvious difference in the elution profiles for Cycles 1, 3 and 4. Note that the concentration of cesium peaks when the front of acid reaches the outlet of the column. Figure 67 shows that more than 94% of the total cesium eluted is removed by the first 6 BV of eluent.

2.8.5.3.4 Cesium Mass Balance

In the CIX unit operation, cesium enters the two CIX columns dissolved in simulant and leaves the columns in simulant at a much lower concentration and also in eluate and other solutions. The cesium mass entering should equal the cesium mass leaving plus any accumulation, which was small. That is, the accumulation of cesium inventory change on the resin was assumed to be small. To perform this calculation, the LAW feed and receipt tanks were calibrated for volume and the results are discussed below. For some solutions the volume was calculated based on the average calibrated flow rate and the elapsed time. Mass balances are listed in Tables 51 and 52. For all four cycles the cesium mass in agrees with the cesium mass out to within measurement uncertainty, which is expressed for 95% confidence limits. As previously mentioned in Section 2.8.5.3.1, the uncertainty of measuring cesium concentration was ±(10% of reading + 30 µg/L). The uncertainty in measuring volume was ±3 liters for simulant and ±1 liter for the other solutions. The mass of cesium in a solution is equal to the cesium concentration multiplied by the solution volume. The cesium mass out was the sum of the masses for the various solutions. The uncertainty on the cesium mass out was computed as the root sum square of the uncertainties for the various solutions.

As a consistency check on the outlet cesium, the total cesium in the composite eluate and the composite pre-elution rinse was compared with the integral of the data plotted in

Fig. 65. In principal, the integral should give the same mass as the composite samples. The integral was calculated numerically using three methods, the Trapezoidal Rule and two variations of Simpson's Rule. The Trapezoidal Rule approximates the integral as a series of trapezoids. The area of each trapezoid is computed as the length of the base of the trapezoid multiplied by the average height. Simpson's Rule approximates segments of the data as parabolas. Simpson's Rule was applied two different ways. Recall that the equation for Simpson's Rule is:

$$\int (x)dx = h/3\ (f(x_0) + 4f(x_1) + 2f(x_2) + 4f(x_3) + \ \ldots. + 4f(x_{n-1}) + (f(x_n))$$

where h is the difference in x between adjacent points. First, Simpson's Rule was applied to the data in Fig. 65. Then, two additional points with concentration equal to zero were added to the beginning and end of the data set. Then Simpson's Rule was applied again. The two applications of Simpson's Rule give different results depending on whether the data point with the largest concentration is multiplied by two or four.

Table 51. Mass Balances for Cycles 1 and 2

Cycle 1 Solution	volume liters	cesium conc., mg/L	ADS Sample #	cesium mass, mg	mass uncertainty, mg		Cycle 2 Solution	volume liters	cesium conc., mg/L	ADS Sample #	cesium mass, mg	mass uncertainty, mg
fresh simulant in	428	5.91	7820	2529	284		fresh simulant in	437	5.91	7820	2583	289
							Cycle 1 spent	9.4	0.12	8198	1	0
							total Cs mass in				2584	289
simulant out (1)	408	0.0213	9494	9	13		simulant out (1)	427	0.00897	9495	4	13
final simulant (2)	9.4	0.12	8198	1	1		final simulant (2)	20	0.102	8358	2	1
0.1 M NaOH	12.2	0.344	8509	4	1		0.1 M NaOH	44.5	50.6	8359	2252	277
pre-elution rinse	0.7	70.8	8497	50	76		pre-elution rinse	0	0	8515	0	0
eluate	31.5	87.2	8200	2747	363		eluate	6.8	2.47	8360	17	4
post-elution rinse	7.5	0.887	8201	7	2		post-elution rinse	5.2	0	8361	0	0
regenerant	4	0.0336	8510	0	0		regenerant	11	0.0109	8362	0	0
total Cs out				2817	371		total Cs out				2274	277

(1) Simulant out refers to the amount of treated simulant during each cycle and does not include final simulant.
(2) Final simulant for Cycles 1 and 3, refers to the simulant displaced from the Lead column by caustic to begin the regeneration process. Final simulant, for Cycles 2 and 4 also includes the simulant displaced from the Lag column.

Table 52. Mass Balances for Cycles 3 and 4

Cycle 3 solution	volume liters	cesium conc., mg/L	ADS Sample #	cesium mass, mg	mass uncertainty, mg		Cycle 4 solution	volume liters	cesium conc., mg/L	ADS Sample #	cesium mass, mg	mass uncertainty, mg
fresh simulant in	453	7.76	9229	3515	388		fresh simulant in	453	7.76	9229	3515	388
Cycle 2 spent simulant (1)							Cycle 3 Spent simulant	9	0.363	11124	3	0
							total Cs mass in				3519	388
simulant out (2)	434	0.0237	9496	10	14		simulant out (2)	442	0	9497	0	13
final simulant (3)	9.4	0.363	11124	3	1		final simulant (3)	19.3	0	11130	0	1
0.1 M NaOH	7.7	41.3	11125	318	73		0.1 M NaOH	8.8	0	11131	0	0
pre-elution rinse	7.1	39.8	11126	283	68		pre-elution rinse	7.3	16.6	11132	121	29
eluate	31.3	87.3	11127	2732	361		eluate	33.4	91.9	11133	3069	400
post-elution rinse	7.8	0.694	11128	5	1		post-elution rinse	7.7	0.456	11134	4	1
regenerant	13.8	2.23	11129	31	6		regenerant	13.2	0.352	11135	5	1
Total Cs out				3383	375		Total Cs out				3199	401

(1) The small volume of Cycle 2 spent simulant obtained during Cycle 2 regeneration is included in the fresh simulant. There was no separate concentration measurement made. That is, the 3515 mg shown as the mass of Cs in the fresh simulant also includes the few milligrams of Cs from the Cycle 2 spent simulant

(2) Simulant out refers to the amount of treated simulant during each cycle and does not include final simulant.

(3) Final simulant for Cycles 1 and 3, refers to the simulant displaced from the Lead column by caustic to begin the regeneration process. Final simulant, for Cycles 2 and 4 also includes the simulant displaced from the Lag column.

The results for cesium mass in the eluate are shown in Table 53. No results are listed for Cycle 2 because no periodic eluate samples were collected during Cycle 2. The masses of cesium calculated using numerical integration agree reasonably well with the masses determined using composite samples.

Table 53. Mass of Eluate Cesium as a function of Integration Method

Cycle number	Trapezoidal Rule, mg Cs	Simpson's Rule a, mg Cs	Simpson's Rule b, mg Cs	Cs from composite, mg
1	2911	2679	3136	2797
3	3164	3090	3236	3015
4	3203	3188	3217	3190

2.8.6 Pilot CIX Conclusions (Author – Steimke)

Pilot CIX operation was not part of Campaign IV testing but for completeness in reporting the following conclusions were extracted from the Interim Reports of Campaign II (Duignan et al., 2004b or Appendix I-2) and Campaign III (Duignan et at., 2004c). Also reported are measurements made after the Campaign III report was issued.

Post-Campaign III Conclusions

- A post-test measurement of the dry mass of the SuperLig®644 resin found a ratio of resin in sodium form to resin in hydrogen form to be 1.19±0.03 and 1.22±0.02 for Columns 1 and 2, respectively.
- A pre-test particle-size distribution of the resin was found to be 78 wt% (Mesh > 30), 20 wt% (30 ≤ Mesh ≤ 40), and 2 wt% (Mesh < 40). A post-test PSD on the resin found no change in the Column 2 contents, indicating that no degradation of the resin occurred. The resin in Column 1 was nominally larger, but the uncertainty bars intersect, so all three samples of resin may actually have had the same size distribution. There was no evidence of particle degradation.

Campaign III

- Pressure drops for the four cycles were low and the resin beds permeabilities were approximately the same as were measured for the 24-Inch Column Test with fresh resin (Fowley et al, 2004).
- The pressure drop across the columns during the flow of simulant generally increased with each cycle of the four cycles of operation.
- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of simulated waste were treated. In fact, in the worst case, Cycle 4,

even after 190 BV of treated waste, the lead column exit cesium concentration was less than 7% of the feed waste.

- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical difficulty of measuring very low cesium concentrations in five molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of simulated waste were treated. This limitation was acknowledged before the start of testing.
- The fraction of the cesium in the simulant that was removed by the lead column generally decreased over the four cycles of testing.
- The masses of cesium in and out of the resin beds for all four cycles balanced to within measurement uncertainty.
- More than 94% of the total cesium eluted is removed by the first 6 BV of eluent.

Campaign II

- Pressure drops throughout the two cycles were low and the resin beds permeabilities were about the same as were measured for the 24-inch Test with fresh resin (Fowley et al, 2004).
- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of waste was treated. In fact, in the worst case, Cycle 1, even after 180 BV of treated waste the lead column exit cesium concentration was only 3% of the feed waste.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical ability to measure very low cesium concentrations in five molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of waste was treated.
- The masses of cesium in and out of the resin beds for Cycles 1 and 2 balanced to within measurement uncertainty.
- During cesium elution 97% of the Cs was removed during the first 3.4 BV.

2.9 PILOT TREATED LAW EVAPORATOR (Authors – Adamson, Williams & Zamecnik)

The Treated LAW Evaporator Process, or TLP, is the last separation technology unit operation in the RPP-WTP Pretreatment Facility that a waste will see on start up. With respect to SIPP, it was be the last unit operation in line because it evaporated the treated LAW product that comes from the pilot CIX unit operation. This treated LAW product is mixed with two recycle streams to produce a feed stream for the TLP unit operation.

This section will not only highlight the pilot TLP tests carried out as part of Campaign III testing, but also includes Campaign II data for comparison. An abridged form of the raw data collected during both campaigns is given in Appendix H4. Campaign IV only dealt with FEP and UFP operations in order to test the new GKN filter, and therefore the pilot TLP was not used. However, it is useful to compare the two pilot TLP operations that were previously done (Duignan et al., 2004b or Appendix I-2 and 2004c) as part of this final report to understand the overall SIPP operation. The process started with the preparation of the TLP feed product in a predetermined fashion, see Table 4. This explanation of the feed stream preparation will be followed by a short description on how feed preparation was handled just before TLP operation and then how the waste stream was handled during and after its concentration. The following sections will discuss the equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made.

2.9.1 Chemical Description of the Pilot TLP Feed Stream (Author – Zamecnik)

As shown in Table 4, the TLP evaporator feed consisted of the Cesium Ion Exchange product (Treated LAW), the LAW SBS condensate supplied by VSL, and a small amount of 0.25 M NaOH CIX regeneration solution, which is the displaced solution obtained when a newly regenerated CIX column is put into service. The compositions of the Untreated LAW CIX feed[†] and the LAW SBS Condensate, are given in Table 52, which were used in Campaign III. The CIX regeneration solution consisted of 20.5L of actual regeneration solution plus 17.3L of simulated regeneration solution; both were essentially 0.25M NaOH. The calculated and measured TLP Feed compositions are also shown in Table 54. The values in this table show that the measured TLP feed composition was slightly more dilute than expected from the calculation. The reason for this dilution is the small amount of 0.25 M NaOH CIX regeneration solution that was included in the treated LAW from the CIX.

[†] Of course, the TLP feed was prepared with Treated LAW CIX feed (i.e., after being processed through the CIX), however, Table 54 shows Untreated LAW feed because only the Untreated feed samples were measured for the suite of analytes shown in the table. To minimize cost to the project, the Treated LAW feed was assumed to be chemically the same as the Untreated feed except of the concentration of cesium. Cesium was only measured in the Treated LAW CIX feed.

Table 54. Measured Composition of Campaign III TLP Feeds

All values mg/kg unless otherwise noted	Untreated CIX LAW Feed*	LAW SBS Condensate	TLP Feed Calculated	TLP Feed Measured
Total Solids (wt%)	28.29	0.26	16.32	16.23 to 16.24
Undissolved Solids (wt%)	0.00	0.17	0.07	0.07 to 0.15
Supernatant Solids (wt%)	28.29	0.09	16.26	16.10 to 16.18
Density (kg/L)	1.248	1.002	1.130	1.134
Ag	0.76	<3.9	0.44	<50
Al	5136	7.53	2947	2900
B	85.7	132	103	
Ba	<1.3	<0.26	0	<2.0
Ca	<3.6	<0.39	0	<6.6
Cd	<0.04	<0.26	0	<2.4
Ce	<1.0	<10	0	<128
Co	<0.11	<1.0	0	<7.3
Cr	139	5.26	81.6	82.8
Cu	<0.03	<0.39	0	<8.3
Fe	1.36	11.7	5.55	15.0
K	16346	123	9420	
La	0.85	<1.3	0.49	<116
Li	1.72	11.5	5.68	1.00
Mg	<0.24	3.56	1.45	<14
Mn	<0.02	<0.12	0	<1.5
Mo	8.65	<1.3	4.96	<17
Na	88141	587	50874	47684
Nd	<1.5	<12	0	<43
Ni	0.25	0.34	0.28	<10
P	554	<10	317	371
Pb	<0.36	<10	0	<114
Re		21.8	8.88	
S	905	78.0	551	502
Si	42.1	21.8	33.0	0
Sr	0.16	<0.07	0.09	8.00
Ti	0.10	1.15	0.53	<23
Zn	2.37	1.29	1.88	<61
Zr	1.43	1.29	1.35	<8.0
bromide	<80	<86	0	<61
chloride	1082	626	875	795
fluoride	44.9	146	85.1	56.0
formate	1066	32.9	624	521
nitrate	72917	135	41852	37200
nitrite	23077	2575	14278	12300
oxalate	658	<86	377	374
phosphate	1963	<86	1125	1220
sulfate	2853	233	1730	1570
ammonium	<80	990	827	785

*Only the Untreated CIX LAW feed was analyzed for the tabular analytes, but it was assumed to be equivalent to the Treated CIX feed except for a higher concentration of Cs.

2.9.2 Simulant Handling (Author – Williams)

To make feed for the pilot-scale TLP, in each campaign approximately 1,000 kg of treated simulant processed through the CIX were mixed with approximately 800 kg of LAW SBS Quencher from VSL, a recycle stream. Since RPP-WTP TLP feed will also recycle a portion of the 0.25 M NaOH Regeneration Solution, which is displaced from a regenerated CIX column after it is put into service, then approximately 40 kg of this solution was used for the pilot work. These three components make up the TLP feed.

Once the initial batch of feed was in the evaporator an amount of DOW Corning Q2-3183A Antifoam was added in order to have a concentration of 1500 ppm. No significant foam was observed in any of the tests but the antifoam was specifically added to mimic the intended plant operation. Despite having fewer recycle streams, the total volume of the TLP feed was larger than that for the FEP, in fact it was approximately 3.5 times larger. This meant that a steady-state evaporated concentration would be attained before exhausting the feed. Once the target slurry density was realized, then the TLP Bottoms would have to be removed while more feed was being sent into the TLP at a rate that would keep the antifoam concentration at the target level of 1500 ppm. Of course, removing concentrated slurry meant removing its antifoam too. Therefore, antifoam had to be reintroduced periodically to maintain its concentration constant. Periodically, a measured amount of antifoam was added to maintain its concentration.

Between 700 and 800 kg of TLP Evaporator Bottoms was produced in each campaign and shipped to VSL for LAW vitrification. After each campaign the condensate collected from both the TLP and FEP operations were combined as RLD. This condensate was used to produce wash and caustic solutions for the other unit operations, as it will be in the WTP.

2.9.3 Pilot TLP Equipment (Author – Adamson)

One of the requirements for SIPP as per the Test Specification (Longwell, 2003) was to utilize and modify existing equipment in the Engineering Development Laboratory of SRNL. To that end only one pilot-scale evaporator was constructed to be used for both FEP and Treated LAW Process (TLP) testing, because the design of those RPP-WTP Pretreatment Facility evaporators is the same. The task plan for those two evaporators for SIPP did not require simultaneous operation, therefore, once one unit operation test completed the test rig could be made ready for the subsequent test. As such, the description of the pilot-scale TLP is the same as for the pilot-scale FEP and therefore will not be repeated here. Please refer to equipment description for the FEP in section 2.6.3.

2.9.4 Pilot TLP Operation (Author – Adamson)

Prior to each of the TLP evaporation campaign, the evaporator system was cleaned, rinsed and inspected. Clean water was then added to the evaporator pot and the system was operated for approximately two hours. The spent water was visually clear with a pH of 7.

The TLP evaporator was operated using Work Instructions, I-EDL-132 "SIPP Treated LAW Process (TLP) Evaporation Test." Manually recorded information was recorded in the TLP unit operation's notebook (Adamson, 2004).

Each of the pilot TLP operations took approximately 11 hours to concentrate the feed to the target density of 1.395 kg/L at 20° C. The total volume of the TLP concentrated product from each of the campaigns was more than 500 liters (>130 gal).

The average condensate boil off rate for the TLP campaigns was greater than 1.58 L/min (>0.42 gpm). The design boil off target of the RPP Pilot-scale Evaporator system was 1.5 L/min (0.40 gpm).

Evaporation of the TLP simulant feed occurred at approximately 57°C under -13 psig vacuum (1.5 psia). The atmospheric pressure was approximately 14.5 psia during the campaign. However, due to pulling off the TLP concentrate and adding the cooler simulant feed, there were small fluctuations in the evaporator pot temperature and pressure as depicted in Figs. 68 and 69 for Campaigns II and III.

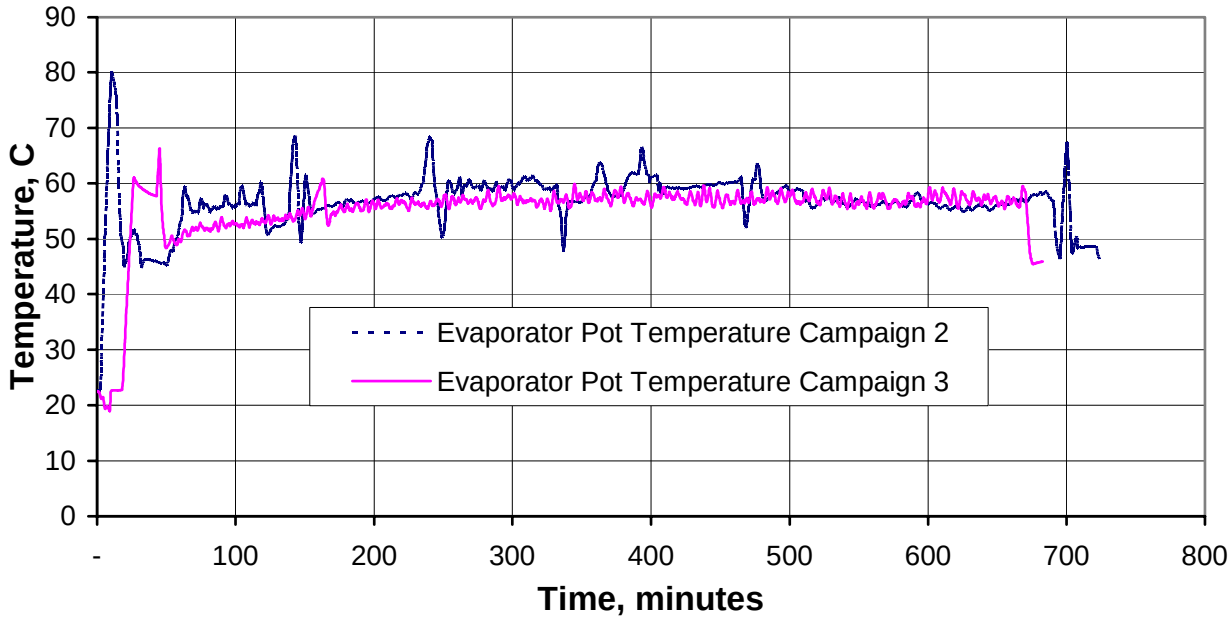


Figure 68. TLP Evaporator Pot Temperature during Campaigns II and III

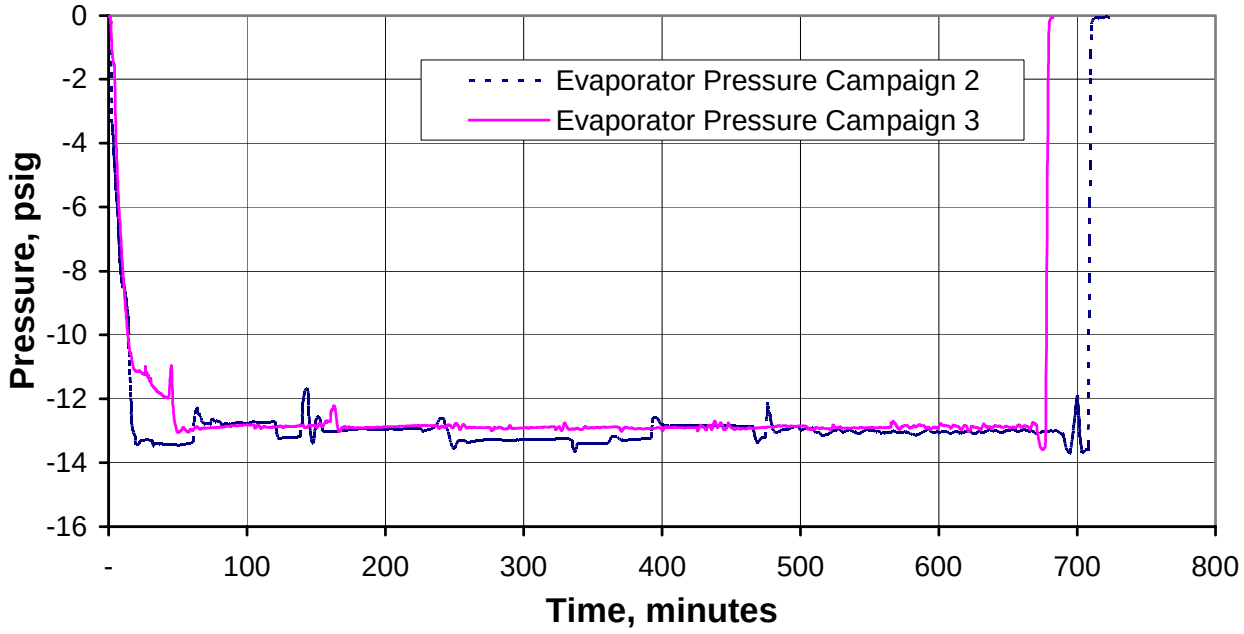


Figure 69. TLP Evaporator Pot Pressure during Campaigns II and III

For both campaigns the TLP simulant was re-circulated through the reboiler and evaporator system at approximately 90 gpm. Since the flow rate was controlled manually there were some variations during each campaign, but the fluctuations were maintained less than ±10 gpm. However, these fluctuations were not expected to affect the evaporation rate. As the simulant became more concentrated, the pump speed controller had to be periodically adjusted. Figure 70 depicts those flow rates. The recirculation of the simulant was continuous for the duration of the campaigns. Also recirculation continued when removing the concentrate from the evaporator system.

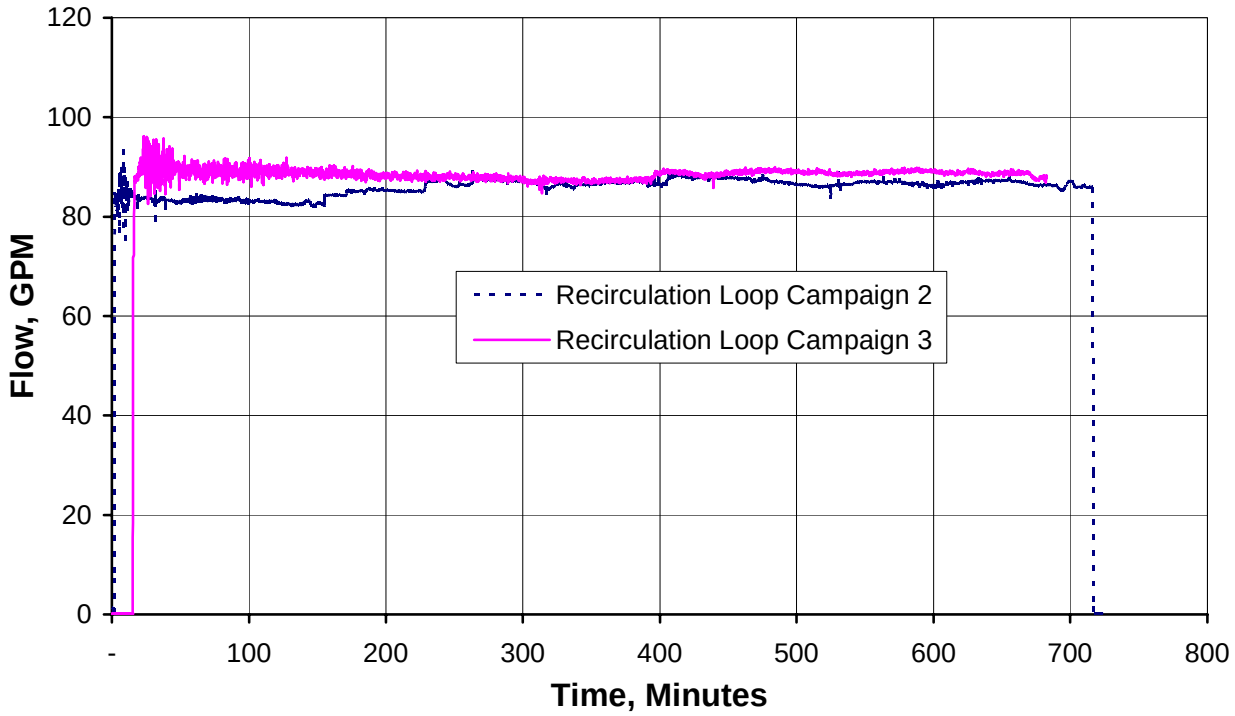


Figure 70. TLP Simulant Recirculation during Campaigns II and III

In each of the two TLP campaigns (i.e., II and III) a total of approximately 900 grams of Q2-antifoam was added to the simulant during the pilot TLP evaporation. This generally consisted of initially adding 309 grams of Q2-antifoam and then, as concentrate was removed additional Q2-antifoam was added, to maintain the concentration close to 1500 ppm. That is, the experiment starts at 1500 ppm, with a fixed evaporator volume of approximately 150 liters, and stays that way until the feed, within the evaporator, reached the target density of 1.365 kg/L at 50°C. In this phase, the feed rate matched the evaporation rate. Once at the target density, the batch mode operation began with slowly allowing feed to enter the evaporator slightly faster than the evaporation rate to maintain the density while allowing the evaporator volume. However, the added extra feed caused the antifoam concentration to drop to approximately 1000 ppm. This was not seen as a problem because from previous work (Qureshi et al., 2004) any reduction in foaming and/or a disengagement region occurred for concentrations of less than 300 ppm of antifoam. Higher concentrations did not result in further reductions in foaming for the simulants under study. However, once at density some of the TLP Bottoms had to be removed to allow more feed to be processed. For continuous operation approximately 95 liters of Bottoms are removed to begin the next batch. This process repeats until all the feed is consumed. However, a further drop in antifoam concentration was not desired, therefore enough antifoam is added so that the next 95 liters of concentrated feed would also have a 1500 ppm concentration. Figure 71 shows the fluctuations in antifoam concentrations and for both campaigns very little foaming was witnessed.

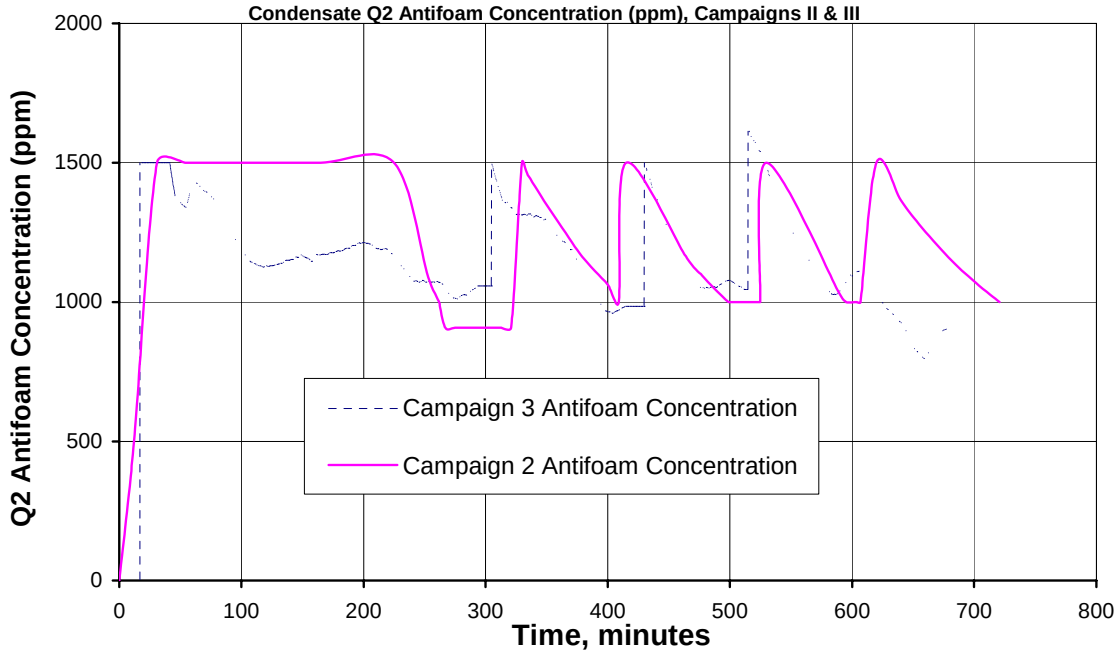


Figure 71. Pilot TLP antifoam concentration throughout Campaigns II and III testing

During testing samples from primary condensate, secondary condensate, and evaporator Bottoms were pulled every 200 liters of simulant feed pumped into the evaporator. Other samples were pulled more often to check the density of the evaporator Bottoms. The density was checked using a density meter (Anton Paar, DMA 4500) and measurements were recorded in the lab notebook (Adamson, 2004).

For both campaigns the feed simulant was concentrated down to three drums. Table 53 gives the volume, density and weight of the TLP simulant and the three drums of concentrate.

Table 55. TLP Simulant and Concentrate

TLP Simulant	Volume	Density (20°C)	Weight
Campaign II TLP Feed Simulant	1,639 L (450.8 gal)	1.14 kg/L	1,875 kg
Drum # 1 concentrate	155.4 L (41.1 gal)	1.375 kg/L	211.4 kg
Drum # 2 concentrate	154.3 L (40.8 gal)	1.385 kg/*	211.4 kg
Drum # 3 concentrate	213.4 L (56.4 gal)	1.375 kg/L	290.2 kg
Campaign III TLP Feed Simulant	1,707 L (450.8 gal)	1.135 kg/L	1,937 kg
Drum # 1 concentrate	194.1 L (51.3 gal)	1.362 kg/L	264.4 kg
Drum # 2 concentrate	193.3 L (51.0 gal)	1.366 kg/*	264.0 kg
Drum # 3 concentrate	180.1L (47.7 gal)	1.370 kg/L	247.4 kg

* Temperature at 20°C

Both campaigns produced over 1,000 liters of condensate (water) from the simulant via evaporation to obtain more than 500 liters of concentrate, as seen in Table 53. The

concentrate was transported to the Vitreous State Laboratory for further testing/ processing for the RPP Project.

2.9.5 Pilot TLP Discussion of Results (Author – Adamson)

2.9.5.1 TLP Experimental Observations

The SIPP TLP evaporation Campaign II was conducted during May 2004 and Campaign III during July 2004 in SRNL's Engineering Development Laboratory. Both evaporation tests were completed without any glitch or equipment failure. However, the Demister® instrumentation had to be purged during the campaigns due to moisture in the lines causing inaccurate readings.

As shown in Fig. 72, a region of gas/liquid disengagement of about one foot in height was witnessed throughout TLP campaigns. This disengagement region may have contained some foam or froth but most of the height was simply liquid entrainment, since upon shutdown no stable foam was evident. As previous stated antifoam was added but visual inspection would suggest that was not required to prevent foaming.

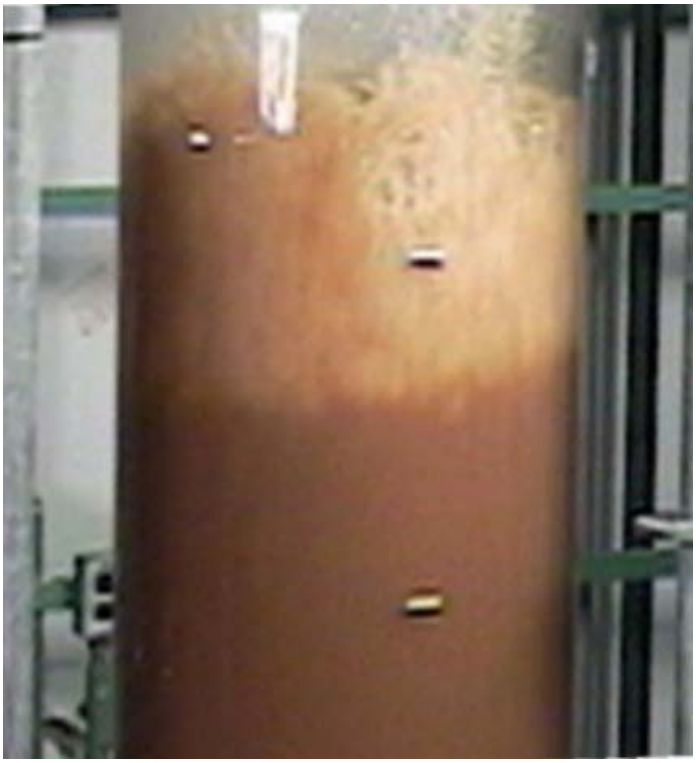


Figure 72. TLP Simulant Boiling in Clear Acrylic Section of Evaporator

2.9.5.2 TLP Waste Products (Author – Zamecnik)

Table 56 shows the feed and Bottoms concentrate compositions for both Campaigns II and III. The Campaign III concentrate composition was calculated by material balance and is compared to the material balance from Campaign II in the adjoining columns of the table. The Campaign II material balance results in a very good agreement with the concentrate composition, so the Campaign III material balance is also expected to be accurate. (Note that the Campaign II concentrate analysis from the microwave dissolution is not shown because these values have been determined to be suspect.) The Campaign III calculated concentrate is lower in Na and Al, slightly higher in K, and about the same in most of the other significant cations and anions. Therefore, the main difference in Campaign III was a lower concentration of Na and Al, which would be present as Na^+ $Al(OH)_4^-$. The sodium concentration in Campaign III was lower than in Campaign II primarily because the final concentrate density was lower in Campaign III. However, the aluminum would have been lower in Campaign III than Campaign II, in any case, because the feed concentration for Campaign III was lower to begin with.

Two measured values for the solids content of the Campaign III feed and concentrate (Bottoms) are shown. Based on the average feed UDS value, the expected concentrate UDS is about 0.28 wt%, which is similar to what was measured in Campaign II. The measured Campaign III values were the same as the feed values. Based on the Campaign II results, the concentrate UDS is expected to be higher. It is important to note that the analytical measurements of undissolved solids concentration are quantitatively inconclusive below 1 wt% UDS. Since the measurement uncertainty of the analytical method for UDS concentrations is ±0.22 wt% UDS, then all the displayed results may be the same. Further, differences shown where there are two values in one column (which are two separate samples) may have been caused by sampling problems. Because of the uncertainties, the Bottoms UDS concentrations could be the same as the feed, or if some of the solids dissolved, but visually the concentrate appeared to have more undissolved solids.

Table 56. Comparison of Campaigns II and III TLP Compositions

	Feed		Bottoms			
	Campaign III	**Campaign II**	**Campaign III**		**Campaign II**	
	Measured*	Measured	Measured*	Calculated	Measured	Calculated
Total Solids (wt%±0.11)	16.23 16.24	16.24	40.06 40.04	40.42	41.30	40.54
Undissolved Solids (wt%±0.22)	0.07 0.15	0.09	0.15 0.07	0.28	0.31	0.23
Supernatant Solids (wt%±0.13)	16.10 16.18	16.16	39.97 40.00	40.25	41.12	40.41
Density (kg/L)	1.134	1.136	1.368	1.368	1.384	
Volume (L)	1706	1639		568	523	
Sample Preparation	Dissolved Total Sample**	Supernate		Calculated Total Sample	Supernate	Calculated Total Sample
Concentrations in mg/kg: Ag	<50	<0.5		<124	<0.43	<1.4
Al	2900	3319		7220	8309	8537
B		80.7			198	208
Ba	<2.0	<0.04		<5.0	<0.03	<0.10
Ca	<6.6	1.95		<16	2.57	5.02
Cd	<2.4	<0.04		<6.0	<0.03	<0.09
Ce	<128	<15		<319	<12	<39
Co	<7.3	<0.08		<18	<0.06	<0.19
Cr	82.8	79.0		206	192	203
Cu	<8.3	0.143		<21	0.38	0.37
Fe	21.0	0.492		52.3	1.00	1.26
K	9480	8389		23603	23916	21579
La	<116	<0.33		<289	<0.27	<0.85
Li	1.0	4.09		2.5	9.37	10.5
Mg	<14	<0.02		<35	<0.02	<0.06
Mn	<1.5	<0.03		<3.7	<0.02	<0.08
Mo	<17	4.79		<41	11.1	12.3
Na	47684	51937		118722	125723	133596
Na (AA)		54930			145954	141295
Na (average)	47684	53433		118722	135838	137445
Na (average in M)	2.4	2.6		7.1	8.2	8.3
Nd	<43	<0.71		<107	<0.59	<1.8
Ni	<10	0.24		<26	0.56	0.62
P	371	355		924	574	912
Pb	<114	7.13		<284	17.3	18
S	502	587		1250	1377	1511
Si	0	36.7		0	113	94
Sr	8.0	0.01		19.92	0.06	0.04
Ti	<23	<0.10		<58	0.25	<0.26
Zn	<61	11.1		<152	27.3	29
Zr	<8.0	<0.14		<20	0.749	<0.36
bromide	<61	<88		<152	<72	<226
chloride	795	663		1979	1821	1705
fluoride	56.0	61.6		139	28.2	159
formate	521	551		1297	1171	1417
nitrate	37200	37500		92619	90318	96461
nitrite	12300	11884		30624	28974	30569
oxalate	374	342		931	831	881
phosphate	1220	1136		3038	1741	2921
sulfate	1570	1514		3909	3699	3895
ammonium	2730	879	<40		<72	

* Solids measurements are duplicate values ** Dissolution by either microwave acid or sodium peroxide fusion HCl uptake

2.9.5.3 TLP Final Description of Dow Corning Antifoam Q2-3183 A (Author – Zamecnik)

The behavior of the Dow Corning Q2-3183A antifoam was described in the Campaign II Interim Report (Duignan et al., 2004b or Appendix I-2), but the analytical results reported were tentative due to questionable results. Since that time, some samples were reanalyzed and several additional samples were also analyzed. All analyses were performed by Dow Corning Analytical Solutions.

In their analytical reports, Dow Corning stated that the samples were not homogeneous, so removal of representative sub-samples for analysis was questionable. This same difficulty in sampling would also apply to taking the actual samples from the SIPP process streams. Small scale evaporator samples were so inhomogeneous that most of the antifoam could be separated from the Bottoms concentrate by skimming the surface of the slurry. The SIPP samples were not nearly as inhomogeneous, but still were difficult to sample.

Dow Corning extracted the samples with n-hexane to remove the polydimethylsiloxane (PDMS) portion of the antifoam. The hexane extract was then analyzed by Fourier Transform Infrared Spectroscopy (FTIR) to measure the signal from the methyl groups at 1260 cm^{-1}. Note that this quantitative analysis technique for PDMS has not been extensively tested since Dow Corning has not apparently had any need to perform such analyses in the past. Their analyses did not include quantification of the other components of the antifoam, such as the polyol fractions. The Dow Corning representative stated that the PDMS portion constituted about 40 wt% of the total antifoam mass, so the total mass of antifoam in a sample would be about 2.5 times (1/0.4) the measured PDMS concentration. Since the non-PDMS portions of the antifoam were not actually quantified, there are no data to indicate whether these other portions remained with the PDMS.

Dow Corning performed several spike tests with supplied antifoam-free samples. These samples were spiked with known amounts of antifoam and then analyzed. The results of these spike tests are shown in Table 57. The recoveries were from 73-84%, so the actual PDMS concentrations from process samples would be expected to be 15-25% higher than measured.

Table 57. Antifoam Spike Test Results

Process Sample Spiked	Spike Amount (Siloxane) (mg/kg)	Measured Siloxane (mg/kg)	Recovery (%)
Wash Permeate	4800	3900	81
IX Feed	4800	3500	73
FEP Feed	5000	4200	84
Washed Slurry	5100	3800	75

Table 58 shows the concentrations of antifoam measured in the different process streams and the total masses actually added and calculated from the analytical data. These data show that the PDMS portion of the antifoam was retained in the FEP and TLP evaporator Bottoms and with the slurry in the filtration processes. However, quantitative measurement of the amount of antifoam was poor, with most samples showing significantly more antifoam than actually added (compare Measured Antifoam to Actual Antifoam Added). These results indicate that either the samples were either biased high in antifoam or the analytical technique on the real samples was not quantitatively reliable. The results by date for the FEP at beginning samples indicate that the ability to measure the PDMS in the samples varied over time for some reason. The replicate results for the other samples were more consistent, although incorrect. The apparent high bias may be due to non-uniform dispersal of the antifoam in the system. It appears that the samples were enriched in the antifoam. Observation of small evaporations with this antifoam show that the PDMS will float on top of the aqueous phase if not vigorously stirred. Such segregation may be the cause for the observed SIPP results.

Based on the high boiling point of polyols, we would not expect them to be found in the evaporator condensate streams. However, conclusions about the fate of these other fractions in the filtration process cannot be made with the available data, so it is not known if the non-PDMS portions of the antifoam remained with the concentrated slurry or were separated into the IX feed or wash permeate. Also, no conclusions about antifoam degradation can be made from these data.

Table 58. Antifoam Concentrations in Process Samples

PROCESS STREAM	Date Analyzed (2004)	Measured PDMS (1) Concentration (mg/kg)	Average Measured PDMS Concentration (mg/kg)	Measured Total Antifoam (2) Concentration (mg/kg)	Process Amount (kg)	Measured PDMS (g)	Measured Antifoam (g)	Actual Antifoam Added (g)	Measured / Actual (%)
FEP at Beginning (after initial antifoam addition)	Late July 8/6 10/21 10/25	1580 1400 2220 2160	1840	4600	157	288	720	186	387
FEP Bottoms Concentrate	Late July 8/6 10/21 10/25	2410 2150 2260 2210	2258	5644	187	421	1053	278	379
FEP Condensate	Sept.	<10	<10	<10	1014		<10	NA	NA
Washed HLW Slurry	Late July 8/6 10/21 10/25	1260 1110 770 800	985	2463	140	138	346	278	125
Wash Permeate	Late July	<10	<10	<10	325		<4	NA	NA
LAW Permeate	Sept.	<10	<10	<10	1153		<12	NA	NA
TLP Feed (after initial antifoam addition)	Sept.	650	650	1625	172	112	280	309	91
TLP Bottoms Concentrate	Sept.	960	960	2400	724	695	1737	616	282
TLP Condensate	Sept.	<10	<10	<10	1214		<12	NA	NA

(1) PDMS = polydimethylsiloxane
(2) Total antifoam = measured siloxane fraction × 2.5

2.9.6 Pilot TLP Conclusions

Pilot TLP operation was not part of Campaign IV testing but for completeness in reporting the following conclusions were extracted from the Interim Reports of Campaign II (Duignan et al., 2004b or Appendix I-2) and Campaign III (Duignan et at., 2004c), along with measurements obtained after the Campaign III report was issued.

2.9.6.1 Experimental Conclusions (Author – Adamson)

Campaign III

- The pilot-scale TLP evaporator operated as designed and concentrated the TLP feed simulant from a density of 1.135 Kg/L at 20°C and a sodium concentration of 2.4 M, to final density 1.365 Kg/L at 20°C and a sodium concentration of 7.1 M.

Campaign II

- The pilot-scale evaporator operated well concentrating the TLP simulant from an initial density of 1.14 kg/L to 1.385 kg/L at 20° C (1.360 kg/L at 50° C).
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m), well below the 5 ft (1.5 m) distance to the lower demister pad
- The two Demisters in series operated well with no significant differential pressure build-up across the Demisters during the TLP campaign II. However, condensation had to be purged from the instrumentation lines during the campaign.

2.9.6.2 Waste Products Conclusions (Author – Zamecnik)

Post-Campaign III

- Tracking the fate of antifoam in the many simulant streams was not successful because of the ineffectiveness in the methods used to measure its concentration. However, it appears that an insignificant amount of antifoam was carried over into the evaporator condensates. This result was not surprising because of the high boiling point of the polyols fractions of the antifoam. Further, it appears that the active component PDMS of the antifoam did not partition into the permeate stream, that is, it remained in the UFP sludge, but the poor detection capabilities did not allow accurate quantification of the antifoam concentrations.

Campaign III

- The concentration of aluminum in the TLP product from Campaign III was less than the result of Campaign II since the UF permeate contained less dissolved aluminum.

Campaign II

- The composition of the products from the TLP matched what was expected from the mass balance.
- No precipitation of additional solids beyond those in the feed was noted.

2.10 GLASS PRODUCTION BASED ON SIPP RESULTS (Author - Zamecnik)

2.10.1 Extrapolated Glass Production Rates based on Campaign II Data

This section repeats the data presentation made in the Campaign II Interim Report, Section 2.10 (Duignan et al., 2004b or Appendix I-2), with the addition of both Campaign III and IV data for some of the analysis and discussion. The flux-versus-slurry undissolved solids content curves for Campaigns III and IV have been shown to be very similar to the Campaign II data, but there are slight differences. The UFP flux data collected in Campaign II were used to create a model to predict the production rates of IHLW and ILAW glass assuming that the dewatering step was rate limiting. Rates were also estimated by "extrapolation" to different feed compositions. By extrapolation, we mean that different, but similar blends of the AY-102 and AP-101 simulants and the FEP Bottoms were calculated.

The rates of IHLW and ILAW glass production were estimated given the following set of assumptions:

1. The dewatering step in ultrafiltration is the rate limiting step in the production of glass.
2. ILAW glass Na_2O loading of 14 wt%.
3. IHLW glass Fe_2O_3 loading of 12.5 wt% (limiting condition). (Calloway, 2004)
4. WTP production rate is scaled to the SIPP production rate by the ratio of the filter surface areas (710 ft^2 / 6.7 ft^2).
5. Flux vs. time and flux vs. UDS curve-fits shown previously are used (see Figs 50 and 53).
6. Average flux is determined by integrating the area under the flux vs. time curve (see Fig 54).
7. Endpoint UDS = 20 wt%.
8. All dissolved Na that goes to ILAW is "waste" Na.
9. WTP filter area of 710 ft^2 (no reduction in area assumed).
10. The HLW melter can process a lower UDS feed and maintain production rate.

Note that the entire 710 ft^2 surface area was assumed to be available for filtration; the 20% contingency was not included. The following analysis could also be done with the contingency in the same manner.

The "extrapolated" glass production rates were determined by calculating the blending of different quantities of the Campaign II FEP Bottoms, AY102 slurry, and AP101 together.

Here it was assumed that the flux curves at these calculated compositions would be the same as the measured curves, i.e., the flux curves are only dependent on the undissolved solids content and not on the actual chemical composition of the feed slurry. This assumption is reasonable so long as the relative amounts of the three components are not changed significantly from the actual amounts tested. For these extrapolated situations, the composition of the FEP Bottoms was assumed to be the same even though the recycle streams would actually have slightly different compositions since the UFP feed composition would be slightly different.

For assumption No. 8, above, "waste" Na (sodium) was defined as any Na in the actual wastes, plus any Na added during washing (0.01M NaOH) and leaching (which was not done in SIPP). Any other Na added was "non-waste" and was not counted towards the ILAW rate. However, in the calculations done for the SIPP (see Appendix B), this distinction was ignored since the only Na additions were small amounts of NaOH added to the recycle streams to maintain the pH>12. These amounts were so small that their effect on the Na concentration in the feed was smaller than the uncertainty in the measurement of the Na.

Table 58 gives the glass production rates for several hypothetical situations. The "Actual Feed" column (1) contains the results from using the actual Campaign II measured feed composition obtained from samples after the feed mixture was made. The "Predicted Feed" column (2) gives the production rates for the feed composition predicted from the mixing of the two simulated waste feed streams and the FEP Bottoms. The compositions are essentially the same, indicating that the blending model was reasonable. Thus, the dewatering fluxes are the same (0.0144 gpm/ft^2) and the glass rates for these two cases are also essentially the same. The target glass rates were 6 MTG/d of IHLW and 80 MTG/d of ILAW (Longwell, 2003), but the actual rates at WTP scale were about 6.6 MTG/d of IHLW and 59.8 MTG/d of ILAW. In the SIPP campaigns, the target rates were not reached because the ratio of undissolved solids (or Fe) to permeate (or dissolved Na) was too high. The target ILAW/IHLW ratio is 13.3 (80/6), but the experimentally obtained ratio turned out to be 9.1 for Campaign II. This means that there should have been more dissolved solids (permeate to LAW) relative to the undissolved solids (washed slurry to HLW).

Column 3 in Table 59 shows the predicted glass production rates with the ILAW/IHLW ratio adjusted to 13.33. To adjust this ratio, the relative amounts of the AY-102 and AP-101 simulants and the FEP Bottoms had to be adjusted also. Given a fixed amount of FEP Bottoms, there will be only one blend of these three components that will result in the exact ILAW/IHLW ratio of 13.33. At this blending (rows 1-3 of column 3), the average flux is slightly higher (0.0148 gpm/ft^2) because the initial UDS is higher (2.32 vs. ~3.2 wt%) in the actual SIPP Campaign II (higher initial UDS gives lower average flux). The values in column 3 show that the change in blending ratios gives more ILAW glass (64.2 vs. 61.3 mt/d) and less HLW glass (4.8 vs. 6.8 mt/d) and that the ratio of ILAW/IHLW is 13.33.

Column 4 in Table 59 shows that an average flux of 0.0185 gpm/ft^2 and the same blending ratio as used in column 3 will result in meeting the glass production targets.

Table 59. Glass Production Rates Based on Ultrafilter Throughput Using Campaign II Data

Process Stream	Property	1 Campaign II Predicted Feed[3]	2 Campaign II Actual Feed[4]	3 Feed Blend to meet ILAW/IHLW[5] = 80/6 (13.3)	4 ILAW/IHLW = 80/6, flux adjusted so ILAW[7] = 80 mt/d
FEP Bottoms	Volume %	11.1	11.1	9.5	9.6
AY102	Volume %	24.3	24.3	17.6	17.7
AP101	Volume %	64.6	64.6	72.2	72.7
Feed	UDS (wt%)	3.13	3.22	2.32	2.32
	Fe (mg/L)	9315	9532	6900	6890
	Na (mg/L)	117500	114900	120300	120300
Concentrated	UDS (wt%)	20	20	20	20
Slurry	Fe (mg/L)	64700	66500	64600	64600
Permeate	Na (mg/L)	111900	114600	116100	116100
	(M)	4.86	4.98	5.05	5.05
Avg. UFP Flux	gpm/ft^2	0.0144	0.0144	0.0148	0.0185
ILAW Glass[1]	mt/d[8]	60.1	61.3	64.2	80.0
IHLW Glass[2]	mt/d	6.6	6.8	4.8	6.0
ILAW/IHLW	ratio	9.1	9.1	13.33	13.33

1. ILAW glass rate based on 14 wt% Na_2O loading
2. IHLW glass rate based on 12.5 wt% Fe_2O_3 loading
3. Feed composition predicted from blending of FEP Bottoms, AY102, and AP101
4. Actual UFP feed composition used
5. Feed blend adjusted to meet this ratio (feed calculated)
6. Feed blend adjusted to meet this value (feed calculated)
7. See 5 + flux adjusted to make rates (calculated model flux not used)
8. mt/d = metric tons / day (tonnes/day)

2.10.2 Increasing Glass Production Rates

In the SIPP, the feed slurry to Ultrafiltration was concentrated to greater than 20 wt% UDS. As the UDS concentration gets higher, the filtration flux decreases. Even at an endpoint of 20 wt% UDS, the average flux is not high enough to make the glass rate goals. Two potential ways to improve the rate were proposed:

1. Decrease the undissolved solids concentration endpoint at the end of the initial dewatering step (production of LAW permeate).
2. Increase the filtration temperature.

Decreasing the UDS endpoint has the effect of increasing the average flux, since the time spent operating at the lower fluxes at higher UDS values is eliminated. A lower UDS endpoint will always result in a higher average UFP flux. Starting at a lower UDS also has the effect of increasing the average flux (since the flux is higher at lower UDS), but

this is not a variable that can be changed if the ILAW/IHLW ratio is to be maintained. Moreover, starting at a lower UDS will require more time to reach a given endpoint, even though the average flux will be higher.

Figure 73 shows the average flux versus UDS for Campaigns II-IV. These data show that the average fluxes are very similar, but that there are differences of up to about 0.0025 gpm/ft^2 at different UDS values. Since the model was based on the Campaign II data, the predictions will be higher than if the Campaign IV data were used. Given the data variation shown in Figure 73, along with the measurement uncertainty, then all campaigns produced approximately the same filter performance. However, a better flux to use for the modeling may be the average of the campaigns. Nonetheless, the method of this model may be applied to any data set.

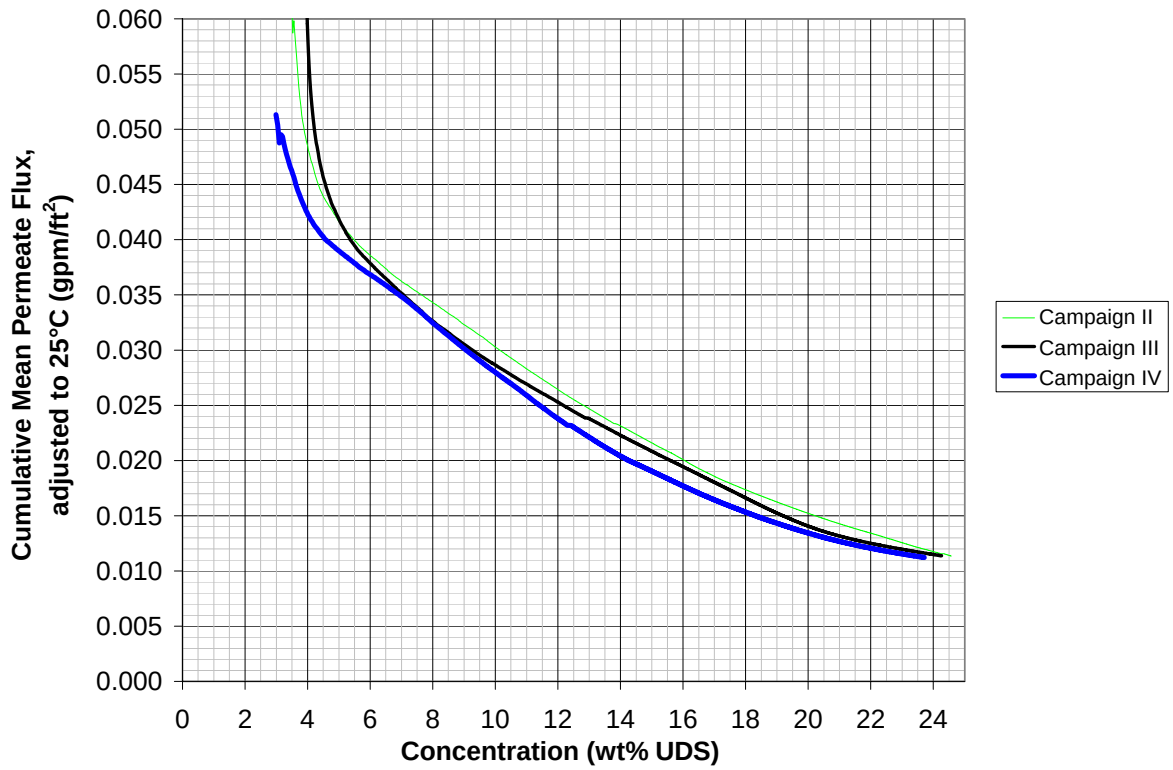


Figure 73. Comparison of Average Fluxes for Campaigns II-IV (repeat of Fig. 29)

Figure 74 shows curves describing the production rates of ILAW and IHLW as a function of the endpoint UDS at a constant processing temperature of 25°C. The target rates of 6 MTG/d IHLW and 80 MTG/d ILAW are met for the model data when the endpoint UDS is 16.7 wt%; the flux is 0.0185 gpm/ft^2 (as was determined to be necessary in Table 59). The average fluxes for each of Campaigns II-IV are also shown. For the Campaign IV data, the required endpoint would be 15.4 wt% UDS.

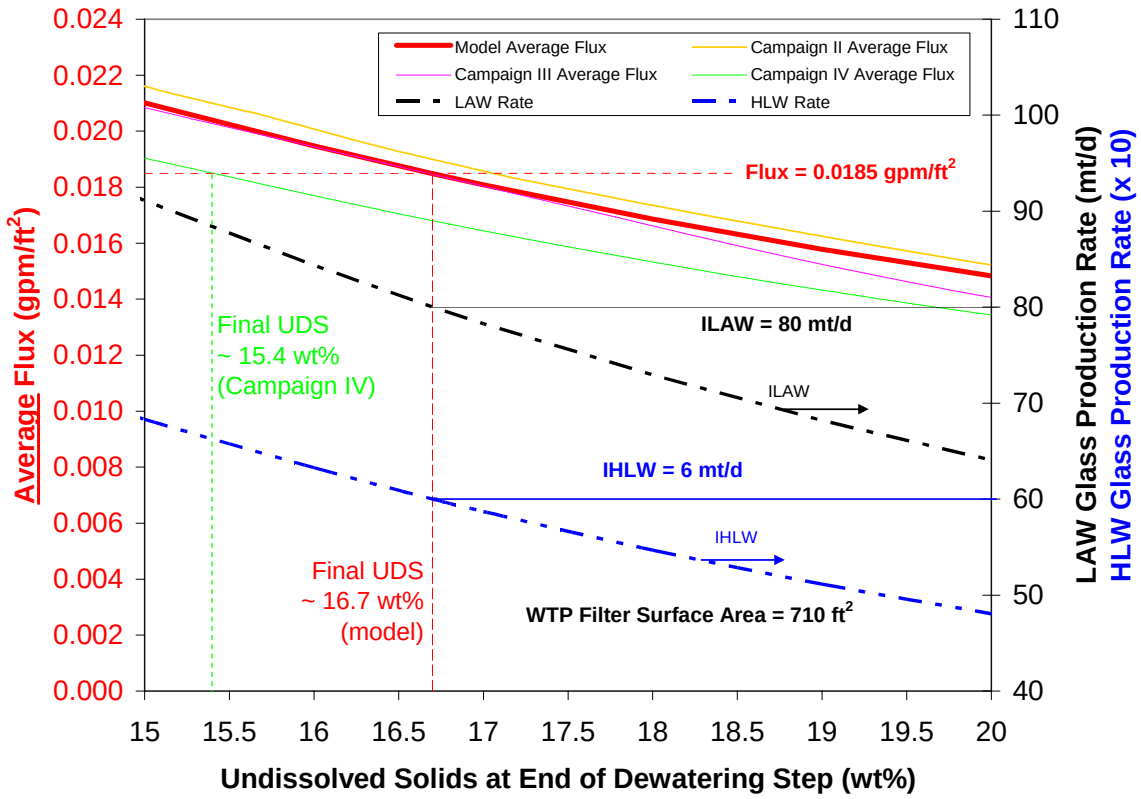


Figure 74. Average Flux to Achieve Rates versus Undissolved Solids (at 25°C)

Based on the operating strategy at the time of the Campaign II report, the concentration step to re-concentrate the washed slurry (dewatering of the washed slurry) will not affect the overall rate since the time to perform this step is less than that of the initial dewatering step, i.e., there is idle time at the end of the washed slurry concentration while waiting for the initial dewatering step in the other filtration train is finishing, or in other words, each train is either in initial dewatering mode or in wash/leach, but the two are never in the same mode. If the washed slurry concentration step is not idled and the next batch initial dewatering is started, the numerical results of the analysis given below do not apply, except to show that the initial dewatering step can be completed faster.

The concentration at the end of the washing step (i.e., the feed to the melter) can be higher than that at the end of the concentrating step (20%, for example) because the rate at which the washed slurry is produced is significantly higher than the rate at which the unwashed slurry is concentrated (dewatering, LAW production). That is, the flux during washing is high enough that 20 wt% can be achieved even if it was not achieved during the concentrating step. Therefore, concentrating less, to lower UDS, will not necessarily have the effect of producing a more dilute feed to the HLW melter system. Concentrating to lower UDS <u>does</u> result in producing less LAW feed per unit of UF feed <u>and does</u> result in slightly more LAW (supernatant) being recycled to the Plant Wash and Disposal (PWD) System.

Figure 75 shows, for the model data, the predicted effect of increasing the temperature during filtration while maintaining the UDS endpoint of 20 wt%. The increase in flux due to temperature was predicted using the following WTP-supplied equation†:

$$\text{Flux @T} = \text{Flux @25}^{o}\text{C} \times \exp\left[2500\left(\frac{1}{298} - \frac{1}{T+273}\right)\right]$$

The minimum flux of 0.0185 gpm/ft^2 is predicted at a temperature of about 33°C. Figure 76 shows the combination of temperatures and ending UDS concentrations that result in predicted glass production rates meeting the target criteria. For the data from Campaign IV, the required temperature would be higher.

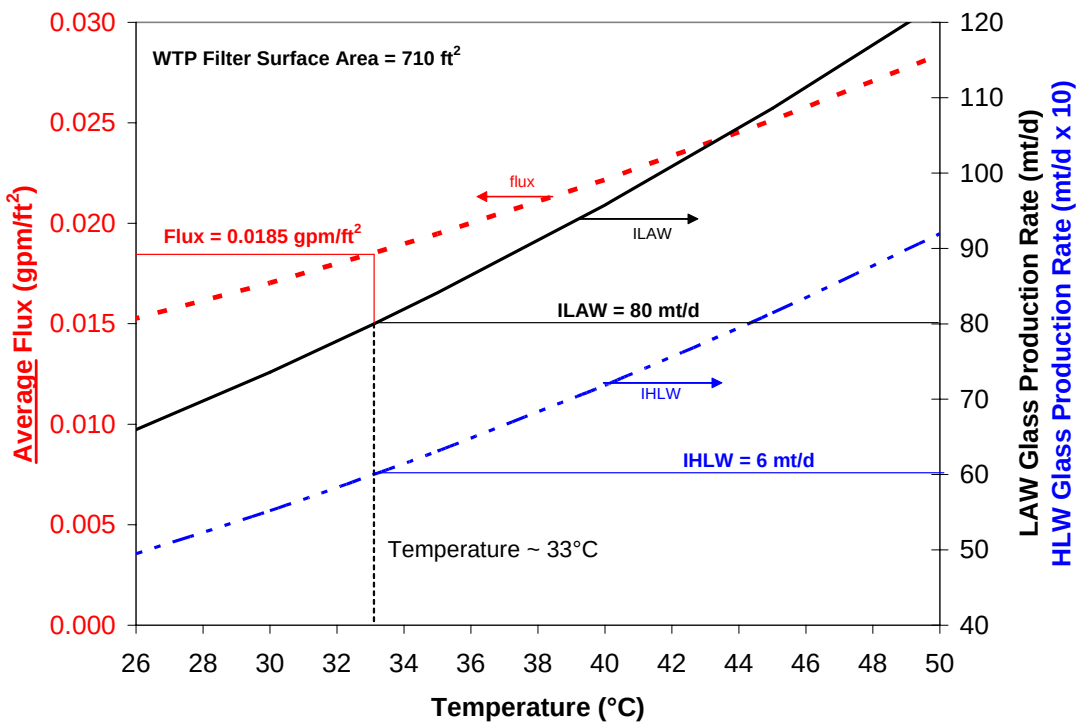


Figure 75. Average Flux to Achieve Rates versus Temperature

† A cautionary note: The "supplied" equation is required by the RPP-WTP Test Specification as a "temperature correction (that) corrects flux back to an equivalent flux at 25°C and accounts for changes in fluid viscosity and surface tension." This correction has been applied to the filter data in this task, as well as all other past RPP-WTP filter tests, e.g., Duignan, 2000a, 2000b, 2003a, and Duignan et al., 2004. It is important to note that, the Test Specification also required filter testing to be carried out at 25°C ± 5°C, therefore the flux in that limited temperature range would only incur a correction of at most ±15%. In general, most data were measured within the range of 25°C ± 2°C, which means the correction was at most 6%, therefore any error in the correction itself was assumed small. This assumption may not be valid as the flux temperature differs substantially from 25°C. How well the supplied equation actually "corrects" for viscous and surface tension is not known and may be substantially in error. Applying the equation at temperatures substantially different than 25°C is not recommended unless it is verified. Its use here was only to illustrate the effect of temperature changes on flux. That is, the listed flux magnitudes may contain substantial error and should not be used for actual design. However, it was shown to correct up to temperatures of 45°C fairly well in Section 2.7.4.1.4.

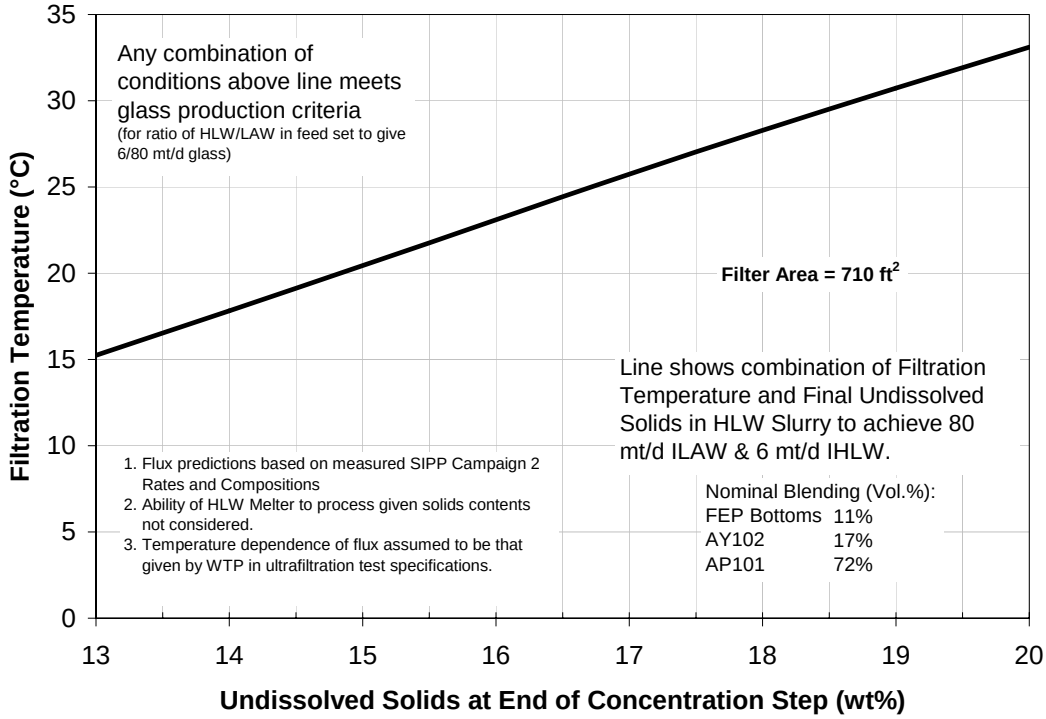


Figure 76. Predicted Combination of Filtration Temperature and Undissolved Solids Endpoint to Meet Glass Production Targets

The validity of this predictive equation was confirmed in Campaign IV as described in Section 2.7.4.1.4 and by the temperature corrected "open circle" data shown in Fig. 32 of that section. The minimum flux of 0.0185 gpm/ft^2 needed to meet the rate targets is predicted at a temperature of about 33°C (with the endpoint of 20 wt% UDS). Figure 72 shows the combination of temperatures and ending UDS concentrations that result in predicted glass production rates meeting the target criteria.

2.11 SMALL-SCALE TO PILOT-SCALE COMPARISONS (AUTHOR – CALLOWAY)

Preceding the pilot-scale SIPP task a limited number of tests were done at smaller scales. Those tests are discussed and contrasted here against the SIPP experience.

2.11.1 Evaporation of Recycle Streams

Several observations noted during the SIPP FEP evaporation can be confirmed by previous experimental work conducted for the WTP. Aluminum (e.g. likely as amorphous aluminum hydroxide or Gibbsite) and oxalate (e.g. likely as sodium oxalate) precipitation were found to occur in the waste feed evaporator system in the SIPP and these were also found to occur in small scale evaporator studies conducted for the WTP.

Al was found to precipitate in the SIPP and in the small-scale experiments conducted by Stone (2004). The results from the small-scale experiments show the effect of increasing

acid cleaning solution on aluminum precipitation in the simulated UFP recycle streams (Fig. 77). Stone found that Al precipitated as a gel when insufficient hydroxide was available to maintain the Al in solutions as aluminate. Additionally, recycle blends that were adjusted to maintain the pH greater than 13 were found to initiate precipitation of Al as gibbsite and bayerite after addition to simulated Envelope A mixtures. Due to Stone's experience, in blending recycles to prepare the feed for SIPP evaporation in the pilot-scale FEP the feed was adjusted during preparations to maintain the pH greater than 13. Even in that case, approximately 25-40% of the Al was found to precipitate in the SIPP. Therefore, it is likely that additional NaOH (UFP recycle stream >pH 14 after blending) may be required to prevent precipitation of Al in the FEP evaporator system.

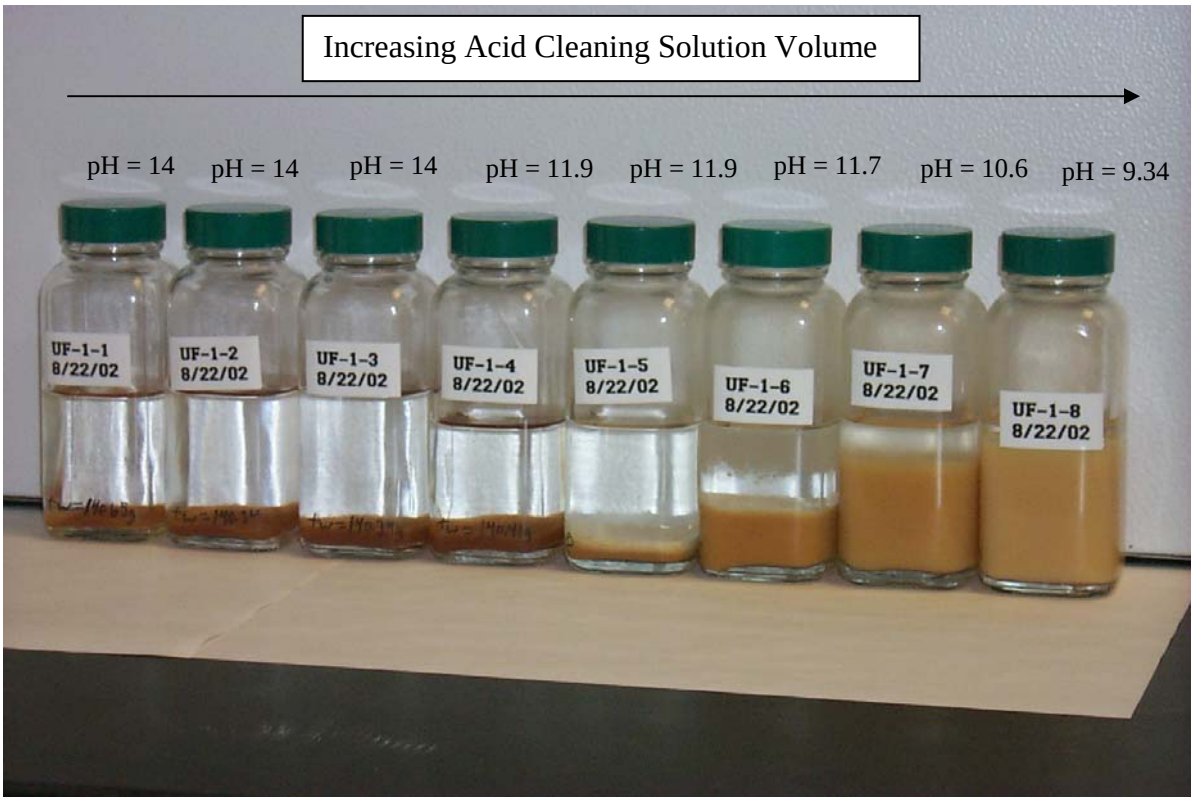


Figure 77. The effect of acid volume (pH) on Al precipitation in Small Scale evaporation experiments

Oxalate was also found to precipitate in the SIPP FEP evaporator. At the small scale Stone (2004) found that many of the recycle mixtures with Envelope A and B simulants precipitated sodium oxalate. Oxalate has been known for sometime to have limited solubility in defense HLW salt wastes. Barney (1994) conducted various organic solubility studies in the 1990's for the Hanford HLW program (see Figure 78) shows the solubility data for sodium oxalate as a function of temperature and sodium hydroxide concentration. The figure also indicates the SIPP oxalate concentrations (1.13E-02 – 1.46E-02 M) are above the solubility limit for sodium oxalate.

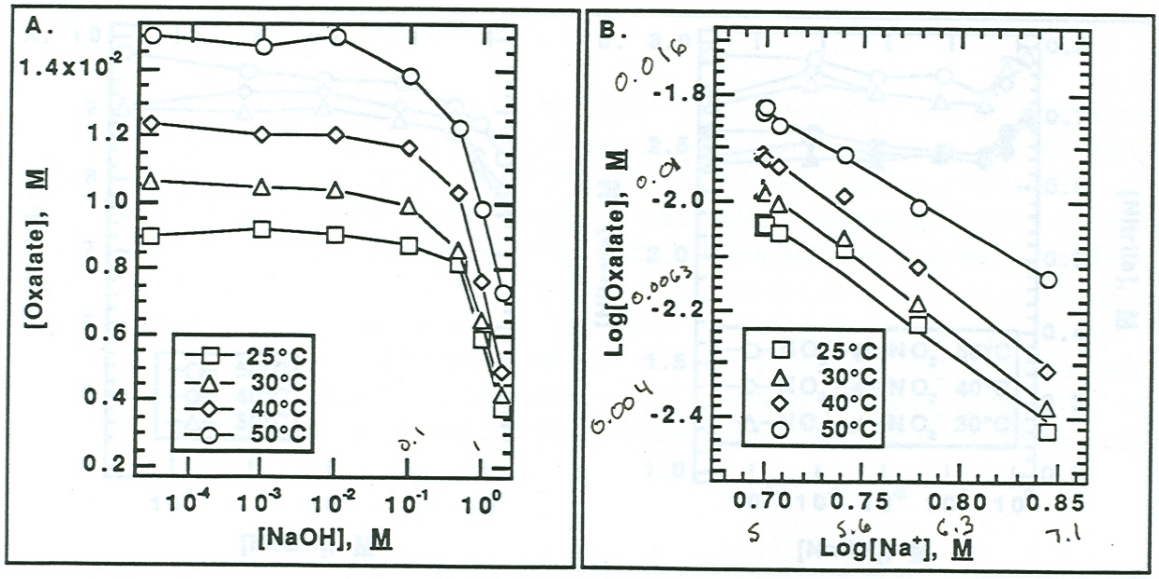


Figure 78. Solubility of sodium oxalate in 4.0 M NaNO3 – 0.97 M NaNO2 at 25 – 50 ºC for various sodium hydroxide concentrations (Barney, 1994).

2.11.2 Filtration

Figure 79 shows the filter flux recorded using the Cells Unit (Cross-flow) Filter (CUF) and the pilot-scale cross-flow filter located at SRNL. Actual AY102/C106 radioactive waste and simulants were used in the SRNL CUF. The pilot cross flow filter used only the AY102/C106 simulant.

Before filtration experiments began for both the radioactive CUF Actual Waste (which is the solid line in Fig. 79) and the CUF Run 1 (AY102/C106) Simulant experiment (which is the square box line in Figure 79 were both evaporated to 5 M Na. As can be seen in Fig. 79, these two slurries had similar filter fluxes during dewatering. This was important to validate that the simulant represented the actual waste in its filtration performance. However, they were both difficult to filter due to precipitation of sodium carbonate that occurred during evaporation; this is the reason the data lines are very wavy.

To prevent sodium carbonate precipitation, the simulants for both the SIPP Campaign I experiment (which is the square dots in Figure 79 and CUF Run 2 (AY102/C105) Simulant experiment (which is the filled-circle line in Figure 79, were not evaporated prior to processing; that is, their sodium concentration was left at 3 M. Both data curves depict more stable flux results, however, even though the simulant was the same in both tests there was a significant difference between the small and pilot scales. The pilot-scale flux is approximately 30% lower than the small scale, but a large part of this difference can be attributed to the difference in test equipment and has been seen, and discussed, in previous work (Duignan, 2003). The CUF used of single filter tube that was shorter in length (24 inches instead of 90 inches for SIPP) and smaller in diameter (0.375 inch

instead of 0.5 inch for SIPP). These geometric differences lead to different end effects and turbulence intensity, which result in higher fluxes for the CUF.

Since the radioactive CUF Actual Waste and the CUF Run 1 Simulant runs were evaporated, and thus changed the slurry viscosities, they can not be directly compared to the SIPP pilot data. However, in an attempt to make a useful comparison all of the filter flux results were adjusted to have the same viscosity by normalizing with respect to the Actual Waste permeate viscosity of 2.9 cp. Figure 79 implies that normalizing to viscosity does not overcome differences in scale, but that the AY102/C106 simulant is comparable to the actual waste from a filter flux perspective.

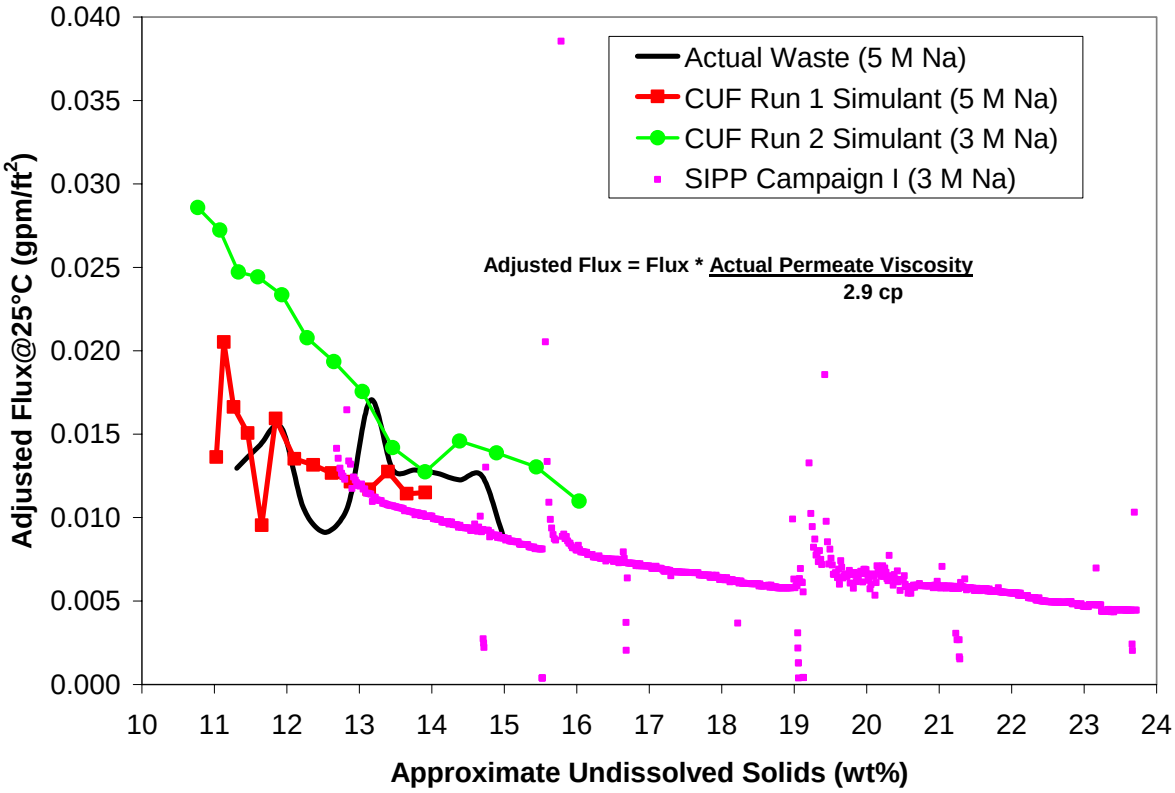


Figure 79. Filter Flux Comparison - Small Scale CUF vs. SIPP Cross Flow Filter

2.11.3 Cesium Ion Exchange

SIPP ion exchange column testing was conducted on two feed samples with similar compositions. Both samples were mixtures of AP-101 and AY-102/C-106 simulants and SIPP recycle streams. As previously explained in Section 2.8, Column testing was conducted only in two of the four SIPP Campaigns [i.e., II and III] and each campaign contain two cycles, i.e., Cycles 1 and 2 [Campaign II] and Cycles 3 and 4 [Campaign III]. The feed solutions for ion exchange testing were permeates generated from simulant slurry dewatering in the pilot-scale filtration process (UFP). The average molar

concentrations for the major species were: 4.8 M Na^+, 0.53 M K^+, 1.4 M NO_3^-, 0.59 M NO_2^-, 0.68 M CO_3^{2-}, and 1.4 M OH^- (hydroxide only measured for Campaign III). Campaign II feed contained 4.45 E-5 M Cs, while Campaign III feed contained 5.84 E-5 M Cs. The average density of the two solutions was 1.246 g/mL. The feed for each SIPP campaign was split in half so that each cycle would process approximately the same amount of simulant. The SIPP IX tests were conducted with two 5.5" ID columns arranged in a lead/lag (sequential) configuration. The columns were eluted and regenerated between cycle and then rotated such that Column #1 was the lead column for the first and third cycles and Column #2 was the lead column for the second and fourth cycles. The resin used for SIPP testing was from a 250 gallon manufacturer batch of SuperLig® 644 resin that had been sieved prior to use to remove particles smaller than 40 mesh. Approximately 190 resin bed volumes (BV) of solution was processed through the columns during each cycle and cesium breakthrough was monitored in the column effluent solutions.

Based on the design criterion of >100 BV of solution processed prior to 50% breakthrough on the Lead Column, then the cesium removal performance was acceptable for all four SIPP CIX cycles. The largest cesium breakthrough was observed for Cycle 4, where approximately 6% cesium breakthrough was measured after processing 190 BV of solution. Less than 1% cesium breakthrough was observed in all cases after processing 100 BV of solution. Furthermore, there was no indication of significant channeling in any test.

It is difficult to evaluate the cesium removal performance observed in the SIPP campaigns further without utilization of the existing chemical and performance models for cesium ion exchange with SuperLig® 644 resin (Hamm et al., 2000). Certain qualitative evaluations can sometimes be made between column tests (by direct comparison of cesium breakthrough profiles) without the use of a chromatography model in cases where similar liquid feeds, resin samples, and processing conditions are used. Small-scale (1.5" ID) column tests were performed previously with actual Hanford AP-101 waste and SuperLig® 644 resin (Fiskum, et al., 2002). For comparison, the concentrations of major species in the actual AP-101 feed were: 5.0 M Na^+, 0.76 M K^+, 1.7 M NO_3^-, 0.71 M NO_2^-, 0.45 M CO_3^{2-}, and 1.9 M OH^-. The actual AP-101 sample contained 3.7 E-5 M Cs^+ and the solution density was 1.256 g/mL. Only 110 BV of solution was processed in the small column testing and <1% cesium breakthrough was observed, which is comparable performance to that observed in the SIPP. However, as shown in Table 60, significant differences existed between the two data sets and any qualitative comparisons beyond that described above should be conducted utilizing the cesium performance model. The term "broader breakthrough profile" in Table 60 refers to kinetic effects upon cesium loading that impact the sharpness of the cesium breakthrough profile. A broader profile would be characterized by earlier breakthrough of relatively low cesium levels.

Table 60. Comparison between AP-101 and SIPP Column Tests and Expected Impacts

Resin Batch (Feed)	**Small Scale AP-101 [1.5-inch column]**	**Pilot Scale [SIPP] [AY102/C106+AP101+Recycles] [6-inch column]**	**Expected Performance Impact***
Na^+/K^+ mole ratio	6.5	9.1	later Cs breakthrough
Na^+/Cs^+ mole ratio	1.4 E5	9.6 E4	earlier Cs breakthrough
resin batch	010319SMC-IV-73	C-01-11-05-02-35-60	impact unknown
particle size (mesh)	-40 to +70	-20 to +40	broader Cs breakthrough profile
flow rate (BV/hr)	2.8	3.0 (SIPP Cycles 1, 2, and 4) 4.5 (SIPP Cycle 3)	minimal impact broader Cs breakthrough profile

* impact defined as the expected changes in SIPP cesium removal performance relative to the actual AP-101 sample

2.12 OVERALL CHEMICAL COMPOSITIONS OF SIPP CAMPAIGN II PROCESS STREAMS (AUTHOR – ZAMECNIK)

As explained throughout this report, the SIPP task contained four campaigns, which the first was just the operation of the ultrafiltration process and the remaining three would operate all four unit operations, i.e., FEP, UFP, CIX, and TLP. As was also discussed, the pre-task steady-state OLI/ESP computational modeling of the SIPP process showed that in preforming Campaign II, III, and IV the product streams became chemically equivalent very fast; the differences in stream composition between Campaign III and IV were less then 5%. (Of course, this small difference cannot be fully shown experimentally because just before beginning the last campaign, the operation of Campaign IV was changed by the Hanford Project to specifically test the new GKN filter, therefore, the CIX and TLP unit operations were not used.)

The first full SIPP campaign was Campaign II and, as such, it was targeted to have its product streams chemically analyzed most extensively. Furthermore, since Campaigns III and IV were expected to be chemically similar to Campaign II, then the number samples was greatly reduced to minimize cost to the project. For those campaigns only a minimum number of samples were taken to insure proper operation the plan tests. On the other hand, the measurements made for Campaign II were extensive to capture inter-unit-operations chemically histories and are listed in Appendix J.

This section only indicates a mapping of where samples were taken in the overall process. Figure 80 shows the overall SIPP operation for the FEP and UFP unit operations of Campaign II and sample points. Figure 81 shows the overall SIPP operation for the CIX and TLP unit operations of Campaign II and sample points. These figures are repeated in Appendix J as well as the full table of analyzed results. The stream analyses table in that Appendix shows the measured compositions of most of the process streams, including density and solids measurements, and the approximate stream volume.

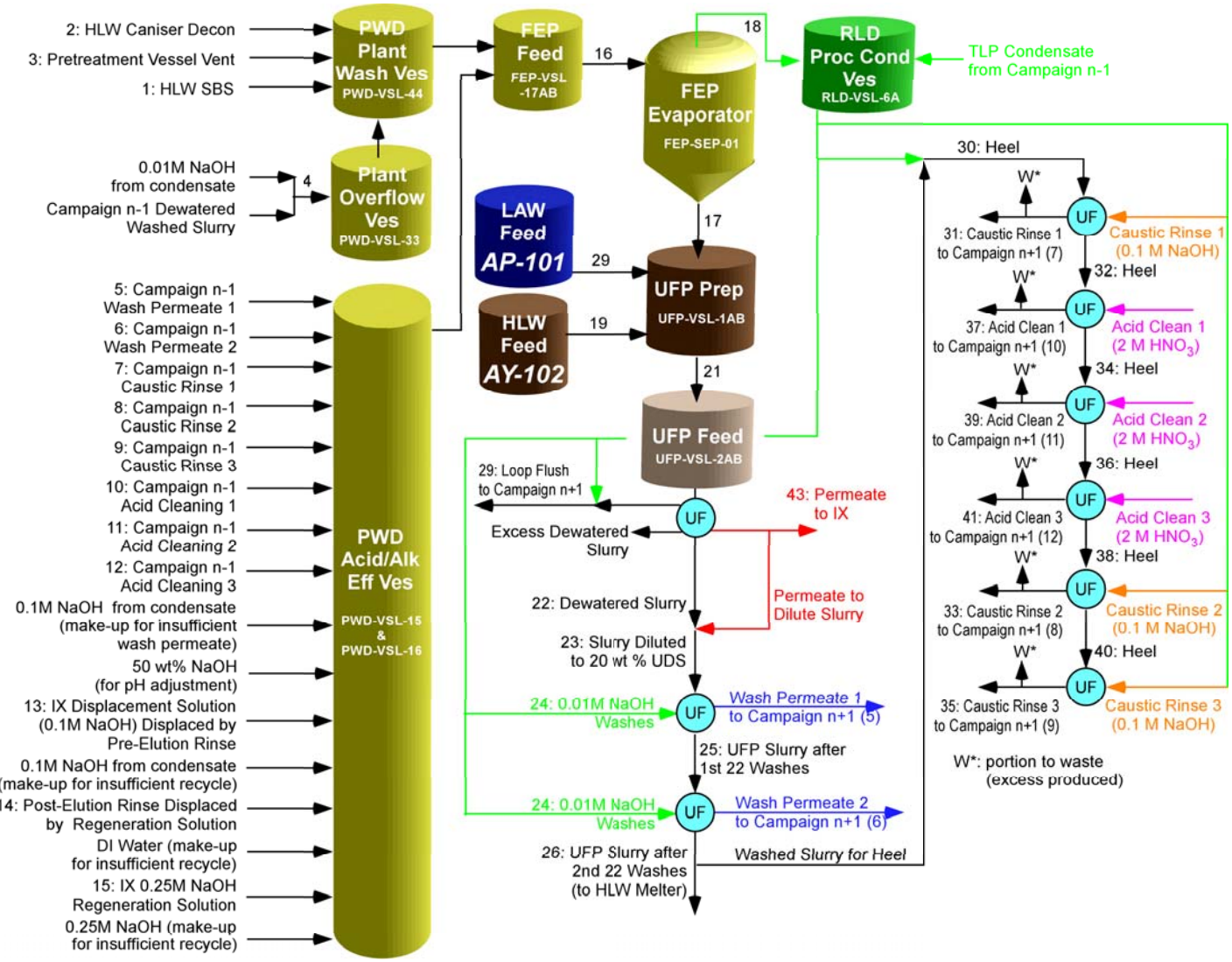


Figure 80. Product samples taken during Campaign II: FEP & UFP. The numbers refer to column results in Appendix J

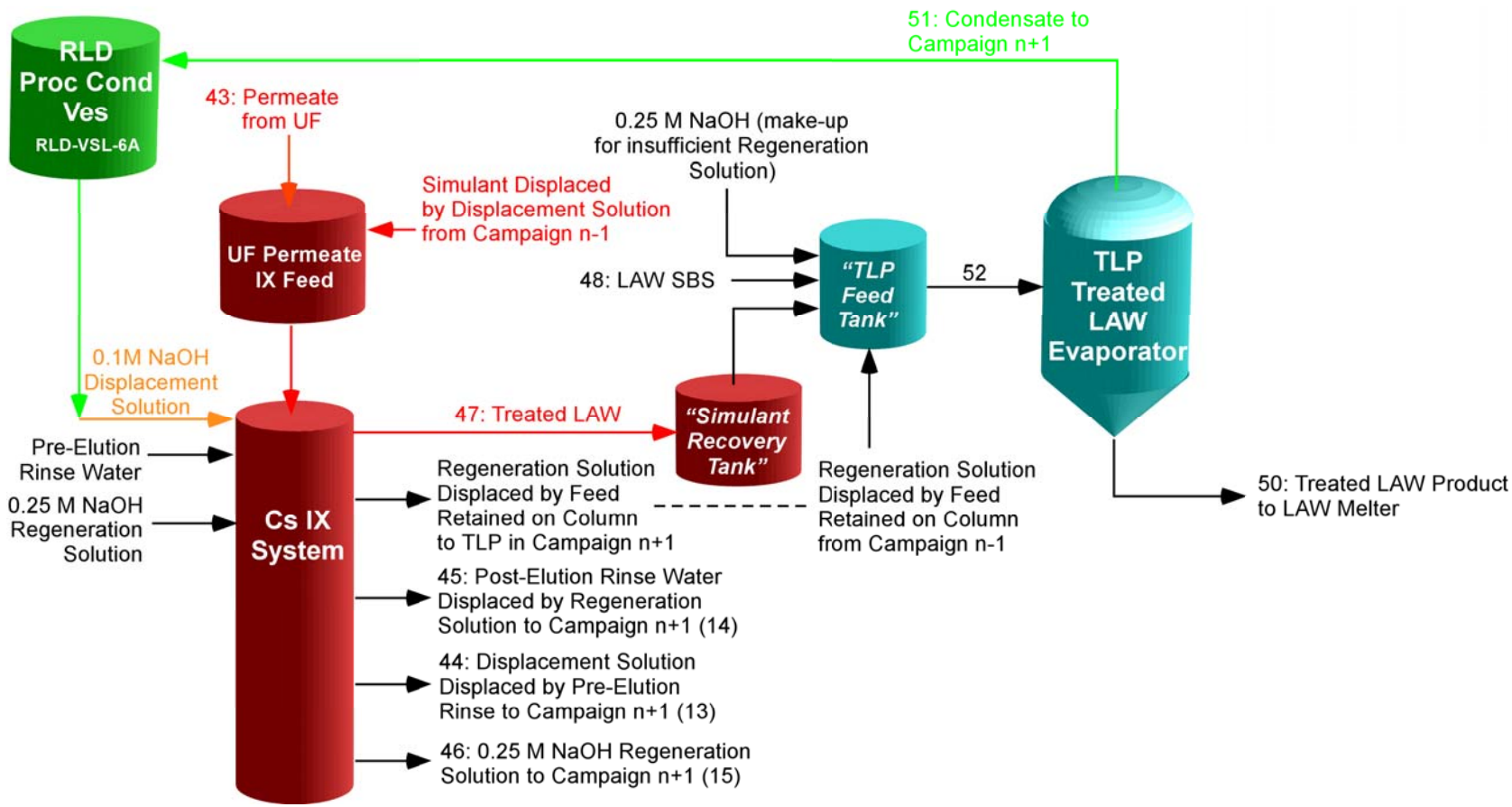


Figure 81. Product samples taken during Campaign II: CIX & TLP. The numbers refer to column of results in Appendix J

3.0 CONCLUSIONS

These are conclusion obtained from Campaign IV for the FEP and the UFP unit operations. For the CIX and TLP unit operations, which ended at Campaign III, some post task conclusions are included here. However, since the report encompasses all task activities the full list of conclusions made for Campaigns I to IV can be found at the end of each appropriate unit operation section.

3.1 PILOT-SCALE FEP UNIT OPERATION – CAMPAIGN IV

- A total of about 1119 kg of FEP feed, was concentrated down to 175 kg.
- The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C) and the entire evaporation process proceeded as designed.
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.
- Mixing of the recycles in a different order for Campaign IV had no effect on the evaporation process as compared to the previous campaigns.
- The FEP feed and Bottoms concentrations for Campaigns III and IV were very similar, indicating that steady-state had been reached with respect to the recycle compositions.
- The precipitation of sodium oxalate in the FEP evaporator occurred in all three campaigns and accounted for most of the precipitated solids found. That is, while more that 90% of the oxalate was dissolved in the FEP feed less than 25% of the oxalate was still dissolved after reaching the target Bottoms concentration.

3.2 PILOT-SCALE UFP UNIT OPERATION – CAMPAIGN IV

- The performance of the GKN filter unit was similar to that of the Mott filter unit under steady state conditions. In addition, the permeate flux of the GKN filter unit during dewatering was the same as the Mott filter unit, within measurement uncertainty, for the same simulated waste mixture.
- In Campaign IV, using the GKN filter unit, the average, temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 20 wt% UDS was
  0.013 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~3 to 17 wt% UDS was 0.016 gpm/ft^2.
- Permeate flux improved at higher slurry temperatures. At 19 wt% UDS, 40 psid TMP, and a slurry velocity through the filter of 12 ft/s, the permeate flux improved almost 75% at 45 ºC compared to 25 ºC.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 1 NTU. The Test

Specification indicated a threshold of 2 NTU, therefore, the measured values indicated that the permeate was free of significant undissolved solids.

- The SIPP and previous UFP tests indicate that the permeate flux during acid cleaning of a filter appears to be more of a function of the waste dewatered than of the filter unit used.
- The increase in the adjusted permeate flux between the second and third acid cleaning steps was minimal in Campaigns II, III, and IV, possibly indicating that the third acid cleaning was unnecessary. The exception was Campaign I where whitish solids in the spent solutions of the first and second acid cleanings inhibited the permeate flux, requiring a third acid cleaning (and possibly a fourth) to reach steady conditions. The Campaign I simulant did not contain AP101 and FEP Bottoms, indicating that the necessity of a third acid cleaning was dependent on the waste dewatered.
- Cleaning the filter with 2 M nitric acid after dewatering was sufficient to increase baseline permeate flux to approximately an order of magnitude higher than that of average waste flux during dewatering. However, it was not sufficient to return the filter to pre-test flux levels. In previous campaigns, soaking the filter unit in 0.1 M NaOH for an extended period of time (2 months or more) typically regained the pre-test flux levels. The significance of "2 months or more" is that 2 months was typically the duration between successive SIPP campaigns.
- During the elevated temperature tests at a constant solids loading of 19 wt%UDS no significant changes occurred with respect to solids concentrations and particles sizes. As expected, as the simulant temperature increased from 25°C to 45°C the consistency of the slurry and the viscosity of the permeate decreased from 14 to 11 mPa•s and from 2.9 to 1.8 mPa•s, respectively, while the slurry yield stress increased approximately 10 to 12 Pa.
- The composition of the undissolved solid species in the washed sludges in Campaigns I-IV were similar, as expected. The soluble species concentrations in the slurry and permeate for Campaigns II-IV were similar as expected.
- The balances on aluminum over the process were not consistent and could not be closed without additional analytical data.
- Ammonium in the first Campaign III 0.01M NaOH wash was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Approximately none of the ammonium in the second wash was retained.
- The antifoam agent did not have any observed macroscopic effects on the filter operations of the SIPP, which is also consistent with similar commercial industrial experience (Watts et al., 1995). However, since the filter was cleaned between each run, the effect of possible accumulation of antifoam on the filter media with no cleaning between runs was not determined.

3.3 PILOT-SCALE CIX UNIT OPERATION – POST CAMPAIGN III

- A post-test measurement of the dry mass of the SuperLig®644 resin found a ratio of a sodium basis to hydrogen basis of 1.19 and 1.22 for Columns 1 and 2, respectively.
- A pre-test particle-size distribution of the resin was found to be 78 wt% (Mesh > 30), 20 wt% (30 ≤ Mesh ≤ 40), and 2 wt% (Mesh < 40). A post-test PSD on the resin found no change in the Column 2 contents, indicating that no degradation of the resin occurred. However, the larger distribution of Column 1 implied that some resin clumping may have occurred.

3.4 PILOT-SCALE TLP UNIT OPERATION – POST CAMPAIGN III

- In the filtration system, nearly all of the antifoam component polydimethylsiloxane (PDMS) remained in the washed concentrated sludge stream which is consistent with similar studies (Watts et al., 1995). Analysis indicates that very little if any of the PDMS was found in the UFP recycles or permeate. Nearly all of the PDMS was also retained in the FEP and TLP Bottoms concentrates, with no detectable PDMS in the condensates. Since PDMS is essentially insoluble, non-homogenous sub-samples, coupled with analytical recoveries of less than 80%, did not allow for accurate quantification of the PDMS for the purposes of process material balances in all the SIPP process streams. SRNL recommends that extraction of the entire samples before analysis should be investigated for any future antifoam analytical work. Furthermore, no conclusions about the fate of the polyol fraction of the antifoam could be made since this portion was not tracked. Future work on the fate of this antifoam fraction is warranted.

Observations from the SIPP task to the Overall Operation of WTP

The SIPP operations conducted at SRNL using simulated WTP startup feed performed well without any significant incidents that caused disruption of operations. All four unit operations (Evaporation FEP& TLP, Filtration-UFP and Ion Exchange, CIX) performed nearly flawlessly and without significant unplanned downtime. The LAW and HLW supernate and slurry products produced by the SIPP were successfully vitrified by VSL (Matlack 2005a, Matlack 2005b).

The SIPP met all success criteria with the exception of demonstration of a scaled throughput of 80 MTG/day of LAW and 5.4 MTG/day HLW. This criterion[†] was partially met by the SIPP in that both evaporators preformed at or above the evaporation rate necessary to meet the desired production rates. The pilot ultra filter system was not able to meet the production rates given a filter concentration end point of 20 wt% undissolved solids. However, glass production rates can be met for simulated AY102/C106 with AP101 slurries by reducing the target ultra filter concentration

[†] The pilot ion exchange testing was by design not required to meet full scale plant production rates (See Test Exception No. 7 in Section 1.2)

endpoint to 15.4 to 16.5 wt% undissolved solids. After the wash cycle is completed, higher undissolved solids concentrations can be achieved by concentrating the UFP slurry after washing (flux rates are much higher during washing) without reducing the overall plant production rate. Therefore, concentrating less, to a lower UDS, will not necessarily have the effect of producing a more dilute feed to the HLW melter system. Concentrating to lower UDS does result in producing less LAW feed per unit of UF feed and does result in slightly more LAW (supernatant) being recycled to the Plant Wash and Disposal (PWD) System. Increasing the operating temperature of the ultra filter also proved to increase the filter production rate beyond the desired production rate goals.

The impact of recycle solutions on SIPP operation proved to have no macroscopic effects on the overall SIPP operation or the individual unit operations. While some solids (e.g. oxalate & aluminum) were found to precipitate in the Plant Wash & Disposal and FEP evaporator systems, none of the these solids proved to have an impact on the overall operation of the SIPP.

Given the limits (e.g. non-prototypical piping layouts, mixing systems, simulant chemical/physical properties vs. actual waste) of the testing described in this report, the full-scale WTP Pretreatment facility unit operations that were simulated by the SIPP should also perform well using AY102/C106 feeds. However, since not all start-up and operational risks can be fully anticipated or mitigated by SIPP testing, the following observations and lessons learned should be considered by the designers and operators of the WTP.

- Precipitation of aluminum, in some tank waste compositions can increase the total number of HLW canister produced, therefore, additional sodium hydroxide maybe necessary to prevent unwanted Al precipitation.

- Ammonium, transferred from the Duratek LAW Submerged Bed Scrubber, will partition to the concentrated/washed HLW transferred to the WTP HLW melter system. The ammonium will likely recycle back to the WTP Pretreatment facility via the HLW SBS condensate system. Incorporation of ammonium chemistry into the WTP models should be implemented to assess the fate and impact of ammonium on the overall operations of the WTP. The potential to generate ammonium nitrate in the WTP vessel vent system should be evaluated. Consideration should be given to determining if the TLP evaporator condensate and LAW melter SBS condensates can be treated and disposed of separately rather than recycling these materials to the front end of the Pretreatment facility. This would also decrease the buildup of corrosive anions (e.g. Cl, F, SO_4) in the TLP system.

- Maintenance of the filter system may dislodge solids and cause a loss in filter flux. WTP should consider cleaning the filter after maintenance is conducted. A detailed filter system performance monitor program maintained by the future WTP filter system engineers would reduce plant down time when filter flux performance issues occur.

- Decon solutions that are generated from hot cell equipment maintenance were not tested in the SIPP. These solutions can carry larger concentrations of glass formers, sludge, salts, and ammonium then the nominal recycles tested by the SIPP. WTP personnel should assess the impact of processing decon solution generated from maintenance activities to determine if any unwanted reactions (e.g. precipitation) will occur.

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4.0 FUTURE WORK

Given the specific scope of the SIPP (i.e., demonstrating pretreatment performance and the influences of recycle streams using AY102/C106 and AP101 simulants) several key findings of the SIPP workshop (Edwards, 2003) were deferred to future programs or tasks. These items are:

- Preliminary calculations indicate the SIPP will produce only enough HLW glass to turnover one DM-100 melter volume. Similar R&D efforts conducted for DOE (e.g., Integrated DWPF Melter System, IDMS) typically produced sufficient glass to turnover the melter at a minimum of three volumes. This typically allows the melter system to achieve steady state operations with respect to glass composition, and production rates.

- The transition of various Hanford waste feeds (e.g. mixing of Envelope D heels with Envelope C supernatant) through an integrated system is not being tested by the SIPP. Future programs or tasks should consider testing additional sludge compositions in an integrated system. Similar R&D efforts conducted for DOE (e.g. IDMS, DWPF Cold Commissioning, and Duratek LAW Pilot Melter) tested a variety of waste chemistries and conducted testing that demonstrated these facilities could operate successfully during waste transitions.

Additionally, since only one Envelope D simulant (AY102/C106) has been tested in the SIPP, the filtration flux at a pilot scale with other wastes (e.g. AZ101, AZ102, C104, and single-shell tank sludges) is unknown and likely to be different than the filtration flux measured with in the SIPP. Because bench-top cross-flow filter fluxes, using AY102/C106 Hanford waste, are higher than pilot-scale filter fluxes using AY102/C106 simulant, it is recommended that additional pilot-scale filtration tests be conducted to determine the filter flux with other Hanford sludges. Furthermore, since it will not be practical or cost effective to conduct pilot-scale testing using all known sludge types, a correlation between bench-top radioactive filter experiments and pilot-scale data should be developed to predict the filter flux of future WTP sludge batches.

Leaching of aluminum or oxidative leaching of other metals (e.g. Cr) was not tested by the SIPP. Leaching was determined to be unnecessary for the AY102/C106 tank composition (Calloway, 2004). However, other Hanford wastes require leaching of aluminum and other metals to reduce the number of HLW canisters produced from a given waste type. While aluminum leaching and oxidative leaching of Cr have been demonstrated in the laboratory, pilot-scale demonstration is needed to assess the actual efficiency of these processes. Additionally, post precipitation of solids after high temperature leaching and subsequent cooling down could become a significant issue in these processes and should be assessed at a pilot scale.

An optimized filter cleaning protocol has never been developed for the WTP which balances the maintenance needs of the filter and the production goals of the plant. If the

filter could be cleaned after every other batch, significant savings in production cycle time could be achieved. However, since no multi-batch studies have been conducted without cleaning the filter after each batch, further testing is recommended using a small scale filter (e.g., CUF) to optimize the cleaning protocols for the WTP. It has been suggested that simple flushing with dilute sodium hydroxide solutions after each batch may be sufficient for cleaning the filter, however, again there is no information to support this protocol since the SIPP testing cleaned the filter after each batch. The long term impact of the antifoam agent on the filter performance may need to be reconsidered in these future studies since it very likely that any antifoam agent left in the SIPP filter after concentration and washing was removed by the acid cleaning step.

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APPENDICES

A. Semi-Integrated Pilot Plant (SIPP) Workshop - Meeting Minutes

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C. WTP Discussion on Pretreatment Facility Waste Processing Residence Times

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APPENDIX A: SEMI-INTEGRATED PILOT PLANT (SIPP) WORKSHOP – MEETING MINUTES

On Tuesday, 28 October, 2003, an all-day workshop was held in the WTP project offices, at Richland, WA, with representatives from WTP R&T, Process Operations, Process Engineering, Commissioning & Training, DOE ORP-WTP and Savannah River Technology Center (SRTC) to discuss the objectives and plans for the Semi-Integrated Pilot Plant (SIPP)[1]. Presentations were given concerning the test objectives, SIPP simulants (AY102/C106), pilot plant modeling and run plans. A summary of the action items developed by the workshop is listed below.

Given the specific scope of the SIPP (i.e., demonstrating pretreatment performance and the influences of recycle streams) several key findings of the workshop were deferred to future programs or tasks. These items are listed below.

- Preliminary calculations indicate the SIPP will produce only enough HLW glass to turnover one DM-100 melter volume. Similar R&D efforts conducted for DOE (e.g. Integrated DWPF Melter System, IDMS) typically produced sufficient glass to turnover the melter at a minimum of three volumes. This typically allows the melter system to achieve steady state operations with respect to glass composition, and production rates.

- The transition of various Hanford waste feeds through an integrated system is not being tested by the SIPP. Future programs or tasks should consider testing additional sludge compositions in an integrated system. Similar R&D efforts conducted for DOE (e.g. IDMS, DWPF Cold Commissioning, and Duratek LAW Pilot Melter) tested a variety of waste chemistries and conducted testing that demonstrated these facilities could operate successfully during waste transitions.

A complete list of actions and the final resolution of these actions is listed below:

[1] Edwards, R. E. to W. Tamosaitis, 11/5/03, "Semi-Integrated Pilot Plant Workshop-Meeting Minutes", SRT-RPP-2003-00277, Westinghouse Savannah River Company, Aiken SC 29808

SIPP Workshop Meeting Minutes - Questions/Issues/Action Items/Decisions (Revised 6/23/04-Final)

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
1. What is the impact of other amorphous components in Hanford Waste?	SRNL, Jack Zamecnik, Analysis of CUF, pilot data compared to other Hanford CUF data will be conducted. (Complete)	The direct impact of amorphous components has not been addressed by the current scope of the SIPP or any other WTP R&T program. Hanford waste tanks contain both amorphous and crystalline compounds. Amorphous compounds, such as amorphous sodium aluminosilicate or metal hydroxides, will tend to be more gelatinous than the crystalline compounds (such as boehmite, zeolite). Amorphous compounds tend to be more "sticky" due to the hydroxide and could make them harder to pump or filter.
2. Al leaching of simulant is not prototypical for AY102/C106 – Resolve for pilot	SRNL, Jack Zamecnik (Complete)	First test simulant data did not match. Final simulant formulation data matched well, as shown below: % Retained Species Radioactive Simulant Al 53-69 53 Cr 51-90 62 Fe 100 100 phosphate 32-65 46 Na 28-48 9-18 Ca 94->96 100 Ni 99 100 Pb 91-96 100 Si 91-99 99 total mass 52 46

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
3. How representative was original SRNL sample as compared to other AY102/C106 cores taken at the same time?	SRNL, Jack Zamecnik (Complete)	See below.

The SRNL sample results were compared to TFCOUP, which is based on samples, and also to several core samples. The concentrations in the supernate and solids fractions compare favorably, but the undissolved solids content of the SRNL sample was about 1/2 the amount given by TFCOUP.

Comparisons of the simulant and radioactive AY102/C106 are documented in SRNL technical report WSRC-TR-2003-00547, REV 0 (SRT-RPP-2003-00240, REV 0), which is publicly available.

Additional discussion:

1. The concentrations of most major components and many minor components agree well for both the supernate and solids.
2. The aluminate concentration in the SRNL sample was approximately 3-4X higher than shown in TFCOUP or the limited core sample analyses that were found. A possible explanation is that the Core 289 sample was taken soon after that addition of NaOH to the tank, so this NaOH in the supernate would not have equilibrated with the solids. During compositing, the solids were contacted with the supernate and a small amount of aluminum may have dissolved and resulted in the higher value. Also note that TFCOUP shows more Al in the solids (TFCOUP: more in solids, less in supernate; SRNL analysis: opposite).
3. It appears that the SRNL sample had more Na_2CO_3 in the supernate, but less in the solids than that predicted by TFCOUP. This difference suggests that only the distribution of Na_2CO_3 is different and that the total amount in the SRNL sample and TFCOUP are close. (Note the carbonate in the TFCOUP solids is significantly higher than in the SRNL sample. Reducing the carbonate and adding bound OH- made SRNL and TFCOUP values match better.)
4. The current TFCOUP values for Si and Zr are orders of magnitude lower that the SRNL analyses. They are also lower that the amount given by TFCOUP for tank C-106 in an earlier version of TFCOUP. It appears that the later versions of TFCOUP may have used results from less aggressive acid digestion analyses that usually underestimate Si and Zr.

5. The calculated TFCOUP undissolved solids content is 11.8 wt% and the total solids is 24.7 wt%. Examination of the SRNL sample compositing data (Core 289 + Core 290 supernate) indicated that the overall composition of Core 289 was approximately 14.3 wt% undissolved solids and 28.3 wt% total solids. Note that these values are very approximate; the SRNL total solids content in the supernate also had to be assumed: 16.3 wt%. These values are reasonably close to those calculated from TFCOUP and show that the undissolved solids in the SRNL sample (5.85 wt%) were about 1/2 of the actual amount in the tank.
6. The TFCOUP adjusted "analyses" calculated were used to calculate the expected composition of the SRNL slurry sample, which had less undissolved solids. These calculated values matched the SRNL measurements reasonably well. Without adjusting for undissolved solids, the concentrations of species mostly present in the solids were much too high in the calculated slurry composition.

Questions/Issues/Action Items/Decisions	Action Assigned to (Status)	Discussion
4. What are the commissioning simulants? Has the composition been defined?	WTP R&T (Complete)	AY102/C106 & AP101. No, the actual simulant composition used during commissioning will be defined by another program. It is likely, the current simulant compositions used for the pilot will be modified for use by the plant.
5. Check with WTP R&T Vitrification concerning the glass composition (waste loading) for AY102/C106?	SRNL, Dan Barnes, Information was obtained from J Perez, WTP R&T (Complete)	Loading- Fe was limiting component @ 12.5 wt.% Fe_2O_3
6. What is the impact, if any of Zr on glass composition?	SRNL, Dan Barnes, (Complete), Discuss Zr with J. Vienna/David Peeler WTP R&T	The wt.% Zr is less than 1% and should not impact glass properties.
7. Comment - WTP equipment will be operated on linear portion of wt.% vs. rheology curve-Curve needs to be defined for each waste tank-transition between linear and non-linear portion of wt.% vs. rheology curve typically defines maximum operating point	WTP R&T (Complete)	Recommended design basis defined in other project documents WPT-075
8. How will current simulant CUF data be compared to pilot runs given different operating conditions (no evaporation)?	SRNL, Jack Zamecnik (Complete)	A permeate viscosity correction will be used to put the data on the same basis. This correction has been demonstrated for the AN-102 Sr/TRU precipitate and is generally accepted in filtration literature.
9. Adjust pilot model to 5 M Na basis	SRNL, Dan Barnes (Complete)	A density of 1.25 yield a Na M of 5.1 M Na

Questions/Issues/Action Items/Decisions	Action Assigned to (Status)	Discussion
10. Close couple (Add a prototypical IX feed tank) filtration and ion exchange in Pilot to determine if filtration can exceed production rate of ion exchange system	SRNL, Mark Duignan, (Complete)	Filter flux will be measured and provided as input for WTP models.
11. Ratio of Waste Feed recycle streams needs to be defined for pilot.	WTP Process Operations, Dave Harty/Dan Barnes (Complete)	Ratio has been defined.
12. Can simulant be simplified?	SRNL, Jack Zamecnik, (Complete)	

Y, Some less abundant components could be dropped to reduce price slightly. Most of the cost of producing the simulant is labor, since it involves two precipitation and washing steps. Additional R&T efforts would be required to determine if a preparation method without precipitations could be used. Such an effort would be outside the scope of the current program and should be deferred to future tasks. Also, past experience has shown that producing hydroxide sludges with the needed properties without precipitating the hydroxides is difficult.

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
13. Do we neutralize the HLW & LAW SBS? Targeted to pH 12?	WTP Process Operations, Eric Slaathaug (Complete)	HLW SBS is pH = 8 and will be run as is, LAW SBS is neutralized only if pH < 4.
14. Should Cerium Decon solution be added to pilot?	WTP R&T, Ron Longwell (Complete)	Ce Decon is a small contributor to the total recycle flow rate and will not be used in the SIPP.

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
15. Should we increase the solids loading of SBS to simulant maintenance operations in HLW/LAW vitrification?	WTP R&T, Ron Longwell (Complete)	, the objective of the testing is to determine if problems will occur during commissioning and if the WTP pretreatment facilities will meet production rates.
16. Flush water is added during filter operations. Define filter operations/process chemical/water additions.	SRNL/WTP Process Engineering, Mark Duignan/Eric Slaathaug (Complete)	Information provided to SRNL to calculate flush water requirements
17. Define Waste Feed Evaporator Endpoint.	SRNL/WTP Process Operations, Dan Barnes, Dave Harty (Complete)	The UF feed point is defined at 5M Na
18. Cr^{+3}/Cr^{+6} Leaching – Consider in analytical plan.	SRNL, Jack Zamecnik (Complete)	See below.

No attempt was made to match the Cr^{+3}/Cr^{+6} content of the simulant to specific analytical data for the waste sample since none was available. The solid phase Cr was precipitated from Cr^{+3} as $Cr(OH)_3$ and the soluble Cr was added as Cr^{+6} (CrO_4^{-2}). This is consistent with previously reported results.* Over time, Cr^{+3} tends to convert to Cr^{+6} in caustic solutions if it dissolves. We expect that any Cr dissolved during caustic leaching would be converted from +3 to +6. <u>Leaching is not being implemented in the SIPP, therefore Cr^{+3}/Cr^{+6} is not being considered in the analytical plan</u>. Measurements done by PNNL used X-ray Absorption, which was done at the Stanford Synchrotron Radiation Laboratory**, so SRTC cannot do this measurement in-house. These authors** note that their speciation did not attempt to determine the distribution between the solid and liquid phases. Since Cr^{+3} is usually insoluble and Cr^{+6} is usually soluble, the distributions they determined may just be the distribution between the phases. For two tanks, they report the following results:

		Percent in Sample		
Tank	Cr+3	Cr+6	Cr+3	Cr+6
SY103	>95	<5	>99	<1
T104	84	16	96	4

Reference: BBI. The other tanks studied have no liquid phase listed in the BBI.

* G. J. Lumetta, B. M. Rapko, H. M. Cho, "Studies of the Fundamental Chemistry of Hanford Tank Sludges," Proceedings of ICEM '03.
** B. M. Rapko, et.al, “The Chemistry of Sludge Washing and Caustic Leaching Processes for Selected Hanford Tank Wastes”, PNNL-11089.

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
19. Compare rheology of slurry vs. wt. % solids between Campaign 1 and Campaign 2. What are the effects of antifoam and recycles?	SRNL, Jack Zamecnik (Complete)	This will be done as part of the SIPP task.
20. Define Blending Strategy of Caustic Cleaning Solutions with other UF recycles.	SRNL/Process Operations, Eric Slaathaug (Complete)	Blending scheme proposed by SRNL and agreed upon by WTP (Harty and Slaathaug)
21. What is the hold time (X) for concentrated waste and recycles prior to filtration? X = time it takes to cool full scale concentrated waste feed evaporator batch to ambient + two days of pilot filter operations (concentration, total of 48 hours + X)	SRNL/Process Engineering/WTP R&T, Dave Harty/Eric Slaathaug, (Complete)	Hold time provided by Harty.
22. Evaporator Operations will be conducted on Day Shift.	SRNL, Mark Duignan (Complete)	
23. What heels & loop volumes are needed for Ultrafiltration?	WTP R&T, Ron Longwell, (Complete)	The original response was: none – future tasks will consider. Upon further discussions with Harty of WTP, the presence of heels in ultrafiltration were included in the operational plan.
24. Delete measurements required to generate pump curves.	SRNL, Mark Duignan (Complete)	

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
25. Final Cleaning Method for Filter Operations – Two or Three Cleaning Cycles for modeling purposes?	WTP R&T, Eric Slaathaug (Complete)	Cleaning methods provided by R&T; three will be used.
26. No pulse jets will be used.	WTP R&T, Ron Longwell (Complete)	
27. Determine Scale of Melter to be used.	WTP R&T, Ron Longwell, (Complete)	J. Perez recommended the DM-100 at VSL. The DM-100 is the smallest melter that can adequately demonstrate production rate.
28. Define simulant hold time between filtration and IX.	WTP R&T, Ron Longwell (Complete)	A 2 day hold time will be used.
29. Surge capacity between UF and IX – Item associated with Ultrafiltration exceeding production capacity of IX. The issue was that without knowing the available surge capacity between UFP and IX there is no way to demonstrate with the SIPP that throughput can be met.	SRNL (Complete)	Process Engineering to provide surge capacity to Process Operation– Action Assigned to Eric Slaathaug - Item does not impact SIPP so action is closed. Filter Flux results will be provided for G2 models.
30. IX is operated at 3BV/hr (superficial velocity will not be used)?	WTP R&T, Reid Peterson, (Complete)	The IX will be operated at three flowrate 1.5, 3.0 and 4.5 BV/hr.
31. Cs breakthrough will be determined during SIPP	SRNL/WTP R&T, Mark Duignan/Reid Peterson (Complete)	
32. Two 6” Columns will be used.	WTP R&T, Reid Peterson (Complete)	
33. Check Cs concentration of simulant – Make Cs concentration match AY102/C106 within analytical error.	SRNL, Jack Zamecnik (Complete)	See below.

The Cs content of the AY-102 tank sample supernate was about 1.6 mg/L and the solids concentration was about 13 mg/kg of wet solids (~42 mg/kg of dried solids without interstitial liquid). The simulant supernate Cs concentration is about 0.5-2 mg/L. This concentration can be adjusted, if deemed necessary, after the portions of the slurry simulant have been combined. The Cs concentration in the solids is more difficult to achieve since most Cs compounds are soluble in water or caustic solutions. Therefore, the Cs content of the solids depends on trapping of Cs in the sodium aluminosilicate matrix. The actual concentration of Cs in the simulant batches was measured to be <23 mg/kg and <35 mg/kg by microwave dissolution and Atomic Absorption (AA). Note both measurements were below detection limits and both bound the target concentration (13 mg/kg). Analysis by ICP-MS could improve this detection limit.

The major source of soluble Cs in the SIPP will come from the AP-101 simulant, which will contain about 8 mg/L of Cs. Therefore, it is the AP-101 simulant Cs concentration that will have the most effect on the combined simulants.

In addition to AA for Cs, Cs by ICP-MS will be added to the analytical plan.

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
34. IX Analytical – Close material balance around IX columns – analyze for post precipitation.	SRNL, Jack Zamecnik (Complete)	Analytical plan will be written to reflect these needs. See analytical plan.
35. Provide SBS LAW ratio for Treated Feed Evaporator.	WTP Process Operations, Dave Harty (Complete)	The ratio has been determined.
36. Verify quantity of material sent for vitrification & associated melter turnovers, forward information to J. Perez, WTP R&T.	SRNL, Dan Barnes, Bond Calloway (Complete)	Calculations complete. Bond Calloway to forward information to WTP.
37. Determine SBS volumes needed.	SRNL, Mark Duignan (Complete)	
38. Refine IX plans during SRNL quarterly-Review Scope of Chemical IX testing.	SRNL/WTP R&T, Mark Duignan/Reid Peterson (Complete)	Test exception from Reid/Sundar required.

Questions/Issues/Action Items/Decisions	Action Assigned (Status)	Discussion
39. Determine No. of Bed Volumes prior to elution	WTP R&T, Reid Peterson (Complete)	
40. SRNL to document rate comparison between SIPP and WTP, with and without leaching, actual flux vs. design rate.	SRNL, Dan Barnes (Complete)	Letter issued.
41. Document Run Plan and forward for project review.	SRNL, Mark Duignan (Complete)	
42. Document Sample Analytical Plan (include and forward for project review).	SRNL, Jack Zamecnik/Mark Duignan (Complete)	Action item transferred to Preparedness checklist.
43. Decide if leaching will be performed. If performed, will the prototypic heating and cooling times be required (heating: 8 hr, leaching; 8 hr, cooling: 19 hr).	WTP R&T, Reid Peterson, Paul Townson (Complete)	Leaching will not be conducted per email from WTP.
44. Do IX competitors (Rb, K, Cr+3) need to be at target levels for revised scope of IX tests? Should Cs in AY-102 be adjusted to target level?	SRNL, Jack Zamecnik, Bond Calloway, WTP R&T, Reid Peterson (Complete)	Cs will be added to adjust to target level if necessary. AP-101 simulant will have Rb & significant K. AY-102 supernate will have Rb added (this can easily be done); K will likely be low, but is so much smaller than K in AP-101 effect will be small. Adjustment of Cs in AY-102 can be accomplished after combining simulant portions at SRNL.

Appendix B: Computational Model (AUTHOR – BARNES)

This appendix was first included in the Campaign II report (Duignan, 2004[†]) and condensed from the modeling report (Barnes, 2004).

The volumes of AY-102 and AP-101 simulant required for the four SIPP campaigns were estimated by modeling each campaign as a steady-state process using the software package, OLI/ESP version 6.6. In addition, the minimum SIPP flow rates/fluxes necessary to prove a production rate of 80 metric tons glass per day (MTG/d) for LAW glass and 6 MTG/d HLW glass were estimated based on Campaign IV stream compositions and flow rates and the SIPP unit operation scale factors relative to the current WTP design basis. The OLI/ESP PUBLIC databook, in addition to the private databooks CARBONAT, HNO3DB, SILICA, and ZEOLITE were used to generate the chemistry model (Zamecnik, 2004) for these simulations.

The model for Campaign I simulated the concentration and wash steps of simulant AY-102 (Zamecnik et al., 2004) waste feed only, while the model for Campaigns II-IV, using a blend of simulant AY-102 and AP-101 (Russell et al., 2003) waste feed. Campaigns II-IV simulated most of the pre-treatment process including the FEP evaporator, ultra-filtration, slurry wash, cesium ion-exchange column recycles, and the TLP evaporator. The estimated SIPP volumes for each campaign were based on producing 140L of washed sludge from Campaign I and the ratio of AP-101:AY-102 waste feed predicted to give a glass production ratio of 80/6 MTG/d LAW/HLW glass for each of the Campaigns II-IV.

The structures of the models for Campaigns II-IV are identical. Each of the three campaigns represent an iteration towards steady-state of the ultra-filtration and Cs-IX recycle streams, with the predicted output recycle from one campaign being used as the input recycle to the subsequent campaign. The difference in the predicted volumetric recycle flows between Campaigns III and IV was less than 0.09%, indicating the Campaign IV output recycle had essentially reached steady-state.

The major assumptions used in the model are discussed in the first section below, followed by the criteria used to determine several stream flow rates. Then the model structure is described with the help of simplified flow diagrams; detailed block diagrams are used to describe certain portions of the model. Finally, the modeling results of Campaigns I and IV are given, along with estimates of the minimum SIPP flow/flux rates and process times necessary to prove rate based on the results of Campaign IV. A complete OLI/ESP listing of the properties and composition of key streams for Campaigns I and IV are given in Appendix A of Barnes (2004).

[†] All references made in this Appendix can be found at the end of this Appendix.

B.1. MODEL ASSUMPTIONS

Although the WTP pre-treatment process will have two FEP evaporator/ultra-filtration trains, only one train was included in the model. The current design basis allows only one train to operate in the concentration mode (concentrating the waste feed blend to 18,000 gals. at 20wt% UDS while generating permeate for the Cs IX column) at any one time. Because this is the rate-limiting mode for this process, train "A" will complete its treat-clean mode and the stand idle while train "B" completes its concentration mode (the treat-clean mode consists of washing the 18,000 gal batch of 20wt% UDS slurry, heel and treated sludge transfers, and filter cleaning). At no time will both trains perform the same function simultaneously. Therefore, a single train must be capable of sustaining a production rate of 80 MTG/d LAW glass when in the concentration mode, or 6 MTG/d HLW glass when in the treat and clean mode.

LAW glass production rate was based on 14wt% loading of Na_2O (Lee et al., 2003a) derived from "waste" sodium only, i.e. sodium from waste feed alone ("waste" sodium is defined to include sodium addition from the leach step, however, this step was not included in these particular models). The amount of sodium in the LAW stream considered to be "waste" sodium was calculated as the difference between the sodium in the waste feed streams and the sodium sent to HLP in the washed sludge (all sodium to HLP is assumed to be waste sodium). This is conservative, the calculated LAW glass rate would be higher for identical flow rates if some or all of the sodium going to the HLP were considered to be non-waste sodium, resulting in a corresponding increase in the amount of "waste" sodium to the LAW glass. The total amount of sodium sent to the LAW (or HLP) process is the same in either case.

HLW glass production was based on 12.5wt% loading of Fe_2O_3. This was the first metal oxide to meet contract minimum, all other metal oxides and combinations thereof fell below the contract minimums (Lee et al., 2003b).

While the Cs-IX column recycle streams generated during the elution and resin regeneration sequence are modeled, the removal of Cs from the UF permeate by the column is not. This results in Cs being sent to the TLP evaporator that, in practice, would be removed from the stream and sent to the Cs eluate pot (the pot is not part of the SIPP) and eventually the HLP system. However, the concentration of Cs is small and felt to have no significant effect on the TLP bottoms with respect to the properties of interest, i.e. flow rates, density, precipitated solids, etc. No other pre-treatment process of the model is affected by this approximation.

With the exception of the filter loop, no approximations of tank heels or line volumes were included in the models. This is not likely to affect the relative feed rates of AY-102 and AP-101 a great deal; it would take a very large heel to impact the chemistry of a stream so dramatically as to shift the split of output to the LAW and HLP systems. But the lack of heels does increase the apparent efficiency of the process. Any treated sludge or Cs-IX effluent that is recycled due to heels and line volumes reduces the plant efficiency and glass production rates. Heels will also generate more recycle per unit of

glass as compared to the model predictions. But because these recycles are largely dilute caustic, the only major impact is likely to be an increased load to the evaporators and increased condensate per unit of glass.

B.2. BASES FOR MODEL INPUT/RECYCLE STREAM FLOW RATES AND COMPOSITIONS

In general, the models of each campaign are steady-state approximations of the pre-treatment process and do not introduce any dynamics. The exception is the iteration on the ultra-filtration and Cs-IX recycle stream as it changes value between Campaigns II, III, and IV (reflected in the difference between the fixed input UF and Cs-IX recycles, and the calculated output UF and Cs-IX recycles). All input streams for one particular campaign (HLW and LAW SBS, vessel vent system, recycle inputs from the previous campaign) are set to an average flow rate and do not reflect the cyclic nature of inputs that will exist under actual plant conditions. These average flow rates are based on either the glass production rate, slurry batch size, or the Cs-IX effluent batch size, and the calculations are described in the following paragraphs. The corresponding flows are listed in Tables. B1, B2, and B3.

HLW and LAW SBS recycles generated from actual Duratek melter runs are to be used in the SIPP campaigns. The analytical compositions of these streams were used as input to the model, while the flow rates were based on the most recent ACM model available at the time (dated 11/04/2003 11:42:35am, for streams RDL62 and RDL21 for HLW and LAW SBS, respectively). Because the ACM model HLW glass production rate was 5.4 MTG/d, the given HLW SBS flow rate was adjusted by a ratio of 6:5.4 to represent a flow corresponding to 6 MTG/d. The vessel vent system (PVP04 and PVP06 combined) and the HLW canister decon. (HDH06) stream compositions and flow rates were also based on the ACM model, and the stream compositions given in the ACM model were approximated as a 0.15M NaOH – 0.3M NaNO3 stream for the canister decon., and a 0.1M NaOH stream for the combined PVP04-06 vessel vent system streams. The vessel vent system flow rate is fixed as tank ventilation is not affected by the glass production rates. The flow rates for these streams are listed in Table B1.

Table B1. Campaigns II-IV Input Recycle Flow Rates as a Function of Glass Production Rate

Stream	Flow Rate - relative to 80/6 MTG/d LAW/HLW glass production	Destination
HLW SBS (based on HLW glass)	2.79 gpm	FEP evaporator
LAW SBS (based on LAW glass)	12.2 gpm	TLP evaporator
PVP04 and PVP06 (vessel vent system - fixed rate)	3.23 gpm	FEP evaporator
Canister decon. (based on HLW glass)	1.68 gpm	FEP evaporator

The filter is cleaned once for every 18,000 gal batch of 20wt% UDS concentrated slurry, produced using three – 5,250 gal flushes of 2M HNO3, and three – 5,250 gal flushes of 0.01M NaOH (Lee et al., 2003c). These acid and caustic rinse streams are each modeled using an average volumetric flow ratio relative to the slurry of 3*5,250/18,000, or 0.875. Following the transfer of treated sludge to the HLP, 700 gals. of sludge remains in the filter loop, which gets pushed to the FEP recycle. This is modeled using an average volumetric flow ratio relative to the slurry of 700/18,000. This same ratio is used for the 0.01M NaOH caustic rinse remaining in the filter loop after cleaning, this volume gets pushed to the Cs-IX at the start of the concentration step. These streams are listed in Table B2.

Table B2. Input/Recycle Stream Flow Rates as a Function of the 20wt% UDS Concentrated Slurry Flow Rate
(slurry batch size of 18,000 gals)

Stream	Volume - relative to 18,000 gals. slurry (volumetric fraction relative to slurry)	Destination
Washed Sludge (in filter loop prior to cleaning)	700 gals. (0.03889)	FEP evaporator
Acid Cleaning (2M HNO_3)	3*5,250 gals. (0.8750)	FEP evaporator
Caustic Rinse (0.01M NaOH)	(3*5,250 - 700)gals. (0.8361)	FEP evaporator
Caustic Rinse (0.01M NaOH, remaining in filter loop prior to concentration of blended waste feed.	700 gals. (0.03889)	Cs-IX column

The Cs-IX effluent batch size is 30,000 gals (Lee et al., 2003d). During the elution cycle, one column volume (CV = 1,200 gals.) of 0.1M NaOH is used to displace the feed, followed by one CV of pre-elution DI water. Both of these streams are recycled to the FEP Evaporator and modeled using a flow ratio relative to the Cs-IX effluent of 1,200/30,000. The acid elution and post-elution DI rinse streams are sent to the Cs eluate pot which is not part of the SIPP, so these streams are not relevant to these models. Finally, the resin is regenerated with 2,500 gals. 0.25M NaOH, 1,300 gals of which is recycled to the FEP Evaporator, while the 1,200 gals. remaining in the column is pushed to the TLP Evaporator by the incoming feed. These streams are modeled using a flow ratio relative to the Cs-IX effluent of 1,300/30,000 and 1,200/30,000 for the FEP and TLP streams, respectively, and are listed in Table B3.

Table B3. Input/Recycle Stream Flow Rates as a Function of the Cs-IX Effluent Flow Rate
(effluent batch size of 30,000 gals, column volume of 1,200gals, liquid bed volume of 300 gals.)

Stream	Volume - relative to 30,000 gals. effluent (volumetric fraction relative to effluent)	Destination
0.1M NaOH used as feed displacement	1,200 gals. (0.040)	FEP evaporator
DI water – pre-elution rinse	1,200 gals. (0.040)	FEP evaporator
0.25M NaOH resin regeneration	1,300 gals. (0.043)	FEP evaporator
0.25M NaOH resin regeneration	1,200 gals. (0.040)	TLP evaporator

B.3. MODEL FLOW-DIAGRAMS

A simplified flow diagram of the model for Campaign I is shown in Fig. B1, and a simplified flow diagram of the model for Campaigns II-IV is shown in Fig. B2. The model for Campaigns II-IV consisted of 294 OLI/ESP blocks (mixer, filter, etc.), of which 220 were used to represent the 44 wash steps. To simplify the block-diagram and yet convey a sense of the model's functionality, only the block diagrams detailing a single wash step (Fig. B3) and the FEP evaporator – waste feed blend concentration sequence (Fig. B4) were included here. Feed-Back and/or "Manipulate" controllers were used to set the input stream flow rates described above. Note that an OLI/ESP feed-back controller is not capable of reading the density of a stream directly, instead, it can calculate the g/m3 of a collection of up to 100 species; 84 were used to define the permeate density and are listed (using the OLI/ESP naming convention) in Table B4.

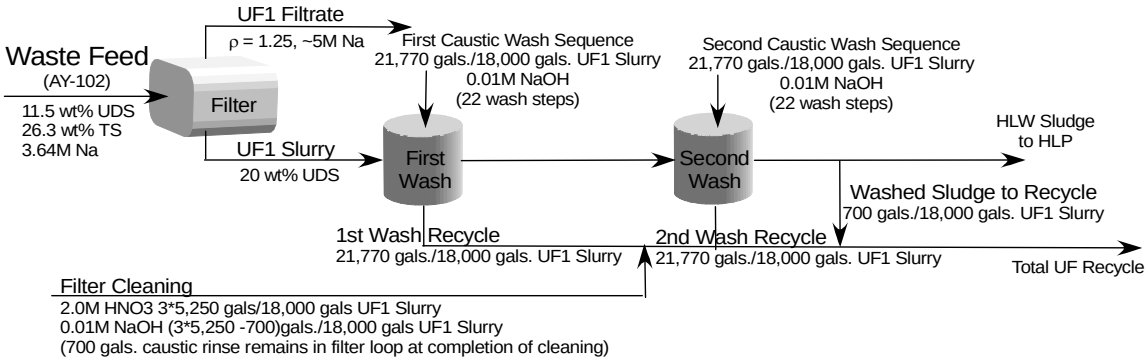

Figure B1. Simplified Flow-Diagram of Campaign I

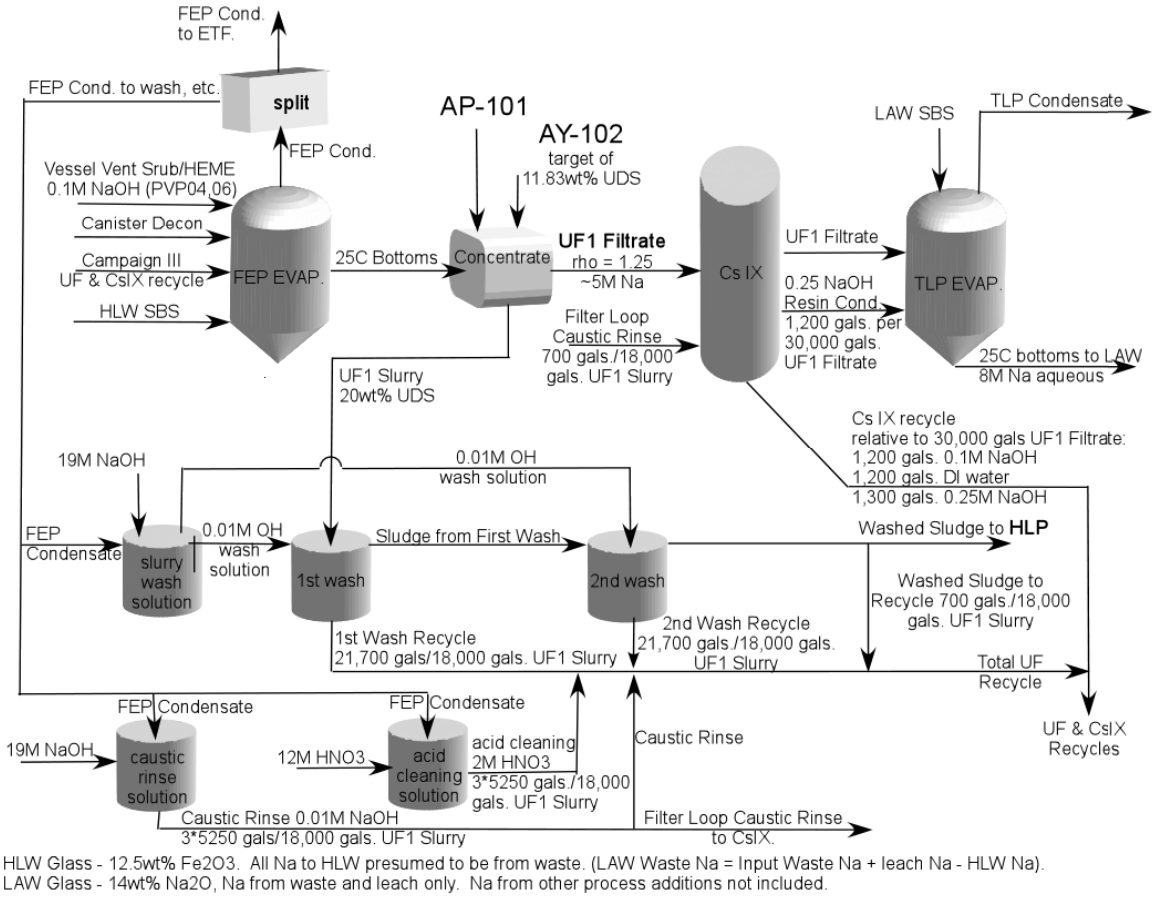

Figure B2. Simplified Flow-Diagram of Campaigns II-IV

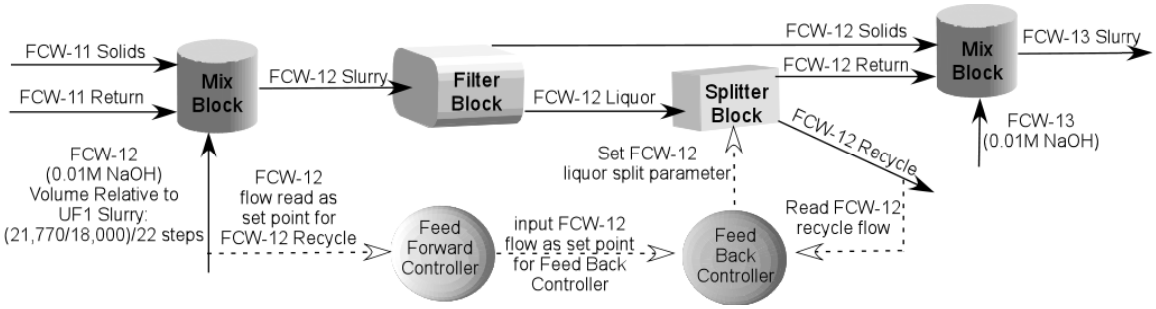

Figure B3. Example Wash Step – Step 12 of First Wash Sequence
(Sets volumetric flow of "FCW-12 Recycle" equal to "FCW-12)

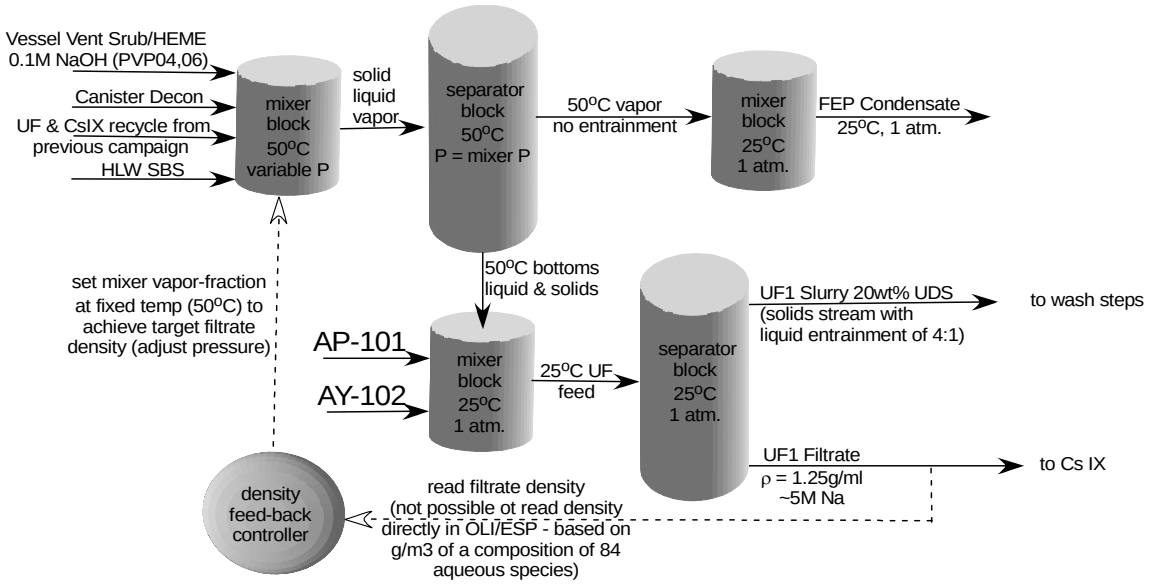

Figure B4. OLI/ESP Representation of FEP Evaporator and Slurry Concentration

Table B4. OLI/ESP Species used to Estimate Aqueous Phase Density
A suffix of AQ indicates an aqueous phase molecule; a suffix of ION indicates an aqueous phase anion/cation.

H2O	BOH3AQ	CAC2O4AQ	CACO3AQ	CAH2SIO4AQ
CEOH3AQ	CSCLAQ	CSNO3AQ	FEIIIOH3AQ	KACETAQ
KCLAQ	KCOOHAQ	KNO3AQ	LIACETAQ	LIH2BO3AQ
LIOHAQ	NAACETAQ	NAALOH4AQ	NABOH4AQ	NABRAQ
NACOOHAQ	NAFAQ	NAHCO3AQ	NAHSIO3AQ	NANO3AQ
BACO3AQ	OHION	AGCL3ION	AGCL4ION	AGOH2ION
ALACETION	ALOH4ION	ALSIO3OHION	B2OOH5ION	B4O5OH4ION
BAION	BAOHION	BOH4ION	BRION	CAH2BO3ION
CAION	CANO3ION	CAOHION	CAPO4ION	CEOH4ION
CLION	CO3ION	COOHION	CRIIC2O42ION	CRIIIION
CRO4ION	CSION	CUOH3ION	CUOH4ION	FEIIIOH4ION
FION	H2SIO4ION	H3SIO4ION	HCO3ION	HPBO2ION
HPO4ION	KION	KSO4ION	LIION	LISO4ION
MNOH3ION	MNOH4ION	NA2FION	NACO3ION	NAION
NASO4ION	NIOH3ION	NO2ION	NO3ION	ACETATEION
OXALATION	PO4ION	RUIIIOH2ION	SO4ION	SROHION
WO4ION	ZNOH3ION	ZNOH4ION	ZROH5ION	

The structures of the models for Campaigns II-IV are identical. The campaigns are related to each other through the UF and Cs-IX recycles, with the recycle generated from one campaign being used directly, with no modifications, as input recycle to the subsequent campaign. The waste feed rates for each of these campaigns was adjusted to give the 80/6 MTG/d LAW/HLW glass ratio. The model for Campaign I was unique. The AY-102 waste feed flow rate was completely arbitrary, only the relative flow rates (acid cleaning flow, etc.) were of importance. Before using it as input to Campaign II, the (arbitrary) Campaign I UF recycle flow rate had to be adjusted to some approximation of a steady-state flow corresponding to the 80/6 MTG/d production rates of Campaigns II-IV. The was done by assuming that the amount of UF recycle generated in Campaign II would only be a function the AY-102 waste feed, and not of the AP-101 waste feed. Then the ratio of generated UF recycle to AY-102 for Campaign II could be calculated by using the same ratio of UF recycle to AY-102 from Campaign I (input UF recycle-II = AY-102-II x (output UF recycle-I)/(AY-102-I)). This turned out to be satisfactory since the difference between the Campaign III and IV recycle volumetric flow rates was less than 0.09%.

B.4. MODEL RESULTS

Campaign I was intended to serve only as a filtration baseline for the remaining campaigns and does not represent the pre-treatment process, no comparisons between the model flow rates and glass production rates were done here. The simulation results for key streams from Campaign I are summarized in Tables B5 and B6. A complete OLI/ESP listing of the properties and composition of key streams for Campaign I is given in Appendix A of Barnes (2004).

Table B5. Composition of Key Streams from the Model of Campaign I

mg/L solution @25C	Waste Feed (AY-102)	UF1 Filtrate to Cs-IX	UF1 Slurry 20wt% UDS	1st Wash Recycle	2nd Wash Recycle	Total UF Recycle	Sludge to HLP
K	427.34	458.61	402.00	245.68	64.18	89.97	27.65
Na	83620.84	80851.08	85865.68	45663.74	13618.32	17675.21	14929.21
Ba	175.81	1.29	317.26	1.06	0.85	0.55	319.25
Ca	965.97	3.44	1746.09	3.65	2.69	1.84	1762.15
Zn	58.36	62.63	54.90	33.55	8.77	12.29	3.78
Cu	67.23	72.15	63.24	38.65	6.63	13.15	8.60
Mg	254.97	0.00	461.62	0.01	0.03	0.01	467.88
Pb	1272.50	1365.61	1197.03	731.56	191.11	267.91	82.33
Al	16182.77	2062.48	27627.02	862.61	163.30	297.89	26746.65
Mn	37.42	2.54	65.69	0.55	0.09	0.18	65.81
Fe	27804.11	45.56	50301.99	18.77	3.76	6.54	50961.18
Ni	910.21	0.41	1647.59	0.17	0.03	0.06	1669.83
F	224.30	240.71	210.99	128.95	33.69	47.22	14.51
Cl	157.97	169.53	148.60	90.82	23.72	33.26	10.22
Br	123.67	132.72	116.34	71.10	18.57	26.04	8.00
Li	85.34	91.59	80.28	49.06	12.82	17.97	5.52
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P	2108.50	2179.93	2050.60	1085.24	157.47	360.84	555.23
S	803.08	818.09	790.90	438.34	114.64	160.57	123.83
Cr	545.25	585.15	512.91	313.46	81.89	114.80	35.28
Si	8382.35	28.08	15153.32	17.72	9.28	7.84	15327.15
Sr	225.34	0.03	407.96	0.03	0.02	0.01	413.47
B	8.96	9.62	8.43	5.15	1.35	1.89	0.58
Cs	6.23	6.68	5.86	3.58	0.94	1.31	0.40
W	161.10	172.89	151.55	92.62	24.19	33.92	10.42
Ce	246.65	264.70	232.02	135.31	6.71	41.24	61.10
Nd	359.53	0.00	650.93	0.00	0.00	0.00	659.82
Zr	993.32	7.39	1792.40	3.75	0.98	1.37	1811.08
Ag	488.67	0.02	884.71	0.00	0.00	0.00	896.79
Ru	87.20	93.58	82.03	50.13	13.10	18.36	5.64
density (g/L)	1231	1169	1281	1098	1029	1041	1137
wt% UDS	11.50	-	20.00	0.09	0.00	0.19	21.39

Table B6. Solids Composition of Key Streams from the Model of Campaign I

Solids (wt% of total UDS)	AY-102 WASTE FEED	20wt% UDS UF1 SLURRY	1st WASH SEQUENCE	2nd WASH SEQUENCE	TOTAL UF Cs-IX RECYCLE	SLUDGE to HLP
Ba(SO4)	0.2097	0.2097	0.0022	0.0107	0.0134	0.2227
Fe(OH)3	37.5385	37.5385	0.2297	0.7329	-	40.1081
Al(OH)3	15.0762	15.0762	14.4437	65.3800	-	16.7198
Mn(OH)2	0.0401	0.0401	0.0297	0.1011	-	0.0438
Ni(OH)2	1.0149	1.0149	0.0017	0.0055	-	1.0842
Ag2(CO3)	0.4413	0.4413	0.0001	0.0002	-	0.4714
Sr(CO3)	0.2683	0.2683	-	-	-	0.2865
ZrO2	0.9416	0.9416	0.0069	0.0319	0.0933	1.0060
Mg(OH)2	0.4322	0.4322	0.0003	0.0273	-	0.4616
NASGEL.15.5H2O	34.8581	34.8581	0.1099	-	-	37.2011
Na2(C2O4)	6.9956	6.9956	85.1755	-	-	-
Ca(CO3)	1.6988	1.6988	-	-	-	1.1021
Nd(PO4).2H2O	0.4848	0.4848	-	-	-	0.5179
Ca(C2O4).1H2O	-	-	-	-	0.2793	-
Ce(PO4)	-	-	-	24.7292	3.3897	0.0416
Pb3(PO4)2	-	-	-	-	16.2916	-
NaAl(CO3)(OH)2	-	-	-	-	79.9325	-
Cu(OH)2	-	-	-	8.9813	-	0.0043
Ca3(PO4)2	-	-	-	-	-	0.7291

Campaigns II and III were intermediary steps towards the UF and Cs-IX recycle stream state-state flows of Campaign IV. As such, only the model results of Campaign IV are reported here and used to estimate the SIPP minimum flux/flow rates necessary to prove rate. These minimum rates, along with the estimated SIPP process volumes are used estimate the corresponding maximum SIPP run times as described below.

In the case of the FEP and TLP evaporators, the overhead flows predicted by the model for the 80/6 MTG/d glass production rates were scaled by a factor 0.l3 (Table B7) to estimate the minimum SIPP overhead flows needed to prove rate.

The minimum LAW permeate flux rate necessary for the SIPP to prove rate was calculated by dividing the flow rate of the LAW permeate (going to the Cs-IX) predicted by the model for the 80/6 MTG/d glass production rates by the design basis filter area of 590 ft^2 (Table B7).

The flux rate for the wash permeate was calculated in a similar manner. However, as described earlier, the concentration mode is the rate-limiting step. One train will have completed the treat-clean mode and remain idle while the other finishes the concentration mode, assuming identical flux rates for the LAW and wash permeates. Instead of using identical fluxes, the calculation for the minimum wash permeate flux rate applied this idle time toward a lower wash permeate flux rate, resulting in equal process times for the

concentration and treat-clean modes. The flux rate was calculated as volume of wash permeate produced by one treat-clean sequence (the washing of 18,000 gals. 20wt% UDS slurry) was divided by the filter area and the time required for one concentration mode, less the time needed for filter cleaning, sludge and heel transfers (i.e. the time available for washing before the train must begin sludge transfer and cleaning in preparation for the next concentration mode).

Table B7. Design Basis and SIPP Capacities

Unit Operation	Design Basis	SIPP	Scale Factor
FEP/TLP Evaporator Cond. Capacity	30 gpm	0.39 gpm	0.13
Ultra-filtration Area	590 ft^2	6.7ft^2	based only on flux rate

These minimum SIPP flux/flow rates where then used to calculate the time required to process the SIPP volumes estimated by the model at these rates. These volumes were based on producing 140L of 20wt% UDS slurry in Campaign I. All flows predicted by the Campaign I model were scaled by the ratio of 140L / (model flow of the 20wt% UDS slurry) to estimate the volumes produced by Campaign I of the SIPP. The calculated volume of the Campaign I SIPP UF recycle (which is also the input UF Recycle for the Campaign II SIPP) was then used to scale the flows predicted by the Campaign II model by the ratio of (Campaign I SIPP UF recycle) / (Campaign II model UF Recycle input). This was done for Campaigns III and IV in the same manner, and is depicted schematically in Fig. B5.

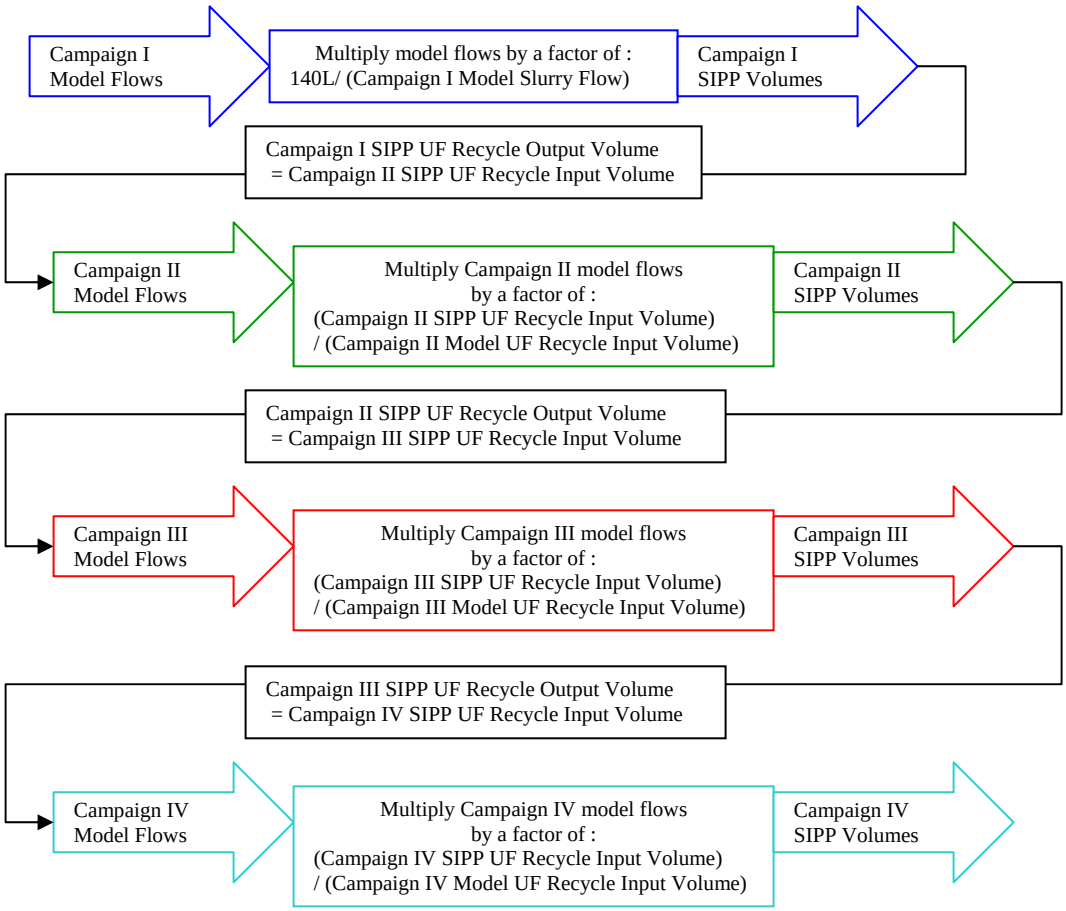

Figure B5. Algorithm for Estimation of SIPP Volumes based on Model Flow Rates

The model flow rates and corresponding SIPP volumes for Campaign IV are listed in Table B8. Table B9 shows the estimated Campaign IV SIPP run time based on values in Tables B7 and B8. The Cs column will not be operated prototypically, but in a manner to determine the break-through curve, so an estimated run-time for the Cs-IX was not included. Also, it is not possible to scale the filter cleaning or the sludge transfer times; the duration for these operations for the SIPP were set at the design basis with the understanding that they will have to be adjusted based on the actual SIPP time for these operations. Finally, these times are only estimates based on the model compositions, the actual Campaign IV SIPP stream compositions, flow, and flux rates will be used to prove or disprove the glass production rates. The model predictions of the composition for key streams of Campaign IV are given in Tables B10 and B11. A complete OLI/ESP listing of the properties and composition of key streams for Campaign IV is given in Appendix B of Barnes (2004).

Table B8. Campaign IV SIPP Volumes and Model Flow Rates

stream name	SIPP Campaign IV Volumes (liters)	Model Flow Rates for 80/6 MTG/d LAW/HLW glass (gpm)
AY102	241.39	3.545
AP101	672.10	9.870
RECYCLE (previous campaign)	602.79	8.852
HLW SBS	189.94	2.789
PVP04/06 (Vessel Vent System)	219.98	3.230
HLW DECON	114.26	1.678
FEP CONDENSATE	984.86	14.462
FEP COOLED BOTTOMS	144.93	2.128
UF1 FILTRATE to CIX	943.65	13.857
UF1 SLURRY 20wt% UDS	116.09	1.705
TOTAL CAUSTIC WASH	280.81	4.124
HLW SLURRY to HLP	109.98	1.615
TOTAL ACID CLEANING	101.59	1.492
TOTAL CAUSTIC RINSE	101.54	1.491
CAUSTIC RINSE TO FEP EVAP	97.03	1.425
CIX DI WATER	37.75	0.554
CIX CAUSTIC RINSE	37.75	0.554
CIX 0.25M NAOH FEP RECYCLE	40.89	0.600
CIX 0.25M NAOH TLP	37.75	0.554
TOTAL UF & CIX RECYCLE	602.27	8.844
LAW SBS	830.20	12.191
TLP CONDENSATE	1224.90	17.987
TLP COOLED BOTTOMS	598.10	8.783

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Table B9. Estimated Filtration Batch Cycle Times Necessary to Make WTP Glass Production Rate of 80/6 MTG/d LAW/HLW

Filtration Step (hrs.)	WTP Batch (18,000 gals.) Cycle Time (hrs.) Design Basis (0.03 gpm/ft2)	WTP Batch (18,000 gals.) Cycle Time (hrs.) Minimum Required Filtration Rates: 0.0235 and 0.00808 gpm/ft2 for the concentration and wash modes respectively	SIPP Batch Cycle Time (hrs.) Design Filtration Rate (0.03 gpm/ft^2)	SIPP Batch Cycle Time (hrs) Minimum Required Filtration Rates: 0.0235 and 0.00808 gpm/ft2 for the concentration and wash modes respectively
1st concentration	137.8	176.0	20.7	26.4
LAW subtotal	**137.8**	**176.0**	**20.7**	**26.4**
1st wash	20.5	76.1	3.1	11.4
2nd wash	20.5	76.1	3.1	11.4
filter cleaning	19.8	19.8	19.8	19.8
sludge heel return	2.0	2.0	2.0	2.0
sludge trans. to HLP	2.0	2.0	2.0	2.0
idle time	73.0	0.0	10.9	0.0
Treat & Clean subtotal	**137.8**	**176.0**	**40.9**	**46.6**
Total Batch Time	***275.5***	***352.0***	***61.6***	***73.0***

Table B10. Composition of Key Streams from Campaign IV Model

mg/L solution @ 25C	AP101	AY102	Input UF&CIX Recycle	FEP Bottoms	UF Blended Feed	UF Filtrate to Cs-IX	UF Slurry 20wt% UDS	1st Wash Sequence	2nd Wash Sequence	Output UF&CIX Recycle	HLW Sludge to HLP	TLP Bottoms
K	31175.6	429.2	3560.4	18546.8	22406.3	22704.3	19983.4	12231.6	3190.6	3602.8	1363.9	37357.0
Na	128776.8	83976.2	20822.7	104317.9	115067.1	113992.0	123803.0	62862.6	22113.6	20864.0	21965.4	184149.6
Ba	0.3	176.6	3.2	13.4	42.3	1.0	377.4	0.9	0.8	3.2	380.7	1.6
Ca	7.7	970.1	19.3	288.6	265.3	2.9	2398.4	2.9	2.6	19.3	2425.9	5.3
Zn	5.6	58.6	7.5	218.9	46.8	47.4	41.8	25.6	6.7	7.5	2.9	80.3
Cu	1.6	67.5	3.0	12.4	18.1	18.3	16.1	9.9	2.6	2.9	1.1	28.9
Mg		256.1	4.5	57.2	66.1	0.0	603.8	0.0	0.0	4.6	612.5	1.2
Pb	14.9	1277.9	54.9	228.3	331.8	336.2	295.9	181.1	47.2	53.3	20.2	530.4
Al	7816.2	16251.5	1025.8	4424.2	9264.0	7717.1	21838.3	3334.5	580.5	1040.9	17351.1	12177.4
Mn		37.6	1.1	4.4	9.2	9.3	8.2	4.2	0.2	1.1	2.8	14.7
Fe	2.5	27922.2	463.1	1957.6	6629.5	202.9	58869.4	77.0	13.0	463.6	59598.9	320.1
Ni	13.7	914.1	15.6	64.8	225.8	1.8	2046.2	0.7	0.1	15.6	2074.4	2.9
F	59.8	225.3	18.6	185.8	114.6	116.2	102.2	62.6	16.3	18.4	7.0	955.8
Cl	1623.7	158.6	436.8	12291.8	2747.0	2783.5	2449.9	1499.6	391.2	441.7	167.2	5904.9
Br		124.2	5.2	21.5	31.2	31.6	27.9	17.1	4.4	5.0	1.9	49.9
Li	0.3	85.7	3.6	15.0	21.8	22.1	19.4	11.9	3.1	3.5	1.3	36.9
P	495.9	2117.5	128.1	533.0	869.7	862.6	927.0	409.4	123.0	126.2	287.6	1361.0
S	1339.2	806.5	183.1	851.0	1149.4	1154.9	1104.4	622.3	162.5	184.0	158.2	2059.8
Cr	170.2	547.6	41.7	173.3	256.4	259.8	228.6	139.9	36.5	41.2	15.6	409.9
Si	136.5	8418.0	152.7	886.5	2125.3	125.3	18382.6	48.0	16.0	152.8	18566.4	265.4

mg/L solution @ 25C	AP101	AY102	Input UF&CIX Recycle	FEP Bottoms	UF Blended Feed	UF Filtrate to Cs-IX	UF Slurry 20wt% UDS	1st Wash Sequence	2nd Wash Sequence	Output UF&CIX Recycle	HLW Sludge to HLP	TLP Bottoms
Sr		226.3	3.7	15.4	53.7	0.1	489.4	0.1	0.1	3.7	496.2	0.1
B	16.0	9.0	2.1	8.9	13.4	13.6	12.0	7.3	1.9	2.2	0.8	1172.8
Cs		6.3	0.3	1.1	1.6	1.6	1.4	0.9	0.2	0.3	0.1	2.5
W	24.6	161.8	9.5	39.4	57.9	58.6	51.6	31.6	8.2	9.3	3.5	92.5
Ce		247.7	10.2	42.6	62.2	63.1	55.5	34.0	8.9	10.0	3.8	99.5
Nd		361.1	5.9	24.5	85.6	0.0	781.3	0.0	0.0	5.9	792.5	1.0
Zr		997.5	18.3	76.2	237.6	24.1	1973.1	12.5	3.1	18.4	1982.1	38.1
Ag		490.7	8.0	33.2	116.3	0.8	1055.0	0.1	0.0	8.0	1069.9	2.7
Ru		87.6	3.6	15.2	22.0	22.3	19.6	12.0	3.1	3.5	1.3	35.2
density (g/L)	1278	1236	1053	1253	1264	1250	1375	1142	1051	1053	1153	1398
wt% UDS	0.01	11.50	0.60	2.45	2.38	0.00	20.00	0.12	0.00	0.57	21.64	0.05

Table B11. Solids Composition of Key Streams from the Model of Campaign IV

wt% of total UDS	AP101	AY102	Input UF & CIX Recycle	FEP Bottoms	UF Blended Feed	20wt% UDS UF1 Slurry	1st Wash Sequence	2nd Wash Sequence	UF&CIX Recycle	HLP Sludge	TLP Bottoms
Fe(OH)3	-	37.54	14.10	12.10	40.83	40.83	0.97	1.24	14.65	45.71	-
Al(OH)3	-	15.08	9.43	29.19	-	-	35.77	98.35	15.81	2.15	-
Ni(OH)2	12.60	1.01	0.39	0.33	1.17	1.17	0.01	0.01	0.41	1.31	-
Ag2(CO3)	-	0.44	0.16	-	0.49	0.49	0.01	0.00	0.17	0.55	-
ZrO2	-	0.94	0.39	0.33	0.96	0.96	0.01	0.04	0.41	1.07	-
Mg(OH)2	-	0.43	-	0.45	0.53	0.53	0.00	0.01	-	0.59	0.42
NASGEL.15.5H2O	-	34.86	14.02	16.74	39.22	39.22	2.19	-	14.57	43.91	-
Nd(PO4).2H2O	-	0.48	0.18	0.15	0.54	0.54	0.00	-	0.19	0.61	0.28
Na2(C2O4)	77.69	7.00	-	38.21	13.55	13.55	61.05	-	-	-	97.91
Ba(SO4)	-	0.21	0.07	0.07	0.23	0.23	-	0.14	0.08	0.26	0.08
Ca(CO3)	9.71	1.70	0.32	2.33	2.18	2.18	-	-	0.57	-	-
Mn(OH)2	-	0.04	-	0.02	-	-	-	0.19	-	0.00	-
Sr(CO3)	-	0.27	0.10	0.08	0.30	0.30	-	0.01	0.10	0.34	0.01
Cu(OH)2	-	-	0.06	-	-	-	-	-	0.06	-	-
Zn(OH)2	-	-	0.13	-	-	-	-	-	0.13	-	-
Ca3(PO4)2	-	-	0.37	-	-	-	-	0.02	0.15	0.09	-
Ce(PO4)	-	-	0.27	-	-	-	-	-	0.28	-	-
Pb3(PO4)2	-	-	1.13	-	-	-	-	-	1.14	-	-
NaAl(CO3)(OH)2	-	-	58.86	-	-	-	-	-	51.30	-	-
CaF2	-	-	-	-	-	-	-	-	-	-	1.30
Ca(C2O4).1H2O	-	-	-	-	-	-	-	-	-	3.41	-

B.5. MODEL RESULTS

Analytical results of the stream compositions from the SIPP Campaign II run indicate a higher glass production rate by about 15% than estimated by the model. This difference is due to the adjustment made to the solids portion of the simulant recipe used in the model. While it is not necessary, even undesirable, to base the solids portion of a simulant recipe on a charge balanced analysis, the model requires all input streams to be neutral. The simulant solids recipe had an excess of cations and hydroxide was added to achieve a charge balance for the model input. This led to an inconsistency between the charge balance and the concentration of the constituent species, adding hydroxide caused the mass basis to go from 1000 kg to 1138 kg (i.e. the solids composition was given in moles/1000kg dry solids). The simulant recipe was still in development at the time of the model runs, and instead of modifying the ratio of the solids species to achieve the correct mass basis, the composition was used as given. The result was to dilute the metals concentration in the solids of the model relative to that of the final simulant composition.

B.6. REFERENCES FOR APPENDIX B

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APPENDIX C: WTP DISCUSSION ON PRETREATMENT FACILITY WASTE PROCESSING RESIDENCE TIMES

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SUBJECT: PLANT RESIDENCE TIME DISCUSSION

<<PT Flow Diagram Rev 1b.vsd>> <<PT Tank Vol_App B.doc>>

Attached *(they have been removed)* above are the handouts from the discussion this afternoon. Four different holdup times were discussed during the meeting.

Note: The defined production rates for SIPP are 6.0 MT IHLW/day and 80 MT ILAW/day. Steady-state flowrates defined below are from the WTP Steady State Flowsheet.

I. Holdup Time For Permeate After Ultrafiltration.

Two permeate vessel tank volumes (21,800 each) plus the CXP Feed Vessel available volume (78,000 batch -25,000 contingency) are used for a total available holdup volume of 96,600 gallons. At a steady-state permeate flowrate of 14.8 gpm, the residence time is 96,600/(14.8*60) = 109 hours (~4 1/2 days).

II. Holdup Time For Blended Feed With Concentrated Recycles Prior To Ultrafiltration.

Two UFP Preparation vessel tank volumes (48,300 each) are used for a total available holdup volume of 96,600 gallons. At a steady-state feed to UFP Feed vessels of 16.3 gpm, the residence time is 96,600/(16.3*60) = 99 hours (~4 days). This value is overly conservative and the residence time of blending the concentrated recycles with the blended feed is dependent on the dynamic nature of recycle generation, feed blending, and the processing of feed form the preparation vessel to the feed vessel. If the online UFP Feed vessel is considered full and the UF Prep vessels are both filled with blended feed and concentrated recycle, then the residence time of ~4 days will result. Further consideration suggests that the residence time using one UFP Preparation vessel tank volume should be used. This would give a residence time of 48,300/(16.3*60) = 49 hours (~2 days). Use the second value.

III. Holdup Time for Blended Recycles (HLW-SBS with UFP recycles) Prior to Evaporation.

Two evaporator feed tanks with an available volume of (50,000 batch - 10,000 contingency) are used for a total available holdup volume of 80,000 gallons. At a steady-state evaporator feed flowrate of 18.5 gpm, the residence time is 80,000/(18.5*60) = 72 hours (~3 days).

IV. Holdup Time For Recycles in the Evaporator.

One evaporator with a holdup volume of ~5500 gallons is used. At a steady-state concentrate flowrate of 1.8 gpm, the residence time is 5500/(1.8*60) = 51 hours (~2 days). It was noted that without the leaching process, there is no recycle leachate. Inclusion of the leaching recycle reduces the residence time in the evaporator because the concentrate flowrate is higher.

Comments are welcome.

Dave Harty
Pretreatment Process Operations, 371-3360

APPENDIX D: SAMPLING MATRICES – Campaigns I-IV

This appendix contains a list of all the samples taken during SIPP. Because of the large number of samples and the importance to document those that were taken, the tables have been put in a form, which is condensed. However, the tables are readable and their placement here should be useful to those wanting to better understand the data discussed in the body of this report. Immediately obvious is that the number of samples for each campaign is different and this occurred for different reasons. Campaign I has the most extensive number of samples for filtration. That campaign only involved filtration [Test Specification (Townson, 2002)] and only tested a single simulant, i.e., AY102/C106, so that it could be compared to past single-simulant filter tests and so that it would be a baseline to compare to other filtration tests in SIPP as the feed simulant included both AP101 and recycle streams.. Beginning with Campaign II a different sample matrix was devised because of the interconnected operation of four unit operations through their feed and product streams, including the recycle streams. Campaign II analyzed the largest number of sample, because it was the first campaign using all four unit operations. The number of samples analyzed in subsequent campaigns was significantly reduced to minimized cost but this was justified because of the similar filtration performance between Campaigns I and II, even with the addition of AP101 and recycle streams to the filtration feed. Finally, Campaign IV was once again just a filtration test to evaluate the new GKN filter (Feed Waste Evaporation was included in order to make feed for the filter test.) While the performance of the GKN was unknown before the test, the chemistry of the feed was not expected to be significantly different than what was measured in Campaigns II and III, therefore, only a minimum number of analytical samples were analyzed to minimize cost. This assumption was backed up be the similar filter performances of Campaigns I, II, and III, and because the model discussed in Appendix B predicted little change in chemical makeup in the streams.

Tables D2: Campaign I
Tables D3: Campaign II
Tables D4: Campaign III
Tables D5: Campaign IV

<u>Notes on the following Sample Tables</u>

Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		ICC	Ion chrom. cations
ICPES	includes all elements present that can be analyzed by ICPES		IEC	Ion exclusion chrom.
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	AA	atomic absorption
	supernates	Cs, Rb	TS	total solids wt%
ICA	Ion chrom - anions	normal suite	UDS	undissolved solids wt%

Explanation of analyses:

DENS	density
RHEO	rheology
PSD	particle size distribution by Microtrac
XRD	X-ray diffraction - on filtered solids and blank ONLY IF SOLIDS PRESENT
TBOH	total base, free hydroxide, other base

DISMW: microwave acid dissolution
DISPER: sodium peroxide fusion / HCL uptake dissolution

Note on Analysis of Sample Compositions

All analyses except total solids, undissolved solids, supernate solids, density, and rheological measurements were performed by the WSRC/SRNL Analytical Development Section per the task plan specifications. The aforementioned analyses were performed by the SRNL Immobilization Technology Section at the Aiken County Technology Laboratory. Table D1 shows the methods used for analysis of each of the species measured.

Table D1 Analysis Methods Used

Analysis or Preparation	Analytical Method	Preparation Method
Slurry Sample Dissolution	Microwave acid (MW) or Sodium peroxide (PER) fusion/ HCl uptake	
Ag, Al, B, Ba, Ca, Cd, Ce, Co, Cr, Cu, Fe, La, Li, Mg, Mn, Mo, Nd, P, Pb, Re, S, Si, Sr, Ti, W, Zn, Zr	ICPES	both
Na	ICPES, also AA	MW
Ni	ICPES	MW
B	ICPES	PER
K	AA, also ICPES	MW
Cs	ICPMS, also AA	MW
Bi, Pr, Rb, Y	ICPMS	MW
bromide, chloride, fluoride, formate, nitrate, nitrite, phosphate, oxalate, sulfate	Anion Chromatography (IC)	none
acetate, citrate	Ion exclusion chromatography	none
ammonium	Cation Chromatography	none
organic carbon, inorganic carbon (TIC)	carbon analyzer	micronization
“total” oxalate	calculated from organic carbon minus formate	none
carbonate	calculated from TIC, also titration	none
total base, free hydroxide, other base	titration	precipitation of carbonate
total acid	titration	none
total solids, dissolved solids (solids in supernate fraction of slurry)	halogen lamp solids analyzer	none
undissolved solids	calculated from total and supernate solids	none
density	?	none
rheology	Haake rheometer	none

Table D2-1 Campaign I Sample Matrix (1 of 4 pages)

					Sample	Sample	Sample	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ULTRAFILTRATION		Campaign I		Sample	Location	Volume mL	Prep	pH	ICPES	ICPMS	ICA	IEC	AA	TS	UDS	WT%CS	CSWT	DENS	RHEO	PSD	XRD	TBOH	TACID	TIC/TOC	CO3
	Concentrate Sample	at start of run		C1-UF-START	SR Tank	750																			
				C1-UF-START-AS-IS-MW		20	DISMW		ICPES	ICPMS			AA												
				C1-UF-START-AS-IS-PER		20	DISPER		ICPES																
				C1-UF-START-AS-IS-WET		100					ICA	IEC								PSD		TBOH		TIC/TOC	CO3
				C1-UF-START-AS-IS-SOL		50		pH						TS	UDS	WT%CS		DENS							
				C1-UF-START-AS-IS-RH		100													RHEO						
				C1-UF-START-SOLIDS-MW		10	DISMW		ICPES	ICPMS			AA												
				C1-UF-START-SOLIDS-PER		10	DISPER		ICPES																
				C1-UF-START-SOLIDS-WET		50					ICA	IEC												TIC/TOC	CO3
				C1-UF-START-SOLIDS-XRD		10	XRDP														XRD				
				C1-UF-START-SOLIDS-SOL		40								TS			CSWT								
				C1-UF-START-SUPN-ELEM		50			ICPES	ICPMS	ICA	IEC	AA												
				C1-UF-START-SUPN-WET		100																TBOH		TIC/TOC	CO3
				C1-UF-START-SUPN-SOL		50		pH						TS				DENS							
				C1-UF-START-SUPN-RH		100													RHEO						
				C1-UF-START-ARC		750																			
		Total time to concentrate (hr)	12.0																						
1st 1/2 of Batch		Time for first half batch (hr)	5.0																						
	Concentrate Sample	at ~ this vol permeate removed (L)	26.7	C1-UF-CON1-27	SR Tank	50								TS	UDS			DENS							
	Concentrate Sample	at ~ this vol permeate removed (L)	53.3	C1-UF-CON1-53	SR Tank	50								TS	UDS			DENS							
	Concentrate Sample	at ~ this vol permeate removed (L)	80.0	C1-UF-CON1-80	SR Tank	50								TS	UDS			DENS							
	Permeate Sample	at ~ this vol permeate removed (L)	26.7	C1-PE-CON1-27	filtrate line	500	XRDP							TS	UDS						XRD				
	Permeate Sample	at ~ this vol permeate removed (L)	53.3	C1-PE-CON1-53	filtrate line	500	XRDP														XRD				
	Permeate Sample	at ~ this vol permeate removed (L)	80.0	C1-PE-CON1-80	filtrate line	500	XRDP														XRD				
	Permeate Sample	composite at start of hold time		C1-PE-CON1-CMP1A	filtrate drum	500	XRDP														XRD				
Hold		Hold for 12 hr																							
	Permeate Sample	composite after hold time		C1-PE-CON1-CMP1B	filtrate drum	500	XRDP							TS	UDS			DENS			XRD				
2nd 1/2 of Batch		Time for second half batch (hr)	7.0																						
	Concentrate Sample	at ~ this vol permeate removed (L)	26.7	C1-UF-CON2-27	SR Tank	50								TS	UDS			DENS							
	Concentrate Sample	at ~ this vol permeate removed (L)	53.3	C1-UF-CON2-53	SR Tank	50								TS	UDS			DENS							
	Concentrate Sample	all permeate removed, @ 20wt% solids	80.0	C1-UF-CON2-END	SR Tank	50								TS	UDS			DENS							
	Concentrate Sample	all permeate removed, @ 20wt% solids	80.0	C1-UF-CON2-80-1	SR Tank	250																			
		SUB-SAMPLES		C1-UF-CON2-80-1-MW		20	DISMW		ICPES	ICPMS			AA												
				C1-UF-CON2-80-1-PER		20	DISPER		ICPES																
				C1-UF-CON2-80-1-WET		50					ICA	IEC								PSD		TBOH		TIC/TOC	CO3
				C1-UF-CON2-80-1-SOL		50		pH						TS	UDS			DENS							
				C1-UF-CON2-80-1-RH		100													RHEO						
	Concentrate Sample	all permeate removed, @ 20wt% solids	80.0	C1-UF-CON2-80-2	SR Tank	250																			
		SUB-SAMPLES		C1-UF-CON2-80-2-MW		20	DISMW		ICPES	ICPMS			AA												
				C1-UF-CON2-80-2-PER		20	DISPER		ICPES																
				C1-UF-CON2-80-2-WET		50					ICA	IEC								PSD		TBOH		TIC/TOC	CO3
				C1-UF-CON2-80-2-SOL		50		pH						TS	UDS			DENS							
				C1-UF-CON2-80-2-RH		100													RHEO						
	Concentrate Sample	all permeate removed, @ 20wt% solids	80.0	C1-UF-CON2-80-3	SR Tank	250																			
		SUB-SAMPLES		C1-UF-CON2-80-3-MW		20	DISMW		ICPES	ICPMS			AA												
				C1-UF-CON2-80-3-PER		20	DISPER		ICPES																
				C1-UF-CON2-80-3-WET		50					ICA	IEC								PSD		TBOH		TIC/TOC	CO3
				C1-UF-CON2-80-3-SOL		50		pH						TS	UDS			DENS							
				C1-UF-CON2-80-3-RH		100													RHEO						
	Concentrate Sample	l permeate removed, @ 20wt% solids	80.0	C1-UF-CON2-80-ARC		250																			
	Permeate Sample	at ~ this vol permeate removed (L)	26.7	C1-PE-CON2-27	filtrate line	500	XRDP														XRD				
	Permeate Sample	at ~ this vol permeate removed (L)	53.3	C1-PE-CON2-53	filtrate line	500	XRDP														XRD				
	Permeate Sample	l permeate removed, @ 20wt% solids	80.0	C1-PE-CON2-80	filtrate line	500	XRDP														XRD				
CONCENTRATION	Concentrate	volume in feed tank (L)	140.0																						
COMPLETE	Permeate Composite	total volume of permeate (L)	160.0	C1-PE-CON2-CMP	filtrate drum	500																		TIC/TOC	
				C1-PE-CON2-CMP-SUP		150			ICPES	ICPMS	ICA	IEC	AA												
				C1-PE-CON2-CMP-RH		100													RHEO						
				C1-PE-CON2-CMP-SOL		50		pH						TS	UDS			DENS							
				C1-PE-CON2-CMP-ARC		500	XRDP														XRD				
STEADY STATE MATRIX		Time for steady-state matrix (hr)	10																						
	Concentrate Sample	at end of concentration		C1-UF-SSM	SR Tank	250																			
				C1-UF-SSM-SOL		200								TS				DENS	RHEO						
				C1-UF-SSM-PSD		50														PSD					

Table D2-2 Campaign I Sample Matrix (2 of 4 pages)

					Sample	Sample	Sample	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ULTRAFILTRATION		**Campaign I**		Sample	Location	Volume mL	Prep	pH	ICPES	ICPMS	ICA	IEC	AA	TS	UDS	WT%CS	CSWT	DENS	RHEO	PSD	XRD	TBOH	TACID	TIC/TOC	CO3
FIRST WASH		RLD Wash water (0.01 M NaOH) (L)	169.3	C1-RLD-WASH	RLD (b)				~~ICPES~~		~~ICA~~		~~AA~~					~~DENS~~							
				C1-RLD-WASH-SOL		25		~~pH~~						~~TS~~	~~UDS~~										
				C1-RLD-WASH-ARC		500																			
	Concentrate Sample	**after addition #**	**1**	**C1-UF-W1-1**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**5**	**C1-UF-W1-5**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**9**	**C1-UF-W1-9**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**13**	**C1-UF-W1-13**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**17**	**C1-UF-W1-17**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition # (last)**	**22**	**C1-UF-W1-22**	**SR Tank**	**350**																			
				C1-UF-W1-22-MW		25	DISMW		ICPES	ICPMS			AA												
				C1-UF-W1-22-PER		25	DISPER		ICPES																
				C1-UF-W1-22-WET		25					ICA									PSD				TIC/TOC	
				C1-UF-W1-22-SOL		150		pH						TS	UDS			DENS	RHEO						
				C1-UF-W1-22-ARC		100																			
	Wash Permeate	**after addition #**	**1**	**C1-WPE1-1**	**filtrate line**	**500**																			
				C1-WPE1-1-ADS		100			ICPES		ICA		AA												
				C1-WPE1-1-SOL		25		pH						TS											
				C1-WPE1-1-ARC		375																			
	Wash Permeate	**after addition #**	**5**	**C1-WPE1-5**	**filtrate line**	**100**																			
				C1-WPE1-5		100			ICPES		ICA		AA												
				C1-WPE1-5-SOL		25		pH						TS											
				C1-WPE1-5-ARC		375																			
	Wash Permeate	**after addition #**	**9**	**C1-WPE1-9**	**filtrate line**	**100**																			
				C1-WPE1-9		100			ICPES		ICA		AA												
				C1-WPE1-9-SOL		25		pH						TS											
				C1-WPE1-9-ARC		375																			
	Wash Permeate	**after addition #**	**13**	**C1-WPE1-13**	**filtrate line**	**100**																			
				C1-WPE1-13		100			ICPES		ICA		AA												
				C1-WPE1-13-SOL		25		pH						TS											
				C1-WPE1-13-ARC		375																			
	Wash Permeate	**after addition #**	**17**	**C1-WPE1-17**	**filtrate line**	**100**																			
				C1-WPE1-17		100			ICPES		ICA		AA												
				C1-WPE1-17-SOL		25		pH						TS											
				C1-WPE1-17-ARC		375																			
	Wash Permeate	**after addition #**	**22**	**C1-WPE1-22**	**filtrate line**	**100**																			
				C1-WPE1-22		100			ICPES		ICA		AA												
				C1-WPE1-22-SOL		25		pH						TS											
				C1-WPE1-22-ARC		375																			
	Wash Permeate	**composite of 2nd wash permeate**		**C1-WPE1-CMP**	**filtrate drum**	**650**																		**TIC/TOC**	
				C1-WPE1-CMP-ADS		100			ICPES	ICPMS	ICA		AA												
				C1-WPE1-CMP-SOL		25		pH						TS											
				C1-WPE1-CMP-ARC		500																			
END 1ST WASH	**Concentrate**		**140.0**																						
		Time for initial wash (hr)	**8.0**																						
2ND WASH		**RLD Wash water (0.01 M NaOH) (L)**	**169.3**																						
	Concentrate Sample	**after addition #**	**1**	**C1-UF-W2-1**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**5**	**C1-UF-W2-5**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**9**	**C1-UF-W2-9**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**13**	**C1-UF-W2-13**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition #**	**17**	**C1-UF-W2-17**	**SR Tank**	**225**		**pH**						**TS**	**UDS**			**DENS**	**RHEO**						
	Concentrate Sample	**after addition # (last)**	**22**	**C1-UF-W2-22**	**SR Tank**	**350**																			
				C1-UF-W2-22-MW		25	DISMW		ICPES	ICPMS			AA												
				C1-UF-W2-22-PER		25	DISPER		ICPES																
				C1-UF-W2-22-WET		25					ICA									PSD				TIC/TOC	
				C1-UF-W2-22-SOL		150		pH						TS	UDS			DENS	RHEO						
				C1-UF-W2-22-ARC		100																			

Table D2-3 Campaign I Sample Matrix (3 of 4 pages)

					Sample	Sample	Sample	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ULTRAFILTRATION		**Campaign I**		Sample	Location	Volume mL	Prep	pH	ICPES	ICPMS	ICA	IEC	AA	TS	UDS	WT%CS	CSWT	DENS	RHEO	PSD	XRD	TBOH	TACID	TIC/TOC	CO3
	Wash Permeate	**after addition #**	**1**	**C1-WPE2-1**	**filtrate line**	**500**																			
				C1-WPE2-1-ADS		100			ICPES		ICA		AA												
				C1-WPE2-1-SOL		25		pH						TS											
				C1-WPE2-1-ARC		375																			
	Wash Permeate	**after addition #**	**5**	**C1-WPE2-5**	**filtrate line**	**100**																			
				C1-WPE2-5		100			ICPES		ICA		AA												
				C1-WPE2-5-SOL		25		pH						TS											
				C1-WPE2-5-ARC		375																			
	Wash Permeate	**after addition #**	**9**	**C1-WPE2-9**	**filtrate line**	**100**																			
				C1-WPE2-9		100			ICPES		ICA		AA												
				C1-WPE2-9-SOL		25		pH						TS											
				C1-WPE2-9-ARC		375																			
	Wash Permeate	**after addition #**	**13**	**C1-WPE2-13**	**filtrate line**	**100**																			
				C1-WPE2-13		100			ICPES		ICA		AA												
				C1-WPE2-13-SOL		25		pH						TS											
				C1-WPE2-13-ARC		375																			
	Wash Permeate	**after addition #**	**17**	**C1-WPE2-17**	**filtrate line**	**100**																			
				C1-WPE2-17		100			ICPES		ICA		AA												
				C1-WPE2-17-SOL		25		pH						TS											
				C1-WPE2-17-ARC		375																			
	Wash Permeate	**after addition #**	**22**	**C1-WPE2-22**	**filtrate line**	**100**																			
				C1-WPE2-22		100			ICPES		ICA		AA												
				C1-WPE2-22-SOL		25		pH						TS											
				C1-WPE2-22-ARC		375																			
	Wash Permeate	**composite of 2nd wash permeate**		**C1-WPE2-CMP**	**filtrate drum**	**650**																		**TIC/TOC**	
				C1-WPE2-CMP-ADS		100			ICPES	ICPMS	ICA		AA												
				C1-WPE2-CMP-SOL		25		pH						TS											
				C1-WPE2-CMP-ARC		500																			
END 2ND WASH		**Time for final wash (hr)**	**8.0**																						
	Concentrate	volume washed concentrate (L)	**140.0**																						
OVER-CONCENTRATE		**Volume to remove for Max wt% (L)**	**?**		**SR Tank**																				
		Time to concentrate (hr)	**5.0**																						
	Concentrate	**over-concentrated slurry**		**C1-UF-OVER**	**SR Tank**	**250**																			
				C1-UF-OVER-SOL		200								TS					RHEO						
				C1-UF-OVER-ARC		50														PSD					
	Permeate			**C1-PE-OVER-ARC**		**500**																			
CLEANING	**NaOH**	**50 wt% NaOH, L**	**0.52**																						
	RLD Dil H2O for NaOH	**volume needed (L)**	**100**																						
		Time to rinse UF (hr)	**0.5**																						
	Rinse water (0.1M NaOH)	**after rinse & after dilution for (L)**		**C1-CAUU-1**	**drum**	**500**																			
				C1-CAUU-1-MW		100	DISMW		ICPES	ICPMS			AA												
				C1-CAUU-1-PER		100	DISPER		ICPES																
				C1-CAUU-1-WET		100					ICA														
				C1-CAUU-1-SOL		100		pH						TS	UDS			DENS							
				C1-CAUU-1-ARC		**500**																			
		2 M HNO3 cleaning (hr)	**1.5**																						
	2M HNO3 clean soln	**after cleaning & after dilution for (L)**	**100**	**C1-NITU-1**	**drum**	**350**																			
				C1-NITU-1-SOL		50								TS	UDS			DENS							
		correction of SIPP/WTP scale		C1-NITU-1-WET		50																	TACID		
				C1-NITU-1-ARC		150																			
				C1-NITU-1-CMP		500																			
		2 M HNO3 cleaning (hr)	**1.5**																						
	2M HNO3 clean soln	**after cleaning & after dilution for (L)**	**100**	**C1-NITU-2**	**drum**	**350**																			
				C1-NITU-2-SOL		50								TS	UDS			DENS							
		correction of SIPP/WTP scale		C1-NITU-2-WET		50																	TACID		
				C1-NITU-2-ARC		150																			
				C1-NITU-2-CMP		500																			
		2 M HNO3 cleaning (hr)	1.5																						
	2M HNO3 clean soln	**after cleaning & after dilution for (L)**	**100**	**C1-NITU-3**	**drum**	**350**																			
				C1-NITU-3-SOL		50								TS	UDS			DENS							
		correction of SIPP/WTP scale		C1-NITU-3-WET		50																	TACID		
				C1-NITU-3-ARC		150																			
				C1-NITU-3-CMP		500																			

Table D2-4 Campaign I Sample Matrix (4 of 4 pages)

					Sample	Sample	Sample	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ULTRAFILTRATION		**Campaign I**		Sample	Location	Volume mL	Prep	pH	ICPES	ICPMS	ICA	IEC	AA	TS	UDS	WT%CS	CSWT	DENS	RHEO	PSD	XRD	TBOH	TACID	TIC/TOC	CO3
	2 M HNO3 cleaning solution composite			**C1-NITU-C**	**composite**	**500**																			
				C1-NITU-C-MW	**bottles**	100	DISMW		ICPES	ICPMS			AA												
				C1-NITU-C-PER		100	DISPER		ICPES																
				C1-NITU-C-SOL		100								TS	UDS			DENS							
				C1-NITU-C-WET		100																	TACID		
				C1-NITU-C-ARC		500																			
	Add NaOH	**50 wt% NaOH, L**	***0.52***																						
	RLD Dil H2O for NaOH	**volume needed (L)**	**100**																						
		Time to rinse UF (hr)	**0.5**																						
	Rinse water (0.1M NaOH)	**after rinse**		**C1-CAUU-2**	**drum**	**500**																			
				C1-CAUU-2-SOL		100		pH						TS	UDS			DENS							
				C1-CAUU-2-CMP		400																			
	Add NaOH	**50 wt% NaOH, L**	***0.52***																						
	RLD Dil H2O for NaOH	**volume needed (L)**	**100**																						
		Time to rinse UF (hr)	**0.5**																						
	Rinse water (0.1M NaOH)	**after rinse & after dilution for (L)**		**C1-CAUU-3**	**drum**	**500**																			
				C1-CAUU-3-SOL		100		pH						TS	UDS			DENS							
				C1-CAUU-3-CMP		400																			
	Rinse water composite	**(post-HNO3 rinses only)**		**C1-CAUU-2+3**	**composite**	**500**																			
				C1-CAUU-2+3-MW	bottles	100	DISMW		ICPES	ICPMS			AA												
				C1-CAUU-2+3-PER	2 & 3	100	DISPER		ICPES																
				C1-CAUU-2+3-WET		100					ICA														
				C1-CAUU-2+3-SOL		100		pH						TS	UDS			DENS							
				C1-CAUU-2+3-ARC		100																			

Table D3-1 Campaign II Sample Matrix (1 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
RECYCLE BLENDING			**Campaign I UF Wash Water**	Previously analyzed: C1-WPE1 & C1-WPE2																			
			HLW SBS	Previously analyzed: HLW-SBS-QUENCHER																			
			HLW Vessel Vent (PVP)	Synthetic - no analysis																			
			HLW Canister Decon	Synthetic - no analysis																			
			Campaign I Caustic Flushes	Previously analyzed				**XRD analyses only required if solids precipitate from solutions that should have no undissolved solids.**															
			Campaign I UF Acid Cleanings	Previously analyzed																			
			Campaign I UF Loop Flushes (PWD-33)	see below				**Cost based on 8 IX samples per cycle; cost will increase**															
			Campaign I Cs IX Recycle: Pre-Elution Rinse Water	NA																			
			Campaign I Cs IX Recycle: 0.1M NaOH Displacement Solution	NA																			
			COMBINED RECYCLES	see below																			
			(does not include NaOH to neutralize HNO3)																				
		PWD	**Generation of Synthetic Recycles**																				
			HLW Canister Decon																				
			DI water																				
			NaOH 50wt% (L)																				
			NaNO3 (kg)																				
			HLW Vessel Vent (PVP)																				
			DI water																				
			NaOH 50wt% (L)																				
			Combined Canister Decon + PVP	C2-PWD-HLWRECS	ARCHIVE	mixing tank																	
			UF Loop Flush	C2-PWD-LOOP-IN-ACTL	NONE	carboy	50								TS	UDS	DENS						
			Add 0.01M NaOH to a carboy																				
			Add Campaign I UF washed sludge product (20 wt%)																				
			Sum																				
			Combining of Recycles																				
		PWD-44		C2-PWD-44-ACTL	NONE	mixing tank	50		pH						TS	UDS	DENS						
			Add HLW Canister Decon + PVP water to a tank	C2-PWD-44-ARC	ARCHIVE		250																
			Add HLW Canister Decon + PVP 50wt% NaOH																				
			Add HLW Canister Decon NaNO3 (kg)																				
			Add HLW SBS to tank with mixing																				
			Add UF Loop Flushes (PWD-33) with mixing																				
			Sum																				
		PWD-15		C2-PWD-15-ACTL	NONE	mixing tank	50		pH						TS	UDS	DENS						
			Add Campaign I Wash Permeate to a tank (use 2nd drum,~0.05M OH)	C2-PWD-15-ARC	ARCHIVE		250																
			Add from Campaign I Caustic Flush Drum 1 with mixing																				
			Add from Campaign I Caustic Flush Drum 2 with mixing																				
			Add from Campaign I Caustic Flush Drum 3 with mixing																				
			Sum																				
		PWD-16		C2-PWD-16-ACTL	NONE	mixing tank	50		pH						TS	UDS	DENS						
			Add Campaign I Wash Permeate to a tank (use 1st drum,~0.1M OH)	C2-PWD-16-ARC	ARCHIVE		250																
			Add NaOH 50wt% (L)																				
			Add from Campaign I Nitric Acid Cleaning Drum 1 with mixing																				
			Add from Campaign I Nitric Acid Cleaning Drum 2 with mixing																				
			Add from Campaign I Nitric Acid Cleaning Drum 3 with mixing																				
			Sum																				
		Combine Recycles in (FEP Feed) Tank		C2-FEP-FEED-ACTL	NONE	mixing tank	50		pH						TS	UDS	DENS						
			Add PWD-44 to tank with mixing	C2-FEP-FEED-WET	41335		100					ICA									TBOH		TIC/TOC
			Add PWD-15 to tank with mixing	C2-FEP-FEED-MW	42336		100	DISMW		ICPES	ICPMS			AA									
			Add PWD-16 to tank with mixing	C2-FEP-FEED-PER	41337		100	DISPER		ICPES													
			Sum	C2-FEP-FEED-ARC	ARCHIVE		1000																
FEP EVAPORATOR			**Starting Volume**																				
		Bottoms	**After all antifoam additions**	C2-FEP-B-START-ACTL	NONE	bottoms tank	60								TS	UDS	DENS	RHEO					
				C2-FEP-B-START-ANTF	NONE	bottoms tank	100																
				C2-FEP-B-START-ARC	ARCHIVE	bottoms tank	100																
		Bottoms	**At ~200 L evaporated**	C2-FEP-B-200-ACTL	NONE	bottoms tank	20								TS	UDS	DENS						
				C2-FEP-B-200-WET	41338	bottoms tank	30			ICPES		ICA		AA									
				C2-FEP-B-200-ARC	ARCHIVE	bottoms tank	100																
		Primary Condensate		C2-FEP-PC-200-ARC	ARCHIVE		100																
		Secondary Condensate		C2-FEP-SC-200-ARC	ARCHIVE		100																
		Bottoms	**At ~400 L evaporated**	C2-FEP-B-400-ACTL	NONE	bottoms tank	20								TS	UDS	DENS						
				C2-FEP-B-400-ARC	ARCHIVE	bottoms tank	100																
		Primary Condensate		C2-FEP-PC-400-ARC	ARCHIVE		100																
		Secondary Condensate		C2-FEP-SC-400-ARC	ARCHIVE		100																
		Bottoms	**At ~600 L evaporated**	C2-FEP-B-600-ACTL	NONE	bottoms tank	20								TS	UDS	DENS						
				C2-FEP-B-600-ARC	ARCHIVE	bottoms tank	100																
		Primary Condensate		C2-FEP-PC-600-ARC	ARCHIVE		100																
		Secondary Condensate		C2-FEP-SC-600-ARC	ARCHIVE		100																
		Bottoms	**At ~800 L evaporated**	C2-FEP-B-800-ACTL	NONE	bottoms tank	20								TS	UDS	DENS						
				C2-FEP-B-800-ARC	ARCHIVE	bottoms tank	100																
		Primary Condensate		C2-FEP-PC-800-ARC	ARCHIVE		100																
		Secondary Condensate		C2-FEP-SC-800-ARC	ARCHIVE		100																
	RUSH	**Bottoms**	**Evaporation completed**	C2-FEP-B-END-SOL	41339	bottoms tank	60		pH						**TS**	**UDS**	DENS						
				C2-FEP-B-END-ACTL	NONE	bottoms tank	60								TS	UDS	DENS	RHEO					
				C2-FEP-B-END-WET	41340	bottoms tank	20					ICA							PSD		TBOH		TIC/TOC
	RUSH			C2-FEP-B-END-SUP	41341	bottoms tank	10	FILTER		ICPES				**AA**									
				C2-FEP-B-END-MW	41342	bottoms tank	25	DISMW		ICPES	ICPMS			AA									
				C2-FEP-B-END-PER	41343	bottoms tank	25	DISPER		ICPES													

Table D3-2 Campaign II Sample Matrix (2 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
				C2-FEP-B-END-ANTF	NONE	bottoms tank	100																
				C2-FEP-B-END-ARC	ARCHIVE	bottoms tank	100																
		Primary Condensate	Evaporation completed	C2-FEP-PC-END-ARC	ARCHIVE		100																
		Secondary Condensate		C2-FEP-SC-END-ARC	ARCHIVE		100																
	COMBINE ALL FEP CONDENSATES																						
		Combined FEP Condensate = RLD Condensate		C2-RLD-FROM-FEP-ADS	41344		100			ICPES	ICPMS	ICA		AA									
				C2-RLD-FROM-FEP-ACTL	NONE		50		pH						TS	UDS	DENS						
				C2-RLD-FROM-FEP-ARC	ARCHIVE		1000																
ULTRAFILTRATION		UFP	FEP Bottoms (L)	see above for sample																			
	RUSH		AY102 before Supernate Addition	C2-AY102-SOL-NOSUP	41329	mixing tank	50								TS	UDS							
	RUSH		AY102 (L)	C2-AY102-SOL	41330	mixing tank	50								TS	UDS	DENS						
				C2-AY102-WET	41331	(after combining	50					ICA		IEC									
				C2-AY102-MW	41332	all ingredients)	50	DISMW		ICPES	ICPMS			AA									
				C2-AY102-PER	41333		50	DISPER		ICPES													
	RUSH			C2-AY102-SUP	41334		50	FILTER			ICPMS												
				C2-AY102-ARC	ARCHIVE		250																
			AP101 (L)	C2-AP101-ACTL	NONE	mixing tank	50								TS	UDS	DENS						
				C2-AP101-WET	41345	(sample from	50					ICA		IEC									
				C2-AP101-MW	41346	all of AP-101 to	50	DISMW		ICPES	ICPMS			AA									
				C2-AP101-PER	41347	be used)	50	DISPER		ICPES													
				C2-AP101-ARC	ARCHIVE		250																
			UFP Heel	-																			
			COMBINED UFP FEEDS	-																			
	CONCENTRATE		Starting volume (L)																				
			Fill feed tank to:	`																			
		UFP Feed	before start of run	C2-UF-START-AS-ACTL	NONE	recirc line	100		pH						TS	UDS	DENS	RHEO					
				C2-UF-START-AS-MW	41348	recirc line	25	DISMW		ICPES	ICPMS			AA									
				C2-UF-START-AS-PER	41349	recirc line	25	DISPER		ICPES													
				C2-UF-START-AS-WET	41350	recirc line	50					ICA	IEC					PSD		TBOH		TIC/TOC
				C2-UF-START-SUP-ACTL	NONE	recirc line	100	FILTER							TS		DENS	RHEO					
				C2-UF-START-SUP-ADS	41351	recirc line	100	FILTER		ICPES	ICPMS	ICA	IEC	AA									TIC/TOC
				C2-UF-START-ARC	ARCHIVE	recirc line	250																
			Total time to concentrate (hr)																				
	1st 1/2 of Batch		Time for first half batch (hr)																				
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	C2-UF-CON1-154	41352	recirc line	50								TS	UDS	DENS						
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	C2-UF-CON1-307	41353	recirc line	50								TS	UDS	DENS						
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	C2-UF-CON1-461	41354	recirc line	50								TS	UDS	DENS						
	Note: EDL to measure	Permeate Sample	at ~ this vol permeate removed (L)	C2-PE-CON1-154-XRD	?	filtrate line	500 clear													XRD			
	turbidity throughout			C2-PE-CON1-154-XRD-BLK	?	↑sample														XRD			
	filtration.	Permeate Sample	at ~ this vol permeate removed (L)	C2-PE-CON1-307-XRD	?	filtrate line	500 clear													XRD			
				C2-PE-CON1-307-XRD-BLK	?	↑sample														XRD			
		Permeate Sample	at ~ this vol permeate removed (L)	C2-PE-CON1-461-XRD	?	filtrate line	500 clear													XRD			
				C2-PE-CON1-461-XRD-BLK	?	↑sample														XRD			
				C2-PE-CON1-461-ACTL	NONE	filtrate drum	50								TS	UDS	DENS						
	Hold		Hold for 12 hr																				
	2nd 1/2 of Batch		Time for second half batch (hr)																				
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	C2-UF-CON2-154	41355		50								TS	UDS	DENS						
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	C2-UF-CON2-307	41356		50								TS	UDS	DENS						
		Concentrate Sample	all permeate removed, @ 20wt% solids	C2-UF-CON2-461-MW	41357		25	DISMW		ICPES	ICPMS			AA									
				C2-UF-CON2-461-PER	41358		25	DISPER		ICPES													
				C2-UF-CON2-461-WET	41359		50					ICA	IEC					PSD				TIC/TOC
	RUSH			C2-UF-CON2-461-SOL	41360		40								TS	UDS							
				C2-UF-CON2-461-ACTL	NONE		60								TS	UDS	DENS	RHEO					
				C2-UF-CON2-461-ARC	ARCHIVE		250																
		Permeate Sample	at ~ this vol permeate removed (L)	C2-PE-CON2-154-XRD	?	filtrate line	500 clear													XRD			
				C2-PE-CON2-154-XRD-BLK	?	↑sample														XRD			
		Permeate Sample	at ~ this vol permeate removed (L)	C2-PE-CON2-307-XRD	?	filtrate line	500 clear													XRD			
				C2-PE-CON2-307-XRD-BLK	?	↑sample														XRD			
		Permeate Sample	all permeate removed, @ 20wt% solids	C2-PE-CON2-461-XRD	?	filtrate line	500 clear													XRD			
				C2-PE-CON2-461-XRD-BLK		↑sample														XRD			
	CONCENTRATION	Concentrate	volume in feed tank (L)																				
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE	C2-IX-FEED-ADS	41361	filtrate tank	100			ICPES	ICPMS	ICA	IEC	AA									TIC/TOC
		to IX	total volume of permeate (L)	C2-IX-FEED-ACTL	?	or IX feed tk	100								TS	UDS	DENS	RHEO					
				C2-IX-FEED-ANTF	?	filtrate tank	100																
				C2-IX-FEED-XRD	?	filtrate tank	500 clear													XRD			
				C2-IX-FEED-XRD-BLK	?	↑sample														XRD			
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE IF NECESSARY																						
	FIRST WASH		RLD Wash water (L)																				
WASHING		Concentrate Sample	after addition #	C2-UF-W1-1	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W1-5	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W1-9	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W1-13	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W1-17	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition # (last)	C2-UF-W1-22-MW	41462	recirc line	25	DISMW		ICPES	ICPMS			AA									
				C2-UF-W1-22-PER	41465	recirc line	25	DISPER		ICPES													
				C2-UF-W1-22-WET	41467	recirc line	25					ICA						PSD				TIC/TOC
				C2-UF-W1-22-ACTL	NONE	recirc line	100								TS	UDS	DENS	RHEO					
				C2-UF-W1-22-ARC	ARCHIVE	recirc line	100																

Table D3-3 Campaign II Sample Matrix (3 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
		Wash Permeate	after addition #	C2-WPE1-1-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-1-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-1-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE1-5-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-5-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-5-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE1-9-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-9-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-9-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE1-13-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-13-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-13-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE1-17-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-17-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-17-XRD-BLK	?															XRD			
		Wash Permeate	after addition #	C2-WPE1-22-ACTL	NONE	filtrate line	25								TS								
				C2-WPE1-22-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-22-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	~40 minutes after last sample	C2-WPE1-END-ACTL	NONE	filtrate line	25								TS								
			(system running with permeate in recycle)	C2-WPE1-END-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE1-END-XRD-BLK	?															XRD			
		Wash Permeate	composite of 1st wash permeate	C2-WPE1-CMP-ADS	41470	filtrate drum	100			ICPES	ICPMS	ICA	IEC	AA									TIC/TOC
				C2-WPE1-CMP-ACTL	NONE	filtrate drum	25								TS								
				C2-WPE1-CMP-XRD	?	filtrate drum	500 clear													XRD			
				C2-WPE1-CMP-XRD-BLK	?	↑sample														XRD			
	END 1ST WASH	Concentrate																					
			Time for initial wash (hr)																				
	2ND WASH		RLD Wash water (L)																				
		Concentrate Sample	after addition #	C2-UF-W2-1	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W2-5	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W2-9	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W2-13	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition #	C2-UF-W2-17	ARCHIVE	recirc line	100								TS	UDS	DENS	RHEO					
		Concentrate Sample	after addition # (last)	C2-UF-W2-22-MW	41463	recirc line	25	DISMW		ICPES	ICPMS			AA									
		(to HLW)		C2-UF-W2-22-PER	41466	recirc line	25	DISPER		ICPES													
				C2-UF-W2-22-WET	41468	recirc line	25					ICA							PSD				TIC/TOC
	RUSH			C2-UF-W2-22-SOL	41471	recirc line	50								**TS**	**UDS**							
				C2-UF-W2-22-ACTL	NONE	recirc line	60								TS	UDS	DENS	RHEO					
				C2-UF-W2-22-ANTF	NONE	recirc line	100																
				C2-UF-W2-22-ARC	ARCHIVE	recirc line	100																
		Wash Permeate	after addition #	C2-WPE2-1-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-1-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-1-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE2-5-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-5-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-5-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE2-9-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-9-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-9-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE2-13-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-13-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-13-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE2-17-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-17-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-17-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	after addition #	C2-WPE2-22-ACTL	NONE	filtrate line	25								TS								
				C2-WPE2-22-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-22-XRD-BLK	?	↑sample														XRD			
		Wash Permeate	~40 minutes after last sample	C2-WPE2-END-ACTL	NONE	filtrate line	25								TS								
			(system running with permeate in recycle)	C2-WPE2-END-XRD	?	filtrate line	500 clear													XRD			
				C2-WPE2-END-XRD-BLK	?															XRD			
		Wash Permeate	composite of 2nd wash permeate	C2-WPE2-CMP-ADS	41472	filtrate drum	100			ICPES	ICPMS	ICA	IEC	AA									TIC/TOC
				C2-WPE2-CMP-ACTL	NONE	filtrate drum	25								TS								
				C2-WPE2-CMP-XRD	?	filtrate drum	500 clear													XRD			
				C2-WPE2-CMP-XRD-BLK	?	↑sample														XRD			
	END 2ND WASH		Time for final wash (hr)																				
		Concentrate	volume washed concentrate																				
CLEANING																							
	Loop Flush	"Flush" UF Feed Loop- offline		C2-LOOP-TO-C3	NONE	carboy	50								TS	UDS	DENS						
		RLD Condensate	volume needed																				
		Concentrated Slurry	volume needed																				
		Save for Campaign III																					
	UF Caustic Flush 1	Flush UF System	Time to Flush UF (hr)																				
		Caustic Flushing Solution																					
		RLD Dilution Water	volume needed for 3 flushes																				
		NaOH	add to 0.1 M (L 50 wt%)																				

Table D3-4 Campaign II Sample Matrix (4 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
CLEANING		Simulated Heel + Filter Loop Residue																					
		RLD Dilution Water	volume needed																				
		Concentrated Slurry	volume needed																				
		Caustic Flush 1	after flushing	C2-CAU-1-ACTL	NONE	transfer line	50		pH						TS	UDS	DENS						
				C2-CAU-2-WET	41473	transfer line	50	FILTER		ICPES		ICA		AA									
				C2-CAU-1-MW	41474	transfer line	50	DISMW		ICPES				AA									
				C2-CAU-1-ARC	ARCHIVE	transfer line	1000																
	HNO3 Cleaning	2 M HNO3 cleaning	cleaning time (hr)																				
		Caustic Flush Heel	volume needed																				
		HNO3 Reagent																					
			RLD Dilution Water																				
			HNO3 (70 wt%)																				
			RLD Dilution Water + HNO3 total for 3 cleanings																				
	Cleaning #1	Acid Cleaning 1	after cleaning	C2-NIT-1-ACTL	NONE	transfer line	50								TS	UDS	DENS						
				C2-NIT-1-WET	41476	transfer line	50	FILTER		ICPES				AA								TACID	
				C2-NIT-1-MW	41475	transfer line	50	DISMW		ICPES				AA									
				C2-NIT-1-PPT	?	transfer line	1000 clear													XRD			
				C2-NIT-1-PPT-BLK	?	↑sample													XRD			
				C2-NIT-1-ARC	ARCHIVE	transfer line	1000																
			cleaning time (hr)																				
		Cleaning Heel	volume needed																				
	Cleaning #2	Acid Cleaning 2	after cleaning	C2-NIT-2-ACTL	NONE	transfer line	50								TS	UDS	DENS						
				C2-NIT-2-WET	41477	transfer line	50	FILTER		ICPES				AA								TACID	
				C2-NIT-2-MW	41483	transfer line	50	DISMW		ICPES													
				C2-NIT-2-ARC-A	ARCHIVE	transfer line	1000																
				C2-NIT-2-ARC-B	ARCHIVE	transfer line	1000																
			cleaning time (hr)																				
		Cleaning Heel	volume needed (L)																				
	Cleaning #3	Acid Cleaning 3	after cleaning (L)	C2-NIT-3-ACTL	NONE	transfer line	50								TS	UDS	DENS						
				C2-NIT-3-WET	41478	transfer line	50	FILTER		ICPES				AA								TACID	
				C2-NIT-3-MW	41484	transfer line	50	DISMW		ICPES													
				C2-NIT-3-ARC-A	ARCHIVE	transfer line	1000																
				C2-NIT-3-ARC-B	ARCHIVE	transfer line	1000																
			cleaning time (hr)																				
		Cleaning Heel	volume needed (L)																				
UF Caustic Flushes 2&3		Flush UF System																					
		Caustic Flushing Solution																					
		RLD Dilution Water	volume needed for 3 flushes (L)																				
		NaOH	add to 0.1 M (L 50 wt%)																				
		Flush water	after Flush	C2-CAU-2-ACTL	NONE	transfer line	50		pH						TS	UDS	DENS						
				C2-CAU-2-WET	41479	transfer line	50			ICPES		ICA		AA								TACID	
				C2-CAU-2-ARC-A	ARCHIVE	transfer line	1000																
				C2-CAU-2-ARC-B	ARCHIVE	transfer line	1000																
			Time to Flush UF (hr)																				
		Flush 2 Heel	volume needed (L)																				
		Caustic Flushing Solution																					
		RLD Dilution Water	volume needed for 3 flushes (L)																				
		NaOH	add to 0.1 M (L 50 wt%)																				
		Flush water	after Flush	C2-CAUU-3-ACTL	NONE	transfer line	50		pH						TS	UDS	DENS						
				C2-CAUU-3-WET	41480	transfer line	50			ICPES		ICA		AA							TBOH		
				C2-CAUU-3-ARC-A	ARCHIVE	transfer line	1000																
				C2-CAUU-3-ARC-B	ARCHIVE	transfer line	1000																
			Time to Flush UF (hr)																				
		Drain System- Leave no Heel																					

Table D3-5 Campaign II Sample Matrix (5 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
ION EXCHANGE		ION EXCHANGE																					
	RUSH	Cycle 1	Lead Column @ BV = 5	C2-IX-CY1-LEAD-5	41596		10				ICPMS												
			Lead Column @ BV = 10	C2-IX-CY1-LEAD-10	ARCHIVE		10																
			Lead Column @ BV = 15	C2-IX-CY1-LEAD-15	ARCHIVE		10																
			Lead Column @ BV = 20	C2-IX-CY1-LEAD-20	ARCHIVE		10																
			Lead Column @ BV = 25	C2-IX-CY1-LEAD-25	ARCHIVE		10																
			Lead Column @ BV = 30	C2-IX-CY1-LEAD-30	ARCHIVE		10																
			Lead Column @ BV = 35	C2-IX-CY1-LEAD-35	ARCHIVE		10																
			Lead Column @ BV = 40	C2-IX-CY1-LEAD-40	ARCHIVE		10																
			Lead Column @ BV = 45	C2-IX-CY1-LEAD-45	ARCHIVE		10																
			Lead Column @ BV = 50	C2-IX-CY1-LEAD-50	ARCHIVE		10																
			Lead Column @ BV = 55	C2-IX-CY1-LEAD-55	ARCHIVE		10																
			Lead Column @ BV = 60	C2-IX-CY1-LEAD-60	ARCHIVE		10																
			Lead Column @ BV = 65	C2-IX-CY1-LEAD-65	ARCHIVE		10																
			Lead Column @ BV = 70	C2-IX-CY1-LEAD-70	ARCHIVE		10																
			Lead Column @ BV = 75	C2-IX-CY1-LEAD-75	ARCHIVE		10																
			Lead Column @ BV = 80	C2-IX-CY1-LEAD-80	ARCHIVE		10																
			Lead Column @ BV = 85	C2-IX-CY1-LEAD-85	ARCHIVE		10																
			Lead Column @ BV = 90	C2-IX-CY1-LEAD-90	ARCHIVE		10																
			Lead Column @ BV = 95	C2-IX-CY1-LEAD-95	ARCHIVE		10																
	RUSH		Lead Column @ BV = 100	C2-IX-CY1-LEAD-100	41596		10				ICPMS												
			Lead Column @ BV = 105	C2-IX-CY1-LEAD-105	ARCHIVE		10																
			Lead Column @ BV = 110	C2-IX-CY1-LEAD-110	ARCHIVE		10																
			Lead Column @ BV = 115	C2-IX-CY1-LEAD-115	ARCHIVE		10																
			Lead Column @ BV = 120	C2-IX-CY1-LEAD-120	ARCHIVE		10																
			Lead Column @ BV = 125	C2-IX-CY1-LEAD-125	ARCHIVE		10																
			Lead Column @ BV = 130	C2-IX-CY1-LEAD-130	ARCHIVE		10																
			Lead Column @ BV = 135	C2-IX-CY1-LEAD-135	ARCHIVE		10																
			Lead Column @ BV = 140	C2-IX-CY1-LEAD-140	ARCHIVE		10																
			Lead Column @ BV = 145	C2-IX-CY1-LEAD-145	ARCHIVE		10																
			Lead Column @ BV = 150	C2-IX-CY1-LEAD-150	ARCHIVE		10																
			Lead Column @ BV = 155	C2-IX-CY1-LEAD-155	ARCHIVE		10																
			Lead Column @ BV = 160	C2-IX-CY1-LEAD-160	ARCHIVE		10																
			Lead Column @ BV = 165	C2-IX-CY1-LEAD-165	ARCHIVE		10																
			Lead Column @ BV = 170	C2-IX-CY1-LEAD-170	ARCHIVE		10																
			Lead Column @ BV = 175	C2-IX-CY1-LEAD-175	41596		10				ICPMS												
			Blank	C2-IX-CY1-LEAD-176	41665		10				ICPMS												
	RUSH		Lead Column @ BV = 180	C2-IX-CY1-LEAD-180	41684		10				ICPMS												
	RUSH		Lead Column @ BV = 185	C2-IX-CY1-LEAD-185	41596		10				ICPMS												
	RUSH		Lead Column @ BV = 190	C2-IX-CY1-LEAD-190	41596		10				ICPMS												
	RUSH		Lead Column @ BV = 195	C2-IX-CY1-LEAD-195	41596		10				ICPMS												
	RUSH		Lead Column @ BV = END	C2-IX-CY1-LEAD-END	41596		10				ICPMS												
ION EXCHANGE	RUSH	Cycle 1	Lag Column @ BV = 5	C2-IX-CY1-LAG-5	41596		10				ICPMS												
			Lag Column @ BV = 10	C2-IX-CY1-LAG-10	ARCHIVE		10																
			Lag Column @ BV = 15	C2-IX-CY1-LAG-15	ARCHIVE		10																
			Lag Column @ BV = 20	C2-IX-CY1-LAG-20	ARCHIVE		10																
			Lag Column @ BV = 25	C2-IX-CY1-LAG-25	ARCHIVE		10																
			Lag Column @ BV = 30	C2-IX-CY1-LAG-30	ARCHIVE		10																
			Lag Column @ BV = 35	C2-IX-CY1-LAG-35	ARCHIVE		10																
			Lag Column @ BV = 40	C2-IX-CY1-LAG-40	ARCHIVE		10																
			Lag Column @ BV = 45	C2-IX-CY1-LAG-45	ARCHIVE		10																
			Lag Column @ BV = 50	C2-IX-CY1-LAG-50	ARCHIVE		10																
			Lag Column @ BV = 55	C2-IX-CY1-LAG-55	ARCHIVE		10																
			Lag Column @ BV = 60	C2-IX-CY1-LAG-60	ARCHIVE		10																
			Lag Column @ BV = 65	C2-IX-CY1-LAG-65	ARCHIVE		10																
			Lag Column @ BV = 70	C2-IX-CY1-LAG-70	ARCHIVE		10																
			Lag Column @ BV = 75	C2-IX-CY1-LAG-75	ARCHIVE		10																
			Lag Column @ BV = 80	C2-IX-CY1-LAG-80	ARCHIVE		10																
			Lag Column @ BV = 85	C2-IX-CY1-LAG-85	ARCHIVE		10																
			Lag Column @ BV = 90	C2-IX-CY1-LAG-90	ARCHIVE		10																
			Lag Column @ BV = 95	C2-IX-CY1-LAG-95	ARCHIVE		10																
	RUSH		Lag Column @ BV = 100	C2-IX-CY1-LAG-100	41596		10				ICPMS												
			Lag Column @ BV = 105	C2-IX-CY1-LAG-105	ARCHIVE		10																
			Lag Column @ BV = 110	C2-IX-CY1-LAG-110	ARCHIVE		10																
			Lag Column @ BV = 115	C2-IX-CY1-LAG-115	ARCHIVE		10																
			Lag Column @ BV = 120	C2-IX-CY1-LAG-120	ARCHIVE		10																
			Lag Column @ BV = 125	C2-IX-CY1-LAG-125	ARCHIVE		10																
			Lag Column @ BV = 130	C2-IX-CY1-LAG-130	ARCHIVE		10																
			Lag Column @ BV = 135	C2-IX-CY1-LAG-135	ARCHIVE		10																
			Lag Column @ BV = 140	C2-IX-CY1-LAG-140	ARCHIVE		10																
			Lag Column @ BV = 145	C2-IX-CY1-LAG-145	ARCHIVE		10																
			Lag Column @ BV = 150	C2-IX-CY1-LAG-150	ARCHIVE		10																
			Lag Column @ BV = 155	C2-IX-CY1-LAG-155	ARCHIVE		10																
			Lag Column @ BV = 160	C2-IX-CY1-LAG-160	ARCHIVE		10																
			Lag Column @ BV = 165	C2-IX-CY1-LAG-165	ARCHIVE		10																
			Lag Column @ BV = 170	C2-IX-CY1-LAG-170	ARCHIVE		10																
			Lag Column @ BV = 175	C2-IX-CY1-LAG-175	ARCHIVE		10																
			Lag Column @ BV = 180	C2-IX-CY1-LAG-180	41596		10																
	RUSH		Lag Column @ BV = 185	C2-IX-CY1-LAG-185	41596		10				ICPMS												
	RUSH		Lag Column @ BV = 190	C2-IX-CY1-LAG-190	41596		10				ICPMS												
	RUSH		Lag Column @ BV = 195	C2-IX-CY1-LAG-195	41596		10				ICPMS												
	RUSH		Lag Column @ BV = END	C2-IX-CY1-LAG-END	41596		10				ICPMS												
			DI Water	C2-IX-CY2-DI	41801		10				ICPMS												
			0.25M NaOH	C2-IX-CY2-0.25M	41801		10				ICPMS												
	LAW Effluent from Addition of 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C2-IX-CY1-LAW-FROM-DIS	41597		25			ICPES	ICPMS			AA							TBOH		
	Displacement Solution Effluent from Addition of Pre-elution Rinse (to C3 Recycle))			C2-IX-CY1-DIS-FROM-PRER	41732		25			ICPES	ICPMS			AA							TBOH		
			HNO3 Eluate (to HLW)	C2-IX-CY2-HLWELUATE	41597		25			ICPES	ICPMS			AA								TACID	
		HNO3 Eluate from Addition of Post-Elution Rinse (to HLW)		C2-IX-CY1-HLW-FROM-POER	41597		25			ICPES	ICPMS			AA								TACID	
			0.25M NaOH Regeneration Effluent (to C3 Recycle)	C2-IX-CY1-REG	41732		25			ICPES	ICPMS			AA							TBOH		

Table D3-6 Campaign II Sample Matrix (6 of 7 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	7	8	9	10	13	14	15	16	17	18	19
				Sample	Travel Copy	Location	Volume mL	Prep	pH	ICPES	ICPMS	ICA	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID	TIC/TOC
ION	RUSH	Cycle 2	Lead Column @ BV = 5	C2-IX-CY2-LEAD-5	ARCHIVE		10				ICPMS												
EXCHANGE			Lead Column @ BV = 10	C2-IX-CY2-LEAD-10	ARCHIVE		10																
			Lead Column @ BV = 15	C2-IX-CY2-LEAD-15	ARCHIVE		10																
			Lead Column @ BV = 20	C2-IX-CY2-LEAD-20	ARCHIVE		10																
			Lead Column @ BV = 25	C2-IX-CY2-LEAD-25	ARCHIVE		10																
			Lead Column @ BV = 30	C2-IX-CY2-LEAD-30	ARCHIVE		10																
			Lead Column @ BV = 35	C2-IX-CY2-LEAD-35	ARCHIVE		10																
			Lead Column @ BV = 40	C2-IX-CY2-LEAD-40	ARCHIVE		10																
			Lead Column @ BV = 45	C2-IX-CY2-LEAD-45	ARCHIVE		10																
			Lead Column @ BV = 50	C2-IX-CY2-LEAD-50	ARCHIVE		10																
			Lead Column @ BV = 55	C2-IX-CY2-LEAD-55	ARCHIVE		10																
			Lead Column @ BV = 60	C2-IX-CY2-LEAD-60	ARCHIVE		10																
			Lead Column @ BV = 65	C2-IX-CY2-LEAD-65	ARCHIVE		10																
			Lead Column @ BV = 70	C2-IX-CY2-LEAD-70	ARCHIVE		10																
			Lead Column @ BV = 75	C2-IX-CY2-LEAD-75	ARCHIVE		10																
			Lead Column @ BV = 80	C2-IX-CY2-LEAD-80	ARCHIVE		10																
			Lead Column @ BV = 85	C2-IX-CY2-LEAD-85	ARCHIVE		10																
			Lead Column @ BV = 90	C2-IX-CY2-LEAD-90	ARCHIVE		10																
			Lead Column @ BV = 95	C2-IX-CY2-LEAD-95	ARCHIVE		10																
	RUSH		Lead Column @ BV = 100	C2-IX-CY2-LEAD-100	ARCHIVE		10				ICPMS												
			Lead Column @ BV = 105	C2-IX-CY2-LEAD-105	ARCHIVE		10																
			Lead Column @ BV = 110	C2-IX-CY2-LEAD-110	ARCHIVE		10																
			Lead Column @ BV = 115	C2-IX-CY2-LEAD-115	ARCHIVE		10																
			Lead Column @ BV = 120	C2-IX-CY2-LEAD-120	ARCHIVE		10																
			Lead Column @ BV = 125	C2-IX-CY2-LEAD-125	ARCHIVE		10																
			Lead Column @ BV = 130	C2-IX-CY2-LEAD-130	ARCHIVE		10																
			Lead Column @ BV = 135	C2-IX-CY2-LEAD-135	ARCHIVE		10																
			Lead Column @ BV = 140	C2-IX-CY2-LEAD-140	ARCHIVE		10																
			Lead Column @ BV = 145	C2-IX-CY2-LEAD-145	ARCHIVE		10																
			Lead Column @ BV = 150	C2-IX-CY2-LEAD-150	ARCHIVE		10																
			Lead Column @ BV = 155	C2-IX-CY2-LEAD-155	41669		10																
			Lead Column @ BV = 160	C2-IX-CY2-LEAD-160	41669		10																
			Lead Column @ BV = 165	C2-IX-CY2-LEAD-165	41669		10																
			Lead Column @ BV = 170	C2-IX-CY2-LEAD-170	41669		10																
	RUSH		Lead Column @ BV = 175	C2-IX-CY2-LEAD-175	41669		10				ICPMS												
			Blank	C2-IX-CY2-LEAD-176	41669		10				ICPMS												
	RUSH		Lead Column @ BV = 180	C2-IX-CY2-LEAD-180	41685		10				ICPMS												
	RUSH		Lead Column @ BV = 185	C2-IX-CY2-LEAD-185	41685		10				ICPMS												
	RUSH		Lead Column @ BV = 190	C2-IX-CY2-LEAD-190	41685		10				ICPMS												
	RUSH		Lead Column @ BV = 195	C2-IX-CY2-LEAD-195	41685		10				ICPMS												
	RUSH		Lead Column @ BV = END	C2-IX-CY2-LEAD-END	41669		10				ICPMS												
ION	RUSH	Cycle 2	Lag Column @ BV = 5	C2-IX-CY2-LAG-5	ARCHIVE		10				ICPMS												
EXCHANGE			Lag Column @ BV = 10	C2-IX-CY2-LAG-10	ARCHIVE		10																
			Lag Column @ BV = 15	C2-IX-CY2-LAG-15	ARCHIVE		10																
			Lag Column @ BV = 20	C2-IX-CY2-LAG-20	ARCHIVE		10																
			Lag Column @ BV = 25	C2-IX-CY2-LAG-25	ARCHIVE		10																
			Lag Column @ BV = 30	C2-IX-CY2-LAG-30	ARCHIVE		10																
			Lag Column @ BV = 35	C2-IX-CY2-LAG-35	ARCHIVE		10																
			Lag Column @ BV = 40	C2-IX-CY2-LAG-40	ARCHIVE		10																
			Lag Column @ BV = 45	C2-IX-CY2-LAG-45	ARCHIVE		10																
			Lag Column @ BV = 50	C2-IX-CY2-LAG-50	ARCHIVE		10																
			Lag Column @ BV = 55	C2-IX-CY2-LAG-55	ARCHIVE		10																
			Lag Column @ BV = 60	C2-IX-CY2-LAG-60	ARCHIVE		10																
			Lag Column @ BV = 65	C2-IX-CY2-LAG-65	ARCHIVE		10																
			Lag Column @ BV = 70	C2-IX-CY2-LAG-70	ARCHIVE		10																
			Lag Column @ BV = 75	C2-IX-CY2-LAG-75	ARCHIVE		10																
			Lag Column @ BV = 80	C2-IX-CY2-LAG-80	ARCHIVE		10																
			Lag Column @ BV = 85	C2-IX-CY2-LAG-85	ARCHIVE		10																
			Lag Column @ BV = 90	C2-IX-CY2-LAG-90	ARCHIVE		10																
			Lag Column @ BV = 95	C2-IX-CY2-LAG-95	ARCHIVE		10																
	RUSH		Lag Column @ BV = 100	C2-IX-CY2-LAG-100	ARCHIVE		10				ICPMS												
			Lag Column @ BV = 105	C2-IX-CY2-LAG-105	ARCHIVE		10																
			Lag Column @ BV = 110	C2-IX-CY2-LAG-110	ARCHIVE		10																
			Lag Column @ BV = 115	C2-IX-CY2-LAG-115	ARCHIVE		10																
			Lag Column @ BV = 120	C2-IX-CY2-LAG-120	ARCHIVE		10																
			Lag Column @ BV = 125	C2-IX-CY2-LAG-125	ARCHIVE		10																
			Lag Column @ BV = 130	C2-IX-CY2-LAG-130	ARCHIVE		10																
			Lag Column @ BV = 135	C2-IX-CY2-LAG-135	ARCHIVE		10																
			Lag Column @ BV = 140	C2-IX-CY2-LAG-140	ARCHIVE		10																
			Lag Column @ BV = 145	C2-IX-CY2-LAG-145	ARCHIVE		10																
			Lag Column @ BV = 150	C2-IX-CY2-LAG-150	ARCHIVE		10																
			Lag Column @ BV = 155	C2-IX-CY2-LAG-155	ARCHIVE		10																
			Lag Column @ BV = 160	C2-IX-CY2-LAG-160	ARCHIVE		10																
			Lag Column @ BV = 165	C2-IX-CY2-LAG-165	41669		10																
			Lag Column @ BV = 170	C2-IX-CY2-LAG-170	41669		10																
			Lag Column @ BV = 175	C2-IX-CY2-LAG-175	41669		10																
			Lag Column @ BV = 180	C2-IX-CY2-LAG-180	41685		10																
	RUSH		Lag Column @ BV = 185	C2-IX-CY2-LAG-185	41685		10				ICPMS												
	RUSH		Lag Column @ BV = 190	C2-IX-CY2-LAG-190	41685		10				ICPMS												
	RUSH		Lag Column @ BV = 195	C2-IX-CY2-LAG-195	41685		10				ICPMS												
	RUSH		Lag Column @ BV = END	C2-IX-CY2-LAG-END	41669		10				ICPMS												
	LAW Effluent from Addition of 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C2-IX-CY2-LAW-FROM-DIS	41671		25			ICPES	ICPMS			AA							TBOH		
	Displacement Solution Effluent from Addition of Pre-elution Rinse (to C3 Recycle))			C2-IX-CY2-DIS-FROM-PRER	41671		25			ICPES	ICPMS			AA							TBOH		
			HNO3 Eluate (to HLW))	C2-IX-CY2-HLWELUATE	41671		25			ICPES	ICPMS			AA								TACID	
		HNO3 Eluate from Addition of Post-Elution Rinse (to HLW)		C2-IX-CY2-HLW-FROM-POER	?		25			ICPES	ICPMS			AA								TACID	
		0.25M NaOH Regeneration Effluent (to C3 Recycle)		C2-IX-CY2-REG	?		25			ICPES	ICPMS			AA							TBOH		

Table D3-7 Campaign II Sample Matrix (7 of 7 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Volume mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	7 IEC	8 AA	9 TS	10 UDS	13 DENS	14 RHEO	15 PSD	16 XRD	17 TBOH	18 TACID	19 TIC/TOC
	IX PRODUCTS	IX Product to TLP		C2-IX-PROD-ACTL	NONE	tank	100								TS	UDS	DENS	RHEO					
				C2-IX-PROD-WET	41771	tank	100			ICPES	ICPMS	ICA	IEC	AA							TBOH		TIC/TOC
				C2-IX-PROD-ANTF	NONE	tank	100																
				C2-IX-PROD-ARC	ARCHIVE	tank	500																
		Pre-elution Rinse Water Composite		Analyze in Campaign III																			
		0.1M NaOH Displacement Solution Composite		Analyze in Campaign III																			
		0.25M NaOH Regeneration Solution Composite		Analyze in Campaign III																			
TLP EVAPORATOR		LAW Feed (IX product)																					
		LAW SBS																					
		IX 0.25M NaOH Regeneration Solution from Campaign I																					
	EVAPORATE	Evaporator Feed Mixture		C2-TLP-FEED-ACTL	NONE	feed tank	100								TS	UDS	DENS						
				C2-TLP-FEED-ADS	41771	feed tank	100			ICPES	ICPMS	ICA	IEC	AA							TBOH		TIC/TOC
				C2-TLP-FEED-ARC	ARCHIVE	feed tank	500																
				C2-TLP-FEED-XRD	?	feed tank	1000 clear													XRD			
				C2-TLP-FEED-XRD-BLK	?	↑sample	NA													XRD			
		Bottoms	After all antifoam additions	C2-TLP-B-START-ACTL	NONE	bottoms tank	60								TS	UDS	DENS	RHEO					
				C2-TLP-B-START-ANTF	NONE	bottoms tank	100																
				C2-TLP-B-START-ARC	ARCHIVE	bottoms tank	100																
		Bottoms	At ~200 L evaporated	C2-TLP-B-200-ACTL	NONE	bottoms tank	50								TS	UDS	DENS						
				C2-TLP-B-200-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-200-XRD-BLK	?	↑sample														XRD			
		Primary Condensate		C2-TLP-PC-200-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-200-ARC	ARCHIVE		100																
		Bottoms	At ~400 L evaporated	C2-TLP-B-400-ACTL	NONE	bottoms tank	50								TS	UDS	DENS						
				C2-TLP-B-400-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-400-XRD-BLK	?	↑sample														XRD			
		Primary Condensate		C2-TLP-PC-400-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-400-ARC	ARCHIVE		100																
		Bottoms	At ~600 L evaporated	C2-TLP-B-600-ACTL	NONE	bottoms tank	50								TS	UDS	DENS						
				C2-TLP-B-600-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-600-XRD-BLK	?	↑sample														XRD			
		Primary Condensate		C2-TLP-PC-600-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-600-ARC	ARCHIVE		100																
		Bottoms	At ~800 L evaporated	C2-TLP-B-800-ACTL	NONE	bottoms tank	50								TS	UDS	DENS						
				C2-TLP-B-800-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-800-XRD-BLK	?	↑sample														XRD			
		Primary Condensate		C2-TLP-PC-800-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-800-ARC	ARCHIVE		100																
		Bottoms	At ~800 L evaporated	C2-TLP-B-1000-ACTL	NONE	bottoms tank	50								TS	UDS	DENS						
				C2-TLP-B-1000-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-1000-XRD-BLK	?	↑sample														XRD			
		Primary Condensate		C2-TLP-PC-1000-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-1000-ARC	ARCHIVE		100																
		Bottoms	Evaporation completed	C2-TLP-B-END-ACTL	NONE	bottoms tank	100								TS	UDS	DENS	RHEO					
				C2-TLP-B-END-SUP	41771	bottoms tank	100			ICPES		ICA	IEC	AA							TBOH		TIC/TOC
				C2-TLP-B-END-MW	41771	bottoms tank	50	DISMW		ICPES	ICPMS			AA									
				C2-TLP-B-END-PSD	41771	bottoms tank	25												PSD				
				C2-TLP-B-END-ANTF	NONE	bottoms tank	100																
				C2-TLP-B-END-ARC	ARCHIVE	bottoms tank	500																
				C2-TLP-B-END-XRD	?	bottoms tank	500 clear													XRD			
				C2-TLP-B-END-XRD-BLK	?	↑sample														XRD			
		Primary Condensate	Evaporation almost completed	C2-TLP-PC-END-ARC	ARCHIVE		100																
		Secondary Condensate		C2-TLP-SC-END-ARC	ARCHIVE		100																
	COMBINE TLP CONDENSATES																						
		Combined TLP Condensate = RLD Condensate		C2-RLD-FROM-TLP-ADS	41771	storage tank	250			ICPES		ICA	IEC	AA									TIC/TOC
		(Primary + Secondary)		C2-RLD-FROM-TLP-ACTL	NONE		250		pH						TS	UDS	DENS						
				C2-RLD-FROM-TLP-ARC	ARCHIVE		500																
	COMBINE FEP & TLP CONDENSATES																						
		Combined FEP + TLP Condensate = RLD Condensate		C2-RLD-TOTAL-ADS	41771	storage tank	250			ICPES		ICA	IEC	AA									TIC/TOC
				C2-RLD-TOTAL-ACTL	NONE		250		pH						TS	UDS	DENS						
				C2-RLD-TOTAL-ARC	ARCHIVE		500																
			ICC ammonium	C2_RLD-FINAL-AGED	42072	storage tank	100																

Notes: Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids.
If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		Ion chrom. cations	ammonium	DENS density
ICPES	includes all elements present that can be analyzed by ICPES		Ion exclusion chrom.	citrate, acetate	RHEO rheology
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	atomic absorption	Cs, K, Na	PSD particle size distribution by Microtrac
	supernates	Cs, Rb	total solids wt%		XRD X-ray diffraction - on filtered solids and blank ONLY IF SOLIDS PRESENT
ICA	Ion chrom - anions	normal suite	undissolved solids wt%		TBOH total base, free hydroxide, other base

Table D4-1 Campaign III Sample Matrix (1 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
RECYCLE BLENDING			Campaign II UF Wash Water																					
			HLW SBS																					
			HLW Vessel Vent (PVP)																					
			HLW Canister Decon																					
			Campaign II Caustic Flushes																					
			Campaign II UF Acid Cleanings																					
			Campaign II UF Loop Flushes (PWD-33)																					
	Campaign II Cs IX Recycle: Displacement Solution Displaced by Pre-Elution Rinse (2)			NO ANALYSIS																				
	Campaign II Cs IX Recycle: Post-Elution Rinse Displaced + Regeneration Solution (5)			NO ANALYSIS																				
			COMBINED RECYCLES																					
		PWD	Generation of Synthetic Recycles																					
			HLW Canister Decon	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			NaNO3 (kg)																					
			HLW Vessel Vent (PVP)	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			Combined Canister Decon + PVP																					
			UF Loop Flush (PWD-33) from Campaign II	NO SAMPLE																				
			Combining of Recycles																					
		PWD-44		C3-PWD-44-ARC	NONE	mixing tank	50																	
			Add HLW Canister Decon + PVP water to a tank																					
			Add HLW Canister Decon + PVP 50wt% NaOH																					
			Add HLW Canister Decon NaNO3 (kg)																					
			Add HLW SBS to tank																					
			Add UF Loop Flush PWD-33																					
			Sum																					
		PWD-15		C3-PWD-15-ARC	NONE	mixing tank	250																	
			Add Campaign II Wash Permeate to a tank (use 2nd drum,~0.05M OH)																					
			Add 0.1M NaOH made from condensate																					
			Add from Campaign II Caustic Flush Drum 1																					
			Add from Campaign II Caustic Flush Drum 2																					
			Add from Campaign II Caustic Flush Drum 3																					
			Sum																					
		PWD-16		C3-PWD-16-ARC	NONE	mixing tank	250																	
			Add Campaign II Wash Permeate to a tank (use 1st drum,~0.1M OH)																					
			Add NaOH 50wt%																					
			Add from Campaign II Nitric Acid Cleaning Drum 1																					
			Add from Campaign II Nitric Acid Cleaning Drum 2																					
			Add from Campaign II Nitric Acid Cleaning Drum 3																					
			Sum																					
		Combine Recycles in (FEP Feed) Tank		C3-FEP-FEED-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
			Add PWD-44 to tank	C3-FEP-FEED-ARC	NONE	mixing tank	250																	
			Add PWD-15 to tank	C3-FEP-FEED-ANTF	NONE	mixing tank	100																	
			Add PWD-16 to tank	C3-FEP-FEED-ADS	42087	mixing tank	50						ICC											
			IX Recycles																					
			Sum																					
			RLD from Campaign II	C2-RLD-FINAL-AGED	42072		100						ICC											
FEP EVAPORATOR			Starting Volume																					
		Bottoms	After all antifoam additions	C3-FEP-B-START-ARC	NONE	bottoms tank	100																	
				C3-FEP-B-START-ANTF	NONE	bottoms tank	100																	
		Bottoms	At ~200 L fed	C3-FEP-B-200-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~400 L fed	C3-FEP-B-400-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~600 L fed	C3-FEP-B-600-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~800 L fed	C3-FEP-B-800-ARC	NONE	bottoms tank	100																	
		Bottoms	Evaporation completed	C3-FEP-B-END-ACTL	NONE	bottoms tank	50									TS	UDS	DENS						
				C3-FEP-B-END-WET	42088	bottoms tank	50					ICA	ICC									TBOH		TIC/TOC
				C3-FEP-B-END-MW	42089	bottoms tank	50	DISMW		ICPES	ICPMS				AAK									
				C3-FEP-B-END-PER	42090	bottoms tank	50	DISPER		ICPES														
				C3-FEP-B-END-ARC	NONE	bottoms tank	500																	
				C3-FEP-B-END-ANTF	NONE	bottoms tank	100																	
		Primary Condensate	Composite	C3-FEP-PC-END-ARC	NONE		100																	
		Secondary Condensate	Composite	C3-FEP-SC-END-ARC	NONE		100																	
	COMBINE ALL FEP CONDENSATES																							
		Combined FEP Condensate = RLD Condensate		C3-RLD-FROM-FEP-ARC	NONE		1000																	
				C3-RLD-FROM-FEP-ADS	42093		100						ICC											

Table D4-2 Campaign III Sample Matrix (2 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
ULTRAFILTRATION		UFP	FEP Bottoms	see above for sample																				
			AY102 before Supernate Addition	C3-AY102-NOSUP-ACTL	NONE	mixing tank	50									TS	UDS							
				C3-AY102-NOSUP-ARC	NONE	mixing tank	50																	
			AY102 after final supernate addition	C3-AY102-SOL-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
				C3-AY102-ARC	NONE		250																	
			AP101	C3-AP101-ARC	NONE	mixing tank	250																	
		COMBINE AY-102, AP-101 & FEP BOTTOMS																						
			Starting Volume of Feed:																					
			Fill feed tank to:																					
		UFP Feed	before start of run	C3-UF-START-ACTL	NONE	recirc line	100									TS	UDS	DENS						
				C3-UF-START-ARC	NONE	recirc line	1000																	
			First 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-159-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-317-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-476-ARC	NONE	recirc line	50																	
			Second 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON2-159-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON2-317-ARC	NONE	recirc line	50																	
		Concentrate Sample	all permeate removed, @ >20wt% solids	C3-UF-CON2-476-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C3-UF-CON2-476-ARC	NONE	recirc line	250																	
				C3-UF-CON2-476-ANTF	NONE	recirc line	100																	
	CONCENTRATION	Concentrate	volume in feed tank (L)																					
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE	C3-IX-FEED-ADS	42095	filtrate tank	100			ICPES	ICPMS	ICA	ICC	IEC	AAK							TBOH		TIC/TOC
		to IX	total volume of permeate (L)	C3-IX-FEED-ACTL	NONE	or IX feed tk	100									TS	UDS	DENS						
				C3-IX-FEED-ARC	NONE		1000																	
				C3-IX-FEED-ANTF	NONE		100																	
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE IF NECESSARY																							
				C3-UF-CON2-ADJ-ACTL	NONE	recirc line	50									TS	UDS	DENS						
	FIRST WASH		RLD Wash water (L)																					
WASHING		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-70-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-118-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C3-UF-W1-118-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-70-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-118-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C3-WPE1-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 1st wash permeate	C3-WPE1-CMP-ARC	NONE	filtrate drum	1000																	
				C3-WPE1-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C3-WPE1-CMP-ADS	42096	filtrate drum	50						ICC									TBASE		
	2ND WASH		RLD Wash water (L)																					
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-70-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-118-ACTL	NONE	recirc line	50									TS	UDS	DENS						
		(to HLW)		C3-UF-W2-118-WET	42094	recirc line	50					ICA	ICC	IEC								TBOH		TIC/TOC
				C3-UF-W2-118-MW	42097	recirc line	50	DISMW		ICPES	ICPMS				AAK									
				C3-UF-W2-118-PER	42098	recirc line	50	DISPER		ICPES														
				C3-UF-W2-118-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-70-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-118-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C3-WPE2-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 2nd wash permeate	C3-WPE2-CMP-ARC	NONE	filtrate drum	1000																	
				C3-WPE2-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C3-WPE2-CMP-ADS	42099	filtrate drum	50						ICC									TBASE		
	END 2ND WASH	Concentrate	volume washed concentrate																					

Table D4-3 Campaign III Sample Matrix (3 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
CLEANING																								
	Loop Flush	"Flush" UF Feed Loop- offline		C3-LOOP-TO-C4-ACTL	NONE	carboy	50									TS	UDS	DENS						
		RLD Condensate	volume needed																					
		Concentrated Slurry	volume needed																					
		Save for Campaign III																						
	UF Caustic Flush 1	Flush UF System																						
		Caustic Flush 1	solution drained	C3-CAU-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-1-ADS	42101	transfer line	50															TBOH		
				C3-CAU-1-ARC	ARCHIVE	transfer line	1000																	
	HNO3 Cleaning	2 M HNO3 cleaning																						
	Cleaning #1	Acid Cleaning 1	solution drained	C3-NIT-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-1-ADS	42104	transfer line	50																TACID	
				C3-NIT-1-ARC	NONE	transfer line	1000																	
	Cleaning #2	Acid Cleaning 2	solution drained	C3-NIT-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-2-ADS	42104	transfer line	50																TACID	
				C3-NIT-2-ARC	NONE	transfer line	1000																	
	Cleaning #3	Acid Cleaning 3	solution drained	C3-NIT-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-3-ADS	42104	transfer line	50																TACID	
				C3-NIT-3-ARC	NONE	transfer line	1000																	
UF Caustic Flushes 2&3		Flush UF System																						
		Caustic Flush 2	solution drained	C3-CAU-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-2-ADS	42104	transfer line	50																TACID	
				C3-CAU-2-ARC	NONE	transfer line	1000																	
		Caustic Flush 3	solution drained	C3-CAU-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-3-ADS	42102	transfer line	50															TBOH	TACID	
				C3-CAU-3-ARC	NONE	transfer line	1000																	
		Drain System- Leave no Heel																						
ION EXCHANGE		ION EXCHANGE																						
		Cycle 3 Lead	Lead Column @ BV = 5	C3-IX-CY3-LEAD-5	42105		10				ICPMS													
			Lead Column @ BV = 40	C3-IX-CY3-LEAD-40	NONE		10																	
			Lead Column @ BV = 70	C3-IX-CY3-LEAD-70	NONE		10																	
			Lead Column @ BV = 115	C3-IX-CY3-LEAD-115	NONE		10																	
			Lead Column @ BV = 145	C3-IX-CY3-LEAD-145	NONE		10																	
			Lead Column @ BV = 175	C3-IX-CY3-LEAD-175	42105		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY3-LEAD-180	42105		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY3-LEAD-185	42105		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY3-LEAD-180	42105		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY3-LEAD-185	42105		10				ICPMS													
			Lead Column @ BV = 200	C3-IX-CY3-LEAD-200	42105		10				ICPMS													
			Lead Column @ BV = 205	C3-IX-CY3-LEAD-205	42105		10				ICPMS													
			Lead Column @ BV = END	C3-IX-CY3-LEAD-END	42105		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY3-LEAD-176	42105		10				ICPMS													
		Cycle 3 Lag	Lag Column @ BV = 5	C3-IX-CY3-LAG-5	42106		10				ICPMS													
			Lag Column @ BV = 5	C3-IX-CY3-LAG-5-BLK	NONE		100																	
			Lag Column @ BV = 40	C3-IX-CY3-LAG-40	NONE		10																	
			Lag Column @ BV = 70	C3-IX-CY3-LAG-70	NONE		10																	
			Lag Column @ BV = 115	C3-IX-CY3-LAG-115	NONE		10																	
			Lag Column @ BV = 145	C3-IX-CY3-LAG-145	NONE		10																	
			Lag Column @ BV = 175	C3-IX-CY3-LAG-175	42106		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY3-LAG-180	42106		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY3-LAG-185	42106		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY3-LAG-180	42106		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY3-LAG-185	42106		10				ICPMS													
			Lag Column @ BV = 200	C3-IX-CY3-LAG-200	42106		10				ICPMS													
			Lag Column @ BV = 205	C3-IX-CY3-LAG-205	42106		10				ICPMS													
			Lag Column @ BV = END	C3-IX-CY3-LAG-END	42106		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY3-LAG-176	42106		10				ICPMS													
E-1	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C3-IX-CY3-LAW-FROM-DIS	NONE		25																	
E-2	Displacement Solution Displaced by Pre-elution Rinse (to C4 recycle)			C3-IX-CY3-DIS-FROM-PRER	NONE		25																	
E-3		Pre-Elution Rinse Displaced by Eluant		C3-IX-CY3-PRER-FROM-ELU	NONE		25																	
E-4		HNO3 Eluate (to HLW)		C3-IX-CY3-HLWELUATE	NONE		25																	
E-5a	Post Elution Rinse Displaced by Regeneration Solution (to C4 recycle)			C3-IX-CY3-POER-FROM-REG	NONE		25																	
E-5b		0.25M NaOH Regeneration Solution (to C4 recycle)		C3-IX-CY4-REG	NONE		25																	
E-6	0.25M NaOH Regeneration Solution retained on Column (would go to C4 TLP)			C3-IX-CY4-TO-TLP	NONE		25																	
		Cycle 4 Lead	Lead Column @ BV = 5	C3-IX-CY4-LEAD-5	42107		10				ICPMS													
			Lead Column @ BV = 70	C3-IX-CY4-LEAD-70	NONE		10																	
			Lead Column @ BV = 115	C3-IX-CY4-LEAD-115	NONE		10																	
			Lead Column @ BV = 175	C3-IX-CY4-LEAD-175	42107		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY4-LEAD-180	42107		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY4-LEAD-185	42107		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY4-LEAD-180	42107		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY4-LEAD-185	42107		10				ICPMS													
			Lead Column @ BV = 200	C3-IX-CY4-LEAD-200	42107		10				ICPMS													
			Lead Column @ BV = 205	C3-IX-CY4-LEAD-205	42107		10				ICPMS													
			Lead Column @ BV = END	C3-IX-CY4-LEAD-END	42107		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY4-LEAD-176	42107		10				ICPMS													

Table D4-4 Campaign III Sample Matrix (4 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
		Cycle 4 Lag	Lag Column @ BV = 5	C3-IX-CY4-LAG-5	42108		10				ICPMS													
			Lag Column @ BV = 70	C3-IX-CY4-LAG-70	NONE		10																	
			Lag Column @ BV = 115	C3-IX-CY4-LAG-115	NONE		10																	
			Lag Column @ BV = 175	C3-IX-CY4-LAG-175	NONE		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY4-LAG-180	42108		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY4-LAG-185	42108		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY4-LAG-180	42108		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY4-LAG-185	42108		10				ICPMS													
			Lag Column @ BV = 200	C3-IX-CY4-LAG-200	42108		10				ICPMS													
			Lag Column @ BV = 205	C3-IX-CY4-LAG-205	42108		10				ICPMS													
			Lag Column @ BV = END	C3-IX-CY4-LAG-END	42108		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY4-LAG-176	42108		10				ICPMS													
E-1	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C3-IX-CY4-LAW-FROM-DIS	NONE		25																	
E-2	Displacement Solution Displaced by Pre-elution Rinse (to C4 recycle)			C3-IX-CY4-DIS-FROM-PRER	NONE		25																	
E-3		Pre-Elution Rinse Displaced by Eluant		C3-IX-CY4-PRER-FROM-ELU	NONE		25																	
E-4			HNO3 Eluate (to HLW)	C3-IX-CY4-HLWELUATE	NONE		25																	
E-5a	Post Elution Rinse Displaced by Regeneration Solution (to C4 recycle)			C3-IX-CY4-POER-FROM-REG	NONE		25																	
E-5b		0.25M NaOH Regeneration Solution (to C4 recycle)		C3-IX-CY4-REG	NONE		25																	
E-6	0.25M NaOH Regeneration Solution retained on Column (would go to C4 TLP)			C3-IX-CY4-TO-TLP	NONE		25																	
	IX PRODUCTS	IX Product to TLP	IX PRODUCT	C3-IX-PROD-ACTL	NONE	tank	100									TS	UDS	DENS						
				C3-IX-PROD-ARC	NONE	tank	500																	
				C3-IX-PROD-ADS	42110	tank	50						ICC											
				C3-IX-PROD-ANTF	NONE	tank	100																	
		Displacement solution displaced by pre-elution rinse (E-2)		Analyze in Campaign IV if needed																				
		Post-elution rinse displaced by regeneration solution (E-5a)		Analyze in Campaign IV if needed																				
			Regeneration solution (E-5b)	Analyze in Campaign IV if needed																				
TLP EVAPORATOR			LAW Feed (IX product)																					
			LAW SBS																					
		IX 0.25M NaOH Regeneration Solution from Campaign 2																						
	EVAPORATE	Evaporator Feed Mixture		C3-TLP-FEED-ACTL	NONE	feed tank	50									TS	UDS	DENS						
				C3-TLP-FEED-WET	42111	feed tank	50					ICA	ICC									TBOH		TIC/TOC
				C3-TLP-FEED-MW	42112	feed tank	50	DISMW		ICPES	ICPMS				AAK									
				C3-TLP-FEED-ARC	NONE	feed tank	1000																	
		Bottoms	After all antifoam additions	C3-TLP-B-START-ARC	NONE	bottoms tank	100																	
				C3-TLP-B-START-ANTF	NONE	bottoms tank	100																	
		Bottoms	At ~200 L fed	C3-TLP-B-200-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~400 L fed	C3-TLP-B-400-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~600 L fed	C3-TLP-B-600-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~800 L fed	C3-TLP-B-800-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~1000 L fed	C3-TLP-B-1000-ARC	NONE	bottoms tank	50																	
		Bottoms	Evaporation completed	C3-TLP-B-END-ACTL	NONE	bottoms tank	100									TS	UDS	DENS						
				C3-TLP-B-END-ADS	42113	bottoms tank	50						ICC											
				C3-TLP-B-END-ARC	NONE	bottoms tank	100																	
		Primary Condensate	Composite	C3-TLP-PC-END-ARC	NONE		100																	
		Secondary Condensate	Composite	C3-TLP-SC-END-ARC	NONE		100																	
	COMBINE TLP CONDENSATES																							
		Combined TLP Condensate = RLD Condensate		C3-RLD-FROM-TLP-ADS	42114	storage tank	50						ICC											
		(Primary + Secondary)		C3-RLD-FROM-TLP-ACTL	NONE		50									TS		DENS						
				C3-RLD-FROM-TLP-ARC	NONE		1000																	
	COMBINE FEP & TLP CONDENSATES		Combined condensate	C3-RLD-COMP-ARC	NONE	storage tank	1000																	
				C3-RLD-COMP-ADS	42115	storage tank	50						ICC											

Notes: Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		lon chrom. cations	ammonium	DENS	density
ICPES	includes all elements present that can be analyzed by ICPES		lon exclusion chrom.	citrate, acetate	RHEO	rheology
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	atomic absorption	Cs, K, Na	PSD	particle size distribution by Microtrac
	supernates	Cs, Rb	total solids wt%		XRD	X-ray diffraction
ICA	lon chrom - anions	normal suite	undissolved solids wt%		TBOH	total base, free hydroxide, other base

Table D5-1 Campaign IV Sample Matrix (1 of 3 pages)

				Sample	ADS Travel Copy	Sample Location	Sample Vol mL	Sample Prep	2 pH	3 ICPES	4 ICPMS	5 ICA	6 ICC	7 IEC	8 AA	9 TS	10 UDS	11 DENS	12 RHEO	13 PSD	14 XRD	15 TB - -	16 TACID	17 TIC/TOC
RECYCLE BLENDING			Campaign III UF Wash Water																					
			HLW SBS																					
			HLW Vessel Vent (PVP)																					
			HLW Canister Decon																					
			Campaign I Caustic Flushes																					
			Campaign I UF Acid Cleanings																					
			Campaign I UF Loop Flushes (PWD-33)																					
	Campaign III Cs IX Recycle: Displacement Solution Displaced by Pre-Elution Rinse (2)			NO ANALYSIS																				
	Campaign III Cs IX Recycle: Post-Elution Rinse Displaced + Regeneration Solution (5)			NO ANALYSIS																				
			COMBINED RECYCLES																					
			(does not include NaOH to neutralize HNO3)																					
		PWD	Generation of Synthetic Recycles																					
			HLW Canister Decon	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			NaNO3 (kg)																					
			HLW Vessel Vent (PVP)	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			Combined Canister Decon + PVP																					
			UF Loop Flush (PWD-33) from Campaign II	NO SAMPLE																				
			Combining of Recycles																					
		PWD-44		C4-PWD-44-ARC	NONE	mixing tank	250																	
			Add HLW Canister Decon + PVP water to a tank																					
			Add HLW Canister Decon + PVP 50wt% NaOH																					
			Add HLW Canister Decon NaNO3 (kg)																					
			Add HLW SBS to tank																					
			Add UF Loop Flush PWD-33																					
			Sum																					
		PWD-15		C4-PWD-15-ARC	NONE	mixing tank	250																	
			Add Campaign III Wash Permeate to a tank (1st drum)																					
			Add 0.1M NaOH made from condensate																					
			Add from Campaign III Caustic Flush Drum 1																					
			Add from Campaign III Caustic Flush Drum 2																					
			Add from Campaign III Caustic Flush Drum 3																					
			Add Campaign III IX Displacement Solution Displaced by Pre-Elution Rinse (E-2)																					
			Add 0.1M NaOH made from condensate																					
			Add Campaign III Post-Elution Rinse Displaced by Regeneration Solution (E-5a)																					
			Add DI Water																					
			Add Campaign III IX 0.25M NaOH Regeneration Solution																					
			Add 0.25M NaOH from DI water																					
			Sum																					
		PWD-16		C4-PWD-16-ARC	NONE	mixing tank	250																	
			Add Campaign III Wash Permeate to a tank (use 2nd drum)																					
			Add NaOH 50wt%																					
			Add from Campaign III Nitric Acid Cleaning Drum 1																					
			Add from Campaign III Nitric Acid Cleaning Drum 2																					
			Add from Campaign III Nitric Acid Cleaning Drum 3																					
			Sum																					
		Combine Recycles in (FEP Feed) Tank		C4-FEP-FEED-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
			Add PWD-44 to tank	C4-FEP-FEED-ARC	NONE	mixing tank	250																	
			Add PWD-15 to tank	C4-FEP-FEED-ANTF	NONE	mixing tank	100																	
			Add PWD-16 to tank	C4-FEP-FEED-ADS	43292	mixing tank	50					ICA	ICC											
				C4-FEP-FEED-MW	43297	mixing tank	50	DISMW		ICPES					AAK									
				C4-FEP-FEED-PER	43299	mixing tank	50	DISPER		ICPES														
				C4-FEP-FEED-SUP	43301	mixing tank	50	FILTER		ICPES		ICA			AAK									
			Sum																					
			RLD Stored from Campaign III	C3-RLD-FINAL-AGED	43295		100						ICC											
FEP EVAPORATOR			Starting Volume																					
		Bottoms	After all antifoam additions	C4-FEP-B-START-ARC	NONE	bottoms tank	100																	
				C4-FEP-B-START-ANTF	NONE	bottoms tank	100																	
		Bottoms	At ~200 L fed (after initial charge)	C4-FEP-B-200-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~400 L fed	C4-FEP-B-400-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~600 L fed	C4-FEP-B-600-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~800 L fed	C4-FEP-B-800-ARC	NONE	bottoms tank	100																	
		Bottoms	Evaporation completed	C4-FEP-B-END-ACTL	NONE	bottoms tank	50									TS	UDS	DENS						
				C4-FEP-B-END-WET	43292	bottoms tank	50					ICA	ICC											
				C4-FEP-B-END-MW	43297	bottoms tank	50	DISMW		ICPES					AAK									
				C4-FEP-B-END-PER	43299	bottoms tank	50	DISPER		ICPES														
				C4-FEP-B-END-SUP	43301	bottoms tank	50	FILTER		ICPES														
				C4-FEP-B-END-ARC	NONE	bottoms tank	500																	
				C4-FEP-B-END-ANTF	NONE	bottoms tank	100																	
		Primary Condensate	Composite	C4-FEP-PC-END-ARC	NONE		100																	
		Secondary Condensate	Composite	C4-FEP-SC-END-ARC	NONE		100																	
	COMBINE ALL FEP CONDENSATES																							
		Combined FEP Condensate = RLD Condensate		C4-RLD-FROM-FEP-ARC	NONE	tank	1000																	
				C4-RLD-FROM-FEP-ADS	43294	tank	100						ICC											

Table D4-5 Campaign IV Sample Matrix (2 of 3 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
ULTRAFILTRATION		UFP	FEP Bottoms	see above for sample																				
	ACTL EXPEDITE		AY102 before Supernate Addition	C4-AY102-NOSUP-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
				C4-AY102-NOSUP-ARC	NONE	mixing tank	50																	
	ACTL EXPEDITE		AY102 after final supernate addition	C4-AY102-SOL-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
				C4-AY102-ARC	NONE	mixing tank	250																	
			AP101	C4-AP101-ARC	NONE	mixing tank	250																	
		COMBINE AY-102, AP-101 & FEP BOTTOMS																						
			Starting Volume of Feed:																					
			Fill feed tank to:																					
		UFP Feed	before start of run	C4-UF-START-ACTL	NONE	recirc line	100									TS	UDS	DENS						
				C4-UF-START-ARC	NONE	recirc line	1000																	
			First 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C4-UF-CON1-157-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C4-UF-CON1-315-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C4-UF-CON1-472-ARC	NONE	recirc line	50																	
			Second 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C4-UF-CON2-157-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C4-UF-CON2-315-ARC	NONE	recirc line	50																	
	ACTL EXPEDITE	Concentrate Sample	all permeate removed, @ >20wt% solids	C4-UF-CON2-472-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-CON2-472-ARC	NONE	recirc line	250																	
				C4-UF-CON2-472-ANTF	NONE	recirc line	100																	
	CONCENTRATION	Concentrate	volume in feed tank (L)																					
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE	C4-IX-FEED-ADS	43302	filtrate tank	100			ICPES		ICA	ICC		AAK									
		to IX	total volume of permeate (L)	C4-IX-FEED-ACTL	NONE	filtrate tank	100									TS	UDS	DENS						
				C4-IX-FEED-ARC	NONE	filtrate tank	1000																	
				C4-IX-FEED-RHEO	NONE	filtrate tank	100												RHEO					
			(permeate for PSD measurements)	C4-PERM-FOR-PSD	NONE	filtrate tank	1000																	
				C4-IX-FEED-ANTF	NONE	filtrate tank	100																	
	STEADY STATE MATRIX																							
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE																							
	ACTL EXPEDITE	Concentrate Sample	Permeate added back in	C4-UF-CON2-ADJ-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-CON2-ADJ-PSD	43304		25													PSD				
				C4-UF-CON2-ADJ-RHEO	NONE		100												RHEO					
		Filter @ 25°C	NO SAMPLE																					
	Slurry Sample	Filter @ 30°C		C4-UF-T-30-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-30-SL-PSD	43304		25													PSD				
			rheology @ 30°C	C4-UF-T-30-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-30-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 30°C	C4-UF-T-30-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 37.5°C		C4-UF-T-37.5-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-37.5-SL-PSD	43304		25													PSD				
			rheology @ 37.5°C	C4-UF-T-37.5-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-37.5-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 37.5°C	C4-UF-T-37.5-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 45°C		C4-UF-T-45-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-45-SL-PSD	43304		25													PSD				
			rheology @ 45°C	C4-UF-T-45-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-45-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 45°C	C4-UF-T-45-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 35°C		C4-UF-T-35-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-35-SL-PSD	43304		25													PSD				
			rheology @ 35°C	C4-UF-T-35-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-35-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 35°C	C4-UF-T-35-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 25°C		C4-UF-T-25-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-25-SL-PSD	43304		25													PSD				
			rheology @ 25°C	C4-UF-T-25-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-25-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 25°C	C4-UF-T-25-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 37.5°C & 15 fps		C4-UF-T-37.5(15)-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-37.5(15)-SL-PSD	43304		25													PSD				
			rheology @ 37.5°C	C4-UF-T-37.5(15)-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-37.5(15)-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 37.5°C	C4-UF-T-37.5(15)-PE-RHEO	NONE		100												RHEO					
	Slurry Sample	Filter @ 45°C & 15 fps		C4-UF-T-45(15)-SL-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-T-45(15)-SL-PSD	43304		25													PSD				
			rheology @ 45°C	C4-UF-T-45(15)-SL-RHEO	NONE		100												RHEO					
	Permeate Sample			C4-UF-T-45(15)-PE-ACTL	NONE	permeate line	50									TS								
			rheology @ 45°C	C4-UF-T-45(15)-PE-RHEO	NONE		100												RHEO					
	FIRST WASH		RLD Wash water (L)																					
WASHING		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-69-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W1-117-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C4-UF-W1-117-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-69-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE1-117-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C4-WPE1-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 1st wash permeate	C4-WPE1-CMP-ARC	NONE	filtrate drum	1000																	
				C4-WPE1-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C4-WPE1-CMP-ADS	43298	filtrate drum	50						ICC									TBASE		
	2ND WASH		RLD Wash water (L)																					
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-69-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C4-UF-W2-117-ACTL	NONE	recirc line	50									TS	UDS	DENS						
		(to HLW)		C4-UF-W2-117-WET	43293	recirc line	50					ICA	ICC									TBOH		
				C4-UF-W2-117-MW	43298	recirc line	50	DISMW		ICPES					AAK									
				C4-UF-W2-117-PER	43300	recirc line	50	DISPER		ICPES														
				C4-UF-W2-117-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-69-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C4-WPE2-117-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C4-WPE2-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 2nd wash permeate	C4-WPE2-CMP-ARC	NONE	filtrate drum	1000																	
				C4-WPE2-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C4-WPE2-CMP-ADS	43298	filtrate drum	50						ICC									TBASE		
	END 2ND WASH	Concentrate	volume washed concentrate																					

Table D4-5 Campaign IV Sample Matrix (3 of 3 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
CLEANING																								
	Loop Flush	**No Loop Flush Needs to be Made**																						
	UF Caustic Flush 1	**Flush UF System**																						
		Caustic Flush 1	**solution drained**	C4-CAU-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-CAU-1-ADS	43303	transfer line	50															TBASE		
				C4-CAU-1-ARC	ARCHIVE	transfer line	1000																	
	HNO3 Cleaning	**2 M HNO3 cleaning**																						
	Cleaning #1	**Acid Cleaning 1**	**solution drained**	C4-NIT-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-NIT-1-ADS	43303	transfer line	50																TACID	
				C4-NIT-1-ARC	NONE	transfer line	1000																	
	Cleaning #2	**Acid Cleaning 2**	**solution drained**	C4-NIT-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-NIT-2-ADS	43303	transfer line	50																TACID	
				C4-NIT-2-ARC	NONE	transfer line	1000																	
	Cleaning #3	**Acid Cleaning 3**	**solution drained**	C4-NIT-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-NIT-3-ADS	43303	transfer line	50																TACID	
				C4-NIT-3-ARC	NONE	transfer line	1000																	
	UF Caustic Flushes 2&3	**Flush UF System**																						
		Caustic Flush 2	**solution drained**	C4-CAU-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-CAU-2-ADS	43303	transfer line	50																TACID	
				C4-CAU-2-ARC	NONE	transfer line	1000																	
		Caustic Flush 3	**solution drained**	C4-CAU-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C4-CAU-3-ADS	43303	transfer line	50															TBASE	TACID	
				C4-CAU-3-ARC	NONE	transfer line	1000																	

Notes: Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

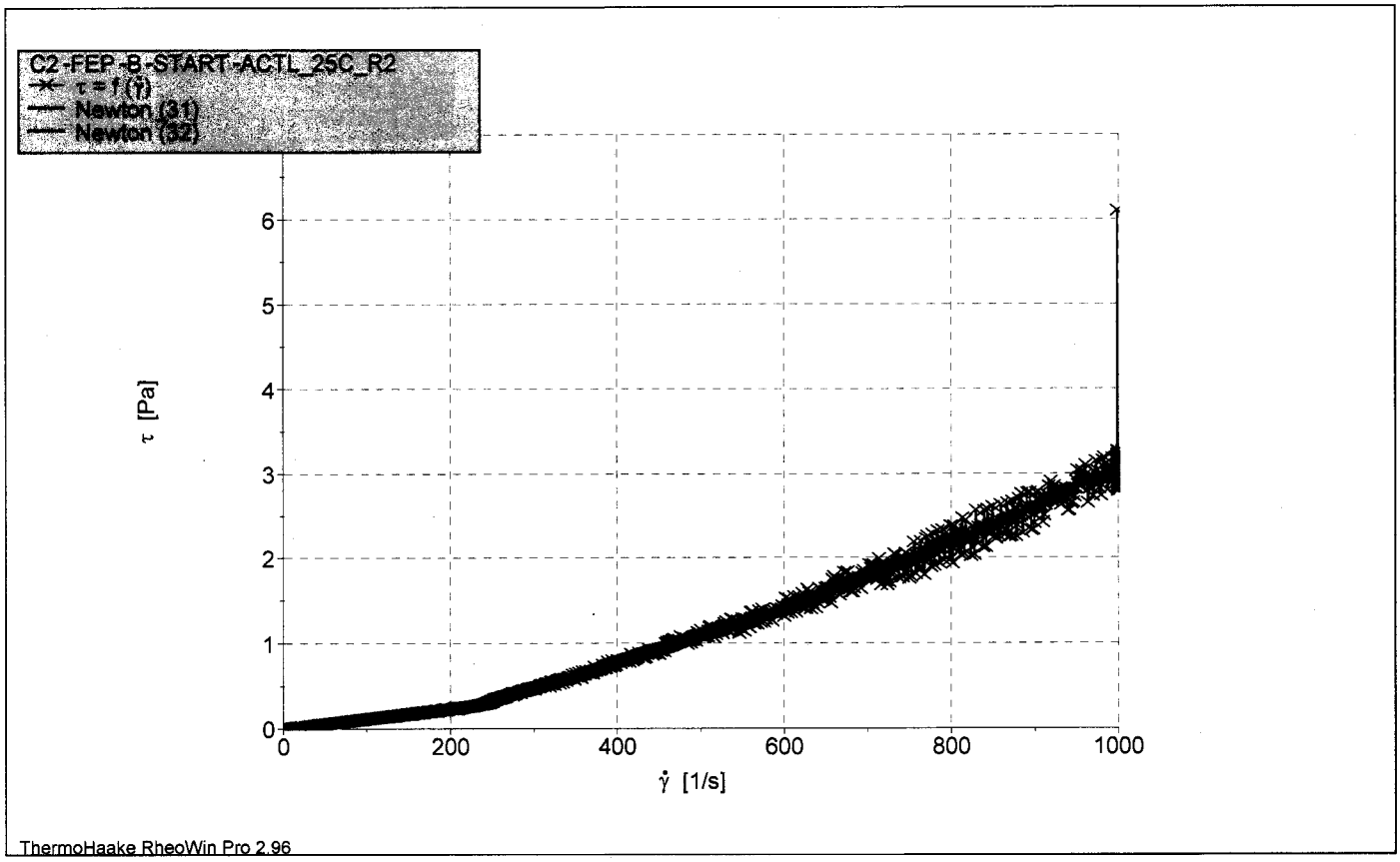
pH	pH		Ion chrom. cations	ammonium	DENS density
ICPES	includes all elements present that can be analyzed by ICPES		Ion exclusion chrom.	citrate, acetate	RHEO rheology
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	atomic absorption	Cs, K, Na	PSD particle size distribution by Microtrac
	supernates	Cs, Rb	total solids wt%		XRD X-ray diffraction
ICA	Ion chrom - anions	normal suite	undissolved solids wt%		TBOH total base, free hydroxide, other base

APPENDIX E: RHEOLOGICAL AND PARTICLE SIZE

The following 96 pages contain the rheological and particle-size distribution analyses results taken during the several campaigns. Each analysis can be related to the point the sample was taken during a campaign by noting the sample number with the sample test matrix in the preceding appendix. The first 42 pages contain the rheological measurements made from samples taken during Campaign II. Such information was only obtained during that Campaign II because it was the first campaign to entail the use of all four unit operations and to limit cost, since rheology was not expected to significantly change. The remaining pages show the particle size distribution measured in Campaigns I, II, and IV. PSD results were not expected to change significantly from Campaigns II and III, but Campaign IV used a new filter, i.e., GKN, and therefore more samples were drawn. Note that for each PSD samples there are two pages of information, i.e., by Volume Distribution and by Number Distribution. Also note the Sample Number is listed in the row entitled “Substance” because the title information was not lined up properly. However, the sample number on those pages can be compared to the one given in the Sample Test Matrix, Appendix D.

Rheological Data from SIPP Campaign II

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	15.04.2004 / 12:21:37 PM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	c2-fep-b-start-actl	**A-factor**	6747.000 Pa/Nm		
Sample no	2	**M-factor**	22.430 (1/s)/(rad/s)		
Description					
Comment					

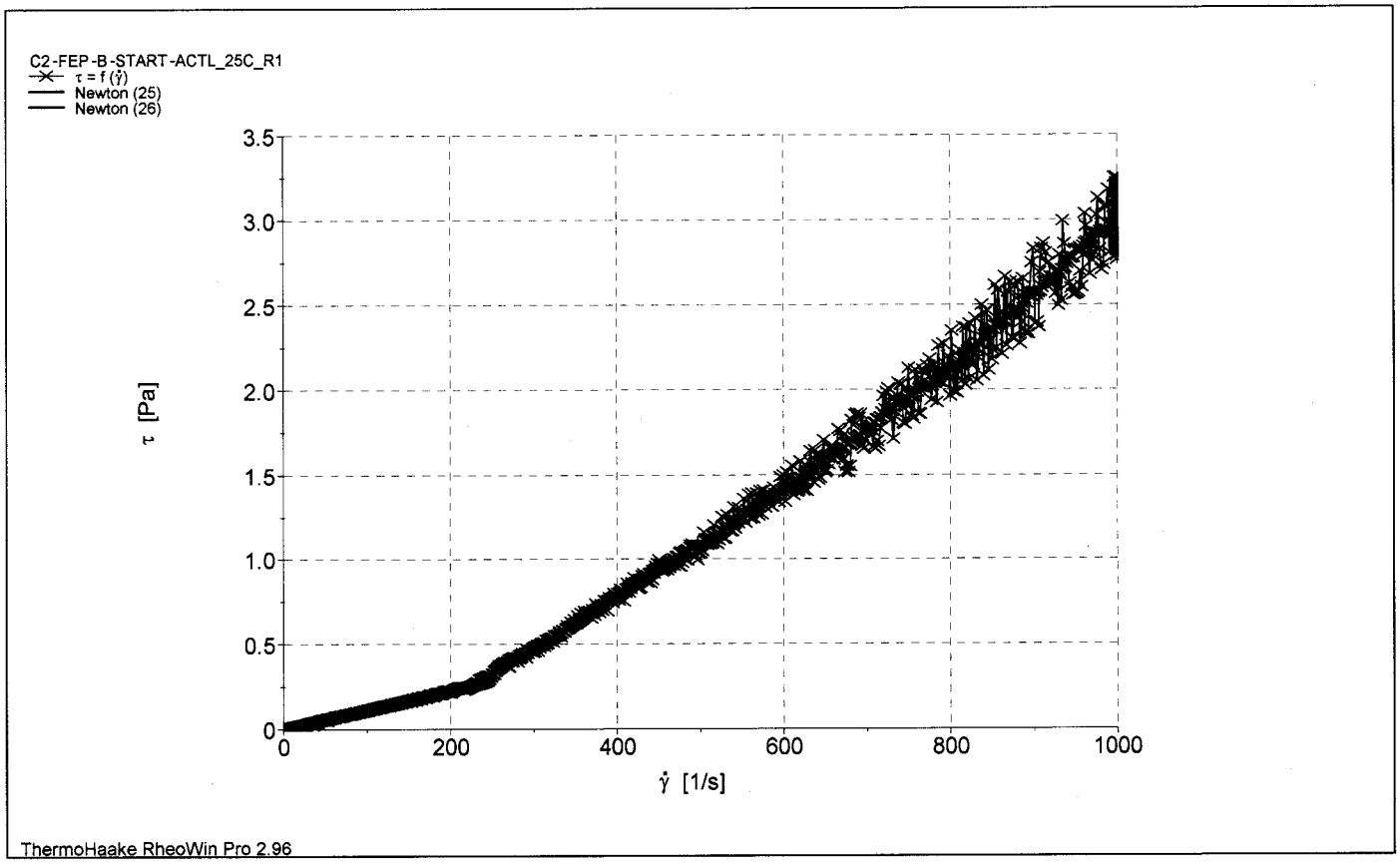


Filename: I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-START-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr
'04\4 -15 -04\C2 -FEP -B -START -ACTL_25C_R2.rwd (Mod)
Bingham (29) : τ_0: -0.3522 η_p:0.003141 Chi²:9.299 r:0.9888
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (30) : τ_0: -0.364 η_p:0.003147 Chi²:13.82 r:0.9837
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (31) : η:0.001172 Chi²:0.001008 r:0.9994
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (32) : η:0.001126 Chi²:0.01445 r:0.9916
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	15.04.2004 / 12:06:15 PM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	c2-fep-b-start-actl	**A-factor**	6747.000 Pa/Nm		
Sample no	1	**M-factor**	22.430 (1/s)/(rad/s)		
Description					
Comment					



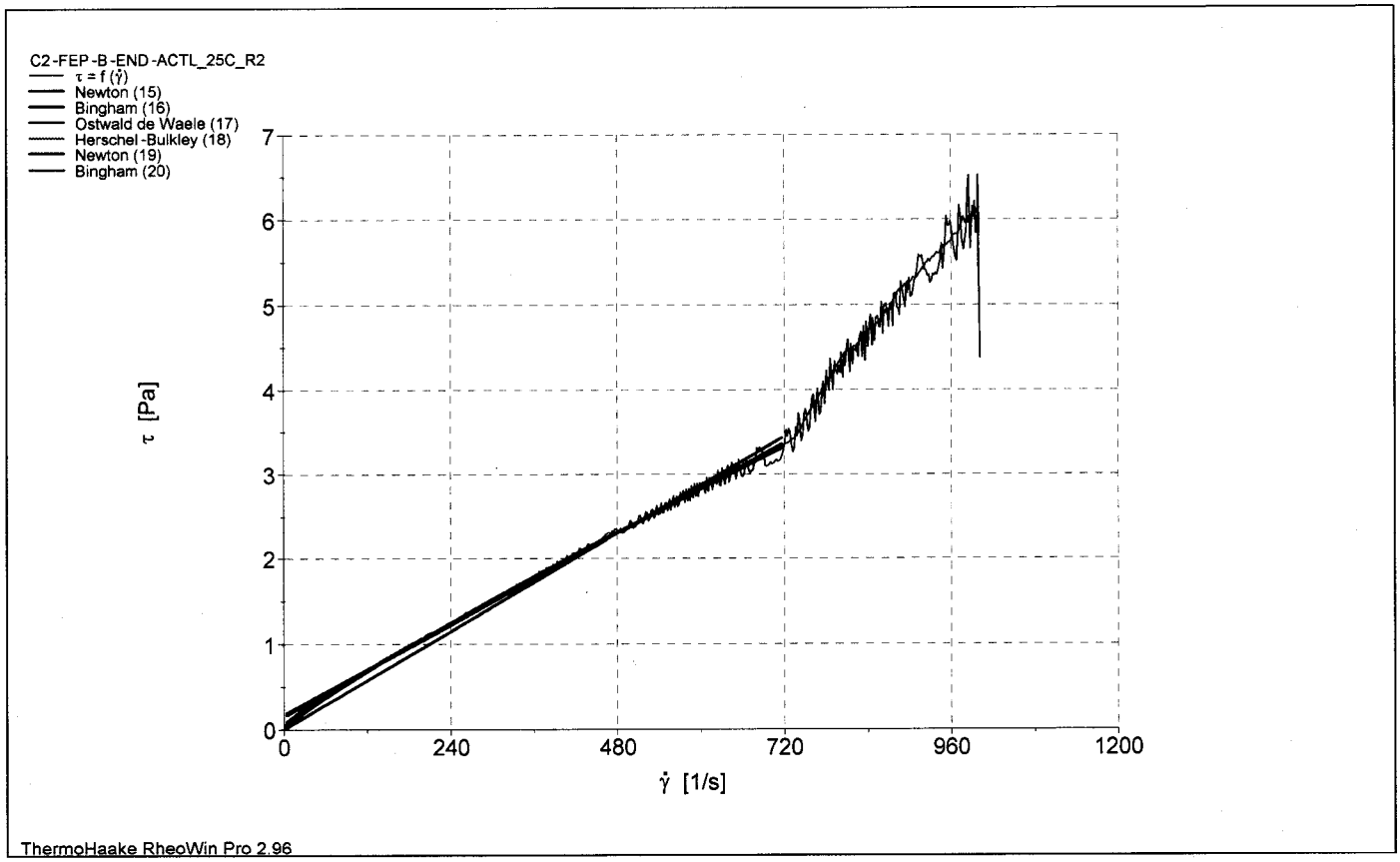
Filename: I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-START-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr
'04\4-15-04\C2-FEP-B-START-ACTL_25C_R1.rwd (Mod)
Bingham (23) : τ_0: -0.34 η_p:0.003091 Chi²:8.299 r:0.9897
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (24) : τ_0: -0.3484 η_p:0.003097 Chi²:11.48 r:0.986
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (25) : η:0.001135 Chi²:0.000459 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (26) : η:0.001117 Chi²:0.01577 r:0.9906
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	15.04.2004 / 12:51:08 PM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	c2-fep-b-end-actl	**A-factor**	6747.000 Pa/Nm		
Sample no	2	**M-factor**	22.430 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-END-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-END-ACTL_25C_R2.rwd (Mod)

Bingham (13) : τ_0: -0.1768 η_p:0.005591 Chi²:44.22 r:0.9834
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (14) : τ_0: -0.1441 η_p:0.005515 Chi²:47.74 r:0.9817
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (15) : η:0.004787 Chi²:2.23 r:0.9964
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (16) : τ_0:0.148 η_p:0.004479 Chi²:0.2482 r:0.9996
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

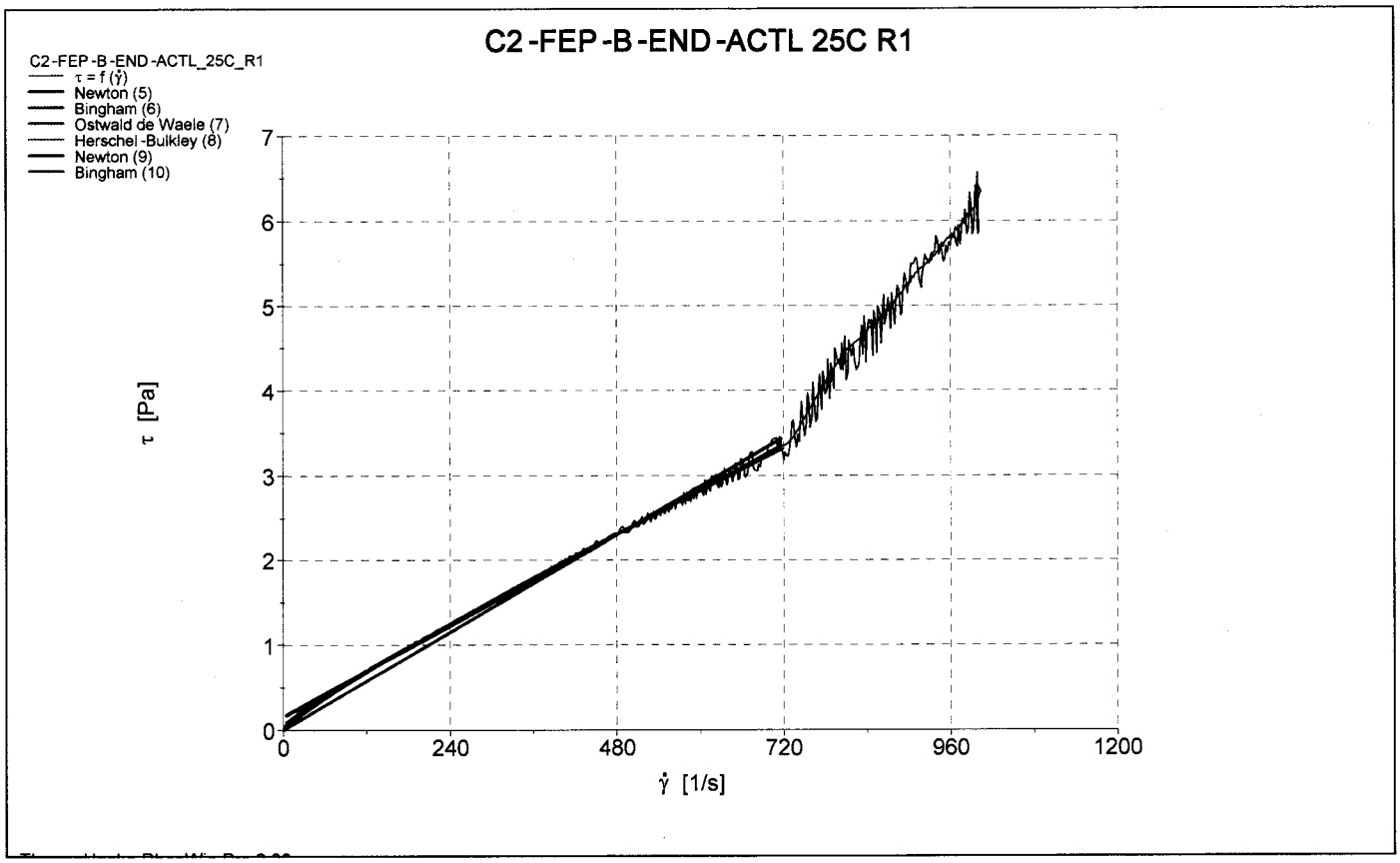
Ostwald de Waele (17) : K:0.009614 n:0.8883 Chi²:0.1317 r:0.9998
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Herschel-Bulkley (18) : τ_0:0.06383 K:0.007338 n:0.9271 Chi²:0.05643 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (19) : η:0.004784 Chi²:3.968 r:0.9935
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (20) : τ_0:0.1784 η_p:0.004412 Chi²:1.084 r:0.9982
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	15.04.2004 / 12:36:00 PM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	c2-fep-b-end-actl	**A-factor**	6747.000 Pa/Nm		
Sample no	1	**M-factor**	22.430 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-END-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr '04\4-15-04\C2-FEP-B-END-ACTL_25C_R1.rwd (Mod)

Bingham (3) : τ_0: -0.1842 η_P:0.005617 Chi²:46.08 r:0.9828
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (4) : τ_0: -0.1627 η_P:0.005567 Chi²:49.82 r:0.9813
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (5) : η:0.004785 Chi²:2.261 r:0.9964
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (6) : τ_0:0.1491 η_P:0.004474 Chi²:0.2485 r:0.9996
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Ostwald de Waele (7) : K:0.00966 n:0.8874 Chi²:0.1304 r:0.9998
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

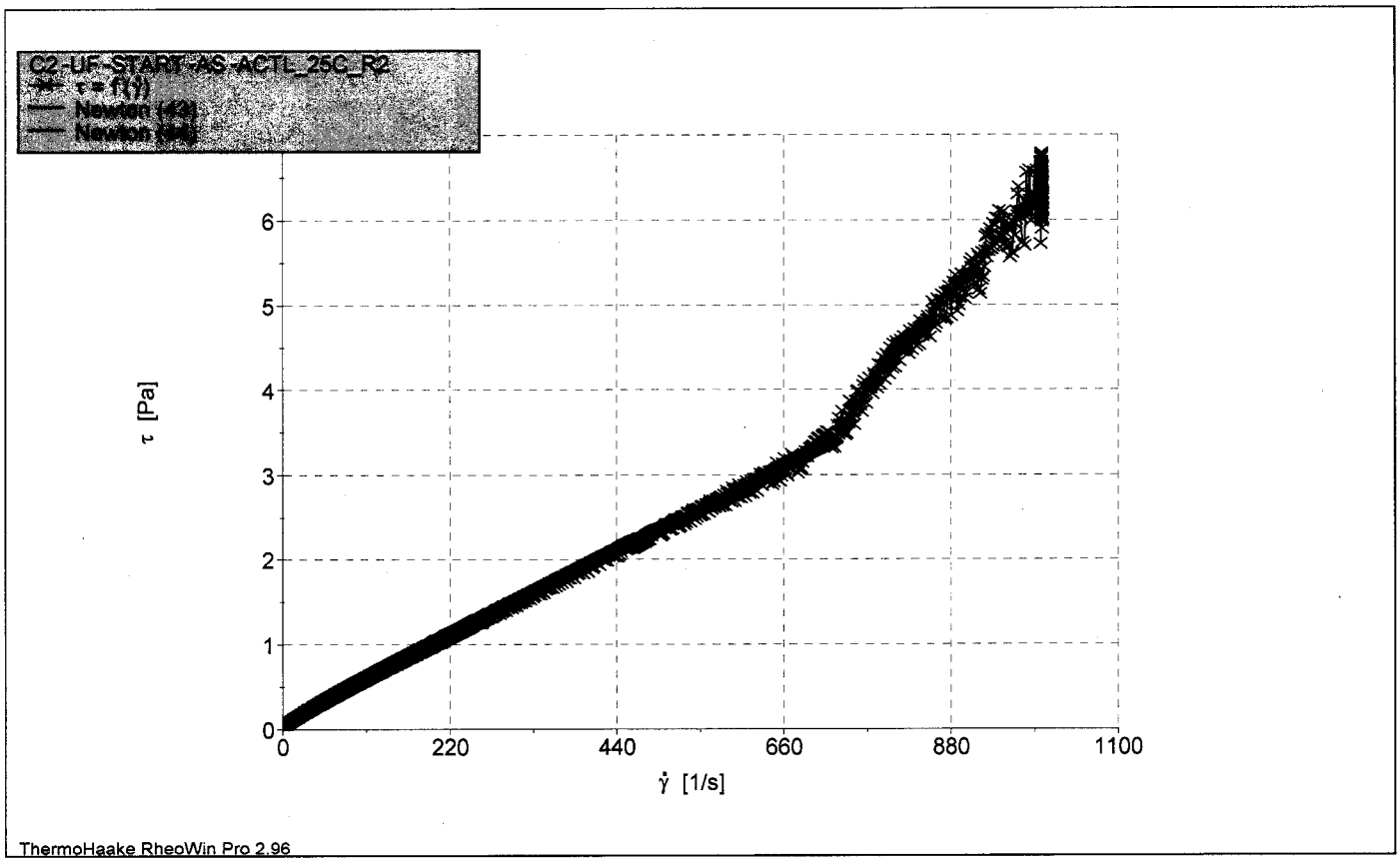
Herschel-Bulkley (8) : τ_0:0.06437 K:0.007359 n:0.9265 Chi²:0.05389 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (9) : η:0.004796 Chi²:3.289 r:0.9946
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (10) : τ_0:0.1664 η_P:0.004449 Chi²:0.7991 r:0.9987
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	22.04.2004 / 7:40:38 AM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	C2-UF-START-AS-ACTL	**A-factor**	6747.000 Pa/Nm		
Sample no	2	**M-factor**	22.430 (1/s)/(rad/s)		
Description					

Comment

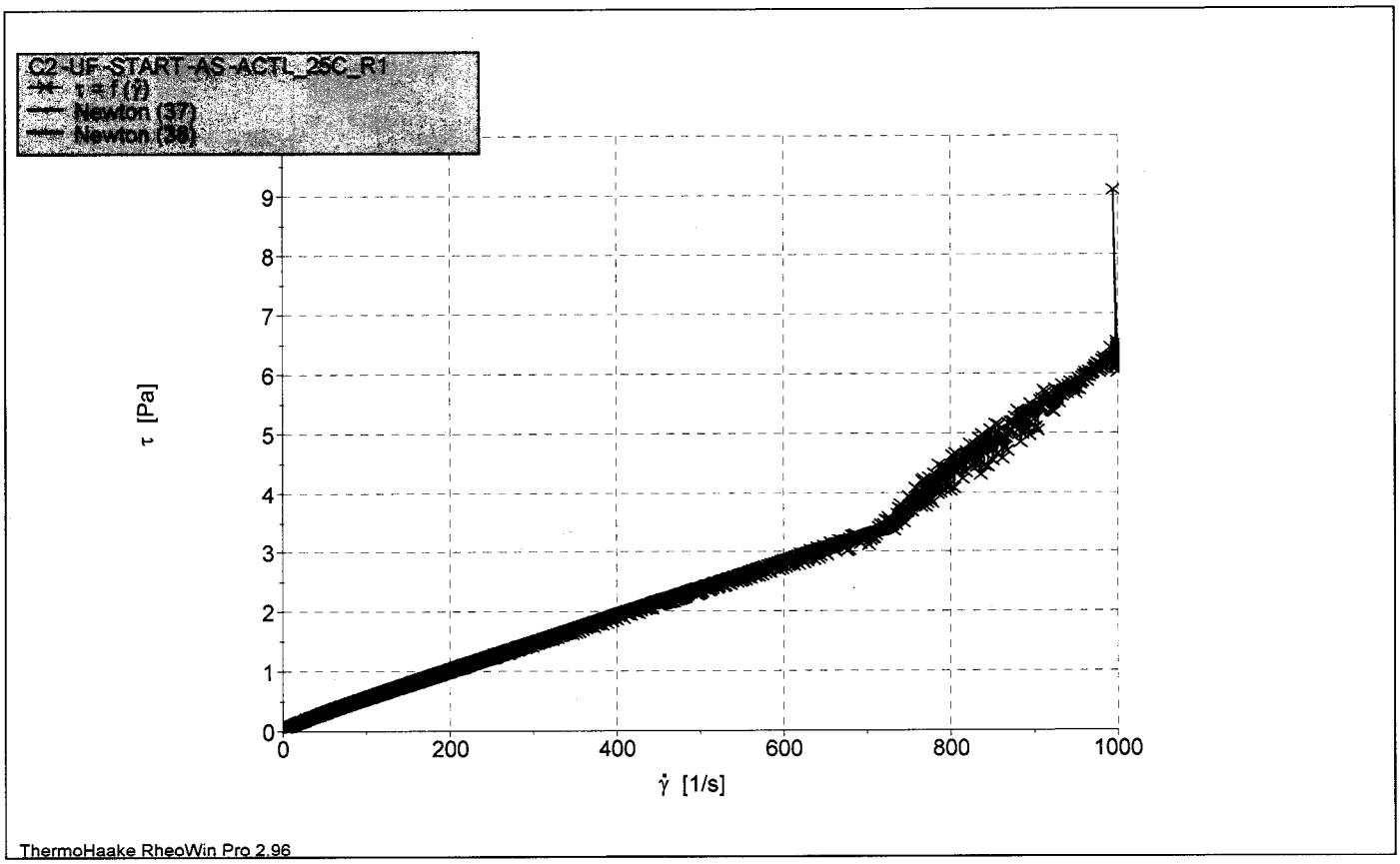


Filename: I:\Rheology\Zamineck\apr '04\4-22-04\C2-UF-START-AS-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr
'04\4-22-04\C2-UF-START-AS-ACTL_25C_R2.rwd (Mod)
Bingham (41) : τ_0: -0.2443 η_p:0.005768 Chi²:51.68 r:0.9818
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (42) : τ_0: -0.2912 η_p:0.005796 Chi²:58.24 r:0.9799
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (43) : η:0.004793 Chi²:1.134 r:0.9981
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (44) : η:0.00469 Chi²:1.067 r:0.9982
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**	DC30		
Date/Time	22.04.2004 / 7:22:49 AM	**Sensor**	Z41 Ti	**Gap**	3.000 mm
Substance	C2-UF-START-AS-ACTL	**A-factor**	6747.000 Pa/Nm		
Sample no	1	**M-factor**	22.430 (1/s)/(rad/s)		
Description					
Comment					

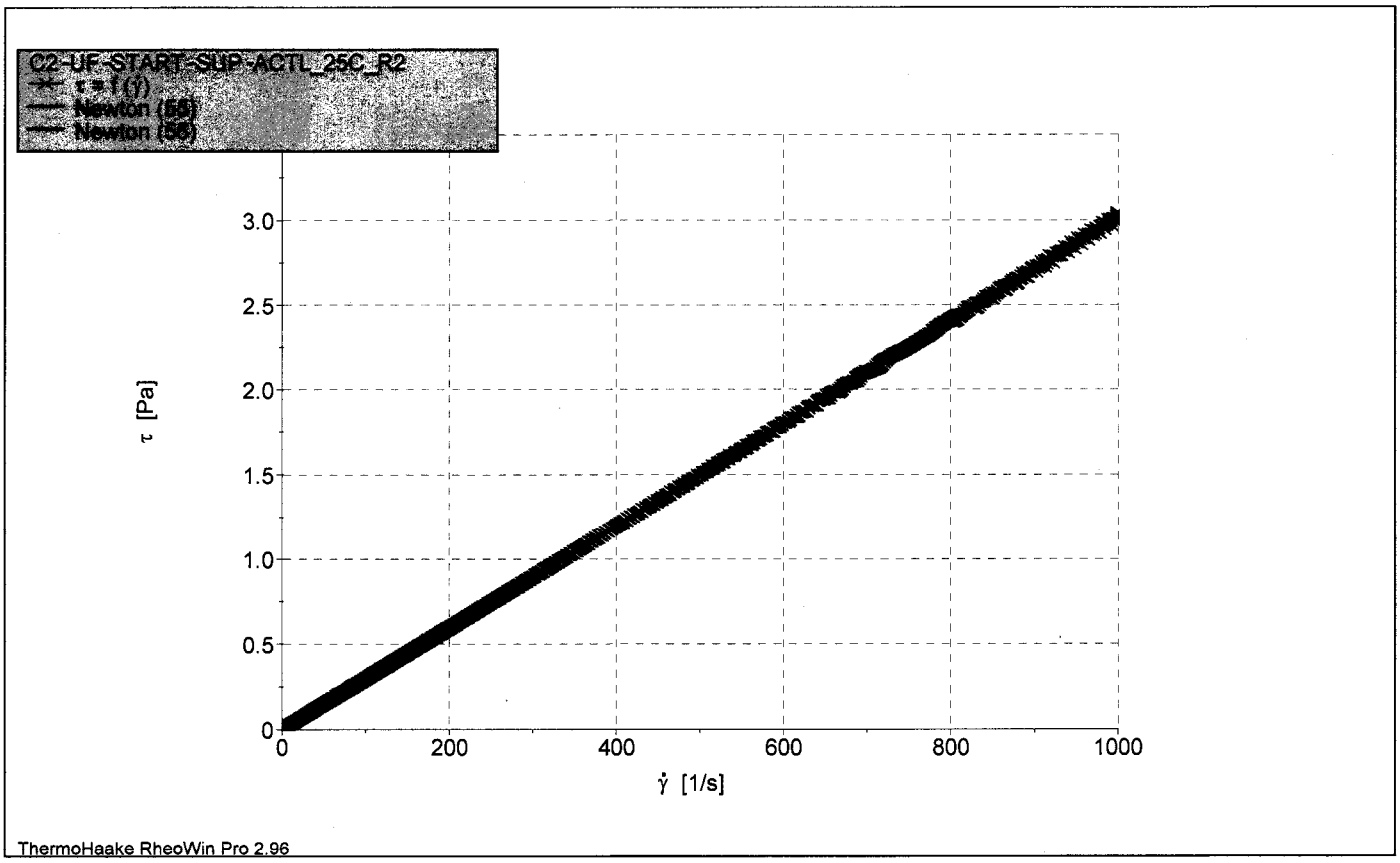


Filename: I:\Rheology\Zamineck\apr '04\4-22-04\C2-UF-START-AS-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z41new program.rwj

I:\Rheology\Zamineck\apr
'04\4 -22 -04\C2 -UF -START -AS -ACTL_25C_R1.rwd (Mod)
Bingham (35) : τ_0: -0.2455 η_P:0.005777 Chi²:50.32 r:0.9823
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (36) : τ_0: -0.2933 η_P:0.005788 Chi²:57.93 r:0.9799
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (37) : η:0.0048 Chi²:1.069 r:0.9982
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (38) : η:0.004681 Chi²:0.9823 r:0.9983
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	22.04.2004 / 9:15:41 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-UF-START-SUP-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no	2	**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					



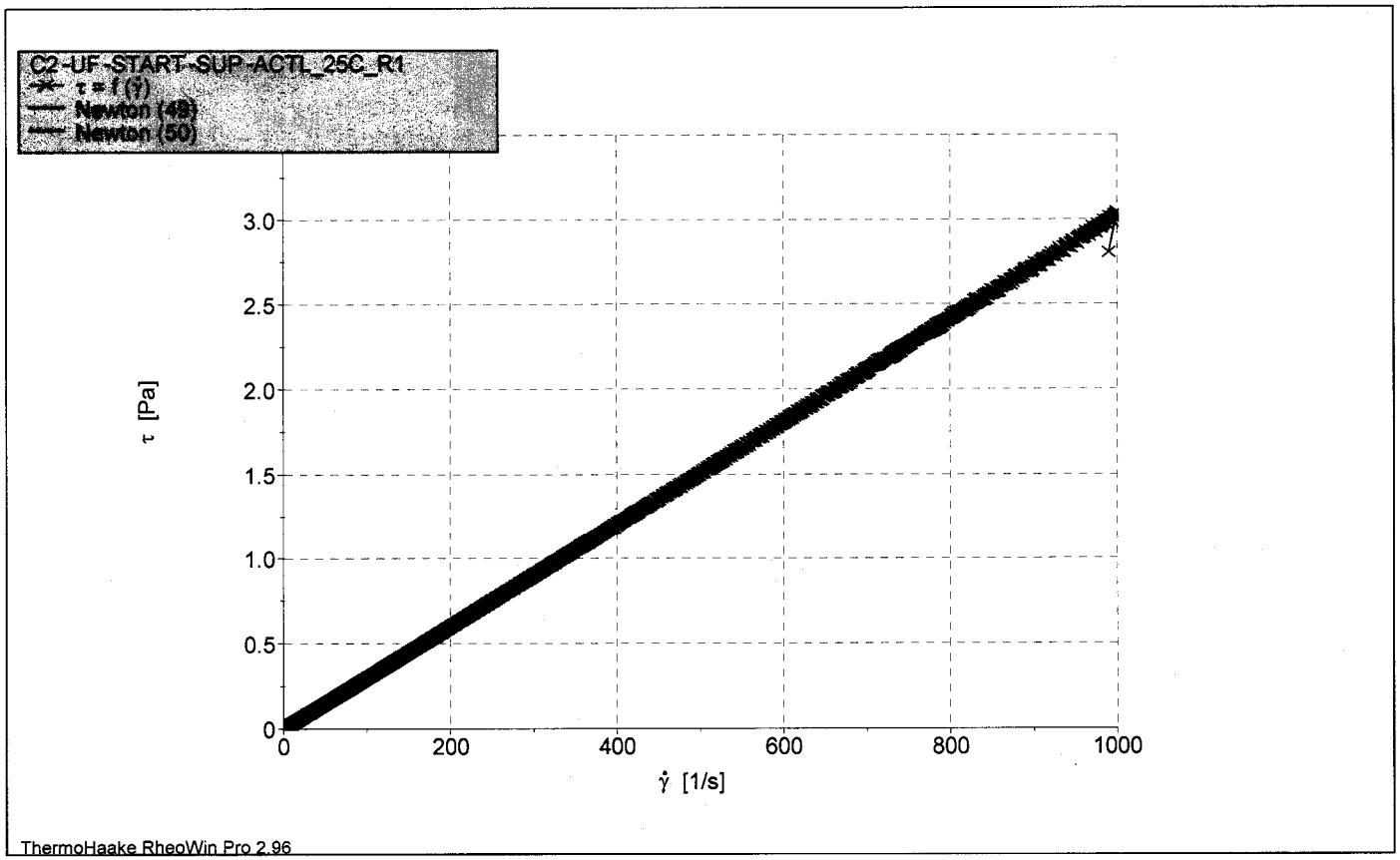
Filename: I:\Rheology\Zamineck\apr '04\4-22-04\C2-UF-START-SUP-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\apr
'04\4-22-04\C2-UF-START-SUP-ACTL_25C_R2.rwd (Mod)
Bingham (53) : τ_0: -0.001936 η_p:0.003013 Chi²:0.01675 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (54) : τ_0: -0.01077 η_p:0.003018 Chi²:0.0495 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (55) : η:0.00301 Chi²:0.01722 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (56) : η:0.003002 Chi²:0.06519 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	22.04.2004 / 8:51:02 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-UF-START-SUP-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no	1	**M-factor**	72.670 (1/s)/(rad/s)		
Description					

Comment

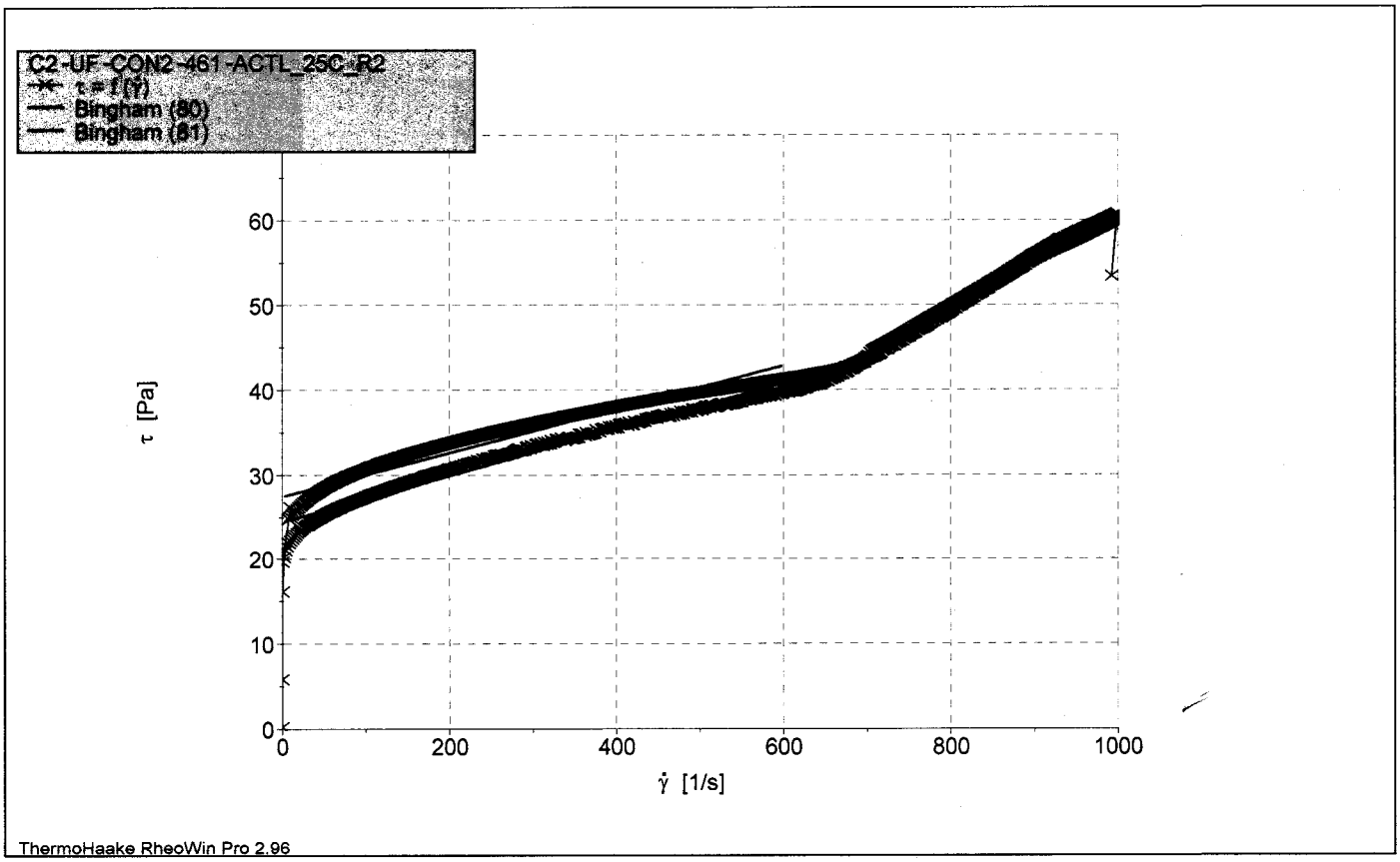


Filename: I:\Rheology\Zamineck\apr '04\4-22-04\C2-UF-START-SUP-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\apr
'04\4-22-04\C2-UF-START-SUP-ACTL_25C_R1.rwd (Mod)
Bingham (47) : τ_0: -0.006008 η_p:0.003028 Chi²:0.01736 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (48) : τ_0: -0.007315 η_p:0.003026 Chi²:0.04681 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (49) : η:0.003019 Chi²:0.02188 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (50) : η:0.003015 Chi²:0.0535 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 13:04:13 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-CON2-461-ACTL	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-CON2-461-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr
'04\4-26-04\C2-UF-CON2-461-ACTL_25C_R2.rwd (Mod)

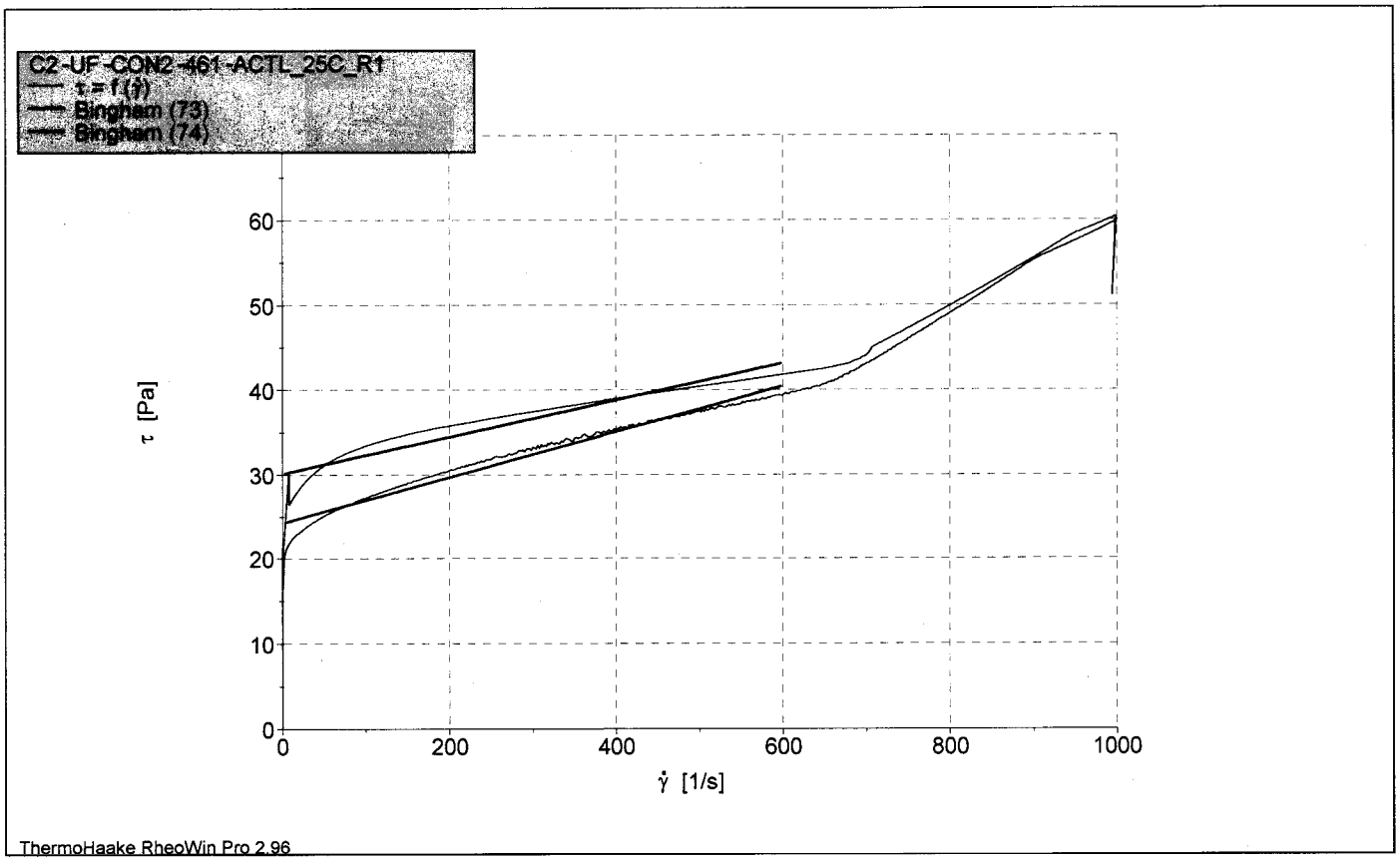
Bingham (77) : τ_0:25.91 η_p:0.03046 Chi²:3270 r:0.9601 — all data
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (78) : τ_0:22.6 η_p:0.03352 Chi²:1905 r:0.9804
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (80) : τ_0:27.47 η_p:0.02564 Chi²:1537 r:0.8909 — restricted set
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (81) : τ_0:24.49 η_p:0.02722 Chi²:264.8 r:0.9809
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 12:40:46 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-CON2-461-ACTL	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



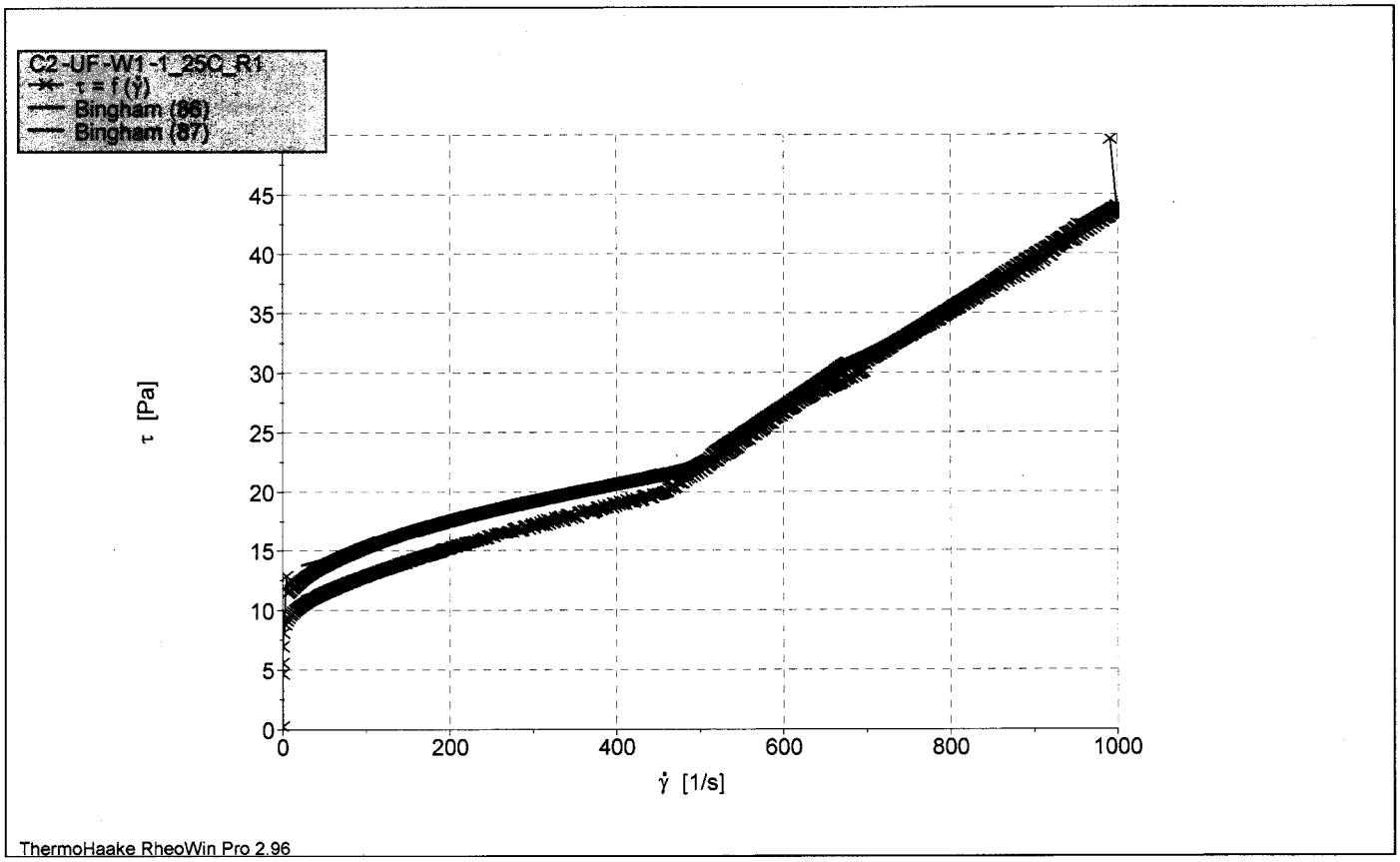
Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-CON2-461-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr
'04\4-26-04\C2-UF-CON2-461-ACTL_25C_R1.rwd (Mod)
Bingham (71) : τ_0:28.33 η_p:0.02743 Chi²:3781 r:0.9444
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (72) : τ_0:22.38 η_p:0.03343 Chi²:1980 r:0.9795
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (73) : τ_0:30.12 η_p:0.02173 Chi²:1901 r:0.8312
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (74) : τ_0:24.33 η_p:0.02695 Chi²:248.4 r:0.9817
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 8:11:33 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-1-W1-1	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-1_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-1_25C_R1.rwd (Mod)

Bingham (84) : τ_0:10.14 η_p:0.03107 Chi²:1606 r:0.9805
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

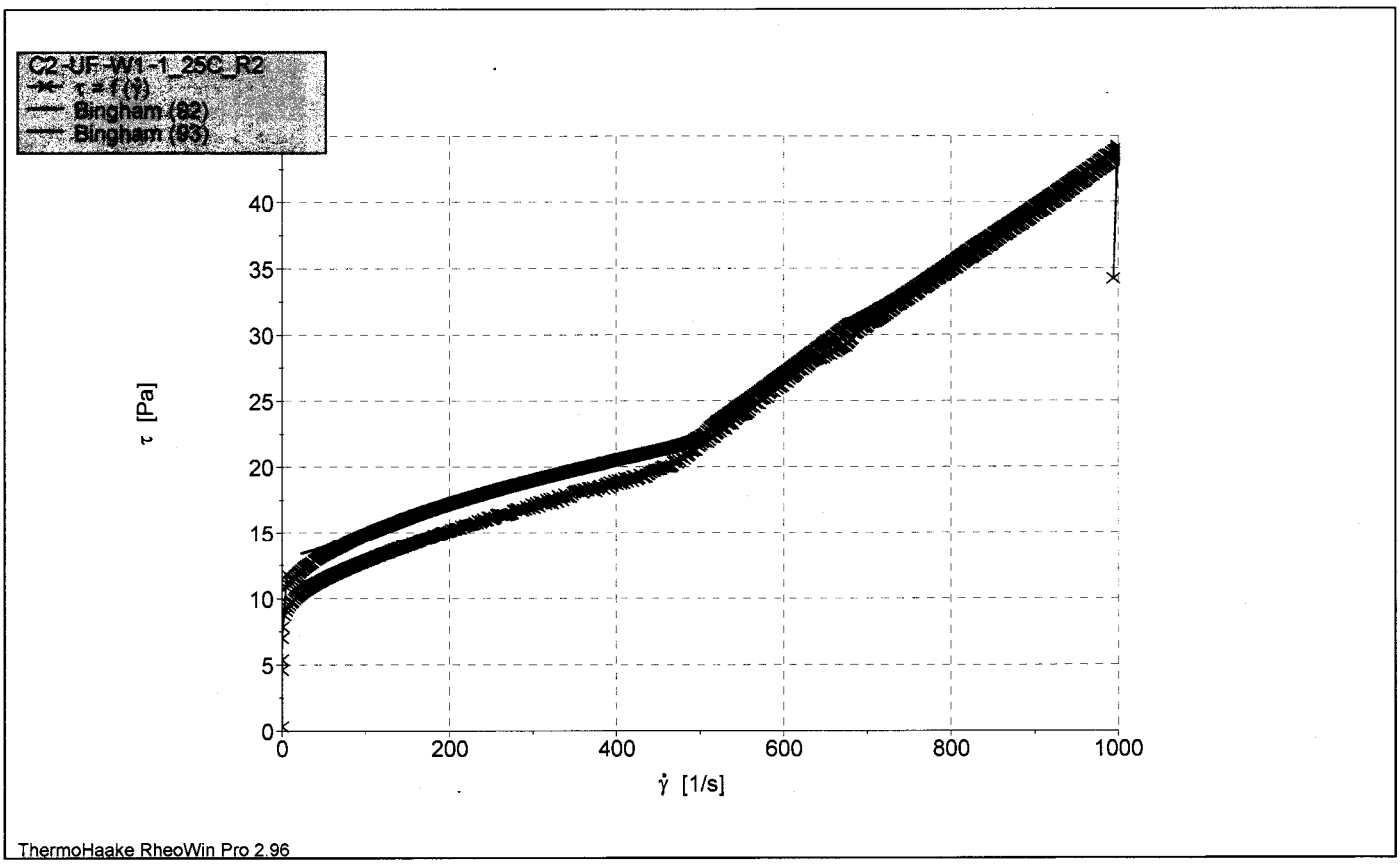
Bingham (85) : τ_0:7.634 η_p:0.03347 Chi²:1248 r:0.987
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (86) : τ_0:13.35 η_p:0.019 Chi²:31.28 r:0.9871
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (87) : τ_0:10.75 η_p:0.02096 Chi²:15.79 r:0.9946
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 8:28:40 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-1-W1-1	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-1_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-1_25C_R2.rwd (Mod)

Bingham (90) : τ_0:9.762 η_p:0.03148 Chi²:1452 r:0.9828
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

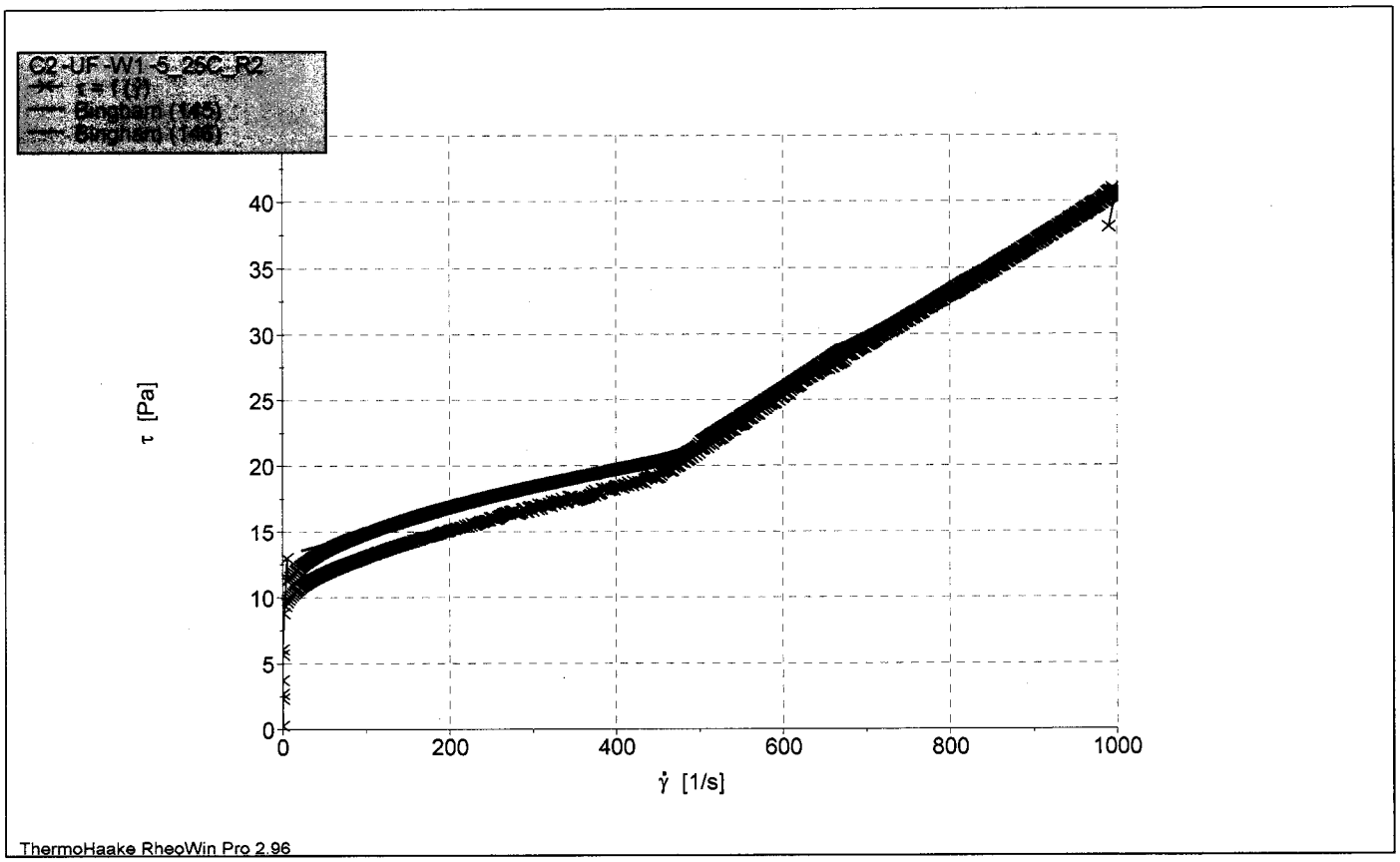
Bingham (91) : τ_0:7.597 η_p:0.0333 Chi²:1269 r:0.9867
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (92) : τ_0:12.95 η_p:0.01923 Chi²:34.32 r:0.99
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (93) : τ_0:10.73 η_p:0.02074 Chi²:16.3 r:0.9959
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 8:57:10 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-5	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-5_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-5_25C_R2.rwd (Mod)

Bingham (143) : τ_0:10.19 η_p:0.02827 Chi²:1225 r:0.982
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

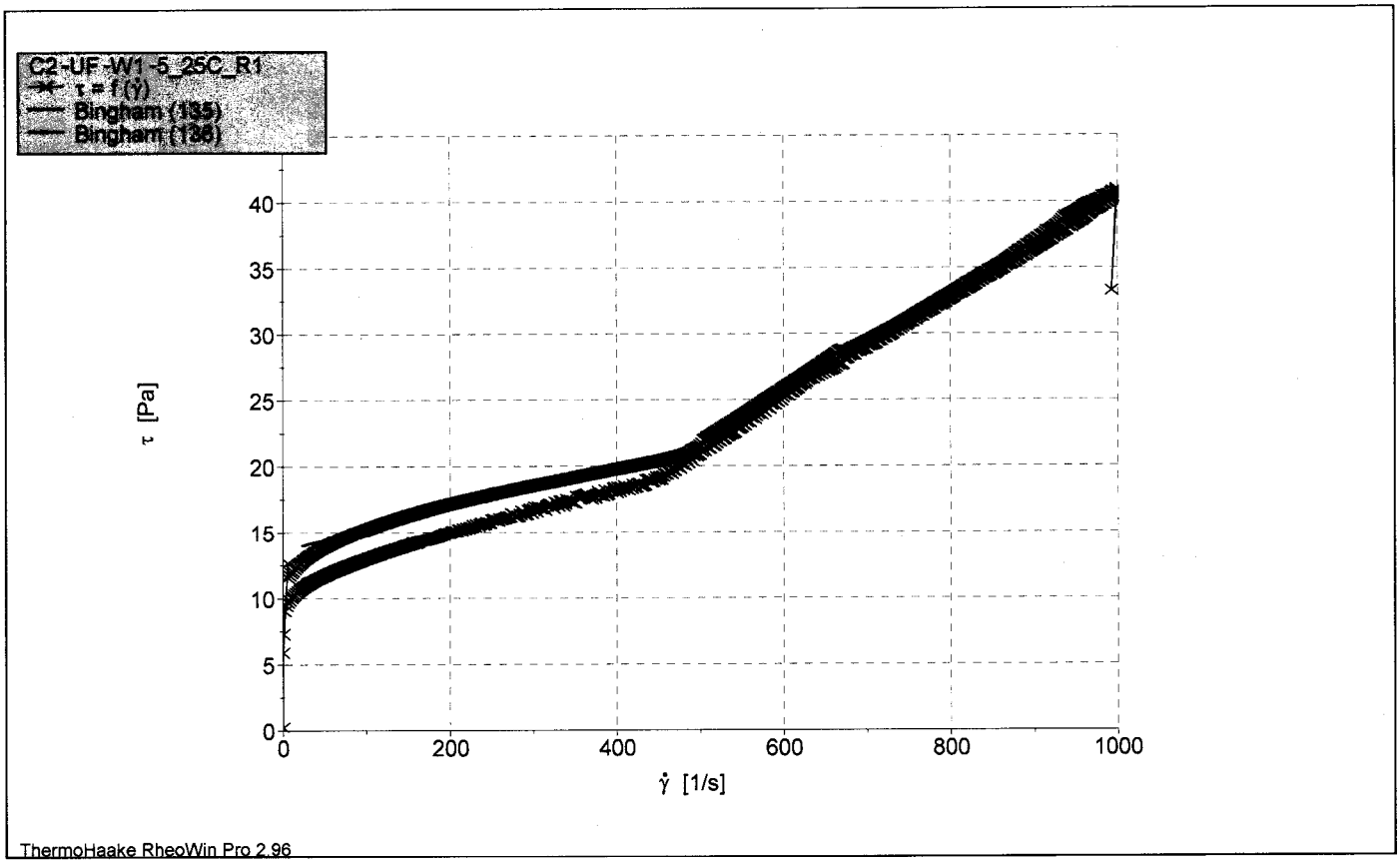
Bingham (144) : τ_0:8.176 η_p:0.03025 Chi²:1096 r:0.9862
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (145) : τ_0:13.16 η_p:0.01677 Chi²:24.81 r:0.9893
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (146) : τ_0:11.17 η_p:0.01833 Chi²:13.37 r:0.9951
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 8:42:26 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-5	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-5_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-5_25C_R1.rwd (Mod)

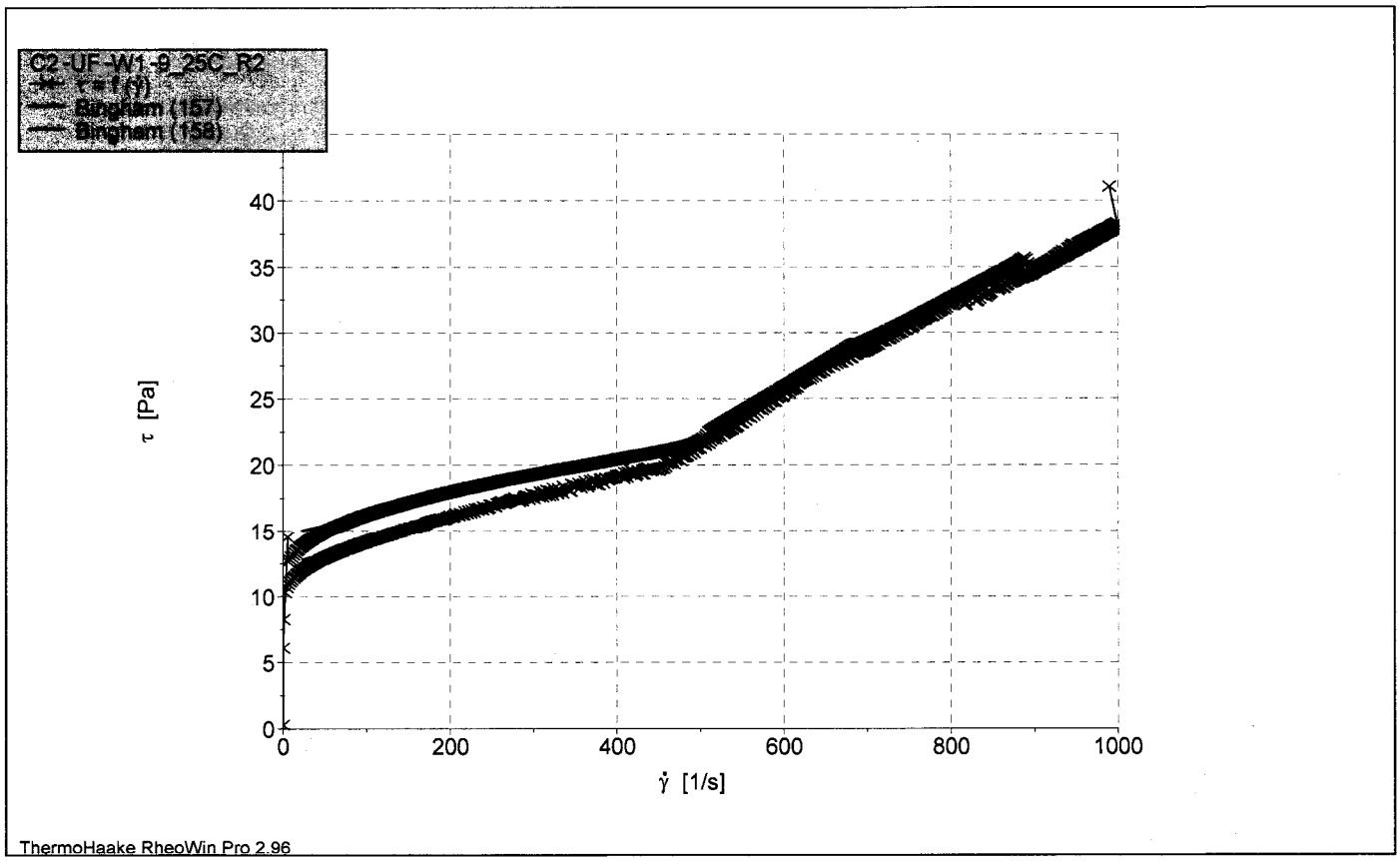
Bingham (133) : τ_0:10.51 η_p:0.0278 Chi²:1355 r:0.9795
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (134) : τ_0:8.246 η_p:0.02991 Chi²:993.7 r:0.987
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (135) : τ_0:13.62 η_p:0.01582 Chi²:26.41 r:0.9872
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (136) : τ_0:11.08 η_p:0.0183 Chi²:13.91 r:0.995
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 9:39:04 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-9	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-9_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-9_25C_R2.rwd (Mod)

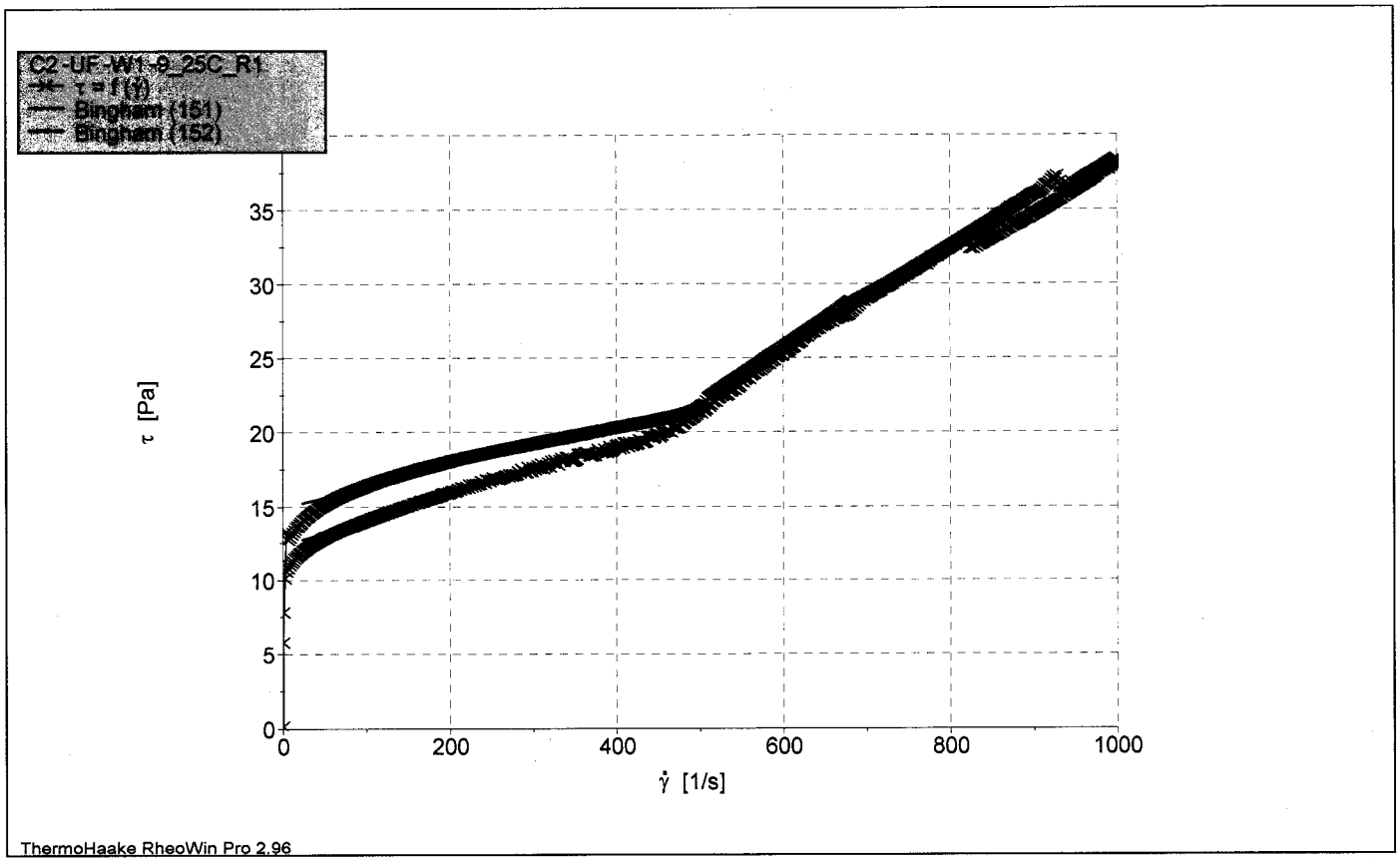
Bingham (155) : τ_0:12.09 η_P:0.02475 Chi²:978.1 r:0.9813
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (156) : τ_0:10.13 η_P:0.02645 Chi²:635.5 r:0.9893
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (157) : τ_0:14.68 η_P:0.01473 Chi²:23.03 r:0.9871
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (158) : τ_0:12.43 η_P:0.01698 Chi²:15.89 r:0.9933
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 9:14:57 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-9	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-9_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-9_25C_R1.rwd (Mod)

Bingham (149) : τ_0:12.08 η_P:0.02477 Chi²:1175 r:0.9777
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

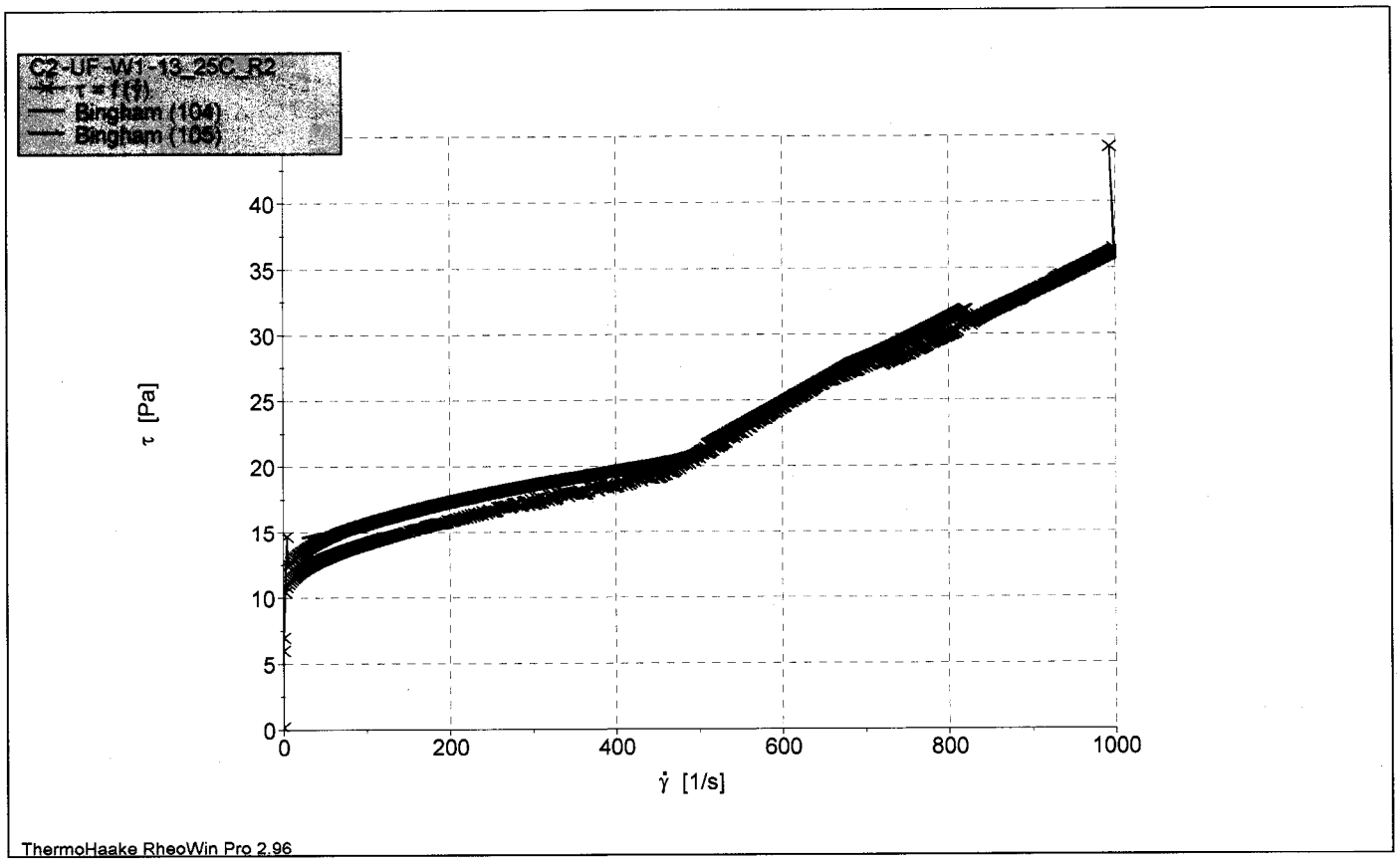
Bingham (150) : τ_0:9.975 η_P:0.02674 Chi²:662.8 r:0.9891
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (151) : τ_0:14.93 η_P:0.01382 Chi²:26.25 r:0.9836
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (152) : τ_0:12.34 η_P:0.01699 Chi²:12.73 r:0.9946
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 10:19:17 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-13	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-13_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-13_25C_R2.rwd (Mod)

Bingham (102) : τ_0:11.9 η_p:0.02293 Chi²:815.7 r:0.9818
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

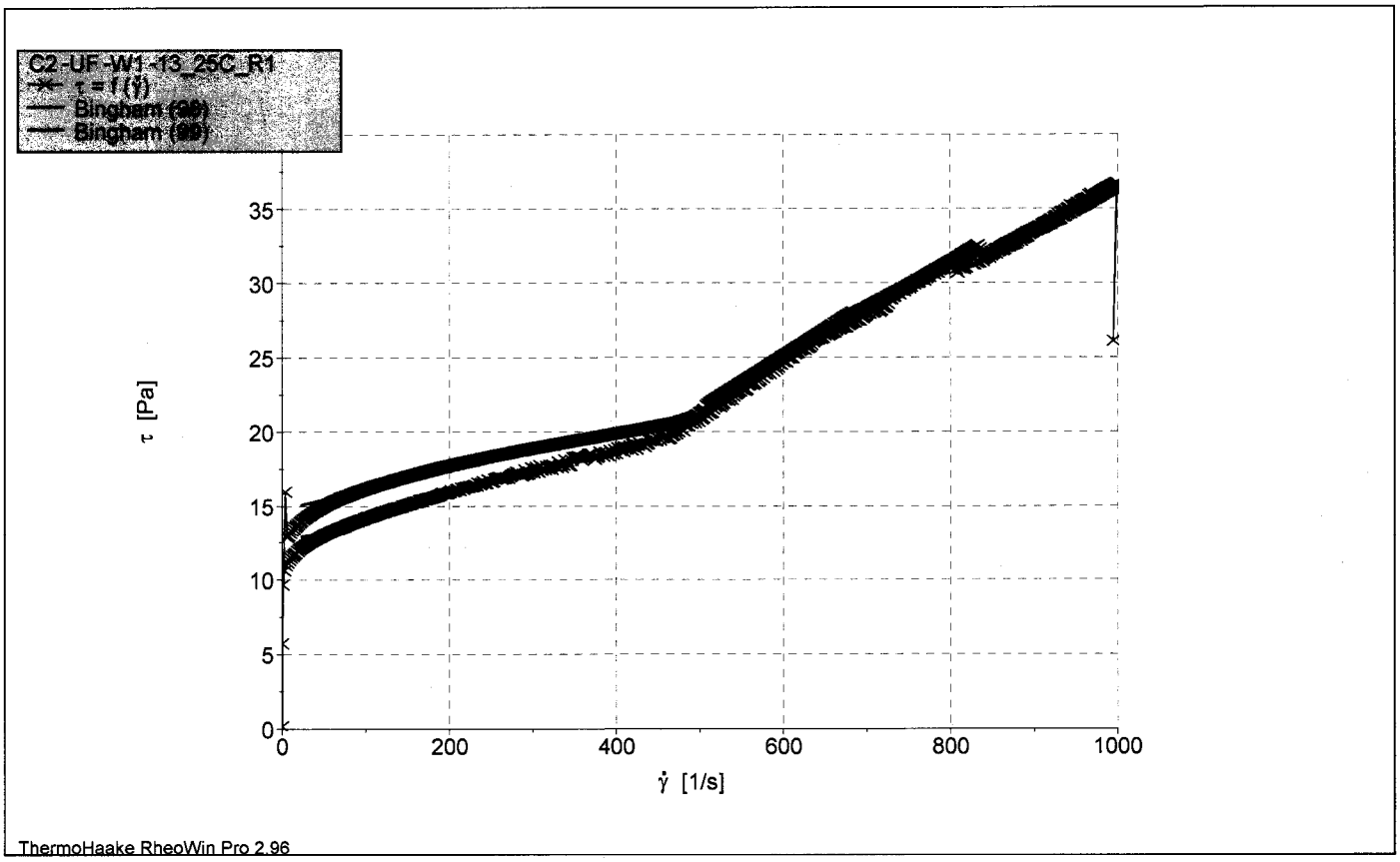
Bingham (103) : τ_0:10.37 η_p:0.02433 Chi²:554 r:0.989
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (104) : τ_0:14.24 η_p:0.01387 Chi²:19.98 r:0.9874
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (105) : τ_0:12.52 η_p:0.01557 Chi²:14.86 r:0.9926
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 10:00:41 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-13	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-13_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-13_25C_R1.rwd (Mod)

Bingham (96) : τ_0:12.29 η_p:0.02288 Chi²:929.4 r:0.9793
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

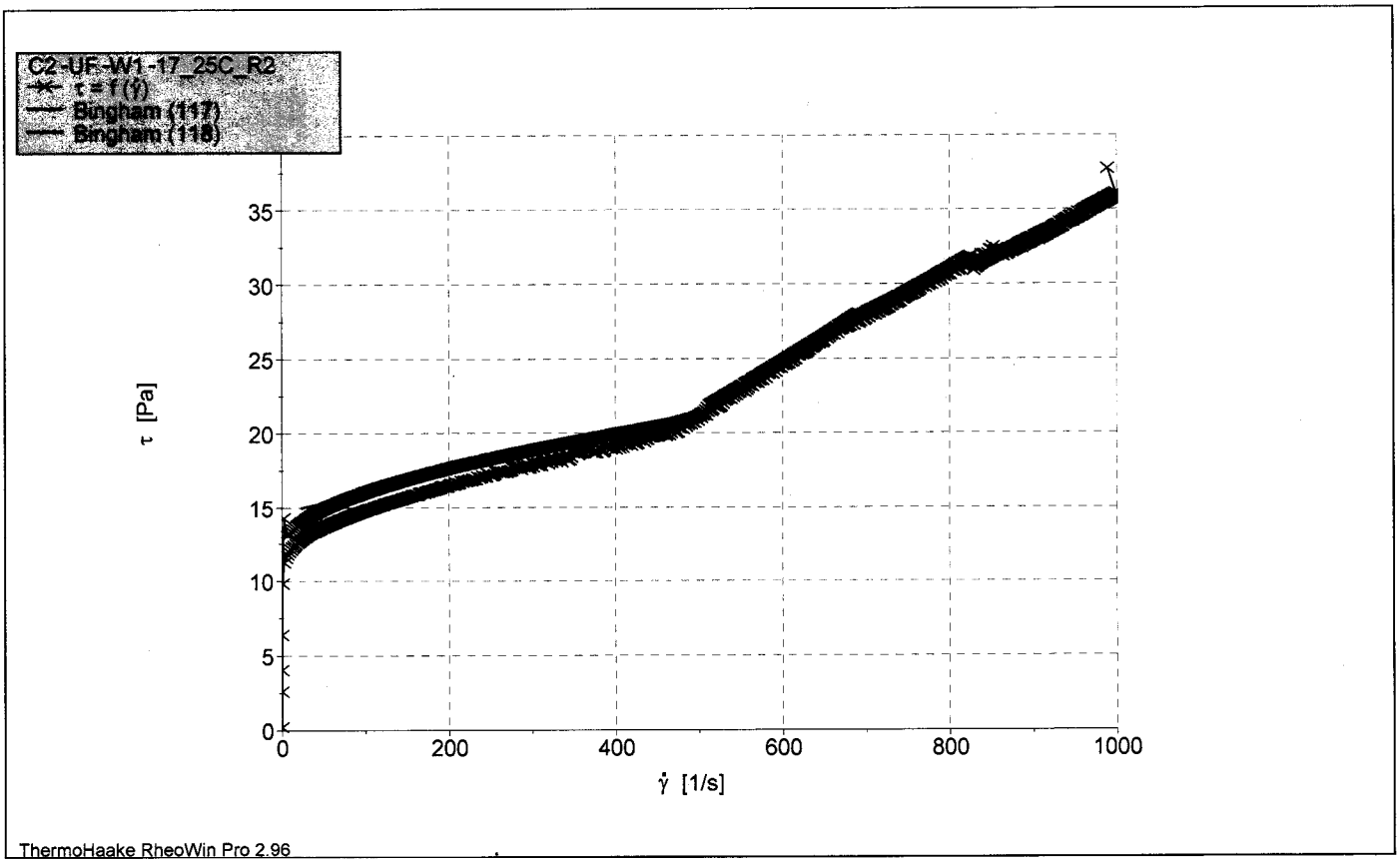
Bingham (97) : τ_0:10.37 η_p:0.02484 Chi²:565.1 r:0.9892
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (98) : τ_0:14.79 η_p:0.01313 Chi²:20.17 r:0.9858
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (99) : τ_0:12.55 η_p:0.01583 Chi²:12.63 r:0.9938
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 10:54:57 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-17	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-17_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-17_25C_R2.rwd (Mod)

Bingham (115) : τ_0:12.39 η_p:0.02229 Chi²:799.5 r:0.9812
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

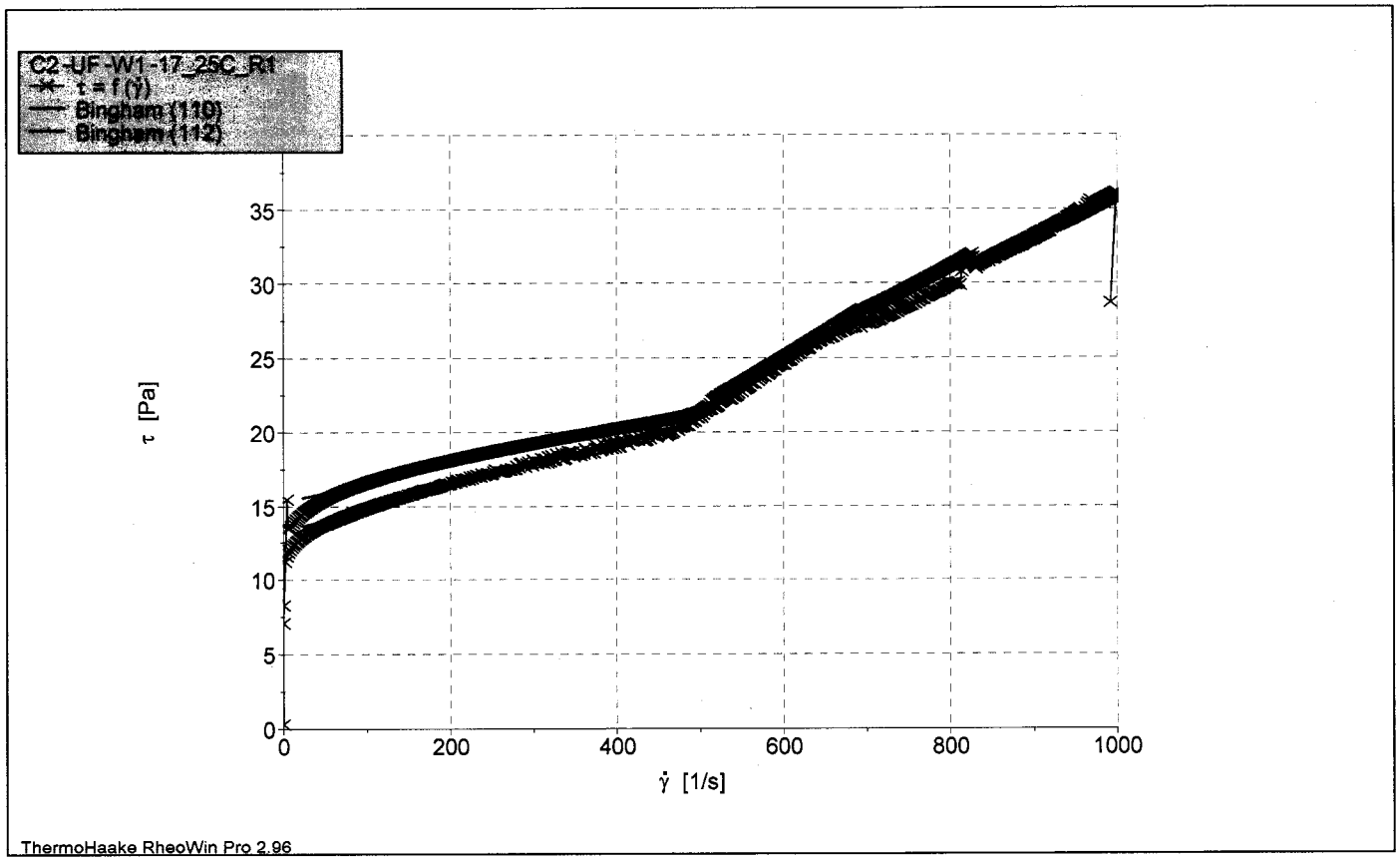
Bingham (116) : τ_0:11.06 η_p:0.02366 Chi²:651.6 r:0.9865
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (117) : τ_0:14.67 η_p:0.01351 Chi²:17.04 r:0.9886
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (118) : τ_0:13.25 η_p:0.01506 Chi²:13.76 r:0.9926
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 10:36:22 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-17	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-17_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-17_25C_R1.rwd (Mod)

Bingham (108) : τ_0:12.95 η_p:0.02172 Chi²:845.4 r:0.9791
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

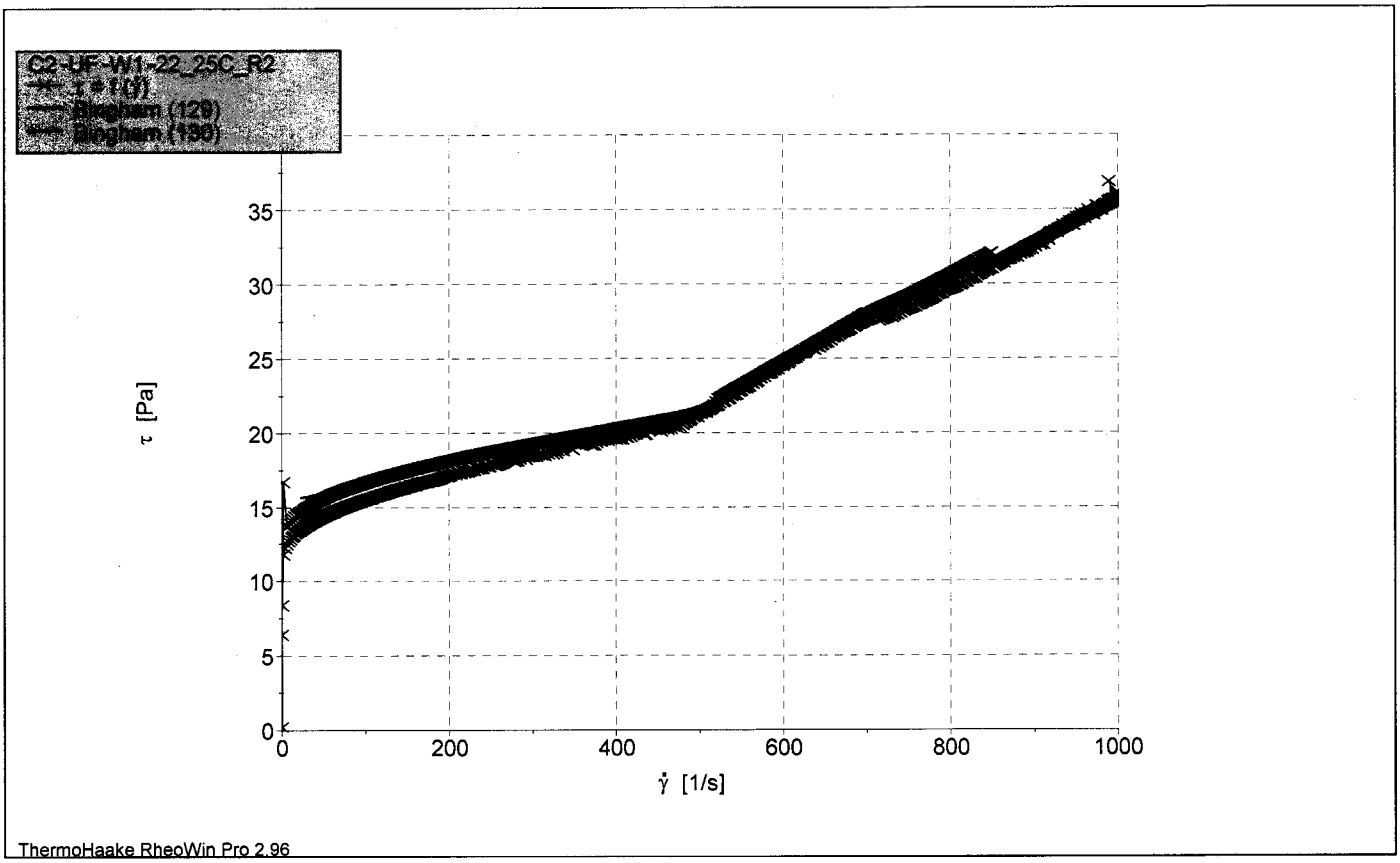
Bingham (109) : τ_0:11.3 η_p:0.02314 Chi²:522.4 r:0.9886
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (110) : τ_0:15.3 η_p:0.01271 Chi²:18.09 r:0.9864
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (112) : τ_0:13.35 η_p:0.0149 Chi²:14.78 r:0.992
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 11:35:38 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-22	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-22_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-22_25C_R2.rwd (Mod)

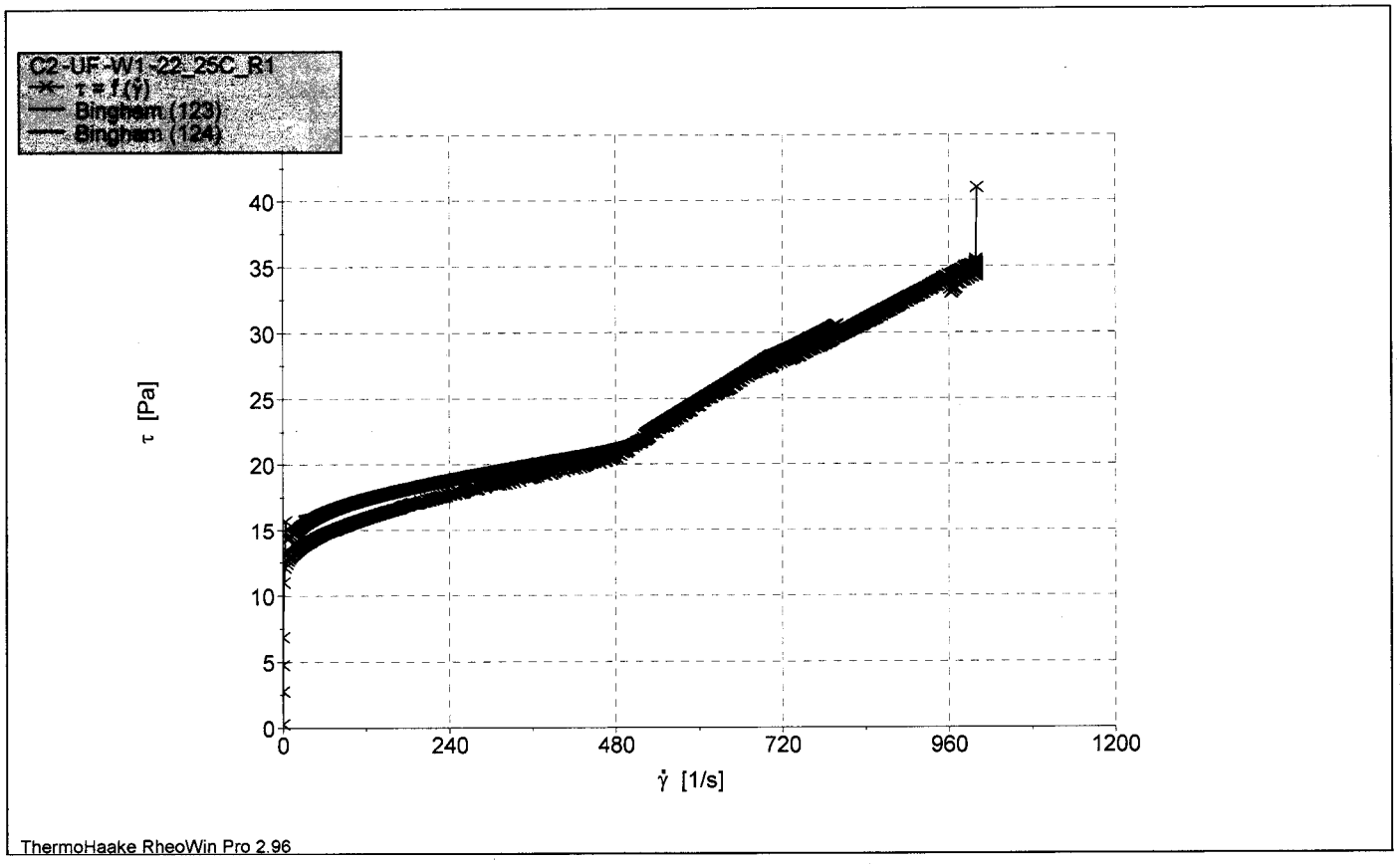
Bingham (127) : τ_0:13.15 η_p:0.021 Chi²:826 r:0.9782
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (128) : τ_0:12.12 η_p:0.02186 Chi²:487.1 r:0.988
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (129) : τ_0:15.37 η_p:0.01255 Chi²:14.24 r:0.989
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (130) : τ_0:14.02 η_p:0.0144 Chi²:14.67 r:0.9915
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 11:15:49 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF--W1-22	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-22_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-26-04\C2-UF-W1-22_25C_R1.rwd (Mod)

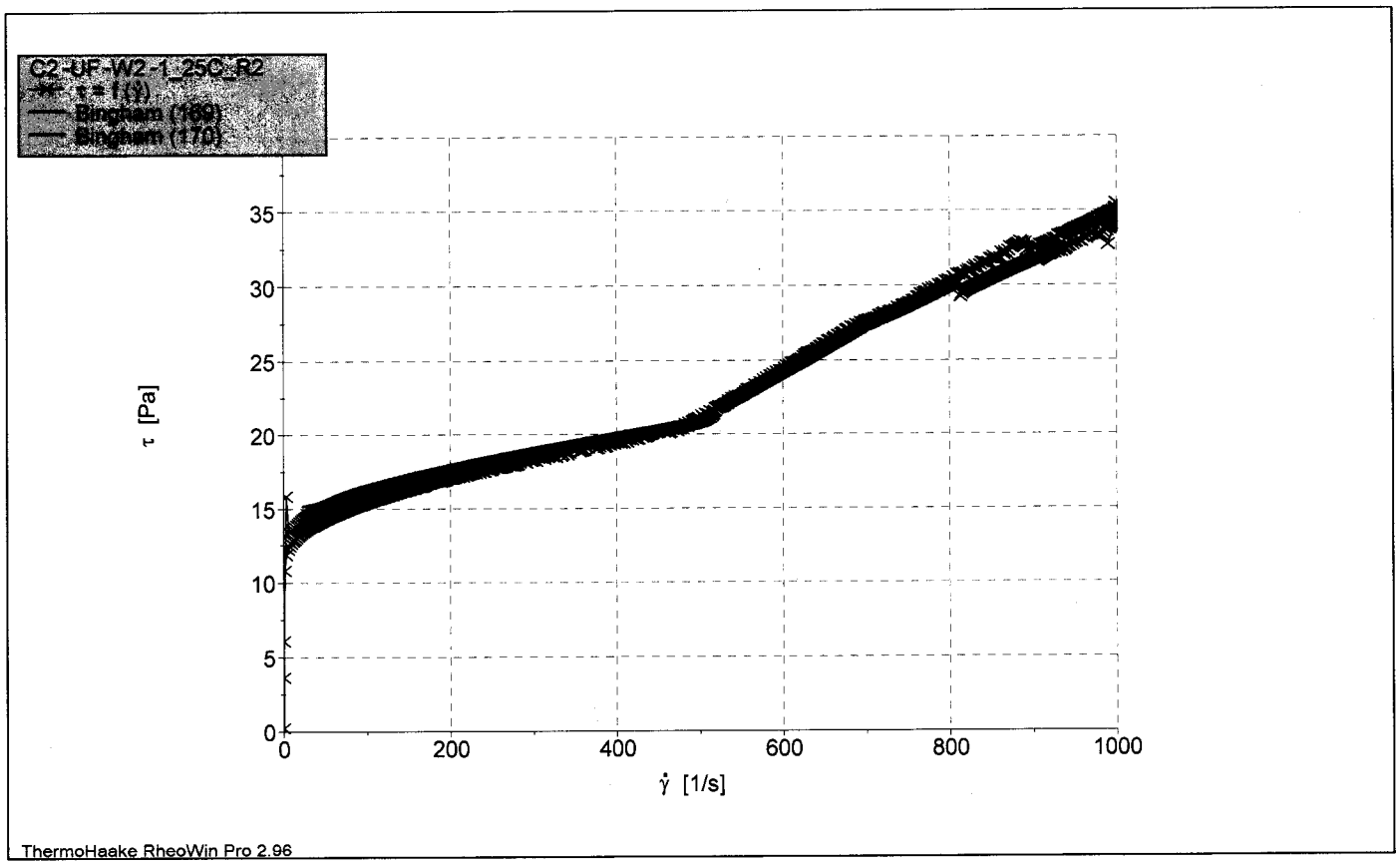
Bingham (121) : τ_0:13.56 η_P:0.02029 Chi²:830 r:0.9766
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (122) : τ_0:12.17 η_P:0.02153 Chi²:550.6 r:0.9862
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (123) : τ_0:15.84 η_P:0.0116 Chi²:13.33 r:0.988
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (124) : τ_0:14.11 η_P:0.0141 Chi²:16.51 r:0.9899
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 9:41:23 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-1	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-1_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-1_25C_R2.rwd (Mod)

Bingham (167) : τ_0:12.87 η_p:0.0202 Chi²:690.3 r:0.9802
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

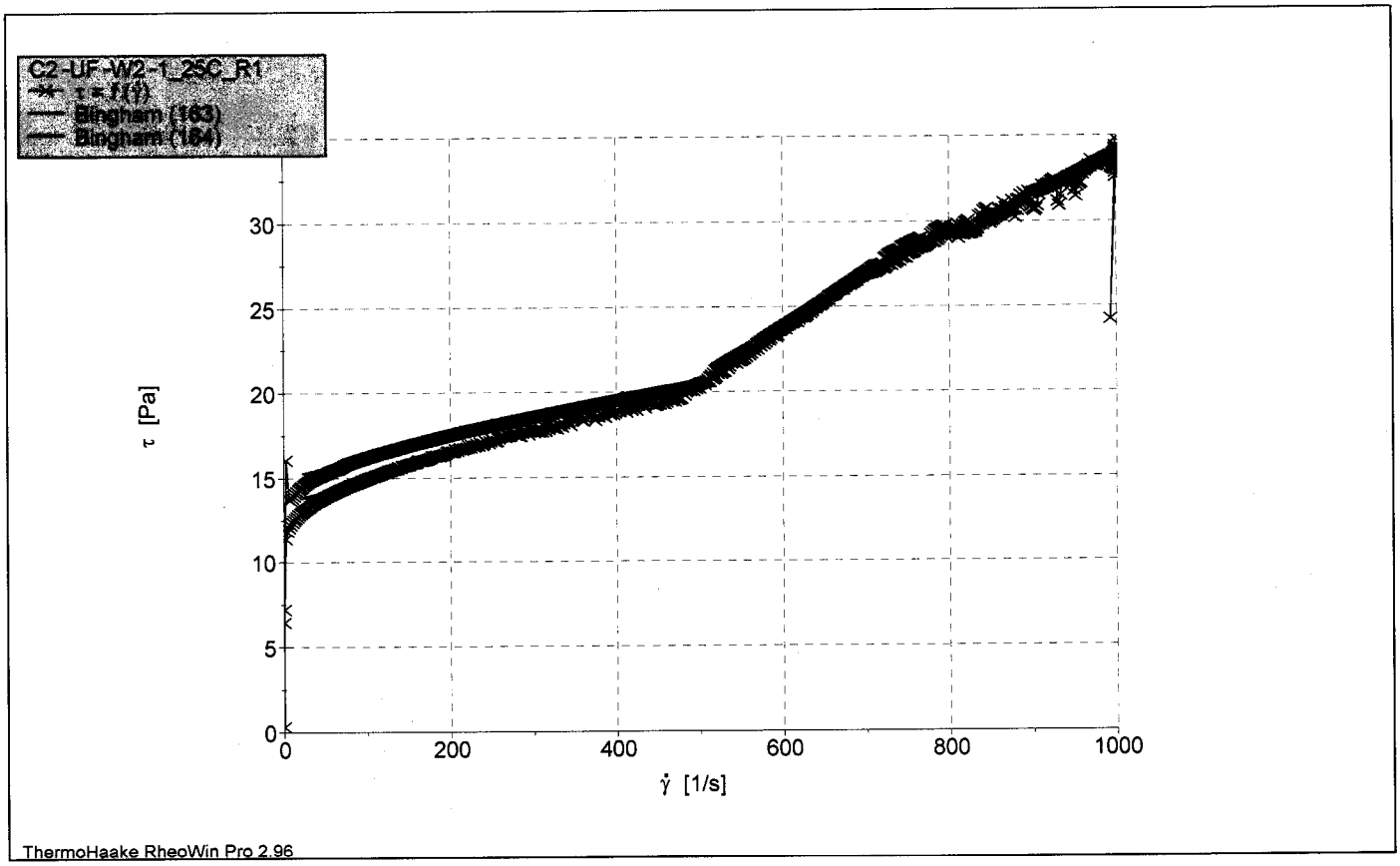
Bingham (168) : τ_0:11.89 η_p:0.02224 Chi²:571.4 r:0.9865
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (169) : τ_0:14.9 η_p:0.01241 Chi²:12.71 r:0.9899
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (170) : τ_0:13.93 η_p:0.01424 Chi²:14.82 r:0.9911
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 9:25:33 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-1	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-1_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-1_25C_R1.rwd (Mod)

Bingham (161) : τ_0:12.87 η_P:0.01977 Chi²:784.1 r:0.9767
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

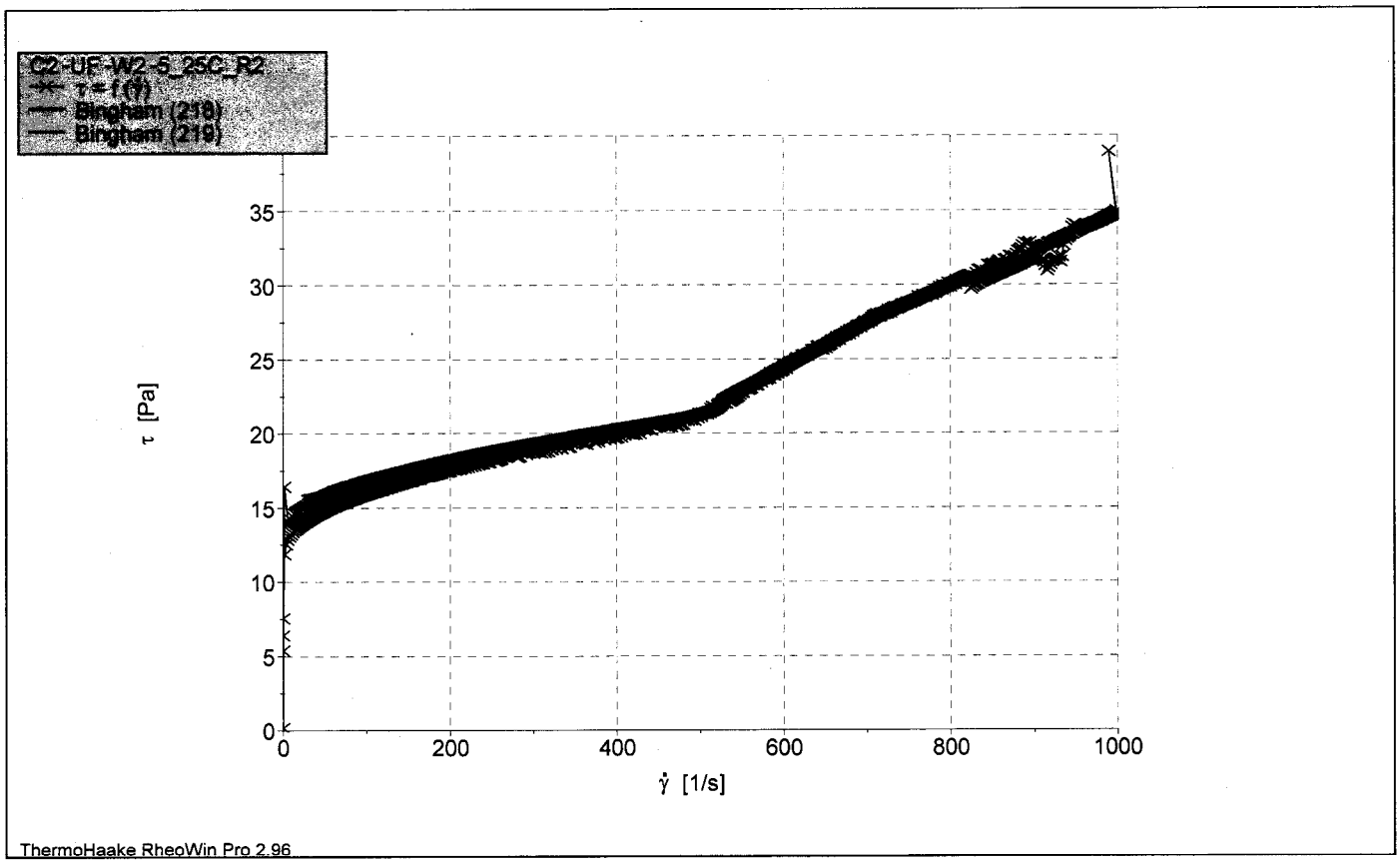
Bingham (162) : τ_0:11.59 η_P:0.02138 Chi²:508.7 r:0.987
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (163) : τ_0:15.01 η_P:0.01147 Chi²:9.103 r:0.9915
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (164) : τ_0:13.55 η_P:0.01353 Chi²:15.46 r:0.9899
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 10:16:21 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-5	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-5_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-5_25C_R2.rwd (Mod)

Bingham (216) : τ_0:13.52 η_p:0.01968 Chi²:778.3 r:0.9766
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

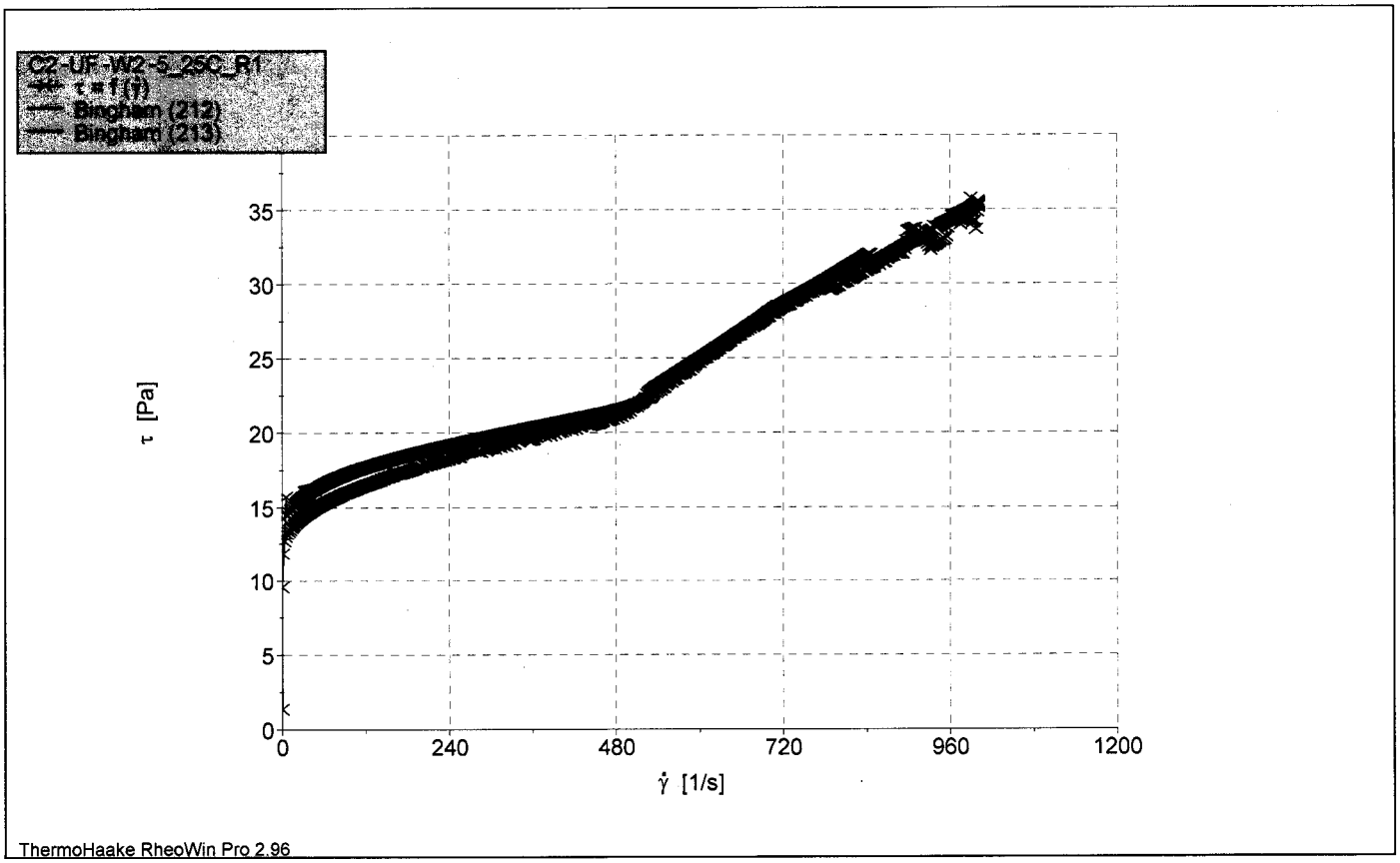
Bingham (217) : τ_0:12.55 η_p:0.02121 Chi²:546.2 r:0.9859
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (218) : τ_0:15.58 η_p:0.01195 Chi²:11.33 r:0.9903
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (219) : τ_0:14.51 η_p:0.01376 Chi²:18.02 r:0.9885
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 10:01:57 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-5	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-5_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-5_25C_R1.rwd (Mod)

Bingham (210) : τ_0:13.92 η_p:0.02009 Chi²:774.4 r:0.9798
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

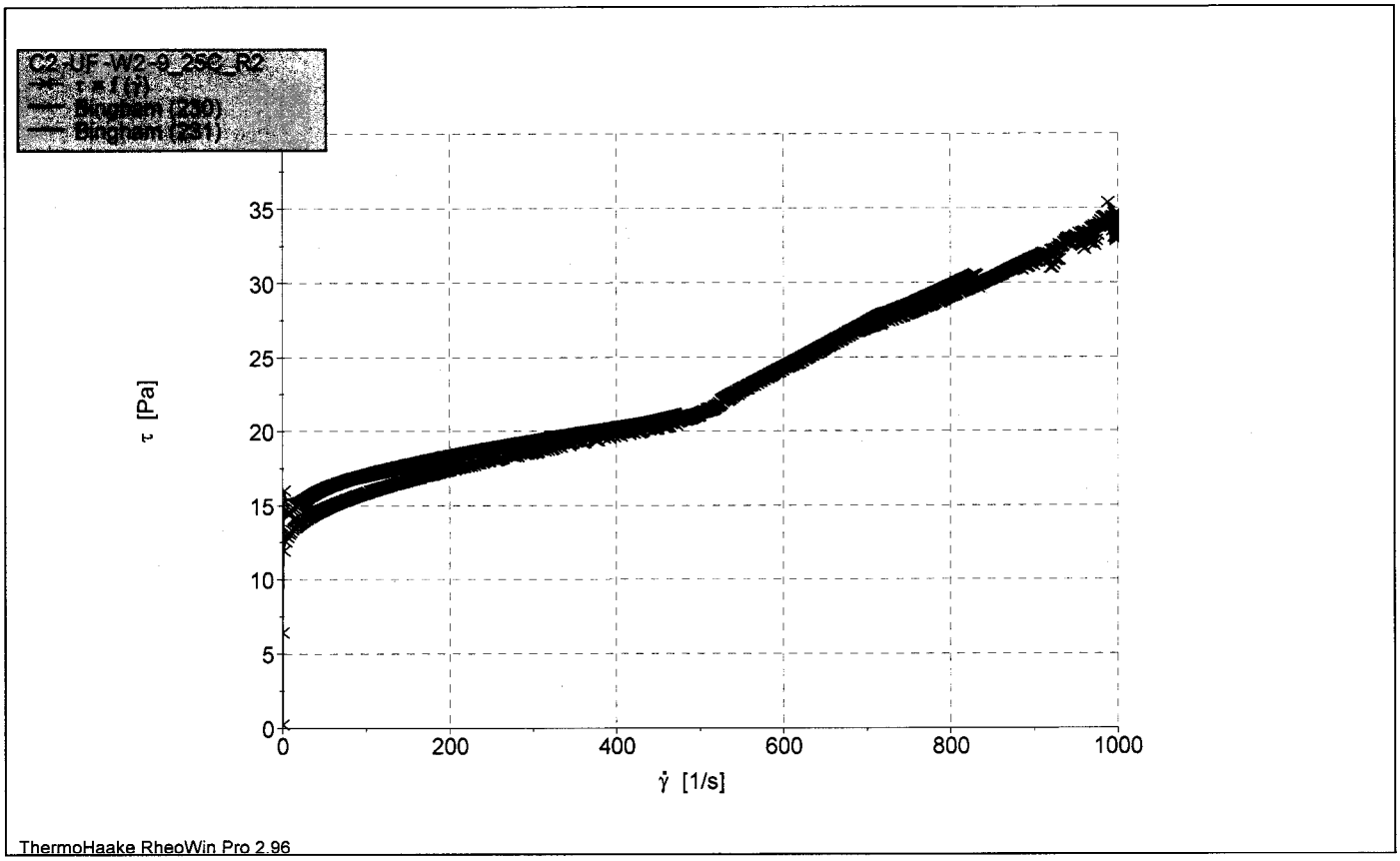
Bingham (211) : τ_0:12.84 η_p:0.02121 Chi²:468.1 r:0.9877
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (212) : τ_0:16.11 η_p:0.01185 Chi²:14.42 r:0.9875
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (213) : τ_0:14.69 η_p:0.01397 Chi²:17.3 r:0.9893
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 10:53:30 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-9	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-9_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-9_25C_R2.rwd (Mod)

Bingham (228) : τ_0:13.84 η_p:0.01896 Chi²:764.3 r:0.9753
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

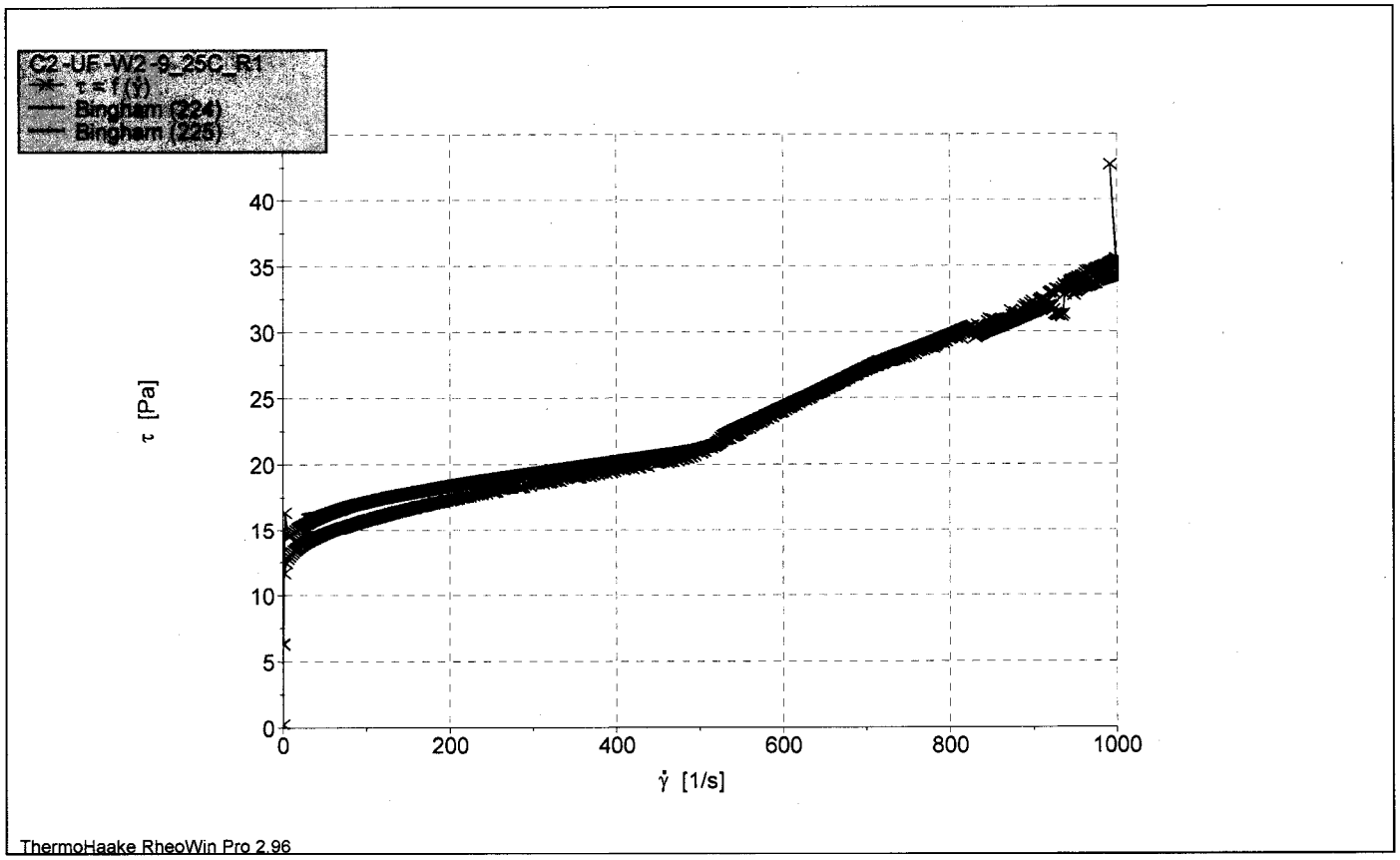
Bingham (229) : τ_0:12.77 η_p:0.02013 Chi²:379.8 r:0.9889
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (230) : τ_0:15.34 η_p:0.01291 Chi²:340.7 r:0.8334
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (231) : τ_0:14.47 η_p:0.0135 Chi²:14.66 r:0.9902
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 10:30:22 AM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-9	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-9_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-9_25C_R1.rwd (Mod)

Bingham (222) : τ_0:13.76 η_p:0.01921 Chi²:893.8 r:0.972
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

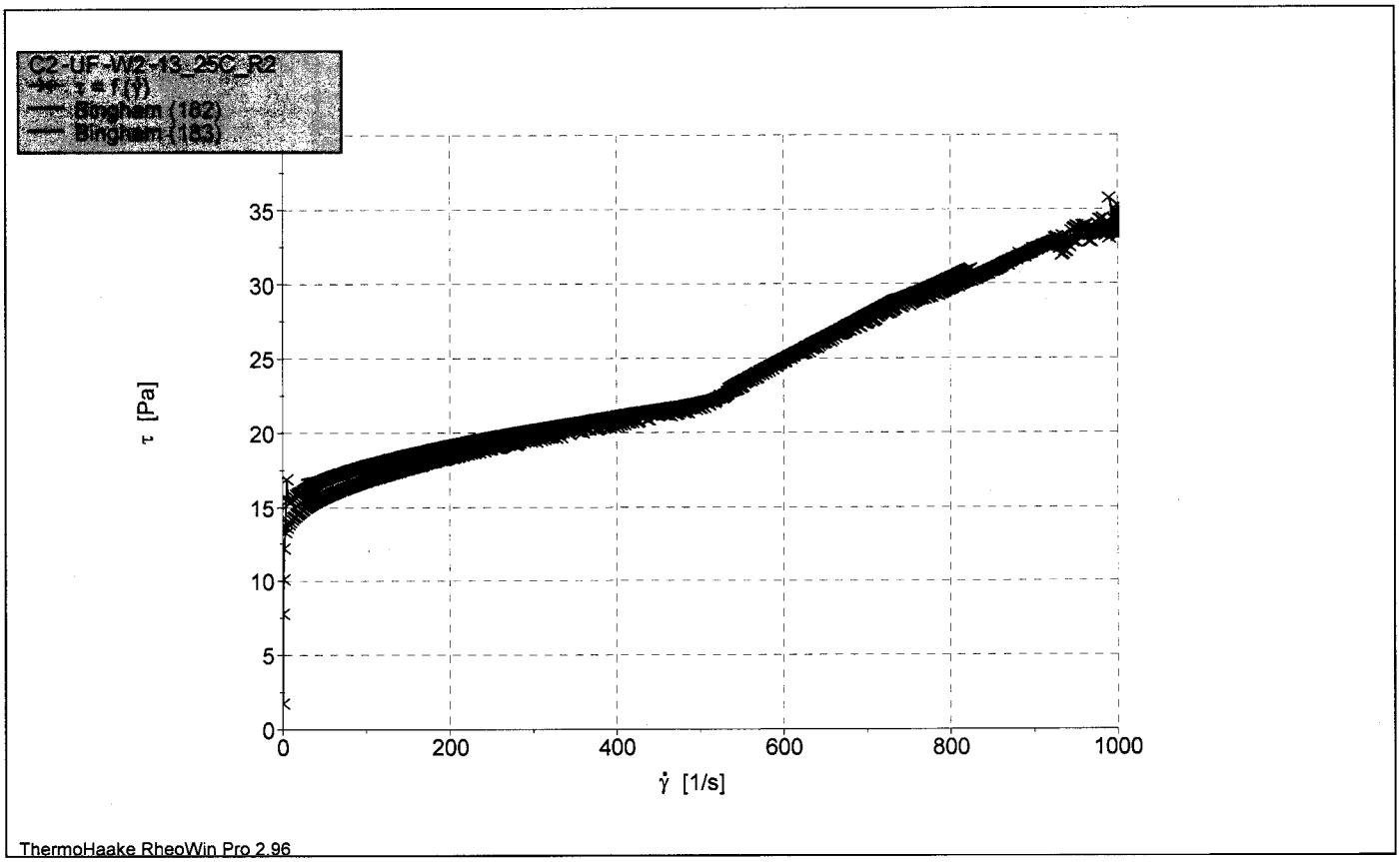
Bingham (223) : τ_0:12.48 η_p:0.02076 Chi²:515.3 r:0.986
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (224) : τ_0:15.98 η_p:0.01091 Chi²:11.91 r:0.9878
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (225) : τ_0:14.41 η_p:0.01329 Chi²:15.64 r:0.9892
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 12:26:21 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-13	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-13_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-13_25C_R2.rwd (Mod)

Bingham (180) : τ_0:14.74 η_p:0.01853 Chi²:667.4 r:0.9774
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

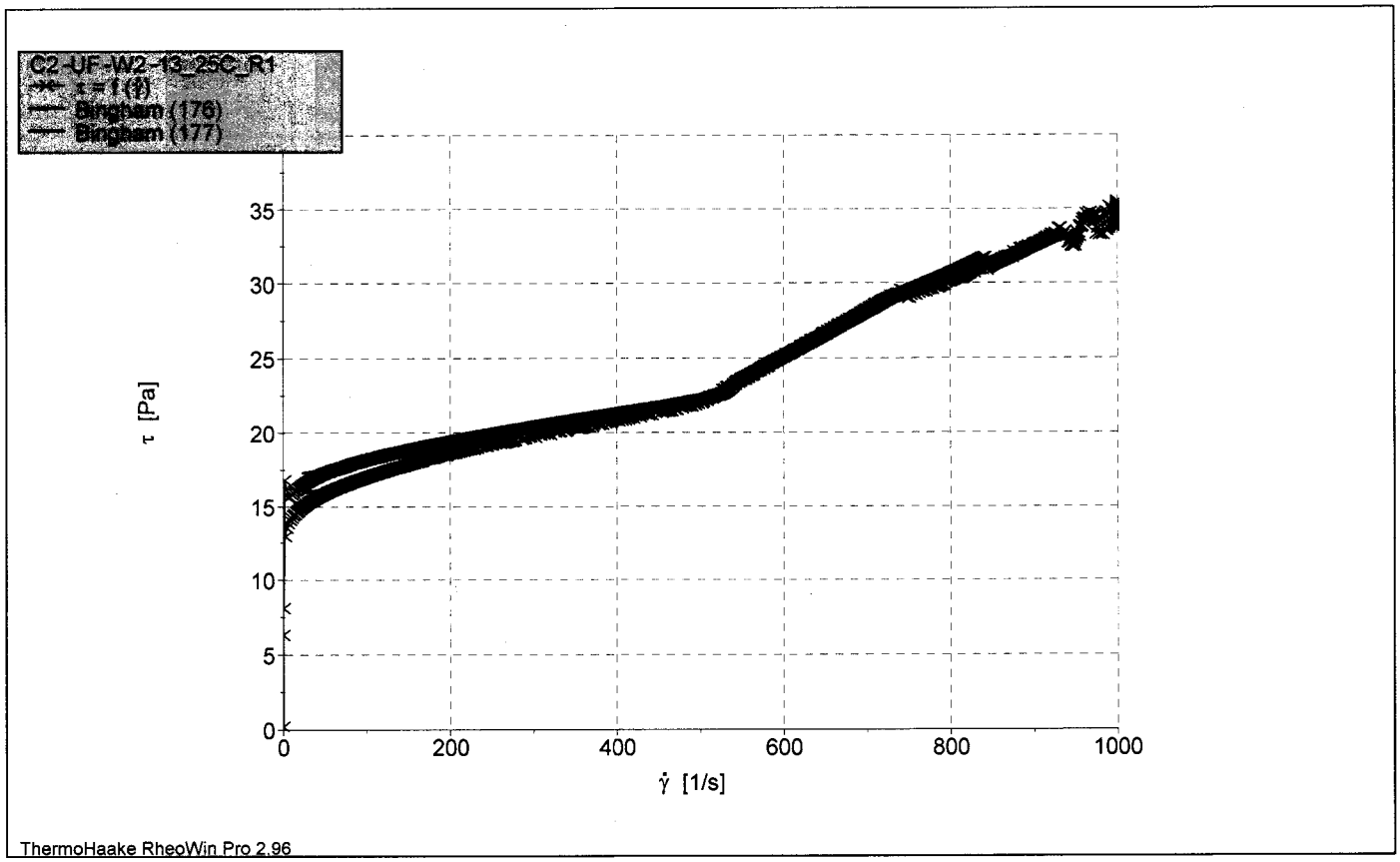
Bingham (181) : τ_0:13.74 η_p:0.01958 Chi²:410.9 r:0.9874
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (182) : τ_0:16.63 η_p:0.01145 Chi²:11.69 r:0.9891
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (183) : τ_0:15.38 η_p:0.01341 Chi²:16.2 r:0.9891
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 12:09:02 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-13	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-13_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-13_25C_R1.rwd (Mod)

Bingham (173) : τ_0:14.93 η_p:0.01873 Chi²:855.4 r:0.9718
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

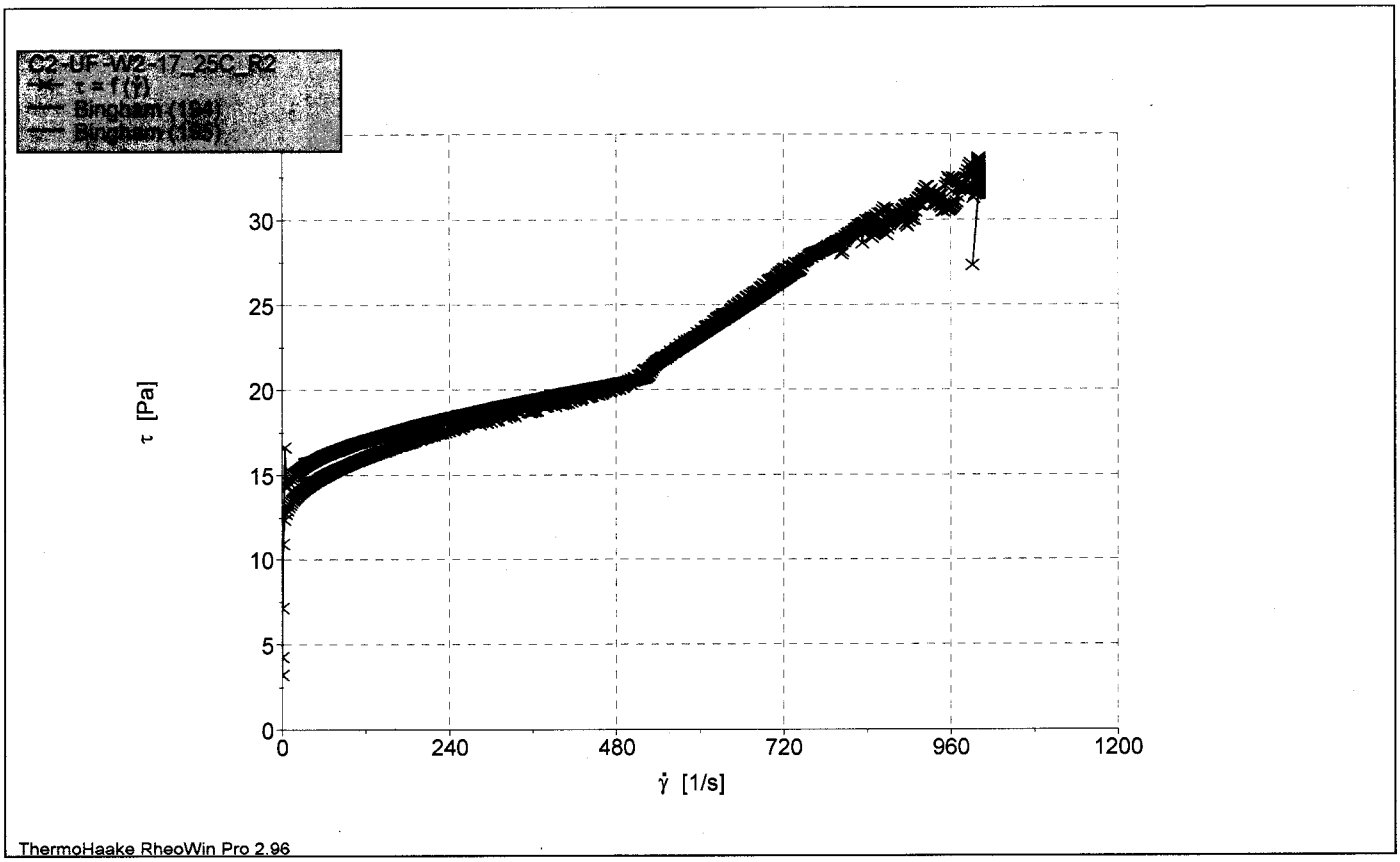
Bingham (174) : τ_0:13.95 η_p:0.01985 Chi²:421.8 r:0.9875
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (176) : τ_0:17.04 η_p:0.01088 Chi²:9.814 r:0.9899
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (177) : τ_0:15.61 η_p:0.01352 Chi²:19.13 r:0.9875
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 13:00:55 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-17	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-17_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-17_25C_R2.rwd (Mod)

Bingham (192) : τ_0:13.87 η_p:0.01735 Chi²:568.9 r:0.9781
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

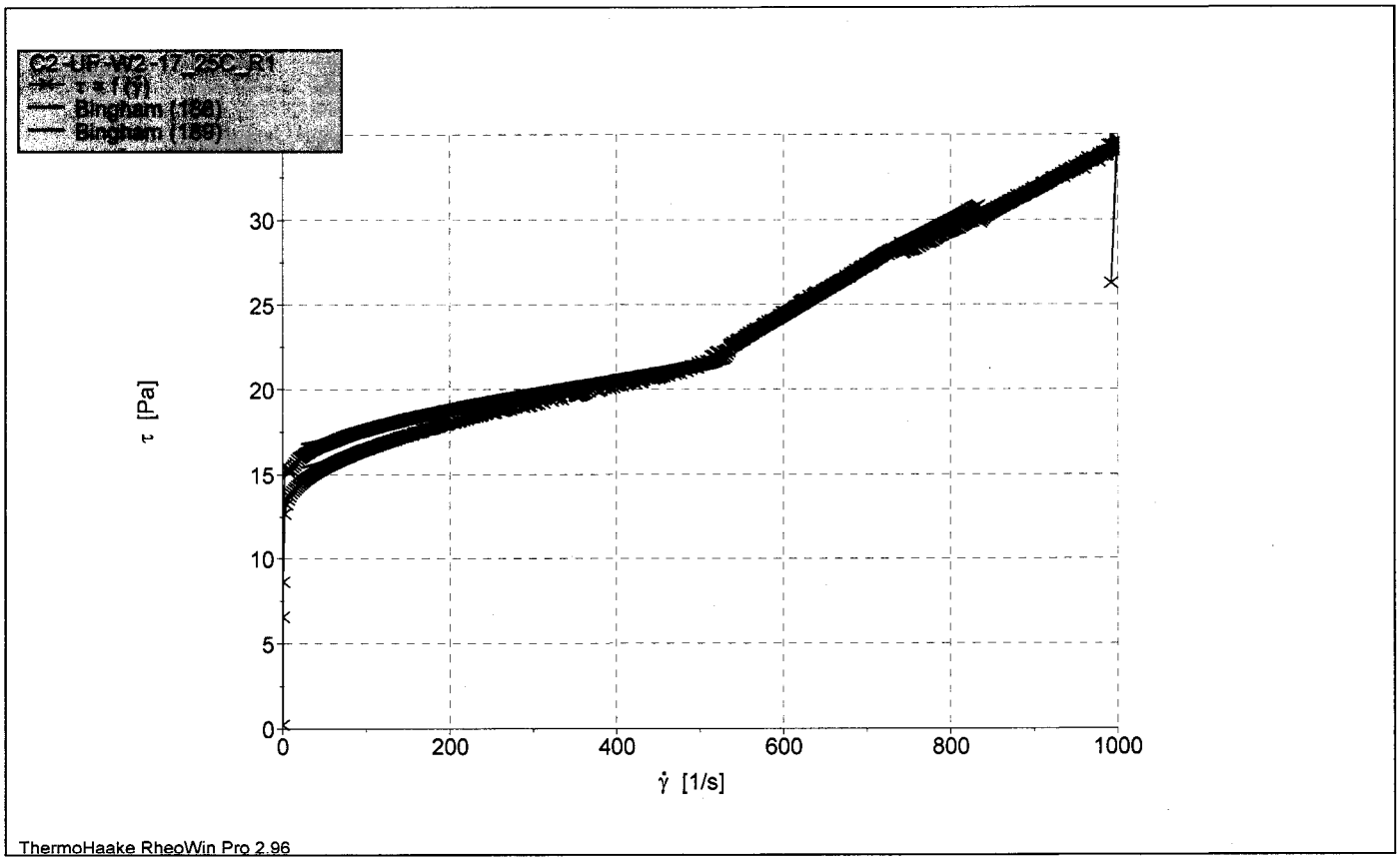
Bingham (193) : τ_0:12.52 η_p:0.01959 Chi²:600 r:0.9819
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (194) : τ_0:15.72 η_p:0.01026 Chi²:8.261 r:0.9903
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (195) : τ_0:14.42 η_p:0.01246 Chi²:15.35 r:0.9881
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 12:43:01 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-17	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-17_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-17_25C_R1.rwd (Mod)

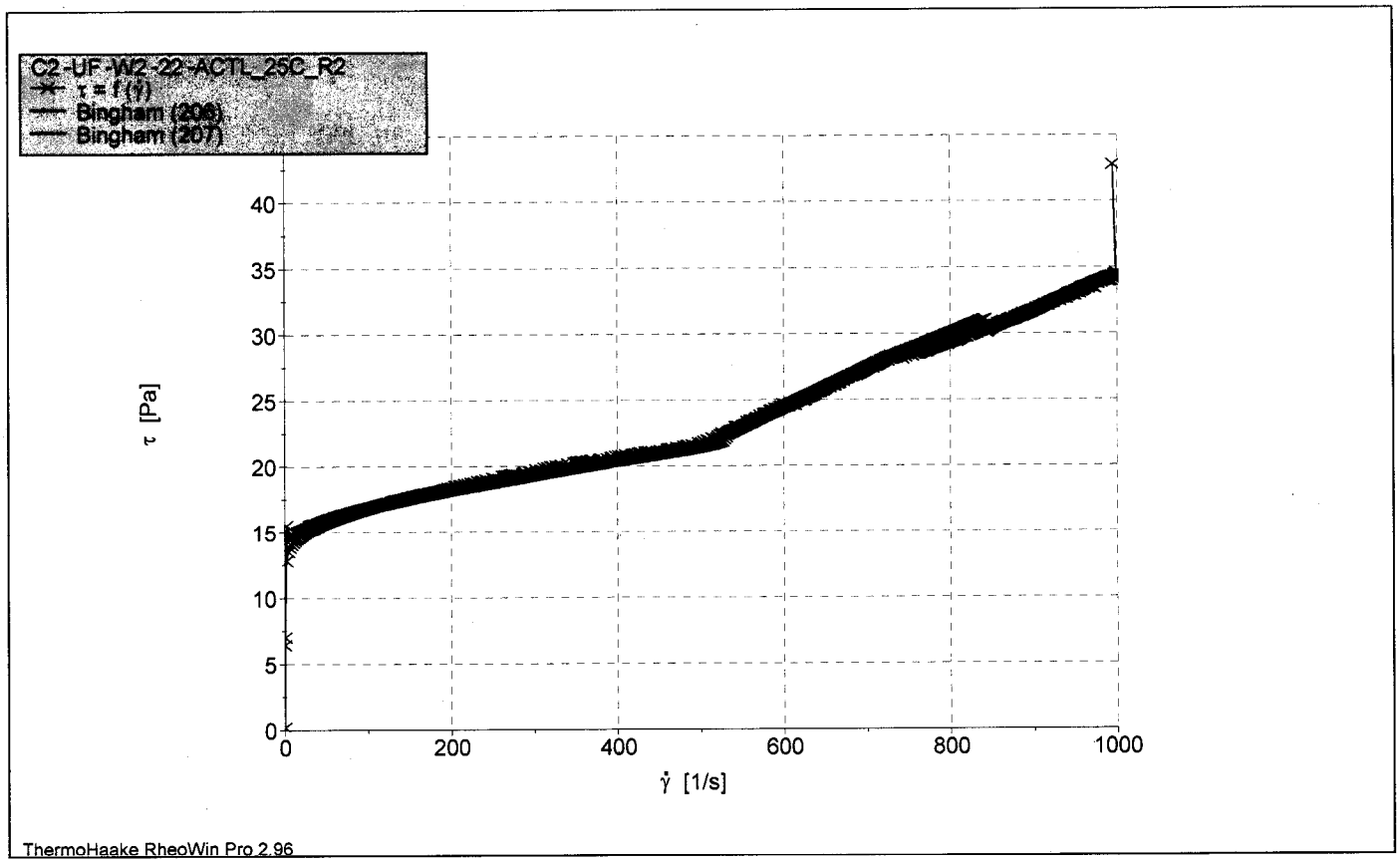
Bingham (186) : τ_0:14.34 η_p:0.01851 Chi²:873.7 r:0.9706
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (187) : τ_0:13.45 η_p:0.0196 Chi²:400.4 r:0.9878
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (188) : τ_0:16.57 η_p:0.01016 Chi²:8.885 r:0.9895
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (189) : τ_0:15.13 η_p:0.01314 Chi²:17.43 r:0.9879
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 13:34:01 PM	**Sensor**	Z38 Ti	**Gap**	8.000 mm
Substance	C2-UF-W2-22-ACTL	**A-factor**	8007.000 Pa/Nm		
Sample no	2	**M-factor**	8.600 (1/s)/(rad/s)		
Description					
Comment					



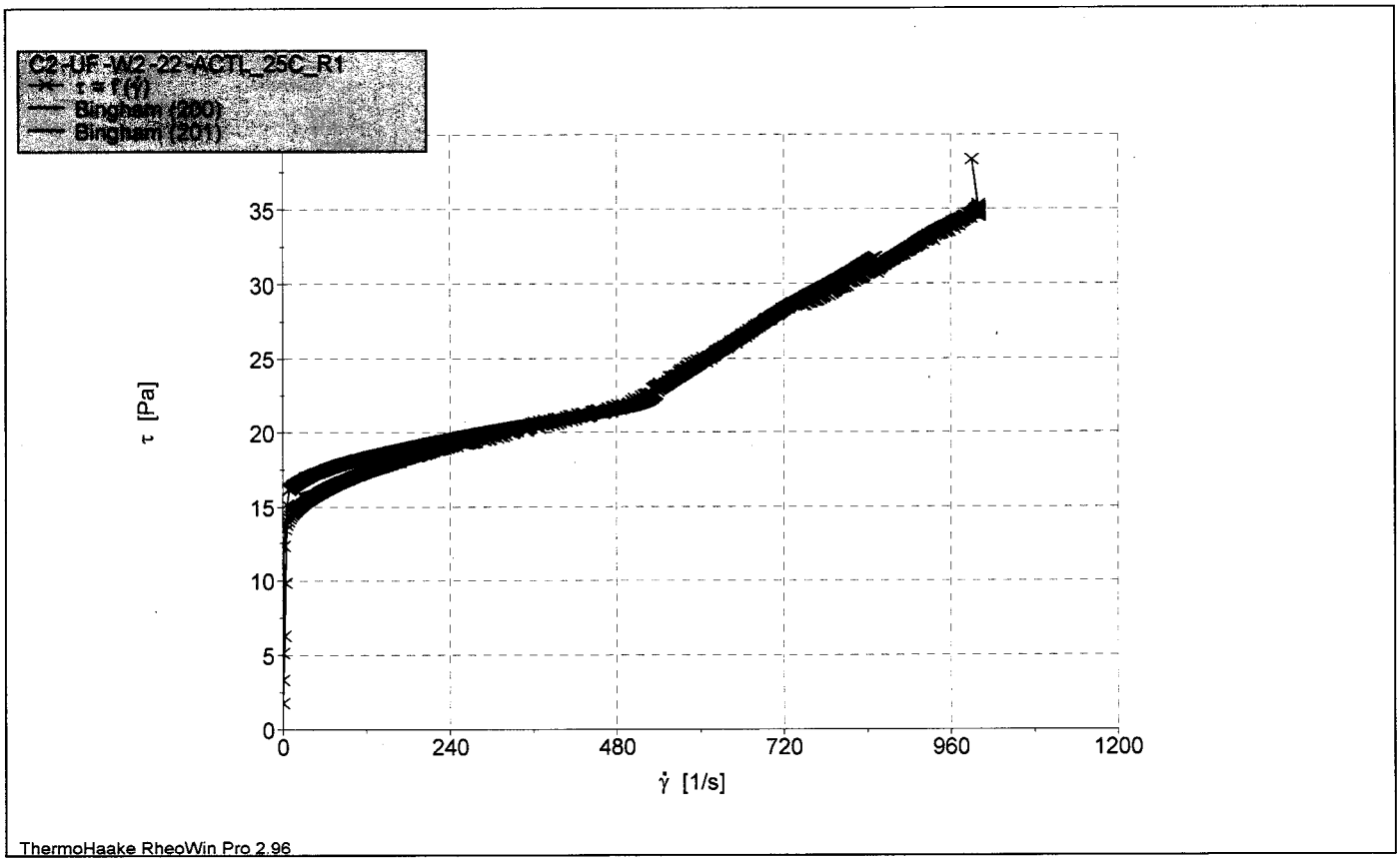
Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-22-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr
'04\4-27-04\C2-UF-W2-22-ACTL_25C_R2.rwd (Mod)
Bingham (204) : τ_0:13.62 η_p:0.01958 Chi²:712.4 r:0.9783
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (205) : τ_0:13.86 η_p:0.01913 Chi²:414 r:0.9868
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (206) : τ_0:15.58 η_p:0.01222 Chi²:6.648 r:0.9945
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (207) : τ_0:15.49 η_p:0.01308 Chi²:17.55 r:0.9876
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	27.04.2004 / 13:17:39 PM	**Sensor**	Z38 Ti	**Gap**	7.999 mm
Substance	C2-UF-W2-22-ACTL	**A-factor**	8007.000 Pa/Nm		
Sample no	1	**M-factor**	8.600 (1/s)/(rad/s)		
Description					

Comment

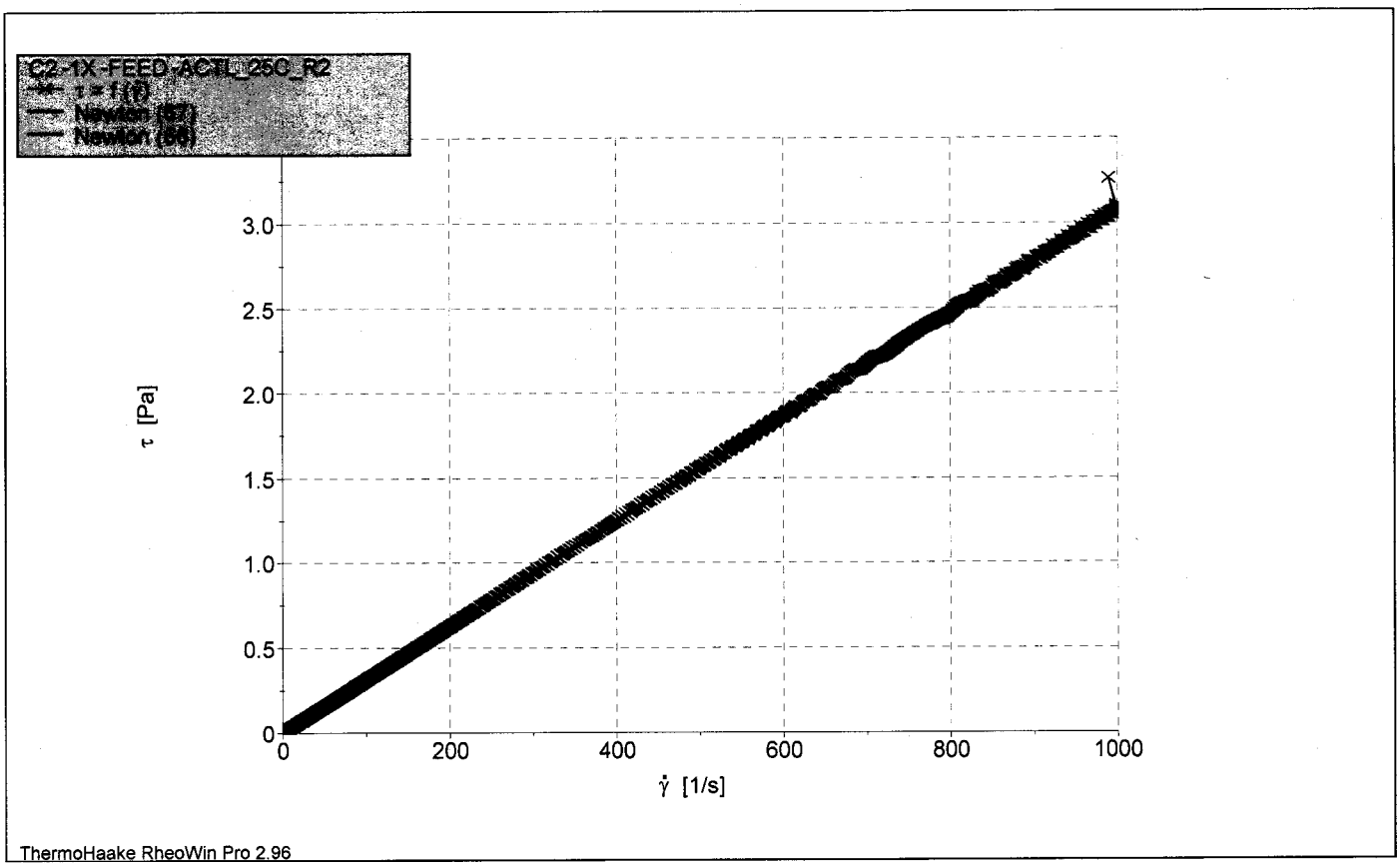


Filename: I:\Rheology\Zamineck\apr '04\4-27-04\C2-UF-W2-22-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP Z38 program.rwj

I:\Rheology\Zamineck\apr
'04\4-27-04\C2-UF-W2-22-ACTL_25C_R1.rwd (Mod)
Bingham (198) : τ_0:14.6 η_p:0.01884 Chi²:984.4 r:0.9685
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (199) : τ_0:13.83 η_p:0.01969 Chi²:566.6 r:0.9831
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (200) : τ_0:17.04 η_p:0.009802 Chi²:6.061 r:0.9923
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (201) : τ_0:15.58 η_p:0.01345 Chi²:17.6 r:0.9881
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 13:34:10 PM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-1X-FEED-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no		**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					

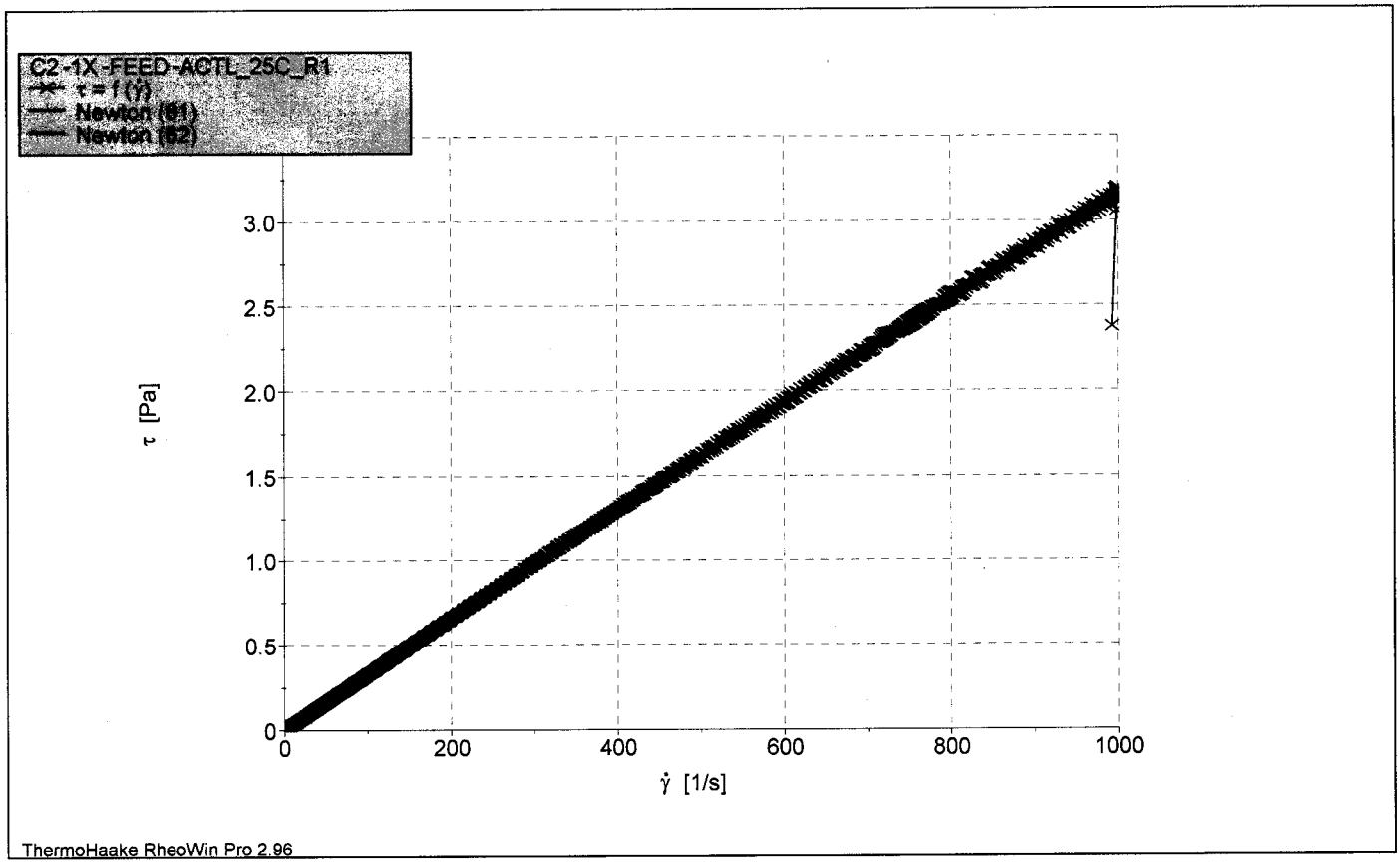


Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-1X-FEED-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\apr
'04\4-26-04\C2-1X-FEED-ACTL_25C_R2.rwd (Mod)
Bingham (65) : τ_0:0.01143 η_p:0.003083 Chi²:0.03498 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (66) : τ_0:0.01163 η_p:0.003081 Chi²:0.05063 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (67) : η:0.0031 Chi²:0.05135 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (68) : η:0.003099 Chi²:0.06754 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	26.04.2004 / 15:10:05 PM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-1X-FEED-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no	4	**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					



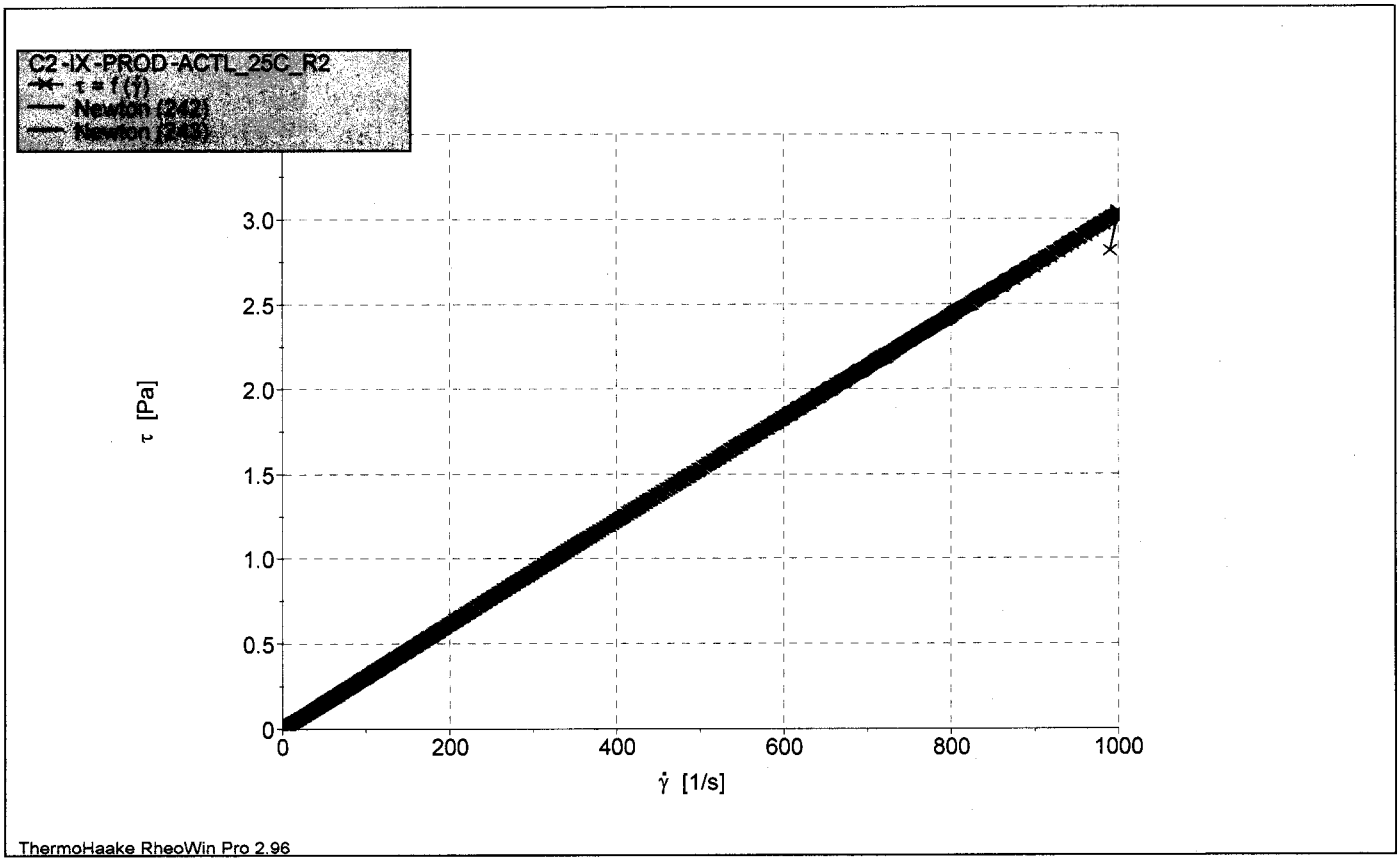
Filename: I:\Rheology\Zamineck\apr '04\4-26-04\C2-1X-FEED-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\apr
'04\4-26-04\C2-1X-FEED-ACTL_25C_R1.rwd (Mod)
Bingham (59) : τ_0:0.02752 η_P:0.003154 Chi²:0.134 r:0.9998
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (60) : τ_0:0.02801 η_P:0.00315 Chi²:0.22 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (61) : η:0.003195 Chi²:0.2289 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (62) : η:0.003192 Chi²:0.3181 r:0.9996
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	11.05.2004 / 7:48:47 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	c2-1x-prod-actl	**A-factor**	3701.000 Pa/Nm		
Sample no	2	**M-factor**	72.670 (1/s)/(rad/s)		
Description					

Comment

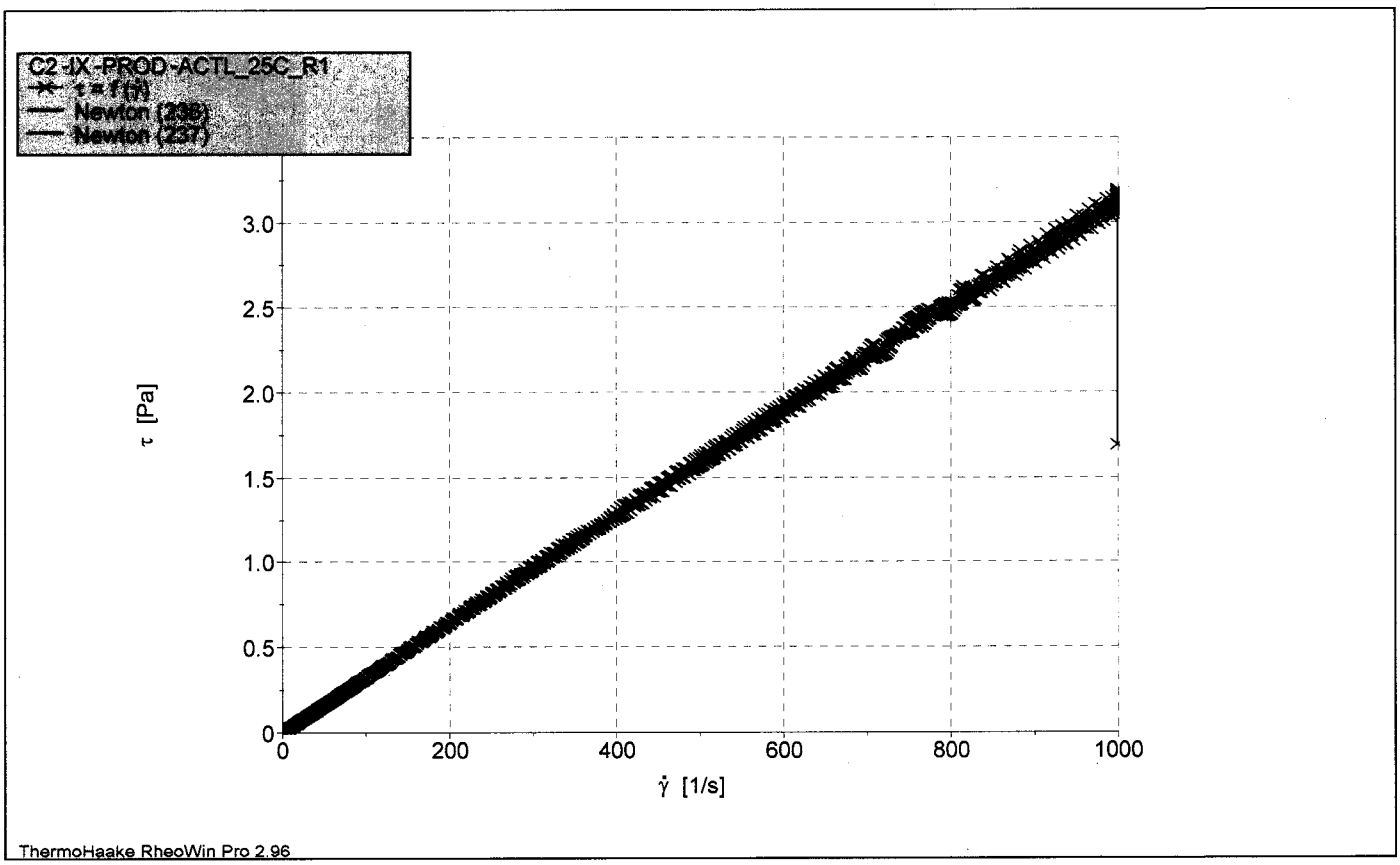


Filename: I:\Rheology\Zamineck\may'04\5-11-04\C2-IX-PROD-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-11-04\C2-IX-PROD-ACTL_25C_R2.n
(Mod)
Bingham (240) : τ_0:0.01381 η_p:0.00303 Chi²:0.02406 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (241) : τ_0:0.007283 η_p:0.003032 Chi²:0.02052 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (242) : η:0.00305 Chi²:0.04794 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (243) : η:0.003043 Chi²:0.02715 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	11.05.2004 / 7:20:46 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	c2-1x-prod-actl	**A-factor**	3701.000 Pa/Nm		
Sample no	1	**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					

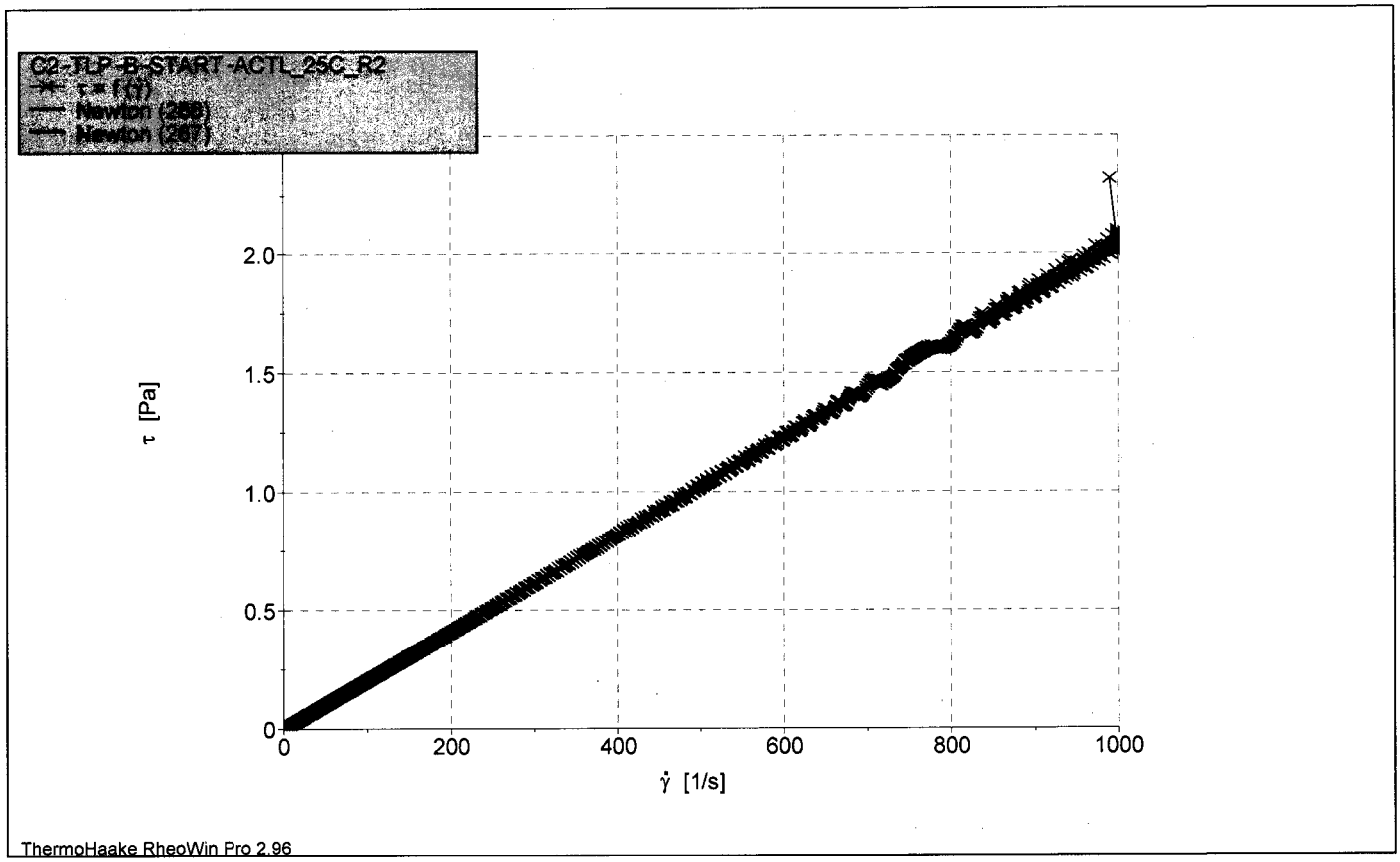


Filename: I:\Rheology\Zamineck\may'04\5-11-04\C2-IX-PROD-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-11-04\C2-IX-PROD-ACTL_25C_R1.n
(Mod)
Bingham (234) : τ_0:0.02436 η_p:0.00311 Chi²:0.2401 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Bingham (235) : τ_0:0.02087 η_p:0.003115 Chi²:0.513 r:0.9994
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (236) : η:0.003147 Chi²:0.3143 r:0.9996
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]
Newton (237) : η:0.003146 Chi²:0.5674 r:0.9993
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	17.05.2004 / 11:38:09 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-TLP-B-start-actl	**A-factor**	3701.000 Pa/Nm		
Sample no	1	**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-START-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-START-ACTL_25C_
(Mod)

Bingham (264) : τ_0: -0.0002228 η_p:0.002049 Chi²:0.033 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

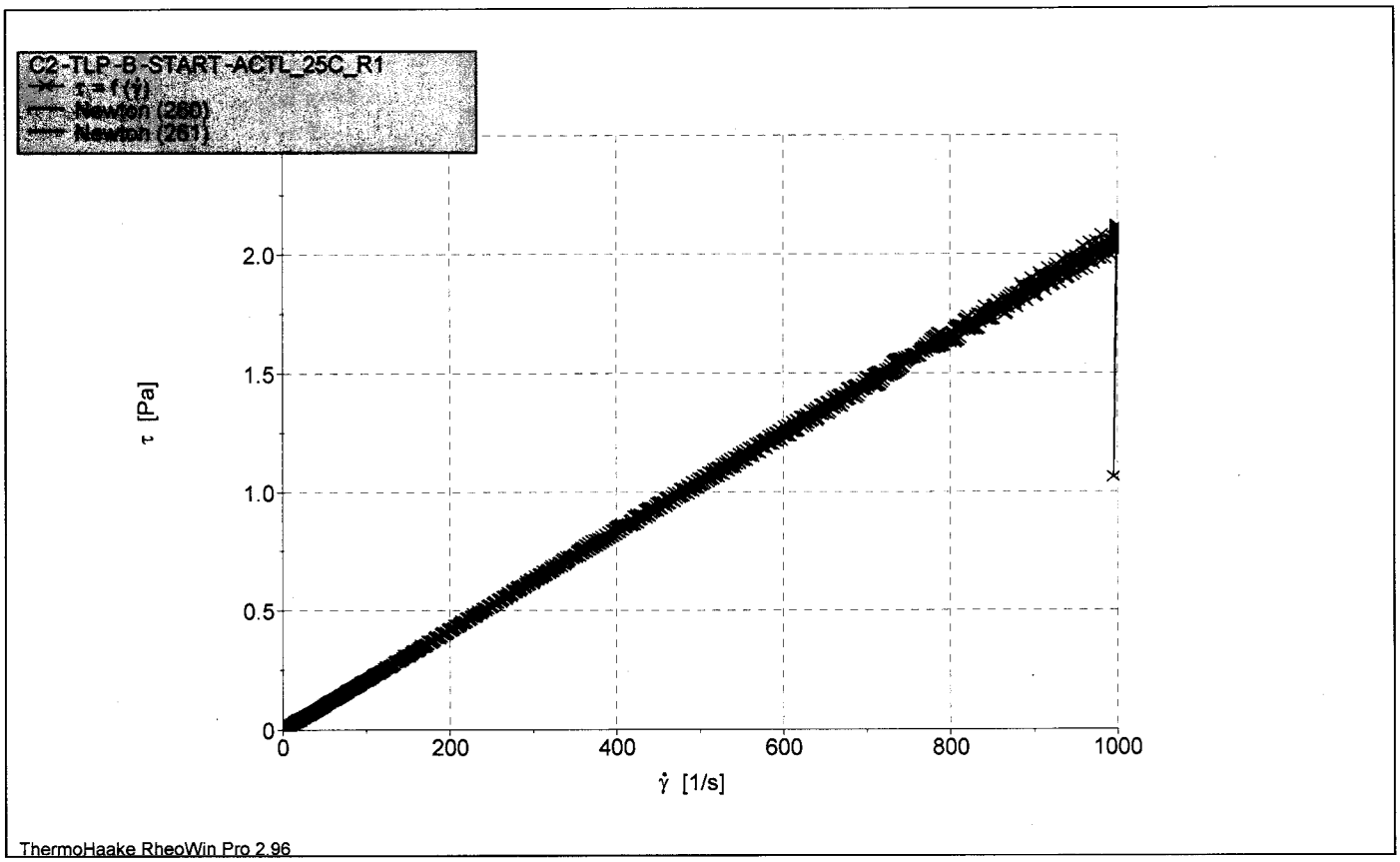
Bingham (265) : τ_0: -0.001663 η_p:0.002048 Chi²:0.1082 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (266) : η:0.002049 Chi²:0.03301 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (267) : η:0.002046 Chi²:0.1085 r:0.9997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	17.05.2004 / 11:17:27 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-TLP-B-start-actl	**A-factor**	3701.000 Pa/Nm		
Sample no	2	**M-factor**	72.670 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-START-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-START-ACTL_25C_
(Mod)

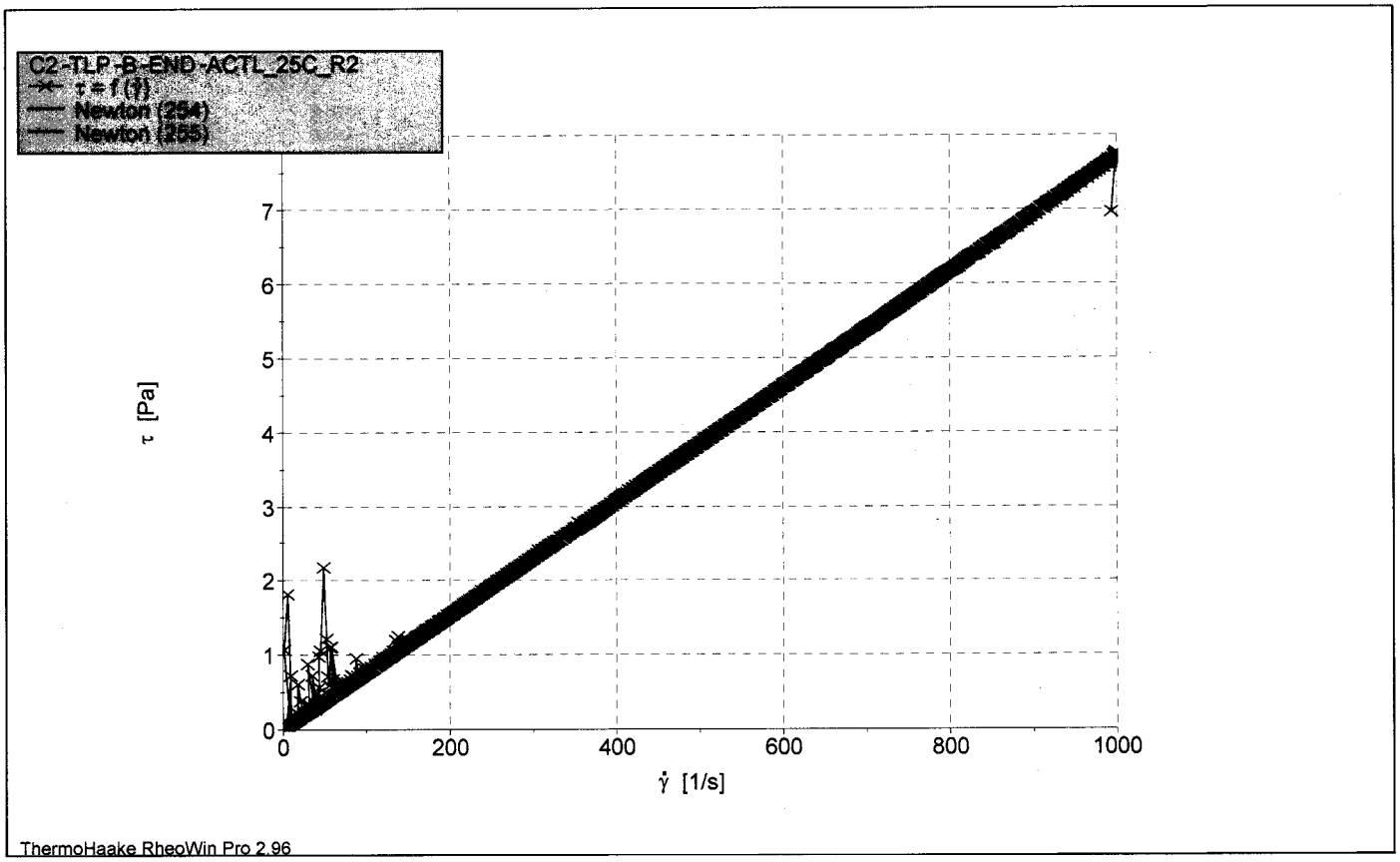
Bingham (258) : τ_0:0.007913 η_p:0.002063 Chi²:0.07411 r:0.9998
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (259) : τ_0:0.003859 η_p:0.002065 Chi²:0.1864 r:0.9995
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (260) : η:0.002074 Chi²:0.08195 r:0.9998
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (261) : η:0.00207 Chi²:0.1882 r:0.9995
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	17.05.2004 / 10:49:26 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-TLP-B-END-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no	2	**M-factor**	72.670 (1/s)/(rad/s)		
Description					
Comment					



Filename: I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-END-ACTL_25C_R2.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-END-ACTL_25C_R
(Mod)

Bingham (252) : τ_0:0.1033 η_p:0.007574 Chi²:10.38 r:0.9978
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

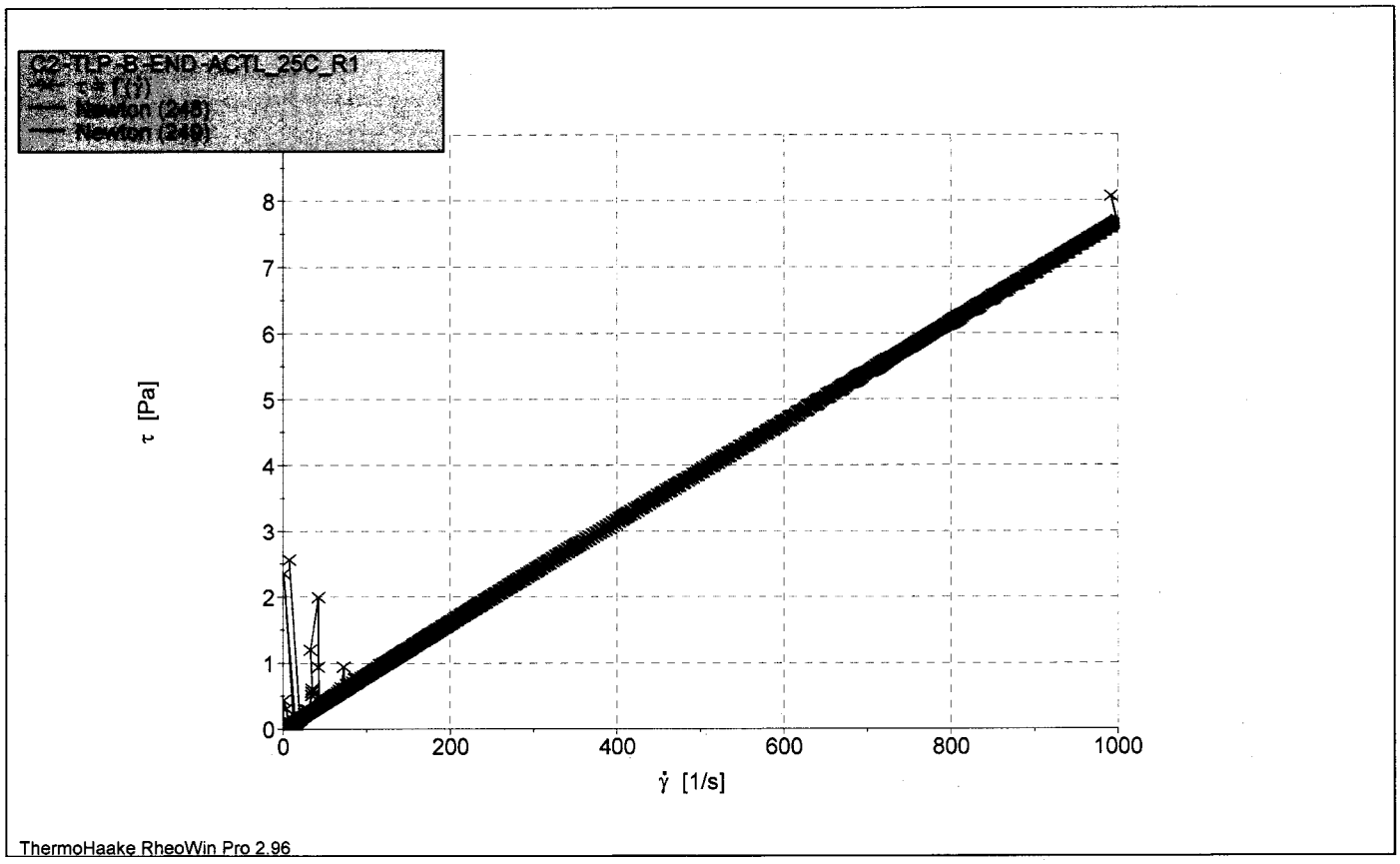
Bingham (253) : τ_0: -0.02319 η_p:0.007719 Chi²:0.07332 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (254) : η:0.007729 Chi²:11.71 r:0.9976
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (255) : η:0.007685 Chi²:0.1405 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Company	SRTC	**Measure device**	RS600	1200203357007	
Operator	ITS	**Temperature device**			
Date/Time	17.05.2004 / 10:33:49 AM	**Sensor**	DG41 Ti	**Gap**	5.100 mm
Substance	C2-TLP-B-END-ACTL	**A-factor**	3701.000 Pa/Nm		
Sample no	1	**M-factor**	72.670 (1/s)/(rad/s)		
Description					

Comment



Filename: I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-END-ACTL_25C_R1.rwd (Mod)

Job: C:\PROGRAM FILES\RHEOWIN\JOBS\RPP DG41 program.rwj

I:\Rheology\Zamineck\may'04\5-17-04\C2-TLP-B-END-ACTL_25C_R (Mod)

Bingham (246) : τ_0:0.1733 η_p:0.007506 Chi²:14.3 r:0.997
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Bingham (247) : τ_0:0.05025 η_p:0.007637 Chi²:0.1689 r:1
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (248) : η:0.007766 Chi²:18.07 r:0.9962
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Newton (249) : η:0.007713 Chi²:0.4846 r:0.9999
x = $\dot{\gamma}$ [1/s] , y = τ [Pa]

Particle-Size Distribution Data from SIPP Campaign I

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

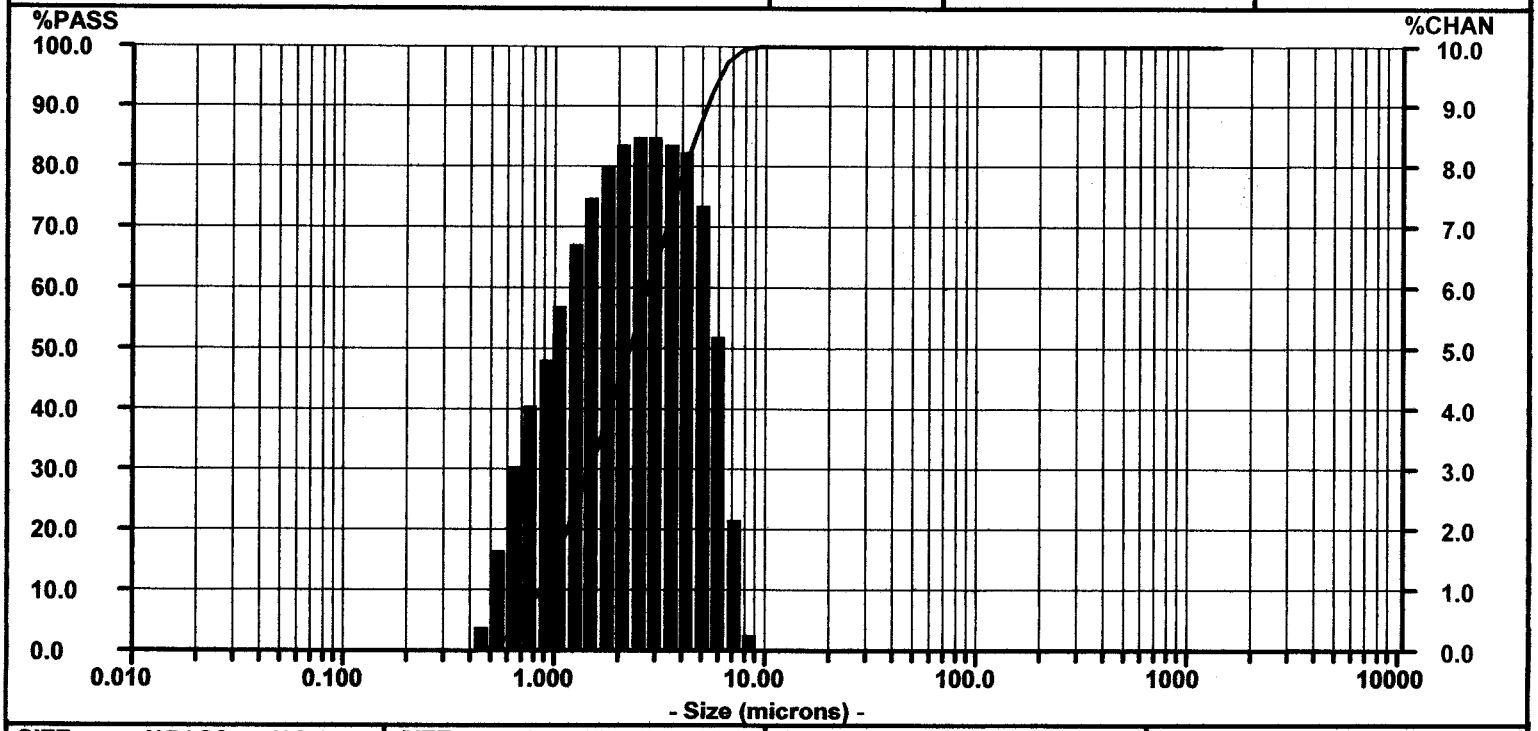
Particle Size Analysis

3-205871
C1-UF-Start-Asls-Wet

Date: 02/02/04 Meas #: 783
Time: 09:31 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 2.681	10% = 0.833	60% = 2.771	2.263	100%	3.522
mn = 0.847	20% = 1.148	70% = 3.396			
ma = 1.725	30% = 1.476	80% = 4.174			
cs = 3.478	40% = 1.841	90% = 5.199			
sd = 1.761	50% = 2.263	95% = 5.959			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.36	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.64	2.17	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	97.47	5.22	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	92.25	7.41	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	84.84	8.24	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	76.60	8.44	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	68.16	8.53	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	59.63	8.57	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	51.06	8.45	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	42.61	8.09	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	34.52	7.52						
104.7	100.00	0.00	1.375	27.00	6.75						
88.00	100.00	0.00	1.156	20.25	5.82						
74.00	100.00	0.00	0.972	14.43	4.92						
62.23	100.00	0.00	0.818	9.51	4.14						
52.33	100.00	0.00	0.688	5.37	3.15						
44.00	100.00	0.00	0.578	2.22	1.70						
37.00	100.00	0.00	0.486	0.52	0.49						
31.11	100.00	0.00	0.409	0.03	0.03						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0091
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

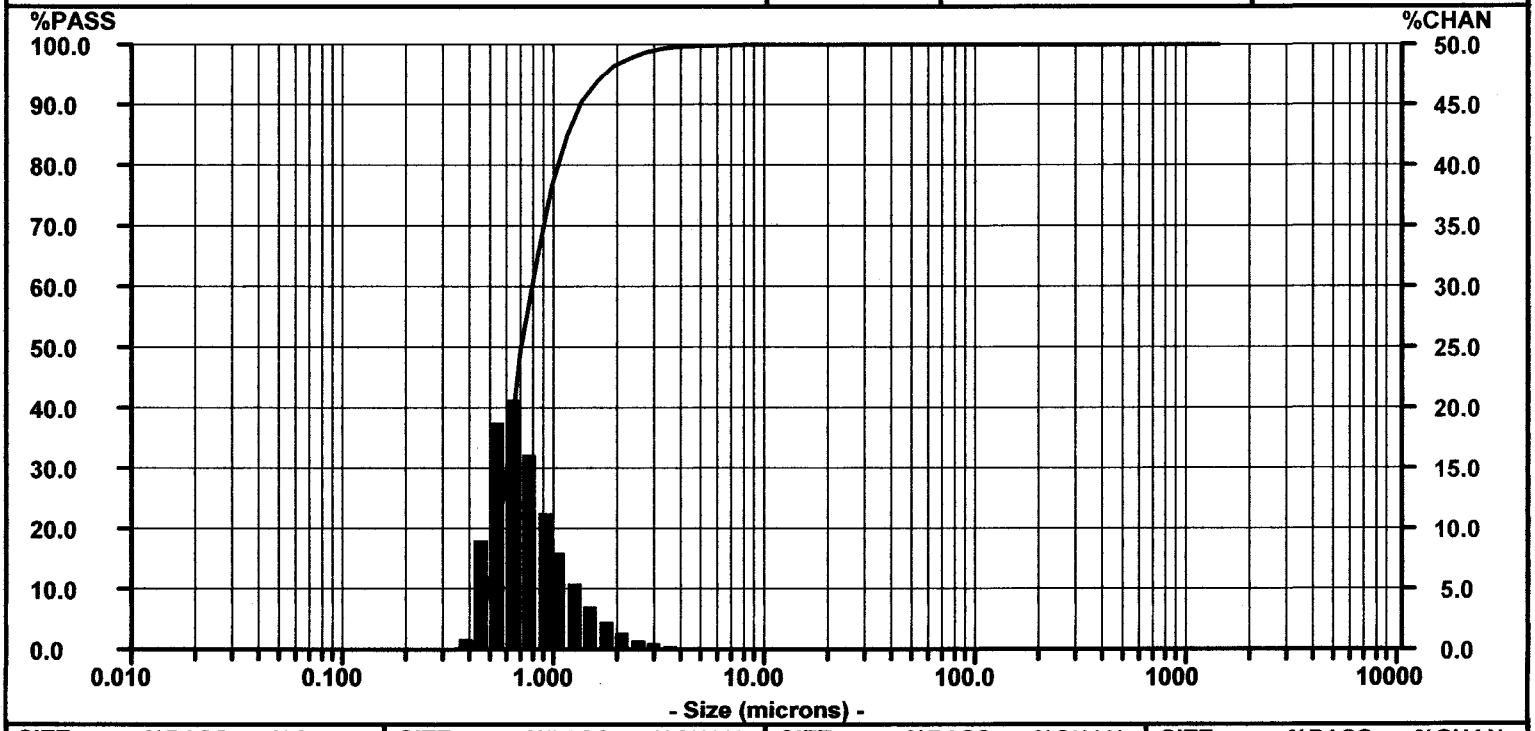
Particle Size Analysis

3-205871
C1-UF-Start-Asls-Wet

Date: 02/02/04 Meas #: 783
Time: 09:32 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Num%	Width
mv = 2.681	10% = 0.486	60% = 0.766	0.692	100%	0.611
mn = 0.847	20% = 0.537	70% = 0.869			
ma = 1.725	30% = 0.584	80% = 1.031			
cs = 3.478	40% = 0.634	90% = 1.350			
sd = 0.305	50% = 0.692	95% = 1.724			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.01	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.99	0.04	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.95	0.09	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.86	0.18	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.68	0.31	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.37	0.52	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	98.85	0.88	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	97.97	1.45	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	96.52	2.34	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	94.18	3.67						
104.7	100.00	0.00	1.375	90.51	5.53						
88.00	100.00	0.00	1.156	84.98	8.03						
74.00	100.00	0.00	0.972	76.95	11.39						
62.23	100.00	0.00	0.818	65.56	16.12						
52.33	100.00	0.00	0.688	49.44	20.69						
44.00	100.00	0.00	0.578	28.75	18.75						
37.00	100.00	0.00	0.486	10.00	9.07						
31.11	100.00	0.00	0.409	0.93	0.93						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0091
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

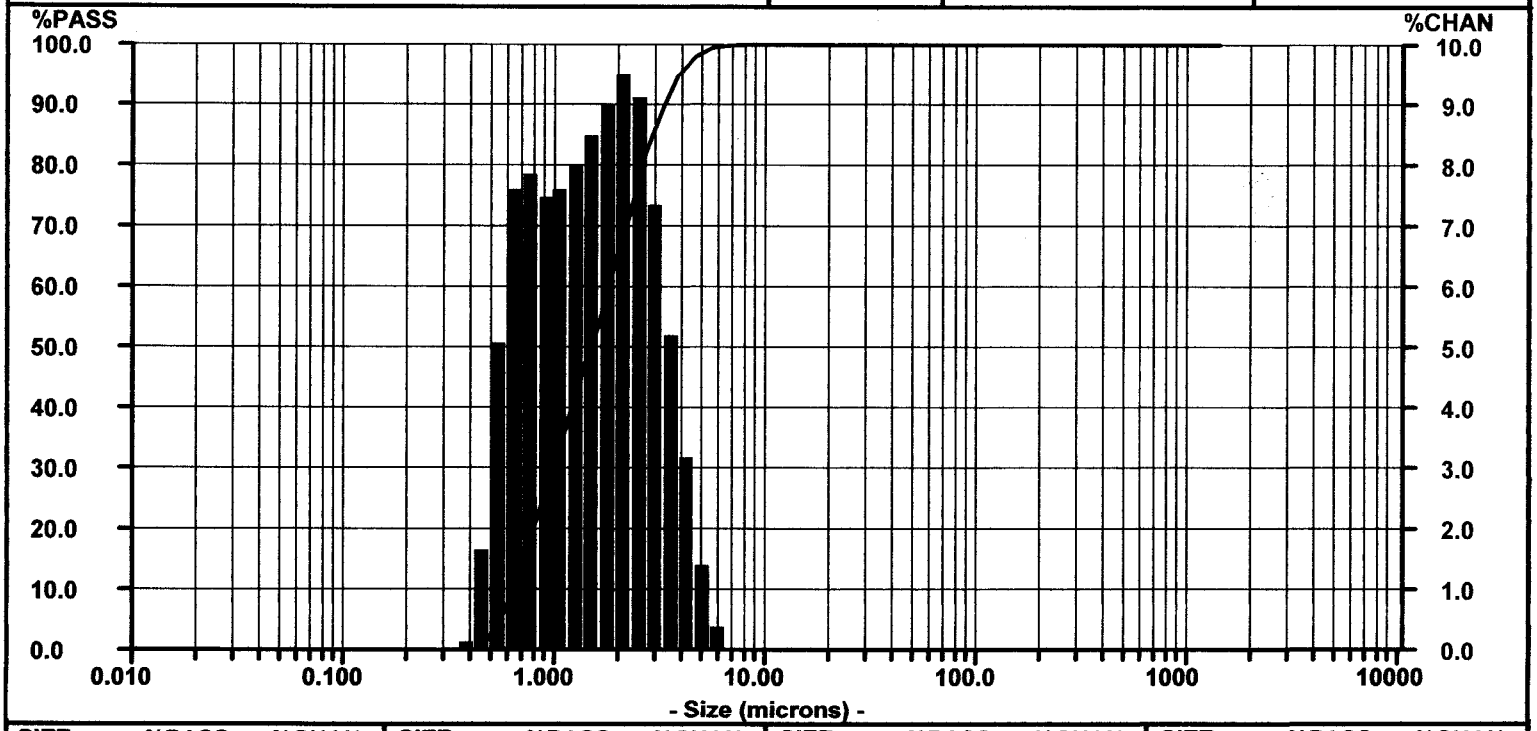
Particle Size Analysis

3-205872
C1-UF-Con2-80-Wet

Date: 02/02/04 Meas #: 787
Time: 10:02 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.761	10% = 0.619	60% = 1.823	1.734	85%	2.077
mn = 0.707	20% = 0.772	70% = 2.188	0.581	15%	0.159
ma = 1.207	30% = 0.968	80% = 2.630			
cs = 4.971	40% = 1.212	90% = 3.302			
sd = 1.074	50% = 1.497	95% = 3.910			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.03	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.97	0.38	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.59	1.50	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	98.09	3.21	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	94.88	5.21	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	89.67	7.43	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	82.24	9.15	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	73.09	9.61	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	63.48	9.11	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	54.37	8.49						
104.7	100.00	0.00	1.375	45.88	8.03						
88.00	100.00	0.00	1.156	37.85	7.67						
74.00	100.00	0.00	0.972	30.18	7.57						
62.23	100.00	0.00	0.818	22.61	7.85						
52.33	100.00	0.00	0.688	14.76	7.60						
44.00	100.00	0.00	0.578	7.16	5.16						
37.00	100.00	0.00	0.486	2.00	1.75						
31.11	100.00	0.00	0.409	0.25	0.25						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0041
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

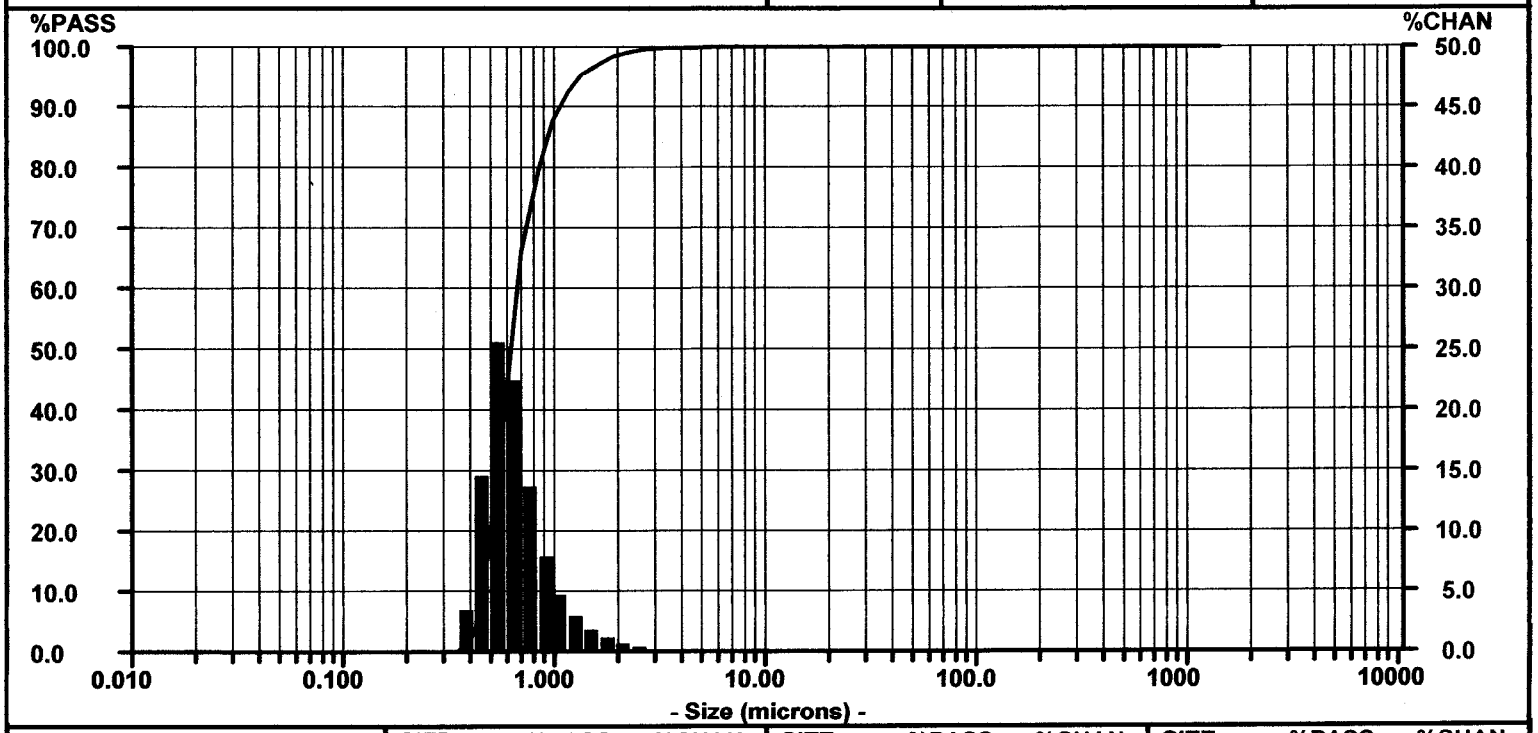
Particle Size Analysis

3-205872
C1-UF-Con2-80-Wet

Date: 02/02/04 Meas #: 787
Time: 10:02 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.761	10% = 0.450	60% = 0.652	0.604	100%	0.408
mn = 0.707	20% = 0.493	70% = 0.716			
ma = 1.207	30% = 0.529	80% = 0.820			
cs = 4.971	40% = 0.565	90% = 1.045			
sd = 0.204	50% = 0.604	95% = 1.332			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.01	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.99	0.03	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.96	0.08	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.88	0.20	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.68	0.42	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.26	0.74	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	98.52	1.19	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.33	1.86						
104.7	100.00	0.00	1.375	95.47	2.96						
88.00	100.00	0.00	1.156	92.51	4.76						
74.00	100.00	0.00	0.972	87.75	7.88						
62.23	100.00	0.00	0.818	79.87	13.74						
52.33	100.00	0.00	0.688	66.13	22.45						
44.00	100.00	0.00	0.578	43.68	25.61						
37.00	100.00	0.00	0.486	18.07	14.57						
31.11	100.00	0.00	0.409	3.50	3.50						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

Filter: Off

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Database Path: C:\MTWIN90\MTWIN.DB

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0041
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

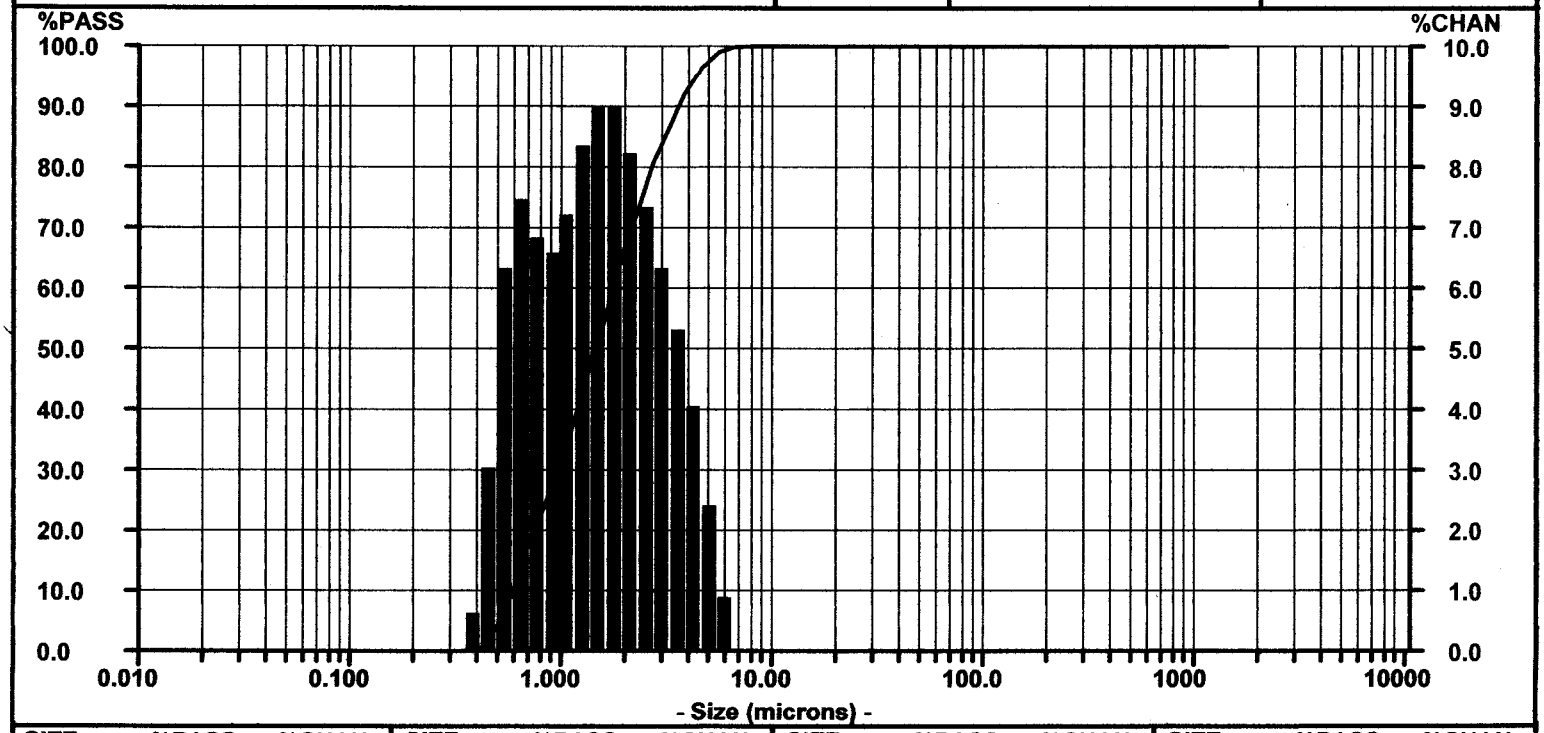
Particle Size Analysis

3-205873
C1-UF-Con2-80-2-Wet

Date: 02/02/04 Meas #: 791
Time: 10:15 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.793	10% = 0.576	60% = 1.765	1.609	90%	2.323
mn = 0.654	20% = 0.728	70% = 2.153	0.508	10%	0.116
ma = 1.163	30% = 0.942	80% = 2.704			
cs = 5.160	40% = 1.194	90% = 3.589			
sd = 1.170	50% = 1.461	95% = 4.320			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.12	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.88	0.89	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	98.99	2.52	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	96.47	4.13	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	92.34	5.32	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	87.02	6.33	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	80.69	7.35	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	73.34	8.33	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	65.01	9.05	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	55.96	9.08						
104.7	100.00	0.00	1.375	46.88	8.37						
88.00	100.00	0.00	1.156	38.51	7.29						
74.00	100.00	0.00	0.972	31.22	6.65						
62.23	100.00	0.00	0.818	24.57	6.90						
52.33	100.00	0.00	0.688	17.67	7.50						
44.00	100.00	0.00	0.578	10.17	6.43						
37.00	100.00	0.00	0.486	3.74	3.07						
31.11	100.00	0.00	0.409	0.67	0.67						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0049
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

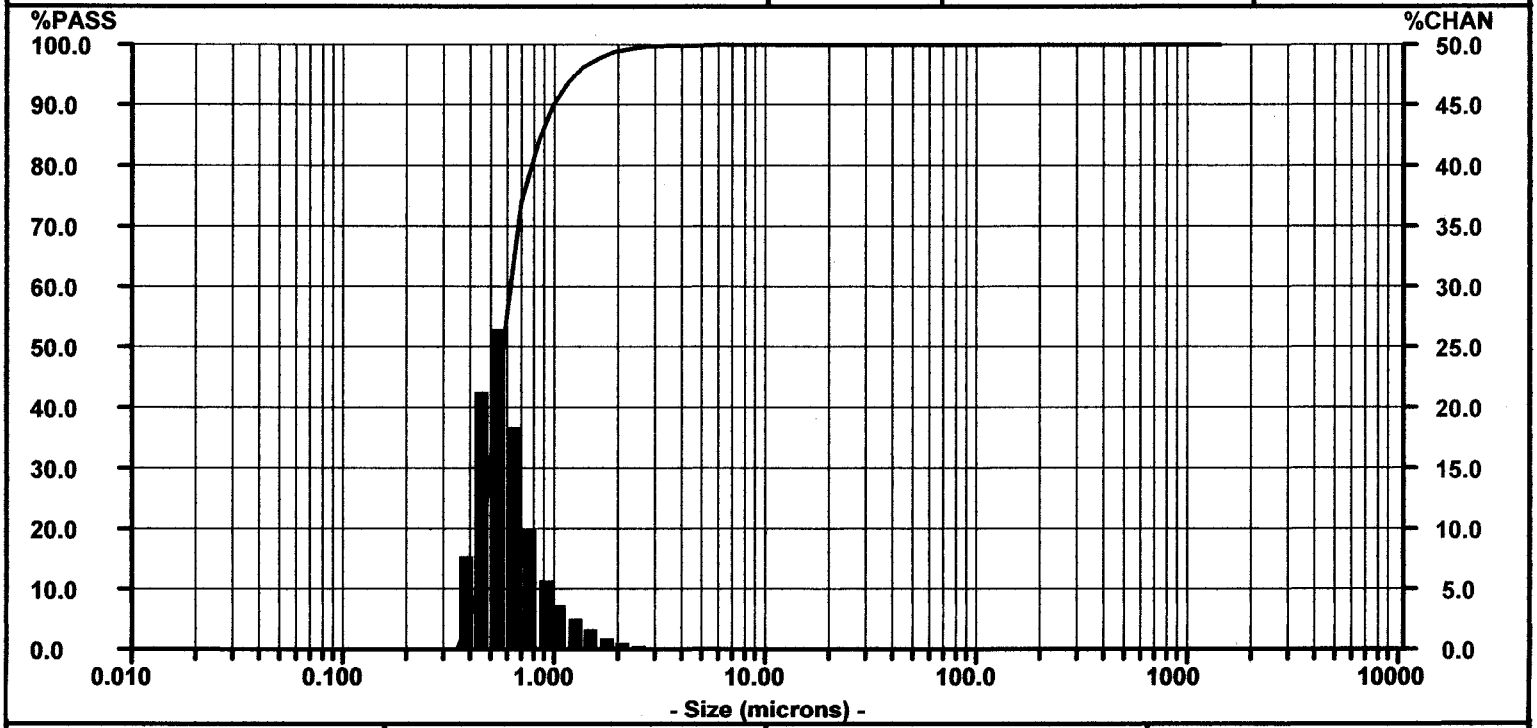
Particle Size Analysis

3-205873
C1-UF-Con2-80-2-Wet

Date: 02/02/04 Meas #: 791
Time: 10:16 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.793	10% = 0.418	60% = 0.598	0.556	100%	0.373
mn = 0.654	20% = 0.456	70% = 0.656			
ma = 1.163	30% = 0.489	80% = 0.751			
cs = 5.160	40% = 0.522	90% = 0.974			
sd = 0.186	50% = 0.556	95% = 1.251			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.01	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.99	0.03	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.96	0.07	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.89	0.14	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.75	0.28	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.47	0.54	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	98.93	0.98	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.95	1.66						
104.7	100.00	0.00	1.375	96.29	2.57						
88.00	100.00	0.00	1.156	93.72	3.77						
74.00	100.00	0.00	0.972	89.95	5.76						
62.23	100.00	0.00	0.818	84.19	10.06						
52.33	100.00	0.00	0.688	74.13	18.45						
44.00	100.00	0.00	0.578	55.68	26.57						
37.00	100.00	0.00	0.486	29.11	21.29						
31.11	100.00	0.00	0.409	7.82	7.82						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0049
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

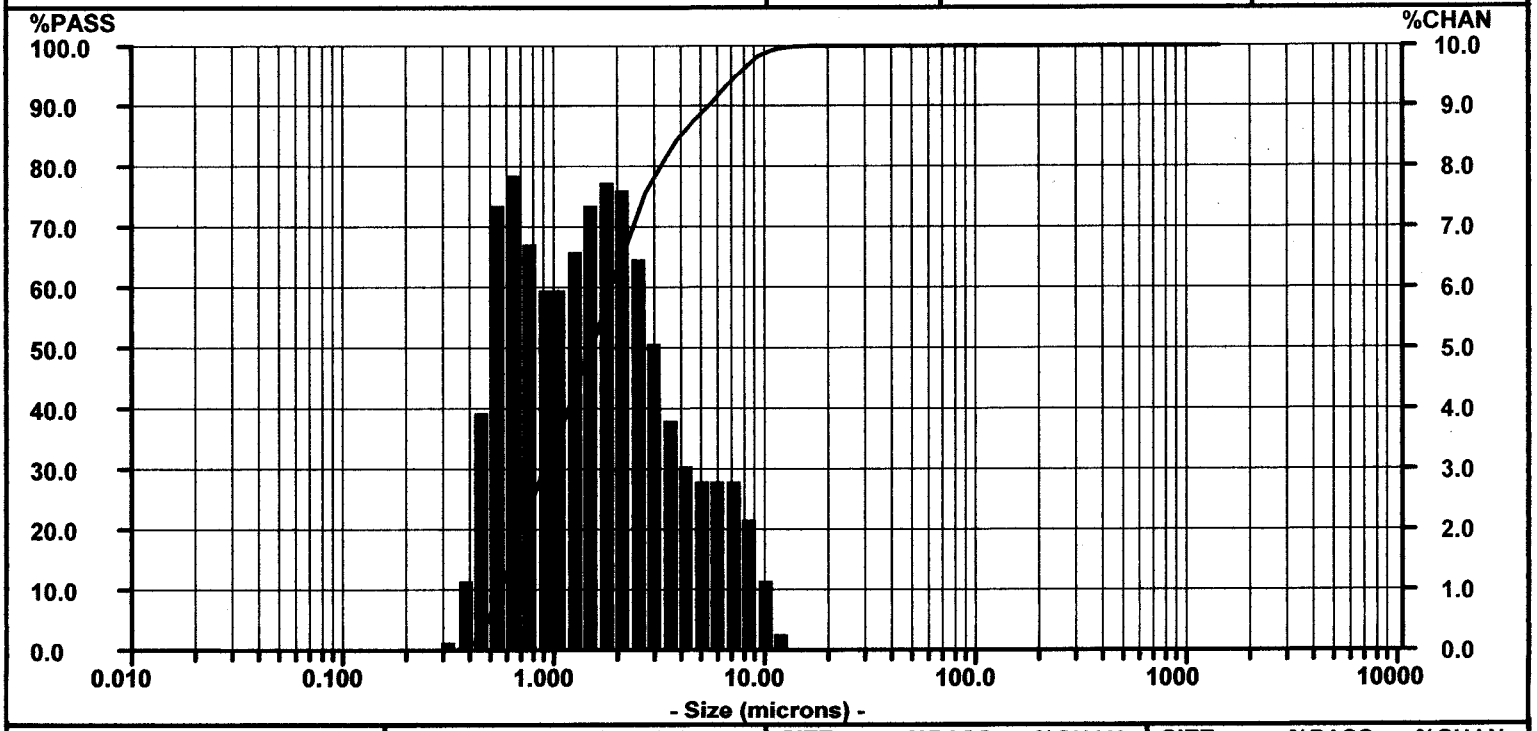
Particle Size Analysis

3-205874
C1-UF-Con2-80-3-Wet

Date: 02/02/04 Meas #: 795
Time: 10:33 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 2.236	10% = 0.544	60% = 1.885	1.901	79%	3.577
mn = 0.602	20% = 0.676	70% = 2.369	0.549	21%	0.186
ma = 1.151	30% = 0.877	80% = 3.185			
cs = 5.215	40% = 1.168	90% = 5.348			
sd = 1.585	50% = 1.504	95% = 7.237			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.04	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	99.96	0.35	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	99.61	1.19	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	98.42	2.27	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	96.15	2.83	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	93.32	2.86	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	90.46	2.84	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	87.62	3.09	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	84.53	3.83	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	80.70	5.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	75.60	6.58	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	69.02	7.61	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	61.41	7.80	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	53.61	7.35						
104.7	100.00	0.00	1.375	46.26	6.64						
88.00	100.00	0.00	1.156	39.62	6.06						
74.00	100.00	0.00	0.972	33.56	6.01						
62.23	100.00	0.00	0.818	27.55	6.79						
52.33	100.00	0.00	0.688	20.76	7.95						
44.00	100.00	0.00	0.578	12.81	7.38						
37.00	100.00	0.00	0.486	5.43	4.05						
31.11	100.00	0.00	0.409	1.38	1.17						
26.16	100.00	0.00	0.344	0.21	0.21						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0043
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

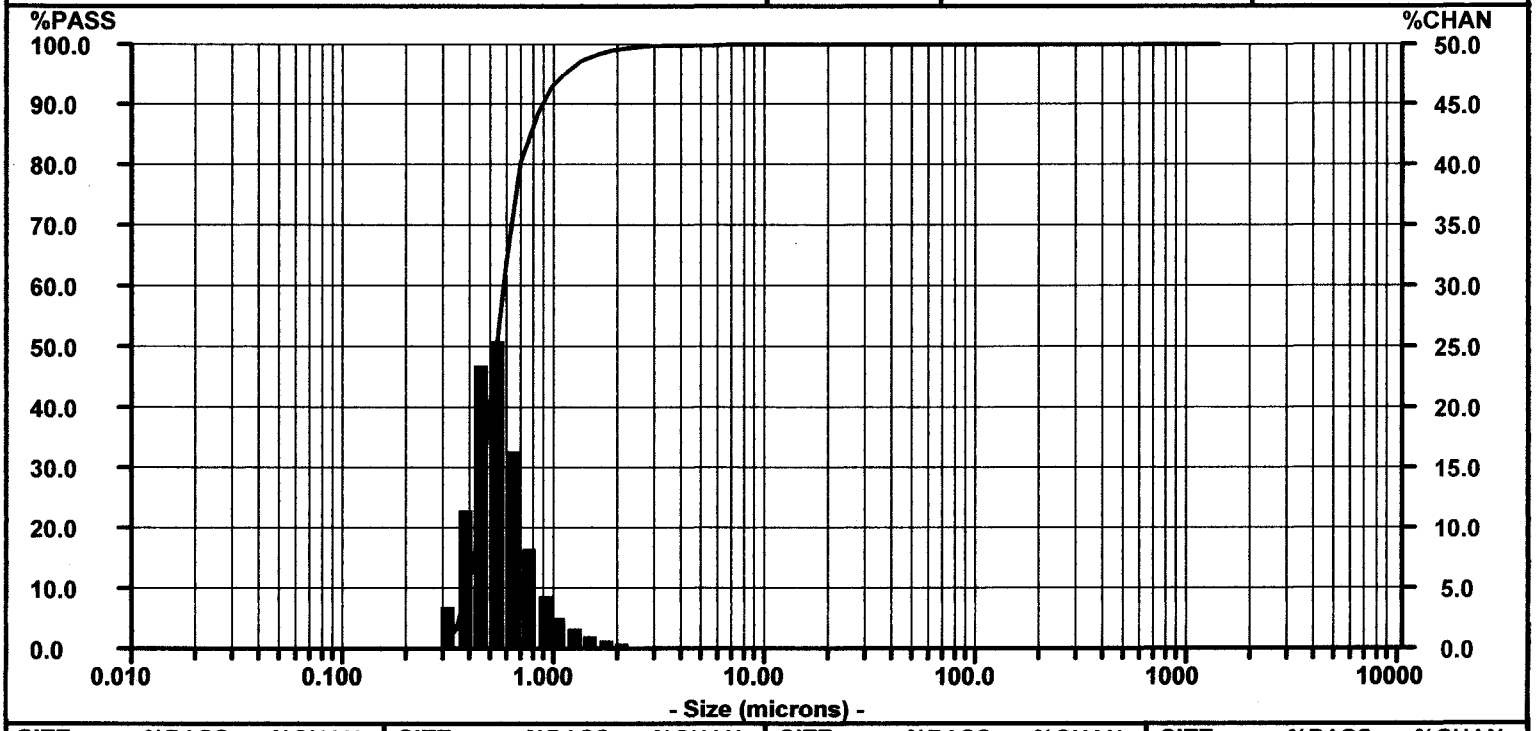
Particle Size Analysis

3-205874
C1-UF-Con2-80-3-Wet

Date: 02/02/04 Meas #: 795
Time: 10:33 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate filtered diluent

Summary	Percentiles		Dia	Num%	Width
mv = 2.236	10% = 0.386	60% = 0.562	0.524	100%	0.319
mn = 0.602	20% = 0.427	70% = 0.610			
ma = 1.151	30% = 0.460	80% = 0.685			
cs = 5.215	40% = 0.491	90% = 0.854			
sd = 0.159	50% = 0.524	95% = 1.099			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.01	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.99	0.01	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.98	0.02	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.96	0.04	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.92	0.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.82	0.21	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.61	0.41	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.20	0.71	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.49	1.12						
104.7	100.00	0.00	1.375	97.37	1.71						
88.00	100.00	0.00	1.156	95.66	2.62						
74.00	100.00	0.00	0.972	93.04	4.36						
62.23	100.00	0.00	0.818	88.68	8.30						
52.33	100.00	0.00	0.688	80.38	16.39						
44.00	100.00	0.00	0.578	63.99	25.56						
37.00	100.00	0.00	0.486	38.43	23.53						
31.11	100.00	0.00	0.409	14.90	11.44						
26.16	100.00	0.00	0.344	3.46	3.46						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0043
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

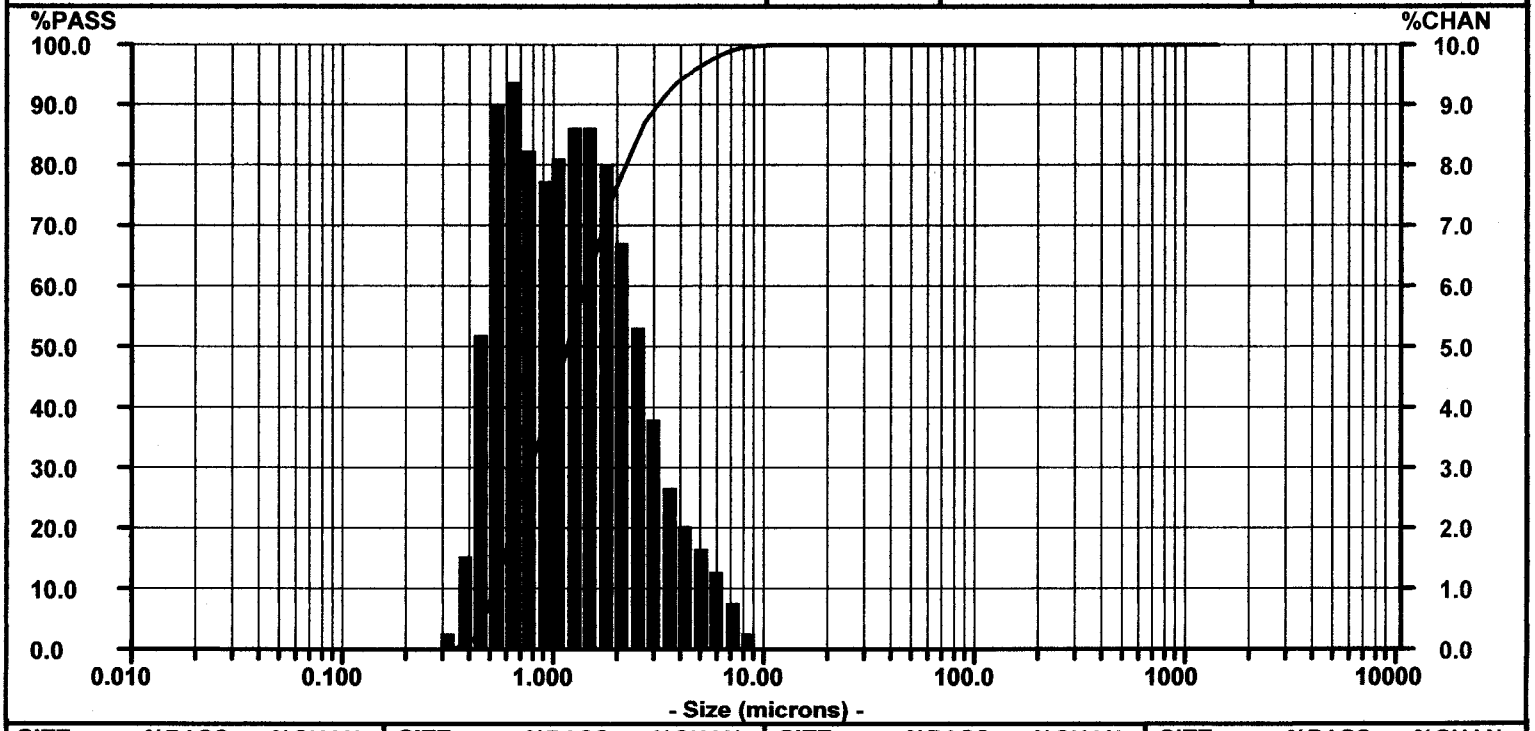
Particle Size Analysis

3-205876
C1-UF-SSM-PSD

Date: 02/04/04 Meas #: 807
Time: 14:36 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.565	10% = 0.516	60% = 1.418	1.500	74%	1.966
mn = 0.590	20% = 0.619	70% = 1.740	0.544	26%	0.189
ma = 0.980	30% = 0.751	80% = 2.198			
cs = 6.120	40% = 0.936	90% = 3.103			
sd = 0.945	50% = 1.160	95% = 4.289			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.03	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	99.97	0.30	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.67	0.83	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	98.84	1.33	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	97.51	1.67	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	95.84	2.06	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	93.78	2.74	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	91.04	3.85	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	87.19	5.33	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	81.86	6.82	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	75.04	7.98	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	67.06	8.61						
104.7	100.00	0.00	1.375	58.45	8.62						
88.00	100.00	0.00	1.156	49.83	8.13						
74.00	100.00	0.00	0.972	41.70	7.77						
62.23	100.00	0.00	0.818	33.93	8.27						
52.33	100.00	0.00	0.688	25.66	9.44						
44.00	100.00	0.00	0.578	16.22	9.05						
37.00	100.00	0.00	0.486	7.17	5.28						
31.11	100.00	0.00	0.409	1.89	1.60						
26.16	100.00	0.00	0.344	0.29	0.29						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0046
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

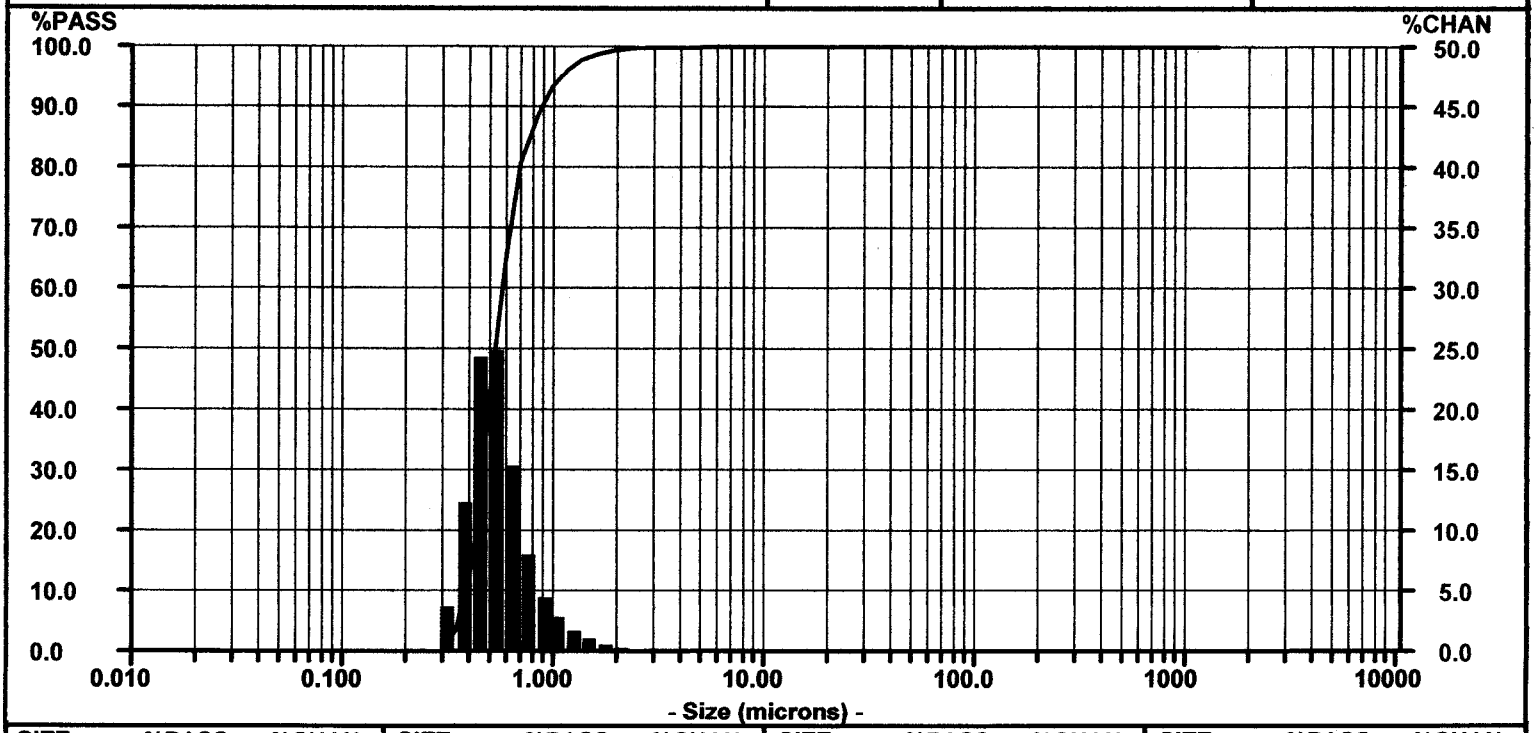
Particle Size Analysis

3-205876
C1-UF-SSM-PSD

Date: 02/04/04 Meas #: 807
Time: 14:36 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.565	10% = 0.382	60% = 0.555	0.518	100%	0.320
mn = 0.590	20% = 0.422	70% = 0.603			
ma = 0.980	30% = 0.454	80% = 0.680			
cs = 6.120	40% = 0.484	90% = 0.849			
sd = 0.160	50% = 0.518	95% = 1.071			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.01	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.99	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.98	0.02	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.06	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.90	0.14	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.76	0.29	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.47	0.58	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.89	1.04						
104.7	100.00	0.00	1.375	97.85	1.76						
88.00	100.00	0.00	1.156	96.09	2.79						
74.00	100.00	0.00	0.972	93.30	4.48						
62.23	100.00	0.00	0.818	88.82	8.01						
52.33	100.00	0.00	0.688	80.81	15.43						
44.00	100.00	0.00	0.578	65.38	24.86						
37.00	100.00	0.00	0.486	40.52	24.33						
31.11	100.00	0.00	0.409	16.19	12.40						
26.16	100.00	0.00	0.344	3.79	3.79						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0046
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

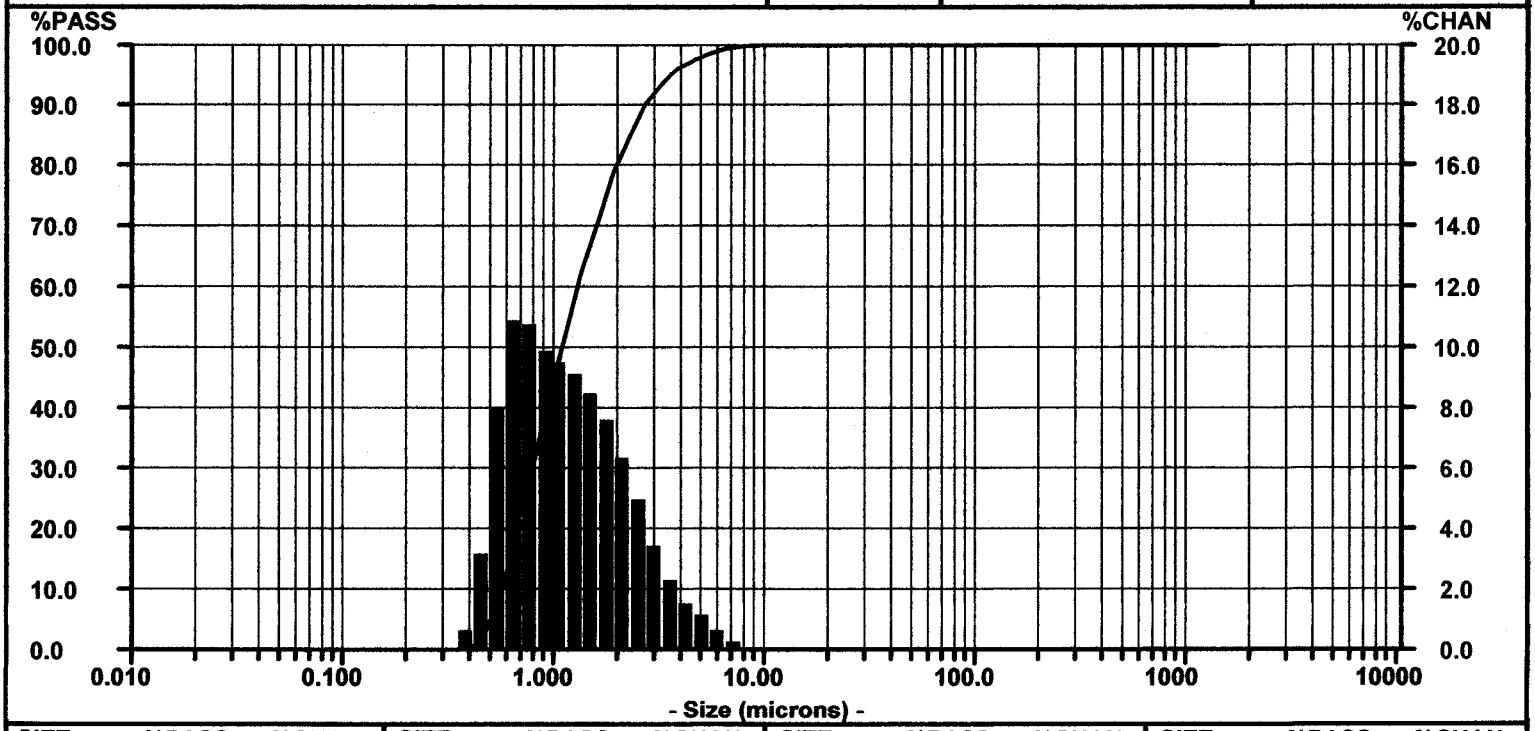
Particle Size Analysis

3-205888
C1-UF-W1-22-Wet

Date: 02/04/04 Meas #: 811
Time: 14:52 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.432	10% = 0.557	60% = 1.309	1.087	100%	1.613
mn = 0.648	20% = 0.656	70% = 1.596			
ma = 0.987	30% = 0.768	80% = 2.004			
cs = 6.082	40% = 0.909	90% = 2.730			
sd = 0.806	50% = 1.087	95% = 3.562			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.08	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.92	0.34	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.58	0.72	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	98.86	1.14	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	97.72	1.63	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	96.09	2.38	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	93.71	3.52	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	90.19	4.96	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	85.23	6.41	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	78.82	7.65	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	71.17	8.59						
104.7	100.00	0.00	1.375	62.58	9.21						
88.00	100.00	0.00	1.156	53.37	9.54						
74.00	100.00	0.00	0.972	43.83	9.99						
62.23	100.00	0.00	0.818	33.84	10.84						
52.33	100.00	0.00	0.688	23.00	10.96						
44.00	100.00	0.00	0.578	12.04	8.02						
37.00	100.00	0.00	0.486	4.02	3.27						
31.11	100.00	0.00	0.409	0.75	0.70						
26.16	100.00	0.00	0.344	0.05	0.05						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0041
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

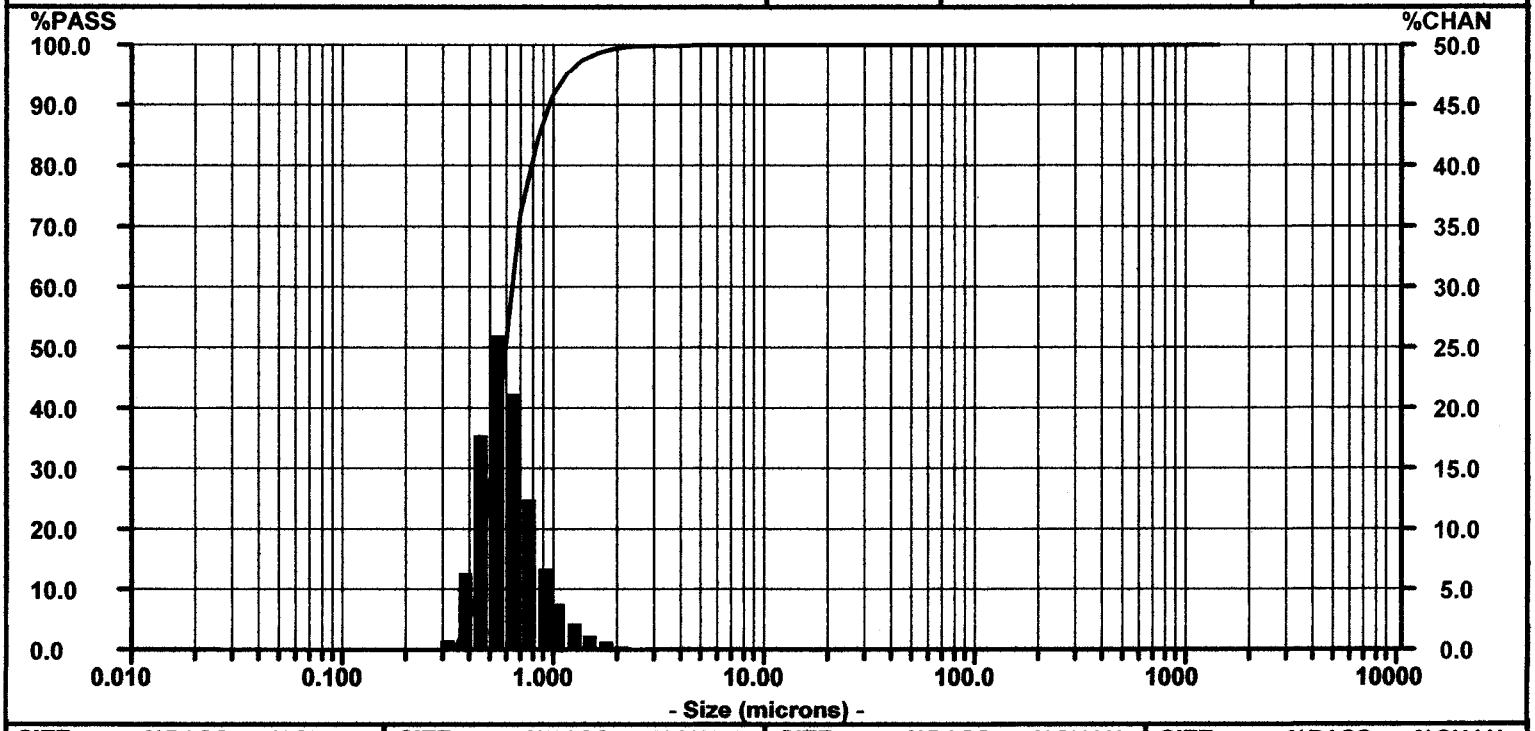
Particle Size Analysis

3-205888
C1-UF-W1-22-Wet

Date: 02/04/04 Meas #: 811
Time: 14:53 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.432	10% = 0.424	60% = 0.618	0.574	100%	0.357
mn = 0.648	20% = 0.468	70% = 0.673			
ma = 0.987	30% = 0.504	80% = 0.757			
cs = 6.082	40% = 0.538	90% = 0.928			
sd = 0.179	50% = 0.574	95% = 1.136			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.06	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.90	0.15	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.75	0.32	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.43	0.65	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.78	1.23						
104.7	100.00	0.00	1.375	97.55	2.22						
88.00	100.00	0.00	1.156	95.33	3.87						
74.00	100.00	0.00	0.972	91.46	6.80						
62.23	100.00	0.00	0.818	84.66	12.42						
52.33	100.00	0.00	0.688	72.24	21.18						
44.00	100.00	0.00	0.578	51.06	26.06						
37.00	100.00	0.00	0.486	25.00	17.81						
31.11	100.00	0.00	0.409	7.19	6.42						
26.16	100.00	0.00	0.344	0.77	0.77						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0041
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

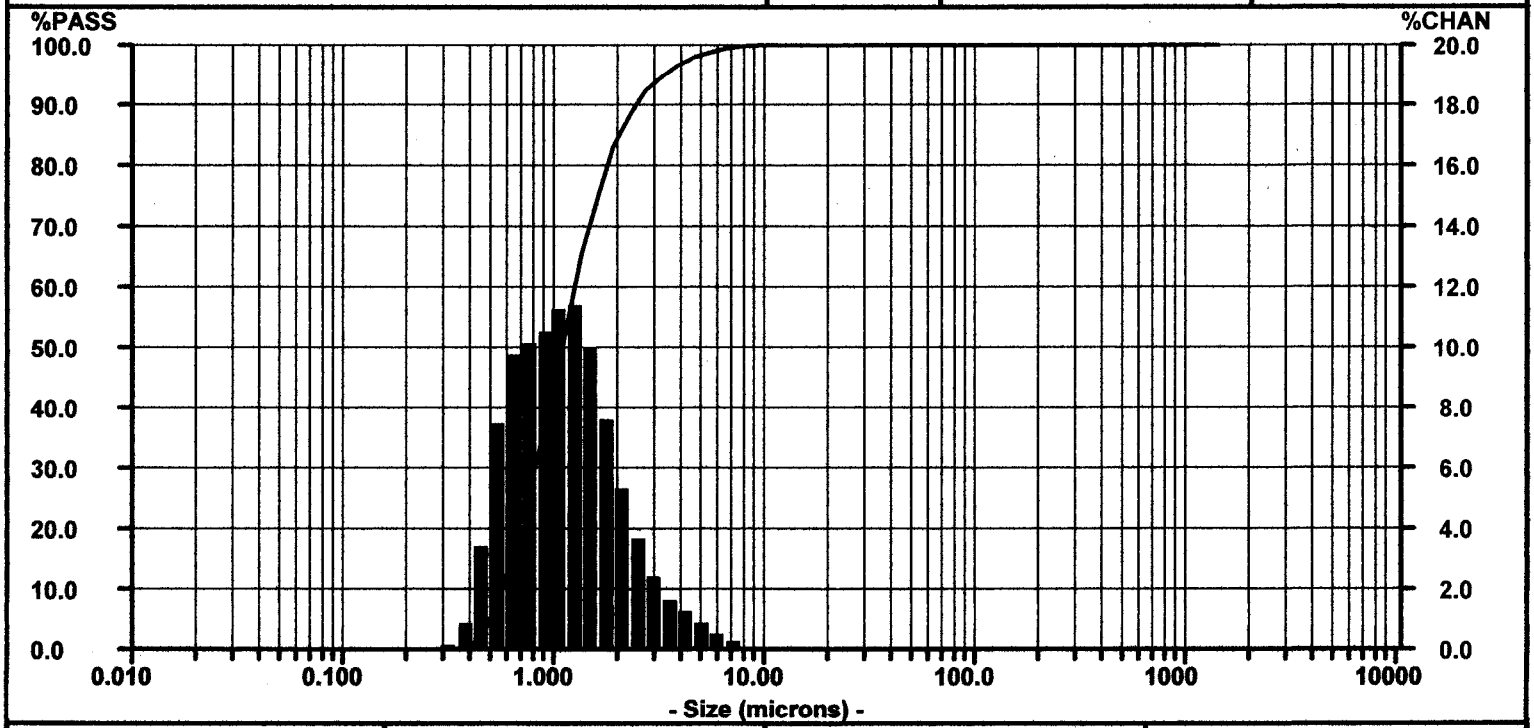
Particle Size Analysis

3-205889
C1-UF-W2-22-Wet

Date: 02/05/04 Meas #: 815
Time: 16:00 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.363	10% = 0.555	60% = 1.263	1.087	100%	1.363
mn = 0.645	20% = 0.666	70% = 1.480			
ma = 0.973	30% = 0.789	80% = 1.794			
cs = 6.164	40% = 0.931	90% = 2.438			
sd = 0.682	50% = 1.087	95% = 3.290			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.10	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.90	0.32	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.58	0.63	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	98.95	0.95	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	98.00	1.30	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	96.70	1.77	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	94.93	2.51	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	92.42	3.69	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	88.73	5.44	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	83.29	7.72	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	75.57	10.04						
104.7	100.00	0.00	1.375	65.53	11.43						
88.00	100.00	0.00	1.156	54.10	11.36						
74.00	100.00	0.00	0.972	42.74	10.63						
62.23	100.00	0.00	0.818	32.11	10.23						
52.33	100.00	0.00	0.688	21.88	9.80						
44.00	100.00	0.00	0.578	12.08	7.53						
37.00	100.00	0.00	0.486	4.55	3.52						
31.11	100.00	0.00	0.409	1.03	0.89						
26.16	100.00	0.00	0.344	0.14	0.14						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0047
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

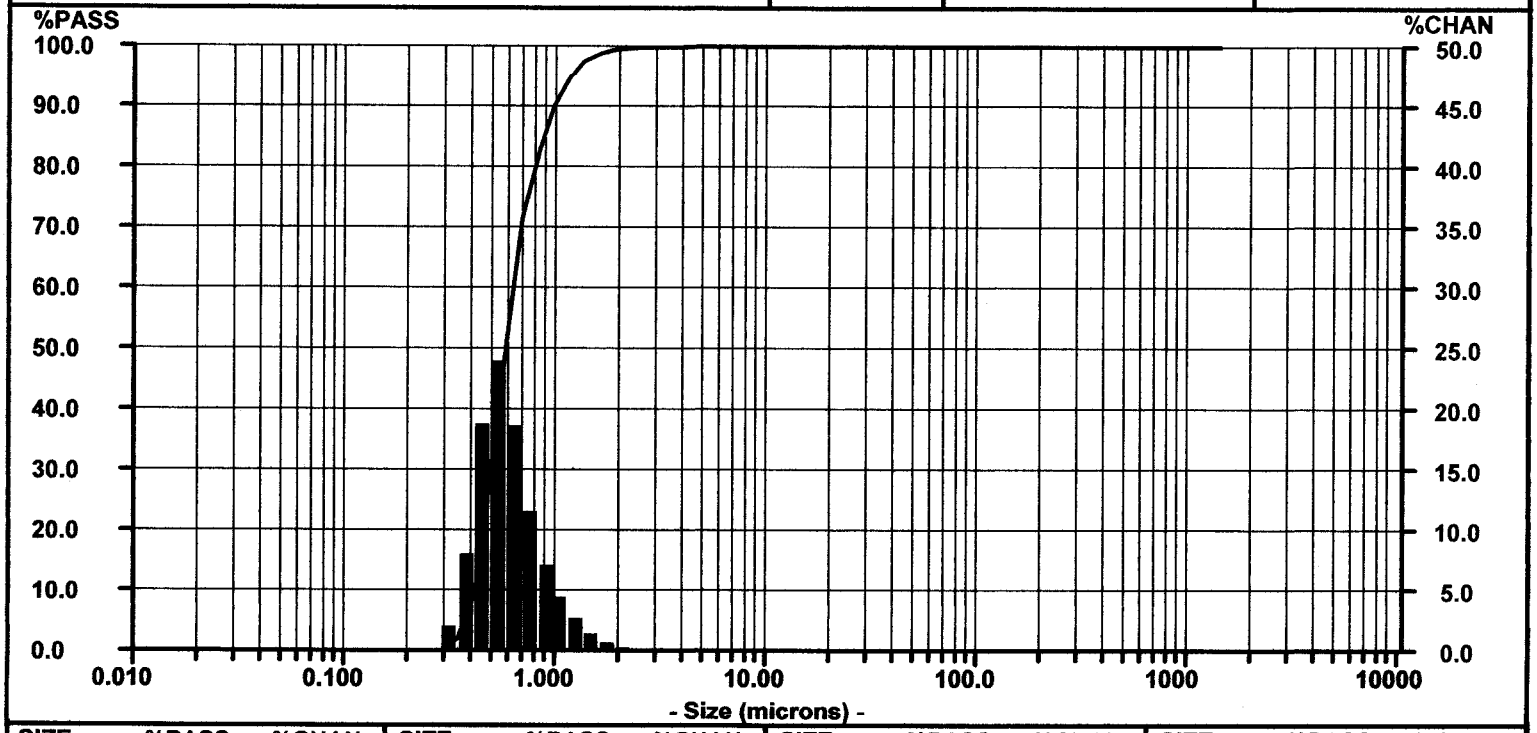
Particle Size Analysis

3-205889
C1-UF-W2-22-Wet

Date: 02/05/04 Meas #: 815
Time: 16:01 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.363	10% = 0.408	60% = 0.613	0.566	100%	0.397
mn = 0.645	20% = 0.452	70% = 0.676			
ma = 0.973	30% = 0.490	80% = 0.773			
cs = 6.164	40% = 0.526	90% = 0.965			
sd = 0.199	50% = 0.566	95% = 1.170			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.02	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.97	0.04	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.93	0.11	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.82	0.27	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.55	0.65	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.90	1.42						
104.7	100.00	0.00	1.375	97.48	2.71						
88.00	100.00	0.00	1.156	94.77	4.53						
74.00	100.00	0.00	0.972	90.24	7.11						
62.23	100.00	0.00	0.818	83.13	11.52						
52.33	100.00	0.00	0.688	71.61	18.61						
44.00	100.00	0.00	0.578	53.00	24.02						
37.00	100.00	0.00	0.486	28.98	18.84						
31.11	100.00	0.00	0.409	10.14	8.01						
26.16	100.00	0.00	0.344	2.13	2.13						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0047
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

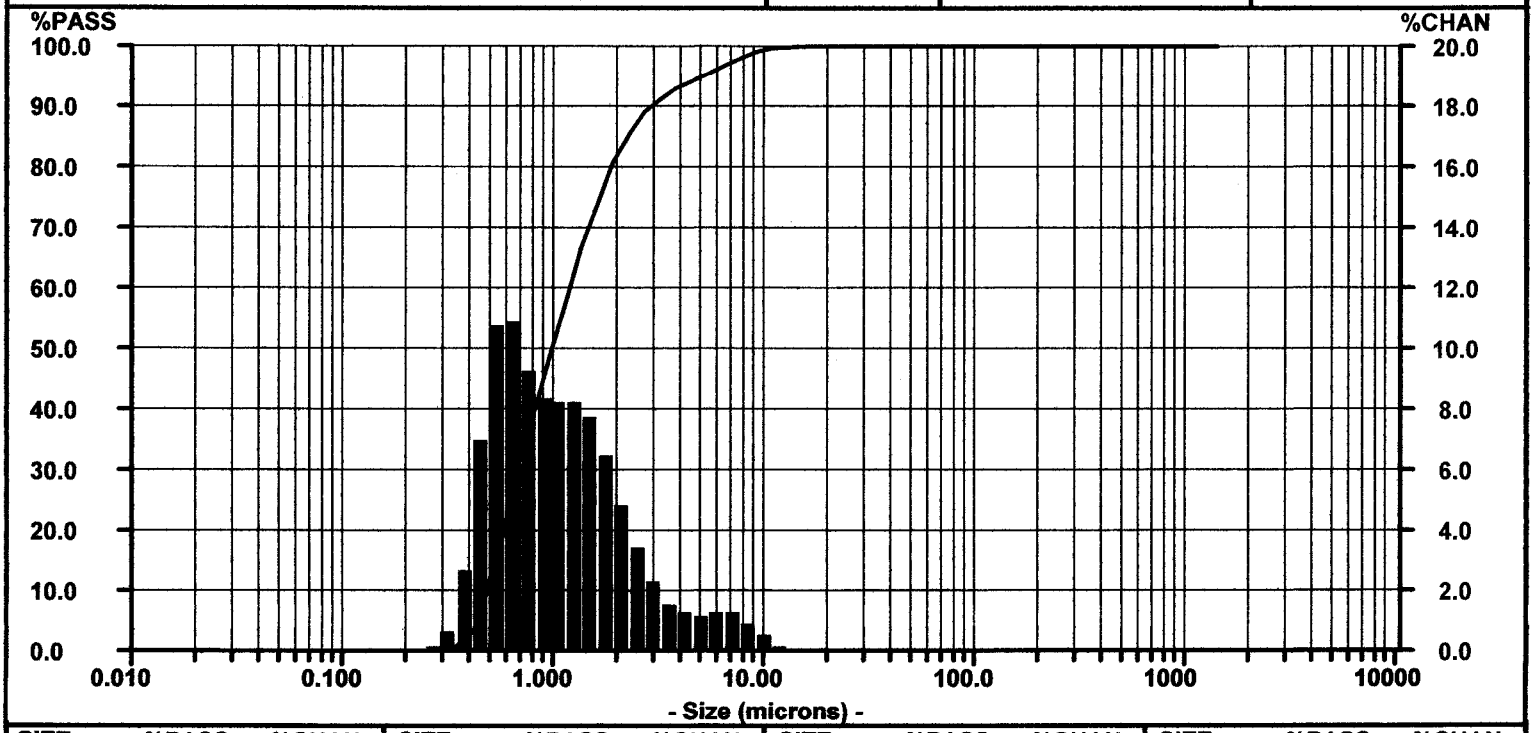
Particle Size Analysis

3-205878
C1-UF-OVER-PSD

Date: 02/10/04 Meas #: 839
Time: 11:05 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.512	10% = 0.481	60% = 1.198	0.973	100%	1.631
mn = 0.545	20% = 0.566	70% = 1.480			
ma = 0.874	30% = 0.662	80% = 1.899			
cs = 6.863	40% = 0.793	90% = 2.913			
sd = 0.815	50% = 0.973	95% = 5.023			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.04	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	99.96	0.19	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	99.77	0.56	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	99.21	1.01	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	98.20	1.27	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	96.93	1.28	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	95.65	1.24	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	94.41	1.32	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	93.09	1.64	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	91.45	2.31	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	89.14	3.42	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	85.72	4.90	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	80.82	6.47	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	74.35	7.74						
104.7	100.00	0.00	1.375	66.61	8.33						
88.00	100.00	0.00	1.156	58.28	8.33						
74.00	100.00	0.00	0.972	49.95	8.38						
62.23	100.00	0.00	0.818	41.57	9.28						
52.33	100.00	0.00	0.688	32.29	10.90						
44.00	100.00	0.00	0.578	21.39	10.82						
37.00	100.00	0.00	0.486	10.57	7.03						
31.11	100.00	0.00	0.409	3.54	2.68						
26.16	100.00	0.00	0.344	0.86	0.70						
22.00	100.00	0.00	0.289	0.16	0.16						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0050
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

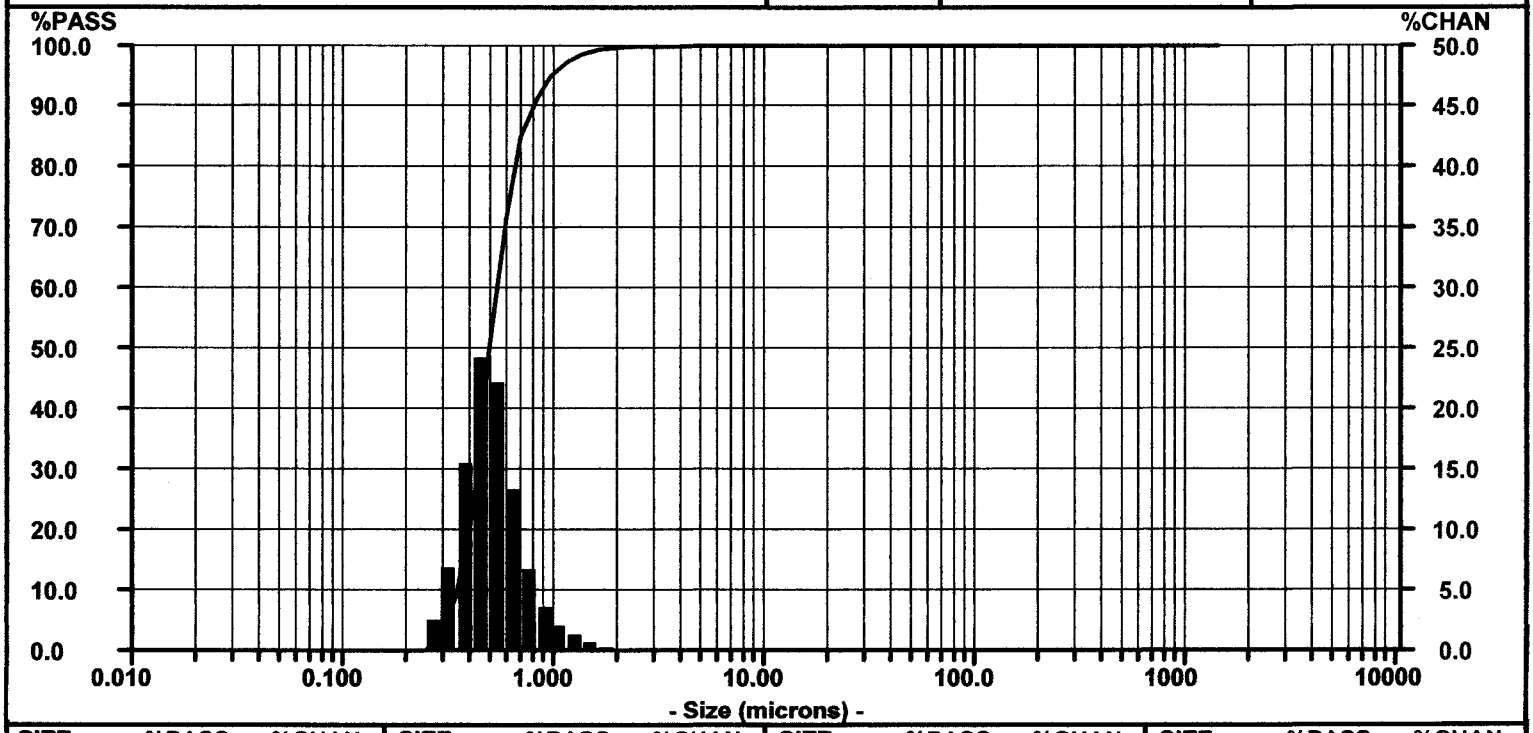
Particle Size Analysis

3-205878
C1-UF-OVER-PSD

Date: 02/10/04 Meas #: 839
Time: 11:05 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.512	10% = 0.347	60% = 0.525	0.488	100%	0.303
mn = 0.545	20% = 0.390	70% = 0.570			
ma = 0.874	30% = 0.425	80% = 0.637			
cs = 6.863	40% = 0.456	90% = 0.775			
sd = 0.151	50% = 0.488	95% = 0.957			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.01	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.98	0.03	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.95	0.07	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.88	0.16	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.72	0.35	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	99.37	0.70						
104.7	100.00	0.00	1.375	98.67	1.27						
88.00	100.00	0.00	1.156	97.40	2.14						
74.00	100.00	0.00	0.972	95.26	3.62						
62.23	100.00	0.00	0.818	91.64	6.74						
52.33	100.00	0.00	0.688	84.90	13.35						
44.00	100.00	0.00	0.578	71.55	22.25						
37.00	100.00	0.00	0.486	49.30	24.25						
31.11	100.00	0.00	0.409	25.05	15.56						
26.16	100.00	0.00	0.344	9.49	6.86						
22.00	100.00	0.00	0.289	2.63	2.63						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0050
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

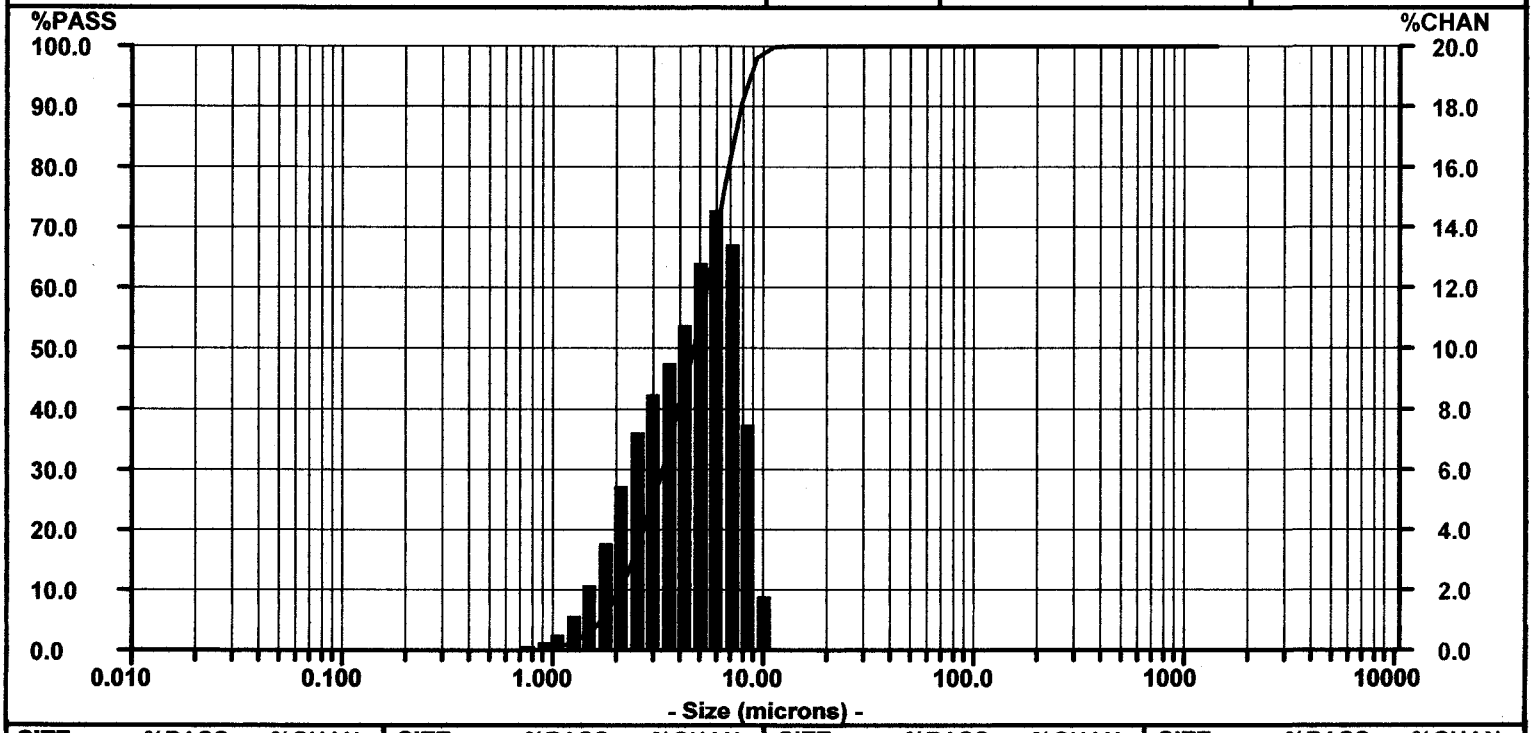
Particle Size Analysis

3-205960
PPT-SRTC

Date: 02/12/04 Meas #: 843
Time: 13:53 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 4.784	10% = 2.081	60% = 5.328	4.646	100%	4.637
mn = 1.932	20% = 2.700	70% = 6.014			
ma = 3.700	30% = 3.309	80% = 6.762			
cs = 1.621	40% = 3.964	90% = 7.707			
sd = 2.319	50% = 4.646	95% = 8.451			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.11	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	99.89	1.78	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	98.11	7.48	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	90.63	13.44	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	77.19	14.67	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	62.52	12.83	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	49.69	10.80	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	38.89	9.51	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	29.38	8.55	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	20.83	7.26	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	13.57	5.50	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	8.07	3.66	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	4.41	2.18						
104.7	100.00	0.00	1.375	2.23	1.17						
88.00	100.00	0.00	1.156	1.06	0.58						
74.00	100.00	0.00	0.972	0.48	0.28						
62.23	100.00	0.00	0.818	0.20	0.14						
52.33	100.00	0.00	0.688	0.06	0.06						
44.00	100.00	0.00	0.578	0.00	0.00						
37.00	100.00	0.00	0.486	0.00	0.00						
31.11	100.00	0.00	0.409	0.00	0.00						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0115
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

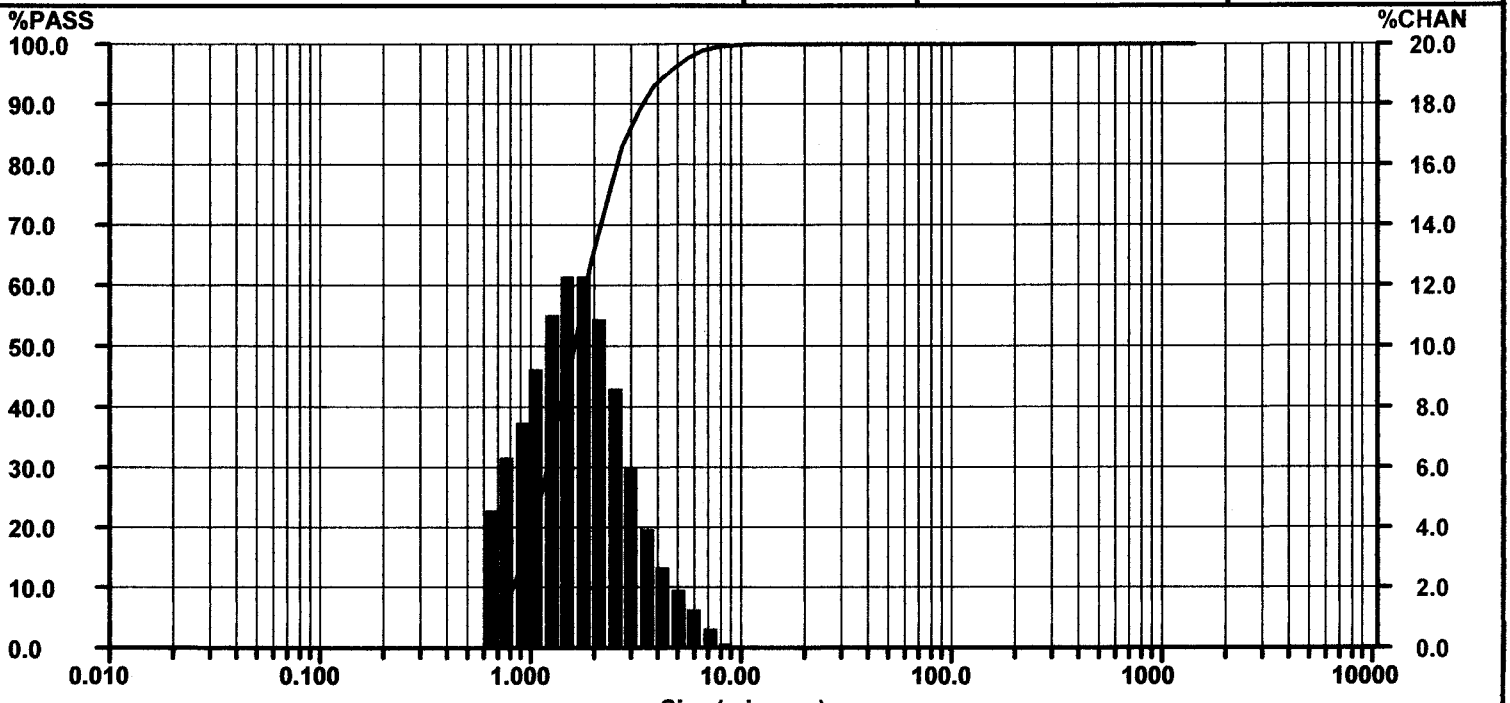
Particle Size Analysis

3-205960
PPT-SRTC

Date: 02/12/04 Meas #: 843
Time: 13:57 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 4.784	10% = 0.799	60% = 1.850	1.609	100%	1.891
mn = 1.932	20% = 1.004	70% = 2.148			
ma = 3.700	30% = 1.201	80% = 2.570			
cs = 1.621	40% = 1.399	90% = 3.379			
sd = 0.946	50% = 1.609	95% = 4.359			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.03	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	99.97	0.23	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.74	0.71	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.03	1.30	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	97.73	1.91	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	95.82	2.70	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	93.12	4.00	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	89.12	6.04	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	83.08	8.63	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	74.45	10.99	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	63.46	12.31	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	51.15	12.33						
104.7	100.00	0.00	1.375	38.82	11.12						
88.00	100.00	0.00	1.156	27.70	9.28						
74.00	100.00	0.00	0.972	18.42	7.52						
62.23	100.00	0.00	0.818	10.90	6.33						
52.33	100.00	0.00	0.688	4.57	4.57						
44.00	100.00	0.00	0.578	0.00	0.00						
37.00	100.00	0.00	0.486	0.00	0.00						
31.11	100.00	0.00	0.409	0.00	0.00						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0115
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

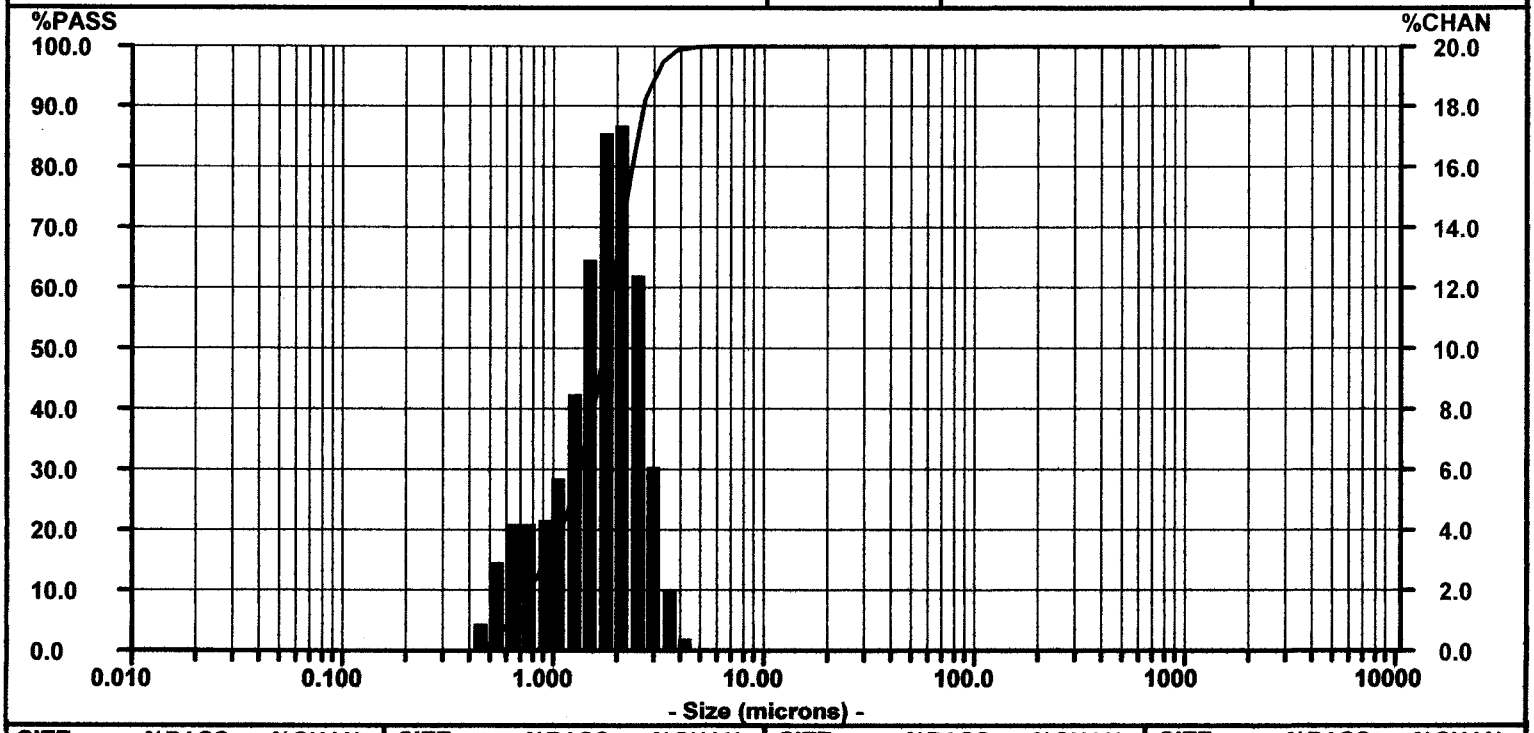
Particle Size Analysis

3-205958
NAS-SRTC

Date: 02/10/04 Meas #: 827
Time: 10:19 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.751	10% = 0.738	60% = 1.920	1.739	100%	1.526
mn = 0.809	20% = 1.074	70% = 2.114			
ma = 1.395	30% = 1.347	80% = 2.347			
cs = 4.301	40% = 1.555	90% = 2.693			
sd = 0.763	50% = 1.739	95% = 3.002			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.06	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.94	0.50	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.44	2.08	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	97.36	6.12	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	91.24	12.49	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	78.75	17.40	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	61.35	17.12	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	44.23	13.00						
104.7	100.00	0.00	1.375	31.23	8.58						
88.00	100.00	0.00	1.156	22.65	5.70						
74.00	100.00	0.00	0.972	16.95	4.43						
62.23	100.00	0.00	0.818	12.52	4.24						
52.33	100.00	0.00	0.688	8.28	4.23						
44.00	100.00	0.00	0.578	4.05	2.98						
37.00	100.00	0.00	0.486	1.07	0.96						
31.11	100.00	0.00	0.409	0.11	0.11						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0058
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

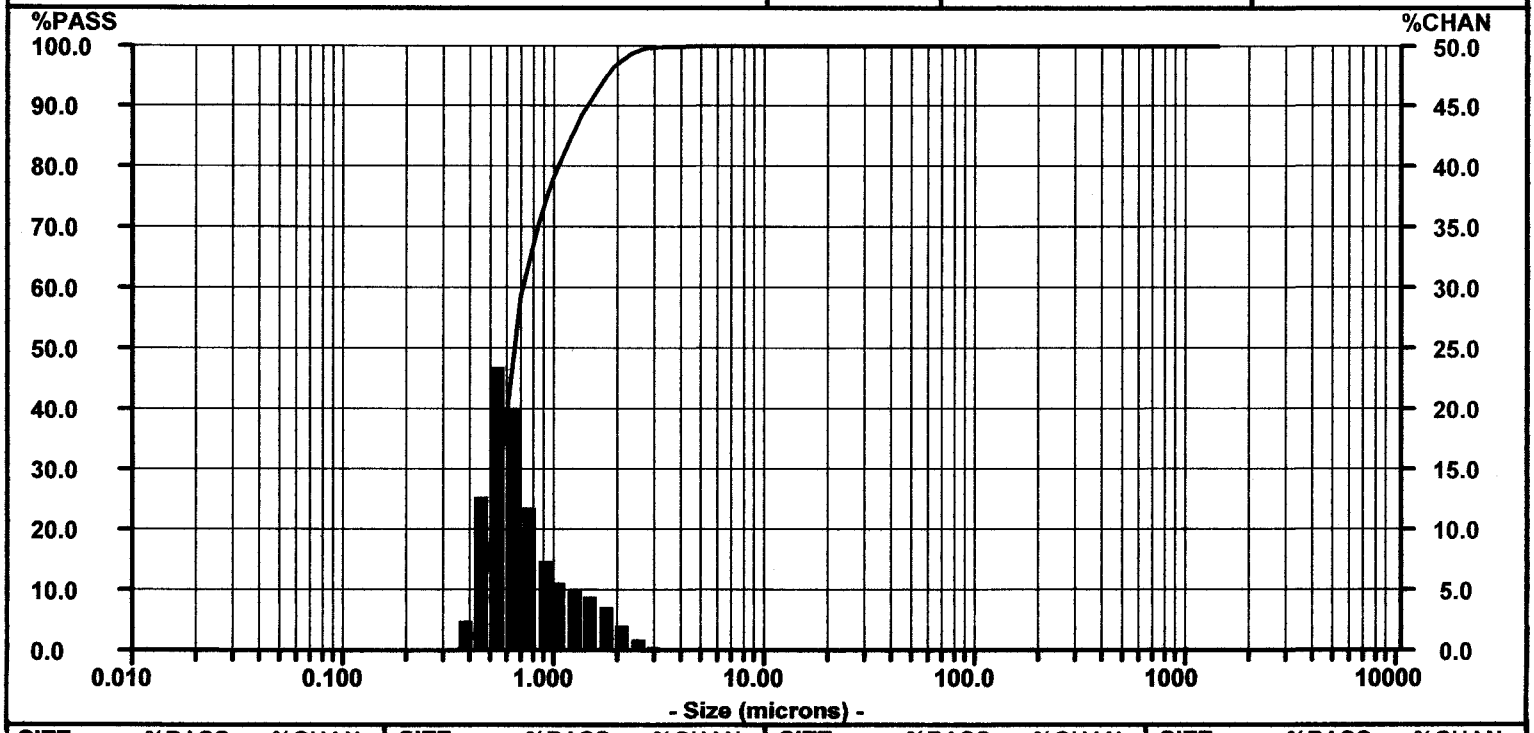
Particle Size Analysis

3-205958
NAS-SRTC

Date: 02/10/04 Meas #: 827
Time: 10:20 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.751	10% = 0.461	60% = 0.699	0.632	100%	0.687
mn = 0.809	20% = 0.506	70% = 0.811			
ma = 1.395	30% = 0.544	80% = 1.036			
cs = 4.301	40% = 0.584	90% = 1.452			
sd = 0.344	50% = 0.632	95% = 1.784			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.05	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.94	0.27	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.67	0.92	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	98.75	2.15	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	96.60	3.56	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	93.04	4.54						
104.7	100.00	0.00	1.375	88.50	5.04						
88.00	100.00	0.00	1.156	83.46	5.63						
74.00	100.00	0.00	0.972	77.83	7.35						
62.23	100.00	0.00	0.818	70.48	11.83						
52.33	100.00	0.00	0.688	58.65	19.91						
44.00	100.00	0.00	0.578	38.74	23.54						
37.00	100.00	0.00	0.486	15.20	12.74						
31.11	100.00	0.00	0.409	2.46	2.46						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0058
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

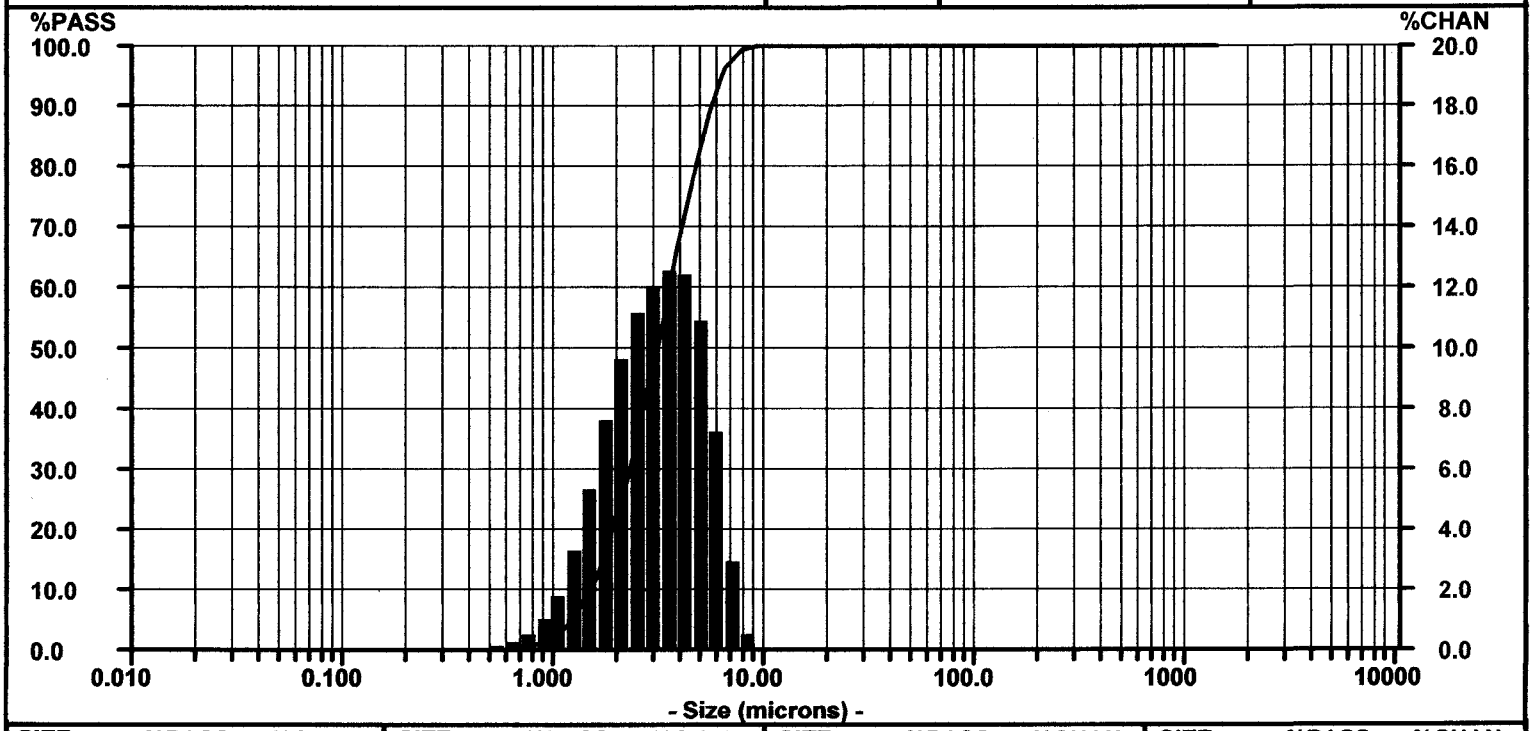
Particle Size Analysis

3-205959
NAS-OPTIMA

Date: 02/10/04 Meas #: 831
Time: 10:30 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 3.365	10% = 1.515	60% = 3.597	3.130	100%	3.261
mn = 1.421	20% = 1.936	70% = 4.123			
ma = 2.612	30% = 2.315	80% = 4.746			
cs = 2.297	40% = 2.706	90% = 5.586			
sd = 1.631	50% = 3.130	95% = 6.245			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.53	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.47	2.94	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	96.53	7.31	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	89.22	10.97	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	78.25	12.53	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	65.72	12.59	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	53.13	12.05	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	41.08	11.15	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	29.93	9.69	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	20.24	7.63	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	12.61	5.34						
104.7	100.00	0.00	1.375	7.27	3.30						
88.00	100.00	0.00	1.156	3.97	1.86						
74.00	100.00	0.00	0.972	2.11	1.03						
62.23	100.00	0.00	0.818	1.08	0.60						
52.33	100.00	0.00	0.688	0.48	0.34						
44.00	100.00	0.00	0.578	0.14	0.14						
37.00	100.00	0.00	0.486	0.00	0.00						
31.11	100.00	0.00	0.409	0.00	0.00						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0105
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

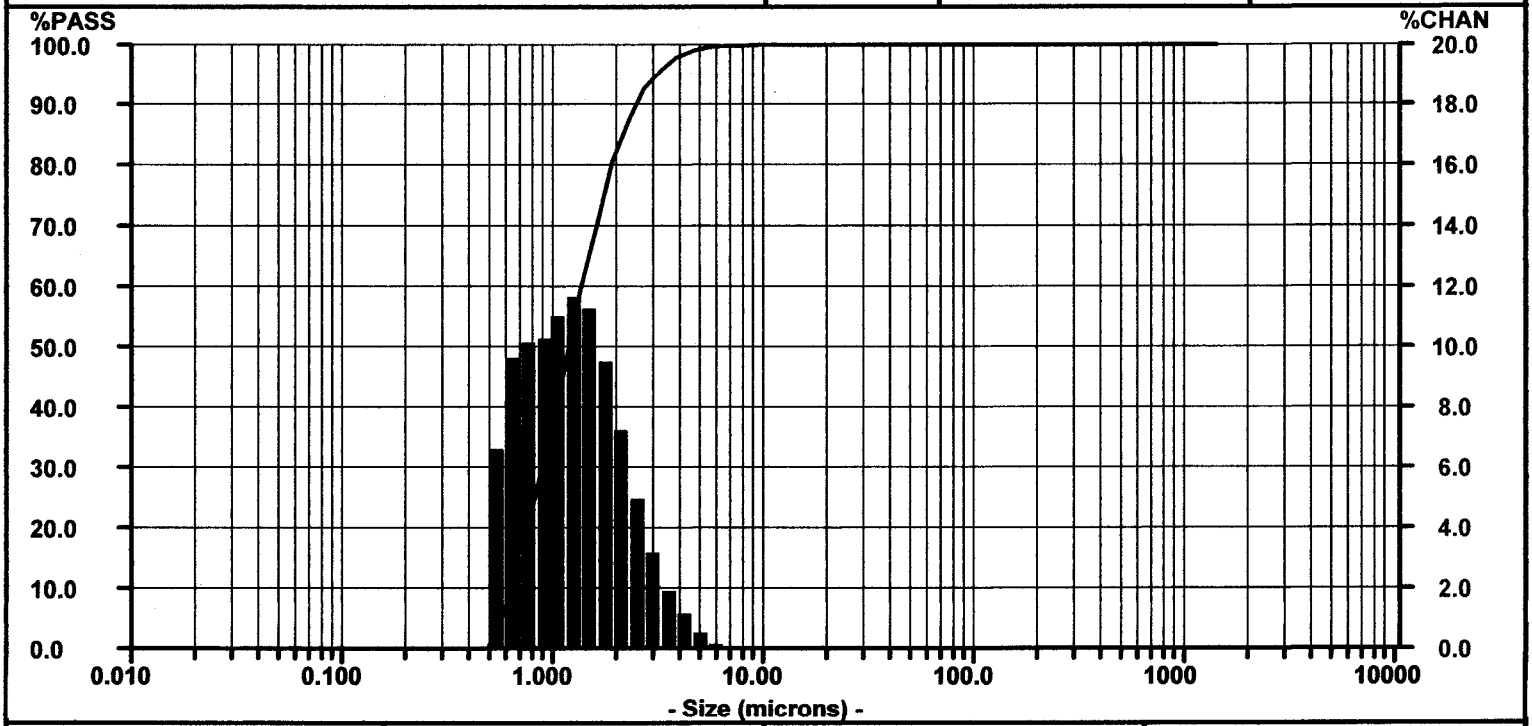
Particle Size Analysis

3-205959
NAS-OPTIMA

Date: 02/10/04 Meas #: 831
Time: 10:30 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 3.365	10% = 0.615	60% = 1.381	1.192	100%	1.414
mn = 1.421	20% = 0.732	70% = 1.610			
ma = 2.612	30% = 0.868	80% = 1.923			
cs = 2.297	40% = 1.022	90% = 2.478			
sd = 0.707	50% = 1.192	95% = 3.083			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.01	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.99	0.06	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.93	0.24	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.69	0.61	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.08	1.17	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	97.91	1.98	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	95.93	3.18	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	92.75	4.95	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	87.80	7.23	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	80.57	9.59	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	70.98	11.29						
104.7	100.00	0.00	1.375	59.69	11.72						
88.00	100.00	0.00	1.156	47.97	11.12						
74.00	100.00	0.00	0.972	36.85	10.34						
62.23	100.00	0.00	0.818	26.51	10.13						
52.33	100.00	0.00	0.688	16.38	9.68						
44.00	100.00	0.00	0.578	6.70	6.70						
37.00	100.00	0.00	0.486	0.00	0.00						
31.11	100.00	0.00	0.409	0.00	0.00						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0105
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

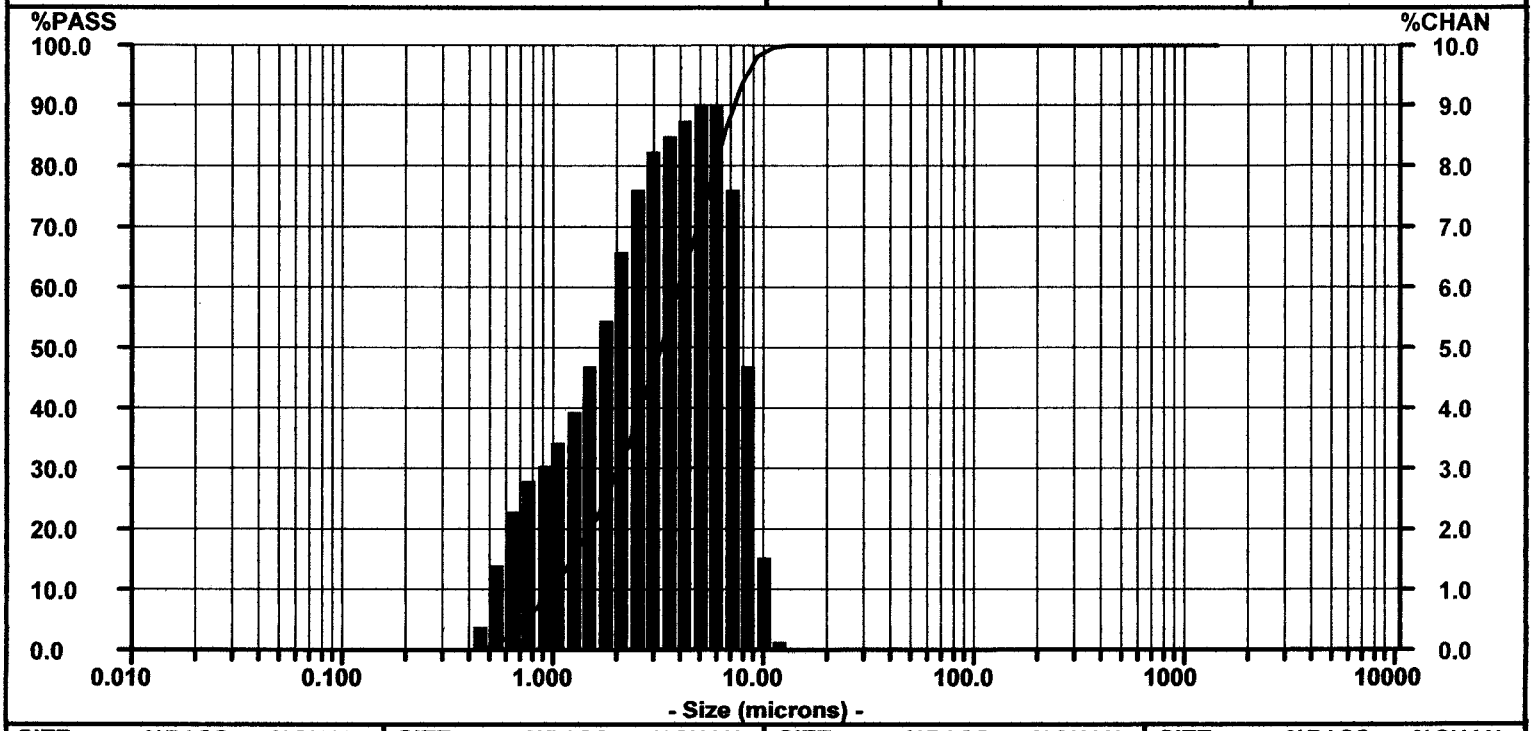
Particle Size Analysis

3-205961
PPT-OPTIMA

Date: 02/10/04 Meas #: 835
Time: 10:42 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 3.708	10% = 0.963	60% = 3.963	3.235	100%	5.021
mn = 0.835	20% = 1.502	70% = 4.825			
ma = 2.177	30% = 2.060	80% = 5.838			
cs = 2.756	40% = 2.620	90% = 7.135			
sd = 2.511	50% = 3.235	95% = 8.114			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.19	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	99.81	1.55	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	98.26	4.71	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	93.55	7.69	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	85.86	9.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	76.86	9.05	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	67.81	8.74	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	59.07	8.54	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	50.53	8.31	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	42.22	7.68	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	34.54	6.62	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	27.92	5.54	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	22.38	4.69						
104.7	100.00	0.00	1.375	17.69	4.03						
88.00	100.00	0.00	1.156	13.66	3.49						
74.00	100.00	0.00	0.972	10.17	3.08						
62.23	100.00	0.00	0.818	7.09	2.80						
52.33	100.00	0.00	0.688	4.29	2.35						
44.00	100.00	0.00	0.578	1.94	1.43						
37.00	100.00	0.00	0.486	0.51	0.48						
31.11	100.00	0.00	0.409	0.03	0.03						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0066
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

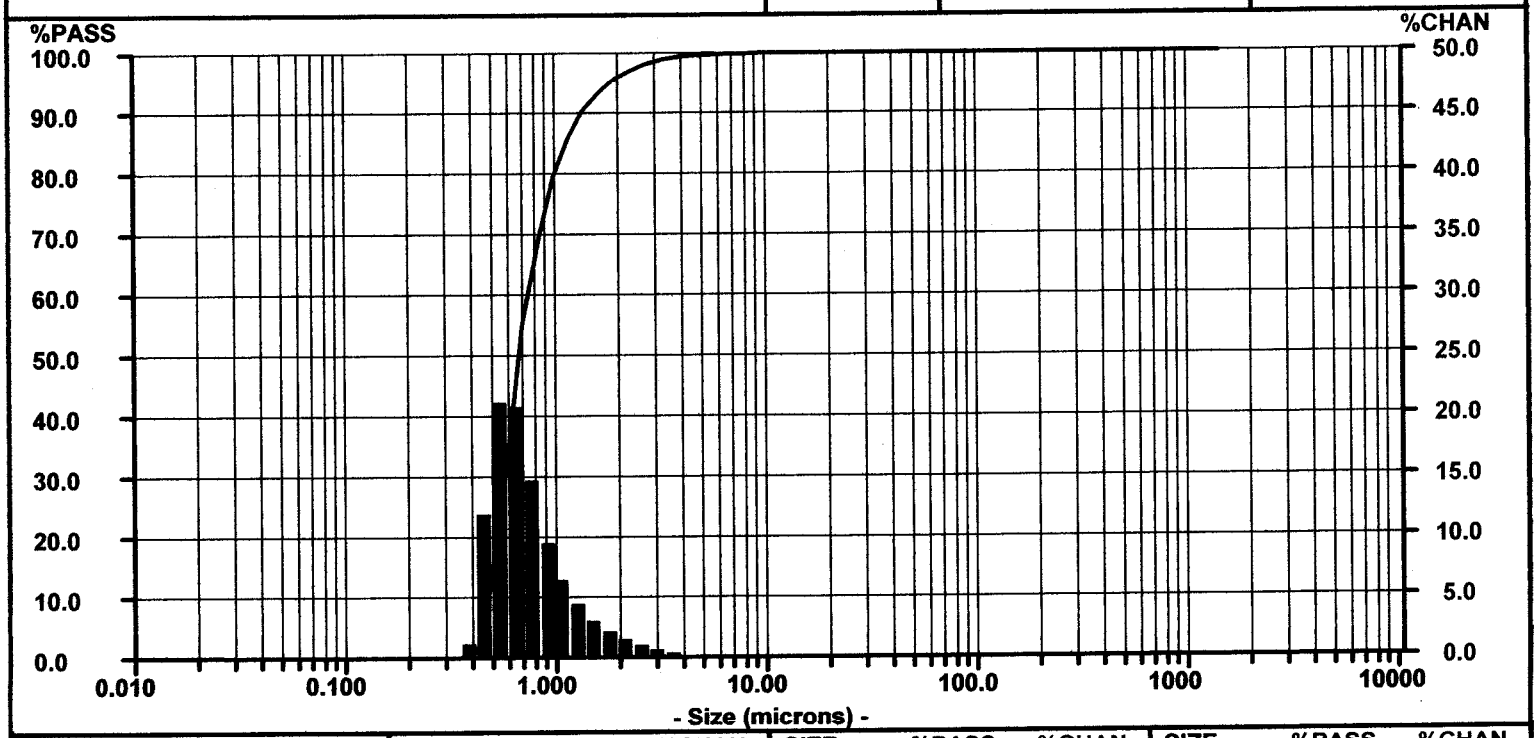
Particle Size Analysis

3-205961
PPT-OPTIMA

Date: 02/10/04 Meas #: 835
Time: 10:42 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 3.708	10% = 0.470	60% = 0.722	0.655	100%	0.588
mn = 0.835	20% = 0.516	70% = 0.818			
ma = 2.177	30% = 0.559	80% = 0.982			
cs = 2.756	40% = 0.604	90% = 1.345			
sd = 0.294	50% = 0.655	95% = 1.821			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.02	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.98	0.05	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.93	0.09	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.84	0.16	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.68	0.25	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.43	0.42	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.01	0.68	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	98.33	1.06	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	97.27	1.54	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	95.73	2.16	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	93.57	3.08						
104.7	100.00	0.00	1.375	90.49	4.45						
88.00	100.00	0.00	1.156	86.04	6.48						
74.00	100.00	0.00	0.972	79.56	9.60						
62.23	100.00	0.00	0.818	69.96	14.69						
52.33	100.00	0.00	0.688	55.27	20.79						
44.00	100.00	0.00	0.578	34.48	21.25						
37.00	100.00	0.00	0.486	13.23	11.97						
31.11	100.00	0.00	0.409	1.26	1.26						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0066
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Particle-Size Distribution Data from SIPP Campaign II

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

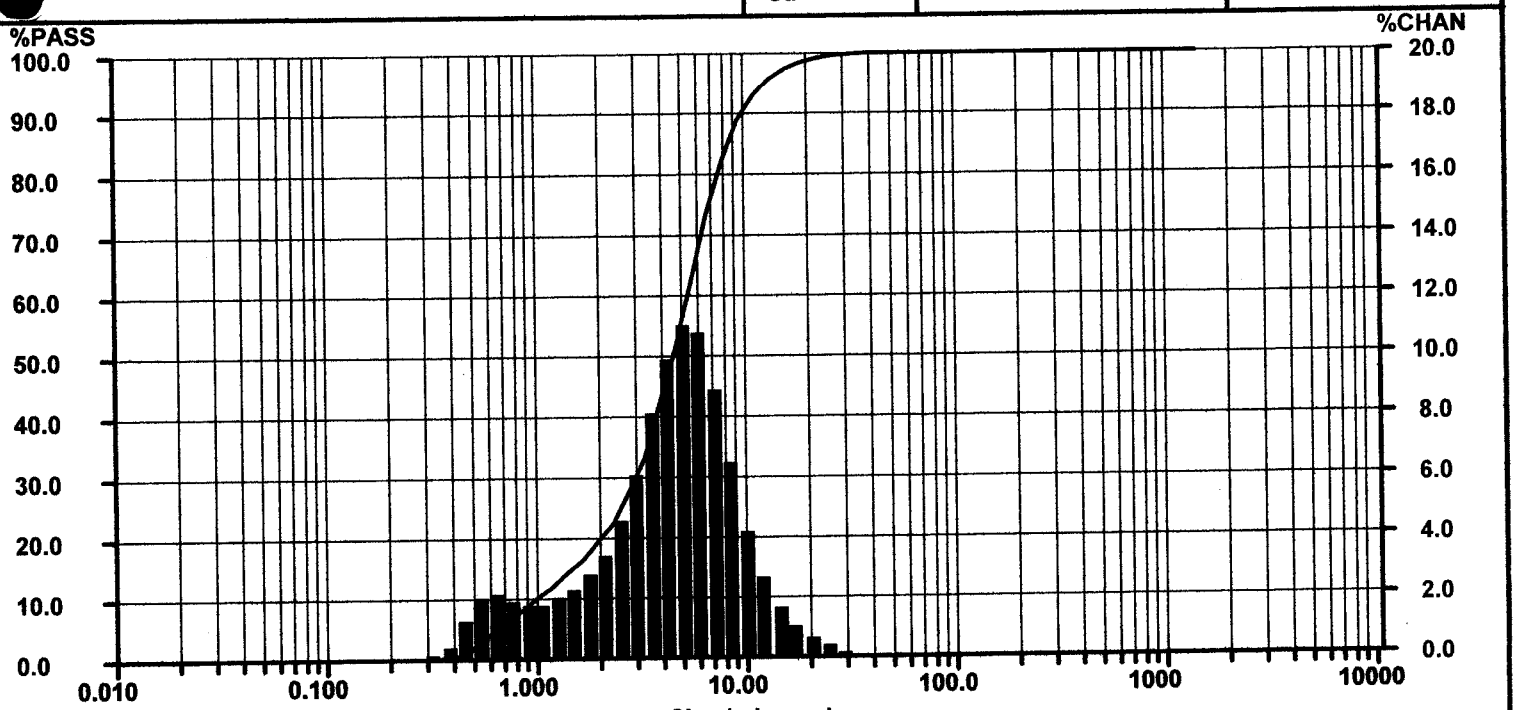
Particle Size Analysis

3-207807
C2-UF-start-as-wet

Date: 04/19/04 Meas #: 1023
Time: 15:21 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%

Summary	Percentiles		Dia	Vol%	Width
mv = 5.180	10% = 0.970	60% = 5.282	4.664	96%	6.239
mn = 0.624	20% = 2.038	70% = 6.181	0.489	4%	0.140
ma = 2.475	30% = 2.990	80% = 7.398			
cs = 2.424	40% = 3.776	90% = 9.623			
sd = 3.241	50% = 4.513	95% = 12.33			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	98.60	1.10	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	97.50	1.70	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	95.80	2.68	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	93.12	4.26	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	88.86	6.49	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	82.37	8.97	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	73.40	10.77	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	62.63	11.12	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	51.51	9.99	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	41.52	8.11	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	33.41	6.17	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	27.24	4.60	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	22.64	3.50	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	19.14	2.81	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	16.33	2.37						
104.7	100.00	0.00	1.375	13.96	2.07						
88.00	100.00	0.00	1.156	11.89	1.87						
74.00	100.00	0.00	0.972	10.02	1.81						
62.23	100.00	0.00	0.818	8.21	1.95						
52.33	100.00	0.00	0.688	6.26	2.20						
44.00	100.00	0.00	0.578	4.06	2.10						
37.00	100.00	0.07	0.486	1.96	1.33						
31.11	99.93	0.20	0.409	0.63	0.50						
26.16	99.73	0.42	0.344	0.13	0.13						
22.00	99.31	0.71	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0127
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

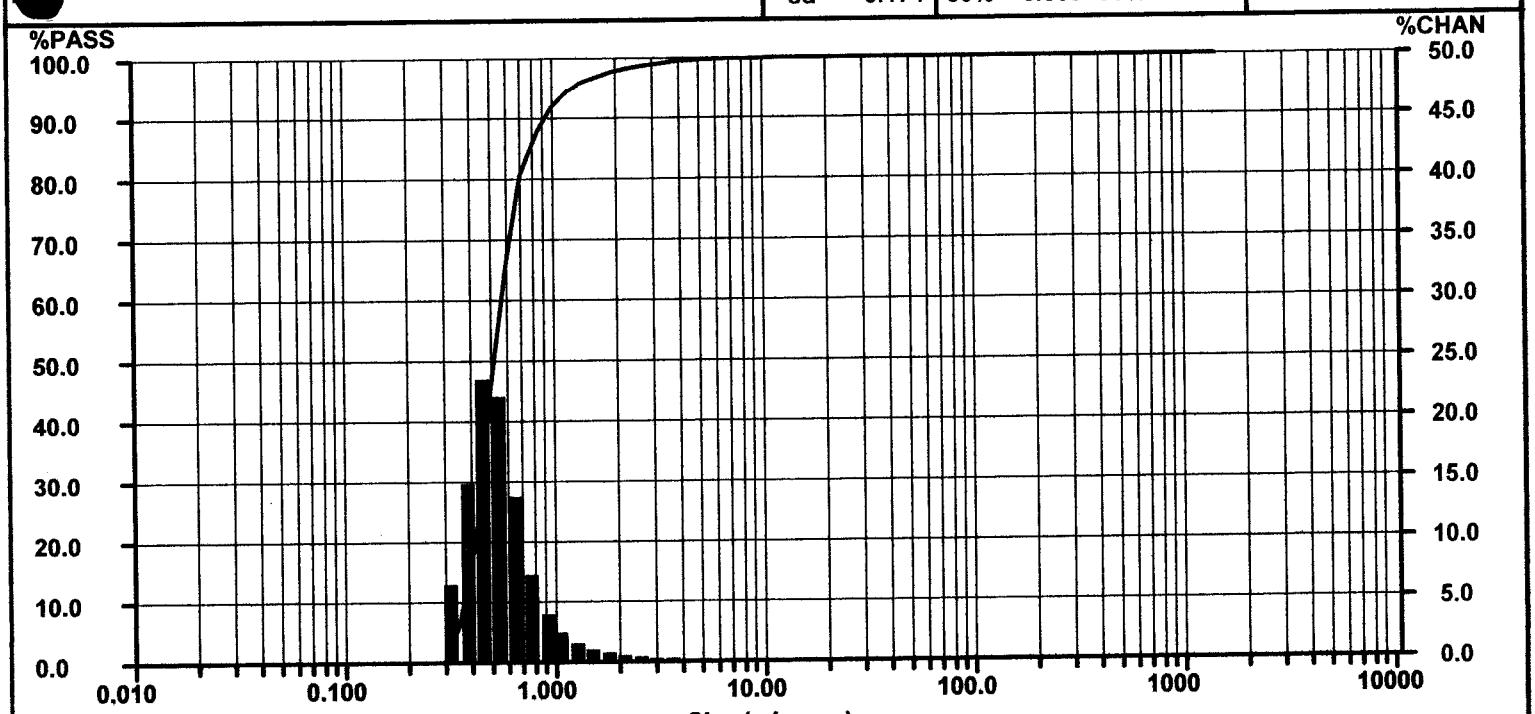
Particle Size Analysis

3-207807
C2-UF-start-as-wet

Date: 04/19/04 Meas #: 1023
Time: 15:22 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%

Summary	Percentiles		Dia	Num%	Width
mv = 5.180	10% = 0.362	60% = 0.545	0.505	100%	0.347
mn = 0.624	20% = 0.404	70% = 0.597			
ma = 2.475	30% = 0.438	80% = 0.681			
cs = 2.424	40% = 0.470	90% = 0.886			
sd = 0.174	50% = 0.505	95% = 1.229			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]4	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.01	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	99.99	0.02	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.97	0.04	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.93	0.08	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.85	0.14	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.71	0.21	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.50	0.28	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.22	0.36	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	98.86	0.45	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	98.41	0.57	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	97.84	0.78	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.06	1.10						
104.7	100.00	0.00	1.375	95.96	1.62						
88.00	100.00	0.00	1.156	94.34	2.46						
74.00	100.00	0.00	0.972	91.88	3.99						
62.23	100.00	0.00	0.818	87.89	7.24						
52.33	100.00	0.00	0.688	80.65	13.77						
44.00	100.00	0.00	0.578	66.88	22.08						
37.00	100.00	0.00	0.486	44.80	23.45						
31.11	100.00	0.00	0.409	21.35	14.84						
26.16	100.00	0.00	0.344	6.51	6.51						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0127
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

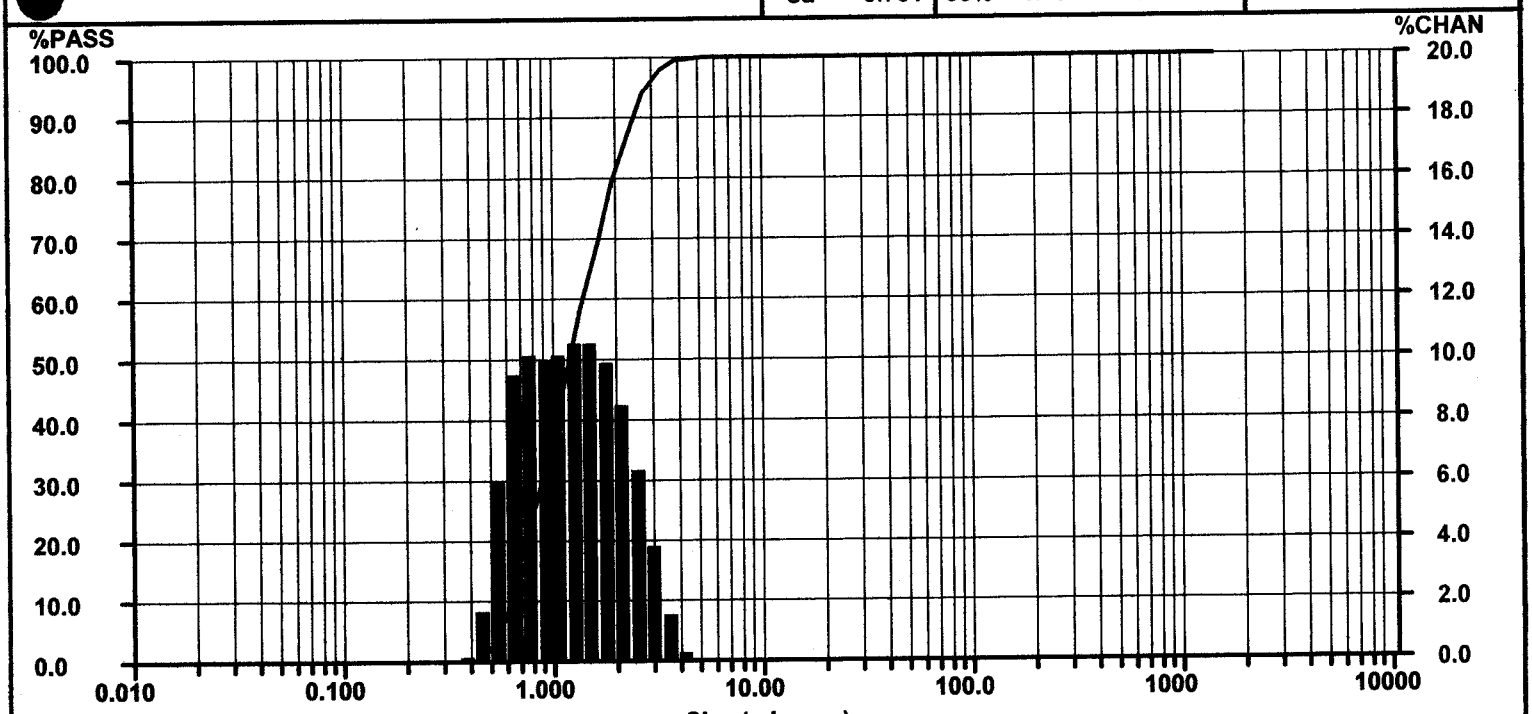
Particle Size Analysis

3-207818
C2-UF-CON2-461-Wet

Date: 08/03/04 Meas #: 1475
Time: 13:18 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
SIPP UFP Filtrate

Summary	Percentiles		Dia	Vol%	Width
mv = 1.375	10% = 0.603	60% = 1.406	1.194	100%	1.461
mn = 0.710	20% = 0.717	70% = 1.655			
ma = 1.053	30% = 0.850	80% = 1.973			
cs = 5.696	40% = 1.010	90% = 2.437			
sd = 0.731	50% = 1.194	95% = 2.829			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.01	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.99	0.37	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.62	1.59	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	98.03	3.80	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	94.23	6.40	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	87.83	8.58	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	79.25	9.97	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	69.28	10.62						
104.7	100.00	0.00	1.375	58.66	10.63						
88.00	100.00	0.00	1.156	48.03	10.24						
74.00	100.00	0.00	0.972	37.79	10.02						
62.23	100.00	0.00	0.818	27.77	10.24						
52.33	100.00	0.00	0.688	17.53	9.57						
44.00	100.00	0.00	0.578	7.96	5.97						
37.00	100.00	0.00	0.486	1.99	1.77						
31.11	100.00	0.00	0.409	0.22	0.22						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0034
Transmission: 0.98
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

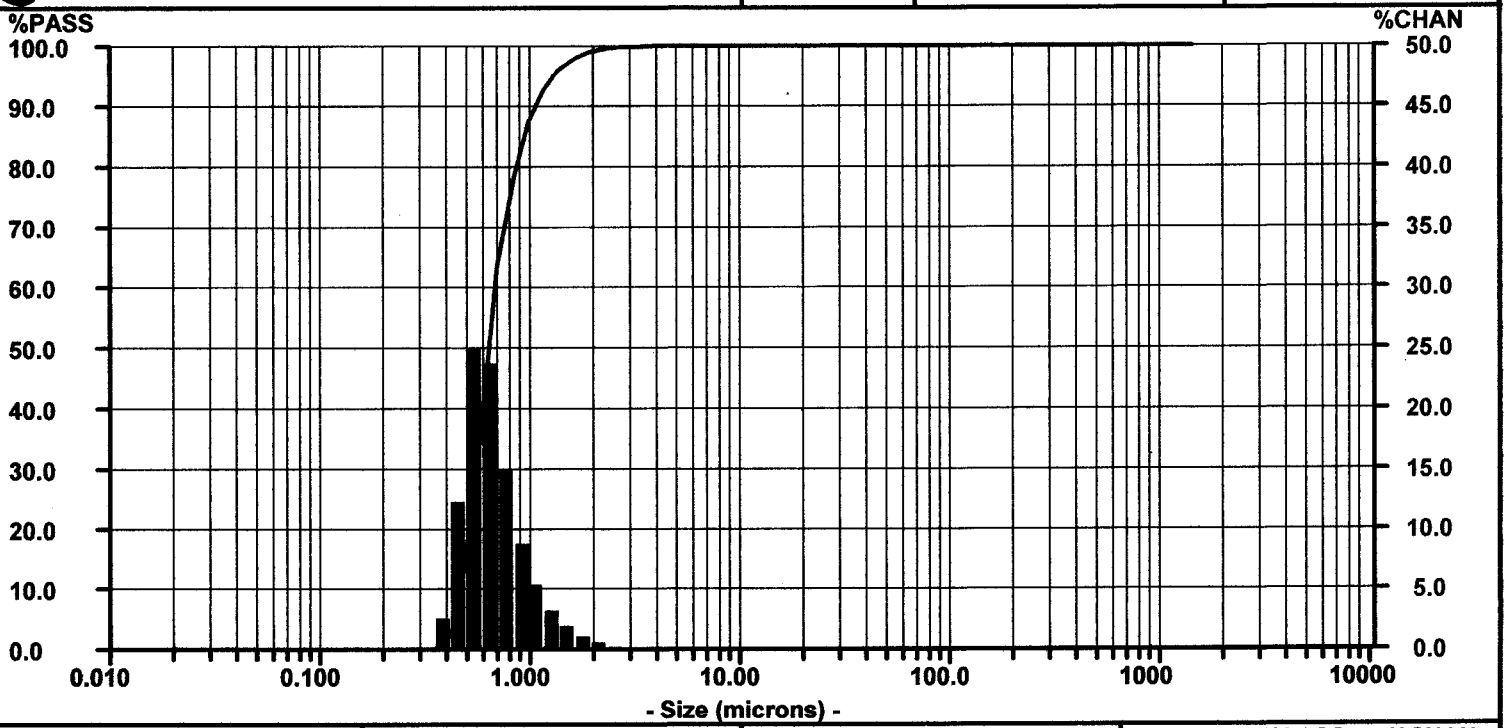
Particle Size Analysis

3-207818
C2-UF-CON2-461-Wet

Date: 08/03/04 Meas #: 1475
Time: 13:18 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
SIPP UFP Filtrate

Summary	Percentiles		Dia	Num%	Width
mv = 1.375	10% = 0.462	60% = 0.668	0.620	100%	0.409
mn = 0.710	20% = 0.506	70% = 0.733			
ma = 1.053	30% = 0.542	80% = 0.836			
cs = 5.696	40% = 0.579	90% = 1.047			
sd = 0.205	50% = 0.620	95% = 1.291			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.00	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	100.00	0.02	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.98	0.09	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.89	0.25	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.64	0.56	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.08	1.09	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.99	1.96						
104.7	100.00	0.00	1.375	96.03	3.29						
88.00	100.00	0.00	1.156	92.74	5.33						
74.00	100.00	0.00	0.972	87.41	8.76						
62.23	100.00	0.00	0.818	78.65	15.06						
52.33	100.00	0.00	0.688	63.59	23.75						
44.00	100.00	0.00	0.578	39.84	24.87						
37.00	100.00	0.00	0.486	14.97	12.38						
31.11	100.00	0.00	0.409	2.59	2.59						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0034
Transmission: 0.98
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

Particle Size Analysis

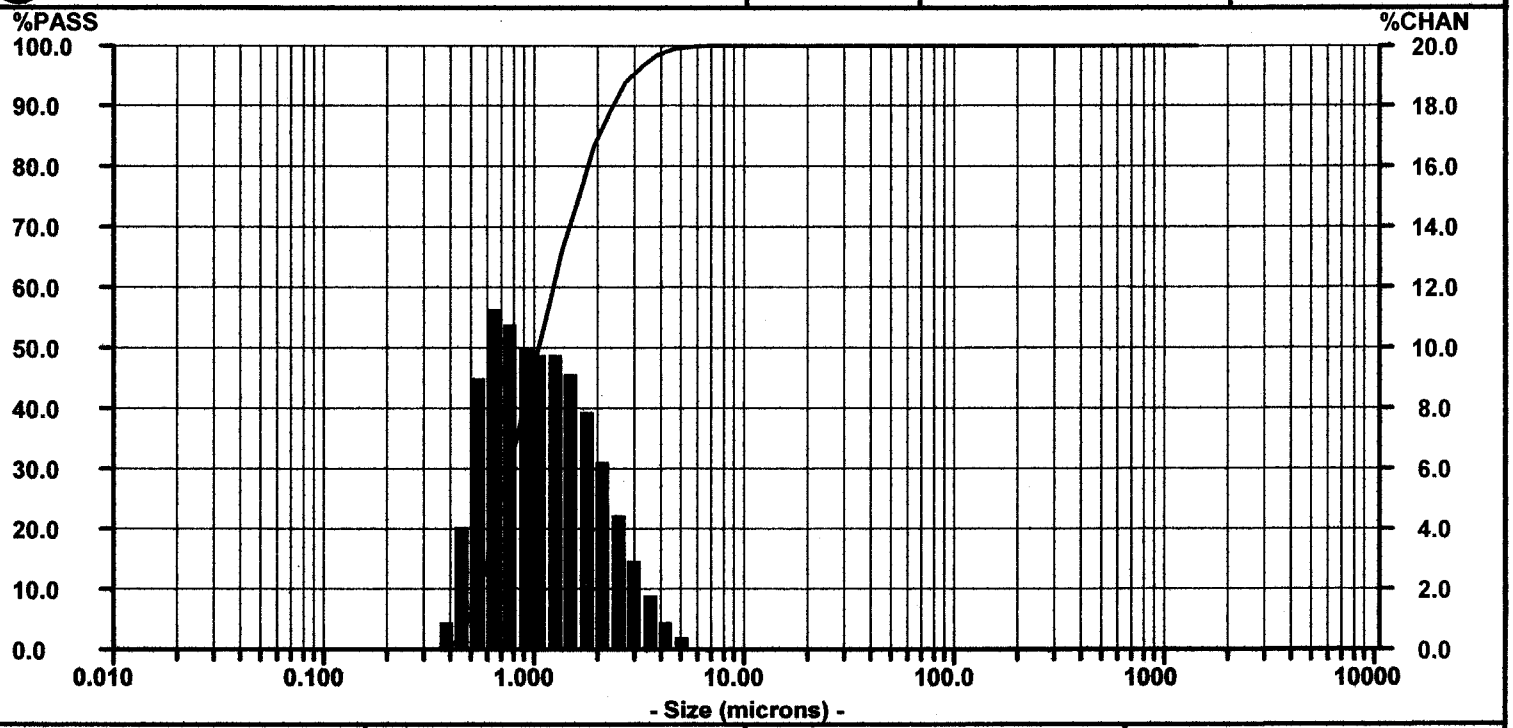
C2

3-208027
C1-UF-W1-22-Wet

Date: 05/03/04 Meas #: 1107
Time: 14:47 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.281	10% = 0.539	60% = 1.237	1.037	100%	1.391
mn = 0.630	20% = 0.633	70% = 1.479			
ma = 0.937	30% = 0.738	80% = 1.807			
cs = 6.402	40% = 0.872	90% = 2.362			
sd = 0.695	50% = 1.037	95% = 2.923			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.09	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.91	0.40	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.51	0.97	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	98.54	1.78	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.76	2.93	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	93.83	4.45	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	89.38	6.21	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	83.17	7.93	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	75.24	9.24						
104.7	100.00	0.00	1.375	66.00	9.83						
88.00	100.00	0.00	1.156	56.17	9.87						
74.00	100.00	0.00	0.972	46.30	10.02						
62.23	100.00	0.00	0.818	36.28	10.81						
52.33	100.00	0.00	0.688	25.47	11.34						
44.00	100.00	0.00	0.578	14.13	9.02						
37.00	100.00	0.00	0.486	5.11	4.07						
31.11	100.00	0.00	0.409	1.04	0.92						
26.16	100.00	0.00	0.344	0.12	0.12						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0050
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

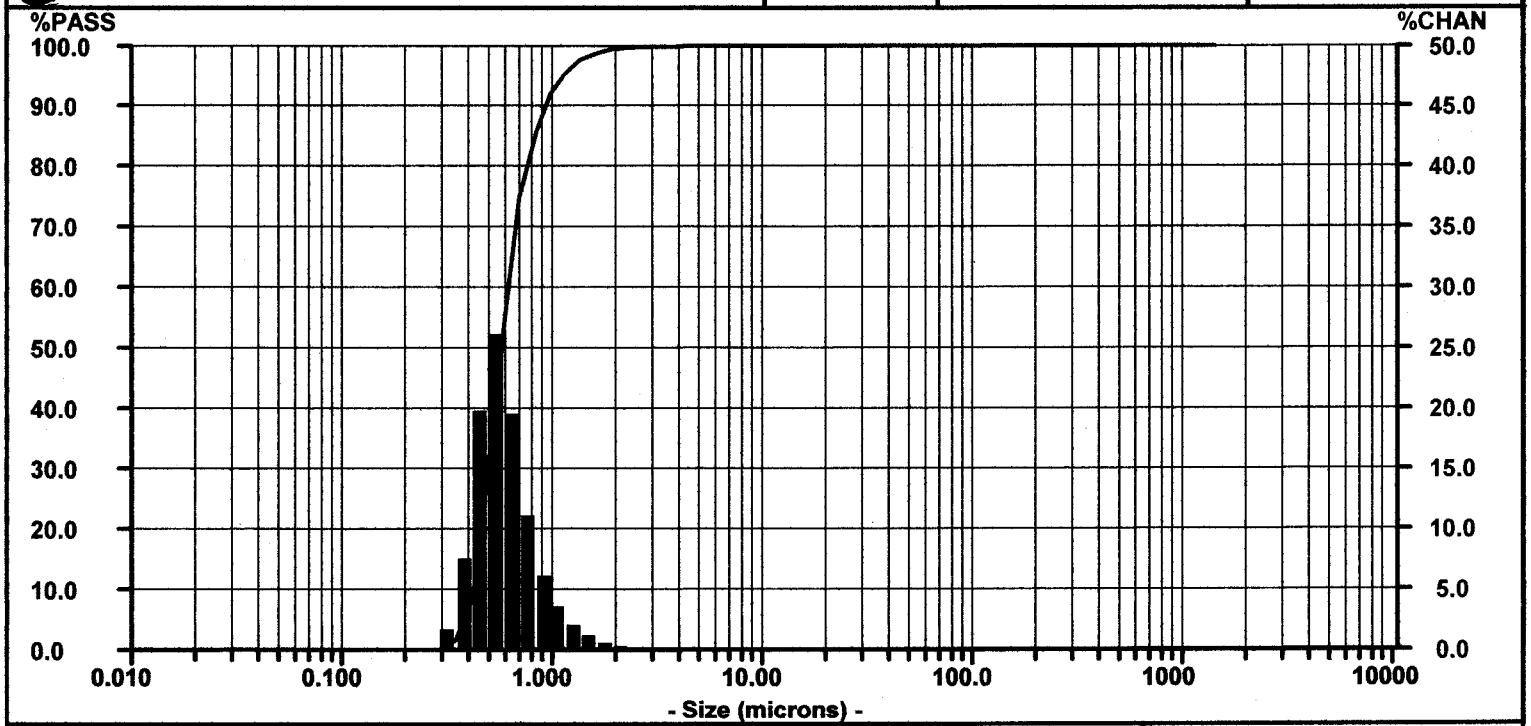
Particle Size Analysis

3-208027
~~C1~~ C2-UF-W1-22-Wet

Date: 05/03/04 Meas #: 1107
Time: 14:47 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.281	10% = 0.413	60% = 0.600	0.558	100%	0.348
mn = 0.630	20% = 0.454	70% = 0.653			
ma = 0.937	30% = 0.489	80% = 0.736			
cs = 6.402	40% = 0.523	90% = 0.908			
sd = 0.174	50% = 0.558	95% = 1.115			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.02	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.97	0.05	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.92	0.12	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.80	0.28	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.52	0.60	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.92	1.19						
104.7	100.00	0.00	1.375	97.73	2.12						
88.00	100.00	0.00	1.156	95.61	3.58						
74.00	100.00	0.00	0.972	92.03	6.10						
62.23	100.00	0.00	0.818	85.93	11.08						
52.33	100.00	0.00	0.688	74.85	19.61						
44.00	100.00	0.00	0.578	55.24	26.20						
37.00	100.00	0.00	0.486	29.04	19.84						
31.11	100.00	0.00	0.409	9.20	7.54						
26.16	100.00	0.00	0.344	1.66	1.66						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0050
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

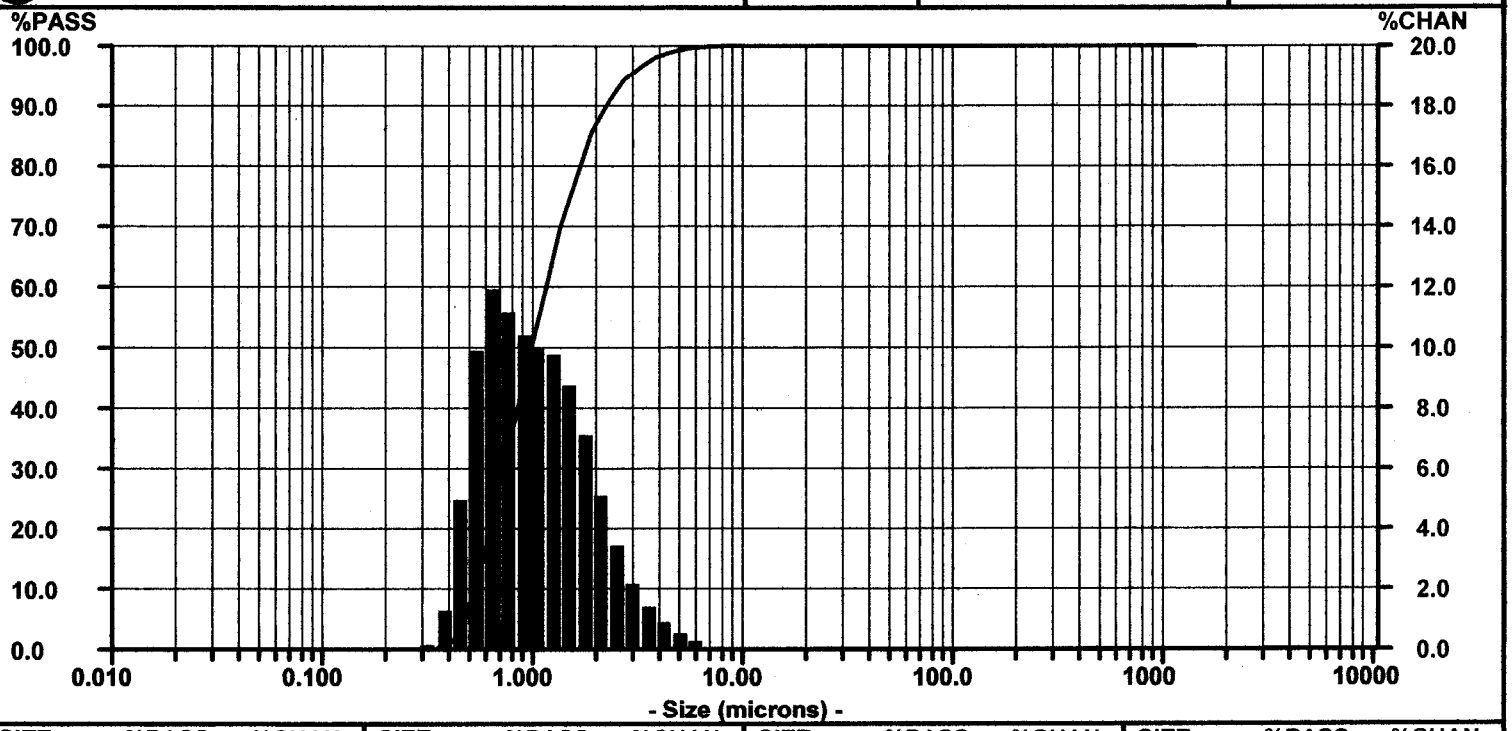
Particle Size Analysis

3-208028
C2-UF-W2-22-Wet

Date: 05/03/04 Meas #: 1111
Time: 14:58 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary		Percentiles		Dia	Vol%	Width
mv	= 1.227	10% = 0.521	60% = 1.154	0.972	100%	1.276
mn	= 0.608	20% = 0.609	70% = 1.377			
ma	= 0.892	30% = 0.705	80% = 1.682			
cs	= 6.726	40% = 0.823	90% = 2.225			
sd	= 0.638	50% = 0.972	95% = 2.857			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.06	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.94	0.27	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.67	0.59	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.08	0.96	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	98.12	1.46	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.66	2.23	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	94.43	3.44	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	90.99	5.14	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	85.85	7.10	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	78.75	8.83						
104.7	100.00	0.00	1.375	69.92	9.82						
88.00	100.00	0.00	1.156	60.10	10.11						
74.00	100.00	0.00	0.972	49.99	10.38						
62.23	100.00	0.00	0.818	39.61	11.22						
52.33	100.00	0.00	0.688	28.39	11.92						
44.00	100.00	0.00	0.578	16.47	9.94						
37.00	100.00	0.00	0.486	6.53	4.96						
31.11	100.00	0.00	0.409	1.57	1.34						
26.16	100.00	0.00	0.344	0.23	0.23						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0054
Transmission: 0.94
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

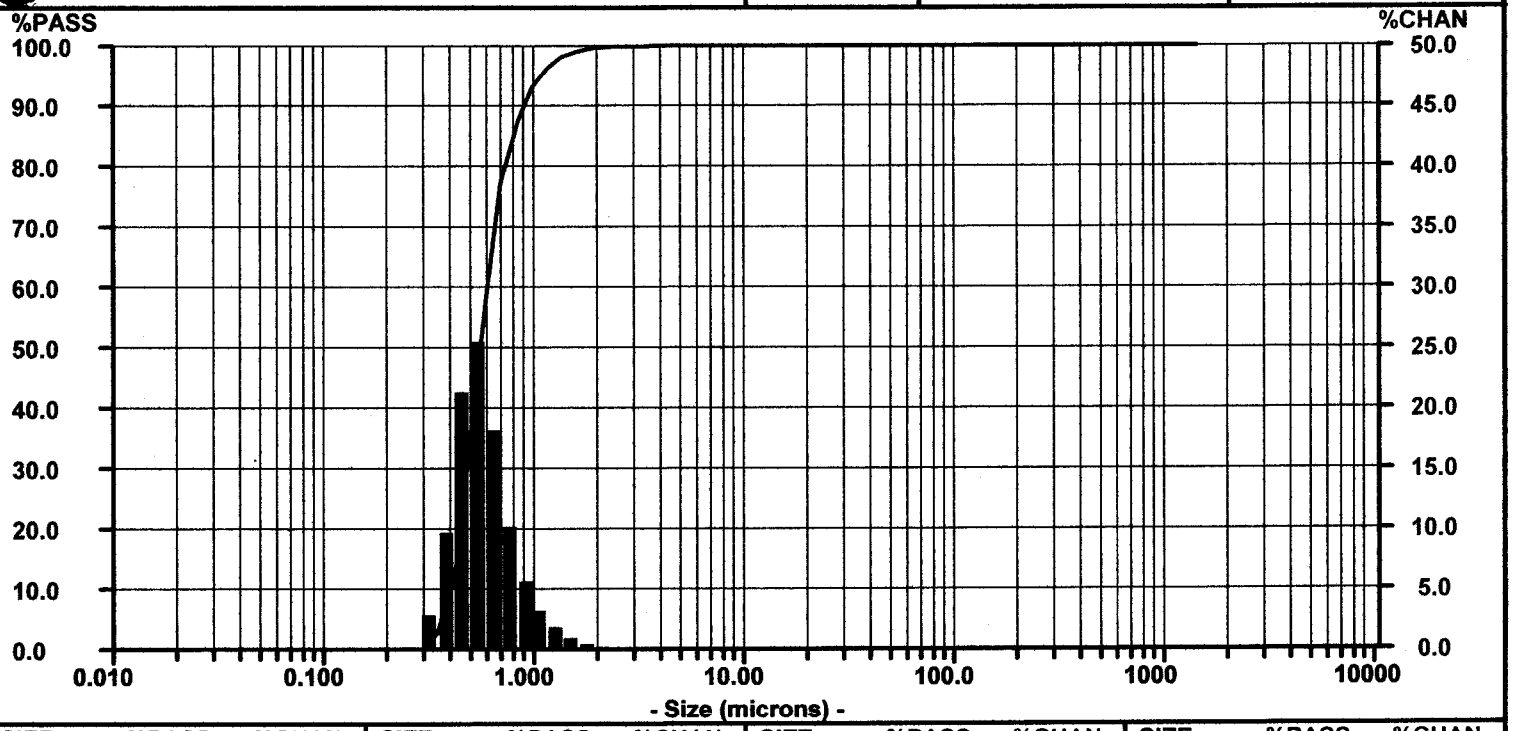
Particle Size Analysis

3-208028
C2-UF-W2-22-Wet

Date: 05/03/04 Meas #: 1111
Time: 14:58 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
Ay-102 Supernate Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.227	10% = 0.396	60% = 0.582	0.542	100%	0.337
mn = 0.608	20% = 0.439	70% = 0.634			
ma = 0.892	30% = 0.474	80% = 0.713			
cs = 6.726	40% = 0.507	90% = 0.874			
sd = 0.169	50% = 0.542	95% = 1.065			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.00	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	100.00	0.01	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.99	0.03	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.96	0.08	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.88	0.21	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.67	0.48	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	99.19	1.00						
104.7	100.00	0.00	1.375	98.19	1.87						
88.00	100.00	0.00	1.156	96.32	3.23						
74.00	100.00	0.00	0.972	93.09	5.57						
62.23	100.00	0.00	0.818	87.52	10.13						
52.33	100.00	0.00	0.688	77.39	18.16						
44.00	100.00	0.00	0.578	59.23	25.45						
37.00	100.00	0.00	0.486	33.78	21.30						
31.11	100.00	0.00	0.409	12.48	9.68						
26.16	100.00	0.00	0.344	2.80	2.80						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0054
Transmission: 0.94
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

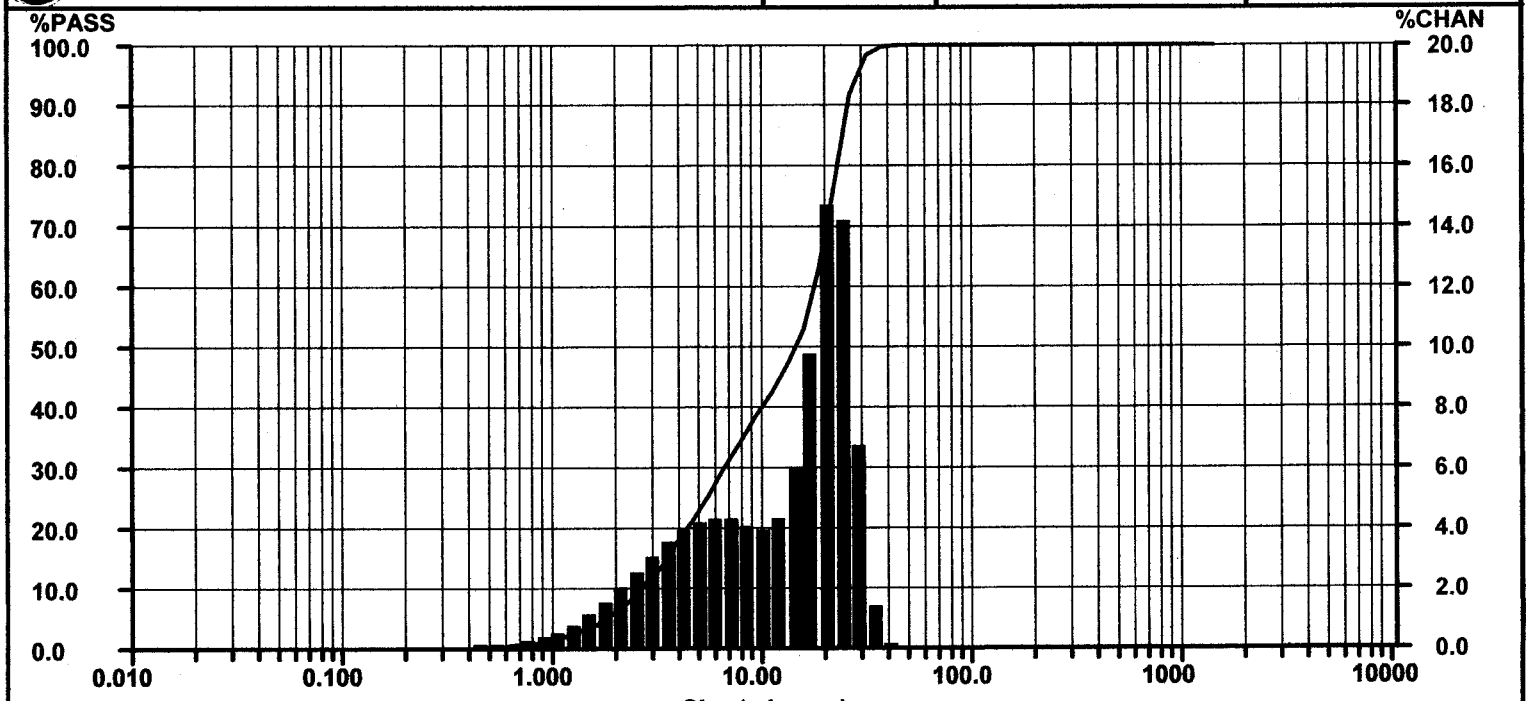
Particle Size Analysis

3-208612
C2-TLP-B-END-PSD

Date: 05/13/04 Meas #: 1127
Time: 13:35 Pres #: 1

Williams, Michael
Absorbing
ASVR = 60%
Ay-102 Filtered Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 14.03	10% = 2.666	60% = 17.78	19.05	70%	14.68
mn = 0.903	20% = 4.386	70% = 20.24	3.490	30%	3.648
ma = 6.137	30% = 6.560	80% = 22.63			
cs = 0.978	40% = 9.924	90% = 25.54			
sd = 10.00	50% = 14.46	95% = 27.93			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	62.70	9.82	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	52.88	6.04	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	46.84	4.43	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	42.41	4.03	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	38.38	4.13	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	34.25	4.32	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	29.93	4.39	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	25.54	4.28	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	21.26	3.99	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	17.27	3.61	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	13.66	3.15	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	10.51	2.64	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	7.87	2.12	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	5.75	1.63	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	4.12	1.20						
104.7	100.00	0.00	1.375	2.92	0.86						
88.00	100.00	0.00	1.156	2.06	0.62						
74.00	100.00	0.00	0.972	1.44	0.45						
62.23	100.00	0.00	0.818	0.99	0.33						
52.33	100.00	0.00	0.688	0.66	0.25						
44.00	100.00	0.16	0.578	0.41	0.19						
37.00	99.84	1.44	0.486	0.22	0.13						
31.11	98.40	6.71	0.409	0.09	0.09						
26.16	91.69	14.23	0.344	0.00	0.00						
22.00	77.46	14.76	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0091
Transmission: 0.98
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

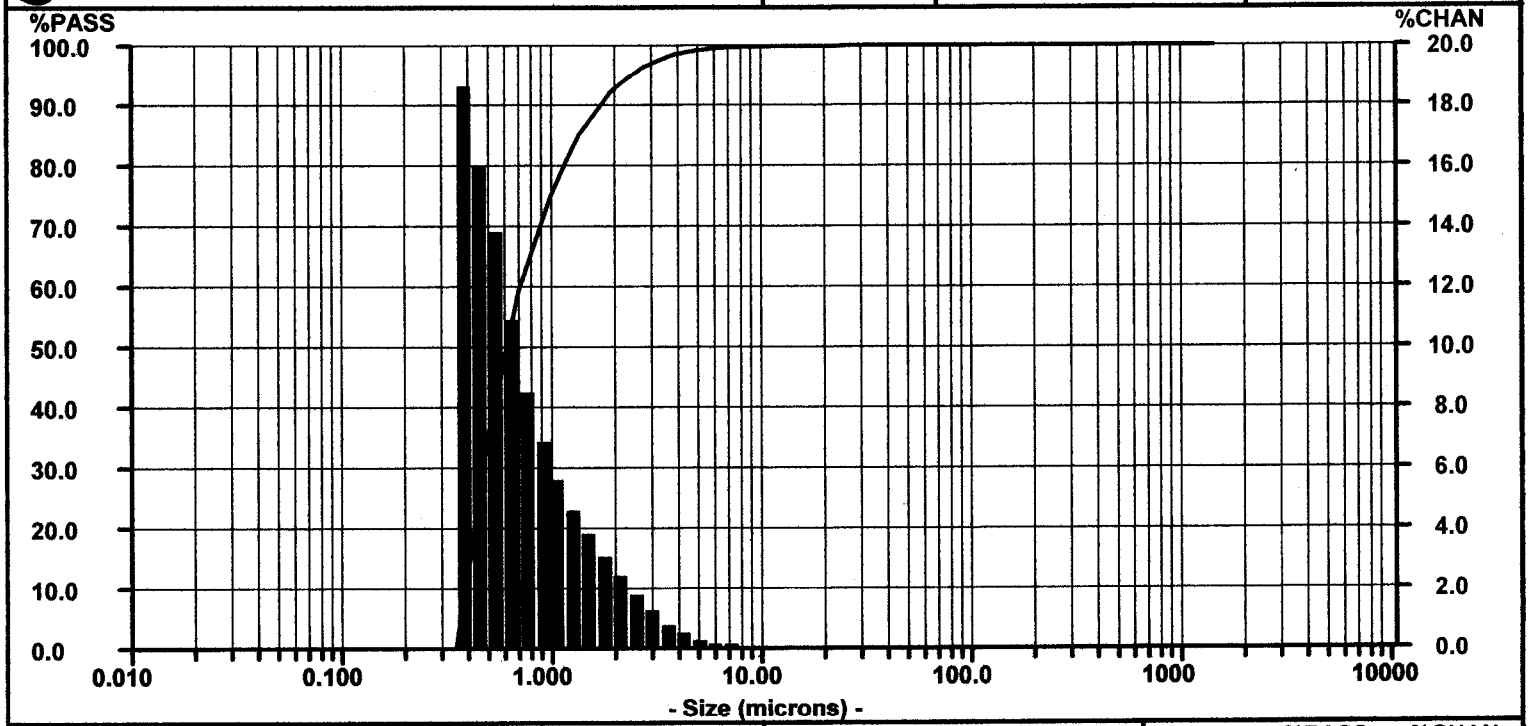
Particle Size Analysis

3-208612
C2-TLP-B-END-PSD

Date: 05/13/04 Meas #: 1127
Time: 13:35 Pres #: 1

Williams, Michael
Absorbing
ASVR = 60%
Ay-102 Filtered Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 14.03	10% = 0.381	60% = 0.696	0.591	100%	0.915
mn = 0.903	20% = 0.415	70% = 0.860			
ma = 6.137	30% = 0.462	80% = 1.139			
cs = 0.978	40% = 0.519	90% = 1.721			
sd = 0.458	50% = 0.591	95% = 2.402			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	99.97	0.02	0.243	0.00	0.00			
[illegible]84	100.00	0.00	15.56	99.95	0.02	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	99.93	0.03	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	99.90	0.04	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	99.86	0.07	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	99.79	0.13	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	99.66	0.22	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	99.44	0.36	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.08	0.57	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	98.51	0.87	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	97.64	1.27	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	96.37	1.79	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	94.58	2.42	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	92.16	3.13	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	89.03	3.88						
104.7	100.00	0.00	1.375	85.15	4.67						
88.00	100.00	0.00	1.156	80.48	5.67						
74.00	100.00	0.00	0.972	74.81	6.91						
62.23	100.00	0.00	0.818	67.90	8.52						
52.33	100.00	0.00	0.688	59.38	10.89						
44.00	100.00	0.00	0.578	48.49	13.90						
37.00	100.00	0.00	0.486	34.59	15.96						
31.11	100.00	0.00	0.409	18.63	18.63						
26.16	100.00	0.01	0.344	0.00	0.00						
22.00	99.99	0.02	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0091
Transmission: 0.98
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Particle-Size Distribution Data from SIPP Campaign IV

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

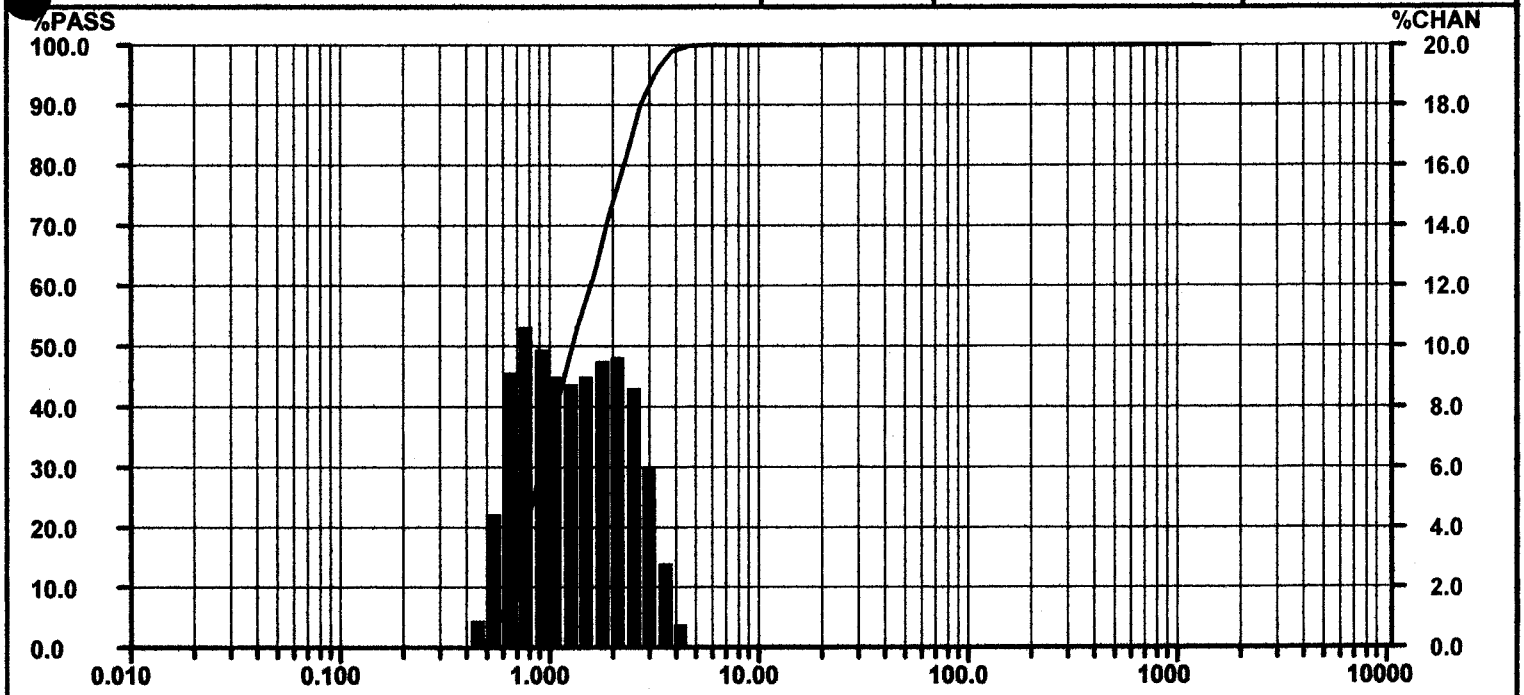
Particle Size Analysis

3-211638
C4-UF-CON2-ADJ

Date: 09/07/04 Meas #: 1611
Time: 14:17 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.515	10% = 0.634	60% = 1.568	1.807	65%	1.537
mn = 0.746	20% = 0.750	70% = 1.885	0.722	35%	0.299
ma = 1.129	30% = 0.884	80% = 2.252			
cs = 5.315	40% = 1.061	90% = 2.743			
sd = 0.861	50% = 1.292	95% = 3.136			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.10	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.90	0.82	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.08	2.90	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.18	6.06	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	90.12	8.67	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	81.45	9.70	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	71.75	9.52	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	62.23	9.04						
104.7	100.00	0.00	1.375	53.19	8.80						
88.00	100.00	0.00	1.156	44.39	9.06						
74.00	100.00	0.00	0.972	35.33	9.92						
62.23	100.00	0.00	0.818	25.41	10.74						
52.33	100.00	0.00	0.688	14.67	9.19						
44.00	100.00	0.00	0.578	5.48	4.51						
37.00	100.00	0.00	0.486	0.97	0.93						
31.11	100.00	0.00	0.409	0.04	0.04						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0036
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

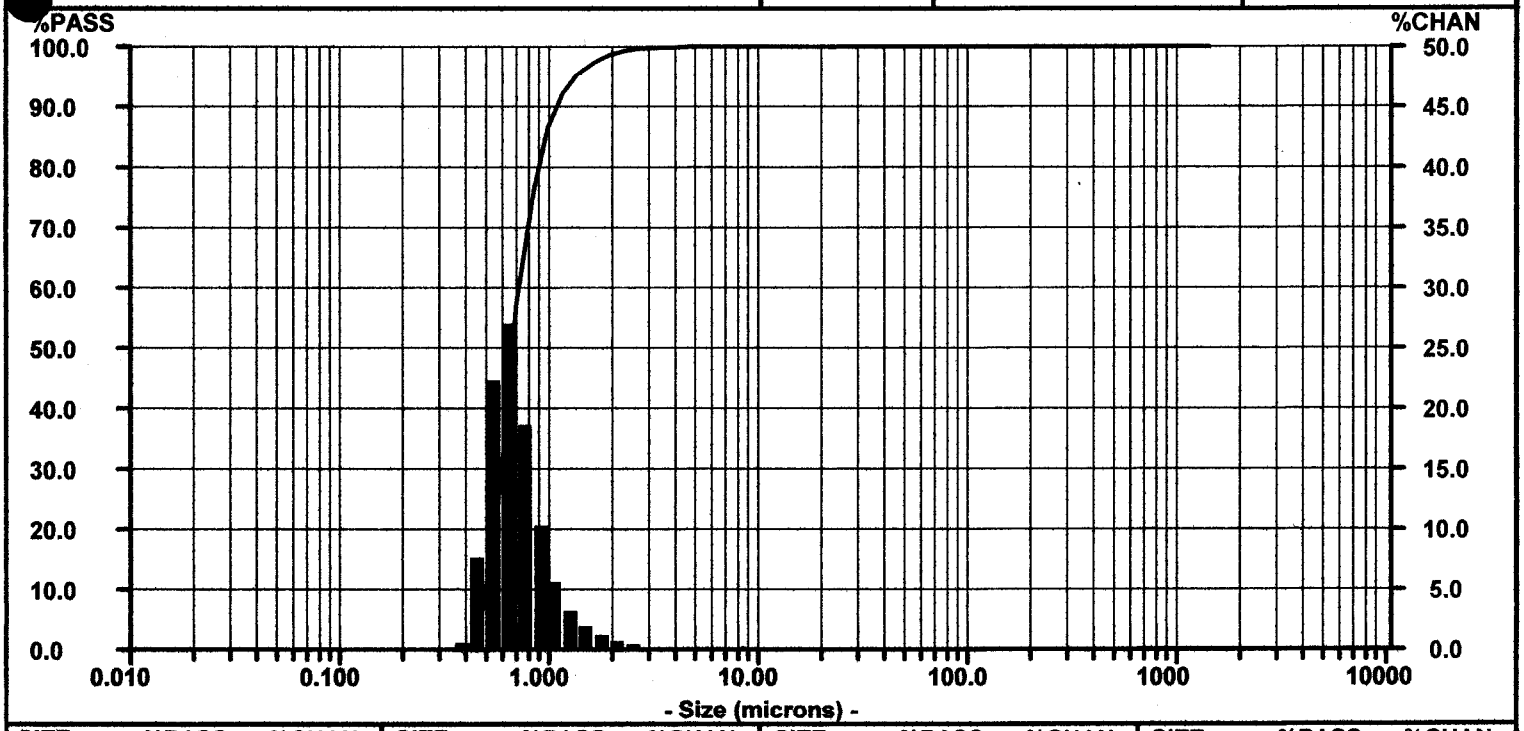
Particle Size Analysis

3-211638
C4-UF-CON2-ADJ

Date: 09/07/04 Meas #: 1611
Time: 14:18 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.515	10% = 0.495	60% = 0.701	0.653	100%	0.399
mn = 0.746	20% = 0.538	70% = 0.764			
ma = 1.129	30% = 0.576	80% = 0.860			
cs = 5.315	40% = 0.614	90% = 1.067			
sd = 0.199	50% = 0.653	95% = 1.338			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible]7.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.05	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.94	0.17	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.77	0.40	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.37	0.75	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	98.62	1.24	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.38	1.97						
104.7	100.00	0.00	1.375	95.41	3.23						
88.00	100.00	0.00	1.166	92.18	5.60						
74.00	100.00	0.00	0.972	86.58	10.28						
62.23	100.00	0.00	0.818	76.30	18.73						
52.33	100.00	0.00	0.688	57.57	27.02						
44.00	100.00	0.00	0.578	30.55	22.28						
37.00	100.00	0.00	0.486	8.27	7.71						
31.11	100.00	0.00	0.409	0.56	0.56						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0036
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

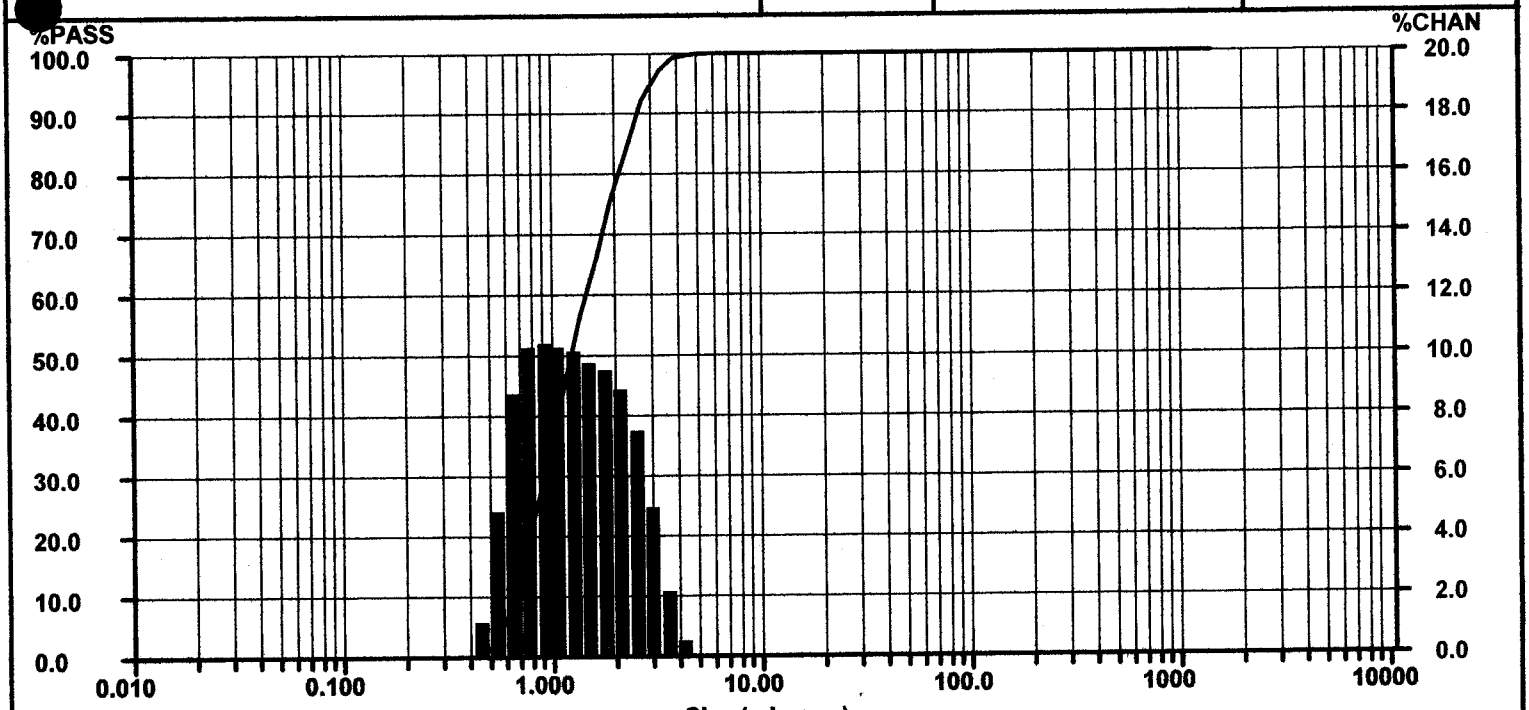
Particle Size Analysis

3-211639
C4-UF-T-30-SL

Date: 09/07/04 Meas #: 1615
Time: 14:31 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.444	10% = 0.626	60% = 1.465	1.233	100%	1.580
mn = 0.736	20% = 0.748	70% = 1.750			
ma = 1.098	30% = 0.882	80% = 2.106			
cs = 5.466	40% = 1.041	90% = 2.599			
sd = 0.790	50% = 1.233	95% = 2.991			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible]7.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.03	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.97	0.51	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.46	2.23	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	97.23	5.00	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	92.23	7.50	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	84.73	8.95	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	75.78	9.54	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	66.24	9.86						
104.7	100.00	0.00	1.375	56.38	10.15						
88.00	100.00	0.00	1.156	46.23	10.34						
74.00	100.00	0.00	0.972	35.89	10.45						
62.23	100.00	0.00	0.818	25.44	10.36						
52.33	100.00	0.00	0.688	15.08	8.85						
44.00	100.00	0.00	0.578	6.23	4.88						
37.00	100.00	0.00	0.486	1.35	1.23						
31.11	100.00	0.00	0.409	0.12	0.12						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0063
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

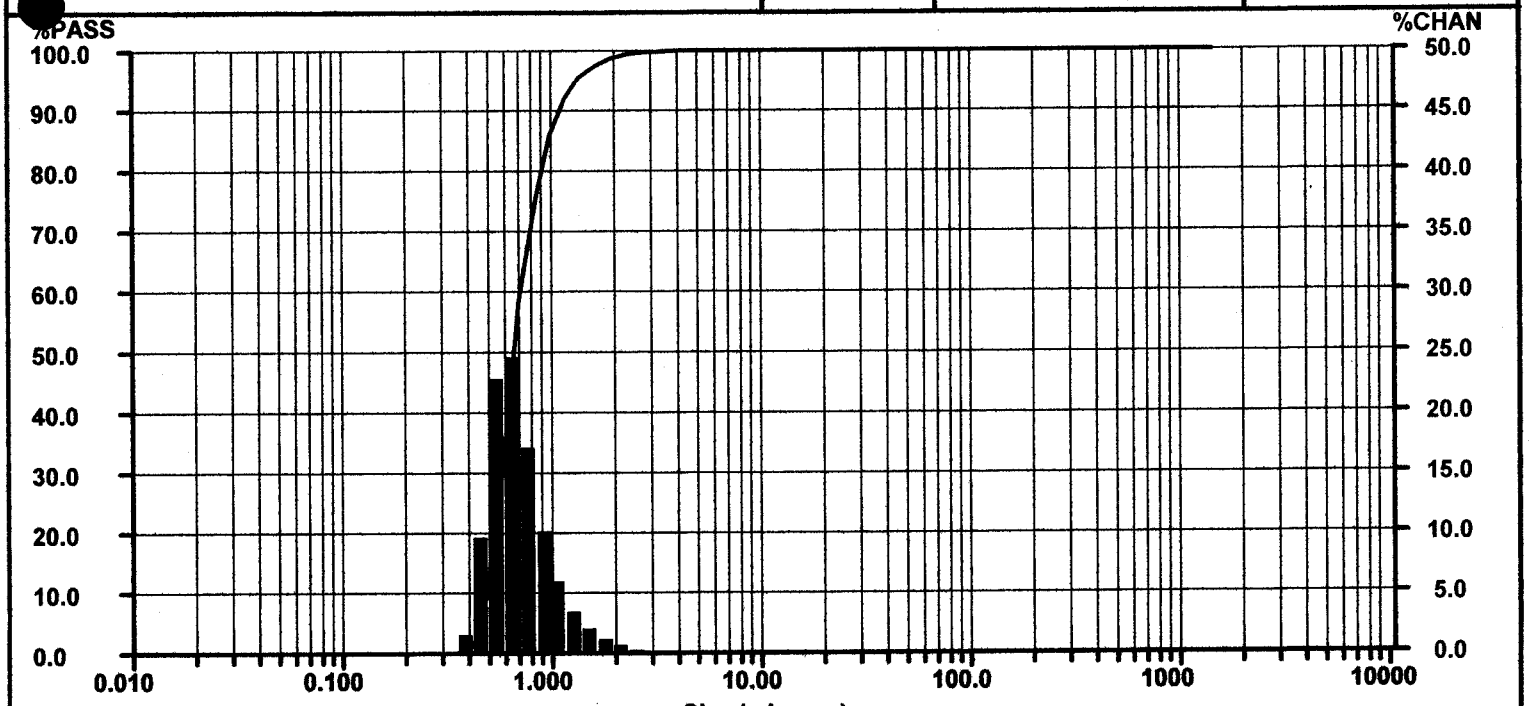
Particle Size Analysis

3-211639
C4-UF-T-30-SL

Date: 09/07/04 Meas #: 1615
Time: 14:31 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.444	10% = 0.479	60% = 0.696	0.644	100%	0.423
mn = 0.736	20% = 0.524	70% = 0.764			
ma = 1.098	30% = 0.563	80% = 0.869			
cs = 5.466	40% = 0.602	90% = 1.077			
sd = 0.211	50% = 0.644	95% = 1.323			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible]7.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.00	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	100.00	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.97	0.13	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.84	0.33	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.51	0.65	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	98.86	1.17	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.69	2.04						
104.7	100.00	0.00	1.375	95.65	3.53						
88.00	100.00	0.00	1.156	92.12	6.05						
74.00	100.00	0.00	0.972	86.07	10.25						
62.23	100.00	0.00	0.818	75.82	17.10						
52.33	100.00	0.00	0.688	58.72	24.65						
44.00	100.00	0.00	0.578	34.07	22.83						
37.00	100.00	0.00	0.486	11.24	9.66						
31.11	100.00	0.00	0.409	1.58	1.58						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0063
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

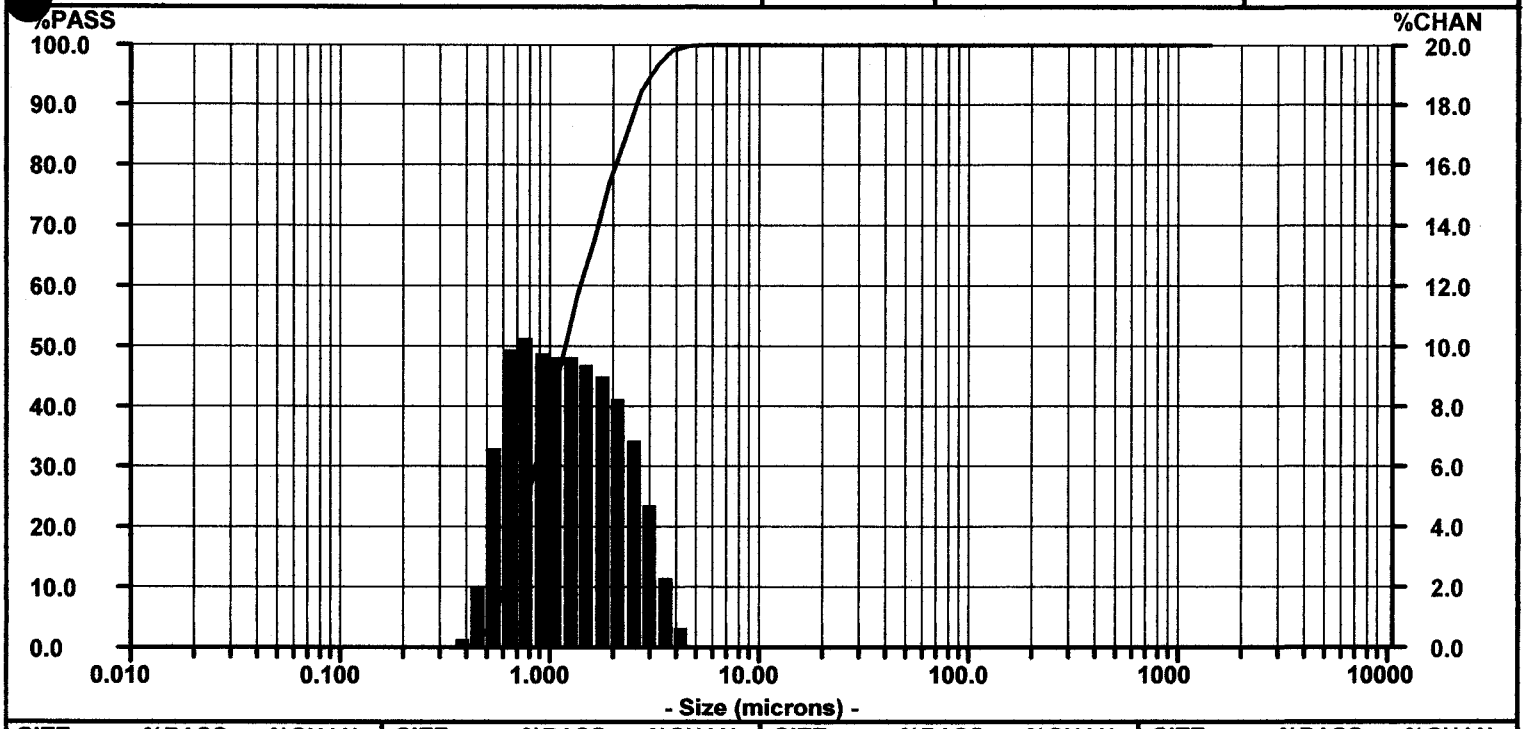
Particle Size Analysis

3-211640
C4-UF-T-37.5-SL

Date: 09/07/04 Meas #: 1619
Time: 14:41 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.409	10% = 0.590	60% = 1.413	1.181	100%	1.599
mn = 0.693	20% = 0.700	70% = 1.701			
ma = 1.046	30% = 0.829	80% = 2.071			
cs = 5.737	40% = 0.988	90% = 2.599			
sd = 0.799	50% = 1.181	95% = 3.030			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible]7.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.08	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.92	0.70	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.22	2.39	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.83	4.77	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	92.06	6.89	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	85.17	8.25	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	76.92	8.99	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	67.93	9.43						
104.7	100.00	0.00	1.375	58.50	9.67						
88.00	100.00	0.00	1.156	48.83	9.72						
74.00	100.00	0.00	0.972	39.11	9.87						
62.23	100.00	0.00	0.818	29.24	10.32						
52.33	100.00	0.00	0.688	18.92	9.96						
44.00	100.00	0.00	0.578	8.96	6.59						
37.00	100.00	0.00	0.486	2.37	2.10						
31.11	100.00	0.00	0.409	0.27	0.27						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0062
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

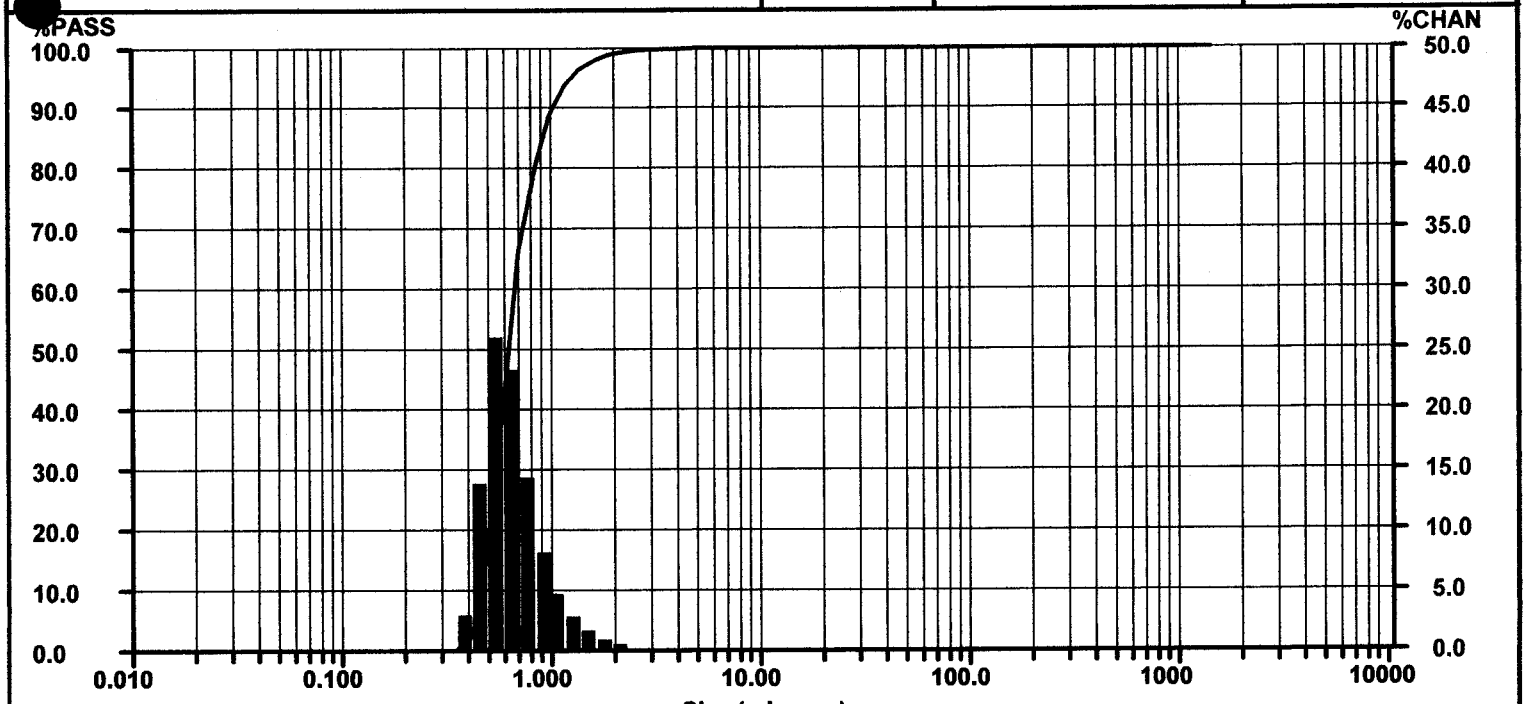
Particle Size Analysis

3-211640
C4-UF-T-37.5-SL

Date: 09/07/04 Meas #: 1619
Time: 14:41 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.409	10% = 0.455	60% = 0.652	0.607	100%	0.386
mn = 0.693	20% = 0.498	70% = 0.713			
ma = 1.046	30% = 0.533	80% = 0.809			
cs = 5.737	40% = 0.568	90% = 1.005			
sd = 0.193	50% = 0.607	95% = 1.240			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible]7.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.86	0.25	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.61	0.51	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.10	0.93	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.17	1.65						
104.7	100.00	0.00	1.375	96.52	2.83						
88.00	100.00	0.00	1.156	93.69	4.80						
74.00	100.00	0.00	0.972	88.89	8.17						
62.23	100.00	0.00	0.818	80.72	14.38						
52.33	100.00	0.00	0.688	66.34	23.41						
44.00	100.00	0.00	0.578	42.93	26.01						
37.00	100.00	0.00	0.486	16.92	13.91						
31.11	100.00	0.00	0.409	3.01	3.01						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0062
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

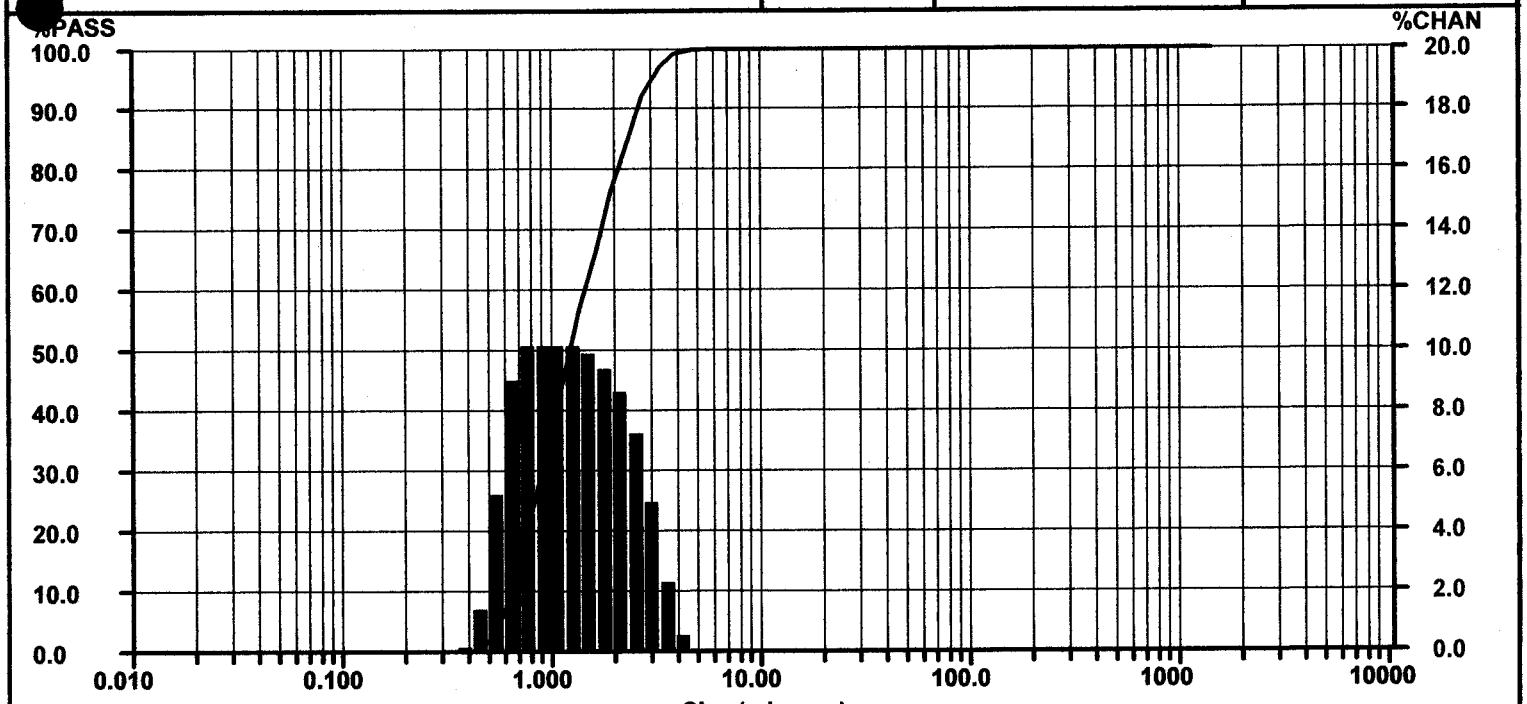
Particle Size Analysis

3-211641
C4-UF-T-45-SL

Date: 09/07/04 Meas #: 1623
Time: 14:53 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.440	10% = 0.618	60% = 1.455	1.226	100%	1.585
mn = 0.726	20% = 0.738	70% = 1.737			
ma = 1.088	30% = 0.874	80% = 2.097			
cs = 5.516	40% = 1.035	90% = 2.607			
sd = 0.792	50% = 1.226	95% = 3.018			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible].2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.04	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.96	0.61	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.35	2.36	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.99	4.95	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	92.04	7.24	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	84.80	8.69	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	76.11	9.46	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	66.65	9.92						
104.7	100.00	0.00	1.375	56.73	10.18						
88.00	100.00	0.00	1.156	46.55	10.21						
74.00	100.00	0.00	0.972	36.34	10.22						
62.23	100.00	0.00	0.818	26.12	10.23						
52.33	100.00	0.00	0.688	15.89	9.07						
44.00	100.00	0.00	0.578	6.82	5.27						
37.00	100.00	0.00	0.486	1.55	1.41						
31.11	100.00	0.00	0.409	0.14	0.14						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0062
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

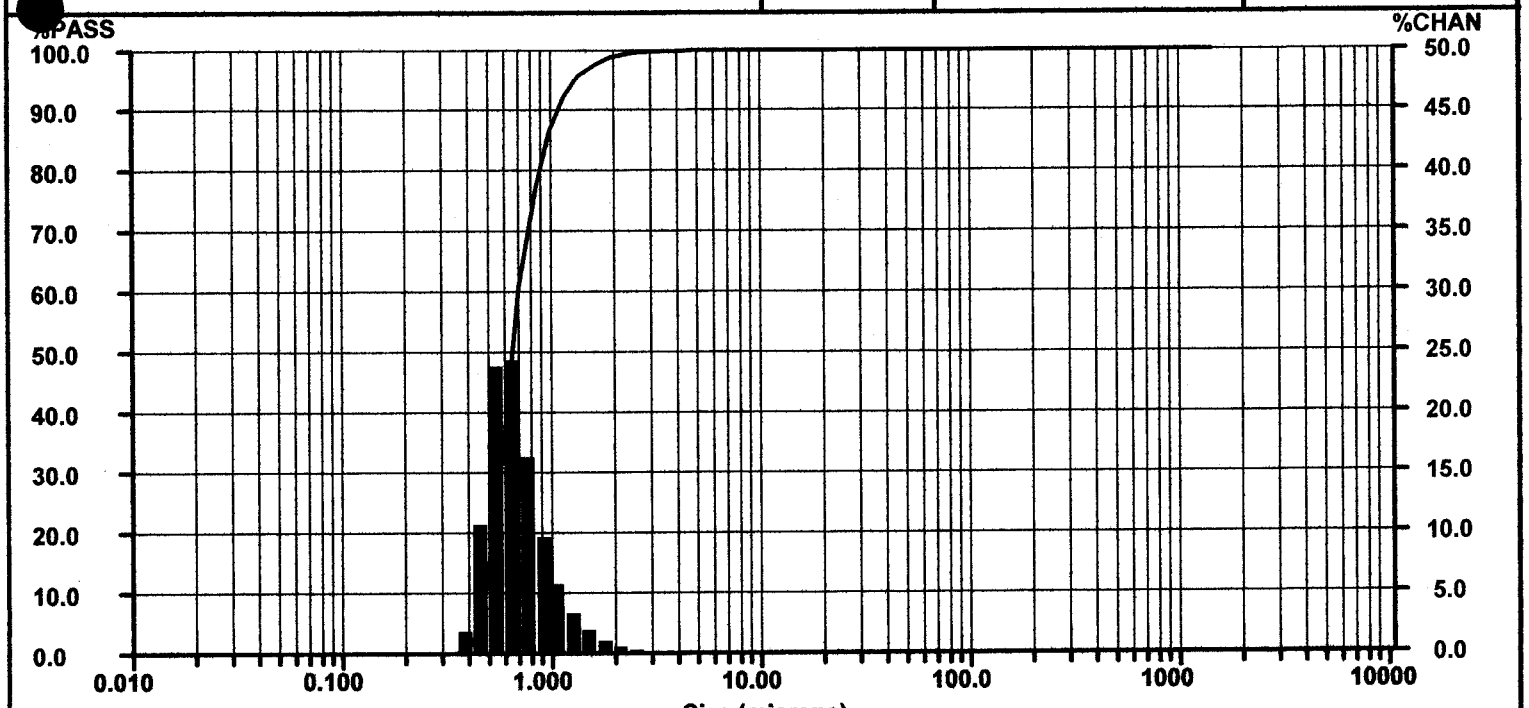
Particle Size Analysis

3-211641
C4-UF-T-45-SL

Date: 09/07/04 Meas #: 1623
Time: 14:53 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.440	10% = 0.473	60% = 0.684	0.634	100%	0.418
mn = 0.726	20% = 0.517	70% = 0.752			
ma = 1.088	30% = 0.555	80% = 0.856			
cs = 5.516	40% = 0.593	90% = 1.064			
sd = 0.209	50% = 0.634	95% = 1.308			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]6.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible].2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.12	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.84	0.30	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.54	0.61	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	98.93	1.12	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	97.81	1.98						
104.7	100.00	0.00	1.375	95.83	3.41						
88.00	100.00	0.00	1.156	92.42	5.76						
74.00	100.00	0.00	0.972	86.66	9.68						
62.23	100.00	0.00	0.818	76.98	16.30						
52.33	100.00	0.00	0.688	60.68	24.41						
44.00	100.00	0.00	0.578	36.27	23.80						
37.00	100.00	0.00	0.486	12.47	10.69						
31.11	100.00	0.00	0.409	1.78	1.78						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0062
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

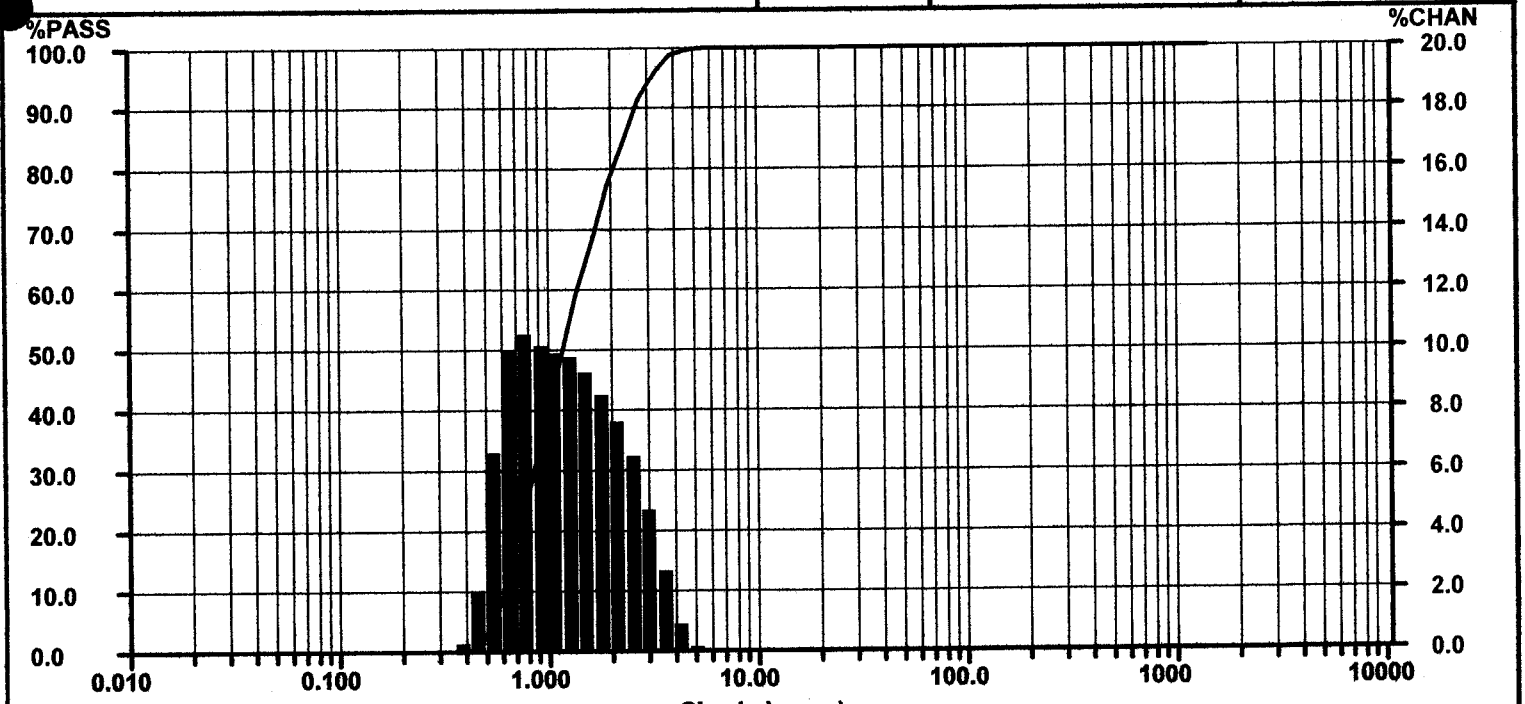
Particle Size Analysis

3-211642
C4-UF-T-35-SL

Date: 09/07/04 Meas #: 1627
Time: 15:06 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.409	10% = 0.590	60% = 1.389	1.162	100%	1.604
mn = 0.692	20% = 0.699	70% = 1.677			
ma = 1.040	30% = 0.823	80% = 2.062			
cs = 5.769	40% = 0.976	90% = 2.632			
sd = 0.802	50% = 1.162	95% = 3.103			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.14	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.86	0.93	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	98.93	2.68	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.25	4.76	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	91.49	6.49	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	85.00	7.70	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	77.30	8.56	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	68.74	9.27						
104.7	100.00	0.00	1.375	59.47	9.76						
88.00	100.00	0.00	1.156	49.71	9.94						
74.00	100.00	0.00	0.972	39.77	10.13						
62.23	100.00	0.00	0.818	29.64	10.58						
52.33	100.00	0.00	0.688	19.06	10.08						
44.00	100.00	0.00	0.578	8.98	6.59						
37.00	100.00	0.00	0.486	2.39	2.11						
31.11	100.00	0.00	0.409	0.28	0.28						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0074
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

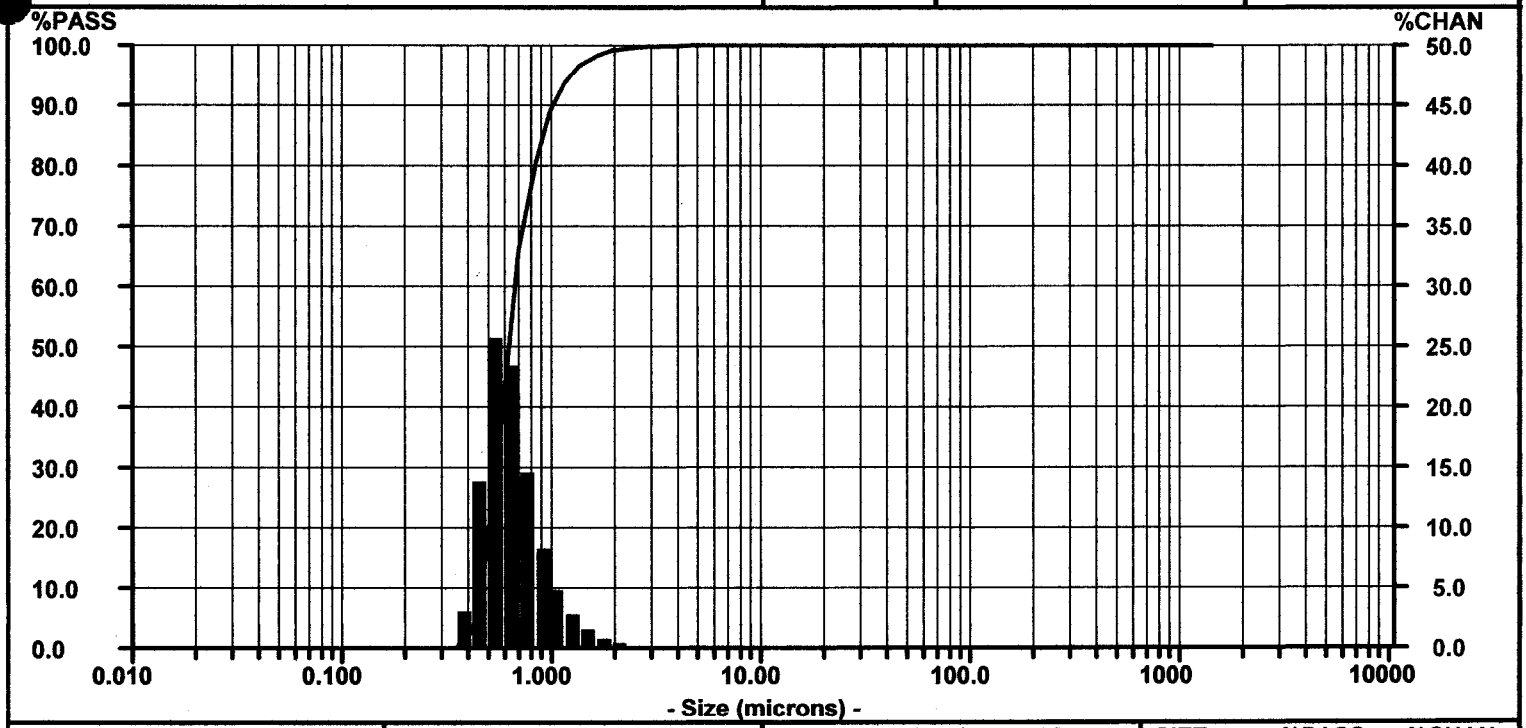
Particle Size Analysis

3-211642
C4-UF-T-35-SL

Date: 09/07/04 Meas #: 1627
Time: 15:07 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.409	10% = 0.454	60% = 0.653	0.608	100%	0.385
mn = 0.692	20% = 0.498	70% = 0.714			
ma = 1.040	30% = 0.533	80% = 0.810			
cs = 5.769	40% = 0.569	90% = 1.002			
sd = 0.193	50% = 0.608	95% = 1.229			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.86	0.24	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.62	0.47	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.15	0.88	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.27	1.60						
104.7	100.00	0.00	1.375	96.67	2.83						
88.00	100.00	0.00	1.156	93.84	4.85						
74.00	100.00	0.00	0.972	88.99	8.30						
62.23	100.00	0.00	0.818	80.69	14.58						
52.33	100.00	0.00	0.688	66.11	23.44						
44.00	100.00	0.00	0.578	42.67	25.75						
37.00	100.00	0.00	0.486	16.92	13.83						
31.11	100.00	0.00	0.409	3.09	3.09						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0074
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

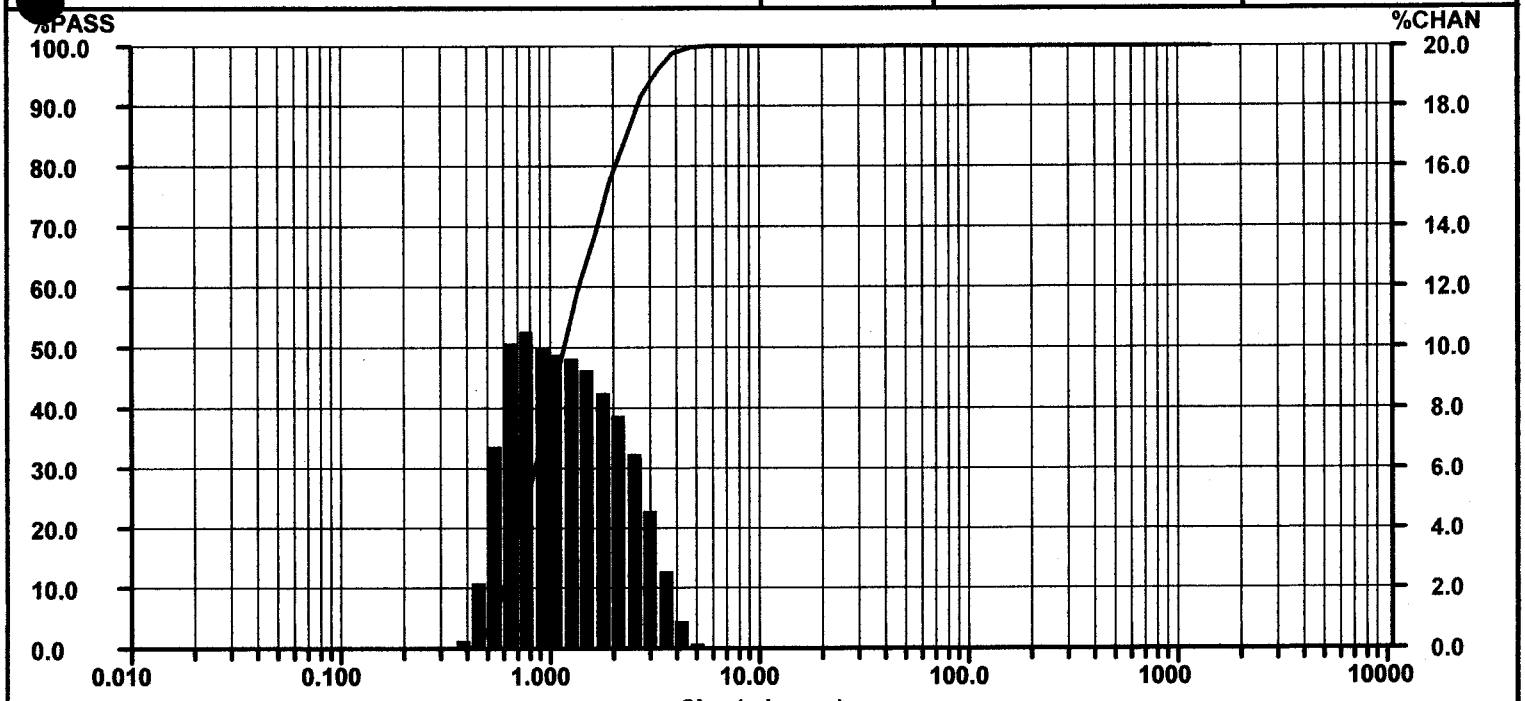
Particle Size Analysis

3-211643
C4-UF-T-25-SL

Date: 09/07/04 Meas #: 1631
Time: 15:17 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.404	10% = 0.585	60% = 1.386	1.159	100%	1.601
mn = 0.686	20% = 0.693	70% = 1.674			
ma = 1.034	30% = 0.817	80% = 2.056			
cs = 5.802	40% = 0.971	90% = 2.622			
sd = 0.801	50% = 1.159	95% = 3.095			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible].2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.16	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.84	0.95	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	98.89	2.61	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	96.28	4.66	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	91.62	6.46	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	85.16	7.74	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	77.42	8.60	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	68.82	9.26						
104.7	100.00	0.00	1.375	59.56	9.68						
88.00	100.00	0.00	1.156	49.88	9.83						
74.00	100.00	0.00	0.972	40.05	10.01						
62.23	100.00	0.00	0.818	30.04	10.51						
52.33	100.00	0.00	0.688	19.53	10.13						
44.00	100.00	0.00	0.578	9.40	6.81						
37.00	100.00	0.00	0.486	2.59	2.27						
31.11	100.00	0.00	0.409	0.32	0.32						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0060
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

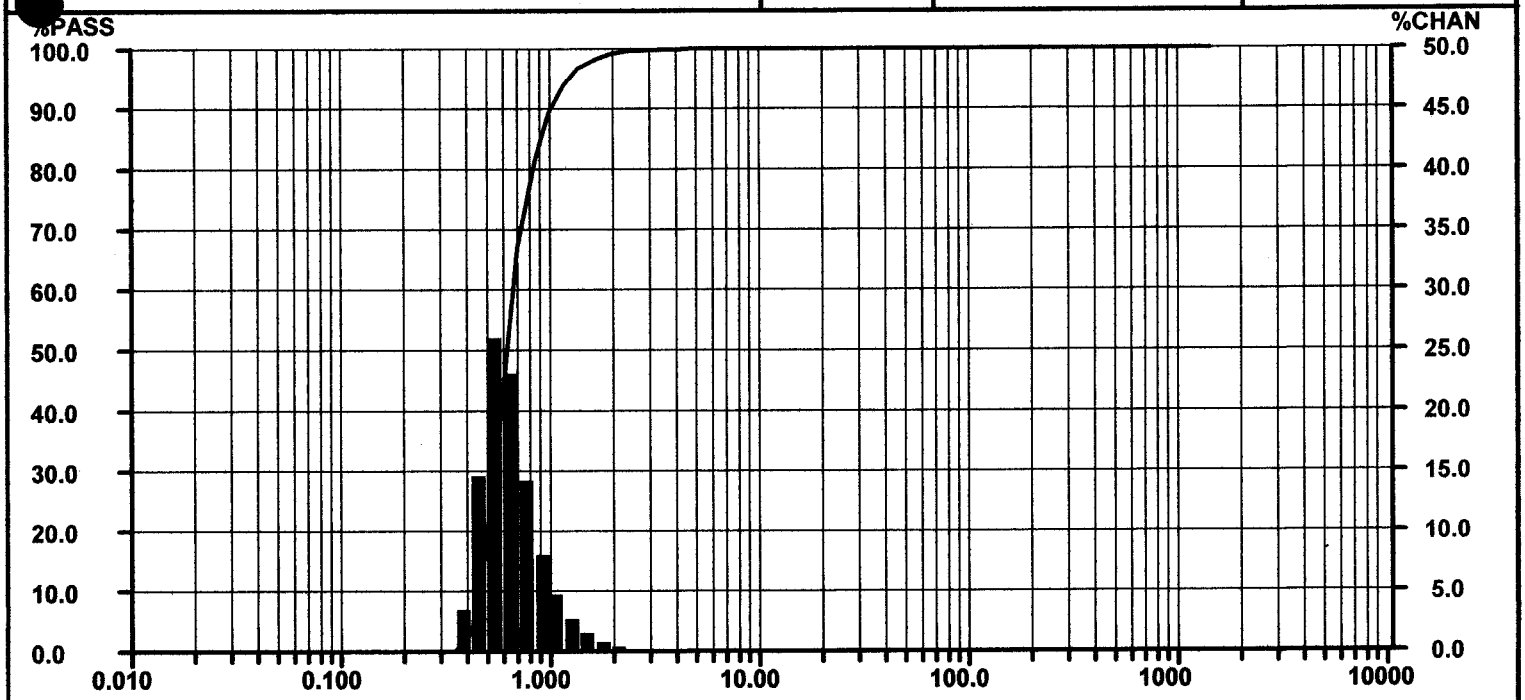
Particle Size Analysis

3-211643
C4-UF-T-25-SL

Date: 09/07/04 Meas #: 1631
Time: 15:17 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.404	10% = 0.450	60% = 0.648	0.602	100%	0.381
mn = 0.686	20% = 0.493	70% = 0.708			
ma = 1.034	30% = 0.529	80% = 0.802			
cs = 5.802	40% = 0.564	90% = 0.993			
sd = 0.191	50% = 0.602	95% = 1.220			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible]5.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible].2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.01	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.99	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.96	0.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.86	0.23	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.63	0.46	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.17	0.86	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.31	1.56						
104.7	100.00	0.00	1.375	96.75	2.75						
88.00	100.00	0.00	1.156	94.00	4.70						
74.00	100.00	0.00	0.972	89.30	8.03						
62.23	100.00	0.00	0.818	81.27	14.18						
52.33	100.00	0.00	0.688	67.09	23.05						
44.00	100.00	0.00	0.578	44.04	26.03						
37.00	100.00	0.00	0.486	18.01	14.56						
31.11	100.00	0.00	0.409	3.45	3.45						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0060
Transmission: 0.96
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

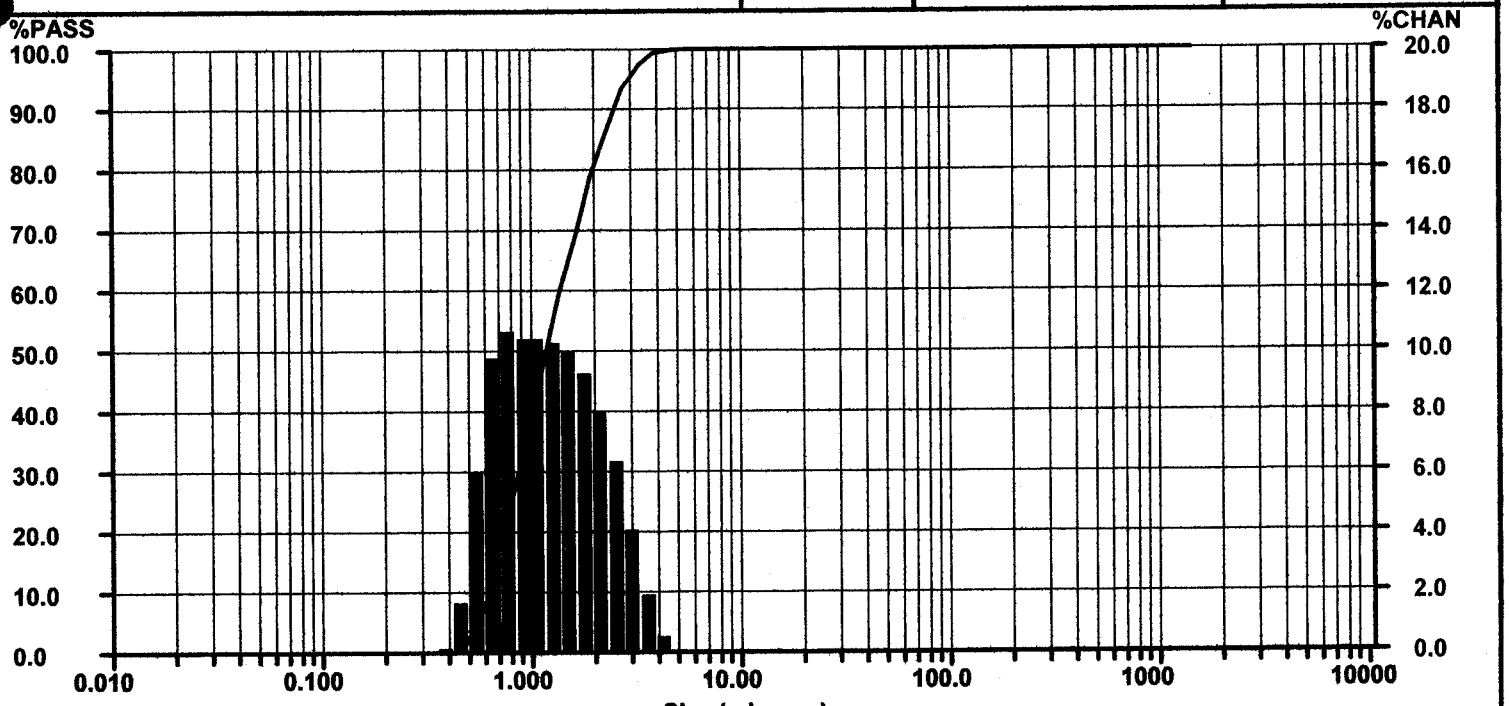
Particle Size Analysis

3-211644
C4-UF-T-37.5(15)-SL

Date: 09/07/04 Meas #: 1635
Time: 15:28 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.380	10% = 0.602	60% = 1.384	1.170	100%	1.495
mn = 0.709	20% = 0.713	70% = 1.647			
ma = 1.047	30% = 0.839	80% = 1.990			
cs = 5.730	40% = 0.990	90% = 2.496			
sd = 0.748	50% = 1.170	95% = 2.921			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.04	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.96	0.53	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.43	1.96	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	97.47	4.15	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	93.32	6.35	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	86.97	8.09	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	78.88	9.26	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	69.62	10.00						
104.7	100.00	0.00	1.375	59.62	10.35						
88.00	100.00	0.00	1.156	49.27	10.38						
74.00	100.00	0.00	0.972	38.89	10.44						
62.23	100.00	0.00	0.818	28.45	10.65						
52.33	100.00	0.00	0.688	17.80	9.79						
44.00	100.00	0.00	0.578	8.01	6.04						
37.00	100.00	0.00	0.486	1.97	1.77						
31.11	100.00	0.00	0.409	0.20	0.20						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0065
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

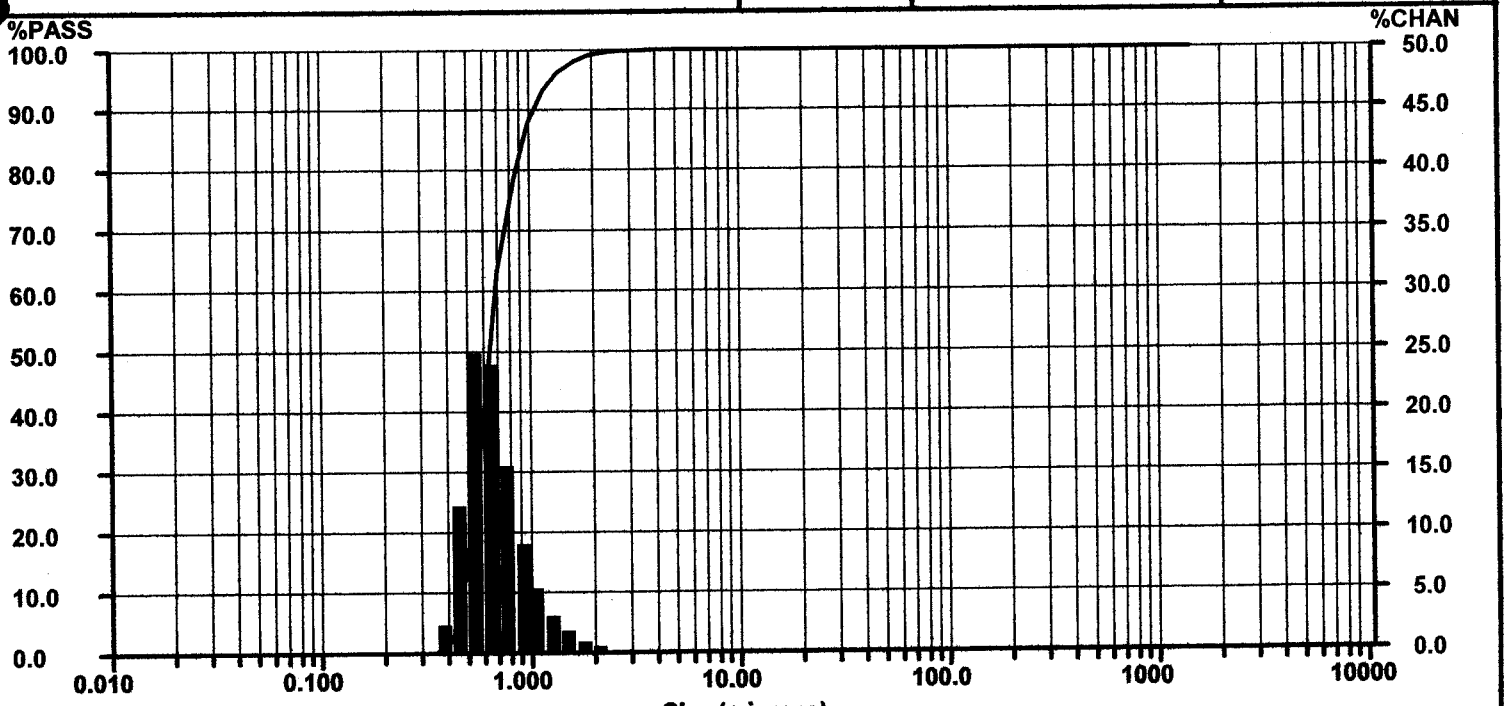
Particle Size Analysis

3-211644
C4-UF-T-37.5(15)-SL

Date: 09/07/04 Meas #: 1635
Time: 15:29 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.380	10% = 0.464	60% = 0.669	0.621	100%	0.402
mn = 0.709	20% = 0.508	70% = 0.734			
ma = 1.047	30% = 0.544	80% = 0.834			
cs = 5.730	40% = 0.581	90% = 1.034			
sd = 0.201	50% = 0.621	95% = 1.267			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.00	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	100.00	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.97	0.09	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.88	0.24	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.64	0.52	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.12	1.00	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.12	1.82						
104.7	100.00	0.00	1.375	96.30	3.16						
88.00	100.00	0.00	1.156	93.14	5.34						
74.00	100.00	0.00	0.972	87.80	9.01						
62.23	100.00	0.00	0.818	78.79	15.45						
52.33	100.00	0.00	0.688	63.34	23.97						
44.00	100.00	0.00	0.578	39.37	24.84						
37.00	100.00	0.00	0.486	14.53	12.21						
31.11	100.00	0.00	0.409	2.32	2.32						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0065
Transmission: 0.95
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Original

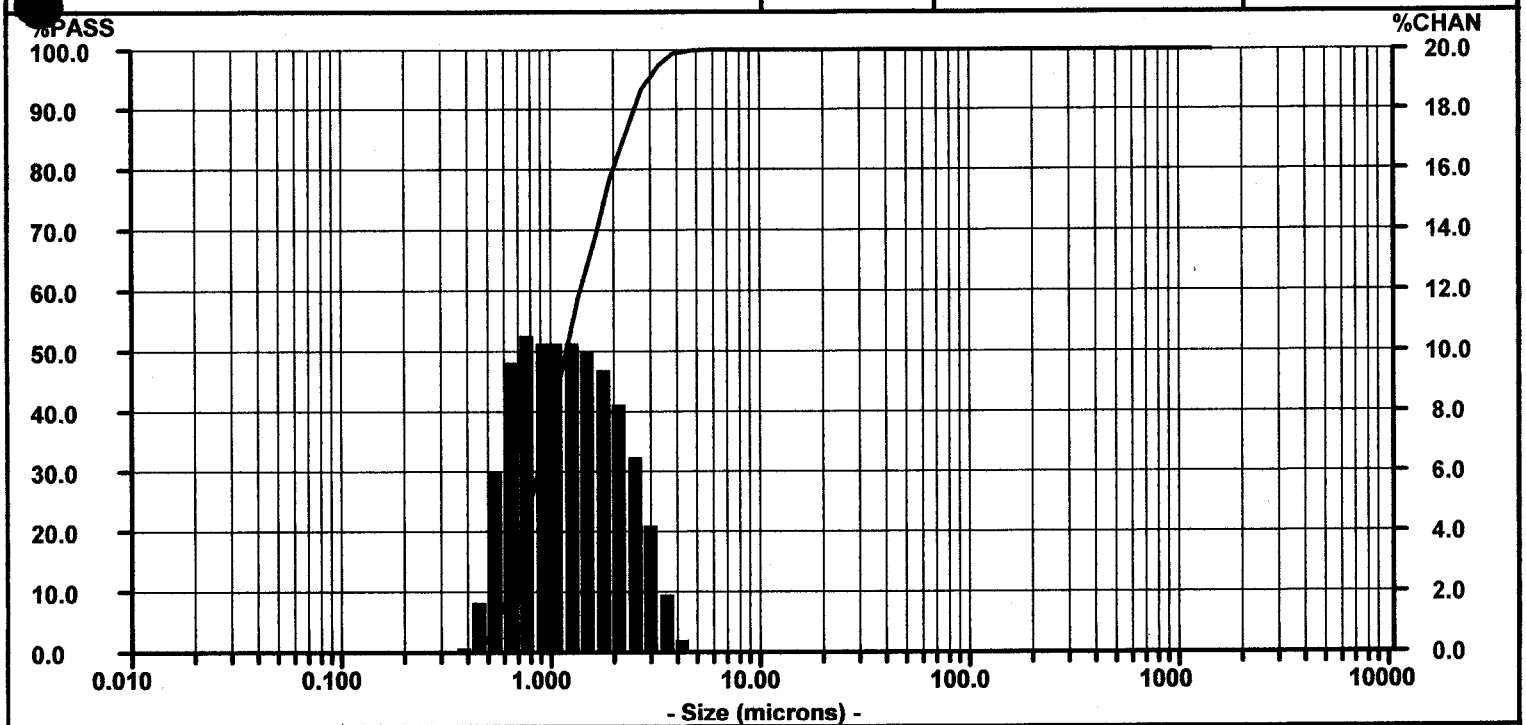
Particle Size Analysis

3-211645
C4-UF-T-45(15)-SL

Date: 09/07/04 Meas #: 1639
Time: 15:37 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Vol%	Width
mv = 1.388	10% = 0.603	60% = 1.398	1.181	100%	1.509
mn = 0.710	20% = 0.715	70% = 1.664			
ma = 1.053	30% = 0.844	80% = 2.007			
cs = 5.697	40% = 0.998	90% = 2.508			
sd = 0.755	50% = 1.181	95% = 2.923			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
[illegible].6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
[illegible].2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.03	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	99.97	0.48	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	99.49	1.96	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	97.53	4.28	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	93.25	6.55	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	86.70	8.27	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	78.43	9.38	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	69.05	10.03						
104.7	100.00	0.00	1.375	59.02	10.31						
88.00	100.00	0.00	1.156	48.71	10.27						
74.00	100.00	0.00	0.972	38.44	10.30						
62.23	100.00	0.00	0.818	28.14	10.54						
52.33	100.00	0.00	0.688	17.60	9.71						
44.00	100.00	0.00	0.578	7.89	5.98						
37.00	100.00	0.00	0.486	1.91	1.72						
31.11	100.00	0.00	0.409	0.19	0.19						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Volume
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0059
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

Serial Number: S3261
Range: 0.021 -1408 um

MICROTRAC - S3000

Ver:9.0K
Meas : Recalc

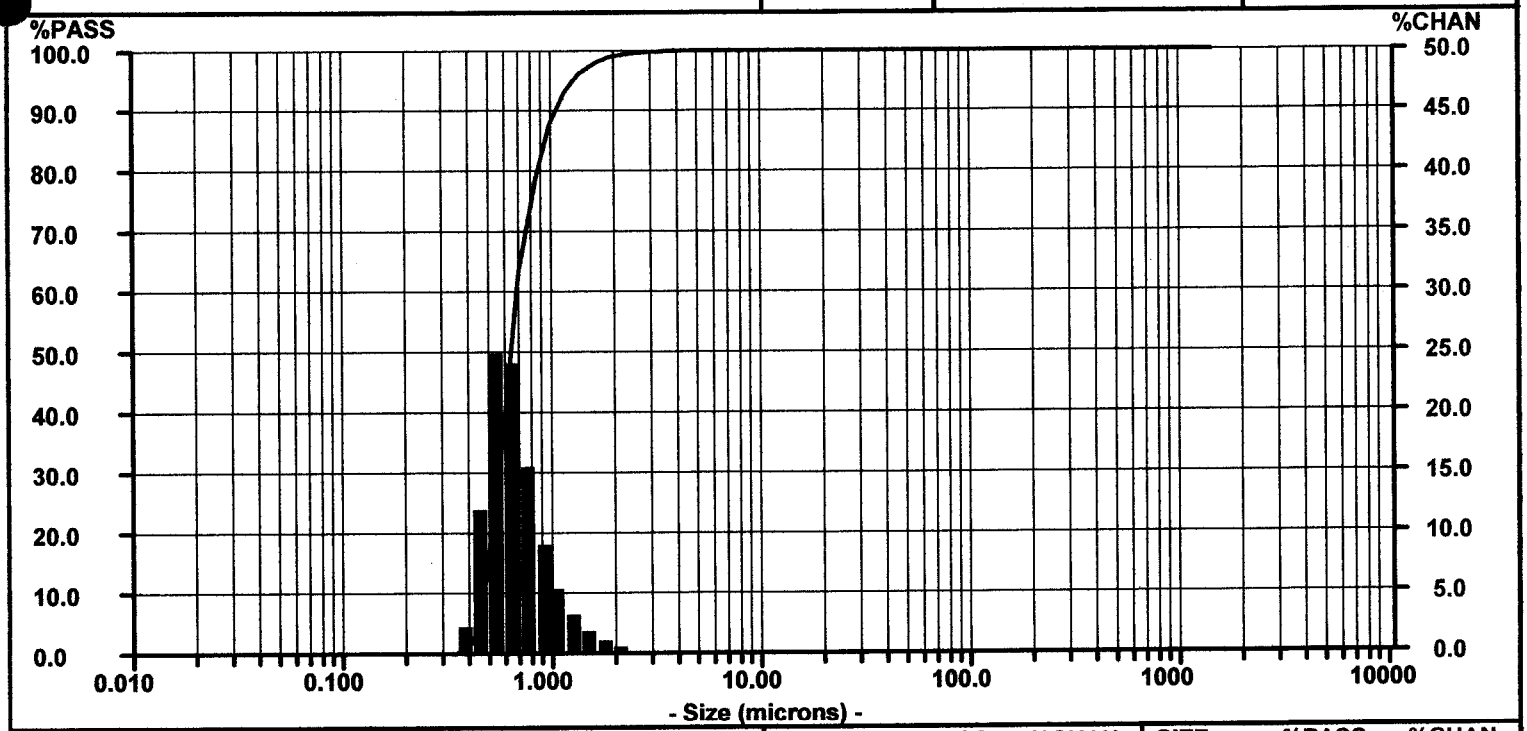
Particle Size Analysis

3-211645
C4-UF-T-45(15)-SL

Date: 09/07/04 Meas #: 1639
Time: 15:37 Pres #: 1

Zamecnik, Jack
Absorbing
ASVR = 60%
C4-PERM-FOR-PSD Diluent

Summary	Percentiles		Dia	Num%	Width
mv = 1.388	10% = 0.466	60% = 0.670	0.622	100%	0.403
mn = 0.710	20% = 0.509	70% = 0.735			
ma = 1.053	30% = 0.545	80% = 0.835			
cs = 5.697	40% = 0.581	90% = 1.038			
sd = 0.201	50% = 0.622	95% = 1.274			



SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN	SIZE	%PASS	%CHAN
1408	100.00	0.00	18.50	100.00	0.00	0.243	0.00	0.00			
1184	100.00	0.00	15.56	100.00	0.00	0.204	0.00	0.00			
995.6	100.00	0.00	13.08	100.00	0.00	0.172	0.00	0.00			
837.2	100.00	0.00	11.00	100.00	0.00	0.145	0.00	0.00			
704.0	100.00	0.00	9.250	100.00	0.00	0.122	0.00	0.00			
592.0	100.00	0.00	7.778	100.00	0.00	0.102	0.00	0.00			
497.8	100.00	0.00	6.541	100.00	0.00	0.086	0.00	0.00			
418.6	100.00	0.00	5.500	100.00	0.00	0.072	0.00	0.00			
352.0	100.00	0.00	4.625	100.00	0.00	0.061	0.00	0.00			
296.0	100.00	0.00	3.889	100.00	0.03	0.051	0.00	0.00			
248.9	100.00	0.00	3.270	99.97	0.10	0.043	0.00	0.00			
209.3	100.00	0.00	2.750	99.87	0.25	0.036	0.00	0.00			
176.0	100.00	0.00	2.312	99.62	0.54	0.030	0.00	0.00			
148.0	100.00	0.00	1.945	99.08	1.03	0.026	0.00	0.00			
124.5	100.00	0.00	1.635	98.05	1.85						
104.7	100.00	0.00	1.375	96.20	3.19						
88.00	100.00	0.00	1.156	93.01	5.34						
74.00	100.00	0.00	0.972	87.67	8.99						
62.23	100.00	0.00	0.818	78.68	15.48						
52.33	100.00	0.00	0.688	63.20	24.06						
44.00	100.00	0.00	0.578	39.14	24.90						
37.00	100.00	0.00	0.486	14.24	12.01						
31.11	100.00	0.00	0.409	2.23	2.23						
26.16	100.00	0.00	0.344	0.00	0.00						
22.00	100.00	0.00	0.289	0.00	0.00						

Distribution: Number
Progression: Standard
Upper Edge: 1408
Lower Edge: 0.021
Residuals: Disabled
Number Of Channels: 64

RunTime: 30 seconds
Run Number Avg of 3 runs
Particle: Resin
Particle Transparency: Absorb
Particle Refractive Index: N/A
Particle Shape: N/A

Fluid: Water
Fluid Refractive Index: 1.33
Loading Factor: 0.0059
Transmission: 0.97
Above Residual: 0.00
Below Residual: 0.00

Analysis Mode: S3000
Sample Cell Id: 0318

ASVR Flow Rate: 75
Ultrasonic Power: 25 watts
Ultrasonic Time: 60 seconds

Filter: Off

Database Path: C:\MTWIN90\MTWIN.DB

APPENDIX F: DIMENSIONAL MEASUREMENTS OF CROSS-FLOW ULTRAFILTRATION TUBES FROM MOTT AND GKN

When the filter units first arrived at SRNL the filter elements were removed from the filter housing to inspect for damage. This was followed by a check on the tubes' dimensions to verify the porous lengths, tube inside diameter, and outside diameter. This was especially important ID and OD were given as nominal dimension of 0.5 inch and 0.625 inch, respectively. Further, there have been filter tests in the past which were done that the internal tube diameter was different than what was expected, e.g., receiving a 3/8-inch ID tube, when a ½-inch tube was specified. The following two table list the measurements that were done in the Engineering Development Laboratory of the Savannah River National Laboratory before the filter units were put into service.

Figure F1: MOTT FILTER USED FOR SIPP
Figure F2: GKN FILTER USED FOR SIPP

Summary Measures*

Filter Specified Dimensions

ID = 0.5 inch
OD = 0.625 inch

Received Dimensions

Mott ID = 0.488 inch ± 0.001 inch (one standard deviation)
Mott OD = 0.654 inch ± 0.007 inch (one standard deviation

GKN ID = 0.495 inch ± 0.002 inch (one standard deviation)
GKN = 0.687 inch ± 0.007 inch (one standard deviation)

*Notes:
1. The measured ID only represents the diameters at the ends of the tubes since the internal dimensions more that a couple of inches within the tubes could not be measured.
2. A much tighter tolerance on the ID was obtained and this was expected since the manufacturing process presses the 316L powder onto an accurately machined mandrel. The OD is not as good on its tolerance and has more fluctuation because the outside pressurized surface is flexible, as it has to be to compress the powder while the sintering process proceeds.

Table F1. Dimension of the new Mott Filter Elements measured on 9/10/2001

Dimensions* of the SRTC 90-inch Cross-flow Filter of 0.1-micron media
[The Mott filter was designed to have a 0.5-inch I.D. and a 0.625-inch O.D.]
(measurements were made on 09/10/2001)

The overall tube sheet-to-tube sheet length is 92 inches and the overall porous length is 90 inches (or approximately 89 5/8 inches if the internal weldments are excluded).

The 14 tube-sheet bushings have inside diameters between 0.505 to 0.515 inch.

	Inside Diameter**			Outside Diameter				
Tube*** Number	FDTSend**** inch	FLTSend**** inch	Section*** Number	FDTSend inch	Mid inch	FLTSend inch	Average inch	Mott Tol. Diff. Inch
1	0.486	0.488	1	0.652	0.647	0.648	0.649	
	0.487	0.485	2	0.661	0.667	0.674	0.667	0.011
			3	0.642	0.645	0.652	0.646	
			4	0.657	0.651	0.645	0.651	
2	0.488	0.487	1	0.665	0.665	0.672	0.667	0.011
	0.488	0.489	2	0.648	0.650	0.659	0.652	
			3	0.649	0.652	0.661	0.654	
			4	0.660	0.656	0.655	0.657	0.001
3	0.485	0.487	1	0.648	0.648	0.657	0.651	
	0.487	0.488	2	0.649	0.651	0.655	0.652	
			3	0.649	0.653	0.657	0.653	
			4	0.651	0.651	0.659	0.654	
4	0.489	0.487	1	0.646	0.645	0.644	0.645	
	0.487	0.488	2	0.658	0.657	0.664	0.660	0.004
			3	0.646	0.648	0.656	0.650	
			4	0.653	0.653	0.649	0.652	
5	0.487	0.489	1	0.654	0.657	0.664	0.658	0.002
	0.489	0.489	2	0.648	0.650	0.656	0.651	
			3	0.648	0.647	0.656	0.650	
			4	0.653	0.651	0.654	0.653	
6	0.487	0.486	1	0.652	0.663	0.668	0.661	0.005
	0.490	0.488	2	0.660	0.667	0.669	0.665	0.009
			3	0.647	0.650	0.663	0.653	
			4	0.653	0.645	0.640	0.646	
7	0.485	0.489	internal	na	na	na		
	0.489	0.490						
Averages	0.487	0.488		0.652	0.653	0.657	0.654	
Std. Dev.	0.002	0.001		0.006	0.007	0.009	0.006	
		I.D.					O.D.	
Maximum		0.490					0.674	
Minimum		0.485					0.640	
Difference		0.005					0.034	
Overall Average		0.488					0.654	
Overall Std. Dev.		0.001					0.007	

Average tube wall thickness = (OD - ID) / 2 = 0.083 inch

*The dimensions were measured with an uncalibrated venier no. MTF-M57-0042 but it was checked with a 1-inch standard which measured to be 1.000. The 1-inch standard was checked with a calibrated venier no. TR-502 that was calibrated on 05/12/01, due 05/12/02.
**Inside diameters were measured by using an inside caliber, therefore the measurement uncertainty is ±0.002 inch or greater.
***Tubes were measured in order but initial tube was arbitrarily chosen. Each of the 7 tubes were made of four 22.5-inch long section. Section 1 starts at the FDTSend.
**** FDTS = Fixed Tube Sheet, FLTS = Floating Tube Sheet

Table F2. Dimension of the new GKN Filter Elements measured on 8/17-18/2004

Dimensions* of the SRTC Cross-flow Filter of 0.1-micron media
[The GKN filter was designed to have a 0.5-inch I.D. and a 0.625-inch O.D.]
(measurements were made on 08/17/2004 and08/18/2004)
The overall tube sheet-to-tube sheet length is 101.25 inches and the overall porous length is 92.4 inches

	Inside Diameter			Outside Diameter			
Tube** Number	FDTSend*** inch	FLTSend*** inch	Section** Number	FDTSend inch	FLTSend inch	Average inch	GKN Tol. Diff. Inch
1	0.497	0.495	1	0.698	0.691	0.695	
	0.493	0.495	2	0.687	0.689	0.688	
			3	0.677	0.680	0.679	
			4	0.689	0.683	0.686	
			5	0.682	0.685	0.684	
			6	0.689	0.682	0.686	
2	0.495	0.497	1	0.701	0.692	0.697	
	0.496	0.492	2	0.692	0.689	0.691	
			3	0.696	0.689	0.693	
			4	0.700	0.692	0.696	
			5	0.691	0.686	0.689	
			6	0.696	0.696	0.696	
3	0.495	0.493	1	0.679	0.679	0.679	
	0.496	0.493	2	0.684	0.665	0.675	
			3	0.678	0.682	0.680	
			4	0.694	0.688	0.691	
			5	0.693	0.689	0.691	
			6	0.684	0.688	0.686	
4	0.498	0.491	1	0.693	0.686	0.690	
	0.496	0.498	2	0.677	0.676	0.677	
			3	0.686	0.665	0.676	
			4	0.699	0.693	0.696	
			5	0.684	0.680	0.682	
			6	0.689	0.694	0.692	
5	0.498	0.500	1	0.695	0.687	0.691	
	0.498	0.491	2	0.677	0.674	0.676	
			3	0.676	0.674	0.675	
			4	0.683	0.685	0.684	
			5	0.690	0.689	0.690	
			6	0.687	0.700	0.694	
6	0.494	0.495	1	0.683	0.684	0.684	
	0.497	0.498	2	0.689	0.685	0.687	
			3	0.690	0.693	0.692	
			4	0.686	0.680	0.683	
			5	0.679	0.686	0.683	
			6	0.690	0.693	0.692	
7	0.490	0.497	internal	na	na		
	0.494	0.495					
Averages	0.496	0.495		0.688	0.685	0.687	
Std. Dev.	0.002	0.003		0.007	0.008	0.007	

	I.D.	O.D.
Maximum	0.500	0.701
Minimum	0.490	0.665
Difference	0.010	0.036
Overall Average	0.495	0.687
Overall Std. Dev.	0.002	0.007
Meas. Method Uncert.	0.001	0.005
Sum Square of Errors	0.003	0.009

Average tube wall thickness = (OD - ID) / 2 = 0.096 0.009

*The dimensions were measured with calibrated venier no. TR-00502 and with uncalibrated micrometer no. TR-00464. The accuracy of the uncalibrated microimeter was checked with the calibrated vernier. Inside diameters were made using telescoping gauges. Outside diameters were made using a custom-made, adjustable gauge block due to interference with the tube buldle tie rods. The uncertainty of these methods are captured in the measurement method uncertainty.
**Tubes were measured in order but initial tube was arbitrarily chosen.
*** FDTS = Fixed Tube Sheet, FLTS = Floating Tube Sheet

APPENDIX G: INSTRUMENT LISTS AND CALIBRATION DATA

This appendix contains a list of all the instruments used to carry out SIPP. The second page of each section contains a condensed figure(s) that list the instruments involved with that unit's operation, along with the pre-test calibration. The principal instruments considered critical to SIPP operation are shown on a following schematic, which is then followed by the post calibration sheets for the same.

The sections are as follows:

Section G1: Pilot Feed-Waste Evaporation Process (FEP) and Treated-LAW Evaporation Process (TLP)

(Both the FEP and TLP used the same equipment)

Section G2: Pilot Ultrafiltration Process (UFP)

Section G3: Pilot Cesium Ion Exchange Process (CIX)

G1: FEP & TLP

INSTRUMENTS USED ON THE RPP-WTP PILOT SCALE EVAPORATOR FOR CAMPAIGNS 2 AND 3									
(Printed: January 28, 2005)									
DAS Chan.	Test Rig No.	Instrument	M&TE	Make	Model/Serial	Calibrated Range	Uncertainty (pre-test)	Uncertainty (post-test)	Uncertainty Average
0	ER-TC2	Thermocouple	TR-01523	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.9 C		
1	ER-TC4	Thermocouple	TR-01505	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.8 C		
2	JP-TC1	Thermocouple	TR-01509	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.9 C		
3	PW-TC4	Thermocouple	TR-01544	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.9 C		
4	ER-TC3	Thermocouple	TR-01525	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 1.0 C		
5	ER-TC1	Thermocouple	TR-01520	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 1.0 C	+/- 0.77 C	0.885
6	PW-TC1	Thermocouple	TR-01514	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.9 C		
7	PW-TC2	Thermocouple	TR-01515	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 1.0 C		
8	PW-TC3	Thermocouple	TR-01519	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.9 C		
9	Spare	Thermocouple	TR-01510	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0-100 C	+/- 0.8 C		
10	ER-FT1	Mag Flowmeter	TR-03278	Fischer-Porter	10D1475DK11PL29KD11CAC / 90W003447	0-100 GPM	+/- 0.37 GPM	+/- 0.43 GPM	0.4
11	CL-FT1	Mag Flowmeter	TR-03703	Fischer-Porter	10D1475DK11PL29KD11CAC / 95W0006755	0-1 GPM	+/- 0.01 GPM		
12	FL-FT1	Mag Flowmeter	TR-03702	Fischer-Porter	10D1475DK11PL29KD11CAC / 95W0006754	0-1 GPM	+/- 0.06 GPM		
13	PC-FT1	Mag Flowmeter	TR-03705	Fischer-Porter	10D1475DK11PL29KD11CAC / 92W130154	0-1.2 GPM	+/- 0.01 GPM		
14	SW-FT1	Mag Flowmeter	TR-03704	Fischer-Porter	10D1475DK11PL29KD11CAC / 94W0Z4465	0-5.3 GPM	+/- 0.01 GPM		
15	JP-DP1	Pressure Transducer	TR-02151	Rosemount	1151DP3522M1B2/1230856	0-10" H2O	+/- 0.02" H2O		
16	JP-PT1	Pressure Transducer	TR-01381	Rosemount	1151DP5E22M3B2/11210985	-14.5 - 0 PSIG	+/- 0.01 PSI		
17	ER-PT1	Pressure Transducer	TR-03554	Rosemount	1151DP6E22/1368954	-14.5 - 0 PSIG	+/- 0.01 PSI	+/- 0.009 PSI	0.0095
18	ER-DP1	Pressure Transducer	TR-02150	Rosemount	1151DP3533M1B2/1276367	0-8" H2O	+/- 0.01" H2O		
19	ER-DP3	Pressure Transducer	TR-03719	Rosemount	3051 CA1A22A1AB4/1338878	-12" to 12" H2O	+/- 0.02" H2O		
20	ER-DP2	Pressure Transducer	TR-03720	Rosemount	3051 CA1A22A1AB4/1338879	-12" to 12" H2O	+/- 0.02" H2O		
21	ER-AP2	Pressure Transducer	TR-03717	Rosemount	3051 CA1A22A1AB4/1339363	0-30 PSIA	+/- 0.008 PSI		
22	ER-AP1	Pressure Transducer	TR-03718	Rosemount	3051 CA1A22A1AB4/1339364	0-30 PSIA	+/- 0.009 PSI		
23	PC-FT2	Mag Flowmeter	TR-03562	Fischer-Porter	10D1475DK11PL29KD11CAC / 95W0006754	0-1 GPM	+/- 0.01 GPM	+/- 0.0083 GPM	0.00915
Spare		Pressure Transducer	TR-03529	Rosemount	1151DP5S22B1/4043432	0-180" H2O	+/- 0.14" H2O		
		Local Instruments							
	PW-FM1	Rotameter	TR-03684	Brooks	1024CNE1F91AA/0102110221812/001	5-40 GPM	+/- 0.48 GPM		
	PW-FM2	Rotameter	TR-03682	Brooks	1305FL1ACJ2BA/0102110221811/002	2.5-25 GPM	+/- 0.78 GPM		
	PW-FM3	Rotameter	TR-03683	Brooks	1305FL1ACJ2BA/0102110221811/001	2.5-25 GPM	+/- 1.09 GPM		
	SW-FI1	Rotameter	TR-20270	Fischer-Porter	10A4555P/91W503196	0-2.76 GPM	Information Only		
	N/A	Weight Scale	DWB-514	Explorer	ELM20/1118453062	0-32,000 g	+/- 0.0818 g		+/- 0.0818
	N/A	Density Meter	N/A	Anton Parr	DMA4500/528030	0-3 g/mL	+/-0.00005 g/mL		+/-0.00005
				DAS Calibration		Transfer Functions for DAS (Conversion from mA to Volts)			
	DAS Channel	Instrument		Slope (V/mA)	Intercept(V)	Output	Slope (unit/V)		Intercept (Unit)
	10	ER-FT1		2.015	0.006	Flow (gpm)	12.381	x V +	-24.543
	11	CL-FT1		2.013	0.010	Flow (gpm)	0.133	x V +	-0.263
	12	FL-FT1		2.012	0.004	Flow (gpm)	0.136	x V +	-0.279
	13	PC-FT1		2.006	0.004	Flow (gpm)	0.150	x V +	-0.302
	14	SW-FT1		2.005	-0.006	Flow (gpm)	0.670	x V +	-1.336
	15	JP-DP1		2.010	0.000	Pressure (psid)	1.256	x V +	-2.509
	16	JP-PT1		2.017	0.010	Pressure (psig)	-1.828	x V +	3.613
	17	ER-PT1		2.008	0.008	Pressure (psig)	1.820	x V +	-18.119
	18	ER-DP1		2.006	0.004	Pressure (psid)	1.003	x V +	-2.001
	19	ER-DP3		2.007	-0.010	Pressure (psid)	22.579	x V +	-45.076
	20	ER-DP2		2.003	0.002	Pressure (psid)	3.002	x V +	-17.983
	21	ER-AP2		2.007	-0.010	Pressure (psia)	3.766	x V +	-7.538
	22	ER-AP1		2.003	-0.010	Pressure (psia)	3.756	x V +	-7.520
	23	PC-FT2		2.003	-0.010	Flow (gpm)	0.127	x V +	-0.256

Figure G1-1. Entire FEP and TLP Instrumentation List

(Printed: January 28, 2005) (Calibration check of all DAS channels was done on 23 July 2004)

TR-01523	Thermocouples		TR-01505			TR-01509			TR-01544			TR-01525		
Temperature °C	Channel 0 T, applied	Channel 0 T, reading	Temperature °C	Channel 1 T, applied	Channel 1 T, reading	Temperature °C	Channel 2 T, applied	Channel 2 T, reading	Temperature °C	Channel 3 T, applied	Channel 3 T, reading	Temperature °C	Channel 4 T, applied	Channel 4 T, reading
0	0	-0.40	0	0	-0.25	0	0	-0.42	0	0	-0.48	0	0	-0.18
25	25	24.80	25	25	24.89	25	25	24.76	25	25	24.73	25	25	24.88
50	50	49.99	50	50	50.04	50	50	49.94	50	50	49.94	50	50	49.94
75	75	75.18	75	75	75.19	75	75	75.12	75	75	75.15	75	75	75.00
100	100	100.38	100	100	100.34	100	100	100.29	100	100	100.36	100	100	100.06

TR-01520			TR-01514			TR-01515			TR-01519		
Temperature °C	Channel 5 T, applied	Channel 5 T, reading	Temperature °C	Channel 6 T, applied	Channel 6 T, reading	Temperature °C	Channel 7 T, applied	Channel 7 T, reading	Temperature °C	Channel 8 T, applied	Channel 8 T, reading
0	0	-0.20	0	0	-0.43	0	0	-0.58	0	0	-0.69
25	25	24.88	25	25	24.74	25	25	24.64	25	25	24.54
50	50	49.96	50	50	49.91	50	50	49.87	50	50	49.78
75	75	75.05	75	75	75.07	75	75	75.09	75	75	75.01
100	100	100.13	100	100	100.24	100	100	100.32	100	100	100.24

Current mA	Channel 10 V, meas.	Channel 10 V, calc.	Current mA	Channel 11 V, meas.	Channel 11 V, calc.	Current mA	Channel 12 V, meas.	Channel 12 V, calc.	Current mA	Channel 13 V, meas.	Channel 13 V, calc.	Current mA	Channel 14 V, meas.	Channel 14 V, calc.
4	1.98	1.998	4	1.98	1.998	4	1.99	2.004	4	1.99	1.998	4	2.00	2.002
8	3.97	4.003	8	3.97	4.001	8	3.97	3.996	8	3.99	4.004	8	3.99	3.997
12	5.95	5.998	12	5.96	6.004	12	5.96	5.998	12	5.98	6.000	12	5.99	6.002
16	7.94	8.003	16	7.94	7.997	16	7.95	8.000	16	7.97	7.996	16	7.98	7.997
20	9.92	9.998	20	9.93	10.000	20	9.94	10.002	20	9.97	10.002	20	9.98	10.002

Current mA	Channel 15 V, meas.	Channel 15 V, calc.	Current mA	Channel 16 V, meas.	Channel 16 V, calc.	Current mA	Channel 17 V, meas.	Channel 17 V, calc.	Current mA	Channel 18 V, meas.	Channel 18 V, calc.	Current mA	Channel 19 V, meas.	Channel 19 V, calc.
4	1.99	2.000	4	1.98	2.002	4	1.99	2.002	4	1.99	1.998	4	2.00	2.002
8	3.98	4.000	8	3.96	3.999	8	3.98	4.000	8	3.99	4.004	8	3.99	3.999
12	5.97	6.000	12	5.94	5.996	12	5.97	5.998	12	5.98	6.000	12	5.98	5.996
16	7.96	8.000	16	7.93	8.003	16	7.96	7.996	16	7.97	7.996	16	7.98	8.003
20	9.95	10.000	20	9.91	10.000	20	9.96	10.004	20	9.97	10.002	20	9.97	10.000

Current mA	Channel 20 V, meas.	Channel 20 V, calc.	Current mA	Channel 21 V, meas.	Channel 21 V, calc.	Current mA	Channel 22 V, meas.	Channel 22 V, calc.	Current mA	Channel 23 V, meas.	Channel 23 V, calc.
4	1.99	1.994	4	2.00	2.002	4	2.00	1.998	4	2.00	1.998
8	4.00	4.007	8	3.99	3.999	8	4.00	4.001	8	4.00	4.001
12	5.99	6.000	12	5.98	5.996	12	6.00	6.004	12	6.00	6.004
16	7.99	8.003	16	7.98	8.003	16	7.99	7.997	16	7.99	7.997
20	9.98	9.996	20	9.97	10.000	20	9.99	10.000	20	9.99	10.000

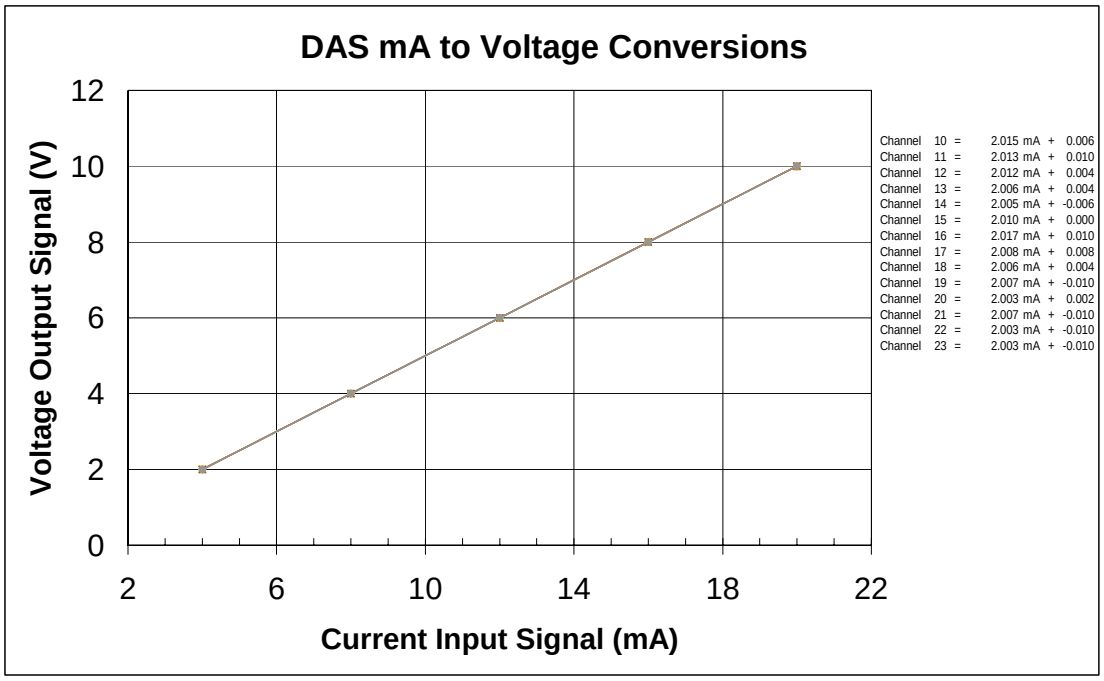


Figure G1-2. Transfer Functions for FEP and TLP Instrumentation

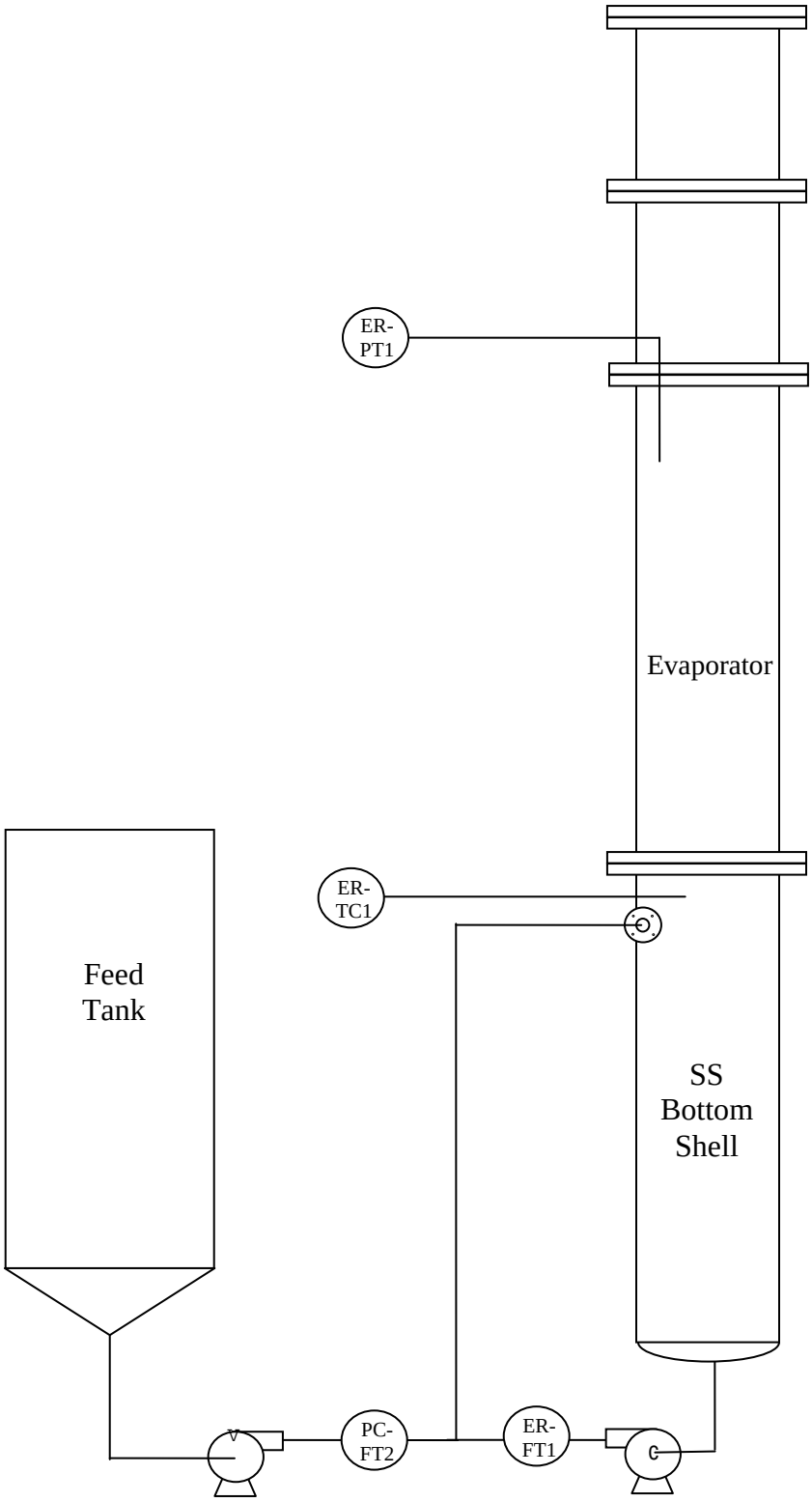


Figure G1-3. Critical Instruments Location Schematic

UNCERTAINTY ANALYSIS **TR-01520** page ____ of ____
REF. L9.5-9114 calibration date_____

Calibration Data

Temperature Medium	Standard Temperature (C)	Voltage Output (mV)	Calculated Temperature (eq. 1) (C)	Error (C)	Curve Fit (C)	Curve Fit Error (C)
Ice Point	0.00	-0.012	-0.20	-0.2	-0.30	-0.10
Room Temp	20.92	1.230	20.64	-0.3	20.72	0.08
Boiling Water*	100.40	6.357	100.56	0.2	100.56	0.00
Boiling Water*	100.40	6.356	100.55	0.1	100.56	0.01
Room Temp	21.21	1.243	20.85	-0.4	21.01	0.16
Ice Point	0.00	-0.013	-0.22	-0.2	-0.30	-0.08
Ice Point	0.00	-0.013	-0.22	-0.2	-0.30	-0.08
Room Temp	21.21	1.242	20.83	-0.4	21.01	0.18
Boiling Water*	100.40	6.360	100.61	0.2	100.56	-0.05
Boiling Water*	100.40	6.360	100.61	0.2	100.56	-0.05
Room Temp	21.36	1.262	21.16	-0.2	21.16	0.00
Ice Point	0.00	-0.013	-0.22	-0.2	-0.30	-0.08

* Temperature derived from 1967 ASME Steam Tables
T (C) =0.00483 + 17.040918*mV - 0.224284*mV^2 + 0.005038*mV^3 (eq. 1) 0.0048
(Limited Curve Fit, 0-100 C. From N.I.S.T. Reference Tables) 17.0409
-0.2243
0.0050

Uncertainty of the Standards:

Temperature Curve Fit: +/-	0.010	C			
Thermometer: +/-	0.40	C			
Ice Bath: +/-	0.10	C			
Multimeter: +/- (	0.0045	% RDG +	0.0400	mV)	
= +/-	0.063	C @	6.36	mV	

Accepted Tolerance: +/- 1.7 C

Statistical Info.

a	b	n	T	Xbar (C)	Sxx (C^2)	SEE (C^2)	MSE (C^2)
-0.30	1.00	12.00	2.179	33.02	12776.5	0.086	0.0086

Calculated Uncertainties:

σ_C (C)	σ_E (C)	σ_F (C)	σ_T (C)
0.41	0.24	0.29	0.77

PASS CALIBRATION? **YES**

Figure G1-4. Evaporator Temperature Thermocouple Post-test Calibration (ER-TC1)

UNCERTAINTY ANALYSIS **TR-03278** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data				Calculated Data						
Meter Output (mA)	Water Temp (C)	Water Weight (lbs)	Time Duration (min)	Mass Flow (lbs/hr)	Water Density (lb/ft^3)	Volume Flow (ft^3/m)	Volume Flow (GPM)	Curve Fit (mA)	Error (mA)	Error (GPM)
7.20	20.11	824.0	5.00	164.7	62.31	2.64	19.77	7.22	0.02	0.124
10.40	20.75	988.0	3.00	328.9	62.30	5.28	39.49	10.42	0.02	0.103
13.60	20.52	1479.0	3.00	492.6	62.30	7.91	59.14	13.60	0.00	0.012
16.80	21.19	1977.0	3.00	658.5	62.29	10.57	79.08	16.83	0.03	0.210
20.00	20.45	2461.0	3.00	819.8	62.30	13.16	98.43	19.97	-0.03	-0.185
7.20	20.08	825.0	5.04	163.6	62.31	2.63	19.64	7.20	0.00	-0.006
10.40	20.16	983.0	3.00	327.6	62.30	5.26	39.33	10.39	-0.01	-0.061
13.60	20.21	1480.0	3.00	492.9	62.30	7.91	59.18	13.61	0.01	0.054
16.80	20.24	1970.0	3.00	656.6	62.30	10.54	78.84	16.79	-0.01	-0.037
20.00	20.40	2474.0	3.00	823.7	62.30	13.22	98.90	20.05	0.05	0.288
7.24	20.12	829.0	5.00	165.7	62.30	2.66	19.89	7.24	0.00	-0.005
10.45	20.19	990.0	3.00	329.5	62.30	5.29	39.57	10.43	-0.02	-0.132
13.62	20.22	1478.0	3.00	492.3	62.30	7.90	59.10	13.60	-0.02	-0.151
16.85	20.32	1976.0	3.00	658.0	62.30	10.56	79.01	16.82	-0.03	-0.175
20.04	20.66	2472.0	3.00	823.0	62.30	13.21	98.82	20.03	-0.01	-0.037

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:					
Weight:	+/-	7.00	lbs		
Temperature:	+/-	0.20	C		
Density:	+/-	0.02	lbm/ft^3		
Time:	+/- (	0.20	sec +	500.00	µsec/sec)
Multimeter:	+/- (	0.04	%RDG +	0.001	mADC)
Accepted Tolerance:	+/-	0.75	GPM		

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
4.0153	0.1621	18.00	2.120	59.21	11691.9	0.007	0.000

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)
0.31	0.30	0.00	0.43

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 6.169 * mA -24.769**

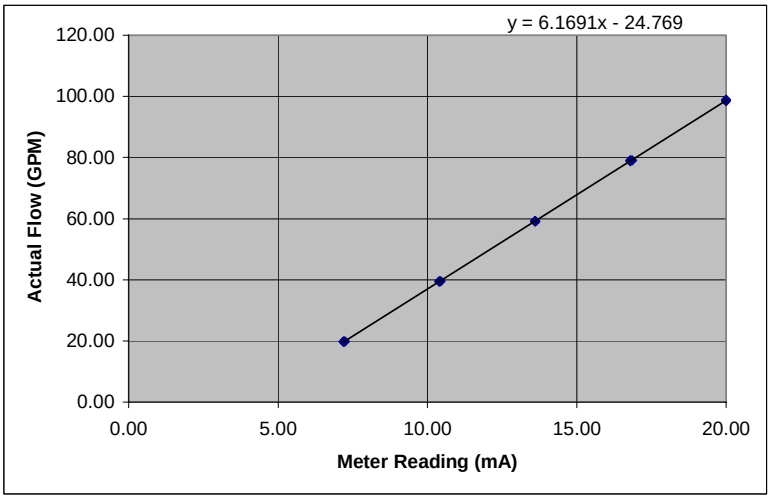


Figure G1-5. Evaporator Recirculation Pump Post-test Calibration (ER-FT1)

Output (mA)	Temp (C)	Weight (lbs)	Duration (min)	Flow (lbs/hr)	Density (lb/ft^3)	Flow (ft^3/m)	Flow (GPM)	Curve Fit (mA)	Error (mA)	Error (GPM)
7.24	19.37	20.7	12.00	1.7	62.31	0.03	0.21	7.26	0.02	0.001
10.44	20.15	20.5	6.00	3.4	62.30	0.05	0.41	10.46	0.02	0.001
13.64	20.88	25.5	5.00	5.1	62.30	0.08	0.61	13.64	0.00	0.000
16.84	21.13	27.1	4.00	6.8	62.29	0.11	0.81	16.83	-0.01	-0.001
20.03	21.16	25.5	3.00	8.5	62.29	0.14	1.02	20.06	0.03	0.002
7.24	21.40	20.6	12.00	1.7	62.29	0.03	0.21	7.24	0.00	0.000
10.46	21.32	20.5	6.00	3.4	62.29	0.05	0.41	10.46	0.00	0.000
13.62	21.09	25.4	5.00	5.1	62.29	0.08	0.61	13.61	-0.01	0.000
16.84	20.38	27.2	4.01	6.8	62.30	0.11	0.81	16.84	0.00	0.000
20.03	21.75	25.4	3.00	8.5	62.28	0.14	1.02	20.04	0.01	0.001
7.24	21.35	20.6	12.00	1.7	62.29	0.03	0.21	7.24	0.00	0.000
10.46	21.20	20.5	6.00	3.4	62.29	0.05	0.41	10.45	-0.01	-0.001
13.62	20.78	25.4	5.00	5.1	62.30	0.08	0.61	13.60	-0.02	-0.001
16.83	20.02	27.1	4.00	6.8	62.31	0.11	0.81	16.81	-0.02	-0.001
20.03	21.48	25.4	3.00	8.5	62.29	0.14	1.02	20.03	0.00	0.000

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:					
Weight:+/-	0.20	lbs			
Temperature: +/-	0.20	C			
Density: +/-	0.02	lbm/ft^3			
Time: +/- (	0.20	sec +	500.00	µsec/sec)	
Multimeter: +/- (	0.04	%RDG +	0.001	mADC)	

Accepted Tolerance: +/- +/- 0.020 GPM

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
3.9868	15.7810	18.00	2.120	0.61	1.2	0.003	0.000

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)
0.01	0.00	0.00	0.0083

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 0.063367 * mA -0.25263**

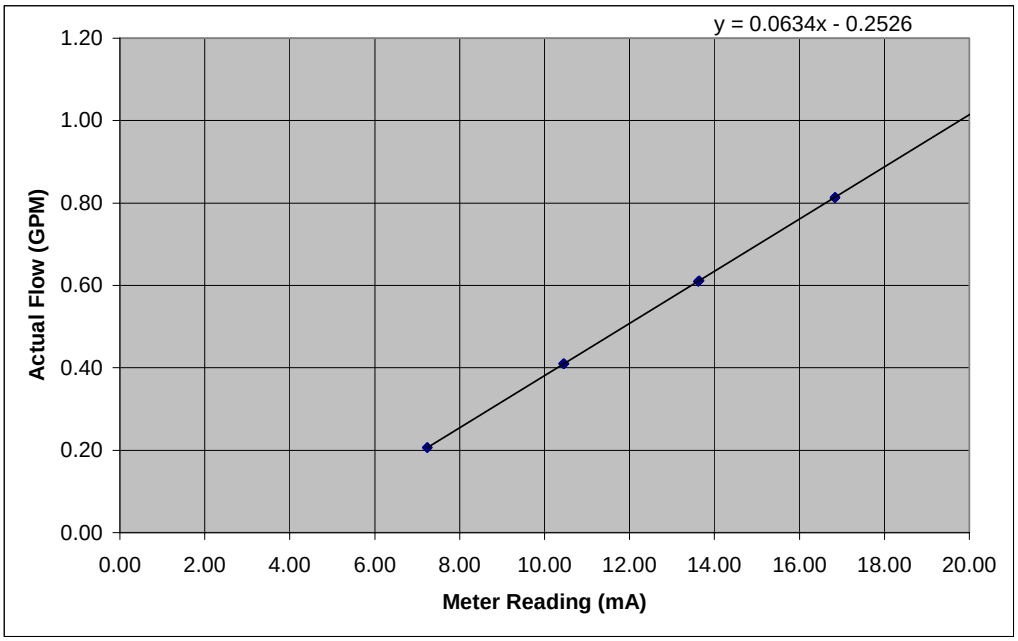


Figure G1-6. Evaporator Feed Pump Post-test Calibration (PC-FT2)

UNCERTAINTY ANALYSIS **TR-03554** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Nominal Pressure (psia)	Applied Pressure (psia)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psia)
-14.5	-14.5	20.03	20.03	-0.003	0.00
-9.5	-9.5	14.51	14.51	0.004	0.00
-4.5	-4.5	9.00	9.00	0.000	0.00
0.0	0.0	4.04	4.04	-0.002	0.00
-14.5	-14.5	20.03	20.03	-0.003	0.00
-9.5	-9.5	14.51	14.51	0.004	0.00
-4.5	-4.5	9.00	9.00	0.000	0.00
0.0	0.0	4.04	4.04	-0.002	0.00

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- 0.04 % RDG = 0.000 psi

Statistical Info:

a	b	n	T	Xbar psia	Sxx psia^2	SEE mADC^2	MSE mADC^2
4.0384	-1.1027	16.00	2.07	-7.13	235.38	0.0001	0.0000

Calculated Uncertainties:

σ_C psia	σ_E psia	σ_F psia	Total Uncertainty σ_T psia
0.01	0.00	0.00	0.009

Accepted Tolerance: +/- 0.1 psia

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **PSIG= -0.90688 *mADC 3.6623**

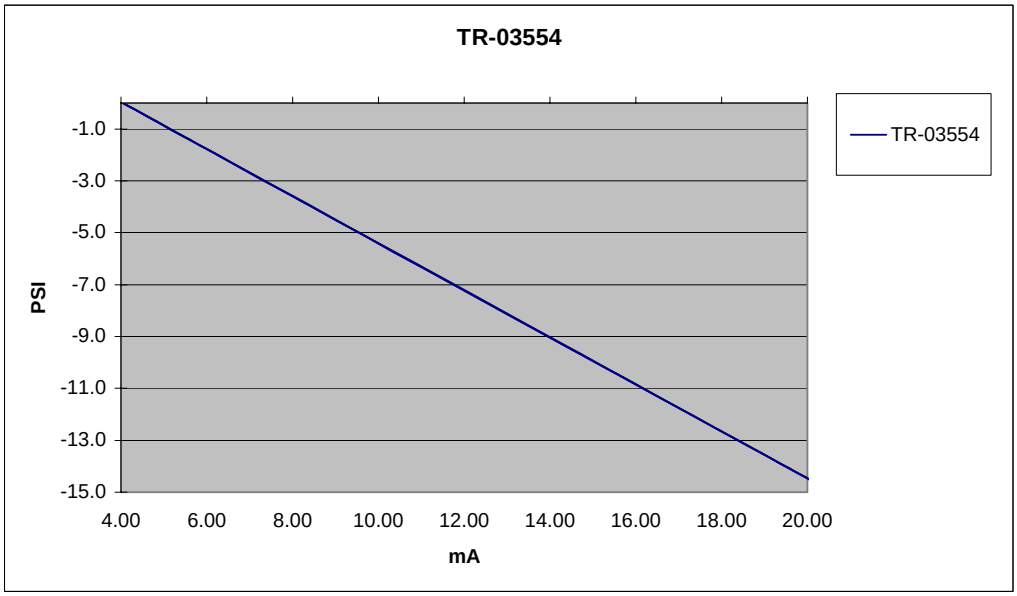


Figure G1-7. Evaporator Pot Gauge Pressure Transducer Post-test Calibration (ER-PT1)

G2: UFP Instrumentation

Channel	M&TE #	M&TE Description	Instrumentation Type	Name	Range	Tolerance (±)
0	TR-02927	Permeate Loop Temperature	Type E Thermocouple	T2	0-100 C	1.7 ºC
1	TR-02930	Cleaning Loop Temperature	Type E Thermocouple	T3	0-100 C	1.7 ºC
2	TR-02929	Slurry Loop Temperature	Type E Thermocouple	T1	0-100 C	1.7 ºC
3	TR-02925	Atmospheric Temperature - upper	Type E Thermocouple	T4	0-100 C	1.7 ºC
4	TR-02926	Atmospheric Temperature - lower	Type E Thermocouple	T5	0-100 C	1.7 ºC
5	Spare					
6	TR-03553	Transmembrane Pressure – upper flange	Rosemount Pressure Transmitter	dP2	0-101 psid	0.5% FS
7	TR-02917	Slurry Loop Pressure	Rosemount Pressure Transmitter	P1	0-100 psig	0.5% FS
8	TR-03495	Filter Pressure Loss	Rosemount Pressure Transmitter	dP1	0-26 psid	0.5% FS
9	TR-03109	Transmembrane Pressure – lower flange	Rosemount Pressure Transmitter	dP3	-11-101 psid	0.5% FS
10	TR-03115	Permeate Loop Pressure	Rosemount Pressure Transmitter	P2	0-151 psig	0.5% FS
11	TR-00532	Backpulse Pot Pressure	Rosemount Pr Transmitter	P3	0-151 psig	0.5% FS
12	TR-20353	Permeate Flow Rate – low range	Fischer-Porter Flow Transmitter	Q2	0-1.2 gpm	0.01 gpm
13	TR-20350	Slurry Flow Rate	Fischer-Porter Flow Transmitter	Q1	0-100 gpm	0.5 gpm
14	TR-03721	Permeate Flow Rate – high range	Fischer-Porter Flow Transmitter	Q3	0-15 gpm	0.1 gpm
15	TR-03276	Backpulse Flow Rate	Fischer-Porter Flow Transmitter	Q4	0-5 gpm	0.05 gpm

Channel	DAS Transfer Equation[1]	DAS Uncertainty (±)		M&TE Transfer Equation	M&TE Uncertainty (±)		Combined Transfer Equation	Combined Uncertainty (±)	
		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test
0	T_{in}=0.998*T_{out}+0.519	0.14 ºC	0.32 ºC	Note 2	0.80 ºC	0.63 ºC	T_{in}=0.998* T_{out}+0.519	0.81 ºC	0.71 ºC
1	T_{in}=1.000*T_{out} +0.480	0.18 ºC	0.32 ºC	Note 2	0.80 ºC	n/a	T_{in}=1.000* T_{out}+0.408	0.82 ºC	n/a
2	T_{in}=0.999*T_{out} +0.520	0.05 ºC	0.14 ºC	Note 2	0.90 ºC	0.76 ºC	T_{in}=0.999* T_{out}+0.0520	0.90 ºC	0.77 ºC
3	T_{in}=0.999*T_{out} +0.879	0.06 ºC	0.40 ºC	Note 2	0.90 ºC	0.66 ºC	T_{in}=0.999* T_{out}+0.879	0.90 ºC	0.77 ºC
4	T_{in}=0.997*T_{out} +0.578	0.09 ºC	0.40 ºC	Note 2	0.70 ºC	0.74 ºC	T_{in}=0.997* T_{out}+0.578	0.71 ºC	0.84 ºC
5	Spare								
6	mA=2.010*V+0.000	0.00 mA	0.00 mA	psid=6.294*mA-24.988	0.10 psid	0.12 psid	psid=12.652*V-24.988	0.10 psid	0.12 psid
7	mA=2.007*V-0.014	0.03 mA	0.02 mA	psig=6.308*mA-25.222	0.13 psig	0.12 psig	psig=12.659*V-25.145	0.13 psig	0.12 psig
8	mA=2.008*V-0.004	0.01 mA	0.04 mA	psid=1.621*mA-6.462	0.05 psid	0.04 psid	psid=3.255*V-6.469	0.05 psid	0.05 psid
9	mA=2.004*V-0.004	0.01 mA	0.06 mA	psid=6.376*mA-36.516	0.12 psid	0.17 psid	psid=12.777*V-36.547	0.12 psid	0.18 psid
10	mA=2.010*V-0.004	0.02 mA	0.04 mA	psig=9.434*mA-37.953	0.50 psig	0.40 psig	psig=18.963*V-37.991	0.50 psig	0.40 psig
11	mA=2.007*V-0.010	0.01 mA	0.02 mA	psig=9.437*mA-37.751	0.20 psig	0.21 psig	psig=18.938*V-37.846	0.20 psig	0.21 psig
12	mA=2.005*V-0.014	0.01 mA	0.01 mA	gpm=0.075*mA-0.296	0.005 gpm	0.010 gpm	gpm=0.150*V-0.297	0.01 gpm	0.01 gpm
13	mA=2.008*V-0.004	0.01 mA	0.01 mA	gpm=6.267*mA-25.000	0.41 gpm	0.48 gpm	gpm=12.584*V-25.025	0.41 gpm	0.48 gpm
14	mA=2.005*V-0.006	0.01 mA	0.04 mA	gpm=0.913*mA-3.659	0.05 gpm	0.08 gpm	gpm=1.830*V-3.662	0.05 gpm	0.09 gpm
15	mA=2.003*V-0.006	0.01 mA	0.00 mA	gpm=0.313*mA-1.246	0.014 gpm	0.013 gpm	gpm=0.627*V1.249	0.02 gpm	0.01 gpm

Figure G2-1. Entire UFP Instrumentation List

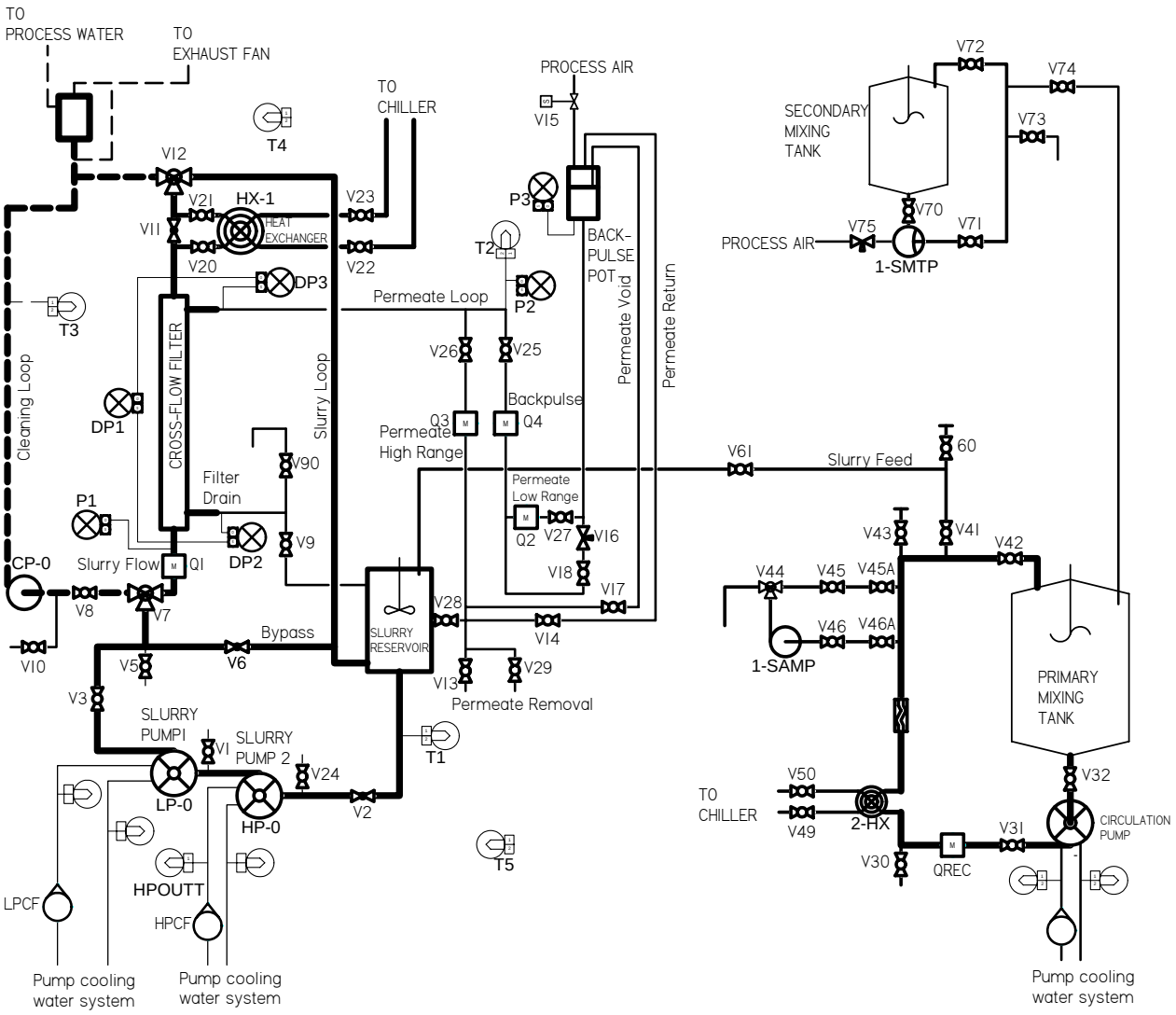


Figure G2-2. Instrument Location Schematic (shown from Section 2.7.1 for convenience)

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REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data

Temperature Medium	Standard Temperature (C)	Voltage Output (mV)	Calculated Temperature (eq. 1) (C)	Error (C)
Ice Point	0.00	-0.035	-0.59	-0.59
Room Temp	20.78	1.209	20.29	-0.49
Boiling Water	100.30	6.360	100.61	0.31
Boiling Water	100.30	6.359	100.59	0.29
Room Temp	20.91	1.212	20.34	-0.57
Ice Point	0.00	-0.036	-0.61	-0.61
Ice Point	0.00	-0.036	-0.61	-0.61
Room Temp	20.97	1.210	20.30	-0.67
Boiling Water	100.30	6.368	100.73	0.43
Boiling Water	100.30	6.365	100.68	0.38
Room Temp	21.06	1.221	20.49	-0.57
Ice Point	0.00	-0.035	-0.59	-0.59

T (C) =0.00483 + 17.040918*mV - 0.224284*mV^2 + 0.005038*mV^3 (eq. 1)
(Limited Curve Fit, 0-100 C. From N.I.S.T. Reference Tables)

Uncertainty of the Standards:

Temperature Curve Fit: +/-	0.010	C			
Thermister: +/-	0.20	C			
Ice Bath: +/-	0.10	C			
Multimeter: +/- (	0.0045	% RDG +	0.0040	mV)	
= +/-	0.063	C @	6.37	mV	

Accepted Tolerance: +/- 1.70 C

Statistical Info.

a	b	n	T	Xbar (C)	Sxx (C^2)	SEE (C^2)	MSE (C^2)
-0.68	1.01	12.00	2.228	40.41	22397.0	0.100	0.0100

Calculated Uncertainties:

σ_C (C)	σ_E (C)	σ_F (C)	σ_T (C)
0.23	0.25	0.68	0.76

PASS CALIBRATION? **YES**

Figure G2-3. Slurry Loop Temperature [T1, Channel 2] – Post Calibration

UNCERTAINTY ANALYSIS **TR-2927** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data

Temperature Medium	Standard Temperature (C)	Voltage Output (mV)	Calculated Temperature (eq. 1) (C)	Error (C)
Ice Point	0.00	-0.028	-0.47	-0.47
Room Temp	20.78	1.215	20.39	-0.39
Boiling Water	100.30	6.362	100.64	0.34
Boiling Water	100.30	6.360	100.61	0.31
Room Temp	20.91	1.222	20.50	-0.41
Ice Point	0.00	-0.028	-0.47	-0.47
Ice Point	0.00	-0.028	-0.47	-0.47
Room Temp	20.97	1.217	20.42	-0.55
Boiling Water	100.30	6.362	100.64	0.34
Boiling Water	100.30	6.362	100.64	0.34
Room Temp	21.06	1.226	20.57	-0.49
Ice Point	0.00	-0.027	-0.46	-0.46

T (C) =0.00483 + 17.040918*mV - 0.224284*mV^2 + 0.005038*mV^3 (eq. 1)
(Limited Curve Fit, 0-100 C. From N.I.S.T. Reference Tables)

Uncertainty of the Standards:

Temperature Curve Fit: +/-	0.010	C			
Thermister: +/-	0.20	C			
Ice Bath: +/-	0.10	C			
Multimeter: +/- (	0.0045	% RDG +	0.0040	mV)	
= +/-	0.063	C @	6.36	mV	

Accepted Tolerance: +/- 1.70 C

Statistical Info.

a	b	n	T	Xbar (C)	Sxx (C^2)	SEE (C^2)	MSE (C^2)
-0.54	1.01	12.00	2.228	40.41	22397.0	0.078	0.0078

Calculated Uncertainties:

σ_C (C)	σ_E (C)	σ_F (C)	σ_T (C)
0.23	0.22	0.54	0.63

PASS CALIBRATION? **YES**

Figure G2-4. Permeate Loop Temperature [T2, Channel 0] – Post Calibration

UNCERTAINTY ANALYSIS **TR-20350** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data				Calculated Data				
Meter Output (mA)	Water Temp (C)	Water Weight (lbs)	Time Duration (min)	Mass Flow (lbs/hr)	Water Density (lb/ft^3)	Volume Flow (ft^3/m)	Volume Flow (GPM)	Curve Fit (mA)
3.98	23.62	0	0.00	0.0	62.26	0.00	0.00	4.00
7.23	23.62	845	5.00	168.9	62.26	2.71	20.29	7.24
10.40	23.76	1001	3.01	332.9	62.26	5.35	40.00	10.39
13.65	24.15	1510	3.01	502.2	62.25	8.07	60.35	13.64
16.82	23.58	2007	3.00	668.1	62.26	10.73	80.27	16.82
20.01	23.27	2510	3.00	835.4	62.26	13.42	100.37	20.03
3.98	23.20	0	0.00	0.0	62.27	0.00	0.00	4.00
7.22	23.20	842	5.01	168.1	62.27	2.70	20.20	7.23
10.46	23.10	1010	3.01	335.8	62.27	5.39	40.35	10.44
13.64	23.23	1508	3.01	501.2	62.26	8.05	60.22	13.62
16.82	23.67	2006	3.00	668.1	62.26	10.73	80.27	16.82
19.98	23.67	2501	3.00	832.6	62.26	13.37	100.04	19.98
4.00	23.26	0	0.00	0.0	62.26	0.00	0.00	4.00
7.22	23.26	842	5.01	168.2	62.26	2.70	20.20	7.23
10.45	23.19	1008	3.01	334.6	62.27	5.37	40.20	10.42
13.60	23.04	1501	3.00	500.1	62.27	8.03	60.07	13.60
16.80	23.77	2000	3.00	666.1	62.26	10.70	80.04	16.79
20.00	23.93	2505	3.00	834.4	62.26	13.40	100.27	20.02

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:						
	Weight:+/-	7.00	lbs			
	Temperature: +/-	0.20	C			
	Density: +/-	0.02	lbm/ft^3			
	Time: +/- (	0.20	sec +	500.00	µsec/sec)	
	Multimeter: +/- (	0.04	%RDG +	0.001	mADC)	
Accepted Tolerance: +/-	+/-	0.50	GPM			

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
3.9975	0.1598	18.00	2.120	50.17	21062.8	0.004	0.000

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)
0.31	0.22	0.30	0.48

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 6.259 * mA -25.018**

Figure G2-5. Slurry Flow Rate [Q1, Channel 13] – Post Calibration

Permeate Flow Rate – Low Range

UNCERTAINTY ANALYSIS **TR-20353** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data				Calculated Data				
Meter Output (mA)	Water Temp (C)	Water Weight (lbs)	Time Duration (min)	Mass Flow (lbs/hr)	Water Density (lb/ft^3)	Volume Flow (ft^3/m)	Volume Flow (GPM)	Curve Fit (mA)
4.00	22.25	0.00	0.00	0.0	62.28	0.00	0.00	3.95
7.28	22.25	25.05	12.01	2.1	62.28	0.03	0.25	7.30
10.41	22.95	24.26	6.00	4.0	62.27	0.06	0.49	10.44
13.65	24.51	24.16	4.00	6.0	62.25	0.10	0.73	13.65
16.84	23.32	24.10	3.00	8.0	62.26	0.13	0.96	16.84
20.10	22.09	30.13	3.00	10.0	62.28	0.16	1.21	20.07
4.00	21.98	0.00	0.00	0.0	62.28	0.00	0.00	3.95
7.21	21.98	24.66	12.01	2.1	62.28	0.03	0.25	7.25
10.42	22.59	24.32	6.01	4.0	62.27	0.07	0.49	10.45
13.63	24.14	24.11	4.00	6.0	62.25	0.10	0.72	13.62
16.86	23.01	24.12	3.00	8.0	62.27	0.13	0.97	16.86
19.96	22.20	29.90	3.00	10.0	62.28	0.16	1.20	19.94
4.00	22.12	0.00	0.00	0.0	62.28	0.00	0.00	3.95
7.20	22.12	24.54	12.00	2.0	62.28	0.03	0.25	7.24
10.47	22.47	24.48	6.00	4.1	62.28	0.07	0.49	10.50
13.65	23.91	24.19	4.01	6.0	62.26	0.10	0.73	13.65
16.86	22.82	24.15	3.01	8.0	62.27	0.13	0.96	16.85
20.00	22.44	30.00	3.00	10.0	62.28	0.16	1.20	20.00

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:					
	Weight:	+/-	0.20	lbs	
	Temperature:	+/-	0.20	C	
	Density:	+/-	0.02	lbm/ft^3	
	Time:	+/- (	0.20	sec +	500.00 μsec/sec)
	Multimeter:	+/- (	0.04	%RDG +	0.001 mADC)
Accepted Tolerance:	+/-	+/-	0.05	GPM	

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
3.9543	13.3665	18.00	2.120	0.60	3.0	0.015	0.001

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)
0.008	0.005	0.002	0.010

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 0.075 * mA -0.296**

Figure G2-6. Permeate Flow Rate – low range [Q2, Channel 11] – Post Calibration

UNCERTAINTY ANALYSIS **TR-03721** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_____

Calibration Data				Calculated Data				
Meter Output (mA)	Water Temp (C)	Water Weight (lbs)	Time Duration (min)	Mass Flow (lbs/hr)	Water Density (lb/ft^3)	Volume Flow (ft^3/m)	Volume Flow (GPM)	Curve Fit (mA)
4.00	24.55	0.0	0.00	0.0	62.25	0.00	0.00	4.00
7.24	24.55	246.8	10.00	24.7	62.25	0.40	2.97	7.24
10.45	24.88	245.8	5.00	49.1	62.24	0.79	5.91	10.45
13.65	25.15	294.0	4.00	73.4	62.24	1.18	8.82	13.64
16.83	25.25	292.8	3.00	97.5	62.24	1.57	11.72	16.81
20.00	25.44	365.4	3.00	121.7	62.23	1.96	14.63	19.99
4.00	24.74	0.0	0.00	0.0	62.24	0.00	0.00	4.00
7.24	24.74	247.0	10.00	24.7	62.24	0.40	2.97	7.24
10.44	25.05	245.4	5.00	49.0	62.24	0.79	5.89	10.44
13.65	25.10	294.2	4.00	73.5	62.24	1.18	8.84	13.66
16.84	25.41	293.4	3.00	97.8	62.23	1.57	11.75	16.84
20.00	25.45	365.8	3.00	121.9	62.23	1.96	14.65	20.01
4.00	24.27	0.0	0.00	0.0	62.25	0.00	0.00	4.00
7.25	24.27	248.2	10.00	24.8	62.25	0.40	2.98	7.26
10.43	25.56	245.0	5.00	49.0	62.23	0.79	5.89	10.43
13.62	25.48	293.4	4.00	73.3	62.23	1.18	8.82	13.63
16.84	25.18	293.6	3.00	97.8	62.24	1.57	11.76	16.85
20.06	24.54	367.2	3.00	122.3	62.25	1.97	14.70	20.06

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:	Weight:+/-(	0.030	% RDG +	0.275	lbs) =	0.39	lbs
	Temperature: +/-	0.20	C				
	Density: +/-	0.02	lbm/ft^3				
	Time: +/- (	0.20	sec +	500.00	µsec/sec)		
	Multimeter: +/- (	0.04	%RDG +	0.001	mADC)		
Accepted Tolerance: +/-	+/-	0.30	GPM				

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
3.9978	1.0928	18.00	2.120	7.35	450.9	0.001	0.000

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)
0.02	0.02	0.05	0.08

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 0.915 * mA -3.658**

Figure G2-7. Permeate Flow Rate – high range [Q3, Channel 14] – Post Calibration

UNCERTAINTY ANALYSIS **TR-3553** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (psig)	Applied Pressure (psig)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psig)
0.00	0.00	3.96	3.96	0.000	0.00
20.00	20.00	7.14	7.14	0.000	0.00
40.00	40.00	10.32	10.32	-0.001	-0.01
60.00	60.00	13.50	13.50	-0.002	-0.01
80.00	80.00	16.67	16.68	0.007	0.04
100.00	100.00	19.86	19.86	-0.004	-0.02
0.00	0.00	3.96	3.96	0.000	0.00
20.00	20.00	7.14	7.14	0.000	0.00
40.00	40.00	10.32	10.32	-0.001	-0.01
60.00	60.00	13.50	13.50	-0.002	-0.01
80.00	80.00	16.67	16.68	0.007	0.04
100.00	100.00	19.86	19.86	-0.004	-0.02
0.00	0.00	3.96	3.96	0.000	0.00
20.00	20.00	7.14	7.14	0.000	0.00
40.00	40.00	10.32	10.32	-0.001	-0.01
60.00	60.00	13.50	13.50	-0.002	-0.01
80.00	80.00	16.67	16.68	0.007	0.04
100.00	100.00	19.86	19.86	-0.004	-0.02
0.00	0.00	3.96	3.96	0.000	0.00
20.00	20.00	7.14	7.14	0.000	0.00
40.00	40.00	10.32	10.32	-0.001	-0.01
60.00	60.00	13.50	13.50	-0.002	-0.01
80.00	80.00	16.67	16.68	0.007	0.04
100.00	100.00	19.86	19.86	-0.004	-0.02

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- (0.07 % RDG + 0.002 psi)

Statistical Info:

a	b	n	T	Xbar psig	Sxx $psig^2$	SEE $mADC^2$	MSE $mADC^2$
3.9605	0.1590	24.00	2.07	50.00	28000.00	0.0003	0.0000
af	bf						
3.9701	0.1589						

Calculated Uncertainties: Total Uncertainty

σ_C psig	σ_E psig	σ_F psig	σ_T psig
0.09	0.05	0.06	0.12

Accepted Tolerance: +/- 0.5 % FS = 0.5 psig

PASS CALIBRATION? YES
TRANSFER EQUATION: PSIG = 6.291 * mA -24.915

Figure G2-8. Transmembrane Pressure – upper flange [dP2, Channel 5] – Post Calibration

UNCERTAINTY ANALYSIS **TR-3109** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (psid)	Applied Pressure (psid)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psid)
-11.00	-11.00	4.02	4.01	-0.014	-0.09
0.00	0.00	5.73	5.73	0.001	0.01
11.00	11.00	7.45	7.46	0.006	0.04
31.00	31.00	10.58	10.59	0.012	0.07
61.00	61.00	15.29	15.30	0.006	0.04
91.00	91.00	20.01	20.00	-0.010	-0.07
-11.00	-11.00	4.02	4.01	-0.014	-0.09
0.00	0.00	5.73	5.73	0.001	0.01
11.00	11.00	7.45	7.46	0.006	0.04
31.00	31.00	10.58	10.59	0.012	0.07
61.00	61.00	15.29	15.30	0.006	0.04
91.00	91.00	20.01	20.00	-0.010	-0.07
-11.00	-11.00	4.02	4.01	-0.014	-0.09
0.00	0.00	5.73	5.73	0.001	0.01
11.00	11.00	7.45	7.46	0.006	0.04
31.00	31.00	10.58	10.59	0.012	0.07
61.00	61.00	15.29	15.30	0.006	0.04
91.00	91.00	20.01	20.00	-0.010	-0.07
-11.00	-11.00	4.02	4.01	-0.014	-0.09
0.00	0.00	5.73	5.73	0.001	0.01
11.00	11.00	7.45	7.46	0.006	0.04
31.00	31.00	10.58	10.59	0.012	0.07
61.00	61.00	15.29	15.30	0.006	0.04
91.00	91.00	20.01	20.00	-0.010	-0.07

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- 0.07 % RDG + 0.002 psi)

Statistical Info:

a	b	n	T	Xbar psid	Sxx psid²	SEE mADC²	MSE mADC²
5.7309	0.1568	24.00	2.15	30.50	30494.00	0.0020	0.0001

af	bf
5.728	0.1568

Calculated Uncertainties:

σ_C psid	σ_E psid	σ_F psid	Total Uncertainty σ_T psid
0.09	0.14	0.02	0.17

Accepted Tolerance: +/- 0.5 % FS= 0.46 psid

PASS CALIBRATION? YES

TRANSFER EQUATION: PSIG = 6.3775 *mA -36.5488

Figure G2-9. Transmembrane Pressure – lower flange [dP3, Channel 9] – Post Calibration

UNCERTAINTY ANALYSIS **TR-2917** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (psig)	Applied Pressure (psig)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psig)
0.00	0.00	4.00	3.99	-0.007	-0.04
20.00	20.00	7.16	7.16	0.003	0.02
40.00	40.00	10.33	10.33	0.003	0.02
60.00	60.00	13.50	13.50	0.003	0.02
80.00	80.00	16.67	16.67	0.003	0.02
100.00	100.00	19.85	19.84	-0.007	-0.04
0.00	0.00	4.00	3.99	-0.007	-0.04
20.00	20.00	7.16	7.16	0.003	0.02
40.00	40.00	10.33	10.33	0.003	0.02
60.00	60.00	13.50	13.50	0.003	0.02
80.00	80.00	16.67	16.67	0.003	0.02
100.00	100.00	19.85	19.84	-0.007	-0.04
0.00	0.00	4.00	3.99	-0.007	-0.04
20.00	20.00	7.16	7.16	0.003	0.02
40.00	40.00	10.33	10.33	0.003	0.02
60.00	60.00	13.50	13.50	0.003	0.02
80.00	80.00	16.67	16.67	0.003	0.02
100.00	100.00	19.85	19.84	-0.007	-0.04
0.00	0.00	4.00	3.99	-0.007	-0.04
20.00	20.00	7.16	7.16	0.003	0.02
40.00	40.00	10.33	10.33	0.003	0.02
60.00	60.00	13.50	13.50	0.003	0.02
80.00	80.00	16.67	16.67	0.003	0.02
100.00	100.00	19.85	19.84	-0.007	-0.04

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- (0.07 %RDG + 0.002 psi)

Statistical Info:

a	b	n	T	Xbar psig	Sxx $psig^2$	SEE $mADC^2$	MSE $mADC^2$
3.9933	0.1585	24.00	2.07	50.00	28000.00	0.0005	0.0000
af	bf						
3.9983	0.1585						

Calculated Uncertainties: Total Uncertainty

σ_C psig	σ_E psig	σ_F psig	σ_T psig
0.09	0.07	0.03	0.12

Accepted Tolerance: +/- 0.5 %FS = 0.50 psig

PASS CALIBRATION? YES
TRANSFER EQUATION PSIG = 6.309 *mA -25.194

Figure G2-10. Slurry Loop Pressure [P1, Channel 7] – Post Calibration

UNCERTAINTY ANALYSIS **TR-3115** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (psid)	Applied Pressure (psid)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psid)
0.00	0.00	4.00	4.02	0.022	0.20
31.00	31.00	7.31	7.31	-0.001	-0.01
61.00	61.00	10.51	10.49	-0.019	-0.18
91.00	91.00	13.69	13.67	-0.018	-0.17
121.00	121.00	16.86	16.85	-0.006	-0.06
151.00	151.00	20.01	20.04	0.025	0.24
0.00	0.00	4.00	4.02	0.022	0.20
31.00	31.00	7.31	7.31	-0.001	-0.01
61.00	61.00	10.51	10.49	-0.019	-0.18
91.00	91.00	13.69	13.67	-0.018	-0.17
121.00	121.00	16.86	16.85	-0.006	-0.06
151.00	151.00	20.01	20.04	0.025	0.24
0.00	0.00	4.00	4.02	0.022	0.20
31.00	31.00	7.31	7.31	-0.001	-0.01
61.00	61.00	10.51	10.49	-0.019	-0.18
91.00	91.00	13.69	13.67	-0.018	-0.17
121.00	121.00	16.86	16.85	-0.006	-0.06
151.00	151.00	20.01	20.04	0.025	0.24
0.00	0.00	4.00	4.02	0.022	0.20
31.00	31.00	7.31	7.31	-0.001	-0.01
61.00	61.00	10.51	10.49	-0.019	-0.18
91.00	91.00	13.70	13.67	-0.028	-0.26
121.00	121.00	16.86	16.85	-0.006	-0.06
151.00	151.00	20.01	20.04	0.025	0.24

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- 0.07 % RDG + 0.002 psi)

Statistical Info:

a	b	n	T	Xbar psid	Sxx psid²	SEE mADC²	MSE mADC²
4.0215	0.1061	28.00	2.12	75.83	63603.33	0.0078	0.0003

af	bf
4.0232	0.106

Calculated Uncertainties:

σ_C psid	σ_E psid	σ_F psid	Total Uncertainty σ_T psid
0.14	0.37	0.06	0.40

Accepted Tolerance: +/- 0.5 % FS = 0.76 psid

PASS CALIBRATION? YES

TRANSFER EQUATION: PSID = 9.4293 *mA -37.9195

Figure G2-11. Permeate Loop Pressure [P2, Channel 10] – Post Calibration

UNCERTAINTY ANALYSIS **TR-00532** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (psid)	Applied Pressure (psid)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (psid)
0.00	0.00	4.01	4.00	-0.008	-0.08
31.00	31.00	7.29	7.29	-0.001	-0.01
61.00	61.00	10.46	10.47	0.009	0.09
91.00	91.00	13.64	13.65	0.010	0.09
121.00	121.00	16.83	16.83	0.000	0.00
151.00	151.00	20.02	20.01	-0.009	-0.09
0.00	0.00	4.01	4.00	-0.008	-0.08
31.00	31.00	7.29	7.29	-0.001	-0.01
61.00	61.00	10.46	10.47	0.009	0.09
91.00	91.00	13.64	13.65	0.010	0.09
121.00	121.00	16.83	16.83	0.000	0.00
151.00	151.00	20.02	20.01	-0.009	-0.09
0.00	0.00	4.01	4.00	-0.008	-0.08
31.00	31.00	7.29	7.29	-0.001	-0.01
61.00	61.00	10.46	10.47	0.009	0.09
91.00	91.00	13.64	13.65	0.010	0.09
121.00	121.00	16.83	16.83	0.000	0.00
151.00	151.00	20.02	20.01	-0.009	-0.09
0.00	0.00	4.01	4.00	-0.008	-0.08
31.00	31.00	7.29	7.29	-0.001	-0.01
61.00	61.00	10.46	10.47	0.009	0.09
91.00	91.00	13.64	13.65	0.010	0.09
121.00	121.00	16.83	16.83	0.000	0.00
151.00	151.00	20.02	20.01	-0.009	-0.09

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001 mADC)
Dead Weight Tester: +/- (0.07 % RDG + 0.002 psi)

Statistical Info:

a	b	n	T	Xbar psid	Sxx $psid^2$	SEE $mADC^2$	MSE $mADC^2$
4.0019	0.1060	24.00	2.07	75.83	63603.33	0.0013	0.0001
af	bf						
4.0005	0.106						

Calculated Uncertainties: Total Uncertainty

σ_C psid	σ_E psid	σ_F psid	σ_T psid
0.14	0.16	0.04	0.21

Accepted Tolerance: +/- 0.5 %FS = 0.76 psid

PASS CALIBRATION? YES
TRANSFER EQUATION: PSID = 9.432 *mA -37.747

Figure G2-12. Backpulse Pot Pressure [P3, Channel 11] – Post Calibration

G3: CIX Instrumentation

INSTRUMENTS USED ON THE RPP-WTP SIPP ION EXCHANGE
(Printed: February 3, 2005)

DAS Chan.	Test Rig No.	Instrument	M&TE	Make	Model/Serial	Calibrated Range	Uncertainty (pre-test)	Uncertainty (post-test)	Uncertainty (maximum)
0	P1	Pressure Transducer	TR-3539	Rosemount	1144G0120A22M1/445095	-5 to 55 psig	±.08 psi		
1	P2	Pressure Transducer	TR-2145	Rosemount	1144G-0200A22/1259930	-5 to 55 psig	±.05 psi		
2	P3	Pressure Transducer	TR-2919	Rosemount	1151GP6E2AT0066B2/409544	-5 to 55 psig	±.06 psi		
3	DP1	DP transducer	TR-3714	Rosemount	3051/1332240	-20 to 20 inch H2O	±.08 in H2O	±.13 in H2O	±.13 in H2O
4	DP2	DP transducer	TR-3713	Rosemount	3051/1332239	-20 to 20 inch H2O	±.07 in H2O	±.13 in H2O	±.13 in H2O
5	DP3	DP transducer	TR-3756	Rosemount	3051CD03A22A1AB4/1383987	-20 to 20 inch H2O	±.08 in H2O	±.14 in H2O	±.14 in H2O
6	DP4	DP transducer	TR-3751	Rosemount	3051CD03A22A1AB4/1383982	-20 to 20 inch H2O	±.08 in H2O	±.13 in H2O	±.13 in H2O
7	DP5	DP transducer	TR-3754	Rosemount	3051CD03A22A1AB4/1383985	-20 to 20 inch H2O	±.08 in H2O	±.17 in H2O	±.17 in H2O
8	DP6	DP transducer	TR-3749	Rosemount	3051CD03A22A1AB4/1383980	-20 to 20 inch H2O	±.08 in H2O	±.09 in H2O	±.09 in H2O
9	DP7	DP transducer	TR-3716	Rosemount	3051/1332242	-20 to 20 inch H2O	±.08 in H2O		
10	DP8	DP transducer	TR-3763	Rosemount	3051/1383984	-20 to 20 inch H2O	±.08 in H2O		
11	DP9	DP transducer	TR-3752	Rosemount	3051CD03A22A1AB4/1383983	-20 to 20 inch H2O	±.08 in H2O		
12	DP10	DP transducer	TR-3755	Rosemount	3051CD03A22A1AB4/1383986	-20 to 20 inch H2O	±.08 in H2O		
13	DP11	DP transducer	TR-3750	Rosemount	3051CD03A22A1AB4/1383981	-20 to 20 inch H2O	±.08 in H2O		
14	Flow 1	Mag. Flowmeter	TR-3703	Fischer-Porter	1475EN01PF29KW12CAC1/95W0006755	0 – 12 L/hr	±3.38 L/hr	±2.72 L/hr	±3.38 L/hr
15	Flow 2	Mag. Flowmeter	TR-3563	Fischer-Porter	10D1475CDBC11BBL1/8710A0242A2	0 - 1 gpm	±.009 gpm		
16	Cond 1	Conductivity Probe		Omega	CDCN-90A/60010121353	0 - 500 mS/cm	±5 mS/cm		
17	Cond 2	Conductivity Probe		Omega	CDCN-90A/60010121353	0 - 500 mS/cm	±5 mS/cm		
18	pH probe	pH Probe		Eutech	pH200/141106	0 - 12	±.01 pH		
20	T1	Thermocouple, E	TR-2814	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0° C - 100° C	±.83 °C		
21	T2	Thermocouple, E	TR-2816	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0° C - 100° C	±.92 °C		
22	T3	Thermocouple, E	TR-3724	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0° C - 100° C	±1.02 °C		
23	T4	Thermocouple, E	TR-1504	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0° C - 100° C	±.87 °C		
24	T5	Thermocouple, E	TR-2933	Omega	TJ36-CSXX-18U-6-SB-OST-N/None	0° C - 100° C	±.99 °C		

		DAS Calibration		Transfer Functions for DAS (Conversion from mA to Volts)			
DAS Channel	Instrument	Slope (V/mA)	Intercept(V)	Output	Slope (unit/V)		Intercept (Unit)
0	P1	2.005	-0.006	Pressure (psig)	7.517	x V +	-20.029
1	P2	2.001	-0.030	Pressure (psig)	7.512	x V +	-20.198
2	P3	2.007	-0.010	Pressure (psig)	7.526	x V +	-20.222
3	DP1	2.002	-0.028	Pressure (psid)	5.005	x V +	-30.059
4	DP2	2.499	-0.008	Pressure (psid)	5.003	x V +	-29.999
5	DP3	2.000	-0.012	Pressure (psid)	5.001	x V +	-30.026
6	DP4	2.010	0.000	Pressure (psid)	5.023	x V +	-29.961
7	DP5	2.008	-0.004	Pressure (psid)	5.014	x V +	-29.940
8	DP6	2.008	-0.012	Pressure (psid)	5.014	x V +	-29.991
9	DP7	2.003	-0.010	Pressure (psid)	5.007	x V +	-30.014
10	DP8	2.004	-0.004	Pressure (psid)	5.009	x V +	-29.971
11	DP9	2.007	-0.010	Pressure (psid)	5.017	x V +	-29.993
12	DP10	2.007	-0.010	Pressure (psid)	5.017	x V +	-29.989
13	DP11	2.000	0.000	Pressure (psid)	4.996	x V +	-29.968
14	Flow1	2.000	0.000	Flow (gpm)	2.831	x V +	3.590
15	Flow2	2.000	0.000	Flow (gpm)	31.773	x V +	3.985
16	Cond 1	2.003	-0.010	Conductivity (mS/cm)	201.37	x V +	-3.82
17	Cond 2	2.001	-0.026	Conductivity (mS/cm)	212.85	x V +	-8.62

Note-Critical Instruments are shown Boxed. Post Calibration sheets on all critical instruments are attached

Figure G3-1. Instrumentation Used for the Pilot CIX

(Printed: February, 2005) (Calibration check of all DAS channels was done on 22 April 2004)

Current mA	Channel 0 V, meas.	Channel 0 V, calc.	Current mA	Channel 1 V, meas.	Channel 1 V, calc.	Current mA	Channel 2 V, meas.	Channel 2 V, calc.	Current mA	Channel 3 V, meas.	Channel 3 V, calc.	Current mA	Channel 4 V, meas.	Channel 4 V, calc.
4	2.00	2.00	4	2.01	2.01	4	2.00	2.00	4	2.01	2.01	4	2.00	2.00
8	3.99	3.99	8	4.01	4.01	8	3.99	3.99	8	4.01	4.01	8	4.00	4.00
12	5.99	5.99	12	6.02	6.01	12	5.98	5.98	12	6.01	6.01	12	6.00	6.00
16	7.98	7.98	16	8.02	8.01	16	7.98	7.98	16	8.01	8.01	16	8.00	8.00
20	9.98	9.98	20	10.00	10.01	20	9.97	9.97	20	10.00	10.00	20	9.99	9.99

Current mA	Channel 5 V, meas.	Channel 5 V, calc.	Current mA	Channel 6 V, meas.	Channel 6 V, calc.	Current mA	Channel 7 V, meas.	Channel 7 V, calc.	Current mA	Channel 8 V, meas.	Channel 8 V, calc.	Current mA	Channel 9 V, meas.	Channel 9 V, calc.
4	2.00	2.01	4	1.99	1.99	4	1.99	1.99	4	2.00	2.00	4	2.00	2.00
8	4.01	4.01	8	3.98	3.98	8	3.99	3.99	8	3.99	3.99	8	4.00	4.00
12	6.01	6.01	12	5.97	5.97	12	5.98	5.98	12	5.98	5.98	12	6.00	5.99
16	8.01	8.01	16	7.96	7.96	16	7.97	7.97	16	7.97	7.97	16	7.99	7.99
20	10.00	10.01	20	9.95	9.95	20	9.96	9.96	20	9.97	9.97	20	9.99	9.99

Current mA	Channel 10 V, meas.	Channel 10 V, calc.	Current mA	Channel 11 V, meas.	Channel 11 V, calc.	Current mA	Channel 12 V, meas.	Channel 12 V, calc.	Current mA	Channel 13 V, meas.	Channel 13 V, calc.	Current mA	Channel 14 V, meas.	Channel 14 V, calc.
4	2.00	2.00	4	2.00	2.00	4	2.00	2.00	4	2.00	2.00	4	2.00	2.00
8	3.99	3.99	8	3.99	3.99	8	3.99	3.99	8	4.00	4.00	8	4.00	4.00
12	5.99	5.99	12	5.98	5.98	12	5.98	5.98	12	6.00	6.00	12	6.00	6.00
16	7.99	7.99	16	7.98	7.98	16	7.98	7.98	16	8.00	8.00	16	8.00	8.00
20	9.98	9.98	20	9.97	9.97	20	9.97	9.97	20	10.00	10.00	20	10.00	10.00

Current mA	Channel 15 V, meas.	Channel 15 V, calc.	Current mA	Channel 16 V, meas.	Channel 16 V, calc.	Current mA	Channel 17 V, meas.	Channel 17 V, calc.	Current mA	Channel 18 V, meas.	Channel 18 V, calc.
4	2.00	2.00	4	2.00	2.00	4	2.01	2.01	4	1.99	1.99
8	4.00	4.00	8	4.00	4.00	8	4.01	4.01	8	3.99	3.99
12	6.00	6.00	12	6.00	6.00	12	6.01	6.01	12	5.98	5.98
16	8.00	8.00	16	7.99	7.99	16	8.02	8.01	16	7.97	7.97
20	10.00	10.00	20	9.99	9.99	20	10.00	10.01	20	9.96	9.96

TR-02814 Temperature °C	Thermocouples Channel 20 T, applied	Channel 20 T, reading	TR-02816 Temperature °C	Channel 21 T, applied	Channel 21 T, reading	TR-03724 Temperature °C	Channel 22 T, applied	Channel 22 T, reading	TR-1504 Temperature °C	Channel 23 T, applied	Channel 23 T, reading	TR-02933 Temperature °C	Channel 24 T, applied	Channel 24 T, reading
0	0	0.30	0	0	0.00	0	0	0.00	0	0	-0.10	0	0	-0.40
25	25	25.30	25	25	25.00	25	25	25.00	25	25	24.80	25	25	24.60
50	50	50.30	50	50	50.00	50	50	50.00	50	50	49.80	50	50	49.60
75	75	75.30	75	75	75.00	75	75	75.00	75	75	74.80	75	75	74.60
100	100	100.30	100	100	100.00	100	100	100.00	100	100	99.90	100	100	99.60

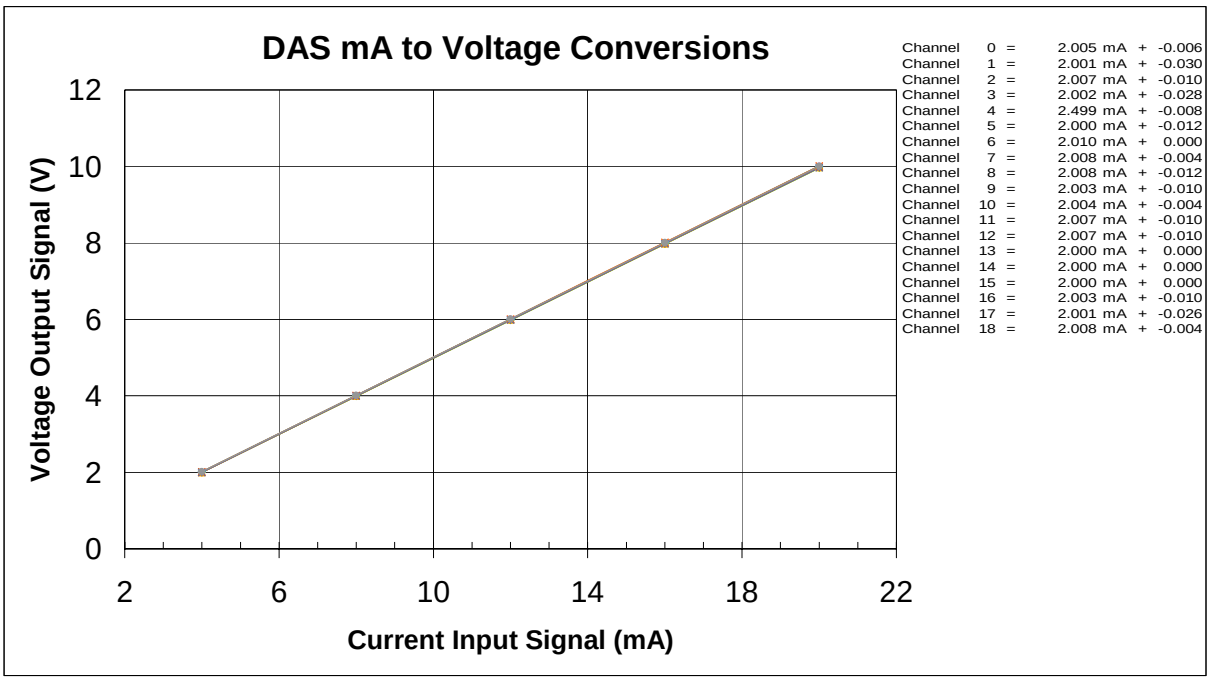


Figure G3-2. Transfer Functions for Instrumentation Used

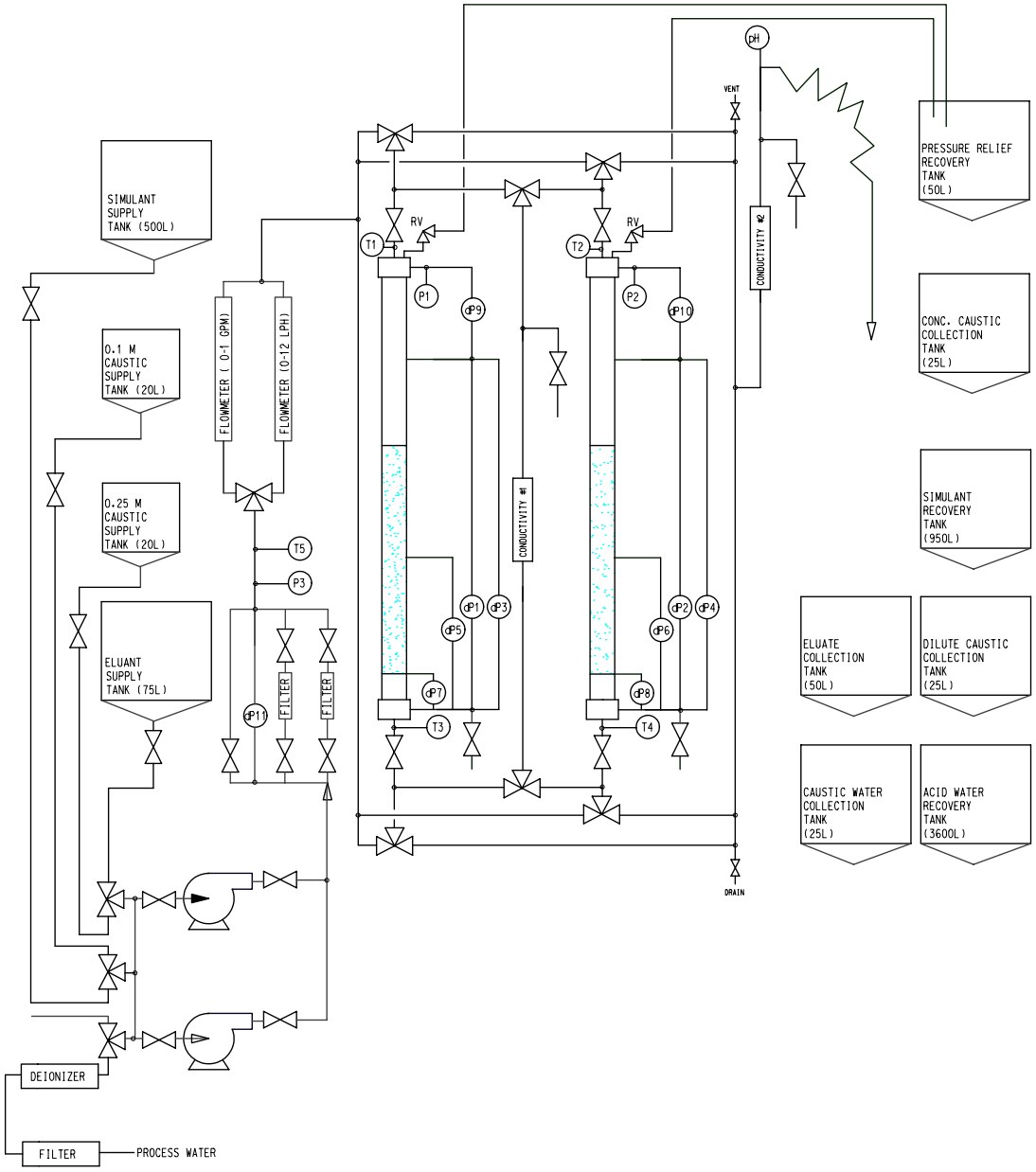


Figure G3-3. Critical Instrument Location Schematic

Calibration Data page___of___

cal. date:

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O²	SEE mADC²
12.0300	0.3989	32.00	2.00	0.00	4000.00	0.0120

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.11	0.00	0.13	

Accepted Tolerance: +/- 0.50 in H2O

MSE mADC² 0.0004

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 = 2.507 *mA -30.157**

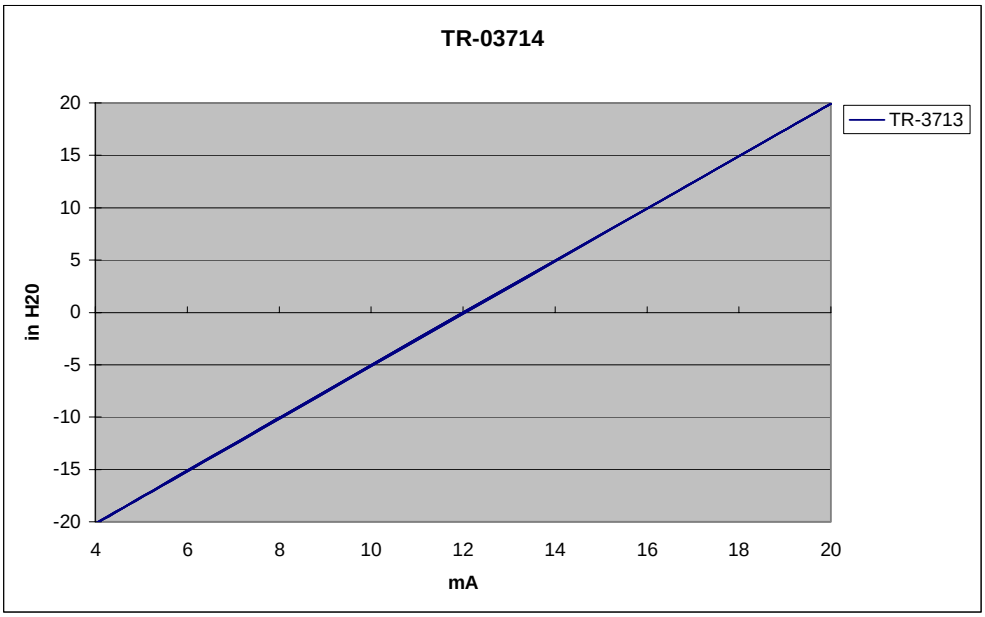


Figure G3-4. Ion Exchange Differential Pressure Post Test Calibration (DP1)

UNCERTAINTY ANALYSIS **TR-3713** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06
-20	-20	4.08	4.05	-0.028	-0.07
-10	-10	8.03	8.04	0.011	0.03
0	0	11.99	12.03	0.040	0.10
10	10	16.02	16.02	-0.001	0.00
20	20	20.03	20.01	-0.022	-0.06

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O^2	SEE mADC^2
12.0300	0.3989	32.00	2.00	0.00	4000.00	0.0120

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.11	0.00	0.13	

Accepted Tolerance: +/- 0.50 in H2O

MSE mADC^2 0.0004

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 =** **2.507** ***mA** **-30.157**

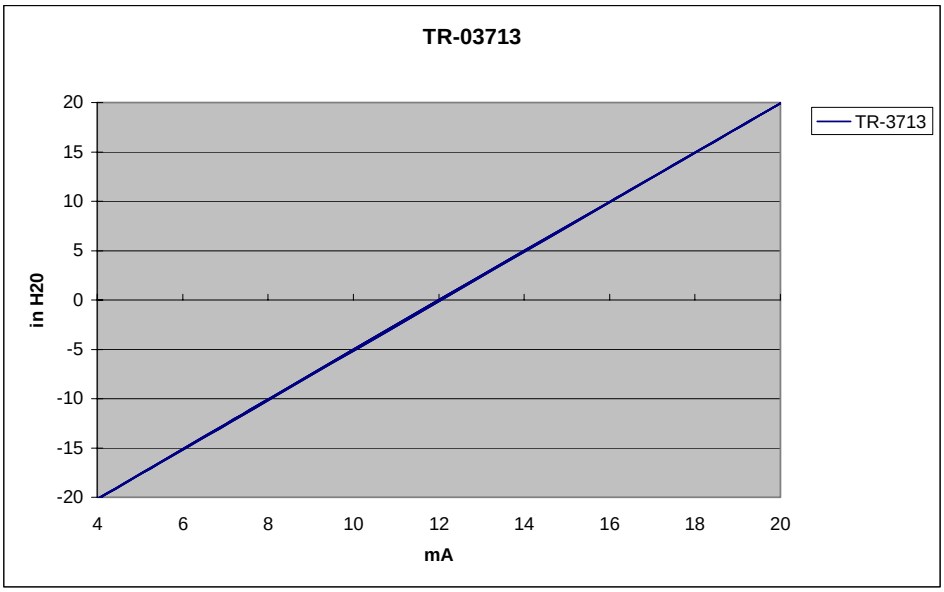


Figure G3-5. Ion Exchange Differential Pressure Post Test Calibration (DP2)

UNCERTAINTY ANALYSIS **TR-3756** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	4.01	3.98	-0.028	-0.07
-10	-10	7.95	7.96	0.005	0.01
0	0	11.88	11.93	0.048	0.12
10	10	15.9	15.90	0.001	0.00
20	20	19.9	19.87	-0.026	-0.07
-20	-20	4.01	3.98	-0.028	-0.07
-10	-10	7.95	7.96	0.005	0.01
0	0	11.88	11.93	0.048	0.12
10	10	15.9	15.90	0.001	0.00
20	20	19.9	19.87	-0.026	-0.07
-20	-20	4.01	3.98	-0.028	-0.07
-10	-10	7.95	7.96	0.005	0.01
0	0	11.88	11.93	0.048	0.12
10	10	15.9	15.90	0.001	0.00
20	20	19.9	19.87	-0.026	-0.07
-20	-20	4.01	3.98	-0.028	-0.07
-10	-10	7.95	7.96	0.005	0.01
0	0	11.88	11.93	0.048	0.12
10	10	15.9	15.90	0.001	0.00
20	20	19.9	19.87	-0.026	-0.07

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O²	SEE mADC²
11.9280	0.3973	32.00	2.00	0.00	4000.00	0.0152

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.12	0.00	0.14	

Accepted Tolerance: +/- 0.50 in H2O MSE mADC² 0.0005

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 = 2.517 *mA -30.022**

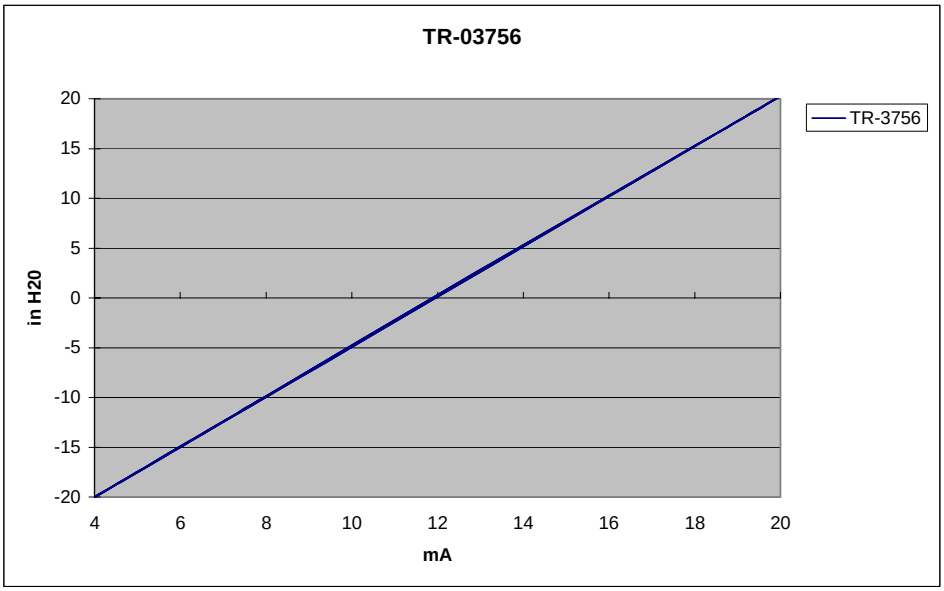


Figure G3-6. Evaporator Ion Exchange Differential Pressure Post Test Calibration (DP3)

UNCERTAINTY ANALYSIS **TR-3751** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	4.08	4.06	-0.025	-0.06
-10	-10	8.03	8.04	0.011	0.03
0	0	12	12.03	0.026	0.07
10	10	15.97	16.01	0.041	0.10
20	20	20.02	20.00	-0.023	-0.06
-20	-20	4.08	4.06	-0.025	-0.06
-10	-10	8.02	8.04	0.021	0.05
0	0	12	12.03	0.026	0.07
10	10	15.97	16.01	0.041	0.10
20	20	20.02	20.00	-0.023	-0.06
-20	-20	4.08	4.06	-0.025	-0.06
-10	-10	8.03	8.04	0.011	0.03
0	0	12.01	12.03	0.016	0.04
10	10	16.03	16.01	-0.019	-0.05
20	20	20.02	20.00	-0.023	-0.06
-20	-20	4.08	4.06	-0.025	-0.06
-10	-10	8.03	8.04	0.011	0.03
0	0	12	12.03	0.026	0.07
10	10	16.03	16.01	-0.019	-0.05
20	20	20.02	20.00	-0.023	-0.06

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O²	SEE mADC²
12.0260	0.3985	32.00	2.00	0.00	4000.00	0.0118

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.11	0.00	0.13	

Accepted Tolerance: +/- 0.50 in H2O MSE mADC² 0.0004

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 =** **2.509** ***mA** **-30.176**

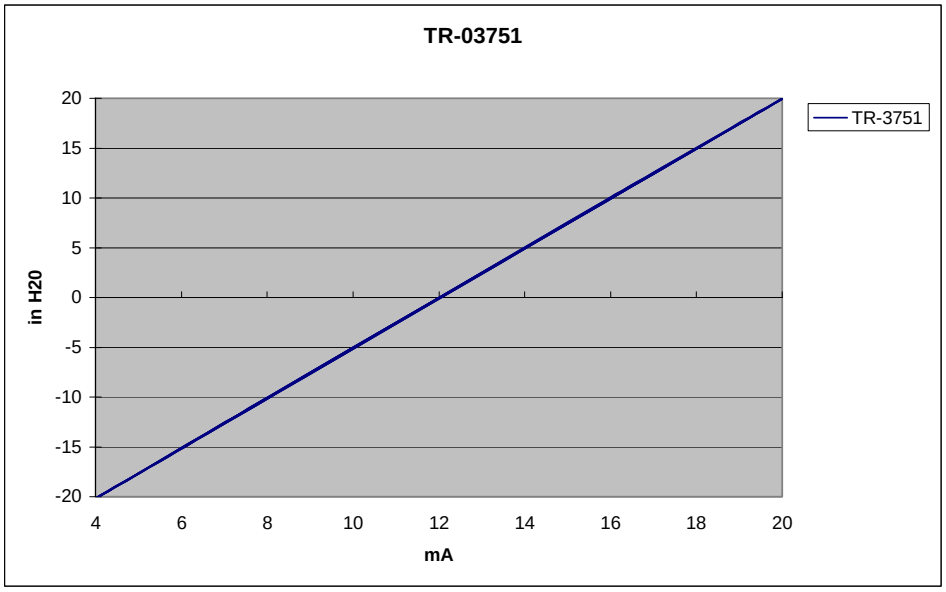


Figure G3-7. Ion Exchange Differential Pressure Post Test Calibration (DP4)

UNCERTAINTY ANALYSIS **TR-3754** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	4.16	4.12	-0.044	-0.11
-10	-10	8.08	8.10	0.021	0.05
0	0	12.03	12.09	0.056	0.14
10	10	16.07	16.07	0.001	0.00
20	20	20.09	20.06	-0.034	-0.09
-20	-20	4.16	4.12	-0.044	-0.11
-10	-10	8.08	8.10	0.021	0.05
0	0	12.03	12.09	0.056	0.14
10	10	16.07	16.07	0.001	0.00
20	20	20.09	20.06	-0.034	-0.09
-20	-20	4.16	4.12	-0.044	-0.11
-10	-10	8.08	8.10	0.021	0.05
0	0	12.03	12.09	0.056	0.14
10	10	16.07	16.07	0.001	0.00
20	20	20.09	20.06	-0.034	-0.09
-20	-20	4.16	4.12	-0.044	-0.11
-10	-10	8.08	8.10	0.021	0.05
0	0	12.03	12.09	0.056	0.14
10	10	16.07	16.07	0.001	0.00
20	20	20.09	20.06	-0.034	-0.09

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O²	SEE mADC²
12.0860	0.3985	32.00	2.00	0.00	4000.00	0.0267

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.16	0.00	0.17	

Accepted Tolerance: +/- 0.50 in H2O MSE mADC² 0.0009

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 = 2.509 *mA -30.327**

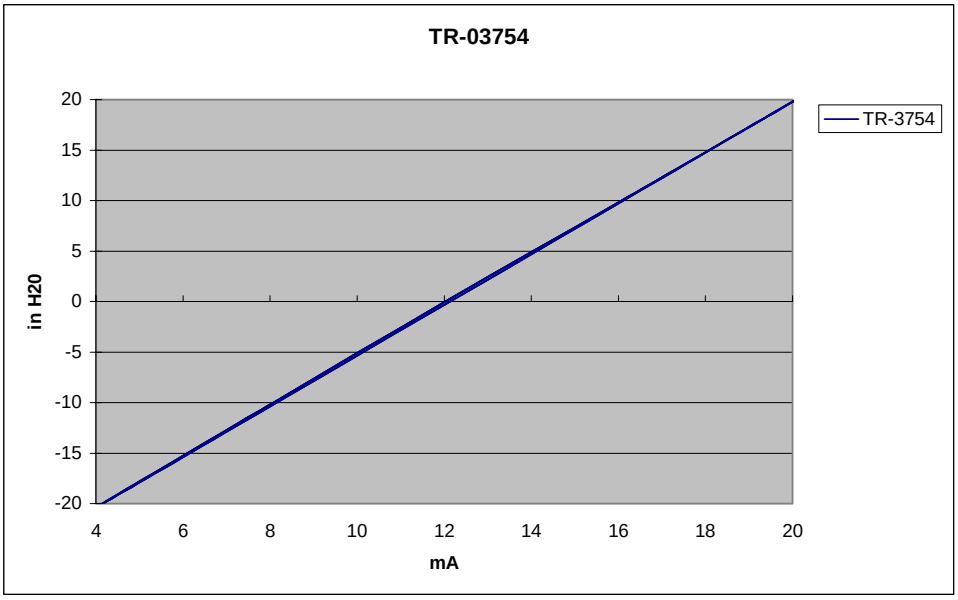


Figure G3-8. Ion Exchange Differential Pressure Post Test Calibration (DP5)

UNCERTAINTY ANALYSIS **TR-3749** page___of___
REF. L9.5-9114, REV. 1 cal. date:

Calibration Data

Nominal Pressure (in H2O)	Applied Pressure (in H2O)	Gage Reading (mADC)	Curve Fit (mADC)	Error (mADC)	Error (in H2O)
-20	-20	3.97	3.95	-0.021	-0.05
-10	-10	7.94	7.95	0.013	0.03
0	0	11.94	11.96	0.017	0.04
10	10	15.97	15.96	-0.010	-0.02
20	20	19.97	19.96	-0.006	-0.01
-20	-20	3.97	3.95	-0.021	-0.05
-10	-10	7.94	7.95	0.013	0.03
0	0	11.94	11.96	0.017	0.04
10	10	15.97	15.96	-0.010	-0.02
20	20	19.97	19.96	-0.006	-0.01
-20	-20		3.95	3.949	9.86
-10	-10	7.94	7.95	0.013	0.03
0	0	11.94	11.96	0.017	0.04
10	10	15.97	15.96	-0.010	-0.02
20	20	19.97	19.96	-0.006	-0.01
-20	-20	3.97	3.95	-0.021	-0.05
-10	-10	7.94	7.95	0.013	0.03
0	0	11.94	11.96	0.017	0.04
10	10	15.97	15.96	-0.010	-0.02
20	20	19.97			

Standard Uncertainties: Multimeter: +/- (0.04 % RDG + 0.001
Dead Weight Tester: +/- 0.07 % RDG

Statistical Info:

a	b	n	T	Xbar in H2O	Sxx in H2O^2	SEE mADC^2
11.9567	0.4004	32.00	2.00	-1.05	3578.95	0.0036

Calculated Uncertainties:

σ_C in H2O	σ_E in H2O	σ_F in H2O	Total Uncertainty σ_T in H2O	mADC)
0.07	0.06	0.00	0.09	

Accepted Tolerance: +/- 0.50 in H2O

MSE mADC^2 0.0001

PASS CALIBRATION? **YES**

TRANSFER EQUATION: **in H20 =** **2.498** ***mA** **-29.863**

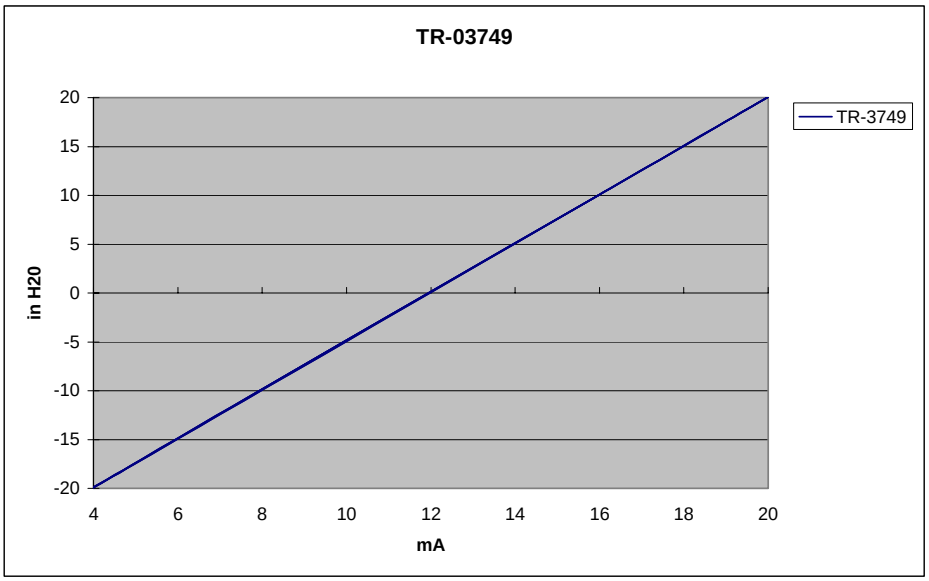


Figure G3-9. Ion Exchange Differential Pressure Post Test Calibration (DP6)

UNCERTAINTY ANALYSIS **TR-03703** page ____ of ____
REF. L9.5-9114, REV. 1 calibration date_08-Feb-05_____

Calibration Data				Calculated Data								
Meter Output (mA)	Water Temp (C)	Water Weight (lbs)	Time Duration (min)	Mass Flow (lbs/hr)	Water Density (lb/ft^3)	Volume Flow (ft^3/m)	Volume Flow (GPM)	Curve Fit (mA)	Error (mA)	Error (GPM)		
4.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
7.25	19.87	0.679	8.00	0.1	62.31	0.00	0.01	7.24	-0.01	0.000		
10.40	19.61	0.669	4.00	0.2	62.31	0.00	0.02	10.41	0.01	0.000		
13.68	19.62	0.757	3.00	0.3	62.31	0.00	0.03	13.70	0.02	0.000		
16.88	19.45	0.836	2.50	0.3	62.31	0.01	0.04	16.88	0.00	0.000		
20.00	19.68	0.832	2.00	0.4	62.31	0.01	0.05	20.02	0.02	0.000		
4.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
7.26	19.90	0.681	8.00	0.1	62.31	0.00	0.01	7.25	-0.01	0.000		
10.42	19.66	0.670	4.00	0.2	62.31	0.00	0.02	10.43	0.01	0.000		
13.63	19.63	0.751	3.00	0.3	62.31	0.00	0.03	13.62	-0.01	0.000		
16.83	19.57	0.832	2.50	0.3	62.31	0.01	0.04	16.80	-0.03	0.000		
20.05	19.44	0.834	2.00	0.4	62.31	0.01	0.05	20.07	0.02	0.000		
4.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	af	bf
7.28	19.82	0.685	8.00	0.1	62.31	0.00	0.01	7.27	-0.01	0.000	3.9613	321.9072
10.43	19.70	0.672	4.01	0.2	62.31	0.00	0.02	10.44	0.01	0.000		
13.63	19.60	0.752	3.00	0.3	62.31	0.00	0.03	13.64	0.01	0.000		
16.80	19.61	0.828	2.51	0.3	62.31	0.01	0.04	16.74	-0.06	0.000		
20.00	19.53	0.831	2.00	0.4	62.31	0.01	0.05	20.00	0.00	0.000		

Density: ρ = 62.441-1.374E-3*T - 271.818E-6*T^2 + 194.093E-9*T^3
7.4805 gallons = 1 ft^3

Uncertainty of the Standards:

Weight:+/-	0.20	lbs			
Temperature: +/-	0.20	C			
Density: +/-	0.02	lbm/ft^3			
Time: +/- (	0.20	sec +	500.00	µsec/sec)	
Multimeter: +/- (	0.04	%RDG +	0.001	mADC)	

Accepted Tolerance: +/- +/- 0.020 GPM

Statistical Info.

a	b	n	T	Xbar (GPM)	Sxx (GPM^2)	SEE (mA^2)	MSE (mA^2)
3.9613	321.9072	18.00	2.120	0.03	0.0	0.006	0.000

Calculated Uncertainties:

σ_C (GPM)	σ_E (GPM)	σ_F (GPM)	σ_T (GPM)	Equivelent in Liters per Hour σ_C (LPH)	σ_E (LPH)	σ_F (LPH)	σ_T (LPH)
0.0120	0.0001	0.0000	0.0120	2.7226	0.0317	0.0000	2.7228

PASS CALIBRATION? **YES**
TRANSFER EQUATION: **GPM = 0.003 * mA -0.012**

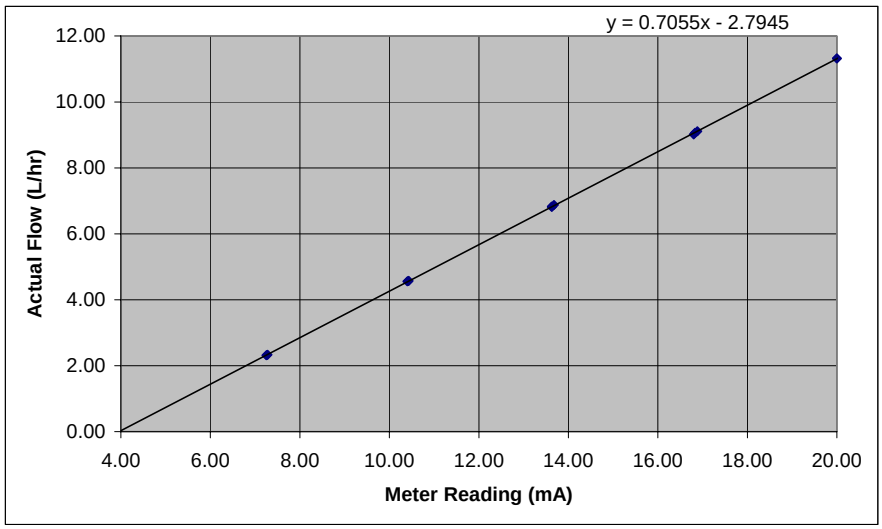


Figure G3-10. IX 0-12 L/hr (0-0.06 GPM) Flowmeter Post Test Calibration (Flowmeter)

APPENDIX H: TABULATED RAW DATA FROM EACH OF THE PILOT OPERATIONS

With time the accessibility of the raw data taken during the SIPP task will become more difficult. An attempt was made here to include the computer acquired data obtained during each of the unit operation for the four campaigns. However, because of the very large size of the files some of the data streams have been abridged. Such abridgment will be explained on the cover sheet to each of the unit operation data section. The order is as follows:

Section H1: FEP – Campaign II, III, and IV

Section H2: UFP – Campaigns I, II, III, and IV

Section H3: CIX – Campaigns II and III

Section H4: TLP – Campaigns II and III

Note that only the UFP was operated for all four campaigns, the CIX and TLP were only operated for Campaigns II and III, and the FEP was not used during Campaign I.

Section H1: Pilot Feed Waste Evaporator Process (FEP) Raw Data

FEP data were obtained ever 60 seconds, however the following tables have been reduced in size to show only the data ever 300 seconds. The full data stream is available upon request.

The short headings for used in FEP tables are described below

Legend for FEP Data

Conc Temp. Reboiler In	Concentrate Temperature at Reboiler Inlet
Conc Temp. Reboiler out	Concentrate Temperature at Reboiler Outlet
Reboiler Steam Supply Temp.	Reboiler Steam Supply Temperature
Ejector Steam Supply Temp.	Ejector (Vacuum Pump) Steam Supply Temperature
Cooling Water Supply Temp.	Cooling Water Supply (to all condensers) Temperature
Evap. Vessel Temp.	Evaporator Vessel Concentrate Temperature
Primary Condensate Temp.	Primary Condensate Temperature
Inter. Cond. Outlet Temp.	Inter-condenser Outlet Temperature
After Cond. Outlet Temp.	After-condenser Outlet Temperature
Recirc. Flow Rate	Recirculation Flow Rate of Concentrate
Feed Rate	Feed Rate to the Evaporator Recirculation Loop
Prim. Condensate Flow	Primary Condensate Flow Rate
Intercondenser Press.	Intercondenser Pressure
Evaporator Press.	Evaporator Pressure

Table H1-1a: Campaign II

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
1	4/14/2004	6:47:32 AM	18.80	19.70	34.50	169.95	20.27	18.40	20.12	21.08	23.14	32.89	-0.01	0.00	-2.78	-4.78
2	4/14/2004	6:52:34 AM	40.97	45.28	139.10	169.98	19.79	42.42	19.79	20.65	22.60	83.32	-0.01	0.00	-7.52	-8.75
3	4/14/2004	6:57:37 AM	65.94	67.27	143.32	169.96	19.55	66.04	19.48	20.41	22.40	83.70	-0.01	0.02	-8.43	-10.17
4	4/14/2004	7:02:39 AM	52.92	53.41	137.90	170.08	19.48	52.07	22.34	20.42	22.46	83.00	-0.01	0.16	-10.54	-12.26
5	4/14/2004	7:07:41 AM	36.02	40.09	142.91	170.14	19.44	36.02	22.50	20.34	22.25	82.45	-0.01	0.23	-11.53	-13.63
6	4/14/2004	7:15:19 AM	41.97	46.44	146.35	169.48	19.41	41.89	23.18	20.22	22.02	82.51	-0.01	0.18	-11.47	-13.58
7	4/14/2004	7:20:21 AM	43.71	48.09	146.64	168.94	19.40	43.63	23.17	20.19	22.00	82.49	-0.01	0.50	-11.26	-13.57
8	4/14/2004	7:25:24 AM	43.77	48.24	147.20	169.32	19.40	43.79	23.35	20.20	22.02	82.01	0.09	0.57	-11.35	-13.56
9	4/14/2004	7:30:26 AM	43.15	47.57	147.66	168.90	19.38	43.53	22.74	20.17	21.99	82.39	0.44	0.63	-11.32	-13.57
10	4/14/2004	7:35:28 AM	44.65	49.01	147.32	168.74	19.37	44.64	23.25	20.16	21.98	82.30	0.46	0.76	-11.28	-13.56
11	4/14/2004	7:40:30 AM	44.84	49.21	147.73	169.52	19.34	45.04	22.57	20.17	22.01	82.15	0.54	0.83	-11.24	-13.54
12	4/14/2004	7:45:32 AM	46.56	50.94	147.34	170.10	19.35	46.54	23.24	20.18	22.03	82.31	0.50	0.83	-11.20	-13.48
13	4/14/2004	7:50:35 AM	44.50	48.95	147.40	169.99	19.33	44.55	23.15	20.17	22.01	82.22	0.55	0.55	-11.34	-13.52
14	4/14/2004	7:55:37 AM	45.65	49.97	148.15	168.86	19.30	45.75	22.73	20.10	21.89	82.34	0.50	0.50	-11.21	-12.70
15	4/14/2004	8:00:39 AM	45.37	50.31	147.48	169.91	19.29	46.62	22.02	20.06	21.64	57.12	0.41	0.45	-10.22	-12.21
16	4/14/2004	8:05:41 AM	57.85	61.46	142.68	170.72	19.28	58.84	20.00	20.17	22.10	74.18	0.39	0.09	-9.23	-11.00
17	4/14/2004	8:10:43 AM	47.44	51.72	148.73	169.47	19.28	47.03	25.23	20.12	21.95	82.31	0.46	0.39	-11.36	-12.94
18	4/14/2004	8:15:46 AM	44.38	48.23	147.54	170.01	19.26	44.41	22.70	20.14	22.04	82.29	0.69	0.73	-11.31	-13.20
19	4/14/2004	8:20:48 AM	41.09	45.13	148.17	170.84	19.24	41.16	22.84	20.17	22.14	82.15	0.64	0.18	-11.55	-13.36
20	4/14/2004	8:25:50 AM	42.04	46.03	148.14	170.88	19.23	42.20	22.41	20.14	22.10	82.19	0.60	0.35	-11.43	-13.37
21	4/14/2004	8:30:52 AM	44.31	48.33	148.05	170.93	19.24	44.49	22.53	20.07	21.73	82.42	0.57	0.43	-10.59	-12.14
22	4/14/2004	8:35:55 AM	58.05	60.25	140.53	170.96	19.22	58.65	19.23	19.68	19.61	83.79	0.30	0.46	-3.02	-3.60
23	4/14/2004	8:40:57 AM	62.86	63.09	136.94	171.01	19.21	62.68	19.16	19.31	20.17	83.98	-0.01	0.04	-1.13	-1.12
24	4/14/2004	8:45:59 AM	62.12	62.36	132.53	159.34	19.23	61.96	19.18	19.26	20.17	83.92	-0.01	0.01	-0.29	-0.02
25	4/14/2004	8:51:01 AM	61.44	61.66	128.27	164.95	19.21	61.27	19.16	19.80	21.41	83.71	-0.01	0.02	-1.56	-2.13
26	4/14/2004	8:56:03 AM	60.79	61.02	124.17	158.07	19.20	60.63	19.16	19.59	20.60	83.69	-0.01	0.01	-0.46	-1.55
27	4/14/2004	9:01:06 AM	60.31	60.87	124.78	171.26	19.18	60.24	19.14	20.13	22.18	83.49	-0.01	0.00	-6.52	-8.63
28	4/14/2004	9:06:08 AM	63.63	64.87	143.73	171.26	19.18	63.30	20.70	20.13	22.16	83.13	-0.01	0.10	-9.30	-11.27
29	4/14/2004	9:11:10 AM	41.47	44.35	138.64	171.26	19.18	41.42	22.30	20.12	22.06	82.27	0.21	0.53	-11.40	-13.63
30	4/14/2004	9:16:12 AM	43.47	47.78	148.16	171.10	19.18	43.49	23.11	20.06	21.97	82.20	0.50	0.54	-11.47	-13.62

Table H1-1b: Campaign II

FEP Campaign II Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
31	4/14/2004	9:21:14 AM	44.33	48.57	148.02	170.82	19.17	44.42	22.62	20.04	21.91	82.19	0.41	0.57	-11.32	-13.55
32	4/14/2004	9:26:17 AM	45.04	49.27	148.25	170.86	19.17	45.08	22.83	20.04	21.92	82.17	0.43	0.51	-11.30	-13.62
33	4/14/2004	9:31:19 AM	45.17	49.38	148.14	170.78	19.18	45.29	22.59	20.05	21.91	82.20	0.46	0.49	-11.26	-13.60
34	4/14/2004	9:36:21 AM	45.43	49.67	148.21	171.08	19.17	45.45	22.86	20.04	21.92	82.06	0.41	0.52	-11.28	-13.57
35	4/14/2004	9:41:23 AM	45.42	48.79	147.89	170.09	19.18	45.50	21.97	20.04	21.92	82.10	0.57	0.30	-11.22	-13.55
36	4/14/2004	9:46:26 AM	42.72	46.53	148.37	171.72	19.19	42.81	22.46	20.11	22.08	81.91	0.54	0.19	-11.41	-13.54
37	4/14/2004	9:51:28 AM	44.38	48.13	148.33	171.78	19.18	44.47	22.25	20.09	22.07	81.99	0.48	0.58	-11.28	-13.49
38	4/14/2004	9:56:30 AM	44.65	48.39	148.32	171.87	19.19	44.75	22.25	20.09	22.06	81.96	0.48	0.66	-11.27	-13.48
39	4/14/2004	10:01:32 AM	44.32	48.07	148.16	171.96	19.17	44.39	22.29	20.08	22.04	81.95	0.47	0.52	-11.30	-13.47
40	4/14/2004	10:06:34 AM	44.56	48.29	148.33	172.06	19.17	44.63	22.23	20.09	22.05	81.95	0.43	0.43	-11.29	-13.46
41	4/14/2004	10:11:36 AM	44.56	48.29	148.34	172.16	19.17	44.61	22.32	20.09	22.05	81.95	0.36	0.43	-11.29	-13.47
42	4/14/2004	10:16:39 AM	44.50	48.28	148.24	172.25	19.16	44.52	22.34	20.08	22.05	81.90	0.29	0.33	-11.31	-13.49
43	4/14/2004	10:21:41 AM	44.34	48.20	148.36	172.30	19.16	44.36	22.51	20.07	22.02	81.95	0.24	0.19	-11.34	-13.53
44	4/14/2004	10:26:43 AM	45.36	49.18	148.41	172.41	19.16	45.36	22.41	20.06	22.01	81.90	0.23	0.18	-11.25	-13.52
45	4/14/2004	10:31:45 AM	48.55	52.20	148.47	172.39	19.16	48.67	21.81	20.05	22.01	81.87	0.23	0.66	-10.98	-13.45
46	4/14/2004	10:36:47 AM	49.21	52.86	148.46	172.53	19.17	49.18	22.26	20.07	22.02	81.73	0.22	0.88	-10.98	-13.43
47	4/14/2004	10:41:50 AM	49.19	52.83	148.49	172.52	19.17	49.35	22.02	20.07	22.02	81.69	0.63	0.41	-10.94	-13.43
48	4/14/2004	10:46:52 AM	50.22	53.88	148.31	171.85	19.17	50.32	22.27	20.05	21.95	81.86	0.74	0.32	-10.93	-13.39
49	4/14/2004	10:51:54 AM	44.61	48.58	148.41	172.71	19.16	44.68	22.83	20.07	21.99	81.46	0.56	0.25	-11.37	-13.59
50	4/14/2004	10:56:56 AM	46.10	50.05	148.40	172.69	19.15	46.23	22.27	20.05	21.97	81.53	0.47	0.26	-11.20	-13.56
51	4/14/2004	11:01:59 AM	47.31	51.33	147.79	172.19	19.17	47.42	22.56	20.03	21.93	84.54	0.38	0.16	-11.13	-13.52
52	4/14/2004	11:07:01 AM	50.37	54.32	146.64	169.76	19.17	50.47	22.42	19.99	21.79	85.22	0.34	0.98	-10.92	-13.41
53	4/14/2004	11:12:03 AM	50.46	54.46	147.70	170.36	19.16	50.45	22.83	20.00	21.81	85.11	0.34	0.90	-10.93	-13.41
54	4/14/2004	11:17:05 AM	51.08	55.05	144.64	170.63	19.16	51.14	22.47	20.00	21.81	84.99	0.33	0.47	-10.83	-13.38
55	4/14/2004	11:22:07 AM	50.61	54.58	145.36	169.98	19.16	50.62	22.68	19.99	21.78	85.01	0.36	0.50	-10.93	-13.34
56	4/14/2004	11:27:10 AM	50.49	54.48	147.81	170.27	19.18	50.51	22.84	20.02	21.81	85.12	0.41	0.53	-10.94	-13.31
57	4/14/2004	11:32:12 AM	50.50	54.56	143.97	171.40	19.19	50.59	22.68	20.04	21.86	84.94	0.57	0.50	-10.89	-13.29
58	4/14/2004	11:37:14 AM	50.62	54.59	145.71	170.45	19.18	50.83	22.32	20.01	21.81	84.82	0.64	0.46	-10.87	-13.29
59	4/14/2004	11:42:16 AM	51.14	55.10	145.72	170.34	19.18	51.39	22.48	20.01	21.81	84.99	0.92	0.47	-10.85	-13.24
60	4/14/2004	11:47:18 AM	50.92	54.92	145.77	170.95	19.19	51.15	22.56	20.03	21.85	85.17	0.86	0.48	-10.85	-13.26

Table H1-1c: Campaign II

FEP Campaign II Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
61	4/14/2004	11:52:21 AM	51.14	55.06	146.05	170.03	19.19	51.31	22.45	20.02	21.81	85.12	0.61	0.47	-10.86	-13.46
62	4/14/2004	11:57:23 AM	51.51	55.45	144.09	170.39	19.18	51.59	22.64	20.01	21.81	85.13	0.44	0.50	-10.84	-13.45
63	4/14/2004	12:02:25 PM	51.42	55.35	143.95	170.52	19.18	51.51	22.60	20.02	21.82	85.40	0.40	0.50	-10.85	-13.48
64	4/14/2004	12:07:27 PM	51.69	55.63	144.85	170.57	19.20	51.80	22.62	20.03	21.83	85.15	0.47	0.49	-10.83	-13.48
65	4/14/2004	12:12:29 PM	52.01	55.94	145.08	170.55	19.18	52.12	22.56	20.01	21.81	84.88	0.49	0.49	-10.79	-13.47
66	4/14/2004	12:17:32 PM	51.67	55.64	144.70	171.12	19.18	51.77	22.64	20.02	21.85	84.81	0.53	0.50	-10.83	-13.49
67	4/14/2004	12:22:34 PM	51.89	55.79	141.94	170.22	19.19	52.02	22.48	20.02	21.79	84.83	0.49	0.48	-10.80	-13.49
68	4/14/2004	12:27:36 PM	52.08	56.03	146.11	170.87	19.18	52.16	22.75	20.02	21.83	84.65	0.48	0.51	-10.80	-13.48
69	4/14/2004	12:32:38 PM	51.71	55.64	144.26	170.34	19.18	51.85	22.45	20.01	21.79	84.42	0.48	0.48	-10.81	-13.52
70	4/14/2004	12:37:40 PM	52.64	56.59	141.45	171.19	19.20	52.76	22.51	20.04	21.85	84.75	0.47	0.48	-10.73	-13.47
71	4/14/2004	12:42:43 PM	51.78	55.72	144.65	170.39	19.18	51.89	22.60	20.02	21.81	84.42	0.47	0.50	-10.84	-13.53
72	4/14/2004	12:47:45 PM	52.16	56.10	141.70	170.79	19.17	52.24	22.65	20.01	21.81	84.34	0.44	0.49	-10.79	-13.51
73	4/14/2004	12:52:47 PM	52.15	56.06	143.11	170.42	19.17	52.26	22.54	20.01	21.80	84.39	0.43	0.49	-10.78	-13.51
74	4/14/2004	12:57:49 PM	52.68	56.59	142.41	170.79	19.18	52.76	22.55	20.02	21.83	84.35	0.42	0.48	-10.75	-13.49
75	4/14/2004	1:02:52 PM	52.60	56.52	140.11	171.10	19.19	52.68	22.54	20.03	21.84	84.42	0.41	0.48	-10.73	-13.48
76	4/14/2004	1:07:54 PM	52.70	56.61	142.23	170.74	19.20	52.74	22.71	20.04	21.84	84.18	0.40	0.50	-10.76	-13.48
77	4/14/2004	1:12:56 PM	52.59	56.49	143.64	170.66	19.20	52.67	22.54	20.03	21.83	84.17	0.39	0.48	-10.77	-13.50
78	4/14/2004	1:17:58 PM	52.39	56.34	142.69	171.32	19.19	52.46	22.60	20.04	21.87	84.11	0.39	0.49	-10.78	-13.52
79	4/14/2004	1:23:00 PM	53.50	57.38	142.98	170.50	19.19	53.60	22.40	20.02	21.83	83.88	0.39	0.46	-10.69	-13.47
80	4/14/2004	1:28:02 PM	53.61	57.49	141.14	170.56	19.18	53.69	22.55	20.02	21.82	84.08	0.39	0.48	-10.68	-13.44
81	4/14/2004	1:33:05 PM	53.47	57.37	144.95	170.56	19.19	53.52	22.65	20.03	21.84	83.80	0.39	0.50	-10.73	-13.44
82	4/14/2004	1:38:07 PM	53.52	57.43	141.65	171.01	19.20	53.58	22.49	20.04	21.85	83.61	0.37	0.48	-10.71	-13.44
83	4/14/2004	1:43:09 PM	53.11	57.02	143.58	170.51	19.20	53.13	22.76	20.04	21.84	83.50	0.35	0.51	-10.78	-13.48
84	4/14/2004	1:48:11 PM	54.61	58.47	138.91	171.24	19.22	54.68	22.35	20.06	21.87	83.99	0.34	0.45	-10.57	-13.41
85	4/14/2004	1:53:13 PM	53.44	57.35	143.71	170.61	19.22	53.48	22.71	20.05	21.87	83.71	0.45	0.50	-10.76	-13.46
86	4/14/2004	1:58:16 PM	54.01	57.84	142.79	170.04	19.23	54.11	22.46	20.05	21.84	84.06	0.47	0.46	-10.68	-13.43
87	4/14/2004	2:03:18 PM	53.99	57.87	140.51	170.97	19.23	54.09	22.61	20.06	21.88	84.28	0.47	0.49	-10.65	-13.41
88	4/14/2004	2:08:20 PM	54.12	58.00	141.50	171.14	19.23	54.20	22.57	20.07	21.89	83.75	0.46	0.48	-10.67	-13.40
89	4/14/2004	2:13:22 PM	53.68	57.55	142.64	170.72	19.23	53.77	22.61	20.06	21.86	83.96	0.46	0.49	-10.71	-13.45
90	4/14/2004	2:18:25 PM	53.78	57.67	142.48	171.26	19.23	53.87	22.58	20.07	21.89	84.09	0.46	0.48	-10.70	-13.44

Table H1-1d: Campaign II

FEP Campaign II Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
91	4/14/2004	2:23:27 PM	53.73	57.58	141.68	170.23	19.24	53.84	22.55	20.06	21.85	84.09	0.47	0.47	-10.72	-13.47
92	4/14/2004	2:28:29 PM	54.23	58.08	141.70	170.61	19.24	54.34	22.57	20.06	21.86	84.32	0.53	0.48	-10.66	-13.42
93	4/14/2004	2:33:31 PM	53.53	57.40	144.82	170.43	19.24	53.64	22.69	20.05	21.86	83.99	0.54	0.50	-10.76	-13.48
94	4/14/2004	2:38:33 PM	54.39	58.25	136.98	171.26	19.24	54.56	22.40	20.07	21.88	84.25	0.54	0.44	-10.59	-13.45
95	4/14/2004	2:43:36 PM	53.87	57.73	142.15	170.39	19.23	54.00	22.60	20.05	21.84	84.37	0.55	0.48	-10.69	-13.47
96	4/14/2004	2:48:38 PM	54.03	57.91	142.11	170.98	19.24	54.14	22.72	20.07	21.88	83.96	0.56	0.48	-10.70	-13.46
97	4/14/2004	2:53:40 PM	53.90	57.75	142.47	170.72	19.24	54.04	22.46	20.06	21.86	83.72	0.45	0.46	-10.67	-13.47
98	4/14/2004	2:58:42 PM	53.82	57.70	143.50	171.17	19.24	54.13	22.56	20.07	21.90	84.92	-0.01	0.47	-10.67	-13.46
99	4/14/2004	3:03:44 PM	54.96	58.75	140.09	170.41	19.25	54.92	22.48	20.06	21.85	84.09	-0.01	0.46	-10.61	-13.44
100	4/14/2004	3:08:47 PM	53.80	57.64	143.69	170.54	19.25	53.91	22.71	20.07	21.87	84.41	-0.01	0.51	-10.73	-13.51
101	4/14/2004	3:13:49 PM	53.72	57.58	141.75	171.02	19.25	54.04	22.42	20.08	21.91	84.32	-0.01	0.45	-10.68	-13.49
102	4/14/2004	3:18:51 PM	54.36	58.17	140.20	170.46	19.26	54.59	22.24	20.08	21.88	84.61	-0.01	0.42	-10.61	-13.44
103	4/14/2004	3:23:53 PM	55.15	58.95	142.58	170.66	19.25	55.02	22.87	20.08	21.89	83.84	-0.01	0.52	-10.63	-13.40
104	4/14/2004	3:28:56 PM	54.82	58.64	140.56	171.02	19.25	54.72	22.72	20.09	21.91	84.23	-0.01	0.50	-10.67	-13.43
105	4/14/2004	3:33:58 PM	53.88	57.72	143.06	170.43	19.26	54.10	22.54	20.08	21.88	84.14	-0.01	0.47	-10.70	-13.48
106	4/14/2004	3:39:00 PM	54.45	58.24	144.26	169.93	19.26	54.61	22.53	20.07	21.86	84.11	-0.01	0.47	-10.67	-13.45
107	4/14/2004	3:44:02 PM	54.50	58.37	141.22	171.52	19.26	54.57	22.62	20.10	21.93	84.88	-0.01	0.48	-10.66	-13.45
108	4/14/2004	3:49:04 PM	53.90	57.72	143.23	170.35	19.26	53.94	22.57	20.08	21.88	83.71	-0.01	0.49	-10.74	-13.52
109	4/14/2004	3:54:07 PM	53.89	57.77	142.23	171.26	19.27	54.01	22.72	20.10	21.93	84.76	-0.01	0.49	-10.73	-13.50
110	4/14/2004	3:59:09 PM	54.24	58.03	142.13	170.46	19.26	54.41	22.36	20.09	21.88	84.23	-0.01	0.45	-10.67	-13.48
111	4/14/2004	4:04:11 PM	54.81	58.63	137.98	171.31	19.26	54.97	22.45	20.10	21.91	84.17	-0.01	0.46	-10.59	-13.42
112	4/14/2004	4:09:13 PM	54.38	58.21	142.92	170.71	19.26	54.50	22.71	20.10	21.90	84.20	-0.01	0.50	-10.69	-13.44
113	4/14/2004	4:14:15 PM	54.46	58.24	140.73	170.57	19.27	54.65	22.22	20.09	21.88	84.60	-0.01	0.43	-10.63	-13.45
114	4/14/2004	4:19:17 PM	54.84	58.66	141.26	170.84	19.27	54.98	22.69	20.11	21.91	84.63	-0.01	0.48	-10.65	-13.40
115	4/14/2004	4:24:20 PM	54.47	58.30	141.20	171.06	19.29	54.49	22.58	20.11	21.94	84.04	-0.01	0.48	-10.66	-13.43
116	4/14/2004	4:29:22 PM	54.61	58.44	142.46	170.82	19.28	54.50	22.79	20.10	21.92	83.92	-0.01	0.52	-10.73	-13.46
117	4/14/2004	4:34:24 PM	55.55	59.31	139.50	170.77	19.29	55.48	22.56	20.11	21.91	83.42	-0.01	0.48	-10.59	-13.40
118	4/14/2004	4:39:26 PM	52.25	54.39	146.49	173.75	19.30	51.82	22.67	20.19	22.11	83.17	-0.01	0.44	-10.94	-13.70
119	4/14/2004	4:44:29 PM	42.48	42.85	141.86	175.69	19.30	42.33	19.78	20.23	22.25	82.57	-0.01	0.27	-11.34	-13.46
120	4/14/2004	4:49:31 PM	42.31	43.28	136.45	174.98	19.45	42.39	19.45	19.74	20.03	15.61	-0.01	0.22	-2.42	-4.74

Table H1-2a: Campaign III

FEP Campaign III Data

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
1	6/9/2004	6:37:14 AM	23.56	23.84	36.93	158.65	21.49	22.81	21.52	22.02	23.47	0.14	-0.01	0.00	-2.42	-3.93
2	6/9/2004	6:52:21 AM	66.43	66.70	129.33	175.86	21.08	66.03	21.41	21.99	24.06	84.36	-0.01	0.03	-9.29	-11.52
3	6/9/2004	6:57:23 AM	46.32	50.28	140.99	173.92	21.03	45.94	26.14	21.93	23.90	85.36	-0.01	0.26	-11.74	-13.76
4	6/9/2004	7:02:25 AM	44.56	49.27	146.40	172.54	21.00	44.91	24.55	21.85	23.79	85.14	0.59	0.25	-11.62	-13.91
5	6/9/2004	7:07:27 AM	48.49	53.06	147.33	171.96	20.97	48.61	24.58	21.79	23.70	84.56	0.52	0.58	-11.35	-13.69
6	6/9/2004	7:20:47 AM	49.47	54.09	147.62	171.61	20.91	49.59	24.84	21.73	23.61	85.17	0.67	0.78	-11.32	-13.56
7	6/9/2004	7:25:49 AM	48.78	53.52	147.39	170.45	20.88	49.18	24.59	21.68	23.50	85.36	0.48	0.57	-11.32	-13.55
8	6/9/2004	7:30:51 AM	49.78	54.44	147.55	170.09	20.86	49.86	24.83	21.65	23.48	85.42	0.63	0.57	-11.32	-13.48
9	6/9/2004	7:35:54 AM	50.07	54.73	147.52	170.27	20.84	50.08	24.94	21.63	23.47	85.56	0.44	0.58	-11.30	-13.46
10	6/9/2004	7:40:56 AM	50.26	54.89	147.40	169.77	20.81	50.21	24.99	21.60	23.42	85.45	0.23	0.59	-11.31	-13.48
11	6/9/2004	7:45:58 AM	50.09	54.75	146.85	170.23	20.80	50.05	24.97	21.60	23.43	85.45	0.22	0.60	-11.32	-13.48
12	6/9/2004	7:51:00 AM	50.03	54.67	146.91	169.93	20.80	50.01	24.82	21.58	23.41	85.51	0.29	0.58	-11.30	-13.50
13	6/9/2004	7:56:02 AM	49.47	54.18	147.36	170.22	20.78	49.50	25.02	21.58	23.41	85.42	0.53	0.61	-11.36	-13.51
14	6/9/2004	8:01:05 AM	50.22	54.84	147.10	169.95	20.77	50.30	24.76	21.57	23.38	85.20	0.64	0.52	-11.27	-13.47
15	6/9/2004	8:06:07 AM	49.28	53.96	147.58	170.00	20.75	49.32	24.89	21.56	23.39	85.17	0.47	0.68	-11.37	-13.54
16	6/9/2004	8:11:09 AM	50.07	54.69	147.85	169.36	20.75	50.06	24.86	21.54	23.35	85.22	0.39	0.58	-11.31	-13.48
17	6/9/2004	8:16:11 AM	50.01	54.67	147.37	170.28	20.75	50.05	24.68	21.55	23.40	85.11	0.41	0.57	-11.29	-13.29
18	6/9/2004	8:21:14 AM	50.69	55.34	147.27	170.39	20.73	50.62	25.02	21.53	23.37	85.06	0.35	0.60	-11.29	-13.34
19	6/9/2004	8:26:16 AM	50.48	55.08	147.12	169.43	20.71	50.47	24.76	21.50	23.29	84.93	0.42	0.55	-11.26	-13.46
20	6/9/2004	8:31:18 AM	49.63	54.26	147.87	169.15	20.71	49.73	24.62	21.50	23.29	84.79	0.62	0.60	-11.32	-13.52
21	6/9/2004	8:36:20 AM	50.07	54.76	147.36	170.75	20.71	50.05	24.97	21.53	23.38	85.35	0.50	0.60	-11.32	-13.48
22	6/9/2004	8:41:22 AM	51.48	56.05	147.77	169.83	20.71	51.54	24.38	21.50	23.34	84.70	0.43	0.53	-11.15	-13.44
23	6/9/2004	8:46:25 AM	52.26	56.74	147.40	168.97	20.70	52.45	24.26	21.48	23.27	85.16	0.81	0.52	-11.09	-13.38
24	6/9/2004	8:51:27 AM	51.95	56.58	146.60	171.45	20.70	52.06	24.84	21.53	23.41	85.10	0.96	0.58	-11.16	-13.36
25	6/9/2004	8:56:29 AM	51.38	55.94	147.99	169.58	20.70	51.58	24.48	21.49	23.32	85.09	0.84	0.54	-11.19	-13.38
26	6/9/2004	9:01:31 AM	51.67	56.23	147.76	170.00	20.70	51.86	24.54	21.50	23.34	85.30	0.92	0.55	-11.18	-13.36
27	6/9/2004	9:06:33 AM	52.49	57.01	146.78	170.46	20.70	52.60	24.46	21.51	23.36	85.24	0.66	0.53	-11.12	-13.31
28	6/9/2004	9:11:36 AM	50.95	55.57	147.59	170.25	20.69	50.93	25.02	21.50	23.34	85.23	0.45	0.62	-11.31	-13.44
29	6/9/2004	9:16:38 AM	50.96	55.54	147.89	169.47	20.69	50.97	24.67	21.48	23.29	85.10	0.39	0.57	-11.27	-13.44
30	6/9/2004	9:21:40 AM	50.96	55.56	147.42	169.89	20.69	50.94	24.82	21.48	23.30	85.39	0.39	0.59	-11.28	-13.44

Table H1-2b: Campaign III

FEP Campaign III Data (Contd..)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
31	6/9/2004	9:26:42 AM	51.27	55.89	146.87	170.41	20.69	51.30	24.60	21.48	23.34	84.68	0.44	0.55	-11.23	-13.42
32	6/9/2004	9:31:45 AM	50.64	55.25	146.59	169.96	20.69	50.66	24.66	21.47	23.31	85.27	0.40	0.58	-11.29	-13.48
33	6/9/2004	9:36:47 AM	50.79	55.46	147.06	170.51	20.67	50.78	24.84	21.48	23.33	84.98	0.43	0.59	-11.29	-13.45
34	6/9/2004	9:41:49 AM	50.34	54.96	146.91	170.13	20.67	50.41	24.57	21.47	23.30	85.19	0.53	0.56	-11.30	-13.50
35	6/9/2004	9:46:51 AM	50.34	54.98	147.42	170.37	20.67	50.36	24.84	21.48	23.31	85.04	0.50	0.59	-11.34	-13.49
36	6/9/2004	9:51:53 AM	51.09	55.67	144.80	170.00	20.67	51.12	24.57	21.47	23.29	85.09	0.42	0.56	-11.24	-13.44
37	6/9/2004	9:56:56 AM	50.53	55.16	146.32	170.35	20.67	50.52	24.71	21.48	23.30	84.91	0.37	0.58	-11.30	-13.48
38	6/9/2004	10:01:58 AM	50.50	55.13	147.12	170.49	20.67	50.44	24.86	21.47	23.32	84.75	0.37	0.60	-11.33	-13.48
39	6/9/2004	10:07:00 AM	50.36	54.98	146.57	170.21	20.66	50.44	24.51	21.45	23.29	84.93	0.59	0.56	-11.30	-13.48
40	6/9/2004	10:12:02 AM	51.42	55.97	147.21	169.73	20.67	51.52	24.44	21.45	23.28	84.84	0.67	0.55	-11.21	-12.98
41	6/9/2004	10:17:05 AM	51.23	55.84	145.72	170.40	20.67	51.32	24.62	21.47	23.30	84.87	0.68	0.57	-11.22	-13.42
42	6/9/2004	10:22:07 AM	50.67	55.33	145.52	171.30	20.66	50.73	24.75	21.48	23.35	85.07	0.69	0.58	-11.29	-13.47
43	6/9/2004	10:27:09 AM	50.23	54.80	146.52	169.32	20.65	50.37	24.37	21.44	23.23	84.77	0.68	0.54	-11.30	-13.54
44	6/9/2004	10:32:11 AM	51.56	56.12	144.08	170.28	20.65	51.64	24.58	21.45	23.28	84.89	0.66	0.56	-11.20	-13.48
45	6/9/2004	10:37:13 AM	51.24	55.84	144.74	170.54	20.66	51.32	24.66	21.46	23.29	85.03	0.65	0.58	-11.25	-13.47
46	6/9/2004	10:42:15 AM	50.69	55.31	145.70	170.49	20.65	50.78	24.57	21.46	23.30	85.07	0.64	0.57	-11.28	-13.48
47	6/9/2004	10:47:18 AM	51.01	55.59	146.10	170.20	20.65	51.10	24.53	21.45	23.28	84.96	0.64	0.56	-11.26	-13.47
48	6/9/2004	10:52:20 AM	50.89	55.48	146.03	170.16	20.66	50.98	24.61	21.44	23.27	84.93	0.63	0.57	-11.29	-13.46
49	6/9/2004	10:57:22 AM	50.95	55.55	141.72	170.79	20.65	50.96	24.75	21.45	23.30	85.06	0.54	0.53	-11.27	-13.49
50	6/9/2004	11:02:24 AM	49.83	54.49	141.67	170.94	20.64	49.88	24.63	21.45	23.28	84.74	0.45	0.64	-11.33	-13.56
51	6/9/2004	11:07:27 AM	50.40	55.03	142.04	170.68	20.65	50.42	24.69	21.45	23.27	84.79	0.43	0.58	-11.30	-13.52
52	6/9/2004	11:12:29 AM	50.05	54.67	142.76	170.50	20.66	50.06	24.72	21.44	23.27	84.92	0.41	0.58	-11.32	-13.54
53	6/9/2004	11:17:31 AM	50.44	55.08	142.75	171.09	20.66	50.44	24.66	21.46	23.32	84.74	0.40	0.57	-11.30	-13.52
54	6/9/2004	11:22:33 AM	49.51	54.14	145.43	169.80	20.65	49.51	24.77	21.43	23.25	84.75	0.40	0.60	-11.43	-13.59
55	6/9/2004	11:27:35 AM	50.42	55.04	144.18	170.55	20.66	50.43	24.62	21.46	23.29	84.52	0.40	0.57	-11.32	-13.53
56	6/9/2004	11:32:38 AM	50.47	55.06	142.41	170.35	20.67	50.52	24.54	21.45	23.28	84.53	0.47	0.56	-11.29	-13.51
57	6/9/2004	11:37:40 AM	51.25	55.82	143.33	170.56	20.66	51.28	24.69	21.45	23.30	84.49	0.52	0.57	-11.24	-13.46
58	6/9/2004	11:42:42 AM	50.52	55.11	143.39	170.49	20.67	50.61	24.56	21.45	23.29	84.49	0.67	0.56	-11.30	-13.51
59	6/9/2004	11:47:44 AM	50.17	54.76	145.00	170.16	20.66	50.29	24.51	21.44	23.29	84.31	0.69	0.56	-11.34	-13.54
60	6/9/2004	11:52:47 AM	51.57	56.10	144.33	170.82	20.67	51.68	24.40	21.46	23.32	84.67	0.69	0.53	-11.19	-13.46

Table H1-2c: Campaign III

FEP Campaign III Data (Contd..)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
63	6/9/2004	12:07:53 PM	51.46	56.01	142.92	170.63	20.66	51.58	24.53	21.45	23.30	84.65	0.70	0.56	-11.24	-13.44
64	6/9/2004	12:12:55 PM	52.28	56.74	141.34	170.07	20.66	52.39	24.29	21.44	23.28	84.94	0.55	0.52	-11.14	-13.40
65	6/9/2004	12:17:58 PM	51.83	56.35	145.12	170.74	20.66	51.81	24.80	21.46	23.31	84.52	0.40	0.59	-11.25	-13.43
66	6/9/2004	12:23:00 PM	51.50	56.07	143.48	170.84	20.65	51.55	24.39	21.45	23.30	84.17	0.39	0.55	-11.23	-13.47
67	6/9/2004	12:28:02 PM	49.33	53.05	147.86	172.79	20.64	49.26	24.45	21.49	23.43	84.21	0.49	0.41	-11.44	-13.64
68	6/9/2004	12:33:04 PM	47.76	52.06	148.19	173.62	20.64	47.81	24.28	21.50	23.48	84.28	0.47	0.11	-11.55	-13.74
69	6/9/2004	12:38:06 PM	48.44	52.90	145.99	173.14	20.64	48.55	24.11	21.49	23.45	81.97	0.45	0.32	-11.43	-13.72
70	6/9/2004	12:43:09 PM	53.92	58.34	147.04	171.61	20.65	54.09	23.61	21.47	23.39	81.26	0.41	0.30	-10.99	-13.57
71	6/9/2004	12:48:11 PM	52.63	57.12	147.30	170.64	20.65	52.60	24.99	21.46	23.32	81.20	0.41	0.19	-11.21	-13.53
72	6/9/2004	12:53:13 PM	52.48	57.00	147.16	171.45	20.66	52.47	24.76	21.48	23.38	81.01	0.40	0.32	-11.20	-13.54
73	6/9/2004	12:58:15 PM	53.12	57.54	147.12	170.21	20.66	53.15	24.46	21.45	23.32	80.64	0.41	0.97	-11.13	-13.54
74	6/9/2004	1:03:18 PM	52.80	57.37	145.93	171.41	20.66	52.91	24.14	21.47	23.38	79.63	0.40	1.02	-11.12	-13.54
75	6/9/2004	1:08:20 PM	55.63	60.23	146.73	171.69	20.66	55.82	23.93	21.48	23.39	77.88	0.66	0.77	-10.88	-13.50
76	6/9/2004	1:13:22 PM	54.25	58.71	144.67	170.84	20.65	54.35	24.17	21.44	23.34	79.94	0.51	0.51	-11.00	-13.48
77	6/9/2004	1:18:24 PM	53.93	58.41	146.96	171.10	20.65	53.94	24.33	21.46	23.38	79.96	0.39	0.53	-11.08	-13.49
78	6/9/2004	1:23:26 PM	53.83	58.26	147.63	170.37	20.66	53.83	24.40	21.45	23.34	80.26	0.38	0.54	-11.08	-13.49
79	6/9/2004	1:28:29 PM	53.75	58.21	143.36	171.58	20.67	53.75	24.36	21.49	23.38	80.61	0.37	0.53	-11.06	-13.49
80	6/9/2004	1:33:31 PM	53.30	57.74	145.28	171.18	20.67	53.31	24.31	21.48	23.36	81.05	0.35	0.52	-11.09	-13.49
81	6/9/2004	1:38:33 PM	52.87	57.33	146.88	171.04	20.67	52.84	24.55	21.48	23.36	80.67	0.37	0.56	-11.18	-13.49
82	6/9/2004	1:43:35 PM	53.24	57.68	146.20	171.34	20.67	53.25	24.24	21.49	23.38	80.52	0.36	0.51	-11.13	-13.50
83	6/9/2004	1:48:37 PM	53.23	57.67	145.95	170.89	20.67	53.50	23.98	21.47	23.35	80.40	0.18	0.48	-11.07	-13.49
84	6/9/2004	1:53:40 PM	54.04	59.03	146.33	170.99	20.67	55.11	22.87	21.48	23.37	76.99	0.00	0.32	-10.87	-13.41
85	6/9/2004	1:58:42 PM	55.16	59.66	145.64	171.50	20.68	55.02	25.15	21.50	23.38	80.55	-0.01	0.65	-11.03	-13.28
86	6/9/2004	2:03:44 PM	53.92	58.44	145.42	171.44	20.67	53.84	24.34	21.49	23.38	79.94	-0.01	0.53	-11.06	-13.30
87	6/9/2004	2:08:46 PM	53.32	57.74	146.22	170.67	20.66	53.21	24.51	21.47	23.35	80.56	-0.01	0.56	-11.16	-13.35
88	6/9/2004	2:13:48 PM	53.54	57.97	146.20	171.43	20.64	53.40	24.56	21.47	23.38	80.97	-0.01	0.56	-11.13	-13.34
89	6/9/2004	2:18:51 PM	54.00	58.37	143.99	171.02	20.64	53.88	24.35	21.46	23.36	80.81	-0.01	0.53	-11.07	-13.31
90	6/9/2004	2:23:53 PM	53.89	58.28	146.07	171.51	20.66	53.75	24.49	21.49	23.39	80.37	-0.01	0.55	-11.12	-13.32
91	6/9/2004	2:28:55 PM	52.58	54.39	145.09	153.18	20.68	52.42	22.55	21.20	22.13	80.34	-0.01	0.42	-8.00	-9.92
92	6/9/2004	2:33:57 PM	52.02	52.33	140.18	153.63	20.69	51.90	20.67	20.72	21.03	80.34	-0.01	0.05	-0.07	-0.57

Table H1-3a: Campaign IV

FEP Campaign IV Data

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
1	8/25/2004	7:16:57 AM	22.27	22.64	22.89	164.65	25.26	20.34	25.70	26.22	27.66	1.70	-0.01	0.00	-1.40	-3.47
2	8/25/2004	7:22:00 AM	28.06	31.40	95.82	173.46	22.25	28.89	22.33	23.28	24.79	71.02	-0.01	0.00	-4.82	-7.41
3	8/25/2004	7:27:02 AM	49.40	52.11	138.55	171.97	21.61	49.60	21.63	21.95	22.58	89.58	-0.01	0.05	-3.11	-4.64
4	8/25/2004	7:32:04 AM	66.83	68.74	113.81	172.37	21.35	67.00	21.32	22.33	23.85	90.23	-0.01	0.00	-3.40	-5.87
5	8/25/2004	7:37:06 AM	69.77	69.98	99.45	175.56	21.22	69.52	21.18	22.29	23.95	89.62	-0.01	0.00	-7.94	-10.16
6	8/25/2004	7:42:09 AM	64.49	64.82	103.26	175.59	21.13	63.97	22.43	22.20	23.86	89.04	-0.01	0.09	-9.63	-11.81
7	8/25/2004	7:47:11 AM	43.35	46.68	142.48	174.51	21.06	43.09	24.72	22.13	23.73	89.93	-0.01	0.39	-11.83	-13.97
8	8/25/2004	7:52:13 AM	45.67	50.19	145.82	172.67	21.00	45.63	24.30	21.99	23.57	90.28	-0.01	0.59	-11.56	-13.95
9	8/25/2004	7:57:15 AM	48.68	53.13	147.10	171.64	20.96	48.60	24.37	21.92	23.46	88.95	-0.01	0.84	-11.31	-13.91
10	8/25/2004	8:02:17 AM	49.35	53.67	147.56	170.76	20.91	49.24	24.40	21.87	23.37	90.29	0.10	0.58	-11.28	-13.90
11	8/25/2004	8:07:20 AM	49.55	53.91	147.07	172.02	20.87	49.71	24.06	21.85	23.39	90.25	0.96	0.54	-11.21	-13.51
12	8/25/2004	8:12:22 AM	49.60	53.95	147.71	171.49	20.84	49.67	24.34	21.80	23.34	90.21	0.95	0.57	-11.25	-13.38
13	8/25/2004	8:17:24 AM	49.60	53.91	147.54	170.80	20.81	49.72	24.13	21.76	23.28	90.34	0.94	0.55	-11.25	-13.47
14	8/25/2004	8:22:26 AM	49.33	53.68	147.83	171.09	20.79	49.49	24.10	21.74	23.28	90.35	0.93	0.56	-11.26	-13.50
15	8/25/2004	8:27:28 AM	49.74	54.08	147.84	171.29	20.77	49.88	24.15	21.73	23.26	90.34	0.91	0.56	-11.25	-13.48
16	8/25/2004	8:32:31 AM	50.07	54.36	147.77	170.74	20.76	50.21	23.99	21.71	23.22	90.33	0.89	0.54	-11.23	-13.46
17	8/25/2004	8:37:33 AM	50.14	54.45	147.71	171.21	20.74	50.27	24.09	21.70	23.22	90.37	0.88	0.56	-11.23	-13.46
18	8/25/2004	8:42:35 AM	49.89	54.16	148.48	170.08	20.69	50.03	24.00	21.63	23.15	90.45	0.88	0.56	-11.27	-13.47
19	8/25/2004	8:47:37 AM	50.57	54.85	147.43	171.44	20.67	50.58	24.08	21.63	23.20	90.54	0.57	0.56	-11.22	-13.45
20	8/25/2004	8:52:40 AM	50.39	54.69	147.82	171.42	20.69	50.36	24.20	21.65	23.21	90.52	0.36	0.58	-11.26	-13.47
21	8/25/2004	8:57:42 AM	50.13	54.45	147.93	171.17	20.70	50.11	24.21	21.66	23.19	90.44	0.34	0.58	-11.29	-13.48
22	8/25/2004	9:02:44 AM	50.24	54.56	147.69	171.27	20.69	50.22	24.15	21.64	23.17	90.44	0.30	0.58	-11.26	-13.49
23	8/25/2004	9:07:46 AM	50.18	54.48	148.04	170.76	20.66	50.17	24.16	21.61	23.13	90.32	0.34	0.58	-11.27	-13.49
24	8/25/2004	9:12:48 AM	49.92	54.25	147.99	171.38	20.65	49.91	24.18	21.61	23.16	90.31	0.35	0.59	-11.30	-13.49
25	8/25/2004	9:17:50 AM	49.90	54.23	147.98	170.80	20.66	49.95	24.07	21.62	23.14	90.19	0.55	0.57	-11.29	-13.49
26	8/25/2004	9:22:53 AM	50.04	54.38	147.77	171.42	20.67	50.07	24.08	21.64	23.16	90.28	0.46	0.56	-11.28	-13.50
27	8/25/2004	9:27:55 AM	50.41	54.65	147.35	169.94	20.65	50.46	24.03	21.59	23.08	90.25	0.48	0.56	-11.26	-13.48
28	8/25/2004	9:32:57 AM	49.76	54.10	147.93	171.37	20.62	49.81	24.09	21.59	23.14	90.20	0.65	0.58	-11.31	-13.51
29	8/25/2004	9:37:59 AM	49.78	54.10	148.06	170.75	20.61	49.88	24.00	21.57	23.12	90.07	0.67	0.56	-11.29	-13.52
30	8/25/2004	9:43:02 AM	50.11	54.45	147.86	171.42	20.61	50.12	23.97	21.61	23.18	90.18	0.40	0.58	-11.28	-13.50

Table H1-3b: Campaign IV

FEP Campaign IV Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
31	8/25/2004	9:48:04 AM	50.28	54.59	147.81	171.10	20.60	50.31	23.67	21.60	23.21	90.07	0.44	0.56	-11.27	-13.42
32	8/25/2004	9:53:06 AM	50.00	54.29	148.33	170.35	20.56	50.11	23.56	21.54	23.15	90.00	0.70	0.57	-11.28	-13.48
33	8/25/2004	9:58:08 AM	50.25	54.56	147.49	171.32	20.56	50.32	23.65	21.57	23.20	90.04	0.59	0.56	-11.27	-13.49
34	8/25/2004	10:03:10 AM	50.14	54.46	147.56	171.05	20.58	50.25	23.50	21.58	23.18	90.04	0.70	0.55	-11.26	-13.50
35	8/25/2004	10:08:13 AM	50.40	54.72	147.90	171.23	20.59	50.49	23.65	21.59	23.18	89.94	0.70	0.56	-11.26	-13.49
36	8/25/2004	10:13:15 AM	50.32	54.66	148.03	171.30	20.58	50.40	23.67	21.59	23.19	90.05	0.62	0.57	-11.28	-13.49
37	8/25/2004	10:18:17 AM	50.65	54.91	147.34	170.53	20.56	50.71	23.48	21.54	23.13	90.08	0.53	0.55	-11.24	-13.48
38	8/25/2004	10:23:19 AM	50.50	54.79	147.67	171.03	20.54	50.58	23.53	21.54	23.16	90.02	0.63	0.56	-11.25	-13.48
39	8/25/2004	10:28:21 AM	50.48	54.78	147.58	171.04	20.56	50.56	23.58	21.56	23.17	90.00	0.67	0.56	-11.26	-13.48
40	8/25/2004	10:33:24 AM	50.52	54.83	147.89	171.22	20.56	50.59	23.65	21.55	23.17	90.11	0.60	0.57	-11.28	-13.49
41	8/25/2004	10:38:26 AM	50.73	55.02	147.56	171.05	20.54	50.77	23.56	21.53	23.16	90.05	0.52	0.56	-11.26	-13.48
42	8/25/2004	10:43:28 AM	50.57	54.84	148.09	170.75	20.51	50.61	23.60	21.50	23.13	90.05	0.49	0.57	-11.27	-13.47
43	8/25/2004	10:48:30 AM	50.96	55.23	146.80	171.31	20.52	51.00	23.53	21.53	23.18	90.06	0.49	0.55	-11.23	-13.47
44	8/25/2004	10:53:33 AM	50.45	54.73	147.84	170.62	20.56	50.54	23.60	21.54	23.17	89.94	0.60	0.57	-11.29	-13.48
45	8/25/2004	10:58:35 AM	50.80	55.09	147.37	171.30	20.57	50.84	23.66	21.56	23.18	89.96	0.57	0.57	-11.25	-13.47
46	8/25/2004	11:03:37 AM	50.73	55.00	147.21	171.07	20.54	50.77	23.52	21.54	23.17	89.91	0.56	0.55	-11.26	-13.46
47	8/25/2004	11:08:39 AM	50.96	55.21	147.63	170.91	20.53	51.02	23.55	21.52	23.17	89.95	0.55	0.56	-11.23	-13.43
48	8/25/2004	11:13:41 AM	50.82	55.09	147.57	171.12	20.55	50.88	23.64	21.55	23.19	90.00	0.62	0.56	-11.26	-13.42
49	8/25/2004	11:18:44 AM	50.82	55.10	147.49	171.25	20.56	50.87	23.67	21.57	23.21	90.02	0.58	0.57	-11.26	-13.44
50	8/25/2004	11:23:46 AM	51.36	55.57	144.41	170.78	20.54	51.43	23.45	21.53	23.15	90.01	0.54	0.54	-11.19	-13.44
51	8/25/2004	11:28:48 AM	51.08	55.32	146.76	171.13	20.53	51.13	23.52	21.53	23.16	90.00	0.53	0.55	-11.21	-13.44
52	8/25/2004	11:33:50 AM	51.20	55.45	145.96	171.19	20.52	51.22	23.55	21.52	23.14	89.99	0.52	0.56	-11.22	-13.43
53	8/25/2004	11:38:52 AM	51.10	55.33	144.87	171.02	20.52	51.18	23.44	21.51	23.13	89.94	0.64	0.54	-11.22	-13.46
54	8/25/2004	11:43:55 AM	50.75	55.03	147.61	171.31	20.55	50.84	23.65	21.55	23.18	89.94	0.74	0.57	-11.28	-13.46
55	8/25/2004	11:48:57 AM	51.33	55.53	145.21	170.39	20.56	51.45	23.46	21.54	23.12	90.01	0.74	0.54	-11.19	-13.44
56	8/25/2004	11:53:59 AM	50.96	55.21	146.89	171.28	20.54	51.06	23.47	21.54	23.16	90.03	0.74	0.55	-11.23	-13.43
57	8/25/2004	11:59:01 AM	51.00	55.26	147.34	171.36	20.53	51.10	23.49	21.53	23.17	90.06	0.75	0.55	-11.24	-13.43
58	8/25/2004	12:04:03 PM	51.07	55.29	147.29	170.82	20.53	51.17	23.47	21.52	23.13	90.14	0.75	0.55	-11.23	-13.42
59	8/25/2004	12:09:06 PM	51.08	55.35	147.03	171.62	20.56	51.19	23.60	21.56	23.19	90.13	0.74	0.56	-11.24	-13.44
60	8/25/2004	12:14:08 PM	51.01	55.24	147.22	171.07	20.57	51.11	23.42	21.57	23.17	90.19	0.67	0.53	-11.25	-13.47

Table H1-3c: Campaign IV

FEP Campaign IV Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
61	8/25/2004	12:19:10 PM	51.57	55.75	147.65	170.30	20.56	51.59	23.54	21.54	23.12	90.21	0.47	0.55	-11.23	-13.44
62	8/25/2004	12:24:12 PM	51.62	55.84	145.90	171.48	20.54	51.59	23.60	21.54	23.16	90.19	0.34	0.57	-11.23	-13.45
63	8/25/2004	12:29:14 PM	51.45	55.67	146.86	171.37	20.53	51.40	23.55	21.53	23.16	90.04	0.26	0.57	-11.24	-13.46
64	8/25/2004	12:34:17 PM	51.51	55.72	147.65	171.11	20.53	51.42	23.66	21.52	23.15	89.93	0.18	0.58	-11.25	-13.45
65	8/25/2004	12:39:19 PM	51.62	55.84	146.23	171.58	20.53	51.56	23.59	21.54	23.19	89.84	0.22	0.57	-11.22	-13.44
66	8/25/2004	12:44:21 PM	51.02	55.27	146.97	171.36	20.55	51.04	23.64	21.55	23.18	89.71	0.46	0.58	-11.27	-13.48
67	8/25/2004	12:49:23 PM	51.43	55.56	145.45	171.02	20.57	51.41	23.37	21.56	23.15	89.70	0.39	0.53	-11.20	-13.48
68	8/25/2004	12:54:25 PM	51.78	55.83	145.77	170.72	20.58	51.62	23.64	22.40	23.01	89.64	0.41	0.58	-11.23	-13.45
69	8/25/2004	12:59:28 PM	52.02	56.06	141.10	171.28	20.57	51.90	23.35	22.55	22.98	89.66	0.44	0.53	-11.15	-13.45
70	8/25/2004	1:04:30 PM	51.64	55.69	144.64	171.43	20.56	51.51	23.54	22.56	23.01	89.62	0.46	0.57	-11.21	-13.45
71	8/25/2004	1:09:32 PM	51.25	55.32	146.17	171.57	20.56	51.15	23.46	22.57	23.02	89.59	0.57	0.56	-11.24	-13.48
72	8/25/2004	1:14:34 PM	51.25	55.34	146.34	171.55	20.57	51.21	23.47	22.57	23.02	89.61	0.78	0.55	-11.24	-13.48
73	8/25/2004	1:19:36 PM	50.92	54.97	148.01	170.57	20.57	50.92	23.39	22.53	22.99	89.64	0.78	0.55	-11.29	-13.48
74	8/25/2004	1:24:39 PM	51.90	55.95	142.21	171.82	20.57	51.86	23.36	22.58	23.02	89.75	0.66	0.53	-11.16	-13.44
75	8/25/2004	1:29:41 PM	51.74	55.75	146.39	170.70	20.57	51.55	23.46	22.53	22.99	89.69	0.21	0.56	-11.25	-13.47
76	8/25/2004	1:34:43 PM	51.88	55.91	145.63	171.53	20.58	51.65	23.58	22.59	23.04	89.65	0.15	0.57	-11.22	-13.46
77	8/25/2004	1:39:45 PM	52.01	56.04	144.34	171.73	20.59	51.76	23.57	22.60	23.03	89.52	0.09	0.56	-11.22	-13.46
78	8/25/2004	1:44:48 PM	52.60	56.55	141.85	170.76	20.58	52.41	23.36	22.55	22.97	89.48	0.19	0.54	-11.13	-13.44
79	8/25/2004	1:49:50 PM	51.28	55.31	145.61	170.92	20.58	51.27	23.47	22.56	23.02	89.27	0.86	0.57	-11.26	-13.46
80	8/25/2004	1:54:52 PM	51.75	55.79	143.84	171.73	20.59	51.75	23.38	22.61	23.04	89.42	0.87	0.53	-11.17	-13.45
81	8/25/2004	1:59:54 PM	51.56	55.61	145.93	171.25	20.63	51.57	23.38	22.63	23.05	89.43	0.88	0.53	-11.21	-13.46
82	8/25/2004	2:04:56 PM	52.00	56.04	143.13	171.72	20.63	51.98	23.46	22.63	23.04	89.47	0.78	0.55	-11.17	-13.44
83	8/25/2004	2:09:59 PM	51.70	55.72	146.98	170.89	20.61	51.67	23.36	22.59	23.02	89.49	0.74	0.53	-11.24	-13.46
84	8/25/2004	2:15:01 PM	52.33	56.34	143.06	171.60	20.60	52.26	23.48	22.59	23.02	89.65	0.72	0.55	-11.15	-13.43
85	8/25/2004	2:20:03 PM	51.94	55.93	146.26	171.00	20.59	51.88	23.32	22.56	23.01	89.75	0.57	0.53	-11.20	-13.45
86	8/25/2004	2:25:05 PM	51.97	55.99	147.44	171.35	20.59	51.83	23.55	22.57	23.03	89.66	0.42	0.57	-11.24	-13.45
87	8/25/2004	2:30:07 PM	52.06	56.07	146.63	171.45	20.60	51.91	23.48	22.58	23.03	89.50	0.37	0.56	-11.22	-13.44
88	8/25/2004	2:35:10 PM	52.68	56.64	141.95	171.30	20.59	52.54	23.22	22.56	23.00	89.46	0.26	0.51	-11.11	-13.42
89	8/25/2004	2:40:12 PM	52.32	56.30	144.56	170.32	20.59	52.23	23.56	22.52	22.97	89.34	0.58	0.58	-11.20	-13.40
90	8/25/2004	2:45:14 PM	51.93	55.91	141.82	171.61	20.60	52.19	23.10	22.59	23.03	89.65	0.76	0.48	-11.13	-13.42

Table H1-3d: Campaign IV

FEP Campaign IV Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
61	8/25/2004	12:19:10 PM	51.57	55.75	147.65	170.30	20.56	51.59	23.54	21.54	23.12	90.21	0.47	0.55	-11.23	-13.44
92	8/25/2004	2:55:18 PM	52.95	56.91	143.16	171.44	20.61	52.70	23.39	22.59	23.02	89.57	-0.01	0.54	-11.14	-13.41
93	8/25/2004	3:00:21 PM	52.84	56.80	145.35	171.26	20.61	52.56	23.62	22.58	23.02	89.48	-0.01	0.59	-11.19	-13.41
94	8/25/2004	3:05:23 PM	52.87	56.81	144.96	171.25	20.61	52.61	23.50	22.59	23.03	89.36	-0.01	0.56	-11.18	-13.42
95	8/25/2004	3:10:25 PM	52.79	56.74	144.94	171.47	20.62	52.53	23.54	22.60	23.04	89.04	-0.01	0.56	-11.17	-13.41
96	8/25/2004	3:15:27 PM	52.60	56.54	146.58	171.31	20.61	52.32	23.59	22.59	23.04	88.89	-0.01	0.58	-11.22	-13.40
97	8/25/2004	3:20:29 PM	52.98	56.89	143.97	171.31	20.61	52.69	23.47	22.58	23.02	88.66	-0.01	0.55	-11.17	-13.40
98	8/25/2004	3:25:32 PM	52.88	56.81	145.29	171.69	20.61	52.55	23.58	22.60	23.05	88.46	-0.01	0.57	-11.21	-13.43

Section H2: Pilot Ultrafiltration Process (UFP) Raw Data

This raw data section differs from the other three, i.e., H1 (FEP), H3 (CIX), and H4 (TLP) in that because of the central role and the complex set of operations of the pilot scale ultrafiltration in the SIPP task the entire UFP unit operational data base is enclosed in this section unabridged. Of course, this make for a very large appendix addition, but inquiries in the past of similar have shown the importance to make this information available. The next couple of pages attempt to orient the reader to understand the data streams and their placement in the overall SIPP task.

Contents Section H2

Appendix H2 Directory
- Raw Data Notes
- Raw Data Nomenclature
- Instrumentation Locations
- Campaign I – IV Test Matrices
- Campaign I Raw Data
- Campaign II Raw Data
- Campaign III Raw Data
- Campaign IV Raw Data

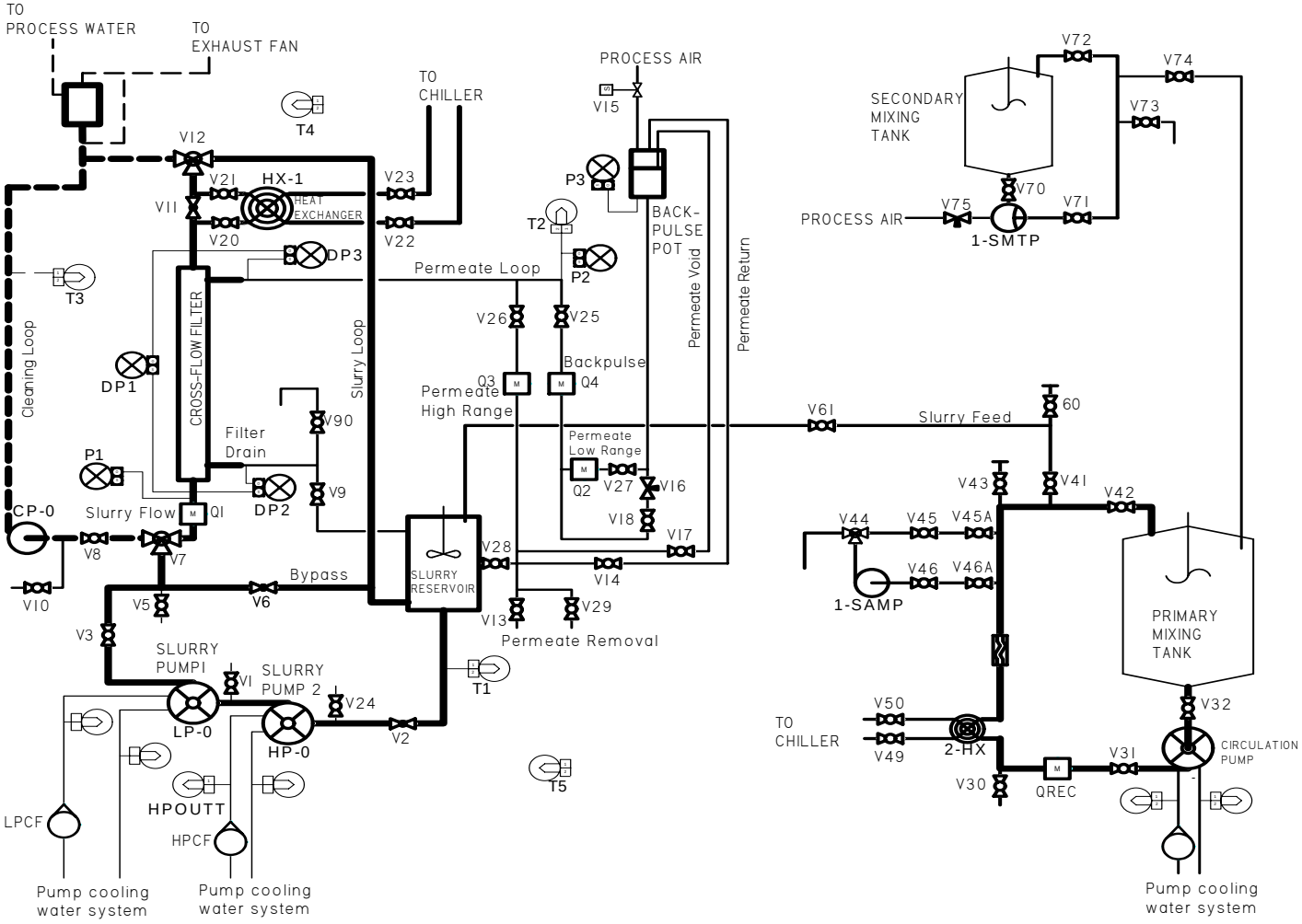
Raw Data Notes

1. The raw data appears in tabular form, in a Microsoft Excel spreadsheet. The table includes measured quantities and calculated quantities. The nomenclature in the table header is described following these notes.
2. A chart precedes each raw data set. The chart shows the permeate flux vs. time for that data set.
3. All columns of measured and calculated quantities are followed by several statistical values, calculated for each columns. The statistical values are average, maximum, medium, minimum, standard deviation and number of data points used in the statistical values. Raw data during bakpulsing were not included in the statistical values due to the significant fluctuations caused by the backpulse.

Raw Data Nomenclature – reference the following figure for instrumentation locations.

Column	Heading	Description
Measured quantities		
A	Date	Date that the data point was taken
B	Time	Time that the data point was taken
D	Filtrate – deg C – T2	Filtrate temperature
E	Cleaning – deg C – T3	Cleaning loop temperature – not used for SIPP
F	Slurry – deg C – T1	Slurry temperature
G	Hi Amb. – deg C – T4	Ambient temperature measured at the top of the test rig
H	Lo Amb. – deg C – T5	Ambient temperature measure at the bottom of the test rig.
J	Bot TMP – psid – dP2	Differential pressure across the filter at the bottom permeate exit.
K	Filter – psig – P1	Gauge pressure in the slurry loop at the filter entrance
L	Filter dP – psid – dP1	Differential pressure between the filter slurry entrance and exit.
M	Top TMP – psid – dP3	Differential pressure across the filter at the top permeate exit.
N	Filtrate – psid – P2	Gauge pressure at the top permeate exit.
O	Pulsepot – psig – P3	Gauge pressure at the backpulse pot.
Q	Slurry – gpm – Q1	Slurry flow rate.
R	Filtrate – gpm – Q2	Permeate flow rate – low flow rates (0 – 1.2 gpm).
S	Hi Filtrate – gpm – Q3	Permeate flow rate – high flow rates (0 – 5 gpm).
T	Backpulse – gpm – Qbp	Permeate flow rate during backpulse - reverse direction.
Calculated quantities		
V	Time – min.	Elapsed time in minutes.
W	Time – hour	Elapsed time in hours.
X	Press. – psig	Filter pressure corrected for head of water in the gauge tubing. P1 – tubing head (psi)
Y	Vel. – ft/s	Axial slurry velocity. Q1/(7.48gal/ft^3)/(60sec/min)/flow area. Flow area = π*(tube ID/12 in/ft)^2/4.
Z	TMP – psi	Transmembrane pressure in psi. (dP2+dP3)/2.
AA	TMP – bar	Transmembrant pressure in bars. TMP (psi)/(14.504bar/psi).
AB	Filtrate Flux– gpm/ft^2	Permeate flux. Q2/filter surface area Filter surface area = π*(tube ID/12in/ft)*(tube length/12in/ft)*7.
AC	Filtrate Flux at 25C – gpm/ft^2	Permeate flux at 25ºC. Filtrate flux*exp(2500*((1/273+T2)-(1/298).
AD	Permeability – gpm-ft^2/psi	Permeability. Filtrate flux @ 25ºC/TMP (psi).
AE	Permeabilityx1000	Permeability * 1000.
AF	Permeability–meter-day/bar	Permeability * 851.0145 m/day/bar/gpm/ft^2/bar.

Instrumentation locations



Test Matrices for reference with the Raw Data Tables

Campaign I

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
1.00A	Water	10	11	25	20
1.00B	Water	20	11	25	20
1.00C	Water	30	11	25	20
1.03	Dewater to 25 wt%	40	12	25	Note 1
1.04	25 wt%	40	11	25	120
1.07	25 wt%	30	9	25	60
1.08	25 wt%	30	13	25	60
1.09	25 wt%	50	13	25	60
1.10	25 wt%	50	9	25	60
1.11	25 wt%	40	11	25	120
1.16	25 wt%	40	11	25	120
Wash	20 wt%	40	12	25	Note 2
1.18A	Water rinse	40	12	25	30
1.18B	Acid clean	40	12	25	90
1.18C	Acid clean	40	12	25	90
1.18D	Acid clean	40	12	25	90
1.19A	Water rinse	20	12	25	30
1.19B	Water rinse	20	12	25	30
1.19C	Water rinse	20	12	25	30
1.20	Water	10, 20, 30	11	25	60

Note 1 Run time is the time necessary to dewater to > 20 wt% undissolved solids. The only test specification was to run no less than 12 hours.

Note 2 Run time was the time necessary to introduce the 22 mini-washes.

Campaign II

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
2.00A	Pre-test baseline A	10	11	25	20
2.00B	Pre-test baseline B	20	11	25	20
2.00C	Pre-test baseline C	30	11	25	20
2.03A	Dewater first half of slurry	40	12	25	948
2.03B	Dewater second half of slurry	40	12	25	2452
Wash 1	Slurry wash 1	40	12	25	379
Wash 2	Slurry wash 2	40	12	25	246
2.18A	Caustic rinse 1	20	11	25	30
2.18B	Acid clean 1	40	11	25	90
2.18C	Acid clean 2	40	11	25	90
2.18D	Acid clean 3	40	11	25	90
2.19A	Caustic rinse 2	20	11	25	30
2.19B	Caustic rinse 3	20	11	25	30
2.21A	Post-test baseline A	10	11	25	20
2.21B	Post-test baseline B	20	11	25	20

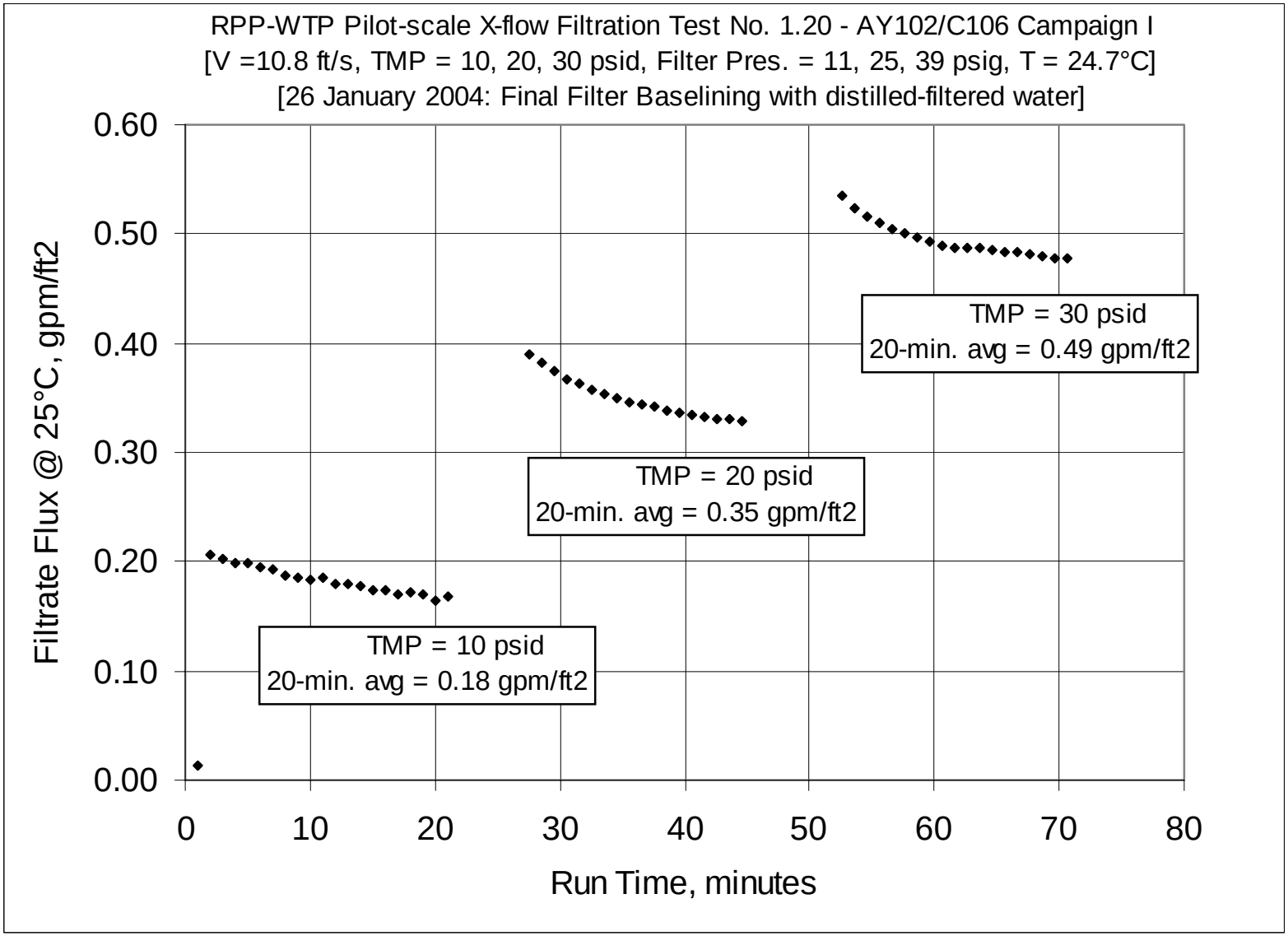
Campaign III

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
3.00A	Pre-test baseline A	10	11	25	20
3.00B	Pre-test baseline B	20	11	25	20
3.00C	Pre-test baseline C	30	11	25	20
3.03A	Dewater first half of slurry	40	12	25	960
3.03B	Dewater second half of slurry	40	12	25	2300
Wash 1	Slurry wash 1	40	12	25	379
Wash 2	Slurry wash 2	40	12	25	229
3.18A	Caustic rinse 1	20	11	25	30
3.18B	Acid clean 1	40	11	25	90
3.18C	Acid clean 2	40	11	25	90
3.18D	Acid clean 3	40	11	25	90
3.19A	Caustic rinse 2	20	11	25	30
3.19B	Caustic rinse 3	20	11	25	30
3.21A	Post-test baseline A	10	11	25	20
3.21B	Post-test baseline B	20	11	25	20
3.21C	Post-test baseline C	30	11	25	20

Campaign IV

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
4.00A	Pre-test baseline A	10	11	25	20
4.00B	Pre-test baseline B	20	11	25	20
4.00C	Pre-test baseline C	30	11	25	20
4.03A	Dewater first half of slurry	40	12	25	960
4.03B	Dewater second half of slurry	40	12	25	2300
4.07	Steady State @ 24wt%	30	9	25	30
4.08	Steady State @ 24wt%	30	13	25	30
4.09	Steady State @ 24wt%	50	13	25	30
4.11	Steady State @ 24wt%	40	11	25	30
Steady5	Steady State @ 24wt%	50	13	25	30
Staedy6	Steady State @ 24wt%	50	15	25[7]	30
Temp1	High temperature test @ 20 wt%	40	12	30	30
Temp2	High temperature test @ 20 wt%	40	12	37.5	30
Temp3	High temperature test @ 20 wt%	40	12	45	30
Temp4	High temperature test @ 20 wt%	40	12	35	30
Temp5	High temperature test @ 20 wt%	40	12	25	30
Temp6	High temperature test @ 20 wt%	50	15	37.5	30
Temp7	High temperature test @ 20 wt%	50	15	45	30
Wash 1	Slurry wash 1	40	12	25	379
Wash 2	Slurry wash 2	40	12	25	229
4.18A	Caustic rinse 1	20	11	25	30
4.18B	Acid clean 1	40	11	25	90
4.18C	Acid clean 2	40	11	25	90
4.18D	Acid clean 3	40	11	25	90
4.19A	Caustic rinse 2	20	11	25	30
4.19B	Caustic rinse 3	20	11	25	30
4.21A	Post-test baseline A	10	11	25	20
4.21B	Post-test baseline B	20	11	25	20
4.21C	Post-test baseline C	30	11	25	20

RUN # 1.00A, B, C; PRE-TEST BASELINE WITH DIF WATER



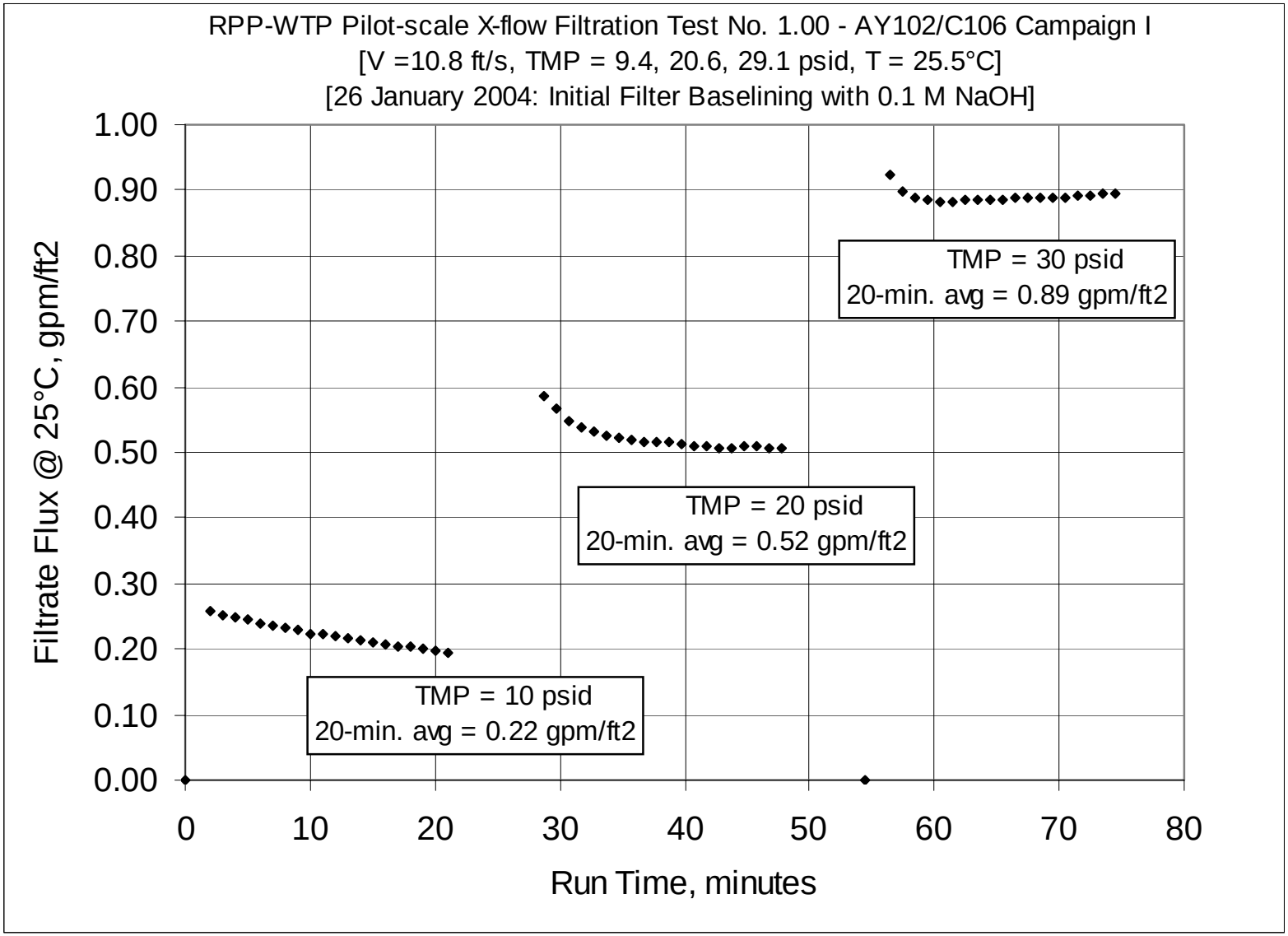
RUN # 1.00A, B, C; PRE-TEST BASELINE WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	1/26/2004	7:40:18 AM		19.871	15.611	12.488	20.323	12.825		0.056	-1.097	-0.004	0.024	-0.103	0.192		-0.084	0.003	14.643	0.006				Filter Surface		6.707	FT2						
8	1/26/2004	7:41:31 AM		19.871	15.611	12.488	20.323	12.825		0.056	-1.097	-0.004	0.024	-0.103	0.192		-0.084	0.003	14.643	0.006				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/26/2004	7:41:32 AM		19.867	15.606	12.488	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.106	0.192		-0.086	0.003	14.643	0.004													
10	1/26/2004	7:41:33 AM		19.872	15.611	12.488	20.313	12.816		0.058	-1.101	-0.004	0.026	-0.144	0.192		-0.084	0.003	14.643	0.007				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/26/2004	7:41:34 AM		19.867	15.611	12.483	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.1	0.195		-0.084	0.003	14.643	0.006													
12	1/26/2004	7:41:35 AM		19.862	15.606	12.483	20.308	12.81		0.058	-1.099	-0.004	0.023	-0.097	0.195		-0.084	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/26/2004	7:41:36 AM		19.867	15.611	12.488	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.097	0.195		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	1/26/2004	7:41:37 AM		19.862	15.606	12.483	20.318	12.81		0.056	-1.101	-0.004	0.026	-0.1	0.195		-0.084	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar
17	1/26/2004	12:53:28 PM		23.154	16.775	23.249	21.379	16.322		3.082	12.438	5.526	-1.461	5.092	52.902		43.831	0.003	-0.014	0.004		0	0	11.0	10.7	0.8	0.056	-0.002	-0.002	-0.003	-2.706	-2.30
18	1/26/2004	12:54:28 PM		22.296	16.781	23.255	21.4	16.485		4.725	12.415	5.478	0.527	3.607	0.37		43.845	0.4	0.09	0.004		1.00	0.01667	10.9	10.7	2.6	0.181	0.013	0.014	0.005	5.369	4.57
19	1/26/2004	12:55:28 PM		23.327	16.777	23.277	21.376	16.669		11.751	12.264	5.465	7.759	-1.214	0.462		44.632	0.003	1.318	0.004		2.00	0.03333	10.8	10.9	9.8	0.673	0.197	0.206	0.021	21.151	18.00
20	1/26/2004	12:56:28 PM		23.412	16.772	23.287	21.396	16.932		11.826	12.297	5.473	7.766	-1.216	0.459		44.719	0.003	1.295	0.004		3.00	0.05	10.8	11.0	9.8	0.675	0.193	0.203	0.021	20.689	17.61
21	1/26/2004	12:57:28 PM		23.468	16.773	23.383	21.327	17.434		11.849	12.249	5.444	7.839	-1.216	0.459		44.667	0.003	1.272	0.004		4.00	0.06667	10.8	10.9	9.8	0.679	0.190	0.199	0.020	20.167	17.16
22	1/26/2004	12:58:28 PM		23.542	16.772	23.492	21.326	17.327		11.915	12.289	5.362	7.954	-1.216	0.456		44.705	0.003	1.272	0.004		5.00	0.08333	10.8	11.0	9.9	0.685	0.190	0.198	0.020	19.922	16.95
23	1/26/2004	12:59:28 PM		23.658	16.783	23.648	21.331	17.362		11.911	12.216	5.401	7.93	-1.214	0.456		44.619	0.003	1.258	0.004		6.00	0.1	10.7	10.9	9.9	0.684	0.188	0.195	0.020	19.643	16.72
24	1/26/2004	1:00:28 PM		23.785	16.804	23.75	21.363	18.056		11.975	12.268	5.415	7.971	-1.208	0.454		44.623	0.003	1.245	0.004		7.00	0.11667	10.8	10.9	10.0	0.688	0.186	0.192	0.019	19.282	16.41
25	1/26/2004	1:01:28 PM		23.856	16.79	23.826	21.283	18.32		12.089	12.322	5.464	8.034	-1.214	0.451		44.677	0.003	1.219	0.004		8.00	0.13333	10.8	10.9	10.1	0.694	0.182	0.188	0.019	18.673	15.89
26	1/26/2004	1:02:28 PM		23.957	16.817	23.978	21.35	17.406		12.044	12.237	5.405	8.073	-1.208	0.448		44.64	0.003	1.213	0.004		9.00	0.15	10.8	10.9	10.1	0.693	0.181	0.186	0.019	18.506	15.75
27	1/26/2004	1:03:28 PM		24.023	16.802	23.969	21.321	17.028		12.079	12.249	5.426	8.071	-1.216	0.448		44.711	0.003	1.198	0.004		10.00	0.16667	10.8	11.0	10.1	0.695	0.179	0.184	0.018	18.252	15.53
28	1/26/2004	1:04:28 PM		24.104	16.818	24.089	21.397	16.927		12.019	12.177	5.356	8.084	-1.214	0.448		44.552	0.003	1.206	0.004		11.00	0.18333	10.7	10.9	10.1	0.693	0.180	0.184	0.018	18.354	15.62
29	1/26/2004	1:05:28 PM		24.185	16.815	24.146	21.343	17.359		12.17	12.299	5.433	8.18	-1.211	0.451		44.615	0.003	1.175	0.004		12.00	0.2	10.8	10.9	10.2	0.702	0.175	0.179	0.018	17.637	15.01
30	1/26/2004	1:06:28 PM		24.231	16.81	24.177	21.233	17.162		12.083	12.183	5.358	8.123	-1.216	0.442		44.717	0.003	1.172	0.004		13.00	0.21667	10.7	11.0	10.1	0.697	0.175	0.179	0.018	17.702	15.06
31	1/26/2004	1:07:28 PM		24.307	16.826	24.298	21.259	17.077		12.313	12.401	5.42	8.311	-1.216	0.448		44.6	0.003	1.166	0.004		14.00	0.23333	10.9	10.9	10.3	0.711	0.174	0.177	0.017	17.195	14.63
32	1/26/2004	1:08:28 PM		24.375	16.834	24.305	21.256	18.02		12.129	12.21	5.417	8.088	-1.214	0.445		44.654	0.003	1.142	0.004		15.00	0.25	10.7	10.9	10.1	0.697	0.170	0.174	0.017	17.177	14.62
33	1/26/2004	1:09:28 PM		24.416	16.835	24.382	21.197	17.799		12.28	12.337	5.429	8.252	-1.216	0.448		44.721	0.003	1.142	0.004		16.00	0.26667	10.9	11.0	10.3	0.708	0.170	0.173	0.017	16.877	14.36
34	1/26/2004	1:10:28 PM		24.488	16.857	24.409	21.274	17.761		12.245	12.26	5.446	8.209	-1.214	0.448		44.775	0.003	1.127	0.004		17.00	0.28333	10.8	11.0	10.2	0.705	0.168	0.171	0.017	16.706	14.22
35	1/26/2004	1:11:28 PM		24.539	16.874	24.48	21.311	17.696		12.278	12.299	5.457	8.209	-1.216	0.445		44.579	0.003	1.133	0.004		18.00	0.3	10.8	10.9	10.2	0.706	0.169	0.171	0.017	16.734	14.24
36	1/26/2004	1:12:28 PM		24.596	16.876	24.512	21.313	17.688		12.193	12.21	5.485	8.069	-1.214	0.448		44.726	0.003	1.127	0.004		19.00	0.31667	10.7	11.0	10.1	0.698	0.168	0.170	0.017	16.815	14.31
37	1/26/2004	1:13:28 PM		24.622	16.882	24.563	21.359	17.759		12.216	12.231	5.395	8.199	-1.216	0.448		44.609	0.003	1.093	0.004		20.00	0.33333	10.8	10.9	10.2	0.704	0.163	0.165	0.016	16.162	13.75
38	1/26/2004	1:14:28 PM		24.663	16.878	24.595	21.32	18.008		12.181	12.158	5.393	8.184	-1.216	0.445		44.575	0.003	1.113	0.004		21.00	0.35	10.7	10.9	10.2	0.702	0.166	0.168	0.016	16.484	14.03
39	1/26/2004	1:19:04 PM		24.885	16.96	25.142	21.382	17.666		2.773	26.497	5.047	-1.773	19.324	66.622		42.713	0.003	14.643	0.004		25.60	0.42667	25.0	10.5	0.5	0.034	2.183	2.174	4.349	4348.876	3700.96
40	1/26/2004	1:20:04 PM		22.828	16.978	25.124	21.354	18.482		2.836	26.64	5.092	-1.755	19.379	8.996		42.596	0.003	14.643	0.004		26.60	0.44333	25.2	10.4	0.5	0.037	2.183	2.176	4.025	4025.049	3425.38
41	1/26/2004	1:21:04 PM		25.21	17.006	25.062	21.342	18.571		20.511	25.892	4.951	17.415	0.587	0.662		44.429	0.003	2.622	0.004		27.60	0.46	24.4	10.9	19.0	1.307	0.391	0.390	0.021	20.579	17.51
42	1/26/2004	1:22:04 PM		25.263	17.019	24.994	21.299	18.755		21.044	26.236	5.023	17.914	0.327	0.659		44.189	0.003	2.558	0.004		28.60	0.47667	24.8	10.8	19.5	1.343	0.381	0.381	0.020	19.582	16.66
43	1/26/2004	1:23:04 PM		25.246	17.048	24.953	21.262	19.223		21.09	25.954	4.768	18.357	0.124	0.662		44.031	0.003	2.51	0.004		29.60	0.49333	24.5	10.8	19.7	1.360	0.374	0.375	0.019	18.998	16.17
44	1/26/2004	1:24:04 PM		25.225	17.072	24.911	21.26	19.488		21.594	26.366	5.029	18.519	-0.082	0.662		43.895	0.003	2.458	0.004		30.60	0.51	24.9	10.8	20.1	1.383	0.366	0.367	0.018	18.318	15.59
45	1/26/2004	1:25:04 PM		25.219	17.102	24.891	21.27	19.856		21.565	26.136	4.911	18.591	-0.16	0.668		43.902	0.003	2.424	0.004		31.60	0.52667	24.7	10.8	20.1	1.384	0.361	0.363	0.018	18.055	15.37
46	1/26/2004	1:26:04 PM		25.2	17.143	24.887	21.392	20.239		21.87	26.308	5.092	18.735	-0.304	0.668		43.96	0.003	2.393	0.004		32.60	0.54333	24.8	10.8	20.3	1.400	0.357	0.358	0.018	17.629	15.00
47	1/26/2004	1:27:04 PM		25.175	17.189	24.887	21.352	20.139		21.799	26.124	4.926	18.827	-0.42	0.668		43.774	0.003	2.359	0.004		33.60	0.56	24.7	10.7	20.3	1.401	0.352	0.353	0.017	17.370	14.78
48	1/26/2004	1:28:04 PM		25.165	17.235	24.892	21.296	20.335		22.025	26.263	5.042	18.934	-0.527	0.67		43.791	0.003	2.337	0.004		34.60	0.57667	24.8	10.7	20.5	1.412	0.348	0.349	0.017	17.065	14.52
49	1/26/2004	1:29:04 PM		25.125	17.254	24.836	21.205	20.219		22	26.124	4.934	19.059	-0.594	0.665		43.716	0.003	2.311	0.004		35.60	0.59333	24.7	10.7	20.5	1.415	0.345	0.346	0.017	16.861	14.35
50	1/26/2004	1:30:04 PM		25.115	17.3	24.811	21.124	20.39		22.204	26.252	4.909	19.357	-0.698	0.662		43.735	0.003	2.29	0.005		36.60	0.61	24.8	10.7	20.8	1.433	0.341	0.343	0.017	16.517	14.06
51	1/26/2004	1:31:04 PM		25.083	17.323	24.759	20.976	19.542		22.061	26.083	4.887	19.137	-0.724	0.656		43.607	0.003	2.275	0.005		37.60	0.62667	24.6	10.7	20.6	1.420	0.339	0.341	0.017	16.578	14.11
52	1/26/2004	1:32:04 PM		25.072	17.373	24.748	21.066	18.931		22.27	26.269	5.062	19.094	-0.811	0.659		43.741	0.003	2.253	0.005		38.60	0.64333	24.8	10.7	20.7	1.426	0.336	0.338	0.016	16.357	13.92
53	1/26/2004	1:33:04 PM		25.055	17.396	24.731	21.13	18.707		22.403	26.28	5.085	19.373	-0.866	0.656		43.724	0.003	2.24	0.005		39.60	0.66	24.8	10.7	20.9	1.440	0.334	0.337	0.016	16.110	13.71
54	1/26/2004	1:34:04 PM		25.043	17.424	24.754	21.153	18.932		22.473	26.277	5.095	19.508	-0.927	0.653		43.585	0.003	2.225	0.005		40.60	0.67667	24.8	10.7	21.0	1.447	0.332	0.334	0.016	15.914	13.54
55	1/26/2004	1:35:04 PM		25.019	17.441	24.75	21.224	18.367		22.386	26.244	5.225	19.063	-0.915	0.65		43.649	0.003	2.215	0.004		41.60	0.69333	24.8	10.7	20.7	1.429	0.330	0.333	0.016	16.047	13.66
56	1/26/2004	1:36:04 PM		25.016	17.458	24.728	21.252	18.491		22.48	26.253	5.125	19.353	-0.988	0.653		43.678	0.003	2.203	0.004		42.60	0.71	24.8	10.7	20.9	1.442	0.328	0.331	0.016	15.824	13.47
57	1/26/2004	1:37:04 PM		25.002	17.469	24.693	21.248	18.542		22.449	26.174	4.985	19.414	-0.994	0.653		43.722	0.003	2.193	0.004		43.60	0.72667	24.7	10.7	20.9	1.443	0.327	0.330	0.016	15.756	13.41
58	1/26/2004	1:38:04 PM		24.987	17.48	24.659	21.228	18.416		22.523	26.232	5.006	19.519	-1.089	0.65		43.61	0.003	2.185	0.005		44.60	0.74333	24.8	10.7	21.0	1.449	0.326	0.329	0.016	15.647	13.32
59	1/26/2004	1:44:07 PM		25.123	17.566	25.435	21.203	18.523		2.41	41.068	4.249	-1.558	34.427	81.799		41.597	0.003	14.643	0.004		50.65	0.84417	39.6	10.2	0.4	0.029	2.183	2.157	5.062	5062.465	4308.23
60	1/26/2004	1:45:07 PM		24.878	17.572	25.541	21.229	18.619		16.167	40.595	4.267	12.613	19.897	0.511		43.03	1.204	14.643	0.004		51.65	0.86083	39.1	10.5	14.4	0.992	2.183	2.150	0.149	149.424	127.16
61	1/26/2004	1:46:07 PM		25.933	17.597	25.636	21.244	18.65		29.682	40.705	4.51	27.219	5.625	1.491		44.423	0.003	3.649	0.004		52.65	0.8775	39.2	10.9	28.5	1.962	0.544	0.534	0.019	18.784	15.99
62	1/26/2004	1:47:07 PM		26.064	17.604	25.702	21.26	18.449		29.913	40.384	4.506	27.381	5.292	1.48		44.302	0.003	3.578	0.004		53.65	0.89417	38.9	10.9	28.6	1.975	0.533	0.523	0.018	18.258	15.54
63	1/26/2004	1:48:07 PM		26.141	17.631	25.724	21.338	18.405		30.334	40.529	4.526	27.886	5.008	1.474		44.196	0.003	3.531	0.004		54.65	0.91083	39.1	10.8	29.1	2.007	0.526	0.516	0.018	17.721	15.08
64	1/26/2004	1:49:07 PM		26.143	17.633	25.726	21.36	18.609		30.338	40.349	4.323	27.91	4.782	1.462		44.154	0.003	3.487	0.007		55.65	0.9275	38.9	10.8	29.1	2.008	0.520	0.509	0.017	17.490	14.88
65	1/26/2004	1:50:07 PM		26.161	17.671	25.739	21.393	18.526		30.479	40.169	4.317	28.173	4.562	1.457		44.018	0.003	3.449	0.006		56.65	0.94417	38.7	10.8	29.3	2.022	0.514	0.504	0.017	17.174	14.62
66	1/26/2004	1:51:07 PM		26.157	17.667	25.74	21.46	18.356		30.734	40.287	4.257	28.61	4.429	1.46		44.046	0.003	3.425	0.005		57.65	0.96083	38.8	10.8	29.7	2.046	0.511	0.500	0.017	16.855	14.34
67	1/26/2004	1:52:07 PM		26.144	17.68	25.722	21.447	18.247		30.968	40.361	4.419	28.696	4.267	1.454		44.012	0.003	3.397	0.005		58.65	0.9775	38.9	10.8	29.8	2.057	0.506	0.496	0.017	16.636	14.16
68	1/26/2004	1:53:07 PM		26.167	17.703	25.745	21.369	18.694		30.951	40.289	4.058	28.869	4.183	1.451		43.96	0.003	3.375	0.006		59.65	0.99417	38.8	10.8	29.9	2.062	0.503	0.493	0.016	16.475	14.02
69	1/26/2004	1:54:07 PM		26.173	17.735	25.771	21.431	18.802		31.167	40.417	4.309	28.967	4.073	1.451		43.979	0.003	3.353	0.006		60.65	1.01083	38.9	10.8	30.1	2.073	0.500	0.489	0.016	16.270	13.85
70	1/26/2004	1:55:07 PM		26.15	17.736	25.703	21.372	18.722		31.279	40.409	4.167	29.339	3.998	1.448		43.795	0.003	3.332	0.005		61.65	1.0275	38.9	10.7	30.3	2.090	0.497	0.487	0.016	16.070	13.68

RUN # 1.00A, B, C; PRE-TEST BASELINE WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/26/2004	1:56:07 PM		26.022	17.657	25.534	21.303	16.387		31.111	40.104	3.888	29.357	3.931	1.445		43.91	0.003	3.322	0.004		62.65	1.04417	38.6	10.8	30.2	2.085	0.495	0.488	0.016	16.138	13.73	
72	1/26/2004	1:57:07 PM		26.007	17.687	25.499	21.379	17.096		31.661	40.645	4.148	29.581	3.824	1.442		43.739	0.003	3.309	0.005		63.65	1.06083	39.2	10.7	30.6	2.111	0.493	0.486	0.016	15.887	13.52	
73	1/26/2004	1:58:07 PM		25.974	17.71	25.442	21.381	17.862		31.989	40.838	4.043	30.012	3.723	1.434		43.728	0.003	3.293	0.005		64.65	1.0775	39.4	10.7	31.0	2.137	0.491	0.485	0.016	15.642	13.31	
74	1/26/2004	1:59:07 PM		25.938	17.739	25.425	21.405	18.402		31.794	40.703	3.896	29.889	3.723	1.442		43.664	0.003	3.281	0.005		65.65	1.09417	39.2	10.7	30.8	2.126	0.489	0.483	0.016	15.672	13.34	
75	1/26/2004	2:00:07 PM		25.898	17.765	25.386	21.36	18.513		31.512	40.322	3.898	29.614	3.641	1.434		43.559	0.003	3.272	0.006		66.65	1.11083	38.8	10.7	30.6	2.107	0.488	0.483	0.016	15.789	13.44	
76	1/26/2004	2:01:07 PM		25.86	17.782	25.362	21.256	18.626		32.03	40.72	4.059	30.104	3.549	1.428		43.599	0.003	3.259	0.006		67.65	1.1275	39.2	10.7	31.1	2.142	0.486	0.481	0.015	15.482	13.18	
77	1/26/2004	2:02:07 PM		25.822	17.799	25.329	21.172	18.825		31.8	40.465	3.885	30.022	3.488	1.419		43.512	0.003	3.244	0.006		68.65	1.14417	39.0	10.7	30.9	2.131	0.484	0.479	0.016	15.503	13.19	
78	1/26/2004	2:03:07 PM		25.79	17.812	25.302	21.094	18.727		31.889	40.49	3.909	30.129	3.453	1.41		43.441	0.003	3.228	0.004		69.65	1.16083	39.0	10.6	31.0	2.138	0.481	0.477	0.015	15.389	13.10	
79	1/26/2004	2:04:07 PM		25.742	17.819	25.259	20.945	18.719		31.968	40.564	3.868	30.129	3.395	1.41		43.493	0.003	3.23	0.006		70.65	1.1775	39.1	10.7	31.0	2.141	0.482	0.478	0.015	15.398	13.10	
80																																	
81		Averages		24.1	16.8	24.0	21.3	17.5	#	12.1	12.3	5.4	8.1	-1.2	0.5	#	44.7	0.0	1.2	0.0	#			10.8	10.9	10.1	0.694	0.178	0.183	0.018	18.2	15.5	#
82		Maximum		24.7	16.9	24.6	21.4	18.3	#	12.3	12.4	5.5	8.3	-1.2	0.5	#	44.8	0.0	1.3	0.0	#			10.9	11.0	10.3	0.711	0.197	0.206	0.021	21.2	18.0	#
83		Median		24.1	16.8	24.1	21.3	17.4	#	12.1	12.3	5.4	8.1	-1.2	0.4	#	44.6	0.0	1.2	0.0	#			10.8	10.9	10.1	0.696	0.177	0.182	0.018	18.0	15.3	#
84		Minimum		23.3	16.8	23.3	21.2	16.7	#	11.8	12.2	5.4	7.8	-1.2	0.4	#	44.6	0.0	1.1	0.0	#			10.7	10.9	9.8	0.673	0.163	0.165	0.016	16.2	13.8	#
85		2 x Std Dev		0.845	0.073	0.847	0.104	0.866	#	0.320	0.115	0.074	0.304	0.005	0.011	#	0.119	0.000	0.128	0.000	#			0.115	0.029	0.309	0.021	0.019	0.024	0.003	2.936	2.499	#
86	Number of Points Used*			20	20	20	20	20	0	20	20	20	20	20	20	0	20	20	20	20	0			20	20	20	20	20	20	20	20	20	0
87		* Backpulse points in box are not included																															
88																																	
89																											20-min. avg. =		0.18				
90																																	
91		Averages		25.1	17.3	24.8	21.2	19.3	#	21.9	26.2	5.0	18.9	-0.5	0.7	#	43.8	0.0	2.3	0.0	#			24.7	10.7	20.4	1.407	0.348	0.350	0.0172	17.2	14.6	#
92		Maximum		25.3	17.5	25.1	21.4	20.4	#	22.5	26.4	5.2	19.5	0.6	0.7	#	44.4	0.0	2.6	0.0	#			24.9	10.9	21.0	1.449	0.391	0.390	0.0206	20.6	17.5	#
93		Median		25.1	17.3	24.8	21.3	19.1	#	22.0	26.2	5.0	19.1	-0.6	0.7	#	43.7	0.0	2.3	0.0	#			24.8	10.7	20.6	1.418	0.343	0.345	0.0167	16.7	14.2	#
94		Minimum		25.0	17.0	24.7	21.0	18.4	#	20.5	25.9	4.8	17.4	-1.1	0.7	#	43.6	0.0	2.2	0.0	#			24.4	10.7	19.0	1.307	0.326	0.329	0.0156	15.6	13.3	#
95		2 x Std Dev		0.178	0.325	0.216	0.203	1.447	#	1.120	0.238	0.207	1.110	0.955	0.013	#	0.428	0.000	0.257	0.001	#			0.238	0.105	1.108	0.076	0.038	0.036	0.0028	2.780	2.366	#
96	Number of Points Used*			18	18	18	18	18	0	18	18	18	18	18	18	0	18	18	18	18	0			18	18	18	18	18	18	18	18	18	0
97		* Backpulse points in box are not included																															
98																																	
99																											18-min. avg. =		0.35				
100																																	
101		Averages		26.0	17.7	25.6	21.3	18.3	#	31.1	40.5	4.2	29.0	4.2	1.4	#	43.9	0.0	3.4	0.0	#			39.0	10.8	30.1	2.075	0.502	0.494	0.0165	16.5	14.0	#
102		Maximum		26.2	17.8	25.8	21.5	18.8	#	32.0	40.8	4.5	30.1	5.6	1.5	#	44.4	0.0	3.6	0.0	#			39.4	10.9	31.1	2.142	0.544	0.534	0.0188	18.8	16.0	#
103		Median		26.0	17.7	25.6	21.4	18.5	#	31.2	40.4	4.1	29.3	4.0	1.4	#	43.9	0.0	3.3	0.0	#			38.9	10.8	30.2	2.085	0.497	0.488	0.0161	16.1	13.7	#
104		Minimum		25.7	17.6	25.3	20.9	16.4	#	29.7	40.1	3.9	27.2	3.4	1.4	#	43.4	0.0	3.2	0.0	#			38.6	10.6	28.5	1.962	0.481	0.477	0.0154	15.4	13.1	#
105		2 x Std Dev		0.280	0.133	0.351	0.253	1.209	#	1.425	0.385	0.458	1.876	1.260	0.043	#	0.559	0.000	0.238	0.002	#			0.384	0.137	1.647	0.114	0.036	0.032	0.0020	1.973	1.679	#
106	Number of Points Used*			19	19	19	19	19	0	19	19	19	19	19	19	0	19	19	19	19	0			19	19	19	19	19	19	19	19	19	0
107		* Backpulse points in box are not included																															
108																																	
109																											19-min. avg. =		0.49				
110																																	
111		Averages		25.0	17.2	24.7	21.3	18.3	#	20.9	25.6	4.9	17.8	0.9	1.7	#	44.1	0.0	2.2	0.0	#			24.1	10.8	19.4	1.337	0.329	0.328	0.0168	16.8	14.3	#
112		Maximum		26.2	17.8	25.8	21.5	20.4	#	32.0	40.8	5.5	30.1	5.6	52.9	#	44.8	0.4	3.6	0.0	#			39.4	11.0	31.1	2.142	0.544	0.534	0.0212	21.2	18.0	#
113		Median		25.1	17.2	24.8	21.3	18.4	#	22.0	26.2	5.0	18.9	-0.6	0.7	#	44.0	0.0	2.3	0.0	#			24.8	10.8	20.5	1.412	0.339	0.341	0.0169	16.9	14.3	#
114		Minimum		22.3	16.8	23.2	20.9	16.3	#	3.1	12.2	3.9	-1.5	-1.2	0.4	#	43.4	0.0	0.0	0.0	#			10.7	10.6	0.8	0.056	-0.002	-0.002	-0.0027	-2.7	-2.3	#
115		2 x Std Dev		1.871	0.768	1.474	0.212	1.982	#	16.797	23.449	1.107	18.434	4.959	13.468	#	0.867	0.102	1.958	0.002	#			23.450	0.213	####	1.214	0.292	0.282	0.0066	6.648	5.657	#
116	Number of Points Used*			59	59	59	59	59	0	59	59	59	59	59	59	0	59	59	59	59	0			59	59	59	59	59	59	59	59	59	0
117		* Backpulse points in box are not included																															
118																																	
119																											1-hour avg. =		0.34				

RUN # 1.00A, B, C; PRE-TEST BASELINE WITH 0.1 M NAOH



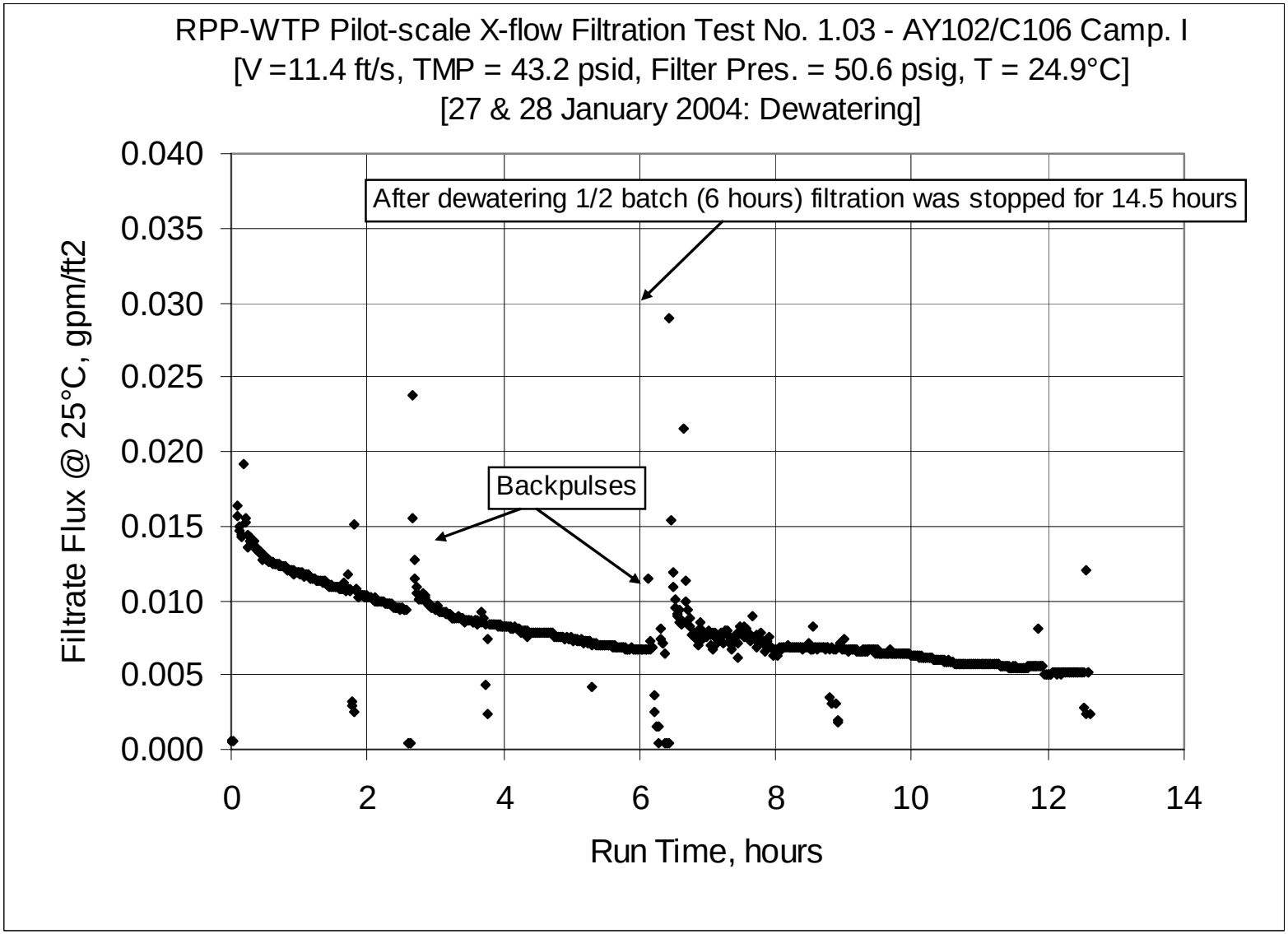
RUN # 1.00A, B, C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	1/26/2004	7:40:18 AM		19.871	15.611	12.488	20.323	12.825		0.056	-1.097	-0.004	0.024	-0.103	0.192		-0.084	0.003	14.643	0.006				Filter Surface	6.707	FT2							
8	1/26/2004	7:41:31 AM		19.871	15.611	12.488	20.323	12.825		0.056	-1.097	-0.004	0.024	-0.103	0.192		-0.084	0.003	14.643	0.006				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	1/26/2004	7:41:32 AM		19.867	15.606	12.488	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.106	0.192		-0.086	0.003	14.643	0.004													
10	1/26/2004	7:41:33 AM		19.872	15.611	12.488	20.313	12.816		0.058	-1.101	-0.004	0.026	-0.144	0.192		-0.084	0.003	14.643	0.007				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/26/2004	7:41:34 AM		19.867	15.611	12.483	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.1	0.195		-0.084	0.003	14.643	0.006													
12	1/26/2004	7:41:35 AM		19.862	15.606	12.483	20.308	12.81		0.058	-1.099	-0.004	0.023	-0.097	0.195		-0.084	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/26/2004	7:41:36 AM		19.867	15.611	12.488	20.313	12.81		0.058	-1.101	-0.004	0.024	-0.097	0.195		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >	<< PERMIABILITY >>				
14	1/26/2004	7:41:37 AM		19.862	15.606	12.483	20.318	12.81		0.056	-1.101	-0.004	0.026	-0.1	0.195		-0.084	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	gpm	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	/ft2	ft2	ft2/psi	ft2/psi		day/bar	
17	1/26/2004	2:29:43 PM		25.309	18.282	24.59	20.967	18.206		2.827	12.523	3.747	-0.267	5.219	52.957		44.081	0.003	-0.01	0.004		0	0	11.1	10.8	1.3	0.088	-0.001	-0.002	-0.001	-1.178	-1.00	
18	1/26/2004	2:30:43 PM		23.624	18.264	24.448	20.884	18.173		3.593	12.602	3.752	0.474	4.947	2.064		44.202	0.088	14.643	0.004		1.00	0.01667	11.1	10.8	2.0	0.140	2.183	2.217	1.090	1090.434	927.98	
19	1/26/2004	2:31:43 PM		24.85	18.283	24.376	20.822	18.207		9.903	12.191	3.726	7.552	-1.214	0.459		45.161	0.003	1.694	0.004		2.00	0.03333	10.7	11.1	8.7	0.602	0.253	0.257	0.029	29.452	25.06	
20	1/26/2004	2:32:43 PM		24.707	18.255	24.323	20.749	18.482		10.129	12.343	3.788	7.694	-1.214	0.462		45.143	0.003	1.662	0.004		3.00	0.05	10.9	11.1	8.9	0.614	0.248	0.253	0.028	28.342	24.12	
21	1/26/2004	2:33:43 PM		24.62	18.269	24.272	20.707	18.152		10.15	12.258	3.81	7.657	-1.216	0.459		45.195	0.003	1.629	0.004		4.00	0.06667	10.8	11.1	8.9	0.614	0.243	0.248	0.028	27.844	23.70	
22	1/26/2004	2:34:43 PM		24.569	18.277	24.305	20.705	18.499		10.192	12.21	3.741	7.759	-1.214	0.459		45.132	0.003	1.607	0.004		5.00	0.08333	10.7	11.1	9.0	0.619	0.240	0.244	0.027	27.222	23.17	
23	1/26/2004	2:35:43 PM		24.557	18.255	24.359	20.598	18.346		10.347	12.291	3.647	8	-1.216	0.454		44.995	0.003	1.576	0.004		6.00	0.1	10.8	11.0	9.2	0.632	0.235	0.239	0.026	26.081	22.20	
24	1/26/2004	2:36:43 PM		24.575	18.233	24.347	20.535	18.405		10.436	12.266	3.797	7.92	-1.216	0.454		45.201	0.003	1.554	0.004		7.00	0.11667	10.8	11.1	9.2	0.633	0.232	0.236	0.026	25.713	21.88	
25	1/26/2004	2:37:43 PM		24.599	18.227	24.411	20.504	18.186		10.494	12.279	3.811	7.961	-1.219	0.451		45.149	0.003	1.528	0.004		8.00	0.13333	10.8	11.1	9.2	0.636	0.228	0.232	0.025	25.102	21.36	
26	1/26/2004	2:38:43 PM		24.642	18.22	24.449	20.482	17.912		10.584	12.318	3.854	7.977	-1.216	0.454		45.116	0.003	1.51	0.005		9.00	0.15	10.8	11.1	9.3	0.640	0.225	0.229	0.025	24.638	20.97	
27	1/26/2004	2:39:43 PM		24.672	18.22	24.509	20.492	17.689		10.621	12.281	3.821	8.03	-1.214	0.451		45.022	0.003	1.483	0.005		10.00	0.16667	10.8	11.0	9.3	0.643	0.221	0.224	0.024	24.040	20.46	
28	1/26/2004	2:40:43 PM		24.721	18.229	24.543	20.546	17.632		10.741	12.353	3.931	8.045	-1.216	0.448		45.191	0.003	1.474	0.004		11.00	0.18333	10.9	11.1	9.4	0.648	0.220	0.223	0.024	23.700	20.17	
29	1/26/2004	2:41:43 PM		24.72	18.202	24.551	20.645	17.474		10.974	12.55	3.982	8.19	-1.214	0.442		44.997	0.003	1.449	0.013		12.00	0.2	11.1	11.0	9.6	0.661	0.216	0.219	0.023	22.833	19.43	
30	1/26/2004	2:42:43 PM		24.748	18.18	24.58	20.745	17.194		10.714	12.204	3.825	8.055	-1.214	0.439		45.13	0.003	1.431	0.004		13.00	0.21667	10.7	11.1	9.4	0.647	0.213	0.216	0.023	23.005	19.58	
31	1/26/2004	2:43:43 PM		24.768	18.17	24.6	20.83	17.533		10.785	12.22	3.766	8.18	-1.216	0.433		44.828	0.003	1.414	0.004		14.00	0.23333	10.7	11.0	9.5	0.654	0.211	0.213	0.022	22.484	19.13	
32	1/26/2004	2:44:43 PM		24.797	18.153	24.623	20.915	17.476		10.998	12.393	3.866	8.318	-1.216	0.436		45.068	0.003	1.394	0.004		15.00	0.25	10.9	11.0	9.7	0.666	0.208	0.210	0.022	21.749	18.51	
33	1/26/2004	2:45:43 PM		24.81	18.126	24.637	21.014	17.606		10.963	12.299	3.889	8.256	-1.219	0.43		45.022	0.003	1.381	0.008		16.00	0.26667	10.8	11.0	9.6	0.663	0.206	0.208	0.022	21.647	18.42	
34	1/26/2004	2:46:43 PM		24.833	18.119	24.654	21.047	18.467		11.042	12.357	3.899	8.236	-1.214	0.433		44.965	0.003	1.363	0.006		17.00	0.28333	10.9	11.0	9.6	0.665	0.203	0.205	0.021	21.289	18.12	
35	1/26/2004	2:47:43 PM		24.83	18.096	24.667	21.034	18.581		11.017	12.252	3.816	8.318	-1.214	0.433		44.972	0.003	1.348	0.006		18.00	0.3	10.8	11.0	9.7	0.667	0.201	0.203	0.021	20.985	17.86	
36	1/26/2004	2:48:43 PM		24.864	18.084	24.67	21.012	18.297		11.177	12.353	3.86	8.414	-1.216	0.425		44.986	0.003	1.333	0.004		19.00	0.31667	10.9	11.0	9.8	0.675	0.199	0.201	0.020	20.478	17.43	
37	1/26/2004	2:49:43 PM		24.861	18.061	24.703	21.045	18.607		11.195	12.316	3.883	8.392	-1.214	0.428		44.945	0.003	1.314	0.004		20.00	0.33333	10.8	11.0	9.8	0.675	0.196	0.198	0.020	20.172	17.17	
38	1/26/2004	2:50:43 PM		24.905	18.065	24.706	21.099	18.883		11.193	12.293	3.873	8.359	-1.214	0.425		44.88	0.003	1.3	0.005		21.00	0.35	10.8	11.0	9.8	0.674	0.194	0.195	0.020	19.991	17.01	
39	1/26/2004	2:56:24 PM		25.226	18.051	25.278	21.287	18.163		2.792	32.9	3.624	-0.608	25.754	72.997		41.551	0.003	-0.013	0.004		26.68	0.44472	31.4	10.2	1.1	0.075	-0.002	-0.002	-0.002	-1.761	-1.50	
40	1/26/2004	2:57:24 PM		24.301	18.042	25.299	21.278	18.279		9.634	32.481	3.58	6.635	18.206	0.428		43.165	1.204	-0.014	0.004		27.68	0.46139	31.0	10.6	8.1	0.561	-0.002	-0.002	0.000	-0.254	-0.22	
41	1/26/2004	2:58:24 PM		25.597	18.037	25.309	21.323	18.602		18.38	31.695	3.368	16.894	7.674	1.659		44.792	0.003	3.966	0.004		28.68	0.47806	30.2	11.0	17.6	1.216	0.591	0.586	0.033	33.236	28.28	
42	1/26/2004	2:59:24 PM		25.643	18.027	25.31	21.329	18.942		19.796	32.147	3.678	17.904	6.771	1.642		44.69	0.003	3.825	0.004		29.68	0.49472	30.7	11.0	18.9	1.300	0.570	0.565	0.030	29.991	25.52	
43	1/26/2004	3:00:24 PM		25.683	18.023	25.341	21.355	18.937		20.304	31.934	3.422	18.782	6.189	1.627		44.69	0.003	3.716	0.004		30.68	0.51139	30.5	11.0	19.5	1.347	0.554	0.549	0.028	28.078	23.90	
44	1/26/2004	3:01:24 PM		25.72	18.055	25.367	21.371	18.449		20.663	31.801	3.487	19.038	5.668	1.613		44.5	0.003	3.648	0.004		31.68	0.52806	30.3	10.9	19.9	1.369	0.544	0.538	0.027	27.118	23.08	
45	1/26/2004	3:02:24 PM		25.75	18.05	25.403	21.412	18.268		21.018	32.033	3.359	19.383	5.552	1.59		44.204	0.003	3.603	0.004		32.68	0.54472	30.6	10.8	20.2	1.393	0.537	0.531	0.026	26.293	22.38	
46	1/26/2004	3:03:24 PM		25.77	18.05	25.427	21.437	18.156		21.076	31.818	3.256	19.628	5.341	1.561		44.154	0.003	3.565	0.004		33.68	0.56139	30.3	10.8	20.4	1.403	0.532	0.525	0.026	25.804	21.96	
47	1/26/2004	3:04:24 PM		25.784	18.049	25.462	21.477	17.959		21.671	32.296	3.526	20.022	5.147	1.561		44.21	0.003	3.557	0.004		34.68	0.57806	30.8	10.8	20.8	1.437	0.530	0.523	0.025	25.111	21.37	
48	1/26/2004	3:05:24 PM		25.804	18.054	25.482	21.502	17.741		21.584	32.143	3.421	19.886	5.127	1.549		44.264	0.003	3.53	0.005		35.68	0.59472	30.7	10.8	20.7	1.430	0.526	0.519	0.025	25.040	21.31	
49	1/26/2004	3:06:24 PM		25.835	18.06	25.493	21.452	17.96		21.718	32.205	3.522	19.89	5.022	1.541		44.191	0.003	3.519	0.005		36.68	0.61139	30.7	10.8	20.8	1.434	0.525	0.517	0.025	24.872	21.17	
50	1/26/2004	3:07:24 PM		25.85	18.065	25.502	21.351	18.07		21.776	32.147	3.385	20.167	4.959	1.535		44.173	0.003	3.505	0.004		37.68	0.62806	30.7	10.8	21.0	1.446	0.523	0.515	0.025	24.569	20.91	
51	1/26/2004	3:08:24 PM		25.87	18.06	25.507	21.331	18.303		21.808	32.091	3.486	20.198	4.881	1.532		44.118	0.003	3.5	0.004		38.68	0.64472	30.6	10.8	21.0	1.448	0.522	0.514	0.024	24.493	20.84	
52	1/26/2004	3:09:24 PM		25.884	18.054	25.517	21.24	18.181		21.916	32.133	3.538	20.167	4.837	1.52		44.058	0.003	3.484	0.004		39.68	0.66139	30.7	10.8	21.0	1.451	0.519	0.512	0.024	24.330	20.71	
53	1/26/2004	3:10:24 PM		25.909	18.059	25.526	21.149	18.135		22.007	32.189	3.46	20.362	4.843	1.52		44.089	0.003	3.476	0.004		40.68	0.67806	30.7	10.8	21.2	1.461	0.518	0.511	0.024	24.104	20.51	
54	1/26/2004	3:11:24 PM		25.907	18.043	25.515	21.011	17.987		21.953	32.062	3.521	20.319	4.713	1.515		44.202	0.003	3.469	0.005		41.68	0.69472	30.6	10.8	21.1	1.457	0.517	0.510	0.024	24.118	20.53	
55	1/26/2004	3:12:24 PM		25.938	18.068	25.575	20.981	17.892		21.891	31.901	3.414	20.317	4.672	1.509		44.096	0.003	3.455	0.005		42.68	0.71139	30.4	10.8	21.1	1.455	0.515	0.507	0.024	24.017	20.44	
56	1/26/2004	3:13:24 PM		25.932	18.057	25.59	20.905	17.921		21.895	31.994	3.358	20.344	4.724	1.512		44.029	0.003	3.456	0.004		43.68	0.72806	30.5	10.8	21.1	1.456	0.515	0.507	0.024	23.996	20.42	
57	1/26/2004	3:14:24 PM		25.946	18.052	25.599	20.834	18.077		22.388	32.533	3.544	20.629	4.791	1.517		43.645	0.003	3.465	0.005		44.68	0.74472	31.1	10.7	21.5	1.483	0.517	0.508	0.024	23.618	20.10	
58	1/26/2004	3:15:24 PM		25.957	18.078	25.61	20.819	18.047		22.003	32.062	3.209	20.58	4.724	1.512		43.543	0.003	3.468	0.005		45.68	0.76139	30.6	10.7	21.3	1.468	0.517	0.508	0.024	23.872	20.32	
59	1/26/2004	3:16:24 PM		25.956	18.062	25.594	20.743	17.976		22.233	32.267	3.428	20.58	4.669	1.512		43.639	0.003	3.463	0.006		46.68	0.77806	30.8	10.7	21.4	1.476	0.516	0.508	0.024	23.720	20.19	
60	1/26/2004	3:17:24 PM		25.961	18.062	25.584	20.713	18.128		22.274	32.292	3.324	20.789	4.669	1.512		43.643	0.003	3.457	0.006		47.68	0.79472	30.8	10.7	21.5	1.485	0.515	0.507	0.024	23.548	20.04	
61	1/26/2004	3:24:13 PM		26.721	18.129	27.089	20.88	17.694		2.576	62.721	3.13	-0.511	56.126	101.7		38.412	0.003	-0.011	0.004		54.50	0.90833	61.2	9.4	1.0	0.071	-0.002	-0.002	-0.001	-1.498	-1.28	
62	1/26/2004	3:25:13 PM		26.369	18.121	27.032	20.968	17.707		10.654	61.747	2.925	8.273	46.262	0.615		40.489	1.204	-0.014	0.004		55.50	0.925	60.3	9.9	9.5	0.652	-0.002	-0.002	0.000	-0.208	-0.18	
63	1/26/2004	3:26:13 PM		27.639	18.139	27.039	21.067	17.568		25.563	60.425	3.111	26.316	27.514	-0.018		44.05	0.003	6.568	0.004		56.50	0.94167	59.0	10.8	25.9	1.788	0.979	0.925	0.036	35.659	30.35	
64	1/26/2004	3:27:13 PM		27.676	18.157	27.062	21.16	17.54		27.048	60.416	2.844	28.033	26	-0.101		43.772	0.003	6.387	0.004		57.50	0.95833	58.9	10.7	27.5	1.899	0.952	0.899	0.033	32.639	27.78	
65	1/26/2004	3:28:13 PM		27.704	18.16	27.08	21.188	17.583		27.747	60.087	2.735	28.688	25.103	-0.145		43.559	0.003	6.312	0.004		58.50	0.975	58.6	10.7	28.2	1.945	0.941	0.888	0.031	31.466	26.78	
66	1/26/2004	3:29:13 PM		27.681	18.172	26.957	21.256	17.788		28.693	60.817	3.125	29.421	24.833	-0.171		43.639	0.003	6.273	0.004		59.50	0.99167	59.3	10.7	29.1	2.003	0.935	0.885	0.030	30.472	25.93	
67	1/26/2004	3:30:13 PM		27.609	18.195	26.885	21.329	17.71		28.822	60.676	3.027	29.525	24.538	-0.197		43.343	0.003	6.242	0.004		60.50	1.00833	59.2	10.6	29.2	2.011	0.931	0.883	0.030	30.261	25.75	
68	1/26/2004	3:31:13 PM		27.552	18.207	26.822	21.306	17.813		29.025	60.665	3.099	29.566	24.578	-0.197		43.382	0.003	6.236	0.004		61.50	1.025	59.2	10.6	29.3	2.020	0.930	0.884	0.030	30.159	25.67	
69	1/26/2004	3:32:13 PM		27.474	18.235	26.77	21.334	17.638		29.118	60.68	3.174	29.636	24.466	-0.203		43.219	0.003	6.229	0.004		62.50	1.04167	59.2	10.6	29.4	2.025	0.929	0.884	0.030	30.085	25.60	
70	1/26/2004	3:33:13 PM		27.411	18.231	26.711	21.32	17.554		29.431	61.169	3.017	30.145	24.376	-0.208		43.169	0.003	6.219	0.005		63.50	1.05833	59.7	10.6	29.8	2.054	0.927	0.884	0.030	29.671	25.25	

RUN # 1.00A, B, C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/26/2004	3:34:13 PM		27.348	18.253	26.658	21.297	17.495		29.346	60.926	3.03	30.038	24.521	-0.208		43.217	0.003	6.229	0.005		64.50	1.075	59.5	10.6	29.7	2.047	0.929	0.887	0.030	29.859	25.41	
72	1/26/2004	3:35:13 PM		27.3	18.265	26.605	21.258	17.871		29.232	60.914	3.164	29.766	24.44	-0.211		43.207	0.003	6.221	0.006		65.50	1.09167	59.4	10.6	29.5	2.034	0.927	0.887	0.030	30.060	25.58	
73	1/26/2004	3:36:13 PM		27.246	18.257	26.531	21.174	17.923		29.127	60.889	2.92	29.579	24.399	-0.015		43.113	0.003	6.213	0.004		66.50	1.10833	59.4	10.6	29.4	2.024	0.926	0.887	0.030	30.233	25.73	
74	1/26/2004	3:37:13 PM		27.207	18.283	26.482	21.099	18.151		29.417	61.038	2.92	30.25	24.202	-0.021		43.096	0.003	6.219	0.005		67.50	1.125	59.6	10.6	29.8	2.057	0.927	0.889	0.030	29.815	25.37	
75	1/26/2004	3:38:13 PM		27.179	18.299	26.459	21.04	18.072		29.313	60.79	3.27	29.41	24.338	-0.015		43.123	0.003	6.206	0.006		68.50	1.14167	59.3	10.6	29.4	2.024	0.925	0.888	0.030	30.251	25.74	
76	1/26/2004	3:39:13 PM		27.14	18.31	26.44	20.955	17.876		29.438	60.951	3.108	30.012	24.283	-0.012		43.048	0.003	6.209	0.005		69.50	1.15833	59.5	10.5	29.7	2.049	0.926	0.889	0.030	29.911	25.45	
77	1/26/2004	3:40:13 PM		27.106	18.332	26.411	20.906	17.983		29.178	61.123	3.026	29.686	24.338	-0.009		43.149	0.003	6.206	0.006		70.50	1.175	59.7	10.6	29.4	2.029	0.925	0.889	0.030	30.219	25.72	
78	1/26/2004	3:41:13 PM		27.072	18.343	26.377	20.831	17.539		29.38	61.049	3.142	29.866	24.257	-0.012		43.057	0.003	6.212	0.004		71.50	1.19167	59.6	10.6	29.6	2.042	0.926	0.891	0.030	30.081	25.60	
79	1/26/2004	3:42:13 PM		27.049	18.355	26.333	20.828	17.798		28.917	60.481	2.861	29.726	24.332	-0.006		42.996	0.003	6.211	0.004		72.50	1.20833	59.0	10.5	29.3	2.022	0.926	0.892	0.030	30.423	25.89	
80	1/26/2004	3:43:13 PM		27.014	18.36	26.299	20.727	17.779		29.023	60.601	3.063	29.255	24.393	-0.003		42.907	0.003	6.216	0.004		73.50	1.225	59.1	10.5	29.1	2.009	0.927	0.894	0.031	30.667	26.10	
81	1/26/2004	3:44:13 PM		26.985	18.366	26.279	20.728	17.906		29.046	60.719	2.78	30.001	24.292	0.003		42.915	0.003	6.218	0.005		74.50	1.24167	59.2	10.5	29.5	2.036	0.927	0.894	0.030	30.295	25.78	
82																																	
83		Averages		24.7	18.2	24.5	20.8	18.1	#	10.7	12.3	3.8	8.1	-1.2	0.4	#	45.1	0.0	1.5	0.0	#			10.8	11.0	9.4	0.646	0.219	0.223	0.024	23.8	20.3	#
84		Maximum		24.9	18.3	24.7	21.1	18.9	#	11.2	12.6	4.0	8.4	-1.2	0.5	#	45.2	0.0	1.7	0.0	#			11.1	11.1	9.8	0.675	0.253	0.257	0.029	29.5	25.1	#
85		Median		24.7	18.2	24.5	20.7	18.2	#	10.7	12.3	3.8	8.1	-1.2	0.4	#	45.0	0.0	1.5	0.0	#			10.8	11.0	9.4	0.647	0.218	0.221	0.023	23.4	19.9	#
86		Minimum		24.6	18.1	24.3	20.5	17.2	#	9.9	12.2	3.6	7.6	-1.2	0.4	#	44.8	0.0	1.3	0.0	#			10.7	11.0	8.7	0.602	0.194	0.195	0.020	20.0	17.0	#
87		2 x Std Dev		0.216	0.142	0.285	0.416	0.932	#	0.768	0.158	0.148	0.499	0.003	0.025	#	0.213	0.000	0.233	0.004	#			0.158	0.052	0.630	0.043	0.035	0.037	0.006	5.604	4.769	#
88		Number of Points Used*		20	20	20	20	20	0	20	20	20	20	20	20	0	20	20	20	20	0			20	20	20	20	20	20	20	20	20	0
89		* Backpulse points in box are not included																															
90																																	
91																											20-min. avg. =		0.22				
92																																	
93		Averages		25.8	18.1	25.5	21.2	18.2	#	21.4	32.1	3.4	19.8	5.2	1.6	#	44.1	0.0	3.6	0.0	#			30.6	10.8	20.6	1.421	0.530	0.523	0.0255	25.5	21.7	#
94		Maximum		26.0	18.1	25.6	21.5	18.9	#	22.4	32.5	3.7	20.8	7.7	1.7	#	44.8	0.0	4.0	0.0	#			31.1	11.0	21.5	1.485	0.591	0.586	0.0332	33.2	28.3	#
95		Median		25.9	18.1	25.5	21.3	18.1	#	21.8	32.1	3.4	20.2	4.9	1.5	#	44.2	0.0	3.5	0.0	#			30.6	10.8	21.0	1.447	0.522	0.515	0.0245	24.5	20.9	#
96		Minimum		25.6	18.0	25.3	20.7	17.7	#	18.4	31.7	3.2	16.9	4.7	1.5	#	43.5	0.0	3.5	0.0	#			30.2	10.7	17.6	1.216	0.515	0.507	0.0235	23.5	20.0	#
97		2 x Std Dev		0.218	0.026	0.190	0.520	0.631	#	1.920	0.383	0.212	1.917	1.552	0.094	#	0.680	0.000	0.268	0.001	#			0.383	0.167	1.915	0.132	0.040	0.042	0.0048	4.806	4.090	#
98		Number of Points Used*		20	20	20	20	20	0	20	20	20	20	20	20	0	20	20	20	20	0			20	20	20	20	20	20	20	20	20	0
99		* Backpulse points in box are not included																															
100																																	
101																											18-min. avg. =		0.52				
102																																	
103		Averages		27.3	18.3	26.6	21.1	17.8	#	28.8	60.8	3.0	29.4	24.7	-0.1	#	43.3	0.0	6.3	0.0	#			59.3	10.6	29.1	2.006	0.932	0.890	0.0306	30.6	26.1	#
104		Maximum		27.7	18.4	27.1	21.3	18.2	#	29.4	61.2	3.3	30.3	27.5	0.0	#	44.1	0.0	6.6	0.0	#			59.7	10.8	29.8	2.057	0.979	0.925	0.0357	35.7	30.3	#
105		Median		27.3	18.3	26.6	21.2	17.8	#	29.1	60.8	3.0	29.6	24.4	0.0	#	43.2	0.0	6.2	0.0	#			59.3	10.6	29.4	2.024	0.927	0.888	0.0302	30.2	25.7	#
106		Minimum		27.0	18.1	26.3	20.7	17.5	#	25.6	60.1	2.7	26.3	24.2	-0.2	#	42.9	0.0	6.2	0.0	#			58.6	10.5	25.9	1.788	0.925	0.883	0.0297	29.7	25.3	#
107		2 x Std Dev		0.487	0.144	0.527	0.408	0.377	#	1.917	0.539	0.280	1.777	1.553	0.178	#	0.587	0.000	0.172	0.001	#			0.539	0.144	1.834	0.126	0.026	0.018	0.0027	2.701	2.298	#
108		Number of Points Used*		19	19	19	19	19	0	19	19	19	19	19	19	0	19	19	19	19	0			19	19	19	19	19	19	19	19	19	0
109		* Backpulse points in box are not included																															
110																																	
111																											19-min. avg. =		0.89				
112																																	
113		Averages		25.9	18.2	25.5	21.0	18.0	#	20.2	34.6	3.4	18.9	9.3	0.6	#	44.2	0.0	3.7	0.0	#			33.1	10.8	19.5	1.3	0.554	0.540	0.0266	26.6	22.6	#
114		Maximum		27.7	18.4	27.1	21.5	18.9	#	29.4	61.2	4.0	30.3	27.5	1.7	#	45.2	0.0	6.6	0.0	#			59.7	11.1	29.8	2.1	0.979	0.925	0.0357	35.7	30.3	#
115		Median		25.9	18.2	25.5	21.0	18.0	#	21.8	32.1	3.4	20.2	4.9	0.4	#	44.2	0.0	3.5	0.0	#			30.6	10.8	21.0	1.4	0.522	0.514	0.0258	25.8	22.0	#
116		Minimum		24.6	18.0	24.3	20.5	17.2	#	9.9	12.2	2.7	7.6	-1.2	-0.2	#	42.9	0.0	1.3	0.0	#			10.7	10.5	8.7	0.6	0.194	0.195	0.0200	20.0	17.0	#
117		2 x Std Dev		2.148	0.206	1.767	0.574	0.774	#	14.911	39.552	0.692	17.466	21.888	1.372	#	1.552	0.000	3.900	0.003	#			39.553	0.380	####	1.116	0.581	0.544	0.0073	7.340	6.247	#
118		Number of Points Used*		59	59	59	59	59	0	59	59	59	59	59	59	0	59	59	59	59	0			59	59	59	59	59	59	59	59	59	0
119		* Backpulse points in box are not included																															
120																																	
121																											1-hour avg. =		0.54				
122																																	
123																												Calc	0.0313				

RUN # 1.03A; DEWATER SLURRY



RUN # 1.03A; DEWATER FIRST HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/27/2004	10:16:13 AM		21.531	16.506	13.839	22.26	14.302		0.052	-0.114	-0.001	0.012	-0.171	0.069		-0.02	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	1/27/2004	10:16:50 AM		21.531	16.506	13.839	22.26	14.302		0.052	-0.114	-0.001	0.012	-0.171	0.069		-0.02	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/27/2004	10:16:51 AM		21.531	16.506	13.824	22.22	14.317		0.052	-0.112	-0.001	0.008	-0.177	0.06		-0.091	0.003	14.643	0.004													
10	1/27/2004	10:16:52 AM		21.526	16.501	13.813	22.215	14.312		0.052	-0.112	-0.001	0.006	-0.177	0.06		-0.085	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/27/2004	10:16:53 AM		21.526	16.495	13.813	22.21	14.302		0.054	-0.114	-0.002	0.008	-0.189	0.06		-0.089	0.003	14.643	0.004													
12	1/27/2004	10:16:54 AM		21.521	16.49	13.803	22.195	14.292		0.054	-0.114	-0.002	0.01	-0.18	0.06		-0.085	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/27/2004	10:16:55 AM		21.511	16.495	13.798	22.205	14.292		0.052	-0.114	-0.001	0.01	-0.177	0.066		-0.087	0.004	14.643	0.004				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	1/27/2004	10:16:56 AM		21.516	16.48	13.798	22.195	14.281		0.054	-0.114	-0.001	0.008	-0.177	0.063		-0.083	0.003	14.643	0.004									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/27/2004	1:25:00 PM		24.608	18.297	21.375	22.211	19.159		9.628	48.751	10.786	-0.236	34.08	90.27		44.894	0.003	14.643	0.004		0	0	47.3	11.0	4.7	0.324	0.000	0.000	0.000	0.106	0.09	
18	1/27/2004	1:26:00 PM		24.485	18.324	21.242	22.259	19.081		6.94	48.349	8.232	-0.458	36.413	48.607		54.056	0.003	14.643	0.007		1.00	0.01667	46.9	13.2	3.2	0.223	0.000	0.000	0.000	0.154	0.13	
19	1/27/2004	1:27:00 PM		23.988	18.333	21.059	22.262	18.953		42.306	48.246	9.253	33.607	0.885	0.335		47.107	0.257	14.643	0.004		2.00	0.03333	46.8	11.5	38.0	2.617	0.038	0.043	0.001	1.130	0.96	
20	1/27/2004	1:28:00 PM		23.759	18.335	20.89	22.335	18.986		42.937	48.524	10.122	33.324	0.393	0.399		42.869	0.133	14.643	0.004		3.00	0.05	47.0	10.5	38.1	2.629	2.183	2.455	0.064	64.382	54.79	
21	1/27/2004	1:29:00 PM		23.471	18.347	20.731	22.337	19.089		42.98	48.407	10.527	33.092	0.367	0.419		47.641	0.108	14.643	0.004		4.00	0.06667	46.9	11.7	38.0	2.622	2.183	2.466	0.065	64.840	55.18	
22	1/27/2004	1:30:00 PM		23.443	18.355	20.592	22.355	19.202		43.113	48.608	10.667	32.988	0.364	0.451		46.688	0.097	14.643	0.004		5.00	0.08333	47.1	11.4	38.1	2.623	0.014	0.016	0.000	0.431	0.37	
23	1/27/2004	1:31:00 PM		23.391	18.383	20.611	22.368	18.832		42.98	48.501	10.559	32.951	0.367	0.48		46.809	0.093	14.643	0.004		6.00	0.1	47.0	11.5	38.0	2.618	0.014	0.016	0.000	0.414	0.35	
24	1/27/2004	1:32:00 PM		23.283	18.395	20.643	22.319	19.369		43.016	48.552	10.76	32.842	0.373	0.511		46.302	0.089	14.643	0.004		7.00	0.11667	47.1	11.3	37.9	2.615	0.013	0.015	0.000	0.396	0.34	
25	1/27/2004	1:33:00 PM		23.144	18.408	20.665	22.256	19.25		43.148	48.737	10.786	32.899	0.367	0.537		43.793	0.087	14.643	0.004		8.00	0.13333	47.3	10.7	38.0	2.622	0.013	0.015	0.000	0.386	0.33	
26	1/27/2004	1:34:00 PM		23.011	18.415	20.753	22.314	19.545		43.073	48.679	10.651	32.912	0.44	0.563		50.036	0.086	14.643	0.004		9.00	0.15	47.2	12.3	38.0	2.619	0.013	0.014	0.000	0.381	0.32	
27	1/27/2004	1:35:00 PM		22.873	18.422	20.846	22.291	19.572		42.937	48.544	10.635	32.827	0.48	0.589		47.205	0.085	14.643	0.004		10.00	0.16667	47.1	11.6	37.9	2.612	0.013	0.014	0.000	0.377	0.32	
28	1/27/2004	1:36:00 PM		22.664	18.429	20.928	22.328	19.009		48.327	48.544	10.648	38.477	-1.219	-6.453		49.006	0.114	14.643	0.003		11.00	0.18333	47.1	12.0	43.4	2.992	0.017	0.019	0.000	0.440	0.37	
29	1/27/2004	1:37:00 PM		22.641	18.446	21.036	22.41	19.555		48.739	48.737	10.874	38.66	-1.216	-7.086		47.302	0.093	14.643	0.004		12.00	0.2	47.3	11.6	43.7	3.013	0.014	0.016	0.000	0.355	0.30	
30	1/27/2004	1:38:00 PM		22.602	18.463	21.144	22.412	19.668		48.754	48.687	10.846	38.707	-1.216	-7.375		46.409	0.092	14.643	0.004		13.00	0.21667	47.2	11.4	43.7	3.015	0.014	0.015	0.000	0.350	0.30	
31	1/27/2004	1:39:00 PM		22.533	18.459	21.215	22.413	19.83		48.825	48.768	10.914	38.699	-1.216	-7.291		45.476	0.082	14.643	0.004		14.00	0.23333	47.3	11.1	43.8	3.017	0.012	0.014	0.000	0.311	0.26	
32	1/27/2004	1:40:00 PM		22.486	18.487	21.309	22.461	19.334		48.748	48.677	10.791	38.744	-1.216	-7.412		46.227	0.087	14.643	0.004		15.00	0.25	47.2	11.3	43.7	3.016	0.013	0.014	0.000	0.329	0.28	
33	1/27/2004	1:41:00 PM		22.442	18.494	21.376	22.493	19.149		48.42	48.347	10.605	38.666	-1.216	-7.415		47.629	0.086	14.643	0.004		16.00	0.26667	46.9	11.7	43.5	3.002	0.013	0.014	0.000	0.327	0.28	
34	1/27/2004	1:42:00 PM		22.403	18.511	21.448	22.429	19.605		48.71	48.656	10.765	38.758	-1.216	-7.421		46.054	0.085	14.643	0.004		17.00	0.28333	47.2	11.3	43.7	3.015	0.013	0.014	0.000	0.321	0.27	
35	1/27/2004	1:43:00 PM		22.375	18.528	21.53	22.451	19.43		48.613	48.536	10.763	38.668	-1.216	-7.418		46.231	0.084	14.643	0.004		18.00	0.3	47.1	11.3	43.6	3.009	0.013	0.014	0.000	0.317	0.27	
36	1/27/2004	1:44:00 PM		22.357	18.545	21.613	22.428	19.598		48.98	48.892	10.949	38.789	-1.214	-7.418		47.798	0.084	14.643	0.004		19.00	0.31667	47.4	11.7	43.9	3.026	0.013	0.014	0.000	0.314	0.27	
37	1/27/2004	1:45:00 PM		22.344	18.547	21.665	22.495	19.399		48.694	48.687	10.754	38.695	-1.219	-7.331		49.027	0.085	14.643	0.004		20.00	0.33333	47.2	12.0	43.7	3.013	0.013	0.014	0.000	0.319	0.27	
38	1/27/2004	1:46:00 PM		22.33	18.564	21.727	22.532	19.673		48.781	48.706	10.829	38.726	-1.214	-7.323		46.719	0.083	14.643	0.004		21.00	0.35	47.2	11.4	43.8	3.017	0.012	0.014	0.000	0.310	0.26	
39	1/27/2004	1:47:00 PM		22.333	18.581	21.749	22.589	20.259		48.771	48.72	10.763	38.791	-1.214	-7.32		42.005	0.083	14.643	0.004		22.00	0.36667	47.2	10.3	43.8	3.019	0.012	0.014	0.000	0.310	0.26	
40	1/27/2004	1:48:00 PM		22.329	18.582	21.595	22.591	20.673		48.621	48.55	10.686	38.756	-1.214	-7.34		45.704	0.081	14.643	0.004		23.00	0.38333	47.1	11.2	43.7	3.012	0.012	0.013	0.000	0.305	0.26	
41	1/27/2004	1:49:00 PM		22.331	18.605	21.652	22.638	20.464		48.851	48.751	10.869	38.822	-1.216	-7.343		45.305	0.081	14.643	0.004		24.00	0.4	47.3	11.1	43.8	3.022	0.012	0.013	0.000	0.303	0.26	
42	1/27/2004	1:50:00 PM		22.333	18.616	21.729	22.605	20.4		48.833	48.772	10.789	38.787	-1.216	-7.334		44.625	0.081	14.643	0.004		25.00	0.41667	47.3	10.9	43.8	3.021	0.012	0.013	0.000	0.303	0.26	
43	1/27/2004	1:51:00 PM		22.324	18.623	21.776	22.586	19.924		48.717	48.65	10.718	38.793	-1.219	-7.326		49.026	0.081	14.643	0.004		26.00	0.43333	47.2	12.0	43.8	3.017	0.012	0.013	0.000	0.303	0.26	
44	1/27/2004	1:52:00 PM		22.342	18.646	21.849	22.689	20.152		48.798	48.741	10.845	38.777	-1.216	-7.308		43.428	0.078	14.643	0.004		27.00	0.45	47.3	10.6	43.8	3.019	0.012	0.013	0.000	0.290	0.25	
45	1/27/2004	1:53:00 PM		22.353	18.673	21.916	22.731	19.706		48.713	48.687	10.786	38.762	-1.216	-7.308		47.162	0.08	14.643	0.004		28.00	0.46667	47.2	11.6	43.7	3.016	0.012	0.013	0.000	0.298	0.25	
46	1/27/2004	1:54:00 PM		22.365	18.68	21.958	22.688	20.015		48.766	48.671	10.797	38.816	-1.214	-7.297		47.867	0.08	14.643	0.004		29.00	0.48333	47.2	11.7	43.8	3.019	0.012	0.013	0.000	0.297	0.25	
47	1/27/2004	1:55:00 PM		22.382	18.687	21.995	22.735	20.128		48.858	48.878	10.864	38.765	-1.214	-7.294		46.734	0.079	14.643	0.004		30.00	0.5	47.4	11.5	43.8	3.021	0.012	0.013	0.000	0.293	0.25	
48	1/27/2004	1:56:00 PM		22.395	18.709	22.043	22.797	20.568		48.712	48.644	10.765	38.75	-1.216	-7.285		48.476	0.079	14.643	0.004		31.00	0.51667	47.2	11.9	43.7	3.015	0.012	0.013	0.000	0.293	0.25	
49	1/27/2004	1:57:00 PM		22.427	18.726	22.1	22.834	20.761		48.768	48.698	10.823	38.787	-1.216	-7.274		45.47	0.079	14.643	0.004		32.00	0.53333	47.2	11.1	43.8	3.018	0.012	0.013	0.000	0.292	0.25	
50	1/27/2004	1:58:00 PM		22.434	18.734	22.138	22.802	20.376		48.578	48.536	10.635	38.775	-1.216	-7.268		42.523	0.079	14.643	0.004		33.00	0.55	47.1	10.4	43.7	3.011	0.012	0.013	0.000	0.293	0.25	
51	1/27/2004	1:59:00 PM		22.456	18.746	22.175	22.773	20.332		48.69	48.675	10.726	38.779	-1.216	-7.259		45.032	0.078	14.643	0.004		34.00	0.56667	47.2	11.0	43.7	3.015	0.012	0.013	0.000	0.288	0.25	
52	1/27/2004	2:00:00 PM		22.477	18.762	22.216	22.815	20.606		48.715	48.716	10.773	38.763	-1.216	-7.248		50.211	0.078	14.643	0.004		35.00	0.58333	47.2	12.3	43.7	3.016	0.012	0.013	0.000	0.288	0.24	
53	1/27/2004	2:01:00 PM		22.493	18.773	22.303	22.745	20.043		48.791	48.836	10.835	38.728	-1.214	-7.239		43.497	0.078	14.643	0.004		36.00	0.6	47.4	10.7	43.8	3.017	0.012	0.013	0.000	0.287	0.24	
54	1/27/2004	2:02:00 PM		22.53	18.785	22.41	22.808	20.447		48.576	48.606	10.593	38.806	-1.216	-7.227		44.978	0.078	14.643	0.004		37.00	0.61667	47.1	11.0	43.7	3.012	0.012	0.013	0.000	0.286	0.24	
55	1/27/2004	2:03:00 PM		22.571	18.816	22.531	22.828	20.654		48.561	48.54	10.712	38.721	-1.211	-7.222		44.719	0.078	14.643	0.004		38.00	0.63333	47.1	11.0	43.6	3.009	0.012	0.012	0.000	0.286	0.24	
56	1/27/2004	2:04:00 PM		22.607	18.817	22.603	22.814	20.449		48.746	48.809	10.81	38.728	-1.219	-7.219		45.529	0.078	14.643	0.003		39.00	0.65	47.3	11.2	43.7	3.016	0.012	0.012	0.000	0.285	0.24	
57	1/27/2004	2:05:00 PM		22.654	18.839	22.68	22.851	20.264		48.853	48.946	10.853	38.81	-1.214	-7.207		45.848	0.078	14.643	0.004		40.00	0.66667	47.5	11.2	43.8	3.022	0.012	0.012	0.000	0.283	0.24	
58	1/27/2004	2:06:00 PM		22.695	18.851	22.671	22.888	20.311		48.939	49.064	10.864	38.826	-1.214	-7.207		45.741	0.078	14.643	0.004		41.00	0.68333	47.6	11.2	43.9	3.026	0.012	0.012	0.000	0.283	0.24	
59	1/27/2004	2:07:00 PM		22.737	18.862	22.778	22.959	20.499		48.798	48.807	10.866	38.797	-1.219	-7.193		43.349	0.078	14.643	0.004		42.00	0.7	47.3	10.6	43.8	3.020	0.012	0.012	0.000	0.283	0.24	
60	1/27/2004	2:08:00 PM		22.784	18.889	22.875	22.886	20.435		48.69	48.698	10.776	38.777	-1.216	-7.193		45.057	0.078	14.643	0.004		43.00	0.71667	47.2	11.0	43.7	3.015	0.012	0.012	0.000	0.282	0.24	
61	1/27/2004	2:09:00 PM		22.821	18.896	22.947	22.917	20.497		48.7	48.826	10.741	38.719	-1.216	-7.175		46.682	0.078	14.643	0.004		44.00	0.73333	47.4	11.4	43.7	3.014	0.012	0.012	0.000	0.282	0.24	
62	1/27/2004	2:10:00 PM		22.862	18.912	23.024	22.929	20.539		48.586	48.72	10.669	38.726	-1.214	-7.17		46.071	0.078	14.643	0.004		45.00	0.75	47.2	11.3	43.7	3.010	0.012	0.012	0.000	0.282	0.24	
63	1/27/2004	2:11:00 PM		22.904	18.914	23.101	22.951	20.43		48.779	48.94	10.773	38.736	-1.216	-7.164		45.668	0.078	14.643	0.004		46.00	0.76667	47.5	11.2	43.8	3.017	0.012	0.012	0.000	0.280	0.24	
64	1/27/2004	2:12:00 PM		22.945	18.915	23.177	22.901	20.607		48.518	48.625	10.71	38.684	-1.216	-7.158		42.494	0.078	14.643	0.004		47.00	0.78333	47.2	10.4	43.6	3.006	0.012	0.012	0.000	0.281	0.24	
65	1/27/2004	2:13:00 PM		22.987	18.927	23.249	22.948	20.653		48.627	48.745	10.752	38.658	-1.216	-7.144		42.567	0.078	14.643	0.004		48.00	0.8	47.3	10.4	43.6	3.009	0.012	0.012	0.000	0.280	0.24	
66	1/27/2004	2:14:00 PM		23.049	18.954	23.23	22.93	20.816		48.545	48.756	10.603	38.73	-1.216	-7.126		46.964	0.077	14.643	0.004		49.00	0.81667	47.3	11.5	43.6	3.009	0.011	0.012	0.000	0.277	0.24	
67	1/27/2004	2:15:00 PM		23.085	18.965	23.152	22.951	20.853		48.544	48.695	10.662	38.732	-1.214	-7.164		45.652	0.077	14.643	0.004		50.00	0.83333	47.2	11.2	43.6	3.009	0.011	0.012	0.000	0.277	0.24	
68	1/27/2004	2:16:00 PM		23.116	18.986	23.223	23.018	20.693		48.692	48.839	10.829	38.699	-1.219	-7.144		50.026	0.077	14.643	0.003		51.00	0.85	47.4	12.3	43.7	3.013	0.011	0.012	0.000	0.276	0.24	
69	1/27/2004	2:17:00 PM		23.143	18.998	23.299	23.009	20.684		48.715	48.878	10.804	38.758	-1.216	-7.132		46.45	0.077	14.643	0.004		52.00	0.86667	47.4	11.4	43.7	3.015	0.011	0.012	0.000	0.275	0.23	
70	1/27/2004	2:18:00 PM		23.169	19.014	23.376	23	20.514		48.694	48.855	10.825	38.691	-1.216	-7.12		45.41	0.077	14.643	0.004		53.00	0.88333	47.4	11.1	43.7	3.012	0.011	0.012	0.000	0.275	0.23	

RUN # 1.03A; DEWATER FIRST HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/27/2004	2:19:00 PM		23.191	19.016	23.443	23.057	20.692		48.684	49.009	10.698	38.709	-1.216	-7.103		50.167	0.077	14.643	0.004		54.00	0.9	47.5	12.3	43.7	3.013	0.011	0.012	0.000	0.275	0.23	
72	1/27/2004	2:20:00 PM		23.227	19.037	23.509	23.098	20.572		48.52	48.758	10.643	38.707	-1.219	-7.1		45.201	0.077	14.643	0.004		55.00	0.91667	47.3	11.1	43.6	3.007	0.011	0.012	0.000	0.275	0.23	
73	1/27/2004	2:21:00 PM		23.253	19.059	23.566	23.14	20.74		48.686	48.899	10.859	38.693	-1.216	-7.094		49.06	0.076	14.643	0.004		56.00	0.93333	47.4	12.0	43.7	3.012	0.011	0.012	0.000	0.270	0.23	
74	1/27/2004	2:22:00 PM		23.296	19.071	23.628	23.092	20.656		48.511	48.679	10.711	38.693	-1.216	-7.086		44.617	0.077	14.643	0.004		57.00	0.95	47.2	10.9	43.6	3.006	0.011	0.012	0.000	0.274	0.23	
75	1/27/2004	2:23:00 PM		23.312	19.077	23.644	23.123	20.839		48.684	48.917	10.776	38.687	-1.222	-7.097		46.528	0.077	14.643	0.003		58.00	0.96667	47.4	11.4	43.7	3.012	0.011	0.012	0.000	0.273	0.23	
76	1/27/2004	2:24:00 PM		23.358	19.114	23.721	23.18	21.187		48.781	49.029	10.893	38.68	-1.219	-7.086		45.287	0.077	14.643	0.004		59.00	0.98333	47.6	11.1	43.7	3.015	0.011	0.012	0.000	0.272	0.23	
77	1/27/2004	2:25:00 PM		23.389	19.109	23.771	23.185	20.941		48.451	48.706	10.673	38.637	-1.214	-7.077		47.779	0.076	14.643	0.004		60.00	1	47.2	11.7	43.5	3.002	0.011	0.012	0.000	0.269	0.23	
78	1/27/2004	2:26:00 PM		23.425	19.12	23.807	23.151	21.239		48.424	48.644	10.696	38.584	-1.214	-7.08		47.107	0.077	14.643	0.004		61.00	1.01667	47.2	11.5	43.5	2.999	0.011	0.012	0.000	0.273	0.23	
79	1/27/2004	2:27:00 PM		23.461	19.147	23.859	23.187	20.828		48.416	48.698	10.652	38.611	-1.216	-7.077		51.373	0.077	14.643	0.004		62.00	1.03333	47.2	12.6	43.5	3.000	0.011	0.012	0.000	0.272	0.23	
80	1/27/2004	2:28:00 PM		23.503	19.169	23.911	23.189	20.915		48.686	48.98	10.834	38.67	-1.216	-7.074		47.575	0.076	14.643	0.004		63.00	1.05	47.5	11.7	43.7	3.011	0.011	0.012	0.000	0.268	0.23	
81	1/27/2004	2:29:00 PM		23.54	19.181	23.953	23.221	20.267		48.872	49.178	10.972	38.689	-1.219	-7.068		48.676	0.076	14.643	0.004		64.00	1.06667	47.7	11.9	43.8	3.019	0.011	0.012	0.000	0.267	0.23	
82	1/27/2004	2:30:00 PM		23.571	19.207	23.939	23.288	21.149		48.742	48.99	10.919	38.646	-1.214	-7.057		47.329	0.076	14.643	0.004		65.00	1.08333	47.5	11.6	43.7	3.013	0.011	0.012	0.000	0.267	0.23	
83	1/27/2004	2:31:00 PM		23.593	19.209	23.79	23.239	21.362		48.447	48.789	10.695	38.543	-1.216	-7.083		46.384	0.076	14.643	0.003		66.00	1.1	47.3	11.4	43.5	2.999	0.011	0.012	0.000	0.270	0.23	
84	1/27/2004	2:32:00 PM		23.615	19.242	23.863	23.276	20.982		48.623	49.004	10.756	38.621	-1.219	-7.083		46.724	0.076	14.643	0.004		67.00	1.11667	47.5	11.5	43.6	3.008	0.011	0.012	0.000	0.268	0.23	
85	1/27/2004	2:33:00 PM		23.626	19.247	23.903	23.257	21.244		48.704	49.11	10.825	38.566	-1.216	-7.071		45.166	0.076	14.643	0.004		68.00	1.13333	47.6	11.1	43.6	3.008	0.011	0.012	0.000	0.268	0.23	
86	1/27/2004	2:34:00 PM		23.622	19.243	23.924	23.227	20.968		48.798	49.199	10.959	38.551	-1.219	-7.063		52.61	0.075	14.643	0.004		69.00	1.15	47.7	12.9	43.7	3.011	0.011	0.012	0.000	0.264	0.22	
87	1/27/2004	2:35:00 PM		23.658	19.274	23.985	23.279	21.025		48.414	48.737	10.711	38.561	-1.216	-7.06		46.309	0.075	14.643	0.004		70.00	1.16667	47.3	11.3	43.5	2.998	0.011	0.012	0.000	0.265	0.23	
88	1/27/2004	2:36:00 PM		23.668	19.29	24.016	23.294	20.587		48.71	49.154	10.788	38.625	-1.216	-7.054		47.005	0.075	14.643	0.004		71.00	1.18333	47.7	11.5	43.7	3.011	0.011	0.011	0.000	0.263	0.22	
89	1/27/2004	2:37:00 PM		23.705	19.317	24.072	23.296	21.027		48.615	48.953	10.853	38.568	-1.219	-7.048		45.779	0.075	14.643	0.004		72.00	1.2	47.5	11.2	43.6	3.005	0.011	0.011	0.000	0.263	0.22	
90	1/27/2004	2:38:00 PM		23.725	19.327	24.118	23.286	20.791		48.484	48.87	10.814	38.541	-1.216	-7.04		46.83	0.075	14.643	0.004		73.00	1.21667	47.4	11.5	43.5	3.000	0.011	0.011	0.000	0.263	0.22	
91	1/27/2004	2:39:00 PM		23.756	19.348	24.154	23.292	21.199		48.551	48.94	10.871	38.492	-1.216	-7.042		43.595	0.075	14.643	0.004		74.00	1.23333	47.5	10.7	43.5	3.001	0.011	0.011	0.000	0.263	0.22	
92	1/27/2004	2:40:00 PM		23.772	19.354	24.18	23.328	21.089		48.625	49.035	10.876	38.471	-1.216	-7.028		45.933	0.074	14.643	0.004		75.00	1.25	47.6	11.3	43.5	3.002	0.011	0.011	0.000	0.259	0.22	
93	1/27/2004	2:41:00 PM		23.803	19.36	24.211	23.329	21.281		48.443	48.816	10.81	38.492	-1.219	-7.025		46.82	0.074	14.643	0.004		76.00	1.26667	47.3	11.5	43.5	2.997	0.011	0.011	0.000	0.260	0.22	
94	1/27/2004	2:42:00 PM		23.829	19.382	24.247	23.31	21.388		48.746	49.131	11.072	38.453	-1.216	-7.025		46.845	0.074	14.643	0.004		77.00	1.28333	47.7	11.5	43.6	3.006	0.011	0.011	0.000	0.258	0.22	
95	1/27/2004	2:43:00 PM		23.85	19.387	24.182	23.28	21.353		48.64	49.112	10.969	38.449	-1.216	-7.019		42.202	0.074	14.643	0.004		78.00	1.3	47.6	10.3	43.5	3.002	0.011	0.011	0.000	0.259	0.22	
96	1/27/2004	2:44:00 PM		23.875	19.403	24.093	23.311	21.389		48.464	48.926	10.865	38.477	-1.214	-7.025		46.84	0.074	14.643	0.004		79.00	1.31667	47.5	11.5	43.5	2.997	0.011	0.011	0.000	0.260	0.22	
97	1/27/2004	2:45:00 PM		23.882	19.424	24.139	23.337	21.395		48.48	48.934	10.897	38.432	-1.216	-7.016		44.173	0.073	14.643	0.004		80.00	1.33333	47.5	10.8	43.5	2.996	0.011	0.011	0.000	0.257	0.22	
98	1/27/2004	2:46:00 PM		23.893	19.42	24.17	23.323	21.024		48.331	48.795	10.802	38.412	-1.219	-7.008		46.327	0.074	14.643	0.004		81.00	1.35	47.3	11.4	43.4	2.990	0.011	0.011	0.000	0.260	0.22	
99	1/27/2004	2:47:00 PM		23.9	19.458	24.213	23.361	21.238		48.754	49.232	11.044	38.438	-1.219	-7.152		48.155	0.074	14.643	0.004		82.00	1.36667	47.8	11.8	43.6	3.006	0.011	0.011	0.000	0.259	0.22	
100	1/27/2004	2:48:00 PM		23.901	19.459	24.234	23.312	21.264		48.341	48.764	10.782	38.383	-1.219	-7.152		44.97	0.073	14.643	0.003		83.00	1.38333	47.3	11.0	43.4	2.990	0.011	0.011	0.000	0.256	0.22	
101	1/27/2004	2:49:00 PM		23.928	19.486	24.291	23.394	21.024		48.661	49.083	11.023	38.465	-1.214	-7.138		45.871	0.073	14.643	0.004		84.00	1.4	47.6	11.2	43.6	3.004	0.011	0.011	0.000	0.255	0.22	
102	1/27/2004	2:50:00 PM		23.918	19.487	24.296	23.314	20.597		48.594	48.944	11.036	38.444	-1.214	-7.123		44.959	0.073	14.643	0.004		85.00	1.41667	47.5	11.0	43.5	3.000	0.011	0.011	0.000	0.255	0.22	
103	1/27/2004	2:51:00 PM		23.956	19.504	24.344	23.382	21.239		48.71	49.145	11.085	38.453	-1.216	-7.123		46.442	0.073	14.643	0.004		86.00	1.43333	47.7	11.4	43.6	3.005	0.011	0.011	0.000	0.254	0.22	
104	1/27/2004	2:52:00 PM		23.962	19.516	24.365	23.353	21.456		48.712	49.224	11.081	38.449	-1.216	-7.109		43.43	0.072	14.643	0.004		87.00	1.45	47.8	10.6	43.6	3.005	0.011	0.011	0.000	0.251	0.21	
105	1/27/2004	2:53:00 PM		23.983	19.537	24.406	23.389	21.563		48.754	49.185	11.088	38.487	-1.216	-7.097		43.43	0.073	14.643	0.004		88.00	1.46667	47.7	10.6	43.6	3.007	0.011	0.011	0.000	0.254	0.22	
106	1/27/2004	2:54:00 PM		23.994	19.533	24.407	23.4	21.458		48.495	49.006	10.991	38.301	-1.216	-7.089		41.102	0.072	14.643	0.004		89.00	1.48333	47.5	10.1	43.4	2.992	0.011	0.011	0.000	0.252	0.21	
107	1/27/2004	2:55:00 PM		24.016	19.565	24.434	23.391	21.263		48.569	49.158	11.013	38.319	-1.216	-7.08		42.8	0.072	14.643	0.004		90.00	1.5	47.7	10.5	43.4	2.995	0.011	0.011	0.000	0.251	0.21	
108	1/27/2004	2:56:00 PM		24.047	19.591	24.48	23.463	21.315		48.659	49.162	11.132	38.35	-1.216	-7.074		43.184	0.072	14.643	0.004		91.00	1.51667	47.7	10.6	43.5	2.999	0.011	0.011	0.000	0.250	0.21	
109	1/27/2004	2:57:00 PM		24.073	19.597	24.496	23.449	21.216		48.675	49.226	11.086	38.403	-1.216	-7.071		43.53	0.072	14.643	0.004		92.00	1.53333	47.8	10.7	43.5	3.002	0.011	0.011	0.000	0.250	0.21	
110	1/27/2004	2:58:00 PM		24.099	19.613	24.522	23.435	20.934		48.588	49.18	11.072	38.27	-1.219	-7.092		47.178	0.072	14.643	0.004		93.00	1.55	47.7	11.6	43.4	2.994	0.011	0.011	0.000	0.251	0.21	
111	1/27/2004	2:59:00 PM		24.114	19.623	24.537	23.379	21.09		48.744	49.297	11.175	38.379	-1.216	-7.089		48.687	0.072	14.643	0.004		94.00	1.56667	47.8	11.9	43.6	3.003	0.011	0.011	0.000	0.250	0.21	
112	1/27/2004	3:00:00 PM		24.129	19.624	24.532	23.41	21.237		48.544	49.197	11.073	38.235	-1.219	-7.097		43.943	0.072	14.643	0.004		95.00	1.58333	47.7	10.8	43.4	2.992	0.011	0.011	0.000	0.251	0.21	
113	1/27/2004	3:01:00 PM		24.175	19.644	24.578	23.4	21.297		48.397	49.013	10.919	38.268	-1.219	-7.094		44.342	0.071	14.643	0.004		96.00	1.6	47.5	10.9	43.3	2.988	0.011	0.011	0.000	0.247	0.21	
114	1/27/2004	3:02:00 PM		24.191	19.655	24.589	23.436	21.339		48.656	49.268	11.195	38.251	-1.216	-7.092		43.564	0.071	14.643	0.004		97.00	1.61667	47.8	10.7	43.5	2.996	0.011	0.011	0.000	0.246	0.21	
115	1/27/2004	3:03:00 PM		24.211	19.671	24.439	23.472	21.636		48.644	49.321	11.175	38.19	-1.216	-7.08		48.912	0.071	14.643	0.004		98.00	1.63333	47.8	12.0	43.4	2.993	0.011	0.011	0.000	0.248	0.21	
116	1/27/2004	3:04:00 PM		24.212	19.672	24.164	23.498	21.872		48.571	49.207	11.167	38.233	-1.219	-7.013		41.419	0.073	14.643	0.004		99.00	1.65	47.7	10.2	43.4	2.992	0.011	0.011	0.000	0.257	0.22	
117	1/27/2004	3:05:00 PM		24.198	19.693	24.236	23.534	21.658		48.8	49.365	11.281	38.301	-1.214	-7.256		46.901	0.071	14.643	0.004		100.00	1.66667	47.9	11.5	43.6	3.003	0.011	0.011	0.000	0.248	0.21	
118	1/27/2004	3:06:00 PM		24.184	19.699	24.282	23.53	21.86		48.416	49.006	11.049	38.2	-1.219	-7.242		47.151	0.07	14.643	0.004		101.00	1.68333	47.5	11.6	43.3	2.986	0.010	0.011	0.000	0.246	0.21	
119	1/27/2004	3:07:00 PM		24.17	19.72	24.308	23.531	21.69		48.513	49.098	11.118	38.188	-1.216	-7.216		44.757	0.072	14.643	0.004		102.00	1.7	47.6	11.0	43.4	2.989	0.011	0.011	0.000	0.253	0.21	
120	1/27/2004	3:08:00 PM		24.156	19.737	24.344	23.497	21.877		48.866	49.377	11.221	38.391	-1.219	-7.652		46.292	0.077	14.643	0.004		103.00	1.71667	47.9	11.3	43.6	3.008	0.011	0.012	0.000	0.268	0.23	
121	1/27/2004	3:09:00 PM		24.168	19.759	24.391	23.599	21.894		48.663	49.131	11.09	38.383	-1.216	-7.782		47.147	0.07	14.643	0.004		104.00	1.73333	47.7	11.6	43.5	3.001	0.010	0.011	0.000	0.244	0.21	
122	1/27/2004	3:10:00 PM		24.184	19.765	24.402	23.56	21.995		48.783	49.249	11.151	38.399	-1.222	-7.803		44.801	0.071	14.643	0.003		105.00	1.75	47.8	11.0	43.6	3.005	0.011	0.011	0.000	0.247	0.21	
123	1/27/2004	3:11:00 PM		24.68	19.775	24.442	23.575	21.664		47.429	49.164	11.11	37.123	-1.216	-4.536		47.483	0.021	14.643	0.004		106.00	1.76667	47.7	11.6	42.3	2.915	0.003	0.003	0.000	0.075	0.06	
124	1/27/2004	3:12:00 PM		24.845	19.796	24.482	23.561	21.136		43.887	49.208	11.093	33.466	0.136	-0.324		49.293	0.019	14.643	0.004		107.00	1.78333	47.7	12.1	38.7	2.667	0.003	0.003	0.000	0.074	0.06	
125	1/27/2004	3:13:00 PM		24.901	19.796	24.488	23.501	21.458		37.329	49.259	11.191	26.874	6.922	6.62		45.024	0.017	14.643	0.004		108.00	1.8	47.8	11.0	32.1	2.213	0.003	0.003	0.000	0.080	0.07	
126	1/27/2004	3:14:00 PM		24.376	19.822	24.534	23.517	21.706		48.462	49.154	11.112	38.184	-1.216	-6.479		45.658	0.1	14.643	0.004		109.00	1.81667	47.7	11.2	43.3	2.987	0.015	0.015	0.000	0.349	0.30	
127	1/27/2004	3:15:00 PM		24.382	19.838	24.56	23.553	21.385		48.526	49.353	11.18	38.075	-1.216	-6.311		46.421	0.071	14.643	0.004		110.00	1.83333	47.9	11.4	43.3	2.985	0.011	0.011	0.000	0.248	0.21	
128	1/27/2004	3:16:00 PM		24.417	19.848	24.575	23.528	21.576		48.758	49.205	11.183	38.403	-1.214	-7.106		47.473	0.071	14.643	0.004		111.00	1.85	47.7	11.6	43.6	3.005	0.011	0.011	0.000	0.246	0.21	
129	1/27/2004	3:17:00 PM		24.478	19.865	24.616	23.619	21.828		48.945	49.409	11.288	38.416	-1.214	-7.172		47.08	0.068	14.643	0.004		112.00	1.86667	47.9	11.5	43.7	3.012	0.010	0.010	0.000	0.235	0.20	
130	1/27/2004	3:18:00 PM		24.509	19.871	24.632	23.671	21.724		48.851	49.249	11.149	38.483	-1.216	-7.363		45.111	0.07	14.643	0.004		113.00	1.88333	47.8	11.1	43.7	3.011	0.010	0.011	0.000	0.241	0.21	
131	1/27/2004	3:19:00 PM		24.54	19.881	24.653	23.681	21.694		48.982	49.427	11.288	38.426	-1.216	-7.378		48.244	0.069	14.643	0.004		114.00	1.9	48.0	11.8	43.7	3.013	0.010	0.010	0.000	0.238	0.20	
132	1/27/2004	3:20:00 PM		24.561	19.897	24.674	23.672	21.826		48.777	49.181	11.166	38.449	-1.216	-7.384		43.27	0.069	14.643	0.004		115.00	1.91667	47.7	10.6	43.6	3.007	0.010	0.010	0.000	0.238	0.20	
133	1/27/2004	3:21:00 PM		24.567	19.898	24.69	23.603	21.696		48.833	49.294	11.243	38.401	-1.219	-7.381		47.562	0.069	14.643	0.004		116.00	1.93333	47.8	11.7	43.6	3.007	0.010	0.010	0.000	0.238	0.20	
134	1/27/2004	3:22:00 PM		24.588	19.919	24.716	23.649	21.596		48.671	49.089	11.121	38.371	-1.216	-7.384		47.216	0.069	14.643	0.004		117.00	1.95	47.6	11.6	43.5	3.001	0.010	0.010	0.000	0.238	0.20	
135	1/27/2004	3:23:00 PM		24.589	19.936	24.722	23.695	21.658		48.634	49.149	11.106	38.334	-1.216	-7.395		43.47	0.068	14.643	0.004		118.00	1.96667	47.7	10.7	43.5	2.998	0.010	0.010	0.000	0.235	0.20	
136	1/27/2004	3:24:00 PM		24.605	19.947	24.748	23.671	21.825		48.798	49.276	11.269	38.266	-1.216	-7.392		44.965	0.069	14.643	0.004		119.00	1.98333	47.8	11.0	43.5	3.001	0.010	0.010	0.000	0.238	0.20	
137	1/27/2004	3:25:00 PM		24.621	19.958	24.769	23.702	21.841		48.789	49.203	11.339	38.291	-1.219	-7.389		48.422	0.068	14.643	0.004		120.00	2	47.7	11.9	43.5	3.002	0.010	0.010	0.000	0.234	0.20	
138	1/27/2004	3:26:00 PM		24.632	19.974	24.79	23.739	22.053		48.949	49.386	11.459	38.313	-1.216	-7.389		43.568	0.068	14.643	0.004		121.00	2.01667	47.9	10.7	43.6	3.008	0.010	0.010	0.000	0.234	0.20	
139	1/27/2004	3:27:00 PM		24.644	19.996	24.807	23.71	22.245		48.822	49.29	11.311	38.352	-1.219	-7.384		45.958	0.068	14.643	0.004		122.00	2.03333	47.8	11.3	43.6	3.005	0.010	0.010	0.000	0.234	0.20	
140	1/27/2004	3:27:27 PM		24.665	20.002	24.828	23.781	22.276		48.92	49.458	11.427	38.256	-1.216	-7.384		44.029	0.068	14.643	0.004		122.45	2.04083	48.0	10.8	43.6	3.005	0.010	0.010	0.000	0.234	0.20	

RUN # 1.03A; DEWATER FIRST HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	1/27/2004	3:28:27 PM		24.661	20.013	24.814	23.797	22.137		48.567	49.096	11.177	38.219	-1.219	-7.386		45.468	0.068	14.643	0.004		123.45	2.0575	47.6	11.1	43.4	2.992	0.010	0.010	0.000	0.235	0.20	
142	1/27/2004	3:29:27 PM		24.672	20.03	24.84	23.874	22.324		49.059	49.608	11.52	38.282	-1.219	-7.389		45.766	0.067	14.643	0.003		124.45	2.07417	48.1	11.2	43.7	3.011	0.010	0.010	0.000	0.230	0.20	
143	1/27/2004	3:30:27 PM		24.674	20.051	24.521	23.911	22.391		48.92	49.425	11.471	38.221	-1.216	-7.386		47.936	0.067	14.643	0.004		125.45	2.09083	48.0	11.7	43.6	3.004	0.010	0.010	0.000	0.232	0.20	
144	1/27/2004	3:31:27 PM		24.65	20.063	24.462	23.907	22.04		48.798	49.295	11.332	38.28	-1.219	-7.389		40.766	0.067	14.643	0.004		126.45	2.1075	47.8	10.0	43.5	3.002	0.010	0.010	0.000	0.233	0.20	
145	1/27/2004	3:32:27 PM		24.626	20.084	24.508	23.973	21.986		48.762	49.224	11.327	38.227	-1.216	-7.389		46.405	0.066	14.643	0.004		127.45	2.12417	47.8	11.4	43.5	2.999	0.010	0.010	0.000	0.229	0.20	
146	1/27/2004	3:33:27 PM		24.613	20.111	24.57	23.98	22.254		48.769	49.27	11.394	38.237	-1.214	-7.381		45.272	0.066	14.643	0.004		128.45	2.14083	47.8	11.1	43.5	2.999	0.010	0.010	0.000	0.229	0.19	
147	1/27/2004	3:34:27 PM		24.583	20.112	24.581	23.905	22.285		48.978	49.475	11.567	38.231	-1.216	-7.386		46.357	0.066	14.643	0.004		129.45	2.1575	48.0	11.4	43.6	3.006	0.010	0.010	0.000	0.228	0.19	
148	1/27/2004	3:35:27 PM		24.58	20.129	24.618	23.933	22.347		48.891	49.489	11.349	38.315	-1.216	-7.381		45.093	0.066	14.643	0.003		130.45	2.17417	48.0	11.1	43.6	3.006	0.010	0.010	0.000	0.228	0.19	
149	1/27/2004	3:36:27 PM		24.582	20.146	24.66	23.944	22.193		48.822	49.361	11.418	38.235	-1.216	-7.384		44.945	0.066	14.643	0.004		131.45	2.19083	47.9	11.0	43.5	3.001	0.010	0.010	0.000	0.228	0.19	
150	1/27/2004	3:37:27 PM		24.579	20.173	24.697	23.987	22.13		48.571	49.131	11.329	38.143	-1.216	-7.326		46.029	0.066	14.643	0.004		132.45	2.2075	47.7	11.3	43.4	2.989	0.010	0.010	0.000	0.229	0.19	
151	1/27/2004	3:38:27 PM		24.586	20.191	24.724	24.084	22.273		48.505	49.096	11.214	38.13	-1.216	-7.395		47.141	0.066	14.643	0.004		133.45	2.22417	47.6	11.6	43.3	2.987	0.010	0.010	0.000	0.229	0.19	
152	1/27/2004	3:39:27 PM		24.578	20.188	24.726	24.056	22.004		48.878	49.541	11.431	38.147	-1.216	-7.398		46.588	0.066	14.643	0.004		134.45	2.24083	48.1	11.4	43.5	3.000	0.010	0.010	0.000	0.228	0.19	
153	1/27/2004	3:40:27 PM		24.59	20.215	24.758	24.073	22.222		48.866	49.512	11.554	38.149	-1.216	-7.401		43.643	0.065	14.643	0.004		135.45	2.2575	48.0	10.7	43.5	3.000	0.010	0.010	0.000	0.224	0.19	
154	1/27/2004	3:41:27 PM		24.608	20.227	24.791	24.126	22.41		48.69	49.344	11.415	38.124	-1.216	-7.395		46.513	0.065	14.643	0.004		136.45	2.27417	47.9	11.4	43.4	2.993	0.010	0.010	0.000	0.225	0.19	
155	1/27/2004	3:42:27 PM		24.625	20.26	24.818	24.198	22.468		48.717	49.413	11.417	38.12	-1.216	-7.398		46.624	0.065	14.643	0.004		137.45	2.29083	47.9	11.4	43.4	2.994	0.010	0.010	0.000	0.224	0.19	
156	1/27/2004	3:43:27 PM		24.642	20.282	24.86	24.16	22.42		48.661	49.396	11.448	38.016	-1.214	-7.395		43.249	0.065	14.643	0.004		138.45	2.3075	47.9	10.6	43.3	2.988	0.010	0.010	0.000	0.224	0.19	
157	1/27/2004	3:44:27 PM		24.655	20.305	24.868	24.218	22.688		48.48	49.187	11.329	38.003	-1.216	-7.395		46.15	0.065	14.643	0.004		139.45	2.32417	47.7	11.3	43.2	2.981	0.010	0.010	0.000	0.225	0.19	
158	1/27/2004	3:45:27 PM		24.657	20.318	24.87	24.17	22.66		48.827	49.551	11.566	38.089	-1.216	-7.392		44.2	0.065	14.643	0.004		140.45	2.34083	48.1	10.8	43.5	2.996	0.010	0.010	0.000	0.224	0.19	
159	1/27/2004	3:46:27 PM		24.669	20.324	24.877	24.232	22.526		48.69	49.437	11.476	38.018	-1.219	-7.395		43.87	0.065	14.643	0.004		141.45	2.3575	48.0	10.8	43.4	2.989	0.010	0.010	0.000	0.224	0.19	
160	1/27/2004	3:47:27 PM		24.701	20.357	24.919	24.3	22.368		48.804	49.583	11.545	38.059	-1.216	-7.389		44.463	0.065	14.643	0.004		142.45	2.37417	48.1	10.9	43.4	2.994	0.010	0.010	0.000	0.224	0.19	
161	1/27/2004	3:48:27 PM		24.708	20.374	24.931	24.277	22.27		48.536	49.253	11.403	37.95	-1.219	-7.386		44.957	0.064	14.643	0.004		143.45	2.39083	47.8	11.0	43.2	2.981	0.010	0.010	0.000	0.221	0.19	
162	1/27/2004	3:49:27 PM		24.71	20.381	24.939	24.314	22.518		48.659	49.479	11.444	37.983	-1.219	-7.386		45.748	0.064	14.643	0.004		144.45	2.4075	48.0	11.2	43.3	2.987	0.010	0.010	0.000	0.221	0.19	
163	1/27/2004	3:50:27 PM		24.737	20.403	24.961	24.371	22.615		48.723	49.583	11.578	37.925	-1.216	-7.386		45.881	0.064	14.643	0.004		145.45	2.42417	48.1	11.2	43.3	2.987	0.010	0.010	0.000	0.220	0.19	
164	1/27/2004	3:51:27 PM		24.759	20.43	24.992	24.433	22.135		48.731	49.587	11.546	37.97	-1.216	-7.384		45.852	0.064	14.643	0.004		146.45	2.44083	48.1	11.2	43.4	2.989	0.010	0.010	0.000	0.220	0.19	
165	1/27/2004	3:52:27 PM		24.765	20.432	24.984	24.424	22.523		48.337	49.243	11.336	37.816	-1.216	-7.384		47.247	0.064	14.643	0.004		147.45	2.4575	47.8	11.6	43.1	2.970	0.010	0.010	0.000	0.222	0.19	
166	1/27/2004	3:53:27 PM		24.767	20.428	24.865	24.401	22.74		48.621	49.413	11.612	37.876	-1.219	-7.386		47.176	0.063	14.643	0.003		148.45	2.47417	47.9	11.6	43.2	2.982	0.009	0.009	0.000	0.218	0.19	
167	1/27/2004	3:54:27 PM		24.778	20.455	24.746	24.397	22.606		48.816	49.728	11.664	37.872	-1.222	-7.384		42.535	0.063	14.643	0.003		149.45	2.49083	48.3	10.4	43.3	2.988	0.009	0.009	0.000	0.218	0.19	
168	1/27/2004	3:55:27 PM		24.801	20.488	24.819	24.495	22.493		48.81	49.75	11.642	37.86	-1.219	-7.381		46.559	0.063	14.643	0.004		150.45	2.5075	48.3	11.4	43.3	2.988	0.009	0.009	0.000	0.218	0.19	
169	1/27/2004	3:56:27 PM		24.788	20.485	24.816	24.547	22.515		48.742	49.724	11.664	37.759	-1.219	-7.384		46.962	0.063	14.643	0.004		151.45	2.52417	48.3	11.5	43.3	2.982	0.009	0.009	0.000	0.218	0.19	
170	1/27/2004	3:57:27 PM		24.815	20.527	24.898	24.604	22.447		48.71	49.622	11.636	37.796	-1.214	-7.375		45.349	0.063	14.643	0.004		152.45	2.54083	48.1	11.1	43.3	2.982	0.009	0.009	0.000	0.218	0.19	
171	1/27/2004	3:58:27 PM		24.802	20.529	24.89	24.501	22.7		48.542	49.537	11.571	37.779	-1.216	-7.375		48.307	0.063	14.643	0.004		153.45	2.5575	48.1	11.8	43.2	2.976	0.009	0.009	0.000	0.218	0.19	
172	1/27/2004	3:59:27 PM		24.819	20.551	24.917	24.523	22.933		48.474	49.411	11.535	37.794	-1.216	-7.372		45.197	0.063	14.643	0.004		154.45	2.57417	47.9	11.1	43.1	2.974	0.009	0.009	0.000	0.218	0.19	
173	1/27/2004	4:00:27 PM		25.171	20.558	24.924	24.444	22.759		46.392	49.678	11.662	35.487	-1.219	20.054		43.474	0.003	14.643	0.004		155.45	2.59083	48.2	10.7	40.9	2.823	0.000	0.000	0.000	0.011	0.01	
174	1/27/2004	4:01:27 PM		25.278	20.575	24.946	24.476	22.836		40.641	49.587	11.493	29.88	3.827	19.97		43.37	0.003	14.643	0.004		156.45	2.6075	48.1	10.6	35.3	2.431	0.000	0.000	0.000	0.013	0.01	
175	1/27/2004	4:02:27 PM		25.254	20.597	24.977	24.523	22.597		29.643	49.533	11.58	18.575	14.741	90.093		45.666	0.003	14.643	0.004		157.45	2.62417	48.1	11.2	24.1	1.662	0.000	0.000	0.000	0.019	0.02	
176	1/27/2004	4:03:27 PM		24.56	20.593	24.994	24.615	22.212		6.766	48.946	8.197	-1.227	37.111	0.269		52.658	0.003	14.643	0.004		158.45	2.64083	47.5	12.9	2.8	0.191	0.000	0.000	0.000	0.162	0.14	
177	1/27/2004	4:04:27 PM		25.293	20.626	25.037	24.648	22.737		43.364	49.249	10.321	33.743	0.393	0.344		46.511	0.16	14.643	0.004		159.45	2.6575	47.8	11.4	38.6	2.658	0.024	0.024	0.001	0.618	0.53	
178	1/27/2004	4:05:27 PM		25.401	20.638	25.019	24.604	22.774		43.971	49.804	11.692	32.897	0.324	0.378		44.817	0.104	14.643	0.003		160.45	2.67417	48.3	11.0	38.4	2.650	0.016	0.015	0.000	0.403	0.34	
179	1/27/2004	4:06:27 PM		25.462	20.65	25.035	24.661	22.83		43.841	49.576	12.159	32.372	0.312	0.41		42.481	0.085	14.643	0.004		161.45	2.69083	48.1	10.4	38.1	2.627	0.013	0.013	0.000	0.332	0.28	
180	1/27/2004	4:07:27 PM		25.499	20.652	25.037	24.603	22.927		44.036	49.831	12.571	32.152	0.292	0.433		46.135	0.077	14.643	0.003		162.45	2.7075	48.4	11.3	38.1	2.626	0.011	0.011	0.000	0.301	0.26	
181	1/27/2004	4:08:27 PM		25.525	20.673	25.053	24.594	22.568		43.669	49.442	12.493	31.951	0.324	0.459		45.262	0.073	14.643	0.004		163.45	2.72417	48.0	11.1	37.8	2.607	0.011	0.011	0.000	0.287	0.24	
182	1/27/2004	4:09:27 PM		25.547	20.696	25.055	24.616	23.071		44.102	49.974	12.68	32.015	0.324	0.482		42.907	0.07	14.643	0.003		164.45	2.74083	48.5	10.5	38.1	2.624	0.010	0.010	0.000	0.274	0.23	
183	1/27/2004	4:10:27 PM		25.56	20.718	25.068	24.729	23.094		44.144	49.981	12.88	31.978	0.327	0.503		43.856	0.068	14.643	0.003		165.45	2.7575	48.5	10.7	38.1	2.624	0.010	0.010	0.000	0.266	0.23	
184	1/27/2004	4:11:27 PM		25.556	20.74	24.859	24.776	23.055		44.262	50.121	12.892	32.05	0.364	0.523		42.491	0.067	14.643	0.004		166.45	2.77417	48.6	10.4	38.2	2.631	0.010	0.010	0.000	0.263	0.22	
185	1/27/2004	4:12:27 PM		25.259	20.748	24.892	24.763	23.108		48.611	50.345	13.016	36.216	-1.219	-4.611		46.617	0.299	14.643	0.004		167.45	2.79083	48.9	11.4	42.4	2.924	0.045	0.045	0.001	1.054	0.90	
186	1/27/2004	4:13:27 PM		25.051	20.77	24.934	24.78	22.779		50.1	50.347	13.198	37.545	-1.216	-6.863		42.406	0.069	14.643	0.003		168.45	2.8075	48.9	10.4	43.8	3.021	0.010	0.010	0.000	0.235	0.20	
187	1/27/2004	4:14:27 PM		25.128	20.807	24.986	24.727	22.701		50.044	50.101	13.078	37.595	-1.214	-7.271		42.99	0.07	14.643	0.004		169.45	2.82417	48.6	10.5	43.8	3.021	0.010	0.010	0.000	0.238	0.20	
188	1/27/2004	4:15:27 PM		25.121	20.81	24.979	24.735	22.347		49.93	50.018	12.905	37.624	-1.222	-7.41		44.102	0.068	14.643	0.003		170.45	2.84083	48.5	10.8	43.8	3.018	0.010	0.010	0.000	0.232	0.20	
189	1/27/2004	4:16:27 PM		25.133	20.827	25.016	24.857	22.696		50.216	50.345	13.151	37.568	-1.219	-7.349		46.776	0.069	14.643	0.004		171.45	2.8575	48.9	11.5	43.9	3.026	0.010	0.010	0.000	0.234	0.20	
190	1/27/2004	4:17:27 PM		25.14	20.849	25.048	24.965	22.903		49.957	49.993	13.095	37.566	-1.216	-7.412		44.377	0.067	14.643	0.004		172.45	2.87417	48.5	10.9	43.8	3.017	0.010	0.010	0.000	0.228	0.19	
191	1/27/2004	4:18:27 PM		25.137	20.857	25.045	24.882	22.916		50.139	50.171	13.121	37.665	-1.222	-7.424		44.961	0.066	14.643	0.003		173.45	2.89083	48.7	11.0	43.9	3.027	0.010	0.010	0.000	0.224	0.19	
192	1/27/2004	4:19:27 PM		25.164	20.874	25.102	24.904	23.439		50.266	50.217	13.197	37.687	-1.216	-7.418		45.72	0.066	14.643	0.004		174.45	2.9075	48.7	11.2	44.0	3.032	0.010	0.010	0.000	0.223	0.19	
193	1/27/2004	4:20:27 PM		25.166	20.891	25.109	24.85	23.436		50.1	50.039	13.075	37.72	-1.219	-7.424		42.439	0.065	14.643	0.004		175.45	2.92417	48.6	10.4	43.9	3.027	0.010	0.010	0.000	0.220	0.19	
194	1/27/2004	4:21:27 PM		25.172	20.907	25.116	24.752	23.382		49.835	49.825	12.936	37.605	-1.222	-7.43		44.669	0.064	14.643	0.003		176.45	2.94083	48.4	10.9	43.7	3.014	0.010	0.010	0.000	0.218	0.19	
195	1/27/2004	4:22:27 PM		25.189	20.929	25.142	24.868	23.308		49.725	49.931	12.749	37.578	-1.219	-7.427		45.758	0.064	14.643	0.004		177.45	2.9575	48.5	11.2	43.7	3.010	0.010	0.010	0.000	0.218	0.19	
196	1/27/2004	4:23:27 PM		25.2	20.946	25.159	24.97	23.275		49.944	49.916	12.962	37.681	-1.216	-7.424		46.646	0.064	14.643	0.004		178.45	2.97417	48.4	11.4	43.8	3.021	0.010	0.009	0.000	0.217	0.18	
197	1/27/2004	4:24:27 PM		25.221	20.957	25.19	25.021	23.166		50.222	50.354	13.079	37.679	-1.216	-7.424		43.787	0.063	14.643	0.004		179.45	2.99083	48.9	10.7	44.0	3.030	0.009	0.009	0.000	0.213	0.18	
198	1/27/2004	4:25:27 PM		25.233	20.969	25.207	25.018	23.228		50.121	50.294	12.99	37.667	-1.216	-7.421		44.315	0.063	14.643	0.004		180.45	3.0075	48.8	10.9	43.9	3.026	0.009	0.009	0.000	0.213	0.18	
199	1/27/2004	4:26:27 PM		25.234	20.985	25.098	24.944	23.425		50.04	50.117	13.035	37.673	-1.216	-7.407		42.952	0.065	14.643	0.004		181.45	3.02417	48.6	10.5	43.9	3.024	0.010	0.010	0.000	0.220	0.19	
200	1/27/2004	4:27:27 PM		25.246	20.987	25.059	24.911	23.416		50.139	50.225	13.172	37.648	-1.219	-7.407		41.53	0.063	14.643	0.003		182.45	3.04083	48.8	10.2	43.9	3.026	0.009	0.009	0.000	0.214	0.18	
201	1/27/2004	4:28:27 PM		25.248	21.019	25.087	24.883	23.087		50.32	50.389	13.182	37.763	-1.216	-7.41		42.936	0.062	14.643	0.004		183.45	3.0575	48.9	10.5	44.0	3.037	0.009	0.009	0.000	0.209	0.18	
202	1/27/2004	4:29:27 PM		25.25	21.021	25.113	24.93	22.823		50.023	50.19	12.939	37.658	-1.219	-7.407		42.087	0.062	14.643	0.004		184.45	3.07417	48.7	10.3	43.8	3.023	0.009	0.009	0.000	0.210	0.18	
203	1/27/2004	4:30:27 PM		25.251	21.022	25.135	24.956	22.92		49.7	49.678	12.865	37.745	-1.219	-7.404		44.771	0.062	14.643	0.004		185.45	3.09083	48.2	11.0	43.7	3.015	0.009	0.009	0.000	0.211	0.18	
204	1/27/2004	4:31:27 PM		25.269	21.04	25.173	25.074	22.963		49.92	50.01	12.983	37.65	-1.219	-7.404		46.836	0.062	14.643	0.004		186.45	3.1075	48.5	11.5	43.8	3.019	0.009	0.009	0.000	0.210	0.18	
205	1/27/2004	4:32:27 PM		25.256	21.047	25.199	25.101	23.035		50.218	50.339	13.093	37.699	-1.219	-7.401		42.567	0.062	14.643	0.004		187.45	3.12417	48.9	10.4	44.0	3.031	0.009	0.009	0.000	0.209	0.18	
206	1/27/2004	4:33:27 PM		25.248	21.049	25.211	25.123	23.082		49.843	50.095	12.851	37.646	-1.225	-7.407		45.289	0.062	14.643	0.003		188.45	3.14083	48.6	11.1	43.7	3.016	0.009	0.009	0.000	0.210	0.18	
207	1/27/2004	4:34:27 PM		25.26	21.066	25.239	25.11	23.495		49.992	50.124	13.01	37.663	-1.219	-7.398		44.214	0.061	14.643	0.004		189.45	3.1575	48.7	10.8	43.8	3.022	0.009	0.009	0.000	0.206	0.18	
208	1/27/2004	4:35:27 PM		25.251	21.073	25.245	24.976	23.396		49.779	49.875	12.901	37.685	-1.219	-7.398		43.174	0.061	14.643	0.003		190.45	3.17417	48.4	10.6	43.7	3.015	0.009	0.009	0.000	0.207	0.18	
209	1/27/2004	4:36:27 PM		25.254	21.08	25.252	25.024	23.298		50.046	50.211	13.025	37.65	-1.219	-7.398		45.184	0.061	14.643	0.004		191.45	3.19083	48.7	11.1	43.8	3.023	0.009	0.009	0.000	0.206	0.18	
210	1/27/2004	4:37:27 PM		25.255	21.087	25.274	25.06	23.365		49.967	50.132	12.963	37.699	-1.219	-7.398		44.675	0.061	14.643	0.004		192.45	3.2075	48.7	10.9	43.8	3.022	0.009	0.009	0.000	0.206	0.18	

RUN # 1.03A; DEWATER FIRST HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	1/27/2004	4:38:27 PM		25.277	21.114	25.301	25.103	23.558		50.083	50.31	13.092	37.626	-1.219	-7.398		45.754	0.061	14.643	0.004		193.45	3.22417	48.8	11.2	43.9	3.024	0.009	0.009	0.000	0.206	0.17	
212	1/27/2004	4:39:27 PM		25.278	21.12	25.317	25.064	23.509		49.976	50.217	13.037	37.638	-1.219	-7.392		44.692	0.06	14.643	0.004		194.45	3.24083	48.7	11.0	43.8	3.020	0.009	0.009	0.000	0.202	0.17	
213	1/27/2004	4:40:27 PM		25.295	21.132	25.339	25.12	23.365		49.552	49.869	12.692	37.541	-1.219	-7.395		45.587	0.06	14.643	0.003		195.45	3.2575	48.4	11.2	43.5	3.002	0.009	0.009	0.000	0.203	0.17	
214	1/27/2004	4:41:27 PM		25.287	21.134	25.33	25.162	23.402		49.949	50.206	13.022	37.576	-1.222	-7.395		40.716	0.06	14.643	0.004		196.45	3.27417	48.7	10.0	43.8	3.017	0.009	0.009	0.000	0.203	0.17	
215	1/27/2004	4:42:27 PM		25.298	21.14	25.332	25.174	23.378		49.959	50.238	13	37.589	-1.219	-7.395		45.989	0.06	14.643	0.004		197.45	3.29083	48.8	11.3	43.8	3.018	0.009	0.009	0.000	0.202	0.17	
216	1/27/2004	4:43:27 PM		25.325	21.172	25.379	25.24	23.495		49.857	50.057	13.016	37.56	-1.216	-7.389		44.327	0.06	14.643	0.004		198.45	3.3075	48.6	10.9	43.7	3.014	0.009	0.009	0.000	0.202	0.17	
217	1/27/2004	4:44:27 PM		25.32	21.163	25.014	25.226	23.751		49.976	50.264	13.042	37.566	-1.222	-7.395		43.806	0.06	14.643	0.004		199.45	3.32417	48.8	10.7	43.8	3.018	0.009	0.009	0.000	0.204	0.17	
218	1/27/2004	4:45:27 PM		25.331	21.174	25.085	25.207	23.632		49.768	50.082	12.898	37.533	-1.222	-7.392		43.983	0.059	14.643	0.003		200.45	3.34083	48.6	10.8	43.7	3.010	0.009	0.009	0.000	0.201	0.17	
219	1/27/2004	4:46:27 PM		25.343	21.201	25.132	25.289	23.178		49.957	50.151	13.127	37.58	-1.216	-7.386		44.496	0.059	14.643	0.004		201.45	3.3575	48.7	10.9	43.8	3.018	0.009	0.009	0.000	0.200	0.17	
220	1/27/2004	4:47:27 PM		25.349	21.217	25.163	25.27	23.464		49.967	50.294	13.1	37.525	-1.219	-7.386		44.707	0.059	14.643	0.003		202.45	3.37417	48.8	11.0	43.7	3.016	0.009	0.009	0.000	0.200	0.17	
221	1/27/2004	4:48:27 PM		25.35	21.223	25.199	25.241	23.511		49.913	50.221	12.982	37.545	-1.222	-7.386		46.056	0.059	14.643	0.003		203.45	3.39083	48.7	11.3	43.7	3.015	0.009	0.009	0.000	0.200	0.17	
222	1/27/2004	4:49:27 PM		25.367	21.255	25.226	25.223	23.593		49.866	50.267	13.044	37.404	-1.216	-7.381		48.294	0.059	14.643	0.004		204.45	3.4075	48.8	11.8	43.6	3.008	0.009	0.009	0.000	0.200	0.17	
223	1/27/2004	4:50:27 PM		25.363	21.251	25.237	25.264	23.183		49.83	50.095	13.094	37.494	-1.216	-7.297		45.647	0.058	14.643	0.004		205.45	3.42417	48.6	11.2	43.7	3.010	0.009	0.009	0.000	0.197	0.17	
224	1/27/2004	4:51:27 PM		25.375	21.273	25.264	25.311	23.125		49.926	50.32	13.179	37.443	-1.219	-7.358		42.811	0.059	14.643	0.004		206.45	3.44083	48.8	10.5	43.7	3.012	0.009	0.009	0.000	0.200	0.17	
225	1/27/2004	4:52:27 PM		25.387	21.285	25.281	25.302	23.066		49.959	50.3	13.158	37.519	-1.219	-7.355		43.958	0.059	14.643	0.004		207.45	3.4575	48.8	10.8	43.7	3.016	0.009	0.009	0.000	0.200	0.17	
226	1/27/2004	4:53:27 PM		25.408	21.311	25.332	25.313	23.679		49.525	49.896	12.849	37.443	-1.216	-7.352		44.723	0.059	14.643	0.004		208.45	3.47417	48.4	11.0	43.5	2.998	0.009	0.009	0.000	0.200	0.17	
227	1/27/2004	4:54:27 PM		25.398	21.302	25.332	25.304	23.754		49.913	50.453	13.09	37.394	-1.216	-7.349		46.549	0.059	14.643	0.004		209.45	3.49083	49.0	11.4	43.7	3.010	0.009	0.009	0.000	0.200	0.17	
228	1/27/2004	4:55:27 PM		25.415	21.318	25.354	25.286	23.55		49.355	49.711	12.754	37.408	-1.216	-7.363		46.096	0.059	14.643	0.004		210.45	3.5075	48.2	11.3	43.4	2.991	0.009	0.009	0.000	0.201	0.17	
229	1/27/2004	4:56:27 PM		25.416	21.319	25.354	25.291	23.576		49.729	50.24	13.022	37.349	-1.216	-7.36		44.534	0.059	14.643	0.004		211.45	3.52417	48.8	10.9	43.5	3.002	0.009	0.009	0.000	0.200	0.17	
230	1/27/2004	4:57:27 PM		25.427	21.33	25.371	25.292	23.537		49.841	50.418	13.064	37.373	-1.219	-7.36		48.334	0.058	14.643	0.004		212.45	3.54083	48.9	11.8	43.6	3.007	0.009	0.009	0.000	0.196	0.17	
231	1/27/2004	4:58:27 PM		25.438	21.352	25.387	25.294	23.559		49.845	50.347	13.117	37.396	-1.219	-7.358		46.957	0.058	14.643	0.004		213.45	3.5575	48.9	11.5	43.6	3.007	0.009	0.009	0.000	0.196	0.17	
232	1/27/2004	4:59:27 PM		25.439	21.353	25.393	25.224	23.639		49.525	50.455	13.002	37.08	-1.219	-6.424		46.309	0.059	14.643	0.004		214.45	3.57417	49.0	11.3	43.3	2.986	0.009	0.009	0.000	0.201	0.17	
233	1/27/2004	5:00:27 PM		25.445	21.369	25.424	25.26	23.776		49.899	50.42	13.122	37.381	-1.214	-7.436		44.694	0.059	14.643	0.004		215.45	3.59083	48.9	11.0	43.6	3.009	0.009	0.009	0.000	0.199	0.17	
234	1/27/2004	5:01:27 PM		25.45	21.374	25.424	25.306	23.806		49.793	50.306	13.115	37.361	-1.219	-7.369		44.483	0.059	14.643	0.004		216.45	3.6075	48.8	10.9	43.6	3.004	0.009	0.009	0.000	0.199	0.17	
235	1/27/2004	5:02:27 PM		25.476	21.385	25.175	25.337	24.002		49.882	50.385	13.155	37.324	-1.216	-7.438		44.544	0.057	14.643	0.004		217.45	3.62417	48.9	10.9	43.6	3.006	0.008	0.008	0.000	0.194	0.17	
236	1/27/2004	5:03:27 PM		25.461	21.385	24.99	25.342	23.822		49.588	50.037	13.064	37.244	-1.216	-7.43		44.41	0.057	14.643	0.004		218.45	3.64083	48.6	10.9	43.4	2.993	0.008	0.009	0.000	0.196	0.17	
237	1/27/2004	5:04:27 PM		25.467	21.396	25.036	25.418	23.573		49.671	50.262	12.99	37.363	-1.219	-7.433		41.238	0.057	14.643	0.004		219.45	3.6575	48.8	10.1	43.5	3.000	0.008	0.008	0.000	0.195	0.17	
238	1/27/2004	5:05:27 PM		25.463	21.417	25.076	25.464	23.528		49.994	50.59	13.26	37.34	-1.222	-7.433		46.632	0.057	14.643	0.003		220.45	3.67417	49.1	11.4	43.7	3.011	0.008	0.008	0.000	0.194	0.17	
239	1/27/2004	5:06:27 PM		25.464	21.438	25.118	25.45	23.504		49.362	50.376	13.148	36.891	-1.219	-6.285		43.165	0.062	14.643	0.003		221.45	3.69083	48.9	10.6	43.1	2.973	0.009	0.009	0.000	0.214	0.18	
240	1/27/2004	5:07:27 PM		25.45	21.449	25.134	25.351	23.671		49.521	50.182	12.924	37.262	-1.222	-7.473		44.281	0.059	14.643	0.003		222.45	3.7075	48.7	10.9	43.4	2.992	0.009	0.009	0.000	0.202	0.17	
241	1/27/2004	5:08:27 PM		25.441	21.46	25.155	25.312	23.772		49.955	50.592	13.229	37.361	-1.219	-7.47		45.821	0.057	14.643	0.004		223.45	3.72417	49.1	11.2	43.7	3.010	0.008	0.008	0.000	0.194	0.16	
242	1/27/2004	5:09:27 PM		25.446	21.461	25.175	25.262	23.522		48.781	50.202	12.975	36.538	-1.219	-5.259		43.386	0.029	14.643	0.004		224.45	3.74083	48.7	10.6	42.7	2.941	0.004	0.004	0.000	0.101	0.09	
243	1/27/2004	5:10:27 PM		25.727	21.487	25.221	25.338	23.197		46.332	50.032	12.908	34.159	-1.219	-1.639		43.224	0.016	14.643	0.004		225.45	3.7575	48.6	10.6	40.2	2.775	0.002	0.002	0.000	0.059	0.05	
244	1/27/2004	5:11:27 PM		25.424	21.488	25.233	25.329	23.188		49.266	50.03	12.9	37.18	-1.219	-7.421		43.226	0.05	14.643	0.004		226.45	3.77417	48.6	10.6	43.2	2.980	0.007	0.007	0.000	0.171	0.15	
245	1/27/2004	5:12:27 PM		25.524	21.519	25.273	25.345	23.229		49.565	50.279	13.064	37.219	-1.219	-7.47		46.306	0.057	14.643	0.004		227.45	3.79083	48.8	11.3	43.4	2.992	0.008	0.008	0.000	0.194	0.17	
246	1/27/2004	5:13:27 PM		25.545	21.515	25.274	25.315	23.365		49.698	50.403	13.17	37.217	-1.216	-7.462		44.897	0.057	14.643	0.004		228.45	3.8075	48.9	11.0	43.5	2.996	0.008	0.008	0.000	0.194	0.17	
247	1/27/2004	5:14:27 PM		25.56	21.525	25.289	25.276	23.406		49.648	50.354	13.158	37.178	-1.216	-7.462		45.166	0.057	14.643	0.004		229.45	3.82417	48.9	11.1	43.4	2.993	0.008	0.008	0.000	0.194	0.17	
248	1/27/2004	5:15:27 PM		25.57	21.53	25.314	25.346	23.325		49.662	50.544	13.055	37.164	-1.216	-7.464		43.605	0.057	14.643	0.004		230.45	3.84083	49.1	10.7	43.4	2.993	0.008	0.008	0.000	0.194	0.17	
249	1/27/2004	5:16:27 PM		25.586	21.547	25.34	25.362	23.231		49.685	50.49	13.114	37.232	-1.219	-7.47		43.737	0.057	14.643	0.004		231.45	3.8575	49.0	10.7	43.5	2.996	0.008	0.008	0.000	0.194	0.16	
250	1/27/2004	5:17:27 PM		25.582	21.547	25.346	25.368	23.242		49.739	50.675	13.135	37.16	-1.216	-7.467		43.457	0.057	14.643	0.004		232.45	3.87417	49.2	10.6	43.4	2.996	0.008	0.008	0.000	0.194	0.16	
251	1/27/2004	5:18:27 PM		25.588	21.548	25.367	25.328	23.032		49.54	50.418	13.026	37.067	-1.219	-7.467		43.695	0.057	14.643	0.004		233.45	3.89083	48.9	10.7	43.3	2.986	0.008	0.008	0.000	0.194	0.17	
252	1/27/2004	5:19:27 PM		25.604	21.559	25.393	25.284	23.138		49.499	50.267	13.079	37.152	-1.219	-7.47		44.632	0.056	14.643	0.004		234.45	3.9075	48.8	10.9	43.3	2.987	0.008	0.008	0.000	0.191	0.16	
253	1/27/2004	5:20:27 PM		25.599	21.57	25.403	25.32	23.264		49.395	50.238	13.051	37.106	-1.219	-7.473		43.259	0.057	14.643	0.004		235.45	3.92417	48.8	10.6	43.3	2.982	0.008	0.008	0.000	0.194	0.17	
254	1/27/2004	5:21:27 PM		25.6	21.57	25.419	25.325	23.25		49.229	50.153	12.844	37.073	-1.219	-7.473		45.622	0.056	14.643	0.004		236.45	3.94083	48.7	11.2	43.2	2.975	0.008	0.008	0.000	0.191	0.16	
255	1/27/2004	5:22:27 PM		25.595	21.576	25.419	25.266	23.1		49.353	50.196	12.993	37.162	-1.219	-7.476		43.172	0.057	14.643	0.004		237.45	3.9575	48.7	10.6	43.3	2.982	0.008	0.008	0.000	0.194	0.17	
256	1/27/2004	5:23:27 PM		25.606	21.587	25.441	25.267	23.046		49.579	50.53	13.065	37.043	-1.222	-7.473		46.014	0.056	14.643	0.003		238.45	3.97417	49.1	11.3	43.3	2.986	0.008	0.008	0.000	0.190	0.16	
257	1/27/2004	5:24:27 PM		25.586	21.566	25.43	25.291	23.236		49.521	50.43	13.152	37.129	-1.222	-7.473		45.12	0.056	14.643	0.003		239.45	3.99083	49.0	11.1	43.3	2.987	0.008	0.008	0.000	0.190	0.16	
258	1/27/2004	5:25:27 PM		25.601	21.591	25.45	25.362	23.211		49.436	50.227	13.117	37.03	-1.219	-7.473		43.616	0.056	14.643	0.004		240.45	4.0075	48.8	10.7	43.2	2.981	0.008	0.008	0.000	0.191	0.16	
259	1/27/2004	5:26:27 PM		25.601	21.582	25.451	25.337	23.061		49.573	50.43	13.191	37.026	-1.222	-7.473		43.098	0.056	14.643	0.004		241.45	4.02417	49.0	10.6	43.3	2.985	0.008	0.008	0.000	0.190	0.16	
260	1/27/2004	5:27:27 PM		25.612	21.608	25.491	25.373	23.011		49.418	50.356	13.177	36.977	-1.222	-7.476		42.158	0.056	14.643	0.003		242.45	4.04083	48.9	10.3	43.2	2.978	0.008	0.008	0.000	0.191	0.16	
261	1/27/2004	5:28:27 PM		25.627	21.613	25.507	25.328	23.012		49.322	50.327	13.079	36.963	-1.216	-7.473		42.661	0.056	14.643	0.004		243.45	4.0575	48.9	10.5	43.1	2.975	0.008	0.008	0.000	0.191	0.16	
262	1/27/2004	5:29:27 PM		25.638	21.624	25.517	25.389	23.158		49.355	50.345	13.084	37.022	-1.219	-7.47		43.701	0.056	14.643	0.004		244.45	4.07417	48.9	10.7	43.2	2.978	0.008	0.008	0.000	0.191	0.16	
263	1/27/2004	5:30:27 PM		25.649	21.624	25.538	25.404	23.123		49.233	50.244	13.016	36.905	-1.219	-7.47		45.65	0.056	14.643	0.004		245.45	4.09083	48.8	11.2	43.1	2.969	0.008	0.008	0.000	0.191	0.16	
264	1/27/2004	5:31:27 PM		25.654	21.619	25.543	25.435	23.088		49.364	50.397	13.125	36.932	-1.219	-7.47		43.958	0.055	14.643	0.004		246.45	4.1075	48.9	10.8	43.1	2.975	0.008	0.008	0.000	0.187	0.16	
265	1/27/2004	5:32:27 PM		25.659	21.62	25.543	25.365	23.033		49.416	50.343	13.252	36.858	-1.225	-7.476		44.335	0.055	14.643	0.003		247.45	4.12417	48.9	10.9	43.1	2.974	0.008	0.008	0.000	0.187	0.16	
266	1/27/2004	5:32:54 PM		25.675	21.636	25.569	25.381	22.909		49.482	50.449	13.199	36.983	-1.219	-7.473		45.887	0.055	14.643	0.004		247.90	4.13167	49.0	11.2	43.2	2.981	0.008	0.008	0.000	0.187	0.16	
267	1/27/2004	5:33:54 PM		25.665	21.626	25.559	25.346	22.593		49.353	50.403	13.184	36.903	-1.222	-7.476		42.2	0.055	14.643	0.004		248.90	4.14833	48.9	10.3	43.1	2.974	0.008	0.008	0.000	0.187	0.16	
268	1/27/2004	5:34:54 PM		25.67	21.616	25.564	25.371	22.719		49.511	50.534	13.245	36.887	-1.222	-7.418		42.821	0.056	14.643	0.004		249.90	4.165	49.1	10.5	43.2	2.978	0.008	0.008	0.000	0.190	0.16	
269	1/27/2004	5:35:54 PM		25.685	21.641	25.589	25.386	23.085		49.6	50.764	13.282	36.936	-1.219	-7.438		43.735	0.055	14.643	0.004		250.90	4.18167	49.3	10.7	43.3	2.983	0.008	0.008	0.000	0.186	0.16	
270	1/27/2004	5:36:54 PM		25.695	21.641	25.584	25.361	23.075		49.144	50.206	13.121	36.825	-1.219	-7.438		45.153	0.055	14.643	0.004		251.90	4.19833	48.7	11.1	43.0	2.964	0.008	0.008	0.000	0.188	0.16	
271	1/27/2004	5:37:54 PM		25.69	21.646	25.569	25.305	23.119		49.465	50.549	13.359	36.788	-1.219	-7.441		46.092	0.055	14.643	0.004		252.90	4.215	49.1	11.3	43.1	2.973	0.008	0.008	0.000	0.187	0.16	
272	1/27/2004	5:38:54 PM		25.71	21.651	25.584	25.295	23.014		49.48	50.718	13.334	36.803	-1.216	-7.441		43.916	0.055	14.643	0.004		253.90	4.23167	49.2	10.8	43.1	2.974	0.008	0.008	0.000	0.187	0.16	
273	1/27/2004	5:39:54 PM		25.7	21.641	25.209	25.295	23.741		49.09	50.2	13.213	36.69	-1.219	-7.444		46.213	0.054	14.643	0.004		254.90	4.24833	48.7	11.3	42.9	2.957	0.008	0.008	0.000	0.187	0.16	
274	1/27/2004	5:40:54 PM		25.705	21.651	24.378	25.356	24.197		49.117	50.254	13.276	36.487	-1.219	-7.45		43.048	0.052	14.643	0.003		255.90	4.265	48.8	10.5	42.8	2.951	0.008	0.008	0.000	0.184	0.16	
275	1/27/2004	5:41:54 PM		25.681	21.662	24.529	25.312	23.521		49.268	50.304	13.421	36.585	-1.219	-7.456		45.357	0.052	14.643	0.004		256.90	4.28167	48.8	11.1	42.9	2.960	0.008	0.008	0.000	0.183	0.16	
276	1/27/2004	5:42:54 PM		25.651	21.662	24.66	25.322	23.336		49.142	50.177	13.384	36.519	-1.219	-7.453		44.452	0.053	14.643	0.004		257.90	4.29833	48.7	10.9	42.8	2.953	0.008	0.008	0.000	0.186	0.16	
277	1/27/2004	5:43:54 PM		25.611	21.662	24.749	25.362	23.286		49.225	50.289	13.391	36.565	-1.219	-7.476		42.565	0.053	14.643	0.004		258.90	4.315	48.8	10.4	42.9	2.957	0.008	0.008	0.000	0.186	0.16	
278	1/27/2004	5:44:54 PM		25.587	21.668	24.835	25.303	23.202		48.988	50.066	13.217	36.589	-1.219	-7.476		43.553	0.053	14.643	0.004		259.90	4.33167	48.6	10.7	42.8	2.950	0.008	0.008	0.000	0.186	0.16	
279	1/27/2004	5:45:54 PM		25.567	21.679	24.921	25.323	23.047		49.472	50.6	13.451	36.628	-1.216	-7.47		46.678	0.053	14.643	0.004		260.90	4.34833	49.1	11.4	43.1	2.968	0.008	0.008	0.000	0.184	0.16	
280	1/27/2004	5:46:54 PM		25.532	21.663	25.186	25.333	23.192		49.237	50.424	13.323	36.675	-1.219	-7.378		46.428	0.051	14.643	0.004		261.90	4.365	49.0	11.4	43.0	2.962	0.008	0.008	0.000	0.176	0.15	

RUN # 1.03A; DEWATER FIRST HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	1/27/2004	5:47:54 PM		25.511	21.667	25.22	25.296	22.85		49.393	50.592	13.338	36.714	-1.219	-7.441		42.375	0.053	14.643	0.004		262.90	4.38167	49.1	10.4	43.1	2.968	0.008	0.008	0.000	0.182	0.16	
282	1/27/2004	5:48:54 PM		25.516	21.672	25.26	25.292	23.126		49.094	50.283	13.12	36.675	-1.216	-7.438		44.723	0.053	14.643	0.004		263.90	4.39833	48.8	11.0	42.9	2.957	0.008	0.008	0.000	0.183	0.16	
283	1/27/2004	5:49:54 PM		25.516	21.678	25.285	25.372	23.006		49.084	50.271	13.126	36.677	-1.216	-7.421		45.391	0.053	14.643	0.004		264.90	4.415	48.8	11.1	42.9	2.956	0.008	0.008	0.000	0.183	0.16	
284	1/27/2004	5:50:54 PM		25.521	21.678	25.32	25.397	22.805		48.926	50.132	13.089	36.665	-1.219	-7.424		45.81	0.053	14.643	0.004		265.90	4.43167	48.7	11.2	42.8	2.951	0.008	0.008	0.000	0.183	0.16	
285	1/27/2004	5:51:54 PM		25.532	21.683	25.351	25.363	22.801		49.078	50.31	13.248	36.63	-1.219	-7.424		44.905	0.053	14.643	0.004		266.90	4.44833	48.8	11.0	42.9	2.955	0.008	0.008	0.000	0.183	0.16	
286	1/27/2004	5:52:54 PM		25.537	21.668	25.376	25.368	22.861		49.075	50.308	13.166	36.632	-1.216	-7.421		45.203	0.053	14.643	0.004		267.90	4.465	48.8	11.1	42.9	2.955	0.008	0.008	0.000	0.182	0.16	
287	1/27/2004	5:53:54 PM		25.536	21.662	25.385	25.347	22.187		49.086	50.31	13.24	36.669	-1.219	-7.424		44.842	0.053	14.643	0.004		268.90	4.48167	48.8	11.0	42.9	2.956	0.008	0.008	0.000	0.182	0.16	
288	1/27/2004	5:54:54 PM		25.551	21.662	25.43	25.357	22.242		49.105	50.376	13.22	36.69	-1.219	-7.418		43.099	0.053	14.643	0.004		269.90	4.49833	48.9	10.6	42.9	2.958	0.008	0.008	0.000	0.182	0.15	
289	1/27/2004	5:55:54 PM		25.555	21.651	25.444	25.315	22.517		49.04	50.231	13.164	36.638	-1.219	-7.421		45.143	0.053	14.643	0.004		270.90	4.515	48.8	11.1	42.8	2.954	0.008	0.008	0.000	0.182	0.16	
290	1/27/2004	5:56:54 PM		25.569	21.64	25.463	25.27	22.452		48.833	50.101	13.068	36.558	-1.219	-7.421		45.045	0.053	14.643	0.004		271.90	4.53167	48.6	11.0	42.7	2.944	0.008	0.008	0.000	0.183	0.16	
291	1/27/2004	5:57:54 PM		25.574	21.634	25.483	25.284	22.672		49.474	50.685	13.437	36.721	-1.219	-7.421		43.261	0.053	14.643	0.004		272.90	4.54833	49.2	10.6	43.1	2.971	0.008	0.008	0.000	0.181	0.15	
292	1/27/2004	5:58:54 PM		25.593	21.639	25.492	25.374	22.581		49.005	50.186	13.239	36.581	-1.219	-7.418		47.206	0.053	14.643	0.004		273.90	4.565	48.7	11.6	42.8	2.950	0.008	0.008	0.000	0.182	0.15	
293	1/27/2004	5:59:54 PM		25.598	21.619	25.507	25.424	22.842		49.102	50.389	13.167	36.593	-1.219	-7.418		44.127	0.053	14.643	0.004		274.90	4.58167	48.9	10.8	42.8	2.954	0.008	0.008	0.000	0.182	0.15	
294	1/27/2004	6:00:54 PM		25.612	21.633	25.532	25.353	22.856		49.158	50.445	13.244	36.573	-1.216	-7.418		44.21	0.053	14.643	0.004		275.90	4.59833	49.0	10.8	42.9	2.955	0.008	0.008	0.000	0.182	0.15	
295	1/27/2004	6:01:54 PM		25.606	21.622	25.536	25.257	23.021		49.109	50.492	13.242	36.521	-1.219	-7.418		44.605	0.053	14.643	0.004		276.90	4.615	49.0	10.9	42.8	2.952	0.008	0.008	0.000	0.182	0.15	
296	1/27/2004	6:02:54 PM		25.637	21.633	25.561	25.288	23.262		49.144	50.48	13.303	36.562	-1.219	-7.418		44.392	0.053	14.643	0.004		277.90	4.63167	49.0	10.9	42.9	2.955	0.008	0.008	0.000	0.182	0.15	
297	1/27/2004	6:03:54 PM		25.641	21.632	25.571	25.292	23.296		49.405	50.745	13.412	36.616	-1.216	-7.415		44.385	0.053	14.643	0.004		278.90	4.64833	49.3	10.9	43.0	2.965	0.008	0.008	0.000	0.181	0.15	
298	1/27/2004	6:04:54 PM		25.657	21.633	25.586	25.197	23.051		49.262	50.604	13.381	36.589	-1.219	-7.418		44.116	0.053	14.643	0.004		279.90	4.665	49.1	10.8	42.9	2.960	0.008	0.008	0.000	0.181	0.15	
299	1/27/2004	6:05:54 PM		25.667	21.643	25.596	25.253	22.51		48.849	50.151	13.063	36.597	-1.219	-7.415		44.713	0.053	14.643	0.004		280.90	4.68167	48.7	11.0	42.7	2.946	0.008	0.008	0.000	0.182	0.15	
300	1/27/2004	6:06:54 PM		25.655	21.616	25.584	25.226	22.573		49.252	50.557	13.465	36.581	-1.222	-7.418		44.794	0.053	14.643	0.003		281.90	4.69833	49.1	11.0	42.9	2.959	0.008	0.008	0.000	0.181	0.15	
301	1/27/2004	6:07:54 PM		25.67	21.621	25.604	25.276	22.433		49.071	50.403	13.223	36.585	-1.219	-7.418		42.625	0.053	14.643	0.004		282.90	4.715	48.9	10.4	42.8	2.953	0.008	0.008	0.000	0.181	0.15	
302	1/27/2004	6:08:54 PM		25.685	21.636	25.629	25.251	22.829		49.202	50.621	13.35	36.517	-1.219	-7.415		42.408	0.053	14.643	0.004		283.90	4.73167	49.1	10.4	42.9	2.955	0.008	0.008	0.000	0.181	0.15	
303	1/27/2004	6:09:54 PM		25.684	21.625	25.638	25.2	22.753		48.831	50.151	13.241	36.476	-1.219	-7.415		44.736	0.052	14.643	0.004		284.90	4.74833	48.7	11.0	42.7	2.941	0.008	0.008	0.000	0.179	0.15	
304	1/27/2004	6:10:54 PM		25.689	21.614	25.648	25.204	23.238		49.405	50.731	13.573	36.573	-1.219	-7.415		46.713	0.052	14.643	0.004		285.90	4.765	49.3	11.4	43.0	2.964	0.008	0.008	0.000	0.177	0.15	
305	1/27/2004	6:11:54 PM		25.693	21.614	25.662	25.199	23.278		49.022	50.627	13.147	36.435	-1.219	-7.412		43.62	0.052	14.643	0.004		286.90	4.78167	49.2	10.7	42.7	2.946	0.008	0.008	0.000	0.178	0.15	
306	1/27/2004	6:12:54 PM		25.698	21.609	25.652	25.143	23.163		48.943	50.378	13.229	36.433	-1.225	-7.418		44.319	0.052	14.643	0.004		287.90	4.79833	48.9	10.9	42.7	2.943	0.008	0.008	0.000	0.178	0.15	
307	1/27/2004	6:13:54 PM		25.707	21.603	25.682	25.173	22.751		48.966	50.464	13.137	36.468	-1.219	-7.415		45.841	0.052	14.643	0.003		288.90	4.815	49.0	11.2	42.7	2.945	0.008	0.008	0.000	0.178	0.15	
308	1/27/2004	6:14:54 PM		25.717	21.613	25.687	25.238	22.525		49.022	50.439	13.351	36.487	-1.219	-7.41		42.711	0.052	14.643	0.004		289.90	4.83167	49.0	10.5	42.8	2.948	0.008	0.008	0.000	0.178	0.15	
309	1/27/2004	6:15:54 PM		25.727	21.608	25.696	25.228	22.399		49.061	50.575	13.33	36.392	-1.222	-7.41		41.1	0.052	14.643	0.004		290.90	4.84833	49.1	10.1	42.7	2.946	0.008	0.008	0.000	0.178	0.15	
310	1/27/2004	6:16:54 PM		25.742	21.613	25.716	25.258	22.555		49.279	50.714	13.49	36.511	-1.222	-7.41		44.346	0.052	14.643	0.004		291.90	4.865	49.2	10.9	42.9	2.957	0.008	0.008	0.000	0.177	0.15	
311	1/27/2004	6:17:54 PM		25.735	21.596	25.715	25.281	22.944		49.127	50.633	13.411	36.435	-1.219	-7.407		45.264	0.052	14.643	0.004		292.90	4.88167	49.2	11.1	42.8	2.950	0.008	0.008	0.000	0.178	0.15	
312	1/27/2004	6:18:54 PM		25.749	21.61	25.743	25.23	22.973		48.993	50.677	13.333	36.37	-1.219	-7.407		43.92	0.051	14.643	0.004		293.90	4.89833	49.2	10.8	42.7	2.943	0.008	0.007	0.000	0.174	0.15	
313	1/27/2004	6:19:54 PM		25.753	21.609	25.747	25.199	22.536		49.005	50.464	13.352	36.331	-1.219	-7.41		44.344	0.051	14.643	0.003		294.90	4.915	49.0	10.9	42.7	2.942	0.008	0.007	0.000	0.175	0.15	
314	1/27/2004	6:20:54 PM		25.747	21.593	25.742	25.188	23.007		49.391	50.849	13.691	36.456	-1.219	-7.401		43.134	0.052	14.643	0.004		295.90	4.93167	49.4	10.6	42.9	2.959	0.008	0.008	0.000	0.177	0.15	
315	1/27/2004	6:21:54 PM		25.769	21.609	25.763	25.234	22.707		49.036	50.551	13.453	36.331	-1.219	-7.404		44.473	0.051	14.643	0.004		296.90	4.94833	49.1	10.9	42.7	2.943	0.008	0.007	0.000	0.174	0.15	
316	1/27/2004	6:22:54 PM		25.763	21.604	25.767	25.314	22.741		48.959	50.472	13.441	36.3	-1.219	-7.401		44.648	0.051	14.643	0.004		297.90	4.965	49.0	10.9	42.6	2.939	0.008	0.007	0.000	0.175	0.15	
317	1/27/2004	6:23:54 PM		25.783	21.614	25.787	25.324	22.962		49.262	50.826	13.563	36.273	-1.216	-7.398		43.351	0.052	14.643	0.004		298.90	4.98167	49.4	10.6	42.8	2.949	0.008	0.008	0.000	0.177	0.15	
318	1/27/2004	6:24:54 PM		25.773	21.594	25.782	25.314	22.892		49.268	50.772	13.667	36.273	-1.219	-7.395		41.492	0.051	14.643	0.004		299.90	4.99833	49.3	10.2	42.8	2.949	0.008	0.007	0.000	0.174	0.15	
319	1/27/2004	6:25:54 PM		25.779	21.609	25.793	25.214	23.249		49.37	50.998	13.616	36.359	-1.214	-7.392		44.75	0.051	14.643	0.004		300.90	5.015	49.5	11.0	42.9	2.955	0.008	0.007	0.000	0.173	0.15	
320	1/27/2004	6:26:54 PM		25.789	21.61	25.793	25.23	23.184		49.418	50.986	13.746	36.329	-1.219	-7.401		44.782	0.05	14.643	0.004		301.90	5.03167	49.5	11.0	42.9	2.956	0.007	0.007	0.000	0.170	0.14	
321	1/27/2004	6:27:54 PM		25.799	21.619	25.823	25.289	22.867		49.194	50.847	13.538	36.279	-1.216	-7.392		42.485	0.051	14.643	0.004		302.90	5.04833	49.4	10.4	42.7	2.947	0.008	0.007	0.000	0.174	0.15	
322	1/27/2004	6:28:54 PM		25.799	21.605	25.808	25.23	23.174		49.202	50.859	13.569	36.32	-1.216	-7.392		45.652	0.051	14.643	0.004		303.90	5.065	49.4	11.2	42.8	2.948	0.008	0.007	0.000	0.174	0.15	
323	1/27/2004	6:29:54 PM		25.799	21.61	25.833	25.24	23.033		49.127	50.625	13.625	36.195	-1.214	-7.386		43.188	0.051	14.643	0.004		304.90	5.08167	49.2	10.6	42.7	2.941	0.008	0.007	0.000	0.174	0.15	
324	1/27/2004	6:30:54 PM		25.81	21.641	25.849	25.255	23.079		49.177	50.72	13.664	36.261	-1.214	-7.389		43.52	0.05	14.643	0.004		305.90	5.09833	49.2	10.7	42.7	2.945	0.007	0.007	0.000	0.170	0.15	
325	1/27/2004	6:31:54 PM		25.794	21.62	25.818	25.32	22.963		49.007	50.619	13.658	36.136	-1.219	-7.274		42.944	0.05	14.643	0.004		306.90	5.115	49.1	10.5	42.6	2.935	0.007	0.007	0.000	0.171	0.15	
326	1/27/2004	6:32:54 PM		25.805	21.615	25.829	25.295	23.34		49.225	50.862	13.721	36.148	-1.219	-7.386		43.172	0.051	14.643	0.004		307.90	5.13167	49.4	10.6	42.7	2.943	0.008	0.007	0.000	0.174	0.15	
327	1/27/2004	6:33:54 PM		25.805	21.626	25.83	25.266	23.075		49.272	50.988	13.684	36.16	-1.216	-7.386		44.817	0.05	14.643	0.003		308.90	5.14833	49.5	11.0	42.7	2.945	0.007	0.007	0.000	0.170	0.15	
328	1/27/2004	6:34:54 PM		25.805	21.616	25.845	25.221	22.864		48.986	50.584	13.622	36.166	-1.219	-7.389		43.29	0.05	14.643	0.004		309.90	5.165	49.1	10.6	42.6	2.935	0.007	0.007	0.000	0.171	0.15	
329	1/27/2004	6:35:54 PM		25.811	21.622	25.84	25.287	22.804		49.152	50.81	13.609	36.234	-1.219	-7.389		44.421	0.049	14.643	0.004		310.90	5.18167	49.3	10.9	42.7	2.944	0.007	0.007	0.000	0.167	0.14	
330	1/27/2004	6:36:54 PM		25.811	21.627	25.845	25.297	22.789		49.084	50.723	13.732	36.08	-1.219	-7.389		42.183	0.05	14.643	0.004		311.90	5.19833	49.3	10.3	42.6	2.936	0.007	0.007	0.000	0.171	0.15	
331	1/27/2004	6:37:54 PM		25.821	21.627	25.861	25.282	23.101		48.858	50.567	13.576	36.031	-1.219	-7.389		43.68	0.05	14.643	0.004		312.90	5.215	49.1	10.7	42.4	2.926	0.007	0.007	0.000	0.171	0.15	
332	1/27/2004	6:38:54 PM		25.821	21.627	25.776	25.237	23.677		48.934	50.596	13.62	36.033	-1.219	-7.392		43.755	0.049	14.643	0.004		313.90	5.23167	49.1	10.7	42.5	2.929	0.007	0.007	0.000	0.168	0.14	
333	1/27/2004	6:39:54 PM		25.816	21.632	25.41	25.226	23.807		48.97	50.681	13.729	35.969	-1.219	-7.386		45.011	0.049	14.643	0.004		314.90	5.24833	49.2	11.0	42.5	2.928	0.007	0.007	0.000	0.170	0.14	
334	1/27/2004	6:40:54 PM		25.816	21.647	25.476	25.257	23.777		49.134	50.685	13.888	35.996	-1.214	-7.384		42.227	0.049	14.643	0.004		315.90	5.265	49.2	10.3	42.6	2.935	0.007	0.007	0.000	0.169	0.14	
335	1/27/2004	6:41:54 PM		25.801	21.642	25.496	25.257	23.336		48.974	50.644	13.683	35.98	-1.216	-7.389		44.306	0.049	14.643	0.004		316.90	5.28167	49.2	10.9	42.5	2.929	0.007	0.007	0.000	0.170	0.14	
336	1/27/2004	6:42:54 PM		25.776	21.637	25.505	25.176	23.186		48.864	50.509	13.627	35.988	-1.219	-7.216		43.795	0.029	14.643	0.003		317.90	5.29833	49.0	10.7	42.4	2.925	0.004	0.004	0.000	0.100	0.09	
337	1/27/2004	6:43:54 PM		25.765	21.646	25.539	25.181	23.641		48.64	50.72	13.603	35.715	-1.216	-6.38		43.405	0.048	14.643	0.004		318.90	5.315	49.2	10.6	42.2	2.908	0.007	0.007	0.000	0.167	0.14	
338	1/27/2004	6:44:54 PM		25.756	21.662	25.57	25.201	23.191		48.878	50.909	13.81	35.717	-1.219	-6.383		43.411	0.049	14.643	0.004		319.90	5.33167	49.4	10.6	42.3	2.916	0.007	0.007	0.000	0.170	0.14	
339	1/27/2004	6:45:54 PM		25.746	21.657	25.601	25.212	23.367		48.822	50.932	13.83	35.668	-1.216	-6.386		44.045	0.049	14.643	0.004		320.90	5.34833	49.5	10.8	42.2	2.913	0.007	0.007	0.000	0.170	0.14	
340	1/27/2004	6:46:54 PM		25.746	21.667	25.62	25.226	23.145		48.872	50.959	13.857	35.688	-1.216	-6.383		44.671	0.048	14.643	0.004		321.90	5.365	49.5	10.9	42.3	2.915	0.007	0.007	0.000	0.166	0.14	
341	1/27/2004	6:47:54 PM		25.736	21.662	25.625	25.236	23.346		48.617	50.662	13.682	35.643	-1.219	-6.398		42.106	0.048	14.643	0.004		322.90	5.38167	49.2	10.3	42.1	2.905	0.007	0.007	0.000	0.167	0.14	
342	1/27/2004	6:48:54 PM		25.741	21.668	25.656	25.157	23.597		48.715	50.768	13.746	35.715	-1.219	-6.409		42.043	0.048	14.643	0.004		323.90	5.39833	49.3	10.3	42.2	2.911	0.007	0.007	0.000	0.166	0.14	
343	1/27/2004	6:49:54 PM		25.751	21.682	25.68	25.146	23.231		48.526	50.698	13.547	35.649	-1.219	-6.412		44.308	0.048	14.643	0.004		324.90	5.415	49.2	10.9	42.1	2.902	0.007	0.007	0.000	0.167	0.14	
344	1/27/2004	6:50:54 PM		25.735	21.676	25.69	25.141	23.36		48.756	50.928	13.747	35.647	-1.219	-6.412		44.169	0.048	14.643	0.004		325.90	5.43167	49.5	10.8	42.2	2.910	0.007	0.007	0.000	0.166	0.14	
345	1/27/2004	6:51:54 PM		25.746	21.687	25.695	25.206	23.607		48.947	50.973	13.888	35.744	-1.219	-6.418		44.494	0.048	14.643	0.004		326.90	5.44833	49.5	10.9	42.3	2.920	0.007	0.007	0.000	0.166	0.14	
346	1/27/2004	6:52:54 PM		25.74	21.671	25.699	25.175	23.26		48.387	50.493	13.579	35.625	-1.219	-6.415		41.828	0.048	14.643	0.004		327.90	5.465	49.0	10.3	42.0	2.896	0.007	0.007	0.000	0.167	0.14	
347	1/27/2004	6:53:54 PM		25.75	21.686	25.724	25.215	23.054		48.518	50.739	13.563	35.643	-1.219	-6.412		45.643	0.048	14.643	0.004		328.90	5.48167	49.3	11.2	42.1	2.901	0.007	0.007	0.000	0.167	0.14	
348	1/27/2004	6:54:54 PM		25.75	21.691	25.739	25.225	23.27		48.715	50.851	13.72	35.737	-1.219	-6.412		43.322	0.048	14.643	0.004		329.90	5.49833	49.4	10.6	42.2	2.911	0.007	0.007	0.000	0.166	0.14	
349	1/27/2004	6:55:54 PM		25.755	21.711	25.754	25.19	23.375		48.486	50.654	13.592	35.627	-1.219	-6.412		42.527	0.048	14.643	0.004		330.90	5.515	49.2	10.4	42.1	2.900	0.007	0.007	0.000	0.167	0.14	
350	1/27/2004	6:56:54 PM		25.759	21.706	25.768	25.21	23.194		48.474	50.716	13.562	35.582	-1.219	-6.409		45.42	0.048	14.643	0.004		331.90	5.53167	49.2	11.1	42.0	2.898	0.007	0.007	0.000	0.167	0.14	

RUN # 1.03A; DEWATER FIRST AND SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	1/27/2004	6:57:54 PM		25.769	21.715	25.778	25.164	23.259		48.408	50.468	13.592	35.684	-1.219	-6.412		44.771	0.048	14.643	0.004		332.90	5.54833	49.0	11.0	42.0	2.899	0.007	0.007	0.000	0.167	0.14	
352	1/27/2004	6:58:54 PM		25.774	21.715	25.783	25.154	23.269		48.48	50.642	13.486	35.713	-1.219	-6.412		48.205	0.048	14.643	0.004		333.90	5.565	49.2	11.8	42.1	2.902	0.007	0.007	0.000	0.166	0.14	
353	1/27/2004	6:59:54 PM		25.784	21.72	25.783	25.139	23.148		48.364	50.381	13.566	35.61	-1.225	-6.415		43.391	0.048	14.643	0.003		334.90	5.58167	48.9	10.6	42.0	2.895	0.007	0.007	0.000	0.167	0.14	
354	1/27/2004	7:00:54 PM		25.793	21.73	25.807	25.189	22.721		48.766	51	13.752	35.602	-1.216	-6.409		42.031	0.048	14.643	0.004		335.90	5.59833	49.5	10.3	42.2	2.908	0.007	0.007	0.000	0.166	0.14	
355	1/27/2004	7:01:54 PM		25.792	21.724	25.812	25.173	22.711		48.559	50.468	13.852	35.69	-1.219	-6.412		44.571	0.047	14.643	0.004		336.90	5.615	49.0	10.9	42.1	2.904	0.007	0.007	0.000	0.163	0.14	
356	1/27/2004	7:02:54 PM		25.802	21.739	25.827	25.188	23.152		48.636	50.789	13.719	35.672	-1.219	-6.409		43.918	0.048	14.643	0.004		337.90	5.63167	49.3	10.8	42.2	2.906	0.007	0.007	0.000	0.166	0.14	
357	1/27/2004	7:03:54 PM		25.802	21.724	25.836	25.132	22.69		48.679	50.919	13.711	35.594	-1.219	-6.412		40.23	0.047	14.643	0.004		338.90	5.64833	49.4	9.9	42.1	2.905	0.007	0.007	0.000	0.162	0.14	
358	1/27/2004	7:04:54 PM		25.8	21.722	25.845	25.096	22.558		48.88	50.998	13.861	35.692	-1.219	-6.409		42.554	0.047	14.643	0.004		339.90	5.665	49.5	10.4	42.3	2.915	0.007	0.007	0.000	0.162	0.14	
359	1/27/2004	7:05:54 PM		25.814	21.731	25.858	25.044	23.018		48.619	50.679	13.784	35.709	-1.219	-6.412		45.372	0.047	14.643	0.003		340.90	5.68167	49.2	11.1	42.2	2.907	0.007	0.007	0.000	0.162	0.14	
360	1/27/2004	7:06:54 PM		25.813	21.72	25.832	25.088	22.982		48.673	50.789	13.811	35.699	-1.214	-6.404		43.42	0.047	14.643	0.004		341.90	5.69833	49.3	10.6	42.2	2.909	0.007	0.007	0.000	0.162	0.14	
361	1/27/2004	7:07:54 PM		25.802	21.714	25.746	25.127	22.901		48.408	50.478	13.584	35.645	-1.219	-6.412		41.14	0.047	14.643	0.004		342.90	5.715	49.0	10.1	42.0	2.898	0.007	0.007	0.000	0.163	0.14	
362	1/27/2004	7:08:54 PM		25.811	21.713	25.701	25.127	23.296		48.657	50.835	13.779	35.586	-1.219	-6.409		42.831	0.047	14.643	0.004		343.90	5.73167	49.4	10.5	42.1	2.904	0.007	0.007	0.000	0.163	0.14	
363	1/27/2004	7:09:54 PM		25.805	21.707	25.645	25.076	22.964		48.632	50.967	13.716	35.54	-1.216	-6.409		43.363	0.047	14.643	0.004		344.90	5.74833	49.5	10.6	42.1	2.902	0.007	0.007	0.000	0.164	0.14	
364	1/27/2004	7:10:54 PM		25.81	21.722	25.61	25.091	22.744		48.489	50.72	13.672	35.563	-1.214	-6.406		43.63	0.047	14.643	0.004		345.90	5.765	49.2	10.7	42.0	2.898	0.007	0.007	0.000	0.164	0.14	
365	1/27/2004	7:11:54 PM		25.8	21.722	25.56	25.116	22.884		48.856	50.998	13.978	35.625	-1.222	-6.412		42.963	0.046	14.643	0.003		346.90	5.78167	49.5	10.5	42.2	2.912	0.007	0.007	0.000	0.160	0.14	
366	1/27/2004	7:12:54 PM		25.8	21.717	25.525	25.146	22.884		48.825	51.139	13.907	35.575	-1.219	-6.409		44.644	0.047	14.643	0.004		347.90	5.79833	49.7	10.9	42.2	2.910	0.007	0.007	0.000	0.164	0.14	
367	1/27/2004	7:13:54 PM		25.78	21.701	25.484	25.165	23.079		48.675	50.967	13.837	35.462	-1.216	-6.412		44.588	0.046	14.643	0.004		348.90	5.815	49.5	10.9	42.1	2.900	0.007	0.007	0.000	0.161	0.14	
368	1/27/2004	7:14:54 PM		25.765	21.717	25.454	25.161	23.185		48.912	51.185	14.006	35.551	-1.219	-6.412		43.628	0.046	14.643	0.004		349.90	5.83167	49.7	10.7	42.2	2.912	0.007	0.007	0.000	0.160	0.14	
369	1/27/2004	7:15:54 PM		25.745	21.702	25.404	25.031	22.904		48.744	50.953	13.914	35.569	-1.219	-6.406		43.812	0.046	14.643	0.003		350.90	5.84833	49.5	10.7	42.2	2.907	0.007	0.007	0.000	0.161	0.14	
370	1/27/2004	7:16:54 PM		25.745	21.711	25.404	25.075	23.27		48.54	50.774	13.876	35.438	-1.219	-6.404		44.327	0.046	14.643	0.004		351.90	5.865	49.3	10.9	42.0	2.895	0.007	0.007	0.000	0.161	0.14	
371	1/27/2004	7:17:54 PM		25.73	21.716	25.379	25.08	23.32		48.432	50.667	13.736	35.46	-1.219	-6.404		43.512	0.046	14.643	0.004		352.90	5.88167	49.2	10.7	41.9	2.892	0.007	0.007	0.000	0.162	0.14	
372	1/27/2004	7:18:54 PM		25.714	21.715	24.942	25.049	23.439		48.872	51.129	14.119	35.405	-1.219	-6.406		43.315	0.045	14.643	0.004		353.90	5.89833	49.7	10.6	42.1	2.905	0.007	0.007	0.000	0.159	0.14	
373	1/27/2004	7:19:54 PM		25.698	21.71	24.967	25.073	23.128		48.837	51.009	14.1	35.376	-1.219	-6.406		42.327	0.045	14.643	0.004		354.90	5.915	49.5	10.4	42.1	2.903	0.007	0.007	0.000	0.159	0.14	
374	1/27/2004	7:20:54 PM		25.677	21.709	24.971	24.957	23.142		48.885	51.118	14.073	35.452	-1.219	-6.406		43.434	0.045	14.643	0.004		355.90	5.93167	49.6	10.6	42.2	2.907	0.007	0.007	0.000	0.159	0.14	
375	1/27/2004	7:21:54 PM		25.647	21.718	24.98	24.992	23.337		48.665	50.76	14.007	35.465	-1.216	-6.406		43.597	0.045	14.643	0.004		356.90	5.94833	49.3	10.7	42.1	2.900	0.007	0.007	0.000	0.160	0.14	
376	1/27/2004	7:22:54 PM		25.626	21.718	24.99	25.001	23.141		48.686	50.971	13.91	35.387	-1.219	-6.406		43.249	0.045	14.643	0.004		357.90	5.965	49.5	10.6	42.0	2.898	0.007	0.007	0.000	0.160	0.14	
377	1/27/2004	7:23:54 PM		25.596	21.712	24.984	25.046	23.085		48.768	51.011	14.021	35.411	-1.216	-6.404		43.399	0.045	14.643	0.004		358.90	5.98167	49.5	10.6	42.1	2.902	0.007	0.007	0.000	0.159	0.14	
378	1/27/2004	7:24:54 PM		25.566	21.697	24.954	25.001	23.115		48.777	51.052	14.052	35.428	-1.225	-6.406		43.966	0.045	14.643	0.003		359.90	5.99833	49.6	10.8	42.1	2.903	0.007	0.007	0.000	0.160	0.14	
379	1/27/2004	7:25:54 PM		25.545	21.711	24.969	25.055	23.285		48.71	50.951	14.03	35.415	-1.219	-6.401		44.454	0.045	14.643	0.004		360.90	6.015	49.5	10.9	42.1	2.900	0.007	0.007	0.000	0.160	0.14	
380	1/27/2004	7:26:54 PM		25.526	21.707	24.964	25.096	23.636		48.936	51.222	14.158	35.409	-1.222	-6.401		44.248	0.045	14.643	0.004		361.90	6.03167	49.7	10.8	42.2	2.908	0.007	0.007	0.000	0.159	0.14	
381	1/27/2004	7:27:54 PM		25.506	21.717	24.959	25.026	23.391		49.009	51.249	14.158	35.528	-1.219	-6.401		42.832	0.045	14.643	0.003		362.90	6.04833	49.8	10.5	42.3	2.914	0.007	0.007	0.000	0.159	0.14	
382	1/27/2004	7:28:54 PM		25.491	21.707	24.959	25.011	23.611		48.742	51.052	13.877	35.524	-1.222	-6.401		44.598	0.045	14.643	0.004		363.90	6.065	49.6	10.9	42.1	2.905	0.007	0.007	0.000	0.159	0.14	
383	1/27/2004	7:29:54 PM		25.475	21.711	24.959	25.01	23.375		48.92	51.187	14.145	35.444	-1.219	-6.395		45.979	0.045	14.643	0.004		364.90	6.08167	49.7	11.3	42.2	2.908	0.007	0.007	0.000	0.159	0.14	
384	1/27/2004	7:30:54 PM		25.455	21.706	24.938	24.94	23.109		49.007	51.39	14.115	35.561	-1.219	-6.398		43.084	0.045	14.643	0.003		365.90	6.09833	49.9	10.6	42.3	2.915	0.007	0.007	0.000	0.159	0.14	
385	1/27/2004	7:31:54 PM		25.455	21.732	24.974	25.07	23.29		49.022	51.351	14.149	35.547	-1.216	-6.398		43.449	0.045	14.643	0.004		366.90	6.115	49.9	10.6	42.3	2.915	0.007	0.007	0.000	0.159	0.14	
386	1/27/2004	7:32:54 PM		25.425	21.711	24.943	25.01	23.29		48.426	51.009	13.955	35.175	-1.219	-5.727		44.317	0.077	14.643	0.004		367.90	6.13167	49.5	10.9	41.8	2.882	0.011	0.011	0.000	0.275	0.23	
387	1/27/2004	7:33:54 PM		25.405	21.716	24.933	25.065	23.265		49.179	50.938	13.897	36.035	-1.219	-7.742		44	0.049	14.643	0.003		368.90	6.14833	49.5	10.8	42.6	2.938	0.007	0.007	0.000	0.172	0.15	
388	1/27/2004	7:34:54 PM		25.394	21.711	24.933	24.984	23.62		48.924	50.89	13.672	35.98	-1.219	-7.337		44.792	0.045	14.643	0.003		369.90	6.165	49.4	11.0	42.5	2.927	0.007	0.007	0.000	0.158	0.13	
389	1/27/2004	7:35:54 PM		25.389	21.715	24.932	24.979	23.354		49.129	51.089	14.008	35.848	-1.219	-7.389		42.913	0.046	14.643	0.004		370.90	6.18167	49.6	10.5	42.5	2.929	0.007	0.007	0.000	0.162	0.14	
390	1/27/2004	7:36:54 PM		25.384	21.725	24.942	25.039	23.78		49.208	51.1	14.049	35.922	-1.219	-7.6		43.153	0.046	14.643	0.004		371.90	6.19833	49.6	10.6	42.6	2.935	0.007	0.007	0.000	0.161	0.14	
391	1/27/2004	7:37:54 PM		25.378	21.714	24.931	25.073	23.228		48.426	51.137	14.078	35.054	-1.219	-5.143		43.718	0.024	14.643	0.004		372.90	6.215	49.7	10.7	41.7	2.878	0.004	0.004	0.000	0.086	0.07	
392	1/27/2004	7:38:54 PM		25.387	21.718	24.93	25.037	23.582		46.707	50.949	13.918	33.435	-1.219	-1.593		43.424	0.017	14.643	0.004		373.90	6.23167	49.5	10.6	40.1	2.763	0.003	0.003	0.000	0.063	0.05	
393	1/27/2004	7:39:54 PM		25.606	21.707	24.919	24.981	23.506		44.142	50.71	13.855	31.001	1.34	1.546		42.656	0.01	14.643	0.004		374.90	6.24833	49.2	10.5	37.6	2.590	0.001	0.001	0.000	0.040	0.03	
394	1/27/2004	7:40:54 PM		25.615	21.711	24.933	24.985	23.199		40.767	50.953	13.907	27.625	5.028	5.209		44.014	0.01	14.643	0.004		375.90	6.265	49.5	10.8	34.2	2.358	0.001	0.001	0.000	0.044	0.04	
395	1/27/2004	7:41:54 PM		25.503	21.715	24.912	25.019	21.878		-7.293	0.529	1.177	-8.685	3.526	7.325		-0.073	0.003	14.643	0.004		376.90	6.28167	-0.9	0.0	-8.0	-0.551	0.000	0.000	0.000	-0.056	-0.05	
396	1/28/2004	10:10:09 AM		18.247	13.599	21.748	19.278	12.906		49.596	51.203	14.746	35.618	-1.208	-6.672		40.708	0.045	14.643	0.004		377.90	6.29833	49.7	10.0	42.6	2.938	0.007	0.007	0.000	0.173	0.15	
397	1/28/2004	10:11:09 AM		18.466	13.616	22.951	19.294	12.912		49.694	51.284	14.709	35.699	-1.208	-6.95		41.401	0.051	14.643	0.004		378.90	6.315	49.8	10.1	42.7	2.944	0.008	0.008	0.000	0.189	0.16	
398	1/28/2004	10:12:09 AM		18.77	13.632	22.877	19.275	12.847		49.855	51.475	14.829	35.715	-1.208	-6.985		44.736	0.045	14.643	0.004		379.90	6.33167	50.0	11.0	42.8	2.950	0.007	0.007	0.000	0.167	0.14	
399	1/28/2004	10:13:09 AM		19.068	13.632	22.334	19.321	12.75		49.909	51.552	14.887	35.653	-1.208	-6.918		43.067	0.044	14.643	0.004		380.90	6.34833	50.1	10.6	42.8	2.950	0.007	0.007	0.000	0.165	0.14	
400	1/28/2004	10:14:09 AM		19.347	13.643	22.335	19.256	13.418		50.426	52.001	21.377	29.724	-1.208	-6.901		54.598	0.04	14.643	0.004		381.90	6.365	50.5	13.4	40.1	2.763	0.006	0.006	0.000	0.161	0.14	
401	1/28/2004	10:15:09 AM		19.595	13.67	22.371	19.313	13.679		51.572	53.357	19.576	32.657	-1.208	-7.008		49.548	0.003	14.643	0.004		382.90	6.38167	51.9	12.1	42.1	2.904	0.000	0.000	0.000	0.011	0.01	
402	1/28/2004	10:16:09 AM		19.819	13.698	22.55	19.376	14.007		49.31	53.359	19.04	30.802	-1.144	20.022		50.824	0.003	14.643	0.004		383.90	6.39833	51.9	12.5	40.1	2.762	0.000	0.000	0.000	0.012	0.01	
403	1/28/2004	10:17:09 AM		21.272	13.715	22.682	19.418	14.217		45.618	53.231	18.761	27.543	2.646	19.762		44.381	0.003	14.643	0.004		384.90	6.415	51.8	10.9	36.6	2.522	0.000	0.000	0.000	0.013	0.01	
404	1/28/2004	10:18:09 AM		21.098	13.738	22.89	19.425	14.072		40.259	53.479	18.725	22.369	8.285	93.869		49.659	0.003	14.643	0.004		385.90	6.43167	52.0	12.2	31.3	2.159	0.000	0.000	0.000	0.015	0.01	
405	1/28/2004	10:19:09 AM		21.815	13.761	22.913	19.408	14.192		46.151	51.97	12.81	33.852	0.665	0.569		51.2	0.183	14.643	0.004		386.90	6.44833	50.5	12.5	40.0	2.758	0.027	0.029	0.001	0.724	0.62	
406	1/28/2004	10:20:09 AM		22.657	13.784	23.147	19.471	14.357		47.126	52.716	15.318	32.341	0.431	0.601		52.691	0.098	14.643	0.004		387.90	6.465	51.2	12.9	39.7	2.739	0.015	0.015	0.000	0.388	0.33	
407	1/28/2004	10:21:09 AM		22.911	13.818	23.305	19.509	14.457		47.916	53.458	16.684	31.766	0.373	0.621		47.527	0.076	14.643	0.004		388.90	6.48167	52.0	11.6	39.8	2.747	0.011	0.012	0.000	0.298	0.25	
408	1/28/2004	10:22:09 AM		23.179	13.835	23.238	19.567	14.5		47.79	53.382	17.127	31.231	0.373	0.624		41.839	0.07	14.643	0.004		389.90	6.49833	51.9	10.3	39.5	2.724	0.010	0.011	0.000	0.278	0.24	
409	1/28/2004	10:23:09 AM		23.339	13.86	23.327	19.587	14.839		47.933	53.539	17.364	31.106	0.373	0.627		44.951	0.061	14.643	0.004		390.90	6.515	52.1	11.0	39.5	2.725	0.009	0.010	0.000	0.241	0.21	
410	1/28/2004	10:24:09 AM		23.463	13.889	23.531	19.626	15.051		48.15	53.798	17.542	31.048	0.373	0.676		50.866	0.065	14.643	0.004		391.90	6.53167	52.3	12.5	39.6	2.730	0.010	0.010	0.000	0.255	0.22	
411	1/28/2004	10:25:09 AM		23.641	13.918	23.58	19.614	14.922		48.111	53.724	17.554	31.05	0.425	0.696		52.429	0.058	14.643	0.004		392.90	6.54833	52.3	12.8	39.6	2.729	0.009	0.009	0.000	0.227	0.19	
412	1/28/2004	10:26:09 AM		23.766	13.948	23.765	19.608	14.744		48.364	54.053	17.457	31.362	0.428	0.714		50.193	0.059	14.643	0.004		393.90	6.565	52.6	12.3	39.9	2.748	0.009	0.009	0.000	0.229	0.19	
413	1/28/2004	10:27:09 AM		23.824	13.966	23.547	19.596	15.351		48.377	54.016	17.314	31.637	0.457	0.737		47.642	0.055	14.643	0.004		394.90	6.58167	52.5	11.7	40.0	2.758	0.008	0.009	0.000	0.214	0.18	
414	1/28/2004	10:28:09 AM		23.924	14.022	21.818	19.686	15.66		48.965	54.596	16.875	32.663	0.489	0.725		49.859	0.057	14.643	0.004		395.90	6.59833	53.1	12.2	40.8	2.814	0.008	0.009	0.000	0.228	0.19	
415	1/28/2004	10:29:09 AM		23.897	14.025	23.58	19.68	15.384		48.217	53.89	17.134	31.625	0.489	0.754		42.623	0.056	14.643	0.004		396.90	6.615	52.4	10.4	39.9	2.752	0.008	0.009	0.000	0.218	0.19	
416	1/28/2004	10:30:09 AM		23.936	14.06	23.755	19.704	15.596		48.414	54.122	17.267	31.647	0.558	0.795		49.41	0.054	14.643	0.004		397.90	6.63167	52.6	12.1	40.0	2.760	0.008	0.008	0.000	0.208	0.18	
417	1/28/2004	10:31:09 AM		22.239	14.088	23.903	19.717	15.478		54.088	54.453	17.316	37.359	-1.208	-5.869		45.23	0.14	14.643	0.004		398.90	6.64833	53.0	11.1	45.7	3.152	0.021	0.022	0.000	0.471	0.40	
418	1/28/2004	10:32:09 AM		22.197	14.113	24.048	19.762	15.345		54.567	54.472	17.35	37.816	-1.211	-6.707		49.921	0.074	14.643	0.004		399.90	6.665	53.0	12.2	46.2	3.185	0.011	0.011	0.000	0.245	0.21	
419	1/28/2004	10:33:09 AM		22.512	14.142	24.172	19.77	15.617		54.959	54.87	16.943	38.565	-1.211	-6.776		45.914	0.065	14.643	0.004		400.90	6.68167	53.4	11.3	46.8	3.224	0.010	0.010	0.000	0.212	0.18	
420	1/28/2004	10:34:09 AM		22.646	14.181	24.286	19.829	15.586		55.001	54.934	16.921	38.697	-1.211	-6.785		46.256	0.055	14.643	0.004		401.90	6.69833	53.5	11.3	46.8	3.230	0.008	0.008	0.000	0.179	0.15	

RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	1/28/2004	10:35:09 AM		22.73	14.205	24.409	19.899	15.665		55.036	54.829	16.909	38.75	-1.211	-6.967		45.105	0.062	14.643	0.004		402.90	6.715	53.4	11.1	46.9	3.233	0.009	0.009	0.000	0.200	0.17	
422	1/28/2004	10:36:09 AM		22.799	14.224	24.478	19.948	15.669		55.084	54.878	16.955	38.695	-1.214	-6.961		45.606	0.058	14.643	0.004		403.90	6.73167	53.4	11.2	46.9	3.233	0.009	0.009	0.000	0.187	0.16	
423	1/28/2004	10:37:09 AM		22.867	14.252	24.561	19.89	15.545		55.503	55.312	17.295	38.678	-1.211	-6.953		42.813	0.055	14.643	0.004		404.90	6.74833	53.8	10.5	47.1	3.247	0.008	0.008	0.000	0.176	0.15	
424	1/28/2004	10:38:09 AM		22.922	14.303	24.716	19.93	15.788		52.69	52.482	20.354	32.932	-1.208	-6.944		54.838	0.051	14.643	0.004		405.90	6.765	51.0	13.4	42.8	2.952	0.008	0.008	0.000	0.179	0.15	
425	1/28/2004	10:39:09 AM		23.02	14.326	24.809	19.938	16.1		53.354	53.206	19.945	33.884	-1.216	-6.924		51.886	0.051	14.643	0.004		406.90	6.78167	51.7	12.7	43.6	3.007	0.008	0.008	0.000	0.175	0.15	
426	1/28/2004	10:40:09 AM		23.104	14.355	24.928	19.906	16.068		53.263	53.065	19.584	34.319	-1.211	-6.892		45.99	0.052	14.643	0.004		407.90	6.79833	51.6	11.3	43.8	3.019	0.008	0.008	0.000	0.177	0.15	
427	1/28/2004	10:41:09 AM		23.177	14.389	25.046	19.909	15.793		53.385	53.22	19.155	34.771	-1.211	-6.878		48.42	0.052	14.643	0.004		408.90	6.815	51.7	11.9	44.1	3.039	0.008	0.008	0.000	0.176	0.15	
428	1/28/2004	10:42:09 AM		23.251	14.423	25.095	19.913	16.111		53.302	53.181	19.001	34.859	-1.214	-6.828		49.723	0.05	14.643	0.004		409.90	6.83167	51.7	12.2	44.1	3.039	0.007	0.007	0.000	0.169	0.14	
429	1/28/2004	10:43:09 AM		23.299	14.442	25.138	19.926	16.225		53.202	53.036	18.908	34.886	-1.214	-6.82		52.095	0.054	14.643	0.004		410.90	6.84833	51.6	12.8	44.0	3.037	0.008	0.008	0.000	0.182	0.15	
430	1/28/2004	10:44:09 AM		23.328	14.476	25.162	19.975	16.163		53.354	53.208	19.044	34.931	-1.211	-6.785		48.073	0.047	14.643	0.004		411.90	6.865	51.7	11.8	44.1	3.043	0.007	0.007	0.000	0.158	0.13	
431	1/28/2004	10:45:09 AM		23.332	14.51	25.2	20.02	16.486		53.325	53.17	18.923	34.964	-1.211	-6.863		49.058	0.058	14.643	0.004		412.90	6.88167	51.7	12.0	44.1	3.044	0.009	0.009	0.000	0.195	0.17	
432	1/28/2004	10:46:09 AM		23.391	14.55	25.249	20.053	16.596		53.468	53.371	19.024	34.962	-1.211	-6.739		48.586	0.055	14.643	0.004		413.90	6.89833	51.9	11.9	44.2	3.048	0.008	0.008	0.000	0.184	0.16	
433	1/28/2004	10:47:09 AM		23.469	14.583	25.282	20.112	16.239		53.526	53.401	18.785	35.331	-1.211	-6.831		50.153	0.05	14.643	0.004		414.90	6.915	51.9	12.3	44.4	3.063	0.007	0.007	0.000	0.166	0.14	
434	1/28/2004	10:48:09 AM		23.488	14.607	25.336	20.1	16.552		53.636	53.56	18.583	35.577	-1.211	-6.788		49.206	0.051	14.643	0.004		415.90	6.93167	52.1	12.1	44.6	3.075	0.008	0.008	0.000	0.169	0.14	
435	1/28/2004	10:49:09 AM		23.501	14.636	25.379	20.185	16.748		53.624	53.587	18.519	35.575	-1.211	-6.748		49.258	0.052	14.643	0.004		416.90	6.94833	52.1	12.1	44.6	3.075	0.008	0.008	0.000	0.172	0.15	
436	1/28/2004	10:50:09 AM		23.529	14.665	25.427	20.203	16.609		53.213	53.185	18.195	35.59	-1.211	-6.724		50.049	0.052	14.643	0.004		417.90	6.965	51.7	12.3	44.4	3.061	0.008	0.008	0.000	0.173	0.15	
437	1/28/2004	10:51:09 AM		23.553	14.689	25.461	20.171	16.39		53.426	53.316	18.477	35.575	-1.211	-6.745		49.327	0.051	14.643	0.004		418.90	6.98167	51.8	12.1	44.5	3.068	0.008	0.008	0.000	0.169	0.14	
438	1/28/2004	10:52:09 AM		23.591	14.722	25.494	20.124	16.743		53.706	53.562	18.305	35.992	-1.214	-6.759		49.538	0.052	14.643	0.004		419.90	6.99833	52.1	12.1	44.8	3.092	0.008	0.008	0.000	0.170	0.15	
439	1/28/2004	10:53:09 AM		23.618	14.745	25.541	20.161	16.872		53.767	53.689	18.026	36.347	-1.211	-6.748		48.493	0.054	14.643	0.004		420.90	7.015	52.2	11.9	45.1	3.107	0.008	0.008	0.000	0.176	0.15	
440	1/28/2004	10:54:09 AM		23.647	14.79	25.575	20.16	16.663		53.698	53.647	17.93	36.353	-1.211	-6.701		51.263	0.048	14.643	0.004		421.90	7.03167	52.2	12.6	45.0	3.104	0.007	0.007	0.000	0.156	0.13	
441	1/28/2004	10:55:09 AM		23.664	14.797	25.587	20.157	16.852		53.65	53.629	17.892	36.363	-1.211	-6.745		49.172	0.052	14.643	0.004		422.90	7.04833	52.2	12.1	45.0	3.103	0.008	0.008	0.000	0.169	0.14	
442	1/28/2004	10:56:09 AM		23.691	14.829	25.614	20.2	16.798		53.673	53.629	17.916	36.376	-1.211	-6.785		50.021	0.053	14.643	0.004		423.90	7.065	52.2	12.3	45.0	3.104	0.008	0.008	0.000	0.172	0.15	
443	1/28/2004	10:57:09 AM		23.728	14.846	24.279	20.231	17.063		53.781	53.726	17.946	36.359	-1.214	-6.748		51.283	0.044	14.643	0.004		424.90	7.08167	52.3	12.6	45.1	3.107	0.007	0.007	0.000	0.149	0.13	
444	1/28/2004	10:58:09 AM		23.759	14.878	24.18	20.293	17.838		53.866	53.821	17.263	37.172	-1.211	-6.782		35.41	0.051	14.643	0.004		425.90	7.09833	52.3	8.7	45.5	3.138	0.008	0.008	0.000	0.171	0.15	
445	1/28/2004	10:59:09 AM		23.766	14.895	24.994	20.285	17.588		53.947	53.91	18.143	36.345	-1.211	-6.753		48.273	0.051	14.643	0.004		426.90	7.115	52.4	11.8	45.1	3.113	0.008	0.008	0.000	0.168	0.14	
446	1/28/2004	11:00:09 AM		23.785	14.95	25.062	20.339	17.414		53.773	53.67	18.042	36.322	-1.208	-6.782		49.364	0.048	14.643	0.004		427.90	7.13167	52.2	12.1	45.0	3.106	0.007	0.007	0.000	0.159	0.13	
447	1/28/2004	11:01:09 AM		23.769	14.974	25.096	20.399	17.302		53.792	53.73	18.064	36.331	-1.211	-6.73		48.841	0.05	14.643	0.004		428.90	7.14833	52.3	12.0	45.1	3.107	0.007	0.007	0.000	0.165	0.14	
448	1/28/2004	11:02:09 AM		23.747	14.993	25.11	20.418	16.906		53.624	53.55	17.942	36.337	-1.211	-6.768		49.327	0.05	14.643	0.004		429.90	7.165	52.1	12.1	45.0	3.101	0.007	0.007	0.000	0.165	0.14	
449	1/28/2004	11:03:09 AM		23.736	15.037	25.138	20.441	17.496		53.736	53.709	17.948	36.37	-1.214	-6.707		48.876	0.052	14.643	0.004		430.90	7.18167	52.2	12.0	45.1	3.106	0.008	0.008	0.000	0.171	0.15	
450	1/28/2004	11:04:09 AM		23.713	15.065	25.161	20.525	17.554		53.947	53.952	18.076	36.382	-1.211	-6.701		49.437	0.053	14.643	0.004		431.90	7.19833	52.5	12.1	45.2	3.114	0.008	0.008	0.000	0.174	0.15	
451	1/28/2004	11:05:09 AM		23.722	15.104	25.209	20.553	17.497		53.883	53.9	17.992	36.37	-1.208	-6.713		50.95	0.052	14.643	0.004		432.90	7.215	52.4	12.5	45.1	3.111	0.008	0.008	0.000	0.171	0.15	
452	1/28/2004	11:06:09 AM		23.715	15.123	25.213	20.572	17.986		53.866	53.85	17.938	36.464	-1.211	-6.722		47.712	0.048	14.643	0.004		433.90	7.23167	52.4	11.7	45.2	3.114	0.007	0.007	0.000	0.158	0.13	
453	1/28/2004	11:07:09 AM		23.718	15.162	25.236	20.656	17.944		53.825	53.788	17.878	36.474	-1.211	-6.768		46.828	0.054	14.643	0.004		434.90	7.24833	52.3	11.5	45.1	3.113	0.008	0.008	0.000	0.177	0.15	
454	1/28/2004	11:08:09 AM		23.733	15.192	25.251	20.67	17.746		54.063	54.066	17.944	36.593	-1.216	-6.794		47.871	0.054	14.643	0.003		435.90	7.265	52.6	11.7	45.3	3.125	0.008	0.008	0.000	0.176	0.15	
455	1/28/2004	11:09:09 AM		23.736	15.221	25.274	20.759	17.79		54.022	53.973	17.981	36.563	-1.214	-6.794		47.335	0.054	14.643	0.004		436.90	7.28167	52.5	11.6	45.3	3.123	0.008	0.008	0.000	0.176	0.15	
456	1/28/2004	11:10:09 AM		23.75	15.261	25.288	20.784	18.042		53.939	53.906	17.974	36.554	-1.214	-6.719		43.668	0.052	14.643	0.004		437.90	7.29833	52.4	10.7	45.2	3.120	0.008	0.008	0.000	0.170	0.14	
457	1/28/2004	11:11:09 AM		23.753	15.289	25.296	20.832	18.055		53.883	53.873	17.833	36.581	-1.214	-6.701		49.725	0.051	14.643	0.004		438.90	7.315	52.4	12.2	45.2	3.119	0.008	0.008	0.000	0.167	0.14	
458	1/28/2004	11:12:09 AM		23.771	15.317	25.314	20.88	18.462		53.644	53.645	17.603	36.718	-1.214	-6.687		48.259	0.049	14.643	0.004		439.90	7.33167	52.2	11.8	45.2	3.115	0.007	0.007	0.000	0.160	0.14	
459	1/28/2004	11:13:09 AM		23.784	15.356	25.322	20.848	18.682		53.827	53.734	17.718	36.821	-1.211	-6.75		49.644	0.045	14.643	0.004		440.90	7.34833	52.3	12.2	45.3	3.125	0.007	0.007	0.000	0.147	0.12	
460	1/28/2004	11:14:09 AM		23.781	15.374	25.304	20.815	18.012		54.032	54.074	17.734	36.796	-1.214	-6.733		46.807	0.047	14.643	0.004		441.90	7.365	52.6	11.5	45.4	3.131	0.007	0.007	0.000	0.153	0.13	
461	1/28/2004	11:15:09 AM		23.805	15.423	25.333	20.788	17.955		53.798	53.776	17.668	36.745	-1.214	-6.75		50.887	0.051	14.643	0.004		442.90	7.38167	52.3	12.5	45.3	3.121	0.008	0.008	0.000	0.166	0.14	
462	1/28/2004	11:16:09 AM		23.827	15.45	25.35	20.846	18.018		53.804	53.792	17.715	36.739	-1.211	-6.719		48.985	0.052	14.643	0.004		443.90	7.39833	52.3	12.0	45.3	3.121	0.008	0.008	0.000	0.170	0.14	
463	1/28/2004	11:17:09 AM		23.849	15.488	25.377	20.883	18.167		53.872	53.948	17.59	36.844	-1.208	-6.695		50.777	0.051	14.643	0.004		444.90	7.415	52.5	12.4	45.4	3.127	0.008	0.008	0.000	0.166	0.14	
464	1/28/2004	11:18:09 AM		23.846	15.505	25.354	20.875	18.709		53.875	54.039	17.488	36.835	-1.216	-6.667		49.058	0.042	14.643	0.004		445.90	7.43167	52.6	12.0	45.4	3.127	0.006	0.006	0.000	0.137	0.12	
465	1/28/2004	11:19:09 AM		23.873	15.548	25.376	20.933	18.545		53.837	53.883	17.508	36.866	-1.211	-6.779		50.357	0.048	14.643	0.004		446.90	7.44833	52.4	12.3	45.4	3.127	0.007	0.007	0.000	0.156	0.13	
466	1/28/2004	11:20:09 AM		23.886	15.577	25.404	20.941	18.83		53.999	53.923	17.763	36.881	-1.214	-6.802		47.971	0.056	14.643	0.004		447.90	7.465	52.5	11.8	45.4	3.133	0.008	0.008	0.000	0.182	0.15	
467	1/28/2004	11:21:09 AM		23.899	15.605	25.407	20.949	18.661		54.045	54.028	17.628	37.041	-1.214	-6.811		49.853	0.054	14.643	0.004		448.90	7.48167	52.6	12.2	45.5	3.140	0.008	0.008	0.000	0.175	0.15	
468	1/28/2004	11:22:09 AM		23.916	15.638	25.414	20.946	18.204		53.777	53.784	17.427	37.018	-1.211	-6.8		48.92	0.053	14.643	0.004		449.90	7.49833	52.3	12.0	45.4	3.130	0.008	0.008	0.000	0.172	0.15	
469	1/28/2004	11:23:09 AM		23.939	15.671	25.437	21.064	18.459		53.858	53.883	17.425	36.995	-1.211	-6.791		49.901	0.052	14.643	0.004		450.90	7.515	52.4	12.2	45.4	3.132	0.008	0.008	0.000	0.169	0.14	
470	1/28/2004	11:24:09 AM		23.941	15.688	25.424	21.056	18.84		54.258	54.342	17.667	37.143	-1.211	-6.684		47.404	0.051	14.643	0.004		451.90	7.53167	52.9	11.6	45.7	3.151	0.008	0.008	0.000	0.164	0.14	
471	1/28/2004	11:25:09 AM		23.968	15.736	25.436	21.023	18.817		54.115	54.277	17.33	37.351	-1.211	-6.667		47.677	0.056	14.643	0.004		452.90	7.54833	52.8	11.7	45.7	3.153	0.008	0.008	0.000	0.180	0.15	
472	1/28/2004	11:26:09 AM		23.98	15.763	25.443	21.035	19.177		54.132	54.182	17.511	37.264	-1.214	-6.687		48.674	0.051	14.643	0.004		453.90	7.565	52.7	11.9	45.7	3.151	0.008	0.008	0.000	0.164	0.14	
473	1/28/2004	11:27:09 AM		23.993	15.812	25.461	21.104	18.529		54.453	54.489	17.8	37.195	-1.211	-6.733		48.084	0.055	14.643	0.004		454.90	7.58167	53.0	11.8	45.8	3.159	0.008	0.008	0.000	0.177	0.15	
474	1/28/2004	11:28:09 AM		24.006	15.846	25.464	21.107	19.355		54.298	54.323	17.625	37.225	-1.214	-6.814		44.738	0.053	14.643	0.004		455.90	7.59833	52.9	11.0	45.8	3.155	0.008	0.008	0.000	0.170	0.15	
475	1/28/2004	11:29:09 AM		24.019	15.879	25.477	21.196	19.524		54.053	54.147	17.542	37.17	-1.211	-6.635		49.22	0.05	14.643	0.004		456.90	7.615	52.7	12.1	45.6	3.145	0.007	0.007	0.000	0.161	0.14	
476	1/28/2004	11:30:09 AM		24.042	15.923	25.49	21.219	19.754		54.034	54.134	17.636	37.096	-1.214	-6.571		50.249	0.049	14.643	0.004		457.90	7.63167	52.7	12.3	45.6	3.142	0.007	0.007	0.000	0.158	0.13	
477	1/28/2004	11:31:09 AM		24.056	15.978	25.494	21.248	19.597		54.279	54.352	17.798	37.131	-1.214	-6.684		49.152	0.061	14.643	0.004		458.90	7.64833	52.9	12.0	45.7	3.151	0.009	0.009	0.000	0.196	0.17	
478	1/28/2004	11:32:09 AM		24.064	16.001	25.502	21.241	19.504		53.957	54.068	17.508	37.08	-1.214	-6.713		47.195	0.051	14.643	0.004		459.90	7.665	52.6	11.6	45.5	3.138	0.008	0.007	0.000	0.165	0.14	
479	1/28/2004	11:33:09 AM		24.072	16.034	23.807	21.279	19.713		54.349	54.456	17.741	37.149	-1.216	-6.695		45.852	0.049	14.643	0.004		460.90	7.68167	53.0	11.2	45.7	3.154	0.007	0.008	0.000	0.165	0.14	
480	1/28/2004	11:34:09 AM		24.09	16.083	23.97	21.343	20.422		54.134	54.211	17.531	37.279	-1.214	-6.626		48.453	0.048	14.643	0.004		461.90	7.69833	52.7	11.9	45.7	3.151	0.007	0.007	0.000	0.161	0.14	
481	1/28/2004	11:35:09 AM		24.053	16.127	24.795	21.381	19.397		53.989	54.196	18.065	36.427	-1.214	-6.672		48.215	0.046	14.643	0.004		462.90	7.715	52.7	11.8	45.2	3.117	0.007	0.007	0.000	0.153	0.13	
482	1/28/2004	11:36:09 AM		24.027	16.171	24.889	21.42	18.81		53.825	53.997	17.967	36.456	-1.214	-6.612		49.223	0.051	14.643	0.004		463.90	7.73167	52.5	12.1	45.1	3.112	0.008	0.008	0.000	0.169	0.14	
483	1/28/2004	11:37:09 AM		24	16.205	24.927	21.413	19.343		53.924	54.047	17.548	36.963	-1.214	-6.719		47.439	0.049	14.643	0.004		464.90	7.74833	52.6	11.6	45.4	3.133	0.007	0.007	0.000	0.161	0.14	
484	1/28/2004	11:38:09 AM		23.997	16.253	25	21.491	19.235		54.061	54.242	17.527	37.123	-1.208	-6.678		47.527	0.048	14.643	0.004		465.90	7.765	52.8	11.6	45.6	3.143	0.007	0.007	0.000	0.157	0.13	
485	1/28/2004	11:39:09 AM		23.975	16.261	25.013	21.489	18.642		54.078	54.23	17.529	37.125	-1.214	-6.817		46.209	0.053	14.643	0.004		466.90	7.78167	52.8	11.3	45.6	3.144	0.008	0.008	0.000	0.173	0.15	
486	1/28/2004	11:40:09 AM		23.983	16.32	25.091	21.588	18.958		54.235	54.412	17.651	37.131	-1.208	-6.713		45.722	0.048	14.643	0.004		467.90	7.79833	52.9	11.2	45.7	3.150	0.007	0.007	0.000	0.156	0.13	
487	1/28/2004	11:41:09 AM		23.95	16.317	25.063	21.585	18.829		54.078	54.294	17.578	37.065	-1.214	-6.684		48.495	0.049	14.643	0.004		468.90	7.815	52.8	11.9	45.6	3.142	0.007	0.007	0.000	0.160	0.14	
488	1/28/2004	11:42:09 AM		23.978	16.371	25.136	21.593	19.215		54.221	54.375	17.703	37.086	-1.214	-6.745		47.677	0.044	14.643	0.004		469.90	7.83167	52.9	11.7	45.7	3.148	0.007	0.007	0.000	0.143	0.12	
489	1/28/2004	11:43:09 AM		23.979	16.387	25.147	21.589	19.575		54.115	54.325	17.512	37.137	-1.216	-6.701		47.464	0.049	14.643	0.003		470.90	7.84833	52.9	11.6	45.6	3.146	0.007	0.007	0.000	0.159	0.14	
490	1/28/2004	11:44:09 AM		23.997	16.431	25.165	21.637	20.041		54.167	54.246	17.552	37.326	-1.214	-6.713		46.795	0.049	14.643	0.004		471.90	7.865	52.8	11.5	45.7	3.154	0.007	0.007	0.000	0.159	0.14	

RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	1/28/2004	11:45:09 AM		24.004	16.464	25.207	21.654	19.877		54.21	54.468	17.441	37.31	-1.214	-6.684		48.459	0.049	14.643	0.004		472.90	7.88167	53.0	11.9	45.8	3.155	0.007	0.007	0.000	0.159	0.14	
492	1/28/2004	11:46:09 AM		24.007	16.497	25.225	21.677	19.714		52.908	53.15	18.327	35.068	-1.214	-6.756		52.414	0.051	14.643	0.004		473.90	7.89833	51.7	12.8	44.0	3.033	0.008	0.008	0.000	0.172	0.15	
493	1/28/2004	11:47:09 AM		24.02	16.525	25.273	21.771	19.086		53.006	53.187	19.432	34.116	-1.211	-6.768		52.207	0.047	14.643	0.004		474.90	7.915	51.7	12.8	43.6	3.003	0.007	0.007	0.000	0.160	0.14	
494	1/28/2004	11:48:09 AM		24.023	16.548	25.311	21.754	19.599		53.045	53.32	19.485	34.141	-1.214	-6.632		51.062	0.046	14.643	0.004		475.90	7.93167	51.8	12.5	43.6	3.006	0.007	0.007	0.000	0.156	0.13	
495	1/28/2004	11:49:09 AM		24.051	16.587	25.344	21.853	19.506		53.045	53.326	19.389	34.198	-1.211	-6.557		52.51	0.046	14.643	0.004		476.90	7.94833	51.9	12.9	43.6	3.008	0.007	0.007	0.000	0.156	0.13	
496	1/28/2004	11:50:09 AM		24.079	16.615	25.392	21.85	19.579		53.115	53.517	19.397	34.172	-1.211	-6.513		49.877	0.043	14.643	0.004		477.90	7.965	52.0	12.2	43.6	3.009	0.006	0.006	0.000	0.145	0.12	
497	1/28/2004	11:51:09 AM		24.092	16.643	25.42	21.873	19.899		52.896	53.241	19.321	34.161	-1.214	-6.577		52.222	0.046	14.643	0.004		478.90	7.98167	51.8	12.8	43.5	3.001	0.007	0.007	0.000	0.156	0.13	
498	1/28/2004	11:52:09 AM		24.114	16.666	25.452	21.845	19.564		53.263	53.585	19.435	34.311	-1.214	-6.617		50.328	0.045	14.643	0.004		479.90	7.99833	52.1	12.3	43.8	3.019	0.007	0.007	0.000	0.151	0.13	
499	1/28/2004	11:53:09 AM		24.142	16.695	25.47	21.904	19.91		53.057	53.345	19.304	34.35	-1.216	-6.56		50.213	0.043	14.643	0.004		480.90	8.015	51.9	12.3	43.7	3.013	0.006	0.006	0.000	0.145	0.12	
500	1/28/2004	11:54:09 AM		24.174	16.732	25.517	21.961	20.159		53.022	53.355	19.23	34.36	-1.211	-6.513		49.692	0.046	14.643	0.004		481.90	8.03167	51.9	12.2	43.7	3.012	0.007	0.007	0.000	0.155	0.13	
501	1/28/2004	11:55:09 AM		24.182	16.75	25.515	21.984	20.176		53.062	53.446	19.237	34.323	-1.214	-6.456		50.122	0.046	14.643	0.004		482.90	8.04833	52.0	12.3	43.7	3.012	0.007	0.007	0.000	0.155	0.13	
502	1/28/2004	11:56:09 AM		24.21	16.788	25.548	21.972	20.22		52.777	53.197	19.071	34.36	-1.214	-6.421		43.073	0.047	14.643	0.004		483.90	8.065	51.7	10.6	43.6	3.004	0.007	0.007	0.000	0.158	0.13	
503	1/28/2004	11:57:09 AM		24.217	16.821	25.56	22.044	20.836		53.107	53.554	19.032	34.677	-1.214	-6.398		49.6	0.046	14.643	0.004		484.90	8.08167	52.1	12.2	43.9	3.026	0.007	0.007	0.000	0.154	0.13	
504	1/28/2004	11:58:09 AM		24.25	16.865	25.598	22.108	20.421		53.258	53.612	19.214	34.676	-1.214	-6.369		49.054	0.047	14.643	0.004		485.90	8.09833	52.1	12.0	44.0	3.031	0.007	0.007	0.000	0.157	0.13	
505	1/28/2004	11:59:09 AM		24.273	16.908	25.596	22.151	20.369		52.821	53.255	18.873	34.627	-1.214	-6.366		50.726	0.047	14.643	0.003		486.90	8.115	51.8	12.4	43.7	3.015	0.007	0.007	0.000	0.158	0.13	
506	1/28/2004	12:00:09 PM		24.276	16.926	25.598	22.138	20.699		52.883	53.372	18.834	34.664	-1.219	-6.34		49.062	0.047	14.643	0.004		487.90	8.13167	51.9	12.0	43.8	3.018	0.007	0.007	0.000	0.157	0.13	
507	1/28/2004	12:01:09 PM		24.309	16.97	25.637	22.238	21.21		53.001	53.471	18.871	34.711	-1.214	-6.331		51.83	0.047	14.643	0.004		488.90	8.14833	52.0	12.7	43.9	3.024	0.007	0.007	0.000	0.157	0.13	
508	1/28/2004	12:02:09 PM		24.332	17.008	25.66	22.286	20.66		53.026	53.591	18.859	34.716	-1.214	-6.337		48.031	0.048	14.643	0.004		489.90	8.165	52.1	11.8	43.9	3.025	0.007	0.007	0.000	0.160	0.14	
509	1/28/2004	12:03:09 PM		24.36	17.057	25.678	22.319	20.341		53.163	53.749	18.788	34.814	-1.211	-6.308		49.402	0.047	14.643	0.004		490.90	8.18167	52.3	12.1	44.0	3.033	0.007	0.007	0.000	0.156	0.13	
510	1/28/2004	12:04:09 PM		24.383	17.101	25.686	22.357	20.203		53.246	53.771	18.937	34.828	-1.216	-6.311		50.195	0.047	14.643	0.004		491.90	8.19833	52.3	12.3	44.0	3.036	0.007	0.007	0.000	0.156	0.13	
511	1/28/2004	12:05:09 PM		24.4	17.129	25.703	22.335	20.301		53.068	53.608	18.742	34.863	-1.216	-6.308		50.484	0.047	14.643	0.004		492.90	8.215	52.1	12.4	44.0	3.031	0.007	0.007	0.000	0.156	0.13	
512	1/28/2004	12:06:09 PM		24.418	17.162	25.731	22.352	20.389		53.035	53.591	18.757	34.855	-1.216	-6.308		48.298	0.047	14.643	0.004		493.90	8.23167	52.1	11.8	43.9	3.030	0.007	0.007	0.000	0.156	0.13	
513	1/28/2004	12:07:09 PM		24.43	17.179	25.733	22.429	19.595		53.149	53.78	18.83	34.857	-1.214	-6.308		49.996	0.047	14.643	0.004		494.90	8.24833	52.3	12.3	44.0	3.034	0.007	0.007	0.000	0.156	0.13	
514	1/28/2004	12:08:09 PM		24.452	17.212	25.75	22.437	19.819		53.091	53.711	18.802	34.835	-1.214	-6.305		48.749	0.047	14.643	0.004		495.90	8.265	52.2	11.9	44.0	3.031	0.007	0.007	0.000	0.156	0.13	
515	1/28/2004	12:09:09 PM		24.475	17.244	25.763	22.439	20.28		53.022	53.61	18.769	34.861	-1.211	-6.305		49.492	0.047	14.643	0.004		496.90	8.28167	52.1	12.1	43.9	3.030	0.007	0.007	0.000	0.156	0.13	
516	1/28/2004	12:10:09 PM		24.492	17.277	25.78	22.442	20.166		52.958	53.599	18.69	34.873	-1.216	-6.308		50.624	0.047	14.643	0.004		497.90	8.29833	52.1	12.4	43.9	3.028	0.007	0.007	0.000	0.156	0.13	
517	1/28/2004	12:11:09 PM		24.509	17.289	25.782	22.414	19.942		53.01	53.618	18.701	34.902	-1.214	-6.305		49.969	0.047	14.643	0.004		498.90	8.315	52.1	12.2	44.0	3.031	0.007	0.007	0.000	0.156	0.13	
518	1/28/2004	12:11:30 PM		24.515	17.311	25.798	22.44	19.701		53.08	53.703	18.763	34.896	-1.214	-6.305		47.243	0.047	14.643	0.004		499.25	8.32083	52.2	11.6	44.0	3.033	0.007	0.007	0.000	0.156	0.13	
519	1/28/2004	12:12:30 PM		24.511	17.317	25.744	22.411	20.196		52.838	53.488	18.545	34.896	-1.214	-6.305		50.585	0.047	14.643	0.004		500.25	8.3375	52.0	12.4	43.9	3.024	0.007	0.007	0.000	0.156	0.13	
520	1/28/2004	12:13:30 PM		24.534	17.35	25.731	22.383	20.551		53.061	53.707	18.682	34.912	-1.214	-6.302		49.94	0.047	14.643	0.004		501.25	8.35417	52.2	12.2	44.0	3.033	0.007	0.007	0.000	0.156	0.13	
521	1/28/2004	12:14:30 PM		24.556	17.403	25.734	22.476	20.644		52.981	53.593	18.793	34.882	-1.214	-6.299		51.321	0.047	14.643	0.004		502.25	8.37083	52.1	12.6	43.9	3.029	0.007	0.007	0.000	0.156	0.13	
522	1/28/2004	12:15:30 PM		24.548	17.405	25.671	22.448	20.289		53.024	53.697	18.811	34.853	-1.219	-6.308		50.914	0.047	14.643	0.003		503.25	8.3875	52.2	12.5	43.9	3.029	0.007	0.007	0.000	0.157	0.13	
523	1/28/2004	12:16:30 PM		24.551	17.438	25.669	22.521	20.12		53.142	53.861	18.802	34.894	-1.214	-6.302		50.217	0.046	14.643	0.004		504.25	8.40417	52.4	12.3	44.0	3.035	0.007	0.007	0.000	0.153	0.13	
524	1/28/2004	12:17:30 PM		24.554	17.456	25.652	22.524	20.309		52.918	53.639	18.355	35.144	-1.216	-6.302		50.124	0.047	14.643	0.004		505.25	8.42083	52.2	12.3	44.0	3.036	0.007	0.007	0.000	0.156	0.13	
525	1/28/2004	12:18:30 PM		24.556	17.484	25.619	22.537	20.845		53.022	53.722	18.454	35.19	-1.216	-6.299		47.666	0.047	14.643	0.004		506.25	8.4375	52.2	11.7	44.1	3.041	0.007	0.007	0.000	0.156	0.13	
526	1/28/2004	12:19:30 PM		24.559	17.522	25.601	22.589	20.863		53.2	53.914	18.619	35.138	-1.214	-6.299		47.831	0.047	14.643	0.004		507.25	8.45417	52.4	11.7	44.2	3.045	0.007	0.007	0.000	0.156	0.13	
527	1/28/2004	12:20:30 PM		24.561	17.545	24.212	22.642	20.925		53.534	54.296	18	36.088	-1.214	-6.297		49.757	0.047	14.643	0.004		508.25	8.47083	52.8	12.2	44.8	3.090	0.007	0.007	0.000	0.160	0.14	
528	1/28/2004	12:21:30 PM		24.538	17.557	24.835	22.653	21.168		52.937	53.672	18.698	34.796	-1.216	-6.302		49.955	0.046	14.643	0.004		509.25	8.4875	52.2	12.2	43.9	3.024	0.007	0.007	0.000	0.157	0.13	
529	1/28/2004	12:22:30 PM		24.489	17.589	24.922	22.65	21.256		53.005	53.722	18.964	34.65	-1.216	-6.305		49.281	0.045	14.643	0.004		510.25	8.50417	52.2	12.1	43.8	3.022	0.007	0.007	0.000	0.153	0.13	
530	1/28/2004	12:23:30 PM		24.447	17.596	24.954	22.698	21.213		53.113	53.786	19.073	34.666	-1.219	-6.308		49.99	0.045	14.643	0.004		511.25	8.52083	52.3	12.3	43.9	3.026	0.007	0.007	0.000	0.153	0.13	
531	1/28/2004	12:24:30 PM		24.424	17.649	25.002	22.811	21.331		52.976	53.672	18.978	34.623	-1.214	-6.302		51.25	0.045	14.643	0.004		512.25	8.5375	52.2	12.6	43.8	3.020	0.007	0.007	0.000	0.153	0.13	
532	1/28/2004	12:25:30 PM		24.392	17.672	25.009	22.789	20.574		52.835	53.541	18.768	34.676	-1.216	-6.424		52.064	0.055	14.643	0.004		513.25	8.55417	52.1	12.8	43.8	3.017	0.008	0.008	0.000	0.187	0.16	
533	1/28/2004	12:26:30 PM		24.389	17.726	25.067	22.867	20.491		52.852	53.494	18.796	34.746	-1.211	-6.432		47.996	0.046	14.643	0.004		514.25	8.57083	52.0	11.8	43.8	3.020	0.007	0.007	0.000	0.156	0.13	
534	1/28/2004	12:27:30 PM		24.381	17.753	25.064	22.848	20.282		52.974	53.655	18.856	34.759	-1.216	-6.496		49.481	0.046	14.643	0.004		515.25	8.5875	52.2	12.1	43.9	3.024	0.007	0.007	0.000	0.156	0.13	
535	1/28/2004	12:28:30 PM		24.383	17.78	25.086	22.855	20.968		52.945	53.624	18.868	34.724	-1.214	-6.496		51.152	0.046	14.643	0.004		516.25	8.60417	52.2	12.5	43.8	3.022	0.007	0.007	0.000	0.156	0.13	
536	1/28/2004	12:29:30 PM		24.374	17.801	25.092	22.856	21.24		52.865	53.525	18.762	34.703	-1.216	-6.493		50.282	0.045	14.643	0.004		517.25	8.62083	52.1	12.3	43.8	3.019	0.007	0.007	0.000	0.153	0.13	
537	1/28/2004	12:30:30 PM		24.39	17.843	25.128	22.873	21.428		52.68	53.363	18.572	34.73	-1.214	-6.516		49.168	0.046	14.643	0.004		518.25	8.6375	51.9	12.0	43.7	3.013	0.007	0.007	0.000	0.156	0.13	
538	1/28/2004	12:31:30 PM		24.387	17.861	25.13	22.895	21.113		52.964	53.709	18.74	34.804	-1.214	-6.516		49.31	0.046	14.643	0.004		519.25	8.65417	52.2	12.1	43.9	3.026	0.007	0.007	0.000	0.156	0.13	
539	1/28/2004	12:32:30 PM		24.379	17.883	25.137	22.877	20.592		52.891	53.562	18.675	34.906	-1.216	-6.516		50.92	0.046	14.643	0.004		520.25	8.67083	52.1	12.5	43.9	3.027	0.007	0.007	0.000	0.156	0.13	
540	1/28/2004	12:33:30 PM		24.376	17.905	25.149	22.914	20.971		52.75	53.504	18.605	34.736	-1.216	-6.522		50.23	0.046	14.643	0.004		521.25	8.6875	52.0	12.3	43.7	3.016	0.007	0.007	0.000	0.156	0.13	
541	1/28/2004	12:34:30 PM		24.387	17.936	25.155	22.935	21.188		53.07	53.883	18.834	34.736	-1.214	-6.522		48.511	0.046	14.643	0.004		522.25	8.70417	52.4	11.9	43.9	3.027	0.007	0.007	0.000	0.156	0.13	
542	1/28/2004	12:35:30 PM		24.383	17.957	25.166	22.951	21.722		52.856	53.655	18.63	34.791	-1.214	-6.516		47.938	0.046	14.643	0.004		523.25	8.72083	52.2	11.7	43.8	3.021	0.007	0.007	0.000	0.156	0.13	
543	1/28/2004	12:36:30 PM		24.395	18	25.198	22.973	21.141		52.976	53.666	18.867	34.763	-1.216	-6.548		49.097	0.045	14.643	0.004		524.25	8.7375	52.2	12.0	43.9	3.025	0.007	0.007	0.000	0.152	0.13	
544	1/28/2004	12:37:30 PM		24.391	18.027	25.205	22.969	20.71		52.933	53.72	18.725	34.757	-1.214	-6.542		48.213	0.046	14.643	0.004		525.25	8.75417	52.2	11.8	43.8	3.023	0.007	0.007	0.000	0.156	0.13	
545	1/28/2004	12:38:30 PM		24.399	18.065	25.222	23.017	21.055		53.07	53.844	18.567	35.109	-1.214	-6.542		50.941	0.046	14.643	0.004		526.25	8.77083	52.4	12.5	44.1	3.040	0.007	0.007	0.000	0.155	0.13	
546	1/28/2004	12:39:30 PM		24.412	18.088	25.225	23.015	21.118		52.889	53.714	18.718	34.791	-1.219	-6.545		46.319	0.045	14.643	0.003		527.25	8.7875	52.2	11.4	43.8	3.023	0.007	0.007	0.000	0.152	0.13	
547	1/28/2004	12:40:30 PM		24.418	18.11	25.236	22.966	21.386		52.896	53.805	18.744	34.736	-1.214	-6.291		51.069	0.024	14.643	0.004		528.25	8.80417	52.3	12.5	43.8	3.021	0.004	0.004	0.000	0.081	0.07	
548	1/28/2004	12:41:30 PM		24.431	18.147	25.244	22.978	21.232		52.578	53.506	18.503	34.656	-1.216	-6.297		51.411	0.046	14.643	0.004		529.25	8.82083	52.0	12.6	43.6	3.007	0.007	0.007	0.000	0.156	0.13	
549	1/28/2004	12:42:30 PM		24.427	18.17	25.24	23.036	21.038		52.647	53.805	18.706	34.506	-1.214	-5.695		50.522	0.021	14.643	0.004		530.25	8.8375	52.3	12.4	43.6	3.004	0.003	0.003	0.000	0.071	0.06	
550	1/28/2004	12:43:30 PM		24.424	18.192	25.242	23.063	20.869		52.983	53.942	18.864	34.715	-1.214	-6.305		49.888	0.045	14.643	0.004		531.25	8.85417	52.5	12.2	43.8	3.023	0.007	0.007	0.000	0.152	0.13	
551	1/28/2004	12:44:30 PM		24.442	18.219	25.26	23.12	20.941		52.837	53.767	18.691	34.759	-1.216	-6.308		50.038	0.045	14.643	0.003		532.25	8.87083	52.3	12.3	43.8	3.020	0.007	0.007	0.000	0.152	0.13	
552	1/28/2004	12:45:30 PM		24.458	18.246	25.271	23.127	20.989		52.626	53.736	18.751	34.572	-1.214	-5.869		51.388	0.021	14.643	0.004		533.25	8.8875	52.3	12.6	43.6	3.006	0.003	0.003	0.000	0.071	0.06	
553	1/28/2004	12:46:30 PM		25.051	18.263	25.278	23.159	21.483		51.309	53.861	18.579	33.474	-1.214	-2.718		48.346	0.013	14.643	0.004		534.25	8.90417	52.4	11.8	42.4	2.923	0.002	0.002	0.000	0.045	0.04	
554	1/28/2004	12:47:30 PM		25.623	18.291	25.28	23.166	21.208		48.872	53.908	18.501	31.048	-0.374	-0.075		47.145	0.012	14.643	0.004		535.25	8.92083	52.4	11.6	40.0	2.755	0.002	0.002	0.000	0.044	0.04	
555	1/28/2004	12:48:30 PM		24.625	18.313	25.292	23.223	21.527		53.342	54.155	18.255	35.645	-1.214	-6.872		46.584	0.048	14.643	0.004		536.25	8.9375	52.7	11.4	44.5	3.068	0.007	0.007	0.000	0.160	0.14	
556	1/28/2004	12:49:30 PM		24.903	18.331	23.592	23.271	21.792		53.669	54.456	18.228	36.015	-1.216	-6.889		45.99	0.044	14.643	0.003		537.25	8.95417	53.0	11.3	44.8	3.092	0.007	0.007	0.000	0.152	0.13	
557	1/28/2004	12:50:30 PM		24.97	18.354	24.526	23.299	21.497		53.225	53.991	18.725	35.038	-1.214	-6.935		46.807	0.045	14.643	0.004		538.25	8.97083	52.5	11.5	44.1	3.043	0.007	0.007	0.000	0.154	0.13	
558	1/28/2004	12:51:30 PM		24.973	18.387	24.715	23.342	21.013		53.034	53.722	18.9	34.746	-1.216	-6.967		48.566	0.045	14.643	0.004		539.25	8.9875	52.2	11.9	43.9	3.026	0.007	0.007	0.000	0.154	0.13	
559	1/28/2004	12:52:30 PM		24.94	18.399	24.757	23.369	21.337		53.113	53.871	18.884	34.769	-1.214	-6.967		51.534	0.045	14.643	0.004		540.25	9.00417	52.4	12.6	43.9	3.030	0.007	0.007	0.000	0.154	0.13	
560	1/28/2004	12:53:30 PM		24.912	18.427	24.804	23.382	20.74		53.238	54.035	18.893	34.802	-1.214	-7.013		49.204	0.049	14.643	0.004		541.25	9.02083	52.6	12.1	44.0	3.035	0.007	0.007	0.000	0.167	0.14	

RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	1/28/2004	12:54:30 PM		24.859	18.434	24.836	23.414	21.064		52.873	53.877	18.722	34.693	-1.216	-6.58		49.709	0.045	14.643	0.004		542.25	9.0375	52.4	12.2	43.8	3.019	0.007	0.007	0.000	0.154	0.13	
562	1/28/2004	12:55:30 PM		24.811	18.451	24.878	23.4	21.559		52.794	53.684	18.816	34.67	-1.214	-6.586		49.289	0.044	14.643	0.004		543.25	9.05417	52.2	12.1	43.7	3.015	0.007	0.007	0.000	0.151	0.13	
563	1/28/2004	12:56:30 PM		24.757	18.467	24.894	23.391	21.359		52.925	53.879	18.841	34.625	-1.216	-6.583		47.838	0.045	14.643	0.004		544.25	9.07083	52.4	11.7	43.8	3.018	0.007	0.007	0.000	0.154	0.13	
564	1/28/2004	12:57:30 PM		24.75	18.515	24.942	23.429	21.301		52.806	53.753	18.712	34.654	-1.216	-6.58		49.058	0.045	14.643	0.004		545.25	9.0875	52.3	12.0	43.7	3.015	0.007	0.007	0.000	0.154	0.13	
565	1/28/2004	12:58:30 PM		24.731	18.538	24.974	23.466	21.64		52.979	53.973	18.914	34.619	-1.216	-6.58		50.044	0.045	14.643	0.004		546.25	9.10417	52.5	12.3	43.8	3.020	0.007	0.007	0.000	0.153	0.13	
566	1/28/2004	12:59:30 PM		24.719	18.556	25.002	23.484	21.437		53.041	54.062	18.84	34.705	-1.216	-6.58		49.709	0.045	14.643	0.004		547.25	9.12083	52.6	12.2	43.9	3.025	0.007	0.007	0.000	0.153	0.13	
567	1/28/2004	1:00:30 PM		24.706	18.578	24.999	23.507	21.127		52.52	53.473	18.525	34.635	-1.219	-6.586		50.533	0.045	14.643	0.004		548.25	9.1375	52.0	12.4	43.6	3.005	0.007	0.007	0.000	0.154	0.13	
568	1/28/2004	1:01:30 PM		24.709	18.596	25.052	23.565	21.321		52.669	53.664	18.723	34.619	-1.214	-6.58		48.332	0.045	14.643	0.004		549.25	9.15417	52.2	11.8	43.6	3.009	0.007	0.007	0.000	0.153	0.13	
569	1/28/2004	1:02:30 PM		24.707	18.629	25.054	23.557	21.263		52.782	53.761	18.756	34.625	-1.219	-6.577		49.214	0.045	14.643	0.004		550.25	9.17083	52.3	12.1	43.7	3.013	0.007	0.007	0.000	0.153	0.13	
570	1/28/2004	1:03:30 PM		24.703	18.651	25.081	23.589	21.818		52.85	53.912	18.759	34.656	-1.216	-6.58		50.57	0.045	14.643	0.004		551.25	9.1875	52.4	12.4	43.8	3.017	0.007	0.007	0.000	0.153	0.13	
571	1/28/2004	1:04:30 PM		24.695	18.668	25.088	23.585	22.196		52.844	53.912	18.845	34.609	-1.216	-6.574		49.31	0.044	14.643	0.004		552.25	9.20417	52.4	12.1	43.7	3.015	0.007	0.007	0.000	0.150	0.13	
572	1/28/2004	1:05:30 PM		24.707	18.711	25.12	23.583	22.685		52.672	53.678	18.708	34.599	-1.214	-6.571		48.912	0.044	14.643	0.004		553.25	9.22083	52.2	12.0	43.6	3.009	0.007	0.007	0.000	0.150	0.13	
573	1/28/2004	1:06:30 PM		24.71	18.743	25.122	23.65	22.391		52.784	53.823	18.709	34.625	-1.216	-6.568		45.468	0.044	14.643	0.004		554.25	9.2375	52.4	11.1	43.7	3.013	0.007	0.007	0.000	0.150	0.13	
574	1/28/2004	1:07:30 PM		24.726	18.78	25.169	23.687	22.066		52.782	53.856	18.781	34.66	-1.214	-6.568		49.794	0.044	14.643	0.004		555.25	9.25417	52.4	12.2	43.7	3.014	0.007	0.007	0.000	0.149	0.13	
575	1/28/2004	1:08:30 PM		24.729	18.809	25.172	23.62	21.733		52.819	53.931	18.813	34.572	-1.216	-6.571		47.548	0.045	14.643	0.004		556.25	9.27083	52.5	11.7	43.7	3.013	0.007	0.007	0.000	0.153	0.13	
576	1/28/2004	1:09:30 PM		24.726	18.831	25.159	23.652	21.946		52.827	53.958	18.757	34.666	-1.219	-6.574		49.316	0.044	14.643	0.003		557.25	9.2875	52.5	12.1	43.7	3.016	0.007	0.007	0.000	0.149	0.13	
577	1/28/2004	1:10:30 PM		24.759	18.869	25.217	23.735	22.049		52.759	53.96	18.635	34.648	-1.211	-6.563		48.419	0.045	14.643	0.004		558.25	9.30417	52.5	11.9	43.7	3.013	0.007	0.007	0.000	0.153	0.13	
578	1/28/2004	1:11:30 PM		24.765	18.886	25.214	23.792	21.604		52.781	53.898	18.778	34.679	-1.216	-6.565		50.814	0.044	14.643	0.004		559.25	9.32083	52.4	12.5	43.7	3.015	0.007	0.007	0.000	0.149	0.13	
579	1/28/2004	1:12:30 PM		24.788	18.914	25.231	23.775	22.049		52.659	53.78	18.669	34.65	-1.216	-6.563		49.383	0.044	14.643	0.004		560.25	9.3375	52.3	12.1	43.7	3.010	0.007	0.007	0.000	0.149	0.13	
580	1/28/2004	1:13:30 PM		24.795	18.936	25.238	23.817	21.588		52.894	54.049	18.79	34.674	-1.216	-6.565		49.928	0.045	14.643	0.004		561.25	9.35417	52.6	12.2	43.8	3.019	0.007	0.007	0.000	0.152	0.13	
581	1/28/2004	1:14:30 PM		24.807	18.953	25.255	23.854	21.691		52.823	53.898	18.715	34.709	-1.214	-6.563		48.059	0.045	14.643	0.004		562.25	9.37083	52.4	11.8	43.8	3.018	0.007	0.007	0.000	0.152	0.13	
582	1/28/2004	1:15:30 PM		24.815	18.971	25.253	23.891	21.849		52.651	53.774	18.639	34.687	-1.219	-6.565		48.707	0.045	14.643	0.004		563.25	9.3875	52.3	11.9	43.7	3.011	0.007	0.007	0.000	0.153	0.13	
583	1/28/2004	1:16:30 PM		24.826	18.993	25.265	23.918	22.172		52.665	53.888	18.611	34.672	-1.216	-6.563		48.53	0.045	14.643	0.004		564.25	9.40417	52.4	11.9	43.7	3.011	0.007	0.007	0.000	0.152	0.13	
584	1/28/2004	1:17:30 PM		24.837	19.009	25.276	23.919	22.173		52.865	54.037	18.779	34.73	-1.216	-6.563		47.911	0.045	14.643	0.004		565.25	9.42083	52.6	11.7	43.8	3.020	0.007	0.007	0.000	0.152	0.13	
585	1/28/2004	1:18:30 PM		24.854	19.036	25.287	23.926	21.859		52.684	53.846	18.48	34.863	-1.216	-6.56		42.781	0.045	14.643	0.004		566.25	9.4375	52.4	10.5	43.8	3.018	0.007	0.007	0.000	0.152	0.13	
586	1/28/2004	1:19:30 PM		24.866	19.064	25.314	23.918	21.831		52.796	54.008	18.469	34.929	-1.214	-6.56		48.142	0.045	14.643	0.004		567.25	9.45417	52.5	11.8	43.9	3.024	0.007	0.007	0.000	0.152	0.13	
587	1/28/2004	1:20:30 PM		24.877	19.08	25.325	23.959	22.168		52.806	54.041	18.536	34.839	-1.211	-6.554		50.086	0.044	14.643	0.004		568.25	9.47083	52.6	12.3	43.8	3.021	0.007	0.007	0.000	0.148	0.13	
588	1/28/2004	1:21:30 PM		24.889	19.106	25.332	24.001	22.114		52.838	54.043	18.608	34.775	-1.216	-6.557		48.785	0.044	14.643	0.004		569.25	9.4875	52.6	12.0	43.8	3.020	0.007	0.006	0.000	0.148	0.13	
589	1/28/2004	1:22:30 PM		24.911	19.139	25.349	24.018	22.212		52.819	54.028	18.424	35.066	-1.216	-6.554		48.849	0.045	14.643	0.004		570.25	9.50417	52.6	12.0	43.9	3.030	0.007	0.007	0.000	0.151	0.13	
590	1/28/2004	1:23:30 PM		24.919	19.177	25.362	24.056	22.245		53.103	54.366	18.562	35.142	-1.216	-6.554		49.973	0.044	14.643	0.003		571.25	9.52083	52.9	12.2	44.1	3.042	0.007	0.006	0.000	0.147	0.13	
591	1/28/2004	1:24:30 PM		24.926	19.185	25.345	24.034	21.956		53.003	54.203	18.541	35.087	-1.222	-6.557		47.55	0.044	14.643	0.004		572.25	9.5375	52.7	11.7	44.0	3.037	0.007	0.006	0.000	0.148	0.13	
592	1/28/2004	1:25:30 PM		24.938	19.207	25.347	24.086	21.702		52.958	54.273	18.449	35.03	-1.222	-6.563		49.552	0.044	14.643	0.003		573.25	9.55417	52.8	12.1	44.0	3.033	0.007	0.006	0.000	0.148	0.13	
593	1/28/2004	1:26:30 PM		24.971	19.25	25.399	24.148	21.277		52.765	54.014	18.416	35.058	-1.216	-6.557		49.815	0.044	14.643	0.004		574.25	9.57083	52.5	12.2	43.9	3.028	0.007	0.006	0.000	0.148	0.13	
594	1/28/2004	1:27:30 PM		24.973	19.257	25.381	24.14	21.44		53.155	54.466	18.711	35.003	-1.214	-6.554		48.029	0.044	14.643	0.004		575.25	9.5875	53.0	11.8	44.1	3.039	0.007	0.006	0.000	0.147	0.13	
595	1/28/2004	1:28:30 PM		24.973	19.273	25.381	24.126	21.295		52.781	54.093	18.437	35.048	-1.216	-6.554		49.369	0.044	14.643	0.004		576.25	9.60417	52.6	12.1	43.9	3.028	0.007	0.006	0.000	0.148	0.13	
596	1/28/2004	1:29:30 PM		24.985	19.289	25.393	24.142	21.663		52.769	54.024	18.432	34.98	-1.214	-6.554		48.954	0.044	14.643	0.004		577.25	9.62083	52.6	12.0	43.9	3.025	0.007	0.006	0.000	0.148	0.13	
597	1/28/2004	1:30:30 PM		25.001	19.316	25.414	24.179	21.635		52.893	54.254	18.52	35.003	-1.216	-6.551		45.067	0.044	14.643	0.004		578.25	9.6375	52.8	11.0	43.9	3.030	0.007	0.006	0.000	0.148	0.13	
598	1/28/2004	1:31:30 PM		25.022	19.337	25.435	24.18	21.661		52.808	54.227	18.409	34.947	-1.214	-6.551		48.298	0.044	14.643	0.004		579.25	9.65417	52.8	11.8	43.9	3.025	0.007	0.006	0.000	0.148	0.13	
599	1/28/2004	1:32:30 PM		25.024	19.364	25.437	24.226	22.25		52.798	54.132	18.498	34.997	-1.214	-6.551		49.087	0.044	14.643	0.004		580.25	9.67083	52.7	12.0	43.9	3.027	0.007	0.006	0.000	0.148	0.13	
600	1/28/2004	1:33:30 PM		25.025	19.37	23.333	24.268	22.722		53.623	55.007	18.529	35.508	-1.216	-6.554		48.739	0.043	14.643	0.004		581.25	9.6875	53.5	11.9	44.6	3.073	0.006	0.007	0.000	0.151	0.13	
601	1/28/2004	1:34:30 PM		25.016	19.386	24.728	24.253	22.232		52.775	54.142	18.903	34.502	-1.216	-6.557		46.663	0.043	14.643	0.004		582.25	9.70417	52.7	11.4	43.6	3.009	0.006	0.006	0.000	0.148	0.13	
602	1/28/2004	1:35:30 PM		24.991	19.402	24.809	24.259	22.242		53.107	54.408	18.797	34.878	-1.216	-6.551		47.385	0.043	14.643	0.004		583.25	9.72083	52.9	11.6	44.0	3.033	0.006	0.006	0.000	0.147	0.12	
603	1/28/2004	1:36:30 PM		24.972	19.434	24.875	24.316	22.033		52.777	54.145	18.566	34.878	-1.219	-6.551		47.604	0.043	14.643	0.004		584.25	9.7375	52.7	11.7	43.8	3.022	0.006	0.006	0.000	0.147	0.12	
604	1/28/2004	1:37:30 PM		24.939	19.451	24.912	24.298	22.517		53.024	54.451	18.249	35.323	-1.216	-6.545		48.589	0.043	14.643	0.004		585.25	9.75417	53.0	11.9	44.2	3.046	0.006	0.006	0.000	0.145	0.12	
605	1/28/2004	1:38:30 PM		24.927	19.479	24.965	24.366	22.791		53.072	54.414	18.423	35.282	-1.214	-6.542		49.884	0.043	14.643	0.004		586.25	9.77083	52.9	12.2	44.2	3.046	0.006	0.006	0.000	0.145	0.12	
606	1/28/2004	1:39:30 PM		24.92	19.502	25.003	24.409	22.633		53.381	54.845	18.552	35.395	-1.214	-6.539		48.34	0.043	14.643	0.004		587.25	9.7875	53.4	11.8	44.4	3.060	0.006	0.006	0.000	0.144	0.12	
607	1/28/2004	1:40:30 PM		24.913	19.525	25.021	24.447	22.385		52.91	54.242	18.208	35.352	-1.216	-6.542		46.586	0.043	14.643	0.003		588.25	9.80417	52.8	11.4	44.1	3.043	0.006	0.006	0.000	0.145	0.12	
608	1/28/2004	1:41:30 PM		24.911	19.538	25.034	24.475	22.403		52.887	54.267	18.2	35.428	-1.225	-6.542		47.518	0.043	14.643	0.003		589.25	9.82083	52.8	11.6	44.2	3.045	0.006	0.006	0.000	0.145	0.12	
609	1/28/2004	1:42:30 PM		24.909	19.571	25.087	24.482	23.128		53.36	54.762	18.45	35.475	-1.216	-6.539		47.253	0.043	14.643	0.003		590.25	9.8375	53.3	11.6	44.4	3.062	0.006	0.006	0.000	0.144	0.12	
610	1/28/2004	1:43:30 PM		24.916	19.594	25.109	24.545	22.297		53.12	54.551	18.327	35.405	-1.219	-6.539		47.977	0.043	14.643	0.003		591.25	9.85417	53.1	11.8	44.3	3.052	0.006	0.006	0.000	0.144	0.12	
611	1/28/2004	1:44:30 PM		24.929	19.627	25.137	24.553	22.722		53.062	54.495	18.277	35.438	-1.216	-6.536		48.267	0.043	14.643	0.004		592.25	9.87083	53.0	11.8	44.3	3.051	0.006	0.006	0.000	0.144	0.12	
612	1/28/2004	1:45:30 PM		24.936	19.655	25.149	24.555	22.88		53.4	54.806	18.547	35.462	-1.216	-6.534		46.628	0.043	14.643	0.004		593.25	9.8875	53.3	11.4	44.4	3.063	0.006	0.006	0.000	0.144	0.12	
613	1/28/2004	1:46:30 PM		24.949	19.682	25.167	24.588	22.486		53.202	54.69	18.367	35.442	-1.216	-6.536		48.374	0.043	14.643	0.004		594.25	9.90417	53.2	11.9	44.3	3.056	0.006	0.006	0.000	0.144	0.12	
614	1/28/2004	1:47:30 PM		24.956	19.71	25.174	24.545	22.503		52.983	54.458	18.246	35.372	-1.219	-6.539		48.278	0.043	14.643	0.003		595.25	9.92083	53.0	11.8	44.2	3.046	0.006	0.006	0.000	0.144	0.12	
615	1/28/2004	1:48:30 PM		24.969	19.738	25.202	24.618	22.807		53.2	54.617	18.496	35.403	-1.219	-6.536		48.768	0.043	14.643	0.004		596.25	9.9375	53.1	12.0	44.3	3.054	0.006	0.006	0.000	0.144	0.12	
616	1/28/2004	1:49:30 PM		24.966	19.755	25.214	24.625	22.759		53.153	54.65	18.373	35.405	-1.219	-6.534		49.727	0.043	14.643	0.003		597.25	9.95417	53.2	12.2	44.3	3.053	0.006	0.006	0.000	0.144	0.12	
617	1/28/2004	1:50:30 PM		24.988	19.787	25.246	24.617	23.102		53.035	54.613	18.254	35.38	-1.219	-6.528		50.908	0.043	14.643	0.004		598.25	9.97083	53.1	12.5	44.2	3.048	0.006	0.006	0.000	0.144	0.12	
618	1/28/2004	1:51:30 PM		25.01	19.825	25.278	24.614	22.773		52.782	54.25	18.236	35.302	-1.216	-6.528		46.382	0.043	14.643	0.004		599.25	9.9875	52.8	11.4	44.0	3.037	0.006	0.006	0.000	0.144	0.12	
619	1/28/2004	1:52:30 PM		25.012	19.858	25.27	24.646	23.212		53.142	54.746	18.33	35.341	-1.219	-6.528		48.182	0.043	14.643	0.004		600.25	10.0042	53.3	11.8	44.2	3.050	0.006	0.006	0.000	0.144	0.12	
620	1/28/2004	1:53:30 PM		25.03	19.896	25.313	24.699	23.505		53.001	54.555	18.254	35.391	-1.216	-6.528		47.975	0.043	14.643	0.004		601.25	10.0208	53.1	11.8	44.2	3.047	0.006	0.006	0.000	0.144	0.12	
621	1/28/2004	1:54:30 PM		25.038	19.929	25.327	24.743	23.754		53.2	54.775	18.354	35.384	-1.216	-6.522		48.259	0.043	14.643	0.004		602.25	10.0375	53.3	11.8	44.3	3.054	0.006	0.006	0.000	0.143	0.12	
622	1/28/2004	1:55:30 PM		25.045	19.962	25.319	24.77	23.35		53.061	54.601	18.367	35.384	-1.219	-6.522		46.793	0.043	14.643	0.003		603.25	10.0542	53.1	11.5	44.2	3.049	0.006	0.006	0.000	0.144	0.12	
623	1/28/2004	1:56:30 PM		25.074	20.011	25.337	24.783	22.827		53.151	54.706	18.398	35.387	-1.219	-6.522		47.99	0.043	14.643	0.004		604.25	10.0708	53.2	11.8	44.3	3.052	0.006	0.006	0.000	0.143	0.12	
624	1/28/2004	1:57:30 PM		25.092	20.049	25.36	24.821	23.221		53.049	54.648	18.278	35.356	-1.216	-6.519		48.945	0.043	14.643	0.004		605.25	10.0875	53.2	12.0	44.2	3.048	0.006	0.006	0.000	0.144	0.12	
625	1/28/2004	1:58:30 PM		25.1	20.082	25.363	24.87	23.49		53.283	54.87	18.521	35.372	-1.219	-6.519		47.608	0.042	14.643	0.004		606.25	10.1042	53.4	11.7	44.3	3.056	0.006	0.006	0.000	0.140	0.12	
626	1/28/2004	1:59:30 PM		25.118	20.111	25.381	24.868	23.463		53.03	54.598	18.516	35.239	-1.219	-6.519		48.638	0.043	14.643	0.004		607.25	10.1208	53.1	11.9	44.1	3.043	0.006	0.006	0.000	0.144	0.12	
627	1/28/2004	2:00:30 PM		25.121	20.145	25.385	24.921	23.622		53.178	54.785	18.522	35.251	-1.219	-6.519		48.048	0.042	14.643	0.004		608.25	10.1375	53.3	11.8	44.2	3.048	0.006	0.006	0.000	0.140	0.12	
628	1/28/2004	2:01:07 PM		25.138	20.167	25.397	24.958	23.714		53.165	54.762	18.565	35.226	-1.216	-6.516		49.671	0.043	14.643	0.004		608.87	10.1478	53.3	12.2	44.2	3.047	0.006	0.006	0.000	0.143	0.12	
629	1/28/2004	2:02:07 PM		25.141	20.185	25.39	24.926	23.301		53.041	54.661	18.507	35.169	-1.219	-6.516		49.857	0.042	14.643	0.003		609.87	10.1644	53.2	12.2	44.1	3.041	0.006	0.006	0.000	0.140	0.12	
630	1/28/2004	2:03:07 PM		25.174	20.228	25.418	25.009	23.133		53.236	54.88	18.597	35.161	-1.216	-6.516		48.232	0.042	14.643	0.004		610.87	10.1811	53.4	11.8	44.2	3.047	0.006	0.006	0.000	0.140	0.12	

RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	1/28/2004	2:04:07 PM		25.192	20.246	25.43	25.072	22.89		53.099	54.76	18.378	35.19	-1.216	-6.513		47.775	0.042	14.643	0.003		611.87	10.1978	53.3	11.7	44.1	3.044	0.006	0.006	0.000	0.140	0.12	
632	1/28/2004	2:05:07 PM		25.198	20.263	25.437	25.028	23.258		53.275	54.961	18.263	35.538	-1.219	-6.482		47.416	0.042	14.643	0.004		612.87	10.2144	53.5	11.6	44.4	3.062	0.006	0.006	0.000	0.139	0.12	
633	1/28/2004	2:06:07 PM		25.231	20.306	25.459	25.046	23.115		53.153	54.818	18.245	35.522	-1.219	-6.493		46.682	0.042	14.643	0.003		613.87	10.2311	53.3	11.4	44.3	3.057	0.006	0.006	0.000	0.139	0.12	
634	1/28/2004	2:07:07 PM		25.232	20.297	25.451	25.012	23.162		53.275	54.916	18.215	35.67	-1.216	-6.484		47.278	0.042	14.643	0.004		614.87	10.2478	53.4	11.6	44.5	3.066	0.006	0.006	0.000	0.139	0.12	
635	1/28/2004	2:08:07 PM		25.254	20.34	25.463	25.06	23.224		53.155	54.876	18.198	35.608	-1.219	-6.487		44.534	0.042	14.643	0.004		615.87	10.2644	53.4	10.9	44.4	3.060	0.006	0.006	0.000	0.139	0.12	
636	1/28/2004	2:09:07 PM		25.266	20.357	25.46	25.087	23.316		53.539	55.218	18.411	35.647	-1.219	-6.551		46.428	0.042	14.643	0.004		616.87	10.2811	53.7	11.4	44.6	3.075	0.006	0.006	0.000	0.139	0.12	
637	1/28/2004	2:10:07 PM		25.279	20.384	25.462	25.139	23.328		53.356	55.067	18.394	35.565	-1.219	-6.554		47.189	0.042	14.643	0.004		617.87	10.2978	53.6	11.6	44.5	3.065	0.006	0.006	0.000	0.139	0.12	
638	1/28/2004	2:11:07 PM		25.291	20.401	25.474	25.186	23.22		53.186	54.914	18.267	35.547	-1.216	-6.551		47.251	0.041	14.643	0.003		618.87	10.3144	53.4	11.6	44.4	3.059	0.006	0.006	0.000	0.136	0.12	
639	1/28/2004	2:12:07 PM		25.307	20.418	25.486	25.188	23.412		53.451	55.104	18.667	35.487	-1.216	-6.557		46.707	0.041	14.643	0.004		619.87	10.3311	53.6	11.4	44.5	3.066	0.006	0.006	0.000	0.136	0.12	
640	1/28/2004	2:13:07 PM		25.318	20.449	25.502	25.194	22.967		53.147	54.868	18.394	35.426	-1.219	-6.534		46.822	0.041	14.643	0.004		620.87	10.3478	53.4	11.5	44.3	3.053	0.006	0.006	0.000	0.136	0.12	
641	1/28/2004	2:14:07 PM		25.33	20.472	25.504	25.211	23.27		53.09	54.87	18.212	35.442	-1.219	-6.534		46.707	0.041	14.643	0.004		621.87	10.3644	53.4	11.4	44.3	3.052	0.006	0.006	0.000	0.136	0.12	
642	1/28/2004	2:15:07 PM		25.352	20.498	25.496	25.197	23.347		53.271	55.017	18.435	35.405	-1.216	-6.536		47.468	0.041	14.643	0.004		622.87	10.3811	53.5	11.6	44.3	3.057	0.006	0.006	0.000	0.136	0.12	
643	1/28/2004	2:16:07 PM		25.358	20.51	25.497	25.214	23.173		53.451	55.226	18.485	35.419	-1.219	-6.531		48.13	0.041	14.643	0.003		623.87	10.3978	53.8	11.8	44.4	3.064	0.006	0.006	0.000	0.136	0.12	
644	1/28/2004	2:17:07 PM		25.371	20.537	25.514	25.246	23.526		53.346	55.071	18.635	35.354	-1.216	-6.525		47.122	0.041	14.643	0.004		624.87	10.4144	53.6	11.5	44.4	3.058	0.006	0.006	0.000	0.136	0.12	
645	1/28/2004	2:18:07 PM		25.383	20.56	25.526	25.238	23.548		53.155	54.882	18.486	35.384	-1.219	-6.525		47.341	0.041	14.643	0.004		625.87	10.4311	53.4	11.6	44.3	3.052	0.006	0.006	0.000	0.136	0.12	
646	1/28/2004	2:19:07 PM		25.394	20.582	25.538	25.285	23.354		53.597	55.336	18.773	35.405	-1.216	-6.522		50.793	0.041	14.643	0.004		626.87	10.4478	53.9	12.4	44.5	3.068	0.006	0.006	0.000	0.135	0.12	
647	1/28/2004	2:20:07 PM		25.407	20.625	25.561	25.343	23.211		53.505	55.249	18.792	35.337	-1.216	-6.525		47.108	0.041	14.643	0.004		627.87	10.4644	53.8	11.5	44.4	3.063	0.006	0.006	0.000	0.135	0.12	
648	1/28/2004	2:21:07 PM		25.418	20.631	25.562	25.319	23.603		53.476	55.311	18.663	35.38	-1.219	-6.528		48.837	0.04	14.643	0.004		628.87	10.4811	53.8	12.0	44.4	3.063	0.006	0.006	0.000	0.132	0.11	
649	1/28/2004	2:22:07 PM		25.431	20.669	25.584	25.366	23.31		53.397	55.2	18.722	35.304	-1.216	-6.528		46.144	0.04	14.643	0.004		629.87	10.4978	53.7	11.3	44.4	3.058	0.006	0.006	0.000	0.132	0.11	
650	1/28/2004	2:23:07 PM		25.438	20.691	25.557	25.374	23.473		53.713	55.471	18.916	35.399	-1.219	-6.531		47.278	0.04	14.643	0.004		630.87	10.5144	54.0	11.6	44.6	3.072	0.006	0.006	0.000	0.132	0.11	
651	1/28/2004	2:24:07 PM		25.455	20.714	25.139	25.426	23.991		53.667	55.469	18.84	35.483	-1.214	-6.528		48.58	0.04	14.643	0.004		631.87	10.5311	54.0	11.9	44.6	3.073	0.006	0.006	0.000	0.133	0.11	
652	1/28/2004	2:25:07 PM		25.442	20.72	24.65	25.373	24.173		53.46	55.202	18.967	35.194	-1.216	-6.531		46.519	0.04	14.643	0.004		632.87	10.5478	53.7	11.4	44.3	3.056	0.006	0.006	0.000	0.136	0.12	
653	1/28/2004	2:26:07 PM		25.454	20.768	24.797	25.44	23.9		53.01	54.876	19.334	34.272	-1.219	-6.534		47.652	0.039	14.643	0.004		633.87	10.5644	53.4	11.7	43.6	3.009	0.006	0.006	0.000	0.134	0.11	
654	1/28/2004	2:27:07 PM		25.416	20.77	24.909	25.451	23.195		53.269	55.075	19.679	34.202	-1.216	-6.534		48.248	0.039	14.643	0.004		634.87	10.5811	53.6	11.8	43.7	3.015	0.006	0.006	0.000	0.133	0.11	
655	1/28/2004	2:28:07 PM		25.403	20.802	24.981	25.434	23.027		53.095	55.009	19.234	34.315	-1.216	-6.534		48.363	0.039	14.643	0.004		635.87	10.5978	53.5	11.9	43.7	3.013	0.006	0.006	0.000	0.133	0.11	
656	1/28/2004	2:29:07 PM		25.374	20.803	25.027	25.43	23.76		53.312	55.113	19.519	34.324	-1.219	-6.534		48.121	0.039	14.643	0.004		636.87	10.6144	53.6	11.8	43.8	3.021	0.006	0.006	0.000	0.133	0.11	
657	1/28/2004	2:30:07 PM		25.365	20.835	25.079	25.431	23.621		53.285	55.113	19.568	34.289	-1.219	-6.534		48.499	0.039	14.643	0.003		637.87	10.6311	53.6	11.9	43.8	3.019	0.006	0.006	0.000	0.132	0.11	
658	1/28/2004	2:31:07 PM		25.352	20.857	25.106	25.398	23.457		53.207	55.017	19.391	34.338	-1.219	-6.534		45.625	0.039	14.643	0.004		638.87	10.6478	53.5	11.2	43.8	3.018	0.006	0.006	0.000	0.132	0.11	
659	1/28/2004	2:32:07 PM		25.353	20.868	25.147	25.404	23.819		53.271	55.088	19.482	34.377	-1.216	-6.528		47.4	0.039	14.643	0.004		639.87	10.6644	53.6	11.6	43.8	3.022	0.006	0.006	0.000	0.132	0.11	
660	1/28/2004	2:33:07 PM		25.355	20.89	25.188	25.421	23.31		53.049	54.887	19.32	34.356	-1.219	-6.528		45.77	0.039	14.643	0.004		640.87	10.6811	53.4	11.2	43.7	3.013	0.006	0.006	0.000	0.132	0.11	
661	1/28/2004	2:34:07 PM		25.351	20.896	25.205	25.477	23.702		52.871	54.688	19.188	34.354	-1.219	-6.528		46.319	0.039	14.643	0.004		641.87	10.6978	53.2	11.4	43.6	3.007	0.006	0.006	0.000	0.133	0.11	
662	1/28/2004	2:35:07 PM		25.358	20.919	25.257	25.529	23.589		53.008	54.901	19.171	34.391	-1.216	-6.525		47.708	0.039	14.643	0.004		642.87	10.7144	53.4	11.7	43.7	3.013	0.006	0.006	0.000	0.132	0.11	
663	1/28/2004	2:36:07 PM		25.366	20.951	25.294	25.547	23.766		53.217	55.15	19.295	34.441	-1.219	-6.522		45.48	0.039	14.643	0.004		643.87	10.7311	53.7	11.1	43.8	3.022	0.006	0.006	0.000	0.132	0.11	
664	1/28/2004	2:37:07 PM		25.372	20.968	25.316	25.603	24.038		52.898	54.818	19.15	34.373	-1.219	-6.522		48.073	0.039	14.643	0.004		644.87	10.7478	53.3	11.8	43.6	3.009	0.006	0.006	0.000	0.132	0.11	
665	1/28/2004	2:38:07 PM		25.379	20.979	25.333	25.62	24.385		53.107	55.017	19.272	34.455	-1.219	-6.519		45.737	0.039	14.643	0.003		645.87	10.7644	53.5	11.2	43.8	3.019	0.006	0.006	0.000	0.132	0.11	
666	1/28/2004	2:39:07 PM		25.381	21.012	25.36	25.667	24.648		53.12	55.048	19.14	34.568	-1.219	-6.516		48.672	0.039	14.643	0.004		646.87	10.7811	53.6	11.9	43.8	3.023	0.006	0.006	0.000	0.131	0.11	
667	1/28/2004	2:40:07 PM		25.409	21.05	25.373	25.745	24.181		52.815	54.777	18.991	34.496	-1.219	-6.516		48.242	0.039	14.643	0.004		647.87	10.7978	53.3	11.8	43.7	3.010	0.006	0.006	0.000	0.132	0.11	
668	1/28/2004	2:41:07 PM		25.417	21.073	25.396	25.803	24.629		53.014	54.947	19.101	34.533	-1.216	-6.51		47.437	0.039	14.643	0.004		648.87	10.8144	53.5	11.6	43.8	3.018	0.006	0.006	0.000	0.131	0.11	
669	1/28/2004	2:42:07 PM		25.436	21.097	25.405	25.817	24.887		53.02	54.911	19.158	34.465	-1.225	-6.513		46.277	0.039	14.643	0.003		649.87	10.8311	53.4	11.3	43.7	3.016	0.006	0.006	0.000	0.131	0.11	
670	1/28/2004	2:43:07 PM		25.453	21.13	25.442	25.814	24.9		53.078	55.036	19.104	34.56	-1.219	-6.51		47.787	0.039	14.643	0.003		650.87	10.8478	53.6	11.7	43.8	3.021	0.006	0.006	0.000	0.131	0.11	
671	1/28/2004	2:44:07 PM		25.46	21.167	25.449	25.836	24.687		53.068	54.997	19.07	34.594	-1.219	-6.505		48.305	0.039	14.643	0.004		651.87	10.8644	53.5	11.8	43.8	3.022	0.006	0.006	0.000	0.131	0.11	
672	1/28/2004	2:45:07 PM		25.483	21.2	25.482	25.899	23.648		52.794	54.835	18.828	34.582	-1.219	-6.505		47.644	0.039	14.643	0.004		652.87	10.8811	53.4	11.7	43.7	3.012	0.006	0.006	0.000	0.131	0.11	
673	1/28/2004	2:46:07 PM		25.506	21.239	25.5	25.948	23.732		53.161	55.084	19.172	34.635	-1.219	-6.502		47.341	0.039	14.643	0.004		653.87	10.8978	53.6	11.6	43.9	3.027	0.006	0.006	0.000	0.131	0.11	
674	1/28/2004	2:47:07 PM		25.513	21.251	25.487	25.884	23.398		52.939	54.897	19.02	34.559	-1.222	-6.505		47.977	0.039	14.643	0.004		654.87	10.9144	53.4	11.8	43.7	3.016	0.006	0.006	0.000	0.131	0.11	
675	1/28/2004	2:48:07 PM		25.53	21.278	25.514	25.911	23.41		52.925	54.93	19.022	34.527	-1.219	-6.505		48.322	0.039	14.643	0.004		655.87	10.9311	53.5	11.8	43.7	3.015	0.006	0.006	0.000	0.131	0.11	
676	1/28/2004	2:49:07 PM		25.545	21.289	25.529	25.907	23.566		53.049	55.04	19.213	34.438	-1.219	-6.505		47.886	0.039	14.643	0.003		656.87	10.9478	53.6	11.7	43.7	3.016	0.006	0.006	0.000	0.131	0.11	
677	1/28/2004	2:50:07 PM		25.567	21.315	25.546	25.899	23.593		53.242	55.307	19.3	34.477	-1.219	-6.508		47.714	0.039	14.643	0.004		657.87	10.9644	53.8	11.7	43.9	3.024	0.006	0.006	0.000	0.131	0.11	
678	1/28/2004	2:51:07 PM		25.574	21.332	25.543	25.905	24.55		52.925	54.928	19.115	34.453	-1.219	-6.502		46.822	0.039	14.643	0.004		658.87	10.9811	53.5	11.5	43.7	3.012	0.006	0.006	0.000	0.131	0.11	
679	1/28/2004	2:52:07 PM		25.601	21.375	25.575	25.967	24.898		52.767	54.858	18.891	34.467	-1.216	-6.499		48.641	0.039	14.643	0.004		659.87	10.9978	53.4	11.9	43.6	3.007	0.006	0.006	0.000	0.131	0.11	
680	1/28/2004	2:53:07 PM		25.609	21.388	25.558	25.96	24.375		52.997	55.054	19.179	34.475	-1.225	-6.502		47.852	0.039	14.643	0.003		660.87	11.0144	53.6	11.7	43.7	3.015	0.006	0.006	0.000	0.131	0.11	
681	1/28/2004	2:54:07 PM		25.621	21.421	25.581	25.978	24.913		52.869	54.976	19.026	34.492	-1.219	-6.496		48.127	0.039	14.643	0.004		661.87	11.0311	53.5	11.8	43.7	3.012	0.006	0.006	0.000	0.131	0.11	
682	1/28/2004	2:55:07 PM		25.639	21.448	25.598	25.94	24.921		53.045	55.088	19.115	34.582	-1.219	-6.493		46.405	0.039	14.643	0.003		662.87	11.0478	53.6	11.4	43.8	3.021	0.006	0.006	0.000	0.131	0.11	
683	1/28/2004	2:56:07 PM		25.667	21.482	25.626	25.989	24.464		52.949	55.063	19.001	34.539	-1.222	-6.493		48.334	0.039	14.643	0.004		663.87	11.0644	53.6	11.8	43.7	3.016	0.006	0.006	0.000	0.131	0.11	
684	1/28/2004	2:57:07 PM		25.68	21.52	25.664	26.061	24.632		53.088	55.193	19.179	34.473	-1.222	-6.49		47.687	0.039	14.643	0.004		664.87	11.0811	53.7	11.7	43.8	3.019	0.006	0.006	0.000	0.130	0.11	
685	1/28/2004	2:58:07 PM		25.687	21.527	25.666	26.084	24.314		52.725	54.855	18.769	34.601	-1.222	-6.487		48.755	0.039	14.643	0.003		665.87	11.0978	53.4	11.9	43.7	3.010	0.006	0.006	0.000	0.131	0.11	
686	1/28/2004	2:59:07 PM		25.704	21.575	25.678	26.121	24.241		53.061	55.183	19.159	34.486	-1.219	-6.493		48.559	0.039	14.643	0.004		666.87	11.1144	53.7	11.9	43.8	3.018	0.006	0.006	0.000	0.130	0.11	
687	1/28/2004	3:00:07 PM		25.721	21.592	25.666	26.138	24.278		52.887	54.999	19.051	34.422	-1.219	-6.487		47.823	0.039	14.643	0.004		667.87	11.1311	53.5	11.7	43.7	3.010	0.006	0.006	0.000	0.131	0.11	
688	1/28/2004	3:01:07 PM		25.729	21.614	25.638	26.165	24.611		52.808	54.882	19.028	34.527	-1.219	-6.487		47.604	0.039	14.643	0.004		668.87	11.1478	53.4	11.7	43.7	3.011	0.006	0.006	0.000	0.131	0.11	
689	1/28/2004	3:02:07 PM		25.745	21.631	25.6	26.172	24.887		53.037	55.154	19.12	34.572	-1.219	-6.484		48.084	0.039	14.643	0.004		669.87	11.1644	53.7	11.8	43.8	3.020	0.006	0.006	0.000	0.131	0.11	
690	1/28/2004	3:03:07 PM		25.751	21.657	25.561	26.173	24.528		53.236	55.312	18.899	34.929	-1.219	-6.484		47.36	0.039	14.643	0.004		670.87	11.1811	53.8	11.6	44.1	3.039	0.006	0.006	0.000	0.130	0.11	
691	1/28/2004	3:04:07 PM		25.754	21.67	25.494	26.161	24.676		52.86	55.059	18.652	34.886	-1.222	-6.473		46.24	0.039	14.643	0.004		671.87	11.1978	53.6	11.3	43.9	3.025	0.006	0.006	0.000	0.131	0.11	
692	1/28/2004	3:05:07 PM		25.776	21.708	25.491	26.228	24.513		52.921	55.079	18.738	34.855	-1.219	-6.508		47.097	0.039	14.643	0.004		672.87	11.2144	53.6	11.5	43.9	3.026	0.006	0.006	0.000	0.131	0.11	
693	1/28/2004	3:06:07 PM		25.779	21.74	25.448	26.281	25.081		53.128	55.397	18.747	34.863	-1.216	-6.508		47.314	0.039	14.643	0.004		673.87	11.2311	53.9	11.6	44.0	3.033	0.006	0.006	0.000	0.131	0.11	
694	1/28/2004	3:07:07 PM		25.797	21.769	25.451	26.324	24.564		53.138	55.322	18.916	34.851	-1.216	-6.505		47.723	0.039	14.643	0.004		674.87	11.2478	53.8	11.7	44.0	3.033	0.006	0.006	0.000	0.131	0.11	
695	1/28/2004	3:08:07 PM		25.779	21.781	25.379	26.266	24.711		53.474	55.596	18.81	35.29	-1.222	-6.496		47.502	0.039	14.643	0.003		675.87	11.2644	54.1	11.6	44.4	3.060	0.006	0.006	0.000	0.130	0.11	
696	1/28/2004	3:09:07 PM		25.782	21.814	25.366	26.303	24.759		53.059	55.191	18.527	35.251	-1.222	-6.493		48.13	0.039	14.643	0.004		676.87	11.2811	53.7	11.8	44.2	3.044	0.006	0.006	0.000	0.130	0.11	
697	1/28/2004	3:10:07 PM		25.773	21.816	25.353	26.325	24.43		53.391	55.577	18.691	35.309	-1.219	-6.496		48.136	0.038	14.643	0.003		677.87	11.2978	54.1	11.8	44.4	3.058	0.006	0.006	0.000	0.126	0.11	
698	1/28/2004	3:11:07 PM		25.786	21.843	25.32	26.297	24.623		53.462	55.674	18.874	35.146	-1.219	-6.496		46.901	0.038	14.643	0.004		678.87	11.3144	54.2	11.5	44.3	3.055	0.006	0.006	0.000	0.127	0.11	
699	1/28/2004	3:12:07 PM		25.782	21.865	25.307	26.329	24.534		52.846	54.978	18.432	35.276	-1.219	-6.502		46.986	0.038	14.643	0.004		679.87	11.3311	53.5	11.5	44.1	3.038	0.006	0.006	0.000	0.127	0.11	
700	1/28/2004	3:13:07 PM		25.784	21.887	25.278	26.346	24.496		53.068	55.233	18.485	35.333	-1.219	-6.502		47.085	0.038	14.643	0.004		680.87	11.3478	53.8	11.5	44.2	3.047	0.006	0.006	0.000	0.127	0.11	

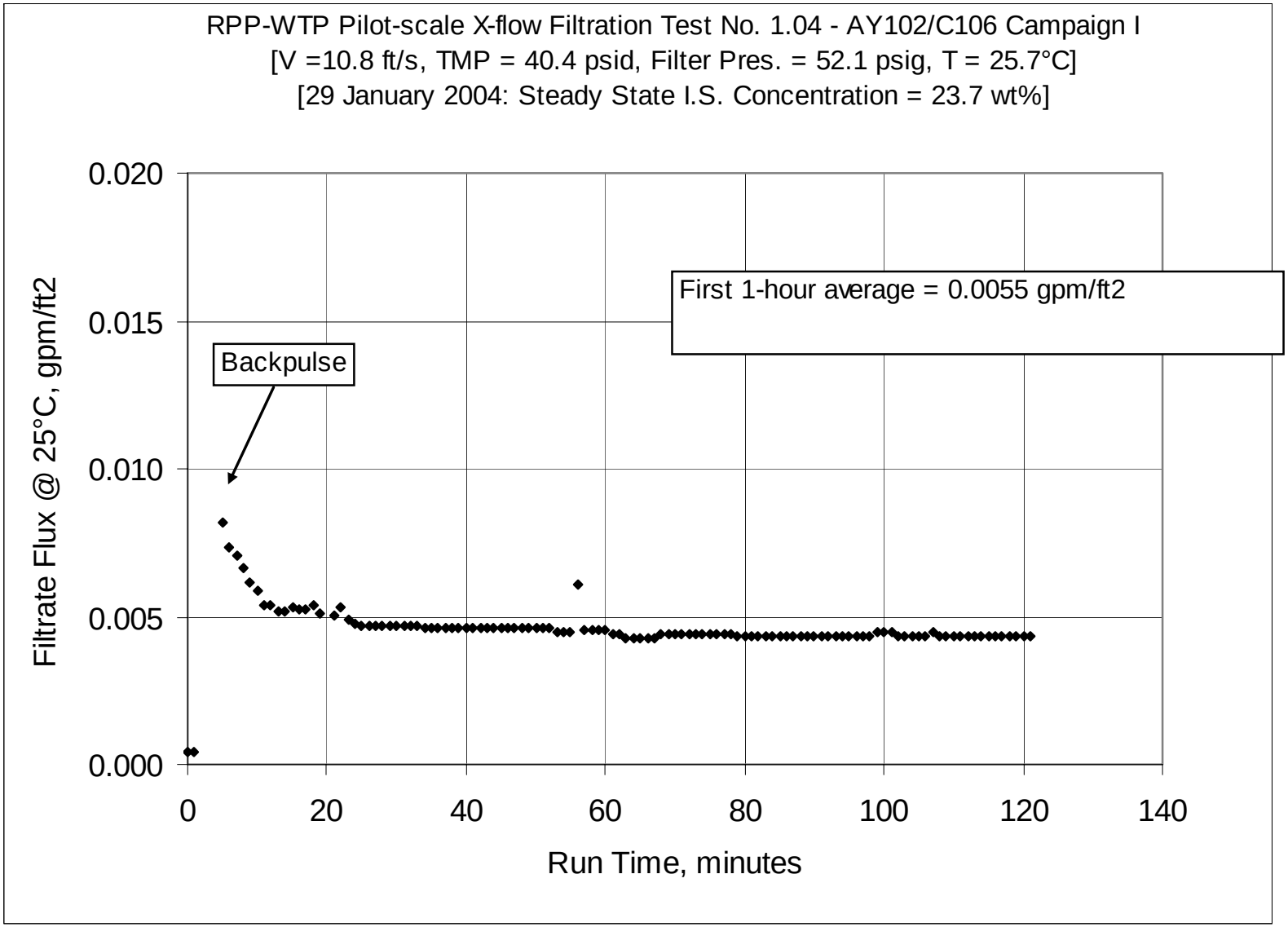
RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
701	1/28/2004	3:14:07 PM		25.785	21.903	25.254	26.387	24.787		53.113	55.197	18.616	35.229	-1.219	-6.502		46.911	0.038	14.643	0.004		681.87	11.3644	53.7	11.5	44.2	3.045	0.006	0.006	0.000	0.127	0.11	
702	1/28/2004	3:15:07 PM		25.792	21.925	25.231	26.409	24.469		53.559	55.834	18.957	35.109	-1.222	-6.493		46.891	0.038	14.643	0.004		682.87	11.3811	54.4	11.5	44.3	3.057	0.006	0.006	0.000	0.127	0.11	
703	1/28/2004	3:16:07 PM		25.794	21.937	25.223	26.476	24.275		53.354	55.467	18.901	35.204	-1.219	-6.499		46.811	0.038	14.643	0.004		683.87	11.3978	54.0	11.5	44.3	3.053	0.006	0.006	0.000	0.127	0.11	
704	1/28/2004	3:17:07 PM		25.795	21.948	25.214	26.517	24.402		53.395	55.627	18.811	35.116	-1.219	-6.496		46.699	0.038	14.643	0.004		684.87	11.4144	54.2	11.4	44.3	3.051	0.006	0.006	0.000	0.127	0.11	
705	1/28/2004	3:18:07 PM		25.791	21.969	25.175	26.473	24.573		53.217	55.494	18.723	35.114	-1.225	-6.502		47.281	0.037	14.643	0.003		685.87	11.4311	54.0	11.6	44.2	3.045	0.006	0.005	0.000	0.124	0.11	
706	1/28/2004	3:19:07 PM		25.796	21.979	25.18	26.448	24.608		53.256	55.51	18.71	35.204	-1.219	-6.496		47.948	0.037	14.643	0.004		686.87	11.4478	54.0	11.8	44.2	3.050	0.006	0.005	0.000	0.124	0.11	
707	1/28/2004	3:20:07 PM		25.781	21.984	25.15	26.443	24.403		53.414	55.639	18.988	35.093	-1.219	-6.496		46.861	0.037	14.643	0.004		687.87	11.4644	54.2	11.5	44.3	3.051	0.006	0.005	0.000	0.124	0.11	
708	1/28/2004	3:21:07 PM		25.798	22.011	25.157	26.43	23.924		53.455	55.618	18.765	35.432	-1.216	-6.499		46.647	0.037	14.643	0.004		688.87	11.4811	54.1	11.4	44.4	3.064	0.006	0.005	0.000	0.124	0.11	
709	1/28/2004	3:22:07 PM		25.788	22.011	24.696	26.465	24.5		53.98	56.232	19.373	35.169	-1.222	-6.499		46.375	0.037	14.643	0.004		689.87	11.4978	54.8	11.4	44.6	3.073	0.006	0.006	0.000	0.125	0.11	
710	1/28/2004	3:23:07 PM		25.783	22.012	24.366	26.475	25.3		54.159	56.423	19.085	35.692	-1.219	-6.499		45.962	0.037	14.643	0.004		690.87	11.5144	55.0	11.3	44.9	3.097	0.006	0.006	0.000	0.125	0.11	
711	1/28/2004	3:24:07 PM		25.783	22.037	24.121	26.53	24.88		53.232	55.569	19.974	33.794	-1.219	-6.502		47.762	0.036	14.643	0.004		691.87	11.5311	54.1	11.7	43.5	3.000	0.005	0.006	0.000	0.126	0.11	
712	1/28/2004	3:25:07 PM		25.759	22.038	24.402	26.491	24.361		52.835	55.125	19.764	33.712	-1.225	-6.505		47.16	0.036	14.643	0.004		692.87	11.5478	53.7	11.6	43.3	2.984	0.005	0.005	0.000	0.126	0.11	
713	1/28/2004	3:26:07 PM		25.741	22.055	24.454	26.548	23.902		52.952	55.206	19.733	33.911	-1.222	-6.502		46.265	0.036	14.643	0.004		693.87	11.5644	53.7	11.3	43.4	2.994	0.005	0.005	0.000	0.125	0.11	
714	1/28/2004	3:27:07 PM		25.733	22.072	24.516	26.6	24.24		53.319	55.55	20.037	33.825	-1.225	-6.505		47.105	0.036	14.643	0.003		694.87	11.5811	54.1	11.5	43.6	3.004	0.005	0.005	0.000	0.125	0.11	
715	1/28/2004	3:28:07 PM		25.708	22.072	24.572	26.63	24.37		53.105	55.425	19.781	33.819	-1.222	-6.499		46.49	0.036	14.643	0.003		695.87	11.5978	54.0	11.4	43.5	2.997	0.005	0.005	0.000	0.125	0.11	
716	1/28/2004	3:29:07 PM		25.689	22.083	24.607	26.616	24.766		53.003	55.287	19.456	34.182	-1.219	-6.496		49.36	0.036	14.643	0.004		696.87	11.6144	53.8	12.1	43.6	3.006	0.005	0.005	0.000	0.124	0.11	
717	1/28/2004	3:30:07 PM		25.67	22.089	24.623	26.636	24.922		53.016	55.374	19.403	34.188	-1.219	-6.493		48.209	0.036	14.643	0.004		697.87	11.6311	53.9	11.8	43.6	3.006	0.005	0.005	0.000	0.124	0.11	
718	1/28/2004	3:31:07 PM		25.671	22.135	24.674	26.643	24.953		53.3	55.6	19.626	34.248	-1.219	-6.49		46.918	0.036	14.643	0.004		698.87	11.6478	54.1	11.5	43.8	3.018	0.005	0.005	0.000	0.124	0.11	
719	1/28/2004	3:32:07 PM		25.641	22.131	24.69	26.638	24.878		52.748	55.14	19.089	34.311	-1.219	-6.487		47.247	0.036	14.643	0.004		699.87	11.6644	53.7	11.6	43.5	3.001	0.005	0.005	0.000	0.124	0.11	
720	1/28/2004	3:33:07 PM		25.638	22.158	24.727	26.67	25.315		53.037	55.326	19.33	34.323	-1.216	-6.484		47.389	0.036	14.643	0.004		700.87	11.6811	53.9	11.6	43.7	3.012	0.005	0.005	0.000	0.124	0.11	
721	1/28/2004	3:34:07 PM		25.631	22.181	24.715	26.688	25.583		52.935	55.216	19.375	34.239	-1.219	-6.482		47.689	0.036	14.643	0.004		701.87	11.6978	53.7	11.7	43.6	3.005	0.005	0.005	0.000	0.124	0.11	
722	1/28/2004	3:35:07 PM		25.639	22.219	24.758	26.731	25.586		53.232	55.546	18.856	35.087	-1.211	-6.476		47.028	0.037	14.643	0.004		702.87	11.7144	54.1	11.5	44.2	3.045	0.006	0.006	0.000	0.126	0.11	
723	1/28/2004	3:36:07 PM		25.638	22.243	24.787	26.75	25.21		53.518	55.84	19.008	35.023	-1.222	-6.479		46.83	0.037	14.643	0.004		703.87	11.7311	54.4	11.5	44.3	3.052	0.006	0.006	0.000	0.125	0.11	
724	1/28/2004	3:37:07 PM		25.651	22.277	24.77	26.763	25.034		53.391	55.796	18.964	34.986	-1.219	-6.476		47.051	0.037	14.643	0.004		704.87	11.7478	54.3	11.5	44.2	3.047	0.006	0.006	0.000	0.126	0.11	
725	1/28/2004	3:38:07 PM		25.645	22.3	24.789	26.777	25.017		53.373	55.67	18.848	35.153	-1.219	-6.482		46.478	0.037	14.643	0.004		705.87	11.7644	54.2	11.4	44.3	3.052	0.006	0.006	0.000	0.125	0.11	
726	1/28/2004	3:39:07 PM		25.653	22.323	24.817	26.75	25.045		53.389	55.738	18.661	35.321	-1.219	-6.476		46.596	0.037	14.643	0.004		706.87	11.7811	54.3	11.4	44.4	3.058	0.006	0.006	0.000	0.125	0.11	
727	1/28/2004	3:40:07 PM		25.665	22.33	24.809	26.776	24.962		53.2	55.575	18.501	35.321	-1.219	-6.476		47.051	0.037	14.643	0.004		707.87	11.7978	54.1	11.5	44.3	3.052	0.006	0.006	0.000	0.125	0.11	
728	1/28/2004	3:41:07 PM		25.671	22.357	24.8	26.763	25.053		53.223	55.635	18.549	35.282	-1.219	-6.479		46.534	0.037	14.643	0.004		708.87	11.8144	54.2	11.4	44.3	3.051	0.006	0.006	0.000	0.125	0.11	
729	1/28/2004	3:42:07 PM		25.672	22.368	24.826	26.734	24.764		53.19	55.62	18.559	35.298	-1.219	-6.476		46.719	0.037	14.643	0.003		709.87	11.8311	54.1	11.4	44.2	3.050	0.006	0.006	0.000	0.125	0.11	
730	1/28/2004	3:43:07 PM		25.684	22.4	24.833	26.801	24.767		53.091	55.687	18.243	35.504	-1.222	-6.031		45.964	0.054	14.643	0.004		710.87	11.8478	54.2	11.3	44.3	3.054	0.008	0.008	0.000	0.183	0.16	
731	1/28/2004	3:44:07 PM		25.686	22.417	24.814	26.812	25.088		53.314	55.869	18.095	35.83	-1.222	-6.12		45.821	0.037	14.643	0.003		711.87	11.8644	54.4	11.2	44.6	3.073	0.006	0.006	0.000	0.124	0.11	
732	1/28/2004	3:45:07 PM		25.698	22.439	24.842	26.81	25.205		53.574	56.074	18.084	36.181	-1.222	-6.129		45.825	0.037	14.643	0.003		712.87	11.8811	54.6	11.2	44.9	3.094	0.006	0.006	0.000	0.123	0.11	
733	1/28/2004	3:46:07 PM		25.69	22.441	24.819	26.827	24.912		53.609	56.186	17.767	36.437	-1.222	-6.126		45.802	0.037	14.643	0.003		713.87	11.8978	54.7	11.2	45.0	3.104	0.006	0.006	0.000	0.123	0.10	
734	1/28/2004	3:47:07 PM		25.718	22.485	24.832	26.905	24.84		53.671	56.143	17.934	36.433	-1.222	-6.516		47.068	0.037	14.643	0.004		714.87	11.9144	54.7	11.5	45.1	3.106	0.006	0.006	0.000	0.123	0.10	
735	1/28/2004	3:48:07 PM		25.729	22.486	24.848	26.861	24.792		53.841	56.209	18.043	36.458	-1.219	-6.493		45.568	0.037	14.643	0.004		715.87	11.9311	54.7	11.2	45.1	3.113	0.006	0.006	0.000	0.123	0.10	
736	1/28/2004	3:49:07 PM		25.717	22.478	24.866	26.884	25.004		51.973	54.285	22.317	30.244	-1.222	-6.542		50.338	0.034	14.643	0.003		716.87	11.9478	52.8	12.3	41.1	2.834	0.005	0.005	0.000	0.124	0.11	
737	1/28/2004	3:50:07 PM		25.739	22.51	24.903	26.9	24.476		51.933	54.366	22.053	30.48	-1.219	-6.545		50.23	0.034	14.643	0.004		717.87	11.9644	52.9	12.3	41.2	2.841	0.005	0.005	0.000	0.123	0.10	
738	1/28/2004	3:51:07 PM		25.75	22.516	24.934	26.922	25.107		51.94	54.387	21.432	31.138	-1.219	-6.542		49.886	0.034	14.643	0.004		718.87	11.9811	52.9	12.2	41.5	2.864	0.005	0.005	0.000	0.122	0.10	
739	1/28/2004	3:52:07 PM		25.744	22.521	24.943	26.881	24.776		51.892	54.387	21.11	31.296	-1.222	-6.542		51.48	0.034	14.643	0.003		719.87	11.9978	52.9	12.6	41.6	2.868	0.005	0.005	0.000	0.122	0.10	
740	1/28/2004	3:53:07 PM		25.754	22.531	24.968	26.921	25.146		51.867	54.182	21.403	31.251	-1.219	-6.551		49.164	0.034	14.643	0.004		720.87	12.0144	52.7	12.0	41.6	2.865	0.005	0.005	0.000	0.122	0.10	
741	1/28/2004	3:54:07 PM		25.765	22.542	25.004	26.912	25.327		52.095	54.48	21.523	31.223	-1.222	-6.557		51.117	0.034	14.643	0.004		721.87	12.0311	53.0	12.5	41.7	2.872	0.005	0.005	0.000	0.122	0.10	
742	1/28/2004	3:55:07 PM		25.796	22.578	25.04	26.958	25.523		51.981	54.437	21.328	31.274	-1.222	-6.557		48.649	0.034	14.643	0.003		722.87	12.0478	53.0	11.9	41.6	2.870	0.005	0.005	0.000	0.122	0.10	
743	1/28/2004	3:56:07 PM		25.798	22.59	25.032	26.969	25.37		51.867	54.385	20.983	31.498	-1.222	-6.554		49.683	0.035	14.643	0.004		723.87	12.0644	52.9	12.2	41.7	2.874	0.005	0.005	0.000	0.125	0.11	
744	1/28/2004	3:57:07 PM		25.815	22.612	25.07	27.012	24.757		52.122	54.439	21.184	31.645	-1.222	-6.557		47.873	0.035	14.643	0.004		724.87	12.0811	53.0	11.7	41.9	2.888	0.005	0.005	0.000	0.124	0.11	
745	1/28/2004	3:58:07 PM		25.832	22.619	25.061	27.009	25.359		52.099	54.509	21.016	31.787	-1.219	-6.554		49.152	0.035	14.643	0.004		725.87	12.0978	53.0	12.0	41.9	2.892	0.005	0.005	0.000	0.124	0.11	
746	1/28/2004	3:59:07 PM		25.832	22.625	25.077	26.974	25.544		52.228	54.7	20.987	31.795	-1.219	-6.557		49.41	0.035	14.643	0.004		726.87	12.1144	53.2	12.1	42.0	2.897	0.005	0.005	0.000	0.124	0.11	
747	1/28/2004	4:00:07 PM		25.849	22.631	25.103	26.995	25.611		51.921	54.427	20.858	31.701	-1.219	-6.557		49.018	0.035	14.643	0.004		727.87	12.1311	53.0	12.0	41.8	2.883	0.005	0.005	0.000	0.124	0.11	
748	1/28/2004	4:00:16 PM		25.849	22.637	25.119	27.011	25.641		52.431	54.887	21.208	31.73	-1.219	-6.554		49.901	0.034	14.643	0.004		728.02	12.1336	53.4	12.2	42.1	2.901	0.005	0.005	0.000	0.120	0.10	
749	1/28/2004	4:01:16 PM		25.865	22.652	25.094	27.032	25.652		52.219	54.704	20.899	31.933	-1.219	-6.554		48.023	0.035	14.643	0.004		729.02	12.1503	53.2	11.8	42.1	2.901	0.005	0.005	0.000	0.124	0.11	
750	1/28/2004	4:02:16 PM		25.866	22.674	25.121	26.988	25.703		51.995	54.356	20.838	31.916	-1.225	-6.557		50.491	0.035	14.643	0.004		730.02	12.1669	52.9	12.4	42.0	2.893	0.005	0.005	0.000	0.124	0.11	
751	1/28/2004	4:03:16 PM		25.893	22.686	25.162	27.02	25.575		52.033	54.491	21.207	31.405	-1.219	-6.554		49.364	0.034	14.643	0.004		731.02	12.1836	53.0	12.1	41.7	2.876	0.005	0.005	0.000	0.121	0.10	
752	1/28/2004	4:04:16 PM		25.9	22.718	25.139	27.061	25.806		52.11	54.64	21.043	31.619	-1.222	-6.551		48.136	0.035	14.643	0.003		732.02	12.2003	53.2	11.8	41.9	2.886	0.005	0.005	0.000	0.124	0.11	
753	1/28/2004	4:05:16 PM		25.916	22.73	25.176	27.098	25.748		52.12	54.64	21.021	31.725	-1.219	-6.551		48.983	0.035	14.643	0.004		733.02	12.2169	53.2	12.0	41.9	2.890	0.005	0.005	0.000	0.124	0.11	
754	1/28/2004	4:06:16 PM		25.939	22.763	25.214	27.151	25.696		51.742	54.292	20.696	31.697	-1.219	-6.548		49.198	0.035	14.643	0.004		734.02	12.2336	52.8	12.1	41.7	2.876	0.005	0.005	0.000	0.124	0.11	
755	1/28/2004	4:07:16 PM		25.941	22.775	25.191	27.148	25.798		51.944	54.48	20.662	31.888	-1.219	-6.548		48.457	0.035	14.643	0.004		735.02	12.2503	53.0	11.9	41.9	2.890	0.005	0.005	0.000	0.124	0.11	
756	1/28/2004	4:08:16 PM		25.959	22.792	25.208	27.16	25.995		51.825	54.223	20.606	32	-1.222	-6.548		48.422	0.035	14.643	0.004		736.02	12.2669	52.8	11.9	41.9	2.890	0.005	0.005	0.000	0.124	0.11	
757	1/28/2004	4:09:16 PM		25.966	22.81	25.196	27.143	25.698		51.975	54.455	20.394	32.284	-1.219	-6.548		48.905	0.035	14.643	0.004		737.02	12.2836	53.0	12.0	42.1	2.905	0.005	0.005	0.000	0.123	0.10	
758	1/28/2004	4:10:16 PM		25.978	22.827	25.193	27.12	24.906		51.967	54.464	20.456	32.236	-1.225	-6.554		49.759	0.035	14.643	0.003		738.02	12.3003	53.0	12.2	42.1	2.903	0.005	0.005	0.000	0.123	0.10	
759	1/28/2004	4:11:16 PM		26.012	22.86	25.236	27.148	25.164		52.34	54.808	20.765	32.236	-1.219	-6.551		49.331	0.035	14.643	0.004		739.02	12.3169	53.3	12.1	42.3	2.916	0.005	0.005	0.000	0.123	0.10	
760	1/28/2004	4:12:16 PM		26.019	22.873	25.224	27.196	25.651		52.253	54.75	20.639	32.261	-1.222	-6.551		48.655	0.035	14.643	0.004		740.02	12.3336	53.3	11.9	42.3	2.913	0.005	0.005	0.000	0.123	0.10	
761	1/28/2004	4:13:16 PM		26.037	22.896	25.262	27.209	25.989		51.948	54.437	20.478	32.247	-1.219	-6.548		49.227	0.035	14.643	0.004		741.02	12.3503	53.0	12.1	42.1	2.902	0.005	0.005	0.000	0.123	0.10	
762	1/28/2004	4:14:16 PM		26.035	22.914	25.215	27.242	26.316		52.34	54.883	20.629	32.302	-1.222	-6.548		49.85	0.035	14.643	0.003		742.02	12.3669	53.4	12.2	42.3	2.918	0.005	0.005	0.000	0.123	0.10	
763	1/28/2004	4:15:16 PM		26.068	22.953	25.263	27.235	26.489		51.913	54.445	20.399	32.257	-1.222	-6.545		49.108	0.035	14.643	0.004		743.02	12.3836	53.0	12.0	42.1	2.902	0.005	0.005	0.000	0.123	0.10	
764	1/28/2004	4:16:16 PM		26.071	22.976	25.276	27.258	26.432		52.128	54.723	20.543	32.243	-1.222	-6.542		49.062	0.035	14.643	0.003		744.02	12.4003	53.3	12.0	42.2	2.909	0.005	0.005	0.000	0.123	0.10	
765	1/28/2004	4:17:16 PM		26.084	22.994	25.269	27.276	26.191		52.078	54.781	20.385	32.28	-1.219	-6.539		48.774	0.035	14.643	0.004		745.02	12.4169	53.3	12.0	42.2	2.908	0.005	0.005	0.000	0.123	0.10	
766	1/28/2004	4:18:16 PM		26.102	23.017	25.287	27.314	25.68		51.751	54.339	20.188	32.255	-1.219	-6.545		49.033	0.035	14.643	0.004		746.02	12.4336	52.9	12.0	42.0	2.896	0.005	0.005	0.000	0.123	0.10	
767	1/28/2004	4:19:16 PM		26.108	23.028	25.278	27.28	25.495		52.518	55.152	20.792	32.222	-1.219	-6.545		49.212	0.035	14.643	0.004		747.02	12.4503	53.7	12.1	42.4	2.921	0.005	0.005	0.000	0.122	0.10	
768	1/28/2004	4:20:16 PM		26.114	23.034	25.279	27.216	25.656		52.174	54.768	20.622	32.183	-1.222	-6.548		47.239	0.035	14.643	0.004		748.02	12.4669	53.3	11.6	42.2	2.908	0.005	0.005	0.000	0.123	0.10	
769	1/28/2004	4:21:16 PM		26.135	23.06	25.27	27.207	25.522		52.265	54.868	20.58	32.257	-1.222	-6.545		49.07	0.035	14.643	0.004		749.02	12.4836	53.4	12.0	42.3	2.914	0.005	0.005	0.000	0.123	0.10	
770	1/28/2004	4:22:16 PM		26.145	23.076	25.296	27.247	25.343		51.969	54.553	20.404	32.251	-1.219	-6.551		49.508	0.035	14.643	0.004		750.02	12.5003	53.1	12.1	42.1	2.903	0.005	0.005	0.000	0.123	0.10	

RUN # 1.03A; DEWATER SECOND HALF OF SLURRY – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
771	1/28/2004	4:23:16 PM		26.15	23.081	25.316	27.277	25.283		52.215	54.773	20.517	32.279	-1.219	-6.531		48.912	0.035	14.643	0.004		751.02	12.5169	53.3	12.0	42.2	2.913	0.005	0.005	0.000	0.122	0.10	
772	1/28/2004	4:24:16 PM		26.171	23.101	25.301	27.303	25.733		51.687	54.698	20.522	31.789	-1.216	-5.464		48.812	0.019	14.643	0.004		752.02	12.5336	53.2	12.0	41.7	2.878	0.003	0.003	0.000	0.067	0.06	
773	1/28/2004	4:25:16 PM		26.17	23.091	25.296	27.292	25.793		50.581	54.541	20.355	30.968	-1.222	-3.053		49.068	0.016	14.643	0.004		753.02	12.5503	53.1	12.0	40.8	2.811	0.002	0.002	0.000	0.058	0.05	
774	1/28/2004	4:26:16 PM		26.161	23.106	25.301	27.328	25.758		51.678	54.513	20.071	32.249	-1.222	-6.337		45.362	0.081	14.643	0.003		754.02	12.5669	53.0	11.1	42.0	2.893	0.012	0.012	0.000	0.285	0.24	
775	1/28/2004	4:27:16 PM		26.192	23.133	25.338	27.374	25.774		52.093	54.806	20.383	32.364	-1.219	-6.482		49.627	0.035	14.643	0.004		755.02	12.5836	53.3	12.2	42.2	2.912	0.005	0.005	0.000	0.122	0.10	
776	1/28/2004	4:28:16 PM		26.208	23.139	25.319	27.375	25.556		51.915	54.584	20.422	32.142	-1.219	-6.482		49.162	0.035	14.643	0.004		756.02	12.6003	53.1	12.0	42.0	2.898	0.005	0.005	0.000	0.123	0.10	
777	1/28/2004	4:29:16 PM		26.225	23.151	25.331	27.342	25.932		51.203	54.789	20.255	31.463	-1.222	-4.328		49.775	0.016	14.643	0.004		757.02	12.6169	53.3	12.2	41.3	2.850	0.002	0.002	0.000	0.057	0.05	
778																																	
779		Averages		24.8	19.7	24.9	24.1	21.9	#	50.6	52.1	15.6	35.7	-1.0	-6.1	#	46.6	0.1	14.6	0.0	#			50.6	11.4	43.2	2.978	0.008	0.008	0.0002	0.183	0.156	#
780		Maximum		26.2	23.2	25.9	27.4	26.5	#	55.5	56.4	22.3	38.8	37.1	93.9	#	54.8	0.3	14.6	0.0	#			55.0	13.4	47.1	3.247	0.045	0.045	0.0011	1.054	0.897	#
781		Median		25.1	20.4	25.2	24.6	22.7	#	50.0	52.0	14.9	35.7	-1.2	-6.6	#	46.7	0.0	14.6	0.0	#			50.5	11.5	43.7	3.010	0.007	0.007	0.0002	0.167	0.142	#
782		Minimum		18.2	13.6	20.6	19.3	12.8	#	-7.3	0.5	1.2	-8.7	-1.2	-7.8	#	-0.1	0.0	14.6	0.0	#			-0.9	0.0	-8.0	-0.551	0.000	0.000	-0.0001	-0.056	-0.048	#
783		2 x Std Dev		2.258	4.720	1.915	3.819	4.953	#	7.449	6.017	6.834	6.027	3.281	11.352	#	6.229	0.038	0.000	0.001	#			6.017	1.527	5.815	0.401	0.006	0.006	0.0001	0.145	0.124	#
784		Number of Points Used*		755	755	755	755	755	0	755	755	755	755	755	755	0	755	755	755	755	0			755	755	755	755	755	755	755	755	755	0
785		* Backpulse points in box are not included																															
786																																	
787																											8.3-hour avg. =		0.0089				
788																											12.6-hour avg.		0.0079				

RUN # 1.04; STEADY STATE TEST AT 25 WT% UDS



RUN # 1.04; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface A		6.707	FT2						
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/29/2004	8:14:42 AM		22.593	14.626	24.823	20.669	13.667		40.701	54.613	21.526	19.861	8.67	95.493		49.988	0.003	14.643	0.004		0	0	53.1	12.3	30.3	2.088	0.000	0.000	0.000	0.015	0.01	
18	1/29/2004	8:15:42 AM		19.798	14.65	24.686	20.733	13.67		-4.01	52.267	9.073	-12.718	51.636	52.57		40.093	0.003	14.643	0.808		1.00	0.01667	50.8	9.8	-8.4	-0.577	0.000	0.000	0.000	-0.054	-0.05	
19	1/29/2004	8:16:42 AM		23.187	14.663	24.584	20.731	13.791		30.709	51.624	12.027	19.367	16.432	0.358		54.431	0.5	14.643	0.004		2.00	0.03333	50.2	13.3	25.0	1.726	0.075	0.075	0.003	3.012	2.56	
20	1/29/2004	8:17:42 AM		22.367	14.698	24.548	20.791	13.886		47.844	53.552	16.609	31.389	0.263	0.41		51.427	0.088	14.643	0.004		3.00	0.05	52.1	12.6	39.6	2.731	2.183	2.211	0.056	55.814	47.50	
21	1/29/2004	8:18:42 AM		22.657	14.717	24.532	20.83	14.043		48.617	54.265	18.9	29.887	0.263	0.439		50.658	0.065	14.643	0.004		4.00	0.06667	52.8	12.4	39.3	2.706	2.183	2.212	0.056	56.357	47.96	
22	1/29/2004	8:19:42 AM		22.842	14.736	24.436	20.834	14.149		46.45	52.086	16.861	29.823	0.228	0.445		44.089	0.054	14.643	0.004		5.00	0.08333	50.6	10.8	38.1	2.629	0.008	0.008	0.000	0.214	0.18	
23	1/29/2004	8:20:42 AM		22.987	14.771	24.24	20.863	14.407		46.881	52.532	17.218	29.897	0.246	0.471		42.485	0.048	14.643	0.004		6.00	0.1	51.1	10.4	38.4	2.647	0.007	0.007	0.000	0.190	0.16	
24	1/29/2004	8:21:42 AM		23.077	14.781	24.034	20.863	14.493		49.206	54.883	18.583	30.851	0.237	0.482		41.908	0.046	14.643	0.004		7.00	0.11667	53.4	10.3	40.0	2.760	0.007	0.007	0.000	0.176	0.15	
25	1/29/2004	8:22:42 AM		23.173	14.807	23.914	20.874	14.565		49.642	55.374	18.579	31.21	0.26	0.494		40.946	0.043	14.643	0.004		8.00	0.13333	53.9	10.0	40.4	2.787	0.006	0.007	0.000	0.164	0.14	
26	1/29/2004	8:23:42 AM		23.228	14.842	23.839	20.954	14.732		49.953	55.697	19.066	31.032	0.26	0.506		40.426	0.04	14.643	0.004		9.00	0.15	54.2	9.9	40.5	2.792	0.006	0.006	0.000	0.152	0.13	
27	1/29/2004	8:24:42 AM		23.253	14.868	23.778	20.929	14.666		49.98	55.718	19.395	30.668	0.26	0.526		40.162	0.038	14.643	0.004		10.00	0.16667	54.2	9.8	40.3	2.780	0.006	0.006	0.000	0.145	0.12	
28	1/29/2004	8:25:42 AM		23.277	14.898	23.823	20.954	14.99		48.648	54.327	21.265	27.635	0.26	0.532		42.781	0.035	14.643	0.004		11.00	0.18333	52.9	10.5	38.1	2.630	0.005	0.005	0.000	0.141	0.12	
29	1/29/2004	8:26:42 AM		23.277	14.918	24.028	21.034	14.878		49.355	55.048	21.466	28.052	0.28	0.543		42.16	0.035	14.643	0.004		12.00	0.2	53.6	10.3	38.7	2.668	0.005	0.005	0.000	0.139	0.12	
30	1/29/2004	8:27:42 AM		23.276	14.942	24.203	21.018	15.03		49.156	54.864	20.922	28.526	0.309	0.549		41.419	0.034	14.643	0.004		13.00	0.21667	53.4	10.2	38.8	2.678	0.005	0.005	0.000	0.133	0.11	
31	1/29/2004	8:28:42 AM		23.285	14.967	24.372	21.062	15.075		49.333	55.094	21.019	28.505	0.332	0.552		41.338	0.034	14.643	0.004		14.00	0.23333	53.6	10.1	38.9	2.683	0.005	0.005	0.000	0.133	0.11	
32	1/29/2004	8:29:42 AM		24.402	14.997	24.522	21.067	15.176		50.392	56.074	21.216	29.423	0.28	0.587		41.315	0.035	14.643	0.004		15.00	0.25	54.6	10.1	39.9	2.751	0.005	0.005	0.000	0.133	0.11	
33	1/29/2004	8:30:42 AM		24.496	15.026	24.652	21.132	15.033		50.685	56.398	20.772	30.063	0.315	0.587		40.456	0.035	14.643	0.004		16.00	0.26667	54.9	9.9	40.4	2.784	0.005	0.005	0.000	0.131	0.11	
34	1/29/2004	8:31:42 AM		24.62	15.045	24.76	21.15	15.28		50.635	56.362	20.912	29.889	0.332	0.601		40.381	0.035	14.643	0.004		17.00	0.28333	54.9	9.9	40.3	2.776	0.005	0.005	0.000	0.130	0.11	
35	1/29/2004	8:32:42 AM		24.745	15.096	24.865	21.2	15.366		50.656	56.412	21.103	29.788	0.335	0.624		40.216	0.036	14.643	0.004		18.00	0.3	54.9	9.9	40.2	2.773	0.005	0.005	0.000	0.134	0.11	
36	1/29/2004	8:33:42 AM		24.838	15.104	24.934	21.188	15.597		50.936	56.673	21.467	29.657	0.332	0.615		40.124	0.034	14.643	0.004		19.00	0.31667	55.2	9.8	40.3	2.778	0.005	0.005	0.000	0.126	0.11	
37	1/29/2004	8:34:42 AM		24.576	15.133	25.022	21.182	15.225		53.192	56.441	21.344	32.138	-1.211	-2.648		40.024	0.267	14.643	0.004		20.00	0.33333	55.0	9.8	42.7	2.942	0.040	0.040	0.001	0.932	0.79	
38	1/29/2004	8:35:42 AM		23.317	15.167	25.156	21.241	15.751		53.265	53.991	23.957	29.774	-1.211	-4.99		43.543	0.034	14.643	0.004		21.00	0.35	52.5	10.7	41.5	2.863	0.005	0.005	0.000	0.122	0.10	
39	1/29/2004	8:36:42 AM		23.606	15.201	25.219	21.209	15.978		52.114	52.717	24.497	27.953	-1.211	-5.398		44.083	0.036	14.643	0.004		22.00	0.36667	51.2	10.8	40.0	2.760	0.005	0.005	0.000	0.133	0.11	
40	1/29/2004	8:37:42 AM		23.75	15.22	25.267	21.242	15.941		52.13	52.733	23.862	28.604	-1.214	-5.421		43.747	0.033	14.643	0.004		23.00	0.38333	51.3	10.7	40.4	2.783	0.005	0.005	0.000	0.121	0.10	
41	1/29/2004	8:38:42 AM		23.839	15.269	25.356	21.281	16.132		51.705	52.265	24.36	27.771	-1.211	-5.421		44.377	0.032	14.643	0.004		24.00	0.4	50.8	10.9	39.7	2.740	0.005	0.005	0.000	0.119	0.10	
42	1/29/2004	8:39:42 AM		23.873	15.288	25.405	21.26	16.202		51.902	52.501	24.135	28.134	-1.214	-5.421		44	0.032	14.643	0.004		25.00	0.41667	51.0	10.8	40.0	2.759	0.005	0.005	0.000	0.118	0.10	
43	1/29/2004	8:40:42 AM		23.932	15.318	25.455	21.345	16.348		51.906	52.464	24.072	28.271	-1.214	-5.421		44.058	0.032	14.643	0.004		26.00	0.43333	51.0	10.8	40.1	2.764	0.005	0.005	0.000	0.117	0.10	
44	1/29/2004	8:41:42 AM		23.972	15.353	25.509	21.324	16.332		51.95	52.501	24.222	28.148	-1.211	-5.421		43.918	0.032	14.643	0.004		27.00	0.45	51.0	10.8	40.0	2.761	0.005	0.005	0.000	0.117	0.10	
45	1/29/2004	8:42:42 AM		24.006	15.368	25.539	21.349	16.393		52.371	52.965	24.769	27.986	-1.214	-5.421		45.115	0.032	14.643	0.004		28.00	0.46667	51.5	11.1	40.2	2.770	0.005	0.005	0.000	0.117	0.10	
46	1/29/2004	8:43:42 AM		24.046	15.408	25.658	21.409	16.199		52.516	53.102	25.372	27.424	-1.211	-5.421		45.426	0.032	14.643	0.004		29.00	0.48333	51.6	11.1	40.0	2.756	0.005	0.005	0.000	0.117	0.10	
47	1/29/2004	8:44:42 AM		24.08	15.427	25.712	21.357	16.254		51.985	52.596	25.256	27.182	-1.216	-5.429		45.547	0.032	14.643	0.004		30.00	0.5	51.1	11.2	39.6	2.729	0.005	0.005	0.000	0.118	0.10	
48	1/29/2004	8:45:42 AM		24.129	15.462	25.796	21.452	16.431		52.288	52.899	25.043	27.641	-1.211	-5.421		44.911	0.032	14.643	0.004		31.00	0.51667	51.4	11.0	40.0	2.755	0.005	0.005	0.000	0.117	0.10	
49	1/29/2004	8:46:42 AM		24.173	15.492	25.84	21.431	16.521		52.234	52.81	24.916	27.74	-1.211	-5.421		44.838	0.032	14.643	0.004		32.00	0.53333	51.3	11.0	40.0	2.757	0.005	0.005	0.000	0.117	0.10	
50	1/29/2004	8:47:42 AM		24.212	15.516	25.874	21.41	16.469		52.369	52.94	24.673	28.193	-1.211	-5.418		44.759	0.032	14.643	0.004		33.00	0.55	51.5	11.0	40.3	2.777	0.005	0.005	0.000	0.116	0.10	
51	1/29/2004	8:48:42 AM		24.286	15.561	25.933	21.5	16.853		52.585	53.175	24.599	28.388	-1.211	-5.421		44.423	0.032	14.643	0.004		34.00	0.56667	51.7	10.9	40.5	2.791	0.005	0.005	0.000	0.115	0.10	
52	1/29/2004	8:49:42 AM		24.315	15.575	25.957	21.539	16.983		52.742	53.311	24.645	28.399	-1.205	-5.418		44.484	0.032	14.643	0.004		35.00	0.58333	51.8	10.9	40.6	2.797	0.005	0.005	0.000	0.114	0.10	
53	1/29/2004	8:50:42 AM		24.364	15.604	25.966	21.537	16.921		52.682	53.322	24.617	28.356	-1.211	-5.421		44.304	0.032	14.643	0.004		36.00	0.6	51.8	10.9	40.5	2.794	0.005	0.005	0.000	0.115	0.10	
54	1/29/2004	8:51:42 AM		24.417	15.643	26.009	21.551	17.143		52.39	52.984	24.537	28.339	-1.214	-5.418		44.225	0.032	14.643	0.004		37.00	0.61667	51.5	10.8	40.4	2.783	0.005	0.005	0.000	0.115	0.10	
55	1/29/2004	8:52:42 AM		24.441	15.667	26.013	21.54	16.99		52.468	53.075	24.484	28.407	-1.211	-5.418		44.242	0.032	14.643	0.004		38.00	0.63333	51.6	10.8	40.4	2.788	0.005	0.005	0.000	0.115	0.10	
56	1/29/2004	8:53:42 AM		24.465	15.696	26.022	21.538	16.938		52.809	53.4	24.799	28.376	-1.214	-5.424		44.231	0.032	14.643	0.004		39.00	0.65	51.9	10.8	40.6	2.799	0.005	0.005	0.000	0.114	0.10	
57	1/29/2004	8:54:42 AM		24.504	15.731	26.041	21.562	16.972		52.319	52.936	24.377	28.407	-1.214	-5.424		44.146	0.032	14.643	0.004		40.00	0.66667	51.5	10.8	40.4	2.783	0.005	0.005	0.000	0.115	0.10	
58	1/29/2004	8:55:42 AM		24.527	15.749	26.039	21.586	17.395		52.603	53.251	24.554	28.43	-1.211	-5.424		44.146	0.032	14.643	0.004		41.00	0.68333	51.8	10.8	40.5	2.793	0.005	0.005	0.000	0.114	0.10	
59	1/29/2004	8:56:42 AM		24.561	15.773	26.043	21.615	17.379		52.553	53.131	24.666	28.405	-1.214	-5.424		44.137	0.032	14.643	0.004		42.00	0.7	51.7	10.8	40.5	2.791	0.005	0.005	0.000	0.114	0.10	
60	1/29/2004	8:57:42 AM		24.59	15.808	26.066	21.568	17.347		52.641	53.235	24.582	28.444	-1.211	-5.424		44.079	0.032	14.643	0.004		43.00	0.71667	51.8	10.8	40.5	2.795	0.005	0.005	0.000	0.114	0.10	
61	1/29/2004	8:58:42 AM		24.619	15.827	26.076	21.628	17.21		52.539	53.15	24.563	28.362	-1.214	-5.424		43.927	0.032	14.643	0.004		44.00	0.73333	51.7	10.8	40.5	2.789	0.005	0.005	0.000	0.114	0.10	
62	1/29/2004	8:59:42 AM		24.643	15.861	26.114	21.707	17.234		52.817	53.423	24.744	28.397	-1.214	-5.424		43.799	0.032	14.643	0.004		45.00	0.75	52.0	10.7	40.6	2.800	0.005	0.005	0.000	0.114	0.10	
63	1/29/2004	9:00:42 AM		24.671	15.885	26.133	21.725	17.333		52.57	53.119	24.489	28.585	-1.211	-5.421		43.716	0.032	14.643	0.004		46.00	0.76667	51.6	10.7	40.6	2.798	0.005	0.005	0.000	0.114	0.10	
64	1/29/2004	9:01:42 AM		24.699	15.914	26.151	21.739	17.438		52.775	53.38	24.377	28.861	-1.214	-5.421		43.286	0.032	14.643	0.004		47.00	0.78333	51.9	10.6	40.8	2.814	0.005	0.005	0.000	0.113	0.10	
65	1/29/2004	9:02:42 AM		24.742	15.952	26.174	21.782	17.562		52.663	53.276	24.336	28.834	-1.214	-5.421		43.234	0.032	14.643	0.004		48.00	0.8	51.8	10.6	40.7	2.809	0.005	0.005	0.000	0.113	0.10	
66	1/29/2004	9:03:42 AM		24.76	15.965	26.172	21.815	17.893		52.954	53.572	24.554	28.821	-1.216	-5.426		43.172	0.032	14.643	0.004		49.00	0.81667	52.1	10.6	40.9	2.819	0.005	0.005	0.000	0.113	0.10	
67	1/29/2004	9:04:42 AM		24.798	16.004	26.205	21.773	18.018		53.076	53.687	24.689	28.76	-1.211	-5.421		43.099	0.032	14.643	0.004		50.00	0.83333	52.2	10.6	40.9	2.821	0.005	0.005	0.000	0.113	0.10	
68	1/29/2004	9:05:42 AM		24.811	16.027	26.203	21.746	17.96		53.008	53.631	24.66	28.752	-1.216	-5.426		43.036	0.032	14.643	0.003		51.00	0.85	52.2	10.5	40.9	2.819	0.005	0.005	0.000	0.113	0.10	
69	1/29/2004	9:06:42 AM		24.829	16.066	26.226	21.809	17.822		53.091	53.778	24.714	28.692	-1.214	-5.424		42.929	0.032	14.643	0.004		52.00	0.86667	52.3	10.5	40.9	2.819	0.005	0.005	0.000	0.113	0.10	
70	1/29/2004	9:07:42 AM		24.852	16.079	26.214	21.838	17.759		52.95	53.568	24.781	28.659	-1.216	-5.426		42.854	0.031	14.643	0.004		53.00	0.88333	52.1	10.5	40.8	2.813	0.005	0.004	0.000	0.109	0.09	

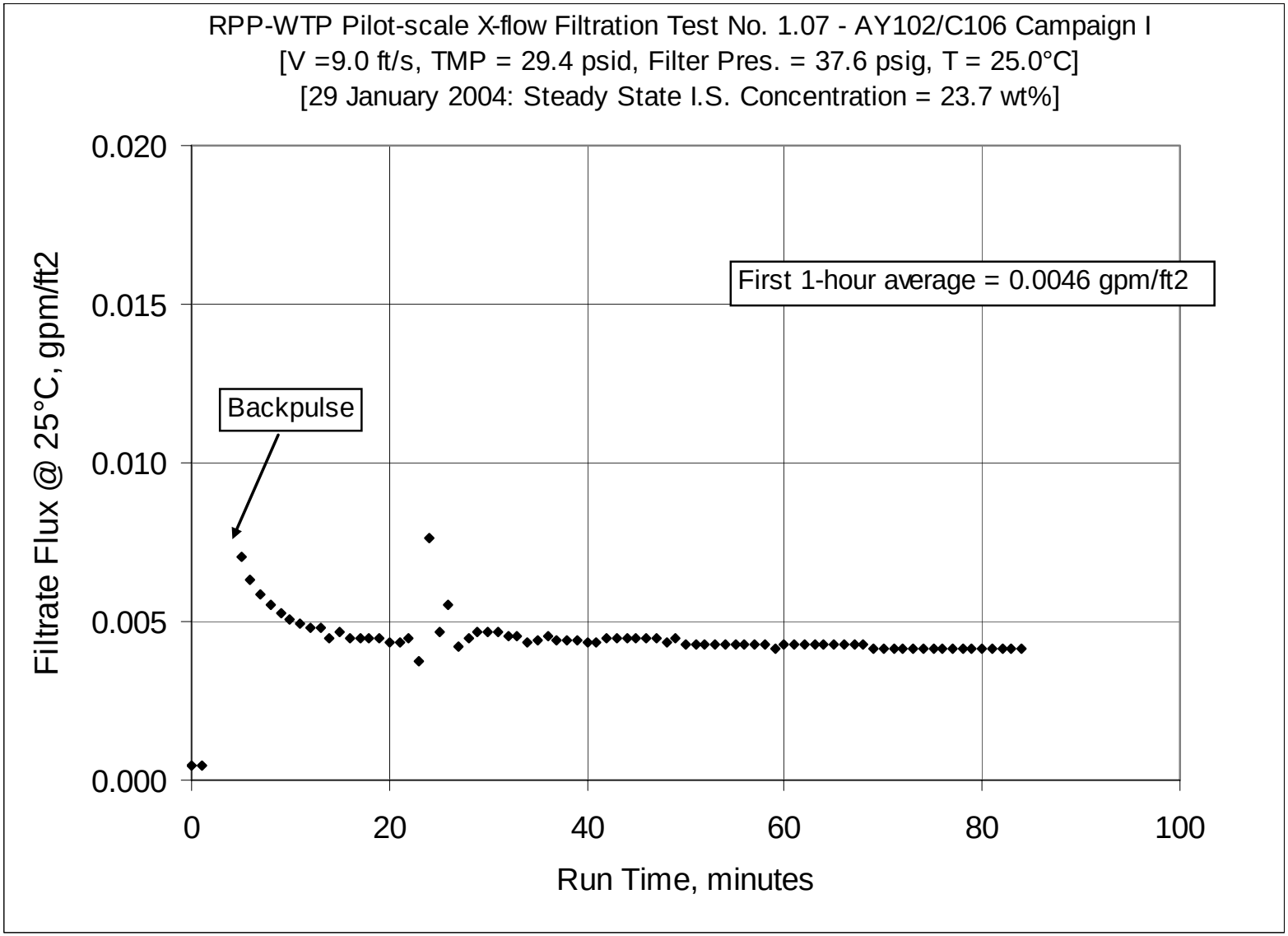
RUN # 1.04; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/29/2004	9:08:42 AM		24.876	16.098	26.178	21.856	17.854		53.188	53.817	24.929	28.643	-1.216	-5.424		42.879	0.031	14.643	0.004		54.00	0.9	52.3	10.5	40.9	2.821	0.005	0.004	0.000	0.109	0.09	
72	1/29/2004	9:09:42 AM		24.903	16.136	26.11	21.899	18.215		52.92	53.556	24.596	28.746	-1.216	-5.426		42.802	0.031	14.643	0.004		55.00	0.91667	52.1	10.5	40.8	2.815	0.005	0.004	0.000	0.110	0.09	
73	1/29/2004	9:10:42 AM		24.926	16.17	25.948	21.932	17.915		52.968	53.593	24.541	28.822	-1.214	-5.464		42.861	0.042	14.643	0.004		56.00	0.93333	52.1	10.5	40.9	2.820	0.006	0.006	0.000	0.149	0.13	
74	1/29/2004	9:11:42 AM		24.844	16.198	25.861	21.915	18.165		52.703	53.494	24.54	28.608	-1.214	-5.019		42.952	0.031	14.643	0.004		57.00	0.95	52.0	10.5	40.7	2.803	0.005	0.005	0.000	0.111	0.09	
75	1/29/2004	9:12:42 AM		24.772	16.237	25.814	21.898	18.067		52.92	53.73	24.627	28.639	-1.214	-5.016		43.151	0.031	14.643	0.004		58.00	0.96667	52.3	10.6	40.8	2.812	0.005	0.005	0.000	0.111	0.09	
76	1/29/2004	9:13:42 AM		24.71	16.265	25.757	21.936	18.373		52.887	53.718	24.633	28.606	-1.214	-5.013		43.249	0.031	14.643	0.004		59.00	0.98333	52.2	10.6	40.7	2.809	0.005	0.005	0.000	0.111	0.09	
77	1/29/2004	9:14:42 AM		24.673	16.298	25.655	21.974	18.624		53.105	53.999	24.716	28.561	-1.216	-5.019		43.566	0.031	14.643	0.004		60.00	1	52.5	10.7	40.8	2.815	0.005	0.005	0.000	0.111	0.09	
78	1/29/2004	9:15:42 AM		24.65	16.321	25.547	22.002	18.843		52.634	53.427	24.429	28.721	-1.214	-5.016		43.706	0.03	14.643	0.004		61.00	1.01667	52.0	10.7	40.7	2.805	0.004	0.004	0.000	0.108	0.09	
79	1/29/2004	9:16:42 AM		24.639	16.35	25.521	22	18.549		52.979	53.794	24.491	28.787	-1.214	-5.016		43.851	0.03	14.643	0.004		62.00	1.03333	52.3	10.7	40.9	2.819	0.004	0.004	0.000	0.108	0.09	
80	1/29/2004	9:17:42 AM		24.621	16.393	25.548	22.028	18.642		52.025	52.789	25.746	26.734	-1.211	-5.019		45.426	0.029	14.643	0.004		63.00	1.05	51.3	11.1	39.4	2.715	0.004	0.004	0.000	0.108	0.09	
81	1/29/2004	9:18:42 AM		24.569	16.411	25.521	21.96	18.413		52.367	53.175	26.014	26.687	-1.211	-5.019		45.524	0.029	14.643	0.004		64.00	1.06667	51.7	11.2	39.5	2.725	0.004	0.004	0.000	0.108	0.09	
82	1/29/2004	9:19:42 AM		24.532	16.44	25.544	21.973	18.603		52.101	52.916	25.737	26.796	-1.214	-5.019		45.389	0.029	14.643	0.004		65.00	1.08333	51.4	11.1	39.4	2.720	0.004	0.004	0.000	0.108	0.09	
83	1/29/2004	9:20:42 AM		24.524	16.468	25.567	22.046	18.726		52.278	53.03	25.542	27.159	-1.214	-5.019		45.228	0.029	14.643	0.004		66.00	1.1	51.6	11.1	39.7	2.738	0.004	0.004	0.000	0.107	0.09	
84	1/29/2004	9:21:42 AM		24.511	16.48	25.604	22.078	19.036		52.184	53.007	25.145	27.518	-1.214	-5.016		45.324	0.029	14.643	0.004		67.00	1.11667	51.5	11.1	39.9	2.748	0.004	0.004	0.000	0.107	0.09	
85	1/29/2004	9:22:42 AM		24.509	16.518	25.621	22.106	19.084		52.18	52.971	25.154	27.551	-1.216	-5.013		45.12	0.03	14.643	0.004		68.00	1.13333	51.5	11.1	39.9	2.749	0.004	0.004	0.000	0.110	0.09	
86	1/29/2004	9:23:42 AM		24.507	16.547	25.665	22.175	19.229		52.485	53.345	25.259	27.611	-1.208	-5.007		45.065	0.03	14.643	0.004		69.00	1.15	51.9	11.0	40.0	2.761	0.004	0.004	0.000	0.110	0.09	
87	1/29/2004	9:24:42 AM		24.489	16.569	25.677	22.212	19.181		52.275	53.061	24.969	27.699	-1.214	-5.013		45.289	0.03	14.643	0.004		70.00	1.16667	51.6	11.1	40.0	2.757	0.004	0.004	0.000	0.110	0.09	
88	1/29/2004	9:25:42 AM		24.481	16.587	25.694	22.21	18.921		52.412	53.228	25.013	27.828	-1.216	-5.016		44.986	0.03	14.643	0.003		71.00	1.18333	51.8	11.0	40.1	2.766	0.004	0.004	0.000	0.109	0.09	
89	1/29/2004	9:26:42 AM		24.479	16.625	25.717	22.258	18.913		52.402	53.22	25.117	27.682	-1.214	-5.01		45.161	0.03	14.643	0.003		72.00	1.2	51.7	11.1	40.0	2.761	0.004	0.004	0.000	0.109	0.09	
90	1/29/2004	9:27:42 AM		24.482	16.653	25.734	22.22	18.901		52.528	53.355	25.147	27.752	-1.216	-5.01		45.226	0.03	14.643	0.004		73.00	1.21667	51.9	11.1	40.1	2.768	0.004	0.004	0.000	0.109	0.09	
91	1/29/2004	9:28:42 AM		24.479	16.676	25.752	22.207	18.964		52.431	53.268	25.17	27.707	-1.214	-5.007		45.018	0.03	14.643	0.004		74.00	1.23333	51.8	11.0	40.1	2.763	0.004	0.004	0.000	0.109	0.09	
92	1/29/2004	9:29:42 AM		24.476	16.708	25.764	22.235	19.566		52.406	53.276	24.989	27.785	-1.214	-5.007		45.243	0.03	14.643	0.004		75.00	1.25	51.8	11.1	40.1	2.764	0.004	0.004	0.000	0.109	0.09	
93	1/29/2004	9:30:42 AM		24.489	16.741	25.777	22.262	19.478		52.595	53.401	25.277	27.683	-1.214	-5.007		45.274	0.03	14.643	0.004		76.00	1.26667	51.9	11.1	40.1	2.767	0.004	0.004	0.000	0.109	0.09	
94	1/29/2004	9:31:42 AM		24.491	16.764	25.784	22.265	19.435		52.361	53.183	24.921	27.816	-1.214	-5.007		45.222	0.03	14.643	0.004		77.00	1.28333	51.7	11.1	40.1	2.764	0.004	0.004	0.000	0.109	0.09	
95	1/29/2004	9:32:42 AM		24.509	16.802	25.811	22.307	19.261		52.352	53.16	24.96	27.855	-1.214	-5.004		45.56	0.03	14.643	0.004		78.00	1.3	51.7	11.2	40.1	2.765	0.004	0.004	0.000	0.109	0.09	
96	1/29/2004	9:33:42 AM		24.53	16.819	25.823	22.304	19.58		52.585	53.504	25.067	27.773	-1.216	-5.004		45.733	0.03	14.643	0.004		79.00	1.31667	52.0	11.2	40.2	2.770	0.004	0.004	0.000	0.109	0.09	
97	1/29/2004	9:34:42 AM		24.542	16.846	25.84	22.356	19.622		52.557	53.438	25.035	27.826	-1.214	-4.999		45.243	0.03	14.643	0.004		80.00	1.33333	52.0	11.1	40.2	2.771	0.004	0.004	0.000	0.109	0.09	
98	1/29/2004	9:35:42 AM		24.559	16.869	25.852	22.379	19.68		52.414	53.247	24.971	27.832	-1.214	-4.999		45.387	0.03	14.643	0.004		81.00	1.35	51.8	11.1	40.1	2.766	0.004	0.004	0.000	0.109	0.09	
99	1/29/2004	9:36:42 AM		24.572	16.891	25.859	22.381	19.612		52.331	53.241	24.75	27.877	-1.214	-4.999		45.422	0.03	14.643	0.004		82.00	1.36667	51.8	11.1	40.1	2.765	0.004	0.004	0.000	0.109	0.09	
100	1/29/2004	9:37:42 AM		24.578	16.923	25.876	22.352	19.689		52.383	53.201	25.246	27.65	-1.214	-4.996		45.199	0.03	14.643	0.004		83.00	1.38333	51.7	11.1	40.0	2.759	0.004	0.004	0.000	0.109	0.09	
101	1/29/2004	9:38:42 AM		24.585	16.945	25.878	22.389	19.348		52.172	53.061	24.746	27.84	-1.214	-4.996		45.549	0.03	14.643	0.004		84.00	1.4	51.6	11.2	40.0	2.758	0.004	0.004	0.000	0.109	0.09	
102	1/29/2004	9:39:42 AM		24.602	16.973	25.88	22.371	19.688		52.17	53.054	24.768	27.83	-1.214	-4.993		45.276	0.03	14.643	0.004		85.00	1.41667	51.6	11.1	40.0	2.758	0.004	0.004	0.000	0.109	0.09	
103	1/29/2004	9:40:42 AM		24.614	17.011	25.902	22.394	19.725		52.346	53.179	24.85	28.07	-1.211	-4.99		44.967	0.03	14.643	0.004		86.00	1.43333	51.7	11.0	40.2	2.772	0.004	0.004	0.000	0.108	0.09	
104	1/29/2004	9:41:42 AM		24.606	17.017	25.893	22.38	19.812		52.381	53.301	24.596	28.105	-1.216	-4.993		45.205	0.03	14.643	0.004		87.00	1.45	51.8	11.1	40.2	2.775	0.004	0.004	0.000	0.108	0.09	
105	1/29/2004	9:42:42 AM		24.613	17.024	25.871	22.382	20.031		52.684	53.552	24.805	28.167	-1.216	-4.993		45.422	0.03	14.643	0.004		88.00	1.46667	52.1	11.1	40.4	2.787	0.004	0.004	0.000	0.108	0.09	
106	1/29/2004	9:43:42 AM		24.63	17.062	25.908	22.409	19.555		52.263	53.11	24.771	27.955	-1.216	-4.99		45.061	0.03	14.643	0.004		89.00	1.48333	51.6	11.0	40.1	2.765	0.004	0.004	0.000	0.109	0.09	
107	1/29/2004	9:44:42 AM		24.637	17.084	25.914	22.421	19.849		52.28	53.092	24.695	28.081	-1.214	-4.984		45.291	0.03	14.643	0.004		90.00	1.5	51.6	11.1	40.2	2.770	0.004	0.004	0.000	0.108	0.09	
108	1/29/2004	9:45:42 AM		24.659	17.112	25.922	22.454	19.654		52.188	53.007	24.644	28.068	-1.211	-4.984		45.675	0.03	14.643	0.004		91.00	1.51667	51.5	11.2	40.1	2.767	0.004	0.004	0.000	0.109	0.09	
109	1/29/2004	9:46:42 AM		24.666	17.144	25.923	22.475	19.681		52.927	53.883	24.242	28.869	-1.214	-4.981		45.143	0.03	14.643	0.004		92.00	1.53333	52.4	11.1	40.9	2.820	0.004	0.004	0.000	0.107	0.09	
110	1/29/2004	9:47:42 AM		24.658	17.151	25.92	22.507	19.497		52.479	53.363	24.12	28.821	-1.214	-4.981		45.038	0.03	14.643	0.004		93.00	1.55	51.9	11.0	40.7	2.803	0.004	0.004	0.000	0.107	0.09	
111	1/29/2004	9:48:42 AM		24.675	17.178	25.912	22.505	20.149		52.794	53.705	24.467	28.647	-1.222	-4.984		44.857	0.03	14.643	0.003		94.00	1.56667	52.2	11.0	40.7	2.808	0.004	0.004	0.000	0.107	0.09	
112	1/29/2004	9:49:42 AM		24.682	17.206	25.905	22.507	20.544		52.584	53.614	24.148	28.729	-1.219	-4.981		44.926	0.03	14.643	0.004		95.00	1.58333	52.1	11.0	40.7	2.803	0.004	0.004	0.000	0.107	0.09	
113	1/29/2004	9:50:42 AM		24.694	17.233	25.911	22.529	20.289		52.423	53.378	24.183	28.67	-1.214	-4.975		45.051	0.03	14.643	0.004		96.00	1.6	51.9	11.0	40.5	2.796	0.004	0.004	0.000	0.108	0.09	
114	1/29/2004	9:51:42 AM		24.711	17.266	25.924	22.576	20.261		52.775	53.674	24.407	28.717	-1.216	-4.975		44.892	0.03	14.643	0.004		97.00	1.61667	52.2	11.0	40.7	2.809	0.004	0.004	0.000	0.107	0.09	
115	1/29/2004	9:52:42 AM		24.728	17.293	25.931	22.588	20.243		52.369	53.247	23.953	28.846	-1.214	-4.973		44.861	0.03	14.643	0.004		98.00	1.63333	51.8	11.0	40.6	2.800	0.004	0.004	0.000	0.107	0.09	
116	1/29/2004	9:53:42 AM		24.725	17.311	25.918	22.611	20.079		52.877	53.815	24.145	29.088	-1.214	-4.97		44.811	0.031	14.643	0.004		99.00	1.65	52.3	11.0	41.0	2.826	0.005	0.005	0.000	0.110	0.09	
117	1/29/2004	9:54:42 AM		24.743	17.343	25.915	22.653	20.338		52.833	53.716	23.943	29.273	-1.214	-4.973		44.836	0.031	14.643	0.004		100.00	1.66667	52.2	11.0	41.1	2.830	0.005	0.005	0.000	0.110	0.09	
118	1/29/2004	9:55:42 AM		24.754	17.355	25.897	22.69	20.189		52.744	53.637	23.962	29.172	-1.216	-4.973		44.717	0.031	14.643	0.004		101.00	1.68333	52.2	11.0	41.0	2.824	0.005	0.005	0.000	0.110	0.09	
119	1/29/2004	9:56:42 AM		24.766	17.377	25.898	22.732	20.074		52.431	53.382	23.705	29.158	-1.216	-4.97		44.823	0.03	14.643	0.004		102.00	1.7	51.9	11.0	40.8	2.813	0.004	0.004	0.000	0.107	0.09	
120	1/29/2004	9:57:42 AM		24.788	17.419	25.915	22.764	19.955		52.487	53.43	23.782	29.179	-1.216	-4.967		44.834	0.03	14.643	0.004		103.00	1.71667	52.0	11.0	40.8	2.815	0.004	0.004	0.000	0.107	0.09	
121	1/29/2004	9:58:42 AM		24.795	17.447	25.907	22.796	19.957		52.609	53.589	23.891	29.096	-1.216	-4.967		44.657	0.03	14.643	0.004		104.00	1.73333	52.1	10.9	40.9	2.817	0.004	0.004	0.000	0.107	0.09	
122	1/29/2004	9:59:42 AM		24.807	17.459	25.9	22.818	20.292		52.508	53.425	23.766	29.15	-1.214	-4.964		44.897	0.03	14.643	0.004		105.00	1.75	52.0	11.0	40.8	2.815	0.004	0.004	0.000	0.107	0.09	
123	1/29/2004	10:00:42 AM		24.824	17.492	25.917	22.765	20.36		52.808	53.813	23.872	29.226	-1.214	-4.961		44.753	0.03	14.643	0.004		106.00	1.76667	52.3	11.0	41.0	2.828	0.004	0.004	0.000	0.106	0.09	
124	1/29/2004	10:01:42 AM		24.821	17.514	25.914	22.817	20.482		52.67	53.535	24.03	29.156	-1.214	-4.961		44.582	0.031	14.643	0.004		107.00	1.78333	52.1	10.9	40.9	2.821	0.005	0.005	0.000	0.110	0.09	
125	1/29/2004	10:02:42 AM		24.848	17.547	25.926	22.87	20.469		52.52	53.595	23.512	29.269	-1.214	-4.961		44.872	0.03	14.643	0.004		108.00	1.8	52.1	11.0	40.9	2.820	0.004	0.004	0.000	0.107	0.09	
126	1/29/2004	10:03:42 AM		24.841	17.57	25.924	22.868	20.663		52.437	53.39	23.746	29.179	-1.216	-4.961		46.133	0.03	14.643	0.004		109.00	1.81667	51.9	11.3	40.8	2.814	0.004	0.004	0.000	0.107	0.09	
127	1/29/2004	10:04:42 AM		24.859	17.593	25.926	22.901	20.158		52.794	53.709	24.093	29.099	-1.216	-4.961		44.769	0.03	14.643	0.004		110.00	1.83333	52.2	11.0	40.9	2.823	0.004	0.004	0.000	0.106	0.09	
128	1/29/2004	10:05:42 AM		24.88	17.62	25.933	22.938	20.608		52.547	53.461	23.808	29.125	-1.214	-4.958		44.853	0.03	14.643	0.004		111.00	1.85	52.0	11.0	40.8	2.815	0.004	0.004	0.000	0.107	0.09	
129	1/29/2004	10:06:42 AM		24.878	17.647	25.92	22.95	20.288		52.456	53.419	23.849	29.049	-1.216	-4.958		44.809	0.03	14.643	0.004		112.00	1.86667	51.9	11.0	40.8	2.810	0.004	0.004	0.000	0.107	0.09	
130	1/29/2004	10:07:42 AM		24.88	17.665	25.913	22.968	20.597		52.564	53.575	23.852	29.086	-1.222	-4.955		44.844	0.03	14.643	0.003		113.00	1.88333	52.1	11.0	40.8	2.815	0.004	0.004	0.000	0.107	0.09	

RUN # 1.04; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
131	1/29/2004	10:08:42 AM		24.888	17.709	25.936	23.031	20.691		52.613	53.616	23.911	29.08	-1.211	-4.947		44.813	0.03	14.643	0.004		114.00	1.9	52.1	11.0	40.8	2.816	0.004	0.004	0.000	0.107	0.09	
132	1/29/2004	10:09:42 AM		24.901	17.722	25.938	22.993	20.678		52.504	53.56	23.884	28.955	-1.214	-4.949		44.607	0.03	14.643	0.004		115.00	1.91667	52.1	10.9	40.7	2.808	0.004	0.004	0.000	0.107	0.09	
133	1/29/2004	10:10:42 AM		24.893	17.734	25.931	22.965	20.6		52.481	53.454	24.006	29.004	-1.214	-4.947		44.78	0.03	14.643	0.004		116.00	1.93333	52.0	11.0	40.7	2.809	0.004	0.004	0.000	0.107	0.09	
134	1/29/2004	10:11:42 AM		24.905	17.776	25.943	23.068	20.531		52.375	53.512	23.693	29.002	-1.211	-4.941		44.894	0.03	14.643	0.004		117.00	1.95	52.0	11.0	40.7	2.805	0.004	0.004	0.000	0.107	0.09	
135	1/29/2004	10:12:42 AM		24.912	17.794	25.945	23.09	20.69		52.636	53.722	23.856	29.023	-1.216	-4.949		44.944	0.03	14.643	0.004		118.00	1.96667	52.2	11.0	40.8	2.815	0.004	0.004	0.000	0.107	0.09	
136	1/29/2004	10:13:42 AM		24.929	17.816	25.942	23.107	20.707		52.545	53.577	24.004	28.982	-1.219	-4.944		44.865	0.03	14.643	0.004		119.00	1.98333	52.1	11.0	40.8	2.811	0.004	0.004	0.000	0.107	0.09	
137	1/29/2004	10:14:42 AM		24.942	17.849	25.949	23.135	20.614		52.161	53.152	23.674	29.014	-1.216	-4.944		45.272	0.03	14.643	0.004		120.00	2	51.7	11.1	40.6	2.798	0.004	0.004	0.000	0.107	0.09	
138	1/29/2004	10:15:42 AM		24.943	17.881	25.961	23.172	20.777		52.215	53.313	23.682	28.971	-1.214	-4.941		44.915	0.03	14.643	0.004		121.00	2.01667	51.8	11.0	40.6	2.799	0.004	0.004	0.000	0.107	0.09	
139																																	
140		Averages		24.5	16.4	25.7	22.0	18.3	#	52.2	53.6	24.0	28.6	-1.0	-4.4	#	44.1	0.0	14.6	0.0	#			52.1	10.8	40.4	2.784	0.005	0.005	0.0001	0.122	0.104	#
141		Maximum		24.9	17.9	26.2	23.2	20.8	#	53.3	56.7	26.0	32.1	0.3	0.6	#	46.1	0.3	14.6	0.0	#			55.2	11.3	42.7	2.942	0.040	0.040	0.0009	0.932	0.794	#
142		Median		24.6	16.4	25.9	22.0	18.6	#	52.5	53.4	24.5	28.6	-1.2	-5.0	#	44.8	0.0	14.6	0.0	#			51.9	11.0	40.5	2.790	0.005	0.004	0.0001	0.110	0.093	#
143		Minimum		23.0	14.8	23.8	20.9	14.4	#	46.9	52.3	17.2	26.7	-1.2	-5.5	#	40.0	0.0	14.6	0.0	#			50.8	9.8	38.1	2.630	0.004	0.004	0.0001	0.106	0.090	#
144		2 x Std Dev		0.934	1.829	1.135	1.266	3.758	#	2.071	1.746	3.151	1.746	0.979	3.737	#	2.852	0.044	0.000	0.000	#			1.746	0.699	1.172	0.081	0.007	0.007	0.0002	0.154	0.131	#
145		Number of Points Used*		116	116	116	116	116	0	116	116	116	116	116	116	0	116	116	116	116	0			116	116	116	116	116	116	116	116	116	0
146		* Backpulse points in box are not included																															
147																																	
148																											2.0-hour avg. =		0.0050				
149																											1-hour avg. =		0.0055				

RUN # 1.07; STEADY STATE TEST AT 25 WT% UDS



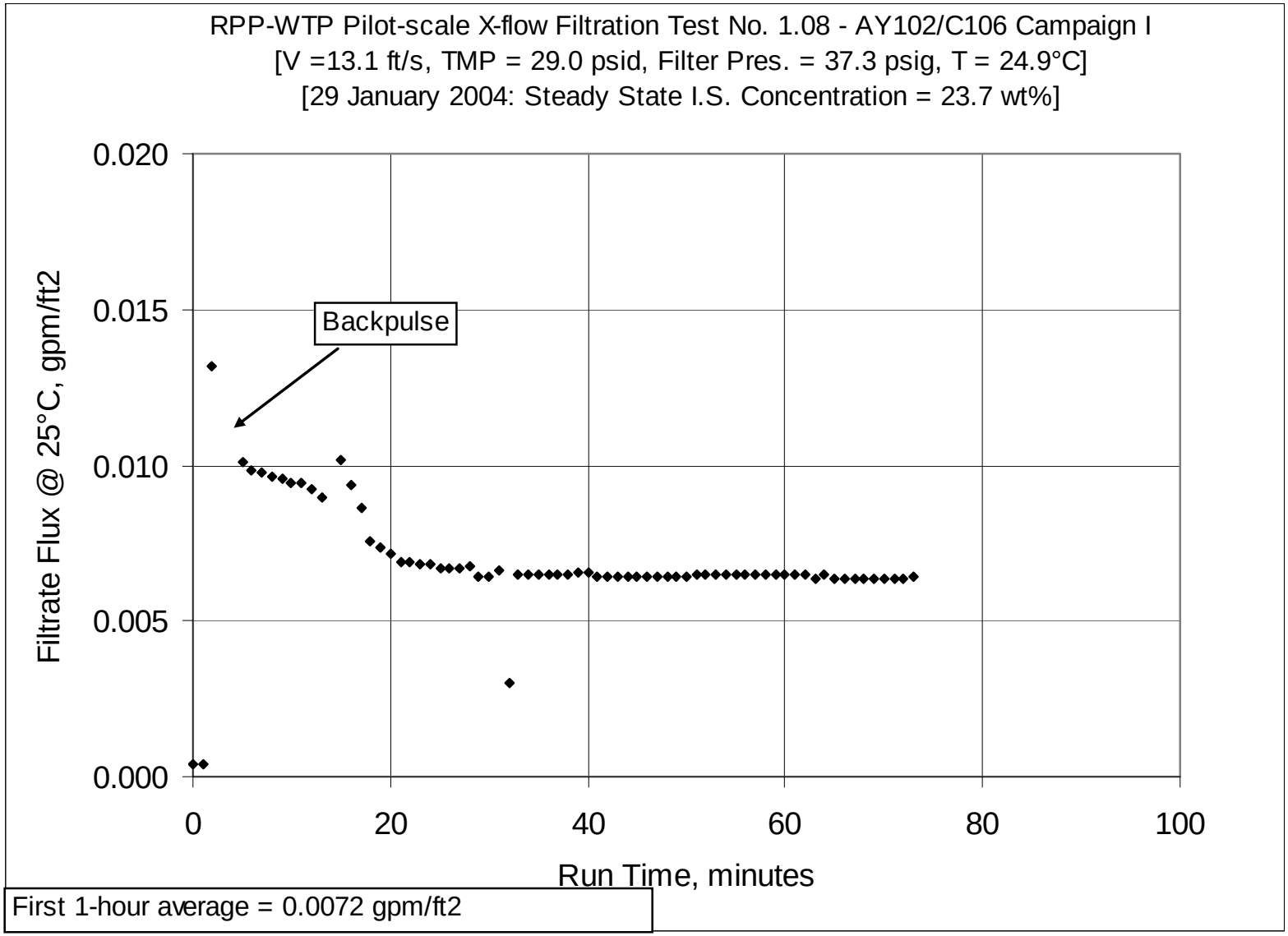
RUN # 1.07; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface	6.707	FT2							
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/29/2004	10:21:21 AM		25.663	18.023	24.64	23.282	21.415		35.039	39.999	17.965	17.495	-0.498	79.955		37.377	0.003	14.643	0.004		0	0	38.5	9.2	26.3	1.811	0.000	0.000	0.000	0.017	0.01	
18	1/29/2004	10:22:21 AM		23.588	18.045	24.582	23.279	21.824		6.481	39.862	8.321	-1.502	28.273	46.126		36.92	0.003	14.643	0.004		1.00	0.01667	38.4	9.0	2.5	0.172	0.000	0.000	0.000	0.182	0.15	
19	1/29/2004	10:23:21 AM		25.262	18.067	24.603	23.286	21.695		29.803	39.352	9.343	21.072	4.374	0.329		39.225	0.493	14.643	0.003		2.00	0.03333	37.9	9.6	25.4	1.754	0.074	0.074	0.003	2.922	2.49	
20	1/29/2004	10:24:21 AM		25.718	18.089	24.585	23.282	21.636		33.735	39.441	11.349	22.8	0.208	0.387		39.285	0.074	14.643	0.004		3.00	0.05	38.0	9.6	28.3	1.949	2.183	2.209	0.078	78.140	66.50	
21	1/29/2004	10:25:21 AM		25.665	18.121	24.597	23.359	21.739		33.662	39.337	12.702	21.396	0.202	0.399		39.505	0.056	14.643	0.004		4.00	0.06667	37.9	9.7	27.5	1.898	2.183	2.208	0.080	80.209	68.26	
22	1/29/2004	10:26:21 AM		25.636	18.132	24.693	23.33	22.081		34.089	39.766	13.621	20.881	0.202	0.402		38.883	0.047	14.643	0.004		5.00	0.08333	38.3	9.5	27.5	1.895	0.007	0.007	0.000	0.257	0.22	
23	1/29/2004	10:27:21 AM		25.617	18.159	24.739	23.351	22.138		34.141	39.826	14.156	20.407	0.199	0.419		38.349	0.042	14.643	0.003		6.00	0.1	38.4	9.4	27.3	1.880	0.006	0.006	0.000	0.231	0.20	
24	1/29/2004	10:28:21 AM		25.574	18.185	24.791	23.328	22.204		34.284	39.963	14.698	20.063	0.202	0.433		37.978	0.039	14.643	0.004		7.00	0.11667	38.5	9.3	27.2	1.874	0.006	0.006	0.000	0.215	0.18	
25	1/29/2004	10:29:21 AM		25.54	18.201	24.796	23.369	22.476		34.481	40.189	15.205	19.685	0.205	0.451		37.823	0.037	14.643	0.004		8.00	0.13333	38.7	9.3	27.1	1.867	0.006	0.006	0.000	0.205	0.17	
26	1/29/2004	10:30:21 AM		25.517	18.239	24.804	23.396	22.243		34.344	40.05	15.307	19.424	0.205	0.462		37.617	0.035	14.643	0.004		9.00	0.15	38.6	9.2	26.9	1.854	0.005	0.005	0.000	0.195	0.17	
27	1/29/2004	10:31:21 AM		25.483	18.26	24.805	23.462	22.213		34.51	40.249	15.652	19.223	0.214	0.471		37.487	0.034	14.643	0.004		10.00	0.16667	38.8	9.2	26.9	1.852	0.005	0.005	0.000	0.190	0.16	
28	1/29/2004	10:32:21 AM		25.459	18.271	24.776	23.498	22.465		34.486	40.181	15.909	18.993	0.237	0.48		37.412	0.033	14.643	0.003		11.00	0.18333	38.7	9.2	26.7	1.844	0.005	0.005	0.000	0.185	0.16	
29	1/29/2004	10:33:21 AM		25.455	18.313	24.757	23.455	22.181		34.656	40.372	16.093	18.977	0.257	0.491		37.25	0.032	14.643	0.004		12.00	0.2	38.9	9.1	26.8	1.849	0.005	0.005	0.000	0.179	0.15	
30	1/29/2004	10:34:21 AM		25.442	18.346	24.759	23.512	21.931		34.469	40.173	15.993	18.928	0.257	0.5		37.049	0.032	14.643	0.004		13.00	0.21667	38.7	9.1	26.7	1.841	0.005	0.005	0.000	0.180	0.15	
31	1/29/2004	10:35:21 AM		25.399	18.352	24.741	23.509	22.134		34.288	40.007	16.5	18.228	0.257	0.506		37.853	0.03	14.643	0.004		14.00	0.23333	38.5	9.3	26.3	1.810	0.004	0.005	0.000	0.172	0.15	
32	1/29/2004	10:36:21 AM		25.391	18.385	24.748	23.541	22.608		34.152	39.901	16.58	18.008	0.257	0.52		37.853	0.031	14.643	0.004		15.00	0.25	38.4	9.3	26.1	1.798	0.005	0.005	0.000	0.178	0.15	
33	1/29/2004	10:37:21 AM		25.392	18.432	24.769	23.573	22.504		34.21	39.945	16.604	18.06	0.254	0.535		37.809	0.03	14.643	0.004		16.00	0.26667	38.5	9.3	26.1	1.802	0.004	0.005	0.000	0.172	0.15	
34	1/29/2004	10:38:21 AM		25.369	18.439	24.766	23.579	22.175		34.234	39.972	16.51	18.214	0.257	0.537		37.458	0.03	14.643	0.004		17.00	0.28333	38.5	9.2	26.2	1.808	0.004	0.005	0.000	0.172	0.15	
35	1/29/2004	10:39:21 AM		25.361	18.481	24.803	23.566	22.563		34.374	40.175	16.592	18.222	0.286	0.555		37.415	0.03	14.643	0.004		18.00	0.3	38.7	9.2	26.3	1.813	0.004	0.004	0.000	0.171	0.15	
36	1/29/2004	10:40:21 AM		25.348	18.493	24.785	23.608	22.354		34.371	40.154	16.651	18.14	0.327	0.561		37.377	0.03	14.643	0.004		19.00	0.31667	38.7	9.2	26.3	1.810	0.004	0.004	0.000	0.171	0.15	
37	1/29/2004	10:41:21 AM		25.33	18.521	24.767	23.59	22.176		34.305	40.081	16.657	18.136	0.327	0.561		37.31	0.029	14.643	0.004		20.00	0.33333	38.6	9.1	26.2	1.808	0.004	0.004	0.000	0.166	0.14	
38	1/29/2004	10:42:21 AM		25.332	18.548	24.764	23.557	21.791		34.429	40.241	16.813	18.037	0.327	0.575		37.352	0.029	14.643	0.004		21.00	0.35	38.8	9.2	26.2	1.809	0.004	0.004	0.000	0.166	0.14	
39	1/29/2004	10:43:21 AM		25.308	18.559	24.745	23.613	21.872		34.297	40.111	16.757	17.992	0.327	0.578		37.31	0.03	14.643	0.004		22.00	0.36667	38.6	9.1	26.1	1.803	0.004	0.005	0.000	0.172	0.15	
40	1/29/2004	10:44:21 AM		25.311	18.597	24.763	23.611	22.266		34.257	40.26	16.848	17.84	0.547	0.769		37.2	0.025	14.643	0.004		23.00	0.38333	38.8	9.1	26.0	1.796	0.004	0.004	0.000	0.144	0.12	
41	1/29/2004	10:45:21 AM		25.322	18.619	24.769	23.618	22.986		36.01	40.237	16.907	19.465	-1.214	-1.018		37.225	0.051	14.643	0.004		24.00	0.4	38.8	9.1	27.7	1.912	0.008	0.008	0.000	0.276	0.23	
42	1/29/2004	10:46:21 AM		25.32	18.652	24.787	23.66	22.612		37.395	41.06	17.33	20.342	-1.219	-1.567		37.185	0.031	14.643	0.003		25.00	0.41667	39.6	9.1	28.9	1.990	0.005	0.005	0.000	0.161	0.14	
43	1/29/2004	10:47:21 AM		24.39	18.653	24.778	23.677	22.217		40.031	39.775	16.501	24.266	-1.219	-5.429		36.1	0.037	14.643	0.004		26.00	0.43333	38.3	8.8	32.1	2.217	0.006	0.006	0.000	0.173	0.15	
44	1/29/2004	10:48:21 AM		25.318	18.681	24.796	23.754	22.335		37.826	37.775	17.934	20.588	-1.216	-5.169		37.314	0.028	14.643	0.004		27.00	0.45	36.3	9.1	29.2	2.014	0.004	0.004	0.000	0.144	0.12	
45	1/29/2004	10:49:21 AM		25.349	18.728	24.757	23.886	22.175		37.957	37.915	17.654	20.986	-1.214	-5.158		37.016	0.03	14.643	0.004		28.00	0.46667	36.4	9.1	29.5	2.032	0.004	0.005	0.000	0.153	0.13	
46	1/29/2004	10:50:21 AM		25.37	18.734	24.682	23.807	22.096		38.231	38.179	17.028	21.91	-1.211	-5.152		36.086	0.031	14.643	0.004		29.00	0.48333	36.7	8.8	30.1	2.073	0.005	0.005	0.000	0.155	0.13	
47	1/29/2004	10:51:21 AM		25.362	18.756	24.619	23.748	21.907		38.528	38.498	16.956	22.277	-1.216	-5.155		35.838	0.031	14.643	0.004		30.00	0.5	37.0	8.8	30.4	2.096	0.005	0.005	0.000	0.154	0.13	
48	1/29/2004	10:52:21 AM		25.344	18.788	24.606	23.825	22.34		38.231	38.231	16.902	21.994	-1.216	-5.158		36.522	0.031	14.643	0.004		31.00	0.51667	36.8	9.0	30.1	2.076	0.005	0.005	0.000	0.155	0.13	
49	1/29/2004	10:53:21 AM		25.321	18.81	24.598	23.767	22.302		38.136	38.083	17.246	21.602	-1.219	-5.163		36.901	0.03	14.643	0.004		32.00	0.53333	36.6	9.0	29.9	2.059	0.004	0.005	0.000	0.151	0.13	
50	1/29/2004	10:54:21 AM		25.263	18.818	24.59	23.794	22.545		38.297	38.241	17.272	21.727	-1.216	-5.163		36.465	0.03	14.643	0.004		33.00	0.55	36.8	8.9	30.0	2.069	0.004	0.005	0.000	0.151	0.13	
51	1/29/2004	10:55:21 AM		25.22	18.845	24.582	23.832	22.793		38.227	38.17	17.54	21.382	-1.216	-5.163		37.052	0.029	14.643	0.004		34.00	0.56667	36.7	9.1	29.8	2.055	0.004	0.004	0.000	0.147	0.12	
52	1/29/2004	10:56:21 AM		25.203	18.873	24.564	23.824	22.956		38.229	38.166	17.614	21.362	-1.216	-5.163		37.083	0.029	14.643	0.004		35.00	0.58333	36.7	9.1	29.8	2.054	0.004	0.004	0.000	0.147	0.13	
53	1/29/2004	10:57:21 AM		25.19	18.89	24.536	23.856	23.444		38.343	38.284	17.534	21.528	-1.216	-5.169		36.876	0.03	14.643	0.004		36.00	0.6	36.8	9.0	29.9	2.064	0.004	0.005	0.000	0.151	0.13	
54	1/29/2004	10:58:21 AM		25.181	18.916	24.503	23.938	23.471		38.254	38.228	17.35	21.569	-1.219	-5.163		36.672	0.029	14.643	0.004		37.00	0.61667	36.8	9.0	29.9	2.062	0.004	0.004	0.000	0.147	0.12	
55	1/29/2004	10:59:21 AM		25.178	18.964	24.49	23.98	23.528		38.366	38.361	17.344	21.708	-1.219	-5.163		36.474	0.029	14.643	0.004		38.00	0.63333	36.9	8.9	30.0	2.071	0.004	0.004	0.000	0.146	0.12	
56	1/29/2004	11:00:21 AM		25.165	18.986	24.527	24.022	23.595		38.05	38	17.505	21.226	-1.216	-5.163		37.463	0.029	14.643	0.004		39.00	0.65	36.5	9.2	29.6	2.043	0.004	0.004	0.000	0.148	0.13	
57	1/29/2004	11:01:21 AM		25.177	19.038	24.624	24.049	23.787		38.287	38.284	17.377	21.585	-1.216	-5.163		36.532	0.029	14.643	0.004		40.00	0.66667	36.8	9.0	29.9	2.064	0.004	0.004	0.000	0.146	0.12	
58	1/29/2004	11:02:21 AM		25.143	19.05	24.69	24.015	23.573		38.619	38.583	17.668	21.632	-1.216	-5.16		37.16	0.029	14.643	0.004		41.00	0.68333	37.1	9.1	30.1	2.077	0.004	0.004	0.000	0.145	0.12	
59	1/29/2004	11:03:21 AM		25.174	19.086	24.766	24.026	23.609		38.702	38.653	17.606	21.788	-1.216	-5.16		36.612	0.03	14.643	0.004		42.00	0.7	37.2	9.0	30.2	2.085	0.004	0.005	0.000	0.149	0.13	
60	1/29/2004	11:04:21 AM		25.201	19.123	24.833	23.977	23.45		38.664	38.571	17.243	22.148	-1.216	-5.158		36.478	0.03	14.643	0.004		43.00	0.71667	37.1	8.9	30.4	2.096	0.004	0.004	0.000	0.148	0.13	
61	1/29/2004	11:05:21 AM		25.227	19.155	24.889	24.044	23.166		38.611	38.573	17.323	22.012	-1.216	-5.155		36.68	0.03	14.643	0.003		44.00	0.73333	37.1	9.0	30.3	2.090	0.004	0.004	0.000	0.148	0.13	
62	1/29/2004	11:06:21 AM		25.289	19.202	24.966	23.966	23.178		38.762	38.763	17.399	22.006	-1.214	-5.155		36.685	0.03	14.643	0.004		45.00	0.75	37.3	9.0	30.4	2.095	0.004	0.004	0.000	0.147	0.13	
63	1/29/2004	11:07:21 AM		25.34	19.219	25.023	24.032	23.355		38.695	38.705	17.38	21.979	-1.214	-5.149		36.657	0.03	14.643	0.004		46.00	0.76667	37.2	9.0	30.3	2.092	0.004	0.004	0.000	0.147	0.13	
64	1/29/2004	11:08:21 AM		25.392	19.246	25.065	24.049	23.387		38.725	38.705	17.452	21.957	-1.216	-5.152		36.664	0.03	14.643	0.004		47.00	0.78333	37.2	9.0	30.3	2.092	0.004	0.004	0.000	0.147	0.13	
65	1/29/2004	11:09:21 AM		25.444	19.268	25.097	24.091	23.208		38.671	38.647	17.399	21.963	-1.216	-5.152		36.641	0.029	14.643	0.004		48.00	0.8	37.2	9.0	30.3	2.090	0.004	0.004	0.000	0.142	0.12	
66	1/29/2004	11:10:21 AM		25.477	19.301	25.134	24.044	22.785		38.722	38.707	17.297	22.119	-1.216	-5.152		36.478	0.03	14.643	0.004		49.00	0.81667	37.2	8.9	30.4	2.097	0.004	0.004	0.000	0.146	0.12	
67	1/29/2004	11:11:21 AM		25.508	19.328	25.166	24.156	22.756		38.874	38.886	17.354	22.123	-1.216	-5.155		36.384	0.029	14.643	0.004		50.00	0.83333	37.4	8.9	30.5	2.103	0.004	0.004	0.000	0.141	0.12	
68	1/29/2004	11:12:21 AM		25.53	19.361	25.198	24.208	22.553		38.698	38.668	17.302	22.105	-1.214	-5.146		36.324	0.029	14.643	0.004		51.00	0.85	37.2	8.9	30.4	2.096	0.004	0.004	0.000	0.141	0.12	
69	1/29/2004	11:13:21 AM		25.547	19.372	25.18	24.2	22.865		39.011	39.002	17.561	22.103	-1.219	-5.152		36.359	0.029	14.643	0.004		52.00	0.86667	37.5	8.9	30.6	2.107	0.004	0.004	0.000	0.141	0.12	
70	1/29/2004	11:14:21 AM		25.569	19.4	25.202	24.267	22.556		38.965	38.956	17.512	22.125	-1.216	-5.149		36.401	0.029	14.643	0.004		53.00	0.88333	37.5	8.9	30.5	2.106	0.004	0.004	0.000	0.141	0.12	

RUN # 1.07; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/29/2004	11:15:21 AM		25.59	19.411	25.203	24.293	22.623		38.895	38.871	17.47	22.103	-1.219	-5.149		36.457	0.029	14.643	0.004		54.00	0.9	37.4	8.9	30.5	2.103	0.004	0.004	0.000	0.141	0.12	
72	1/29/2004	11:16:21 AM		25.622	19.423	25.23	24.29	22.529		38.88	38.84	17.433	22.129	-1.216	-5.149		36.267	0.029	14.643	0.004		55.00	0.91667	37.4	8.9	30.5	2.103	0.004	0.004	0.000	0.141	0.12	
73	1/29/2004	11:17:21 AM		25.639	19.45	25.237	24.327	22.717		38.93	38.91	17.39	22.193	-1.222	-5.152		36.267	0.029	14.643	0.003		56.00	0.93333	37.4	8.9	30.6	2.107	0.004	0.004	0.000	0.141	0.12	
74	1/29/2004	11:18:21 AM		25.671	19.473	25.259	24.369	22.438		38.899	38.898	17.291	22.207	-1.216	-5.146		36.199	0.029	14.643	0.004		57.00	0.95	37.4	8.9	30.6	2.107	0.004	0.004	0.000	0.140	0.12	
75	1/29/2004	11:19:21 AM		25.693	19.495	25.276	24.376	23.082		38.971	38.981	17.235	22.396	-1.219	-5.143		35.986	0.029	14.643	0.004		58.00	0.96667	37.5	8.8	30.7	2.116	0.004	0.004	0.000	0.140	0.12	
76	1/29/2004	11:20:21 AM		25.725	19.522	25.313	24.338	23.295		38.631	38.637	17.768	21.53	-1.219	-5.152		37.586	0.028	14.643	0.003		59.00	0.98333	37.2	9.2	30.1	2.074	0.004	0.004	0.000	0.138	0.12	
77	1/29/2004	11:21:21 AM		25.721	19.538	25.329	24.399	23.366		38.571	38.587	17.666	21.552	-1.216	-5.146		37.123	0.029	14.643	0.004		60.00	1	37.1	9.1	30.1	2.073	0.004	0.004	0.000	0.143	0.12	
78	1/29/2004	11:22:21 AM		25.748	19.561	25.317	24.286	23.944		38.824	38.842	17.617	21.844	-1.219	-5.149		36.762	0.029	14.643	0.003		61.00	1.01667	37.4	9.0	30.3	2.091	0.004	0.004	0.000	0.141	0.12	
79	1/29/2004	11:23:21 AM		25.775	19.603	25.349	24.404	23.109		38.801	38.763	17.545	21.949	-1.219	-5.143		36.705	0.029	14.643	0.004		62.00	1.03333	37.3	9.0	30.4	2.094	0.004	0.004	0.000	0.141	0.12	
80	1/29/2004	11:24:21 AM		25.787	19.625	25.361	24.471	23.437		38.708	38.73	17.474	21.897	-1.219	-5.143		36.666	0.029	14.643	0.004		63.00	1.05	37.3	9.0	30.3	2.089	0.004	0.004	0.000	0.141	0.12	
81	1/29/2004	11:25:21 AM		25.799	19.647	25.347	24.432	23.644		38.739	38.713	17.51	21.965	-1.216	-5.143		36.518	0.029	14.643	0.004		64.00	1.06667	37.2	8.9	30.4	2.093	0.004	0.004	0.000	0.141	0.12	
82	1/29/2004	11:26:21 AM		25.826	19.68	25.339	24.435	23.912		38.859	38.877	17.454	22.064	-1.222	-5.146		36.297	0.029	14.643	0.003		65.00	1.08333	37.4	8.9	30.5	2.100	0.004	0.004	0.000	0.141	0.12	
83	1/29/2004	11:27:21 AM		25.859	19.713	25.342	24.538	23.564		38.762	38.79	17.442	21.986	-1.219	-5.143		36.532	0.029	14.643	0.003		66.00	1.1	37.3	9.0	30.4	2.094	0.004	0.004	0.000	0.141	0.12	
84	1/29/2004	11:28:21 AM		25.861	19.74	25.344	24.57	23.551		38.708	38.705	17.407	21.981	-1.219	-5.14		36.497	0.029	14.643	0.004		67.00	1.11667	37.2	8.9	30.3	2.092	0.004	0.004	0.000	0.141	0.12	
85	1/29/2004	11:29:21 AM		25.868	19.763	25.341	24.572	24.099		38.971	39.022	17.373	22.23	-1.219	-5.146		36.119	0.029	14.643	0.003		68.00	1.13333	37.5	8.9	30.6	2.110	0.004	0.004	0.000	0.140	0.12	
86	1/29/2004	11:30:21 AM		25.874	19.8	25.363	24.609	23.685		38.44	38.465	17.643	21.481	-1.214	-5.143		37.325	0.028	14.643	0.004		69.00	1.15	37.0	9.1	30.0	2.066	0.004	0.004	0.000	0.138	0.12	
87	1/29/2004	11:31:21 AM		25.877	19.827	25.38	24.631	23.522		38.353	38.365	17.623	21.417	-1.219	-5.143		37.235	0.028	14.643	0.004		70.00	1.16667	36.9	9.1	29.9	2.060	0.004	0.004	0.000	0.138	0.12	
88	1/29/2004	11:32:21 AM		25.9	19.856	25.398	24.634	22.613		38.613	38.583	17.761	21.54	-1.219	-5.143		37.106	0.028	14.643	0.004		71.00	1.18333	37.1	9.1	30.1	2.074	0.004	0.004	0.000	0.137	0.12	
89	1/29/2004	11:33:21 AM		25.917	19.899	25.416	24.687	23.312		38.685	38.689	17.66	21.69	-1.219	-5.143		36.939	0.028	14.643	0.004		72.00	1.2	37.2	9.1	30.2	2.081	0.004	0.004	0.000	0.137	0.12	
90	1/29/2004	11:34:21 AM		25.914	19.921	25.403	24.684	23.209		38.642	38.67	17.625	21.663	-1.219	-5.143		36.912	0.028	14.643	0.004		73.00	1.21667	37.2	9.0	30.2	2.079	0.004	0.004	0.000	0.137	0.12	
91	1/29/2004	11:35:21 AM		25.952	19.943	25.4	24.721	23.422		38.791	38.836	17.566	21.852	-1.216	-5.14		36.647	0.028	14.643	0.003		74.00	1.23333	37.4	9.0	30.3	2.091	0.004	0.004	0.000	0.136	0.12	
92	1/29/2004	11:36:21 AM		25.953	19.97	25.401	24.758	23.263		38.824	38.871	17.511	21.983	-1.214	-5.134		36.334	0.028	14.643	0.004		75.00	1.25	37.4	8.9	30.4	2.096	0.004	0.004	0.000	0.136	0.12	
93	1/29/2004	11:37:21 AM		25.965	19.992	25.368	24.805	23.455		38.845	38.85	17.419	22.09	-1.211	-5.137		36.407	0.028	14.643	0.004		76.00	1.26667	37.4	8.9	30.5	2.101	0.004	0.004	0.000	0.136	0.12	
94	1/29/2004	11:38:21 AM		25.972	20.025	25.366	24.807	23.763		38.857	38.865	17.303	22.209	-1.216	-5.137		36.105	0.028	14.643	0.004		77.00	1.28333	37.4	8.8	30.5	2.105	0.004	0.004	0.000	0.135	0.12	
95	1/29/2004	11:39:21 AM		25.964	20.042	25.333	24.779	23.745		38.992	39.004	17.345	22.334	-1.216	-5.134		36.088	0.028	14.643	0.004		78.00	1.3	37.5	8.8	30.7	2.114	0.004	0.004	0.000	0.135	0.11	
96	1/29/2004	11:40:21 AM		25.941	20.064	25.325	24.736	23.697		38.99	39.026	17.315	22.31	-1.216	-5.137		36.015	0.028	14.643	0.004		79.00	1.31667	37.6	8.8	30.7	2.113	0.004	0.004	0.000	0.135	0.11	
97	1/29/2004	11:41:21 AM		25.939	20.087	25.333	24.769	23.153		38.951	38.983	17.301	22.293	-1.216	-5.134		36.013	0.028	14.643	0.004		80.00	1.33333	37.5	8.8	30.6	2.111	0.004	0.004	0.000	0.135	0.11	
98	1/29/2004	11:42:21 AM		25.906	20.11	25.34	24.791	23.812		38.938	38.962	17.307	22.314	-1.219	-5.134		35.948	0.028	14.643	0.004		81.00	1.35	37.5	8.8	30.6	2.112	0.004	0.004	0.000	0.135	0.11	
99	1/29/2004	11:43:21 AM		25.809	20.117	25.317	24.818	23.634		38.98	38.968	17.377	22.322	-1.216	-5.134		36	0.028	14.643	0.004		82.00	1.36667	37.5	8.8	30.7	2.113	0.004	0.004	0.000	0.135	0.11	
100	1/29/2004	11:44:21 AM		25.656	20.139	25.304	24.875	23.606		38.971	38.979	17.369	22.304	-1.216	-5.137		35.969	0.028	14.643	0.004		83.00	1.38333	37.5	8.8	30.6	2.112	0.004	0.004	0.000	0.135	0.11	
101	1/29/2004	11:45:21 AM		25.518	20.151	25.286	24.908	23.829		38.892	38.946	17.314	22.252	-1.219	-5.134		35.946	0.028	14.643	0.003		84.00	1.4	37.5	8.8	30.6	2.108	0.004	0.004	0.000	0.135	0.12	
102																																	
103		Averages		25.5	19.2	25.0	24.1	22.9	#	37.6	39.0	17.1	21.1	-0.9	-3.8	#	36.8	0.0	14.6	0.0	#			37.6	9.0	29.4	2.026	0.004	0.004	0.0002	0.154	0.131	#
104		Maximum		26.0	20.2	25.4	24.9	24.1	#	40.0	41.1	17.9	24.3	0.5	0.8	#	38.3	0.1	14.6	0.0	#			39.6	9.4	32.1	2.217	0.008	0.008	0.0003	0.276	0.235	#
105		Median		25.5	19.2	25.0	24.0	23.0	#	38.6	38.9	17.4	21.8	-1.2	-5.1	#	36.7	0.0	14.6	0.0	#			37.4	9.0	30.2	2.079	0.004	0.004	0.0001	0.146	0.124	#
106		Minimum		24.4	18.2	24.5	23.3	21.8	#	34.1	37.8	14.2	17.8	-1.2	-5.4	#	35.8	0.0	14.6	0.0	#			36.3	8.8	26.0	1.796	0.004	0.004	0.0001	0.135	0.115	#
107		2 x Std Dev		0.570	1.193	0.607	0.915	1.234	#	3.681	1.452	1.389	2.944	1.253	4.812	#	1.151	0.007	0.000	0.001	#			1.452	0.282	3.275	0.226	0.001	0.001	0.0000	0.048	0.041	#
108		Number of Points Used*		79	79	79	79	79	0	79	79	79	79	79	79	0	79	79	79	79	0			79	79	79	79	79	79	79	79	79	0
109		* Backpulse points in box are not included																															
110																																	
111																											1.4-hour avg. =		0.0045				
112																											1-hour avg. =		0.0046				

RUN # 1.08; STEADY STATE TEST AT 25 WT% UDS



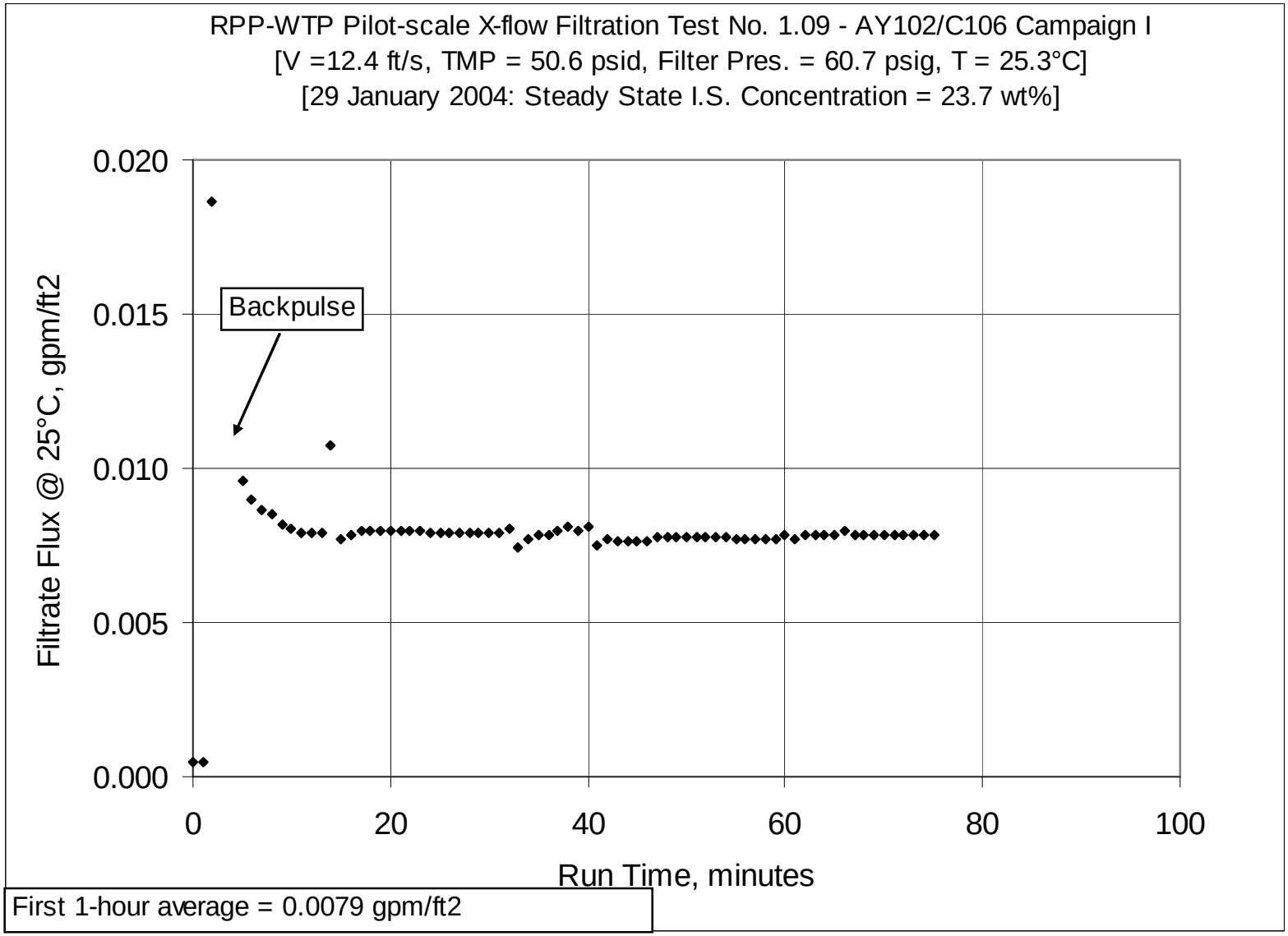
RUN # 1.08; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface	6.707	FT2							
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/29/2004	12:40:59 PM		25.833	20.797	27.494	25.909	23.433	#	40.16	45.933	26.093	7.72	0.327	86.355		62.357	0.003	14.643	0.004		0	0	44.5	15.3	23.9	1.651	0.000	0.000	0.000	0.017	0.01	
18	1/29/2004	12:41:59 PM		24.888	20.813	27.51	25.925	23.503	#	14.279	37.619	16.604	-1.925	18.062	8.337		70.703	0.003	14.643	0.007		1.00	0.01667	36.1	17.3	6.2	0.426	0.000	0.000	0.000	0.068	0.06	
19	1/29/2004	12:42:59 PM		26.907	20.838	27.54	25.915	23.504	#	33.036	38.825	19.7	14.082	0.228	0.295		70.019	0.095	14.643	0.004		2.00	0.03333	37.4	17.2	23.6	1.624	0.014	0.013	0.001	0.560	0.48	
20	1/29/2004	12:43:59 PM		27.46	20.883	27.619	25.919	23.638	#	33.459	39.257	20.679	13.495	0.202	0.335		63.554	0.081	14.643	0.004		3.00	0.05	37.8	15.6	23.5	1.619	2.183	2.029	0.086	86.437	73.56	
21	1/29/2004	12:44:59 PM		27.703	20.918	27.689	25.989	23.658	#	33.498	39.304	21.001	13.264	0.234	0.367		61.108	0.075	14.643	0.004		4.00	0.06667	37.8	15.0	23.4	1.612	2.183	2.025	0.087	86.624	73.72	
22	1/29/2004	12:45:59 PM		27.843	20.948	27.734	26.074	23.683	#	33.48	39.319	21.092	13.161	0.254	0.378		72.855	0.073	14.643	0.003		5.00	0.08333	37.8	17.9	23.3	1.608	0.011	0.010	0.000	0.432	0.37	
23	1/29/2004	12:46:59 PM		27.948	20.979	27.764	26.11	23.764	#	33.563	39.416	21.257	13.083	0.251	0.407		62.76	0.071	14.643	0.003		6.00	0.1	37.9	15.4	23.3	1.608	0.011	0.010	0.000	0.420	0.36	
24	1/29/2004	12:47:59 PM		28.043	21.005	27.814	26.11	23.679	#	33.6	39.451	21.306	13.044	0.315	0.439		73.821	0.071	14.643	0.004		7.00	0.11667	38.0	18.1	23.3	1.608	0.011	0.010	0.000	0.420	0.36	
25	1/29/2004	12:48:59 PM		28.113	21.045	27.924	26.145	23.86	#	33.492	39.393	21.199	13.044	0.324	0.448		65.793	0.07	14.643	0.004		8.00	0.13333	37.9	16.1	23.3	1.604	0.010	0.010	0.000	0.413	0.35	
26	1/29/2004	12:49:59 PM		28.197	21.075	28.019	26.17	24.085	#	33.426	39.333	21.218	12.989	0.324	0.462		67.324	0.07	14.643	0.004		9.00	0.15	37.9	16.5	23.2	1.600	0.010	0.010	0.000	0.413	0.35	
27	1/29/2004	12:50:59 PM		28.282	21.105	28.104	26.14	24.06	#	33.453	39.389	21.235	12.978	0.324	0.485		66.045	0.069	14.643	0.004		10.00	0.16667	37.9	16.2	23.2	1.601	0.010	0.009	0.000	0.406	0.35	
28	1/29/2004	12:51:59 PM		28.396	21.14	28.193	26.14	24.259	#	33.525	39.505	21.261	12.943	0.361	0.514		68.444	0.069	14.643	0.004		11.00	0.18333	38.0	16.8	23.2	1.602	0.010	0.009	0.000	0.405	0.34	
29	1/29/2004	12:52:59 PM		28.47	21.175	28.247	26.144	24.254	#	33.498	39.499	21.299	12.937	0.358	0.535		62.436	0.068	14.643	0.004		12.00	0.2	38.0	15.3	23.2	1.601	0.010	0.009	0.000	0.399	0.34	
30	1/29/2004	12:53:59 PM		28.561	21.241	28.253	26.285	24.145	#	32.725	38.707	20.875	12.613	0.387	0.578		62.722	0.066	14.643	0.004		13.00	0.21667	37.2	15.4	22.7	1.563	0.010	0.009	0.000	0.396	0.34	
31	1/29/2004	12:54:59 PM		28.168	21.267	28.159	26.286	24.446	#	39.637	39.522	20.944	19.201	-1.222	-5.473		61.262	0.105	14.643	0.003		14.00	0.23333	38.1	15.0	29.4	2.028	0.016	0.014	0.000	0.487	0.41	
32	1/29/2004	12:55:59 PM		27.846	21.299	27.842	26.342	24.482	#	39.27	38.952	19.064	20.656	-1.216	-5.64		61.667	0.074	14.643	0.004		15.00	0.25	37.5	15.1	30.0	2.066	0.011	0.010	0.000	0.340	0.29	
33	1/29/2004	12:56:59 PM		27.722	21.34	27.219	26.383	24.678	#	39.162	38.616	17.821	21.848	-1.219	-5.846		47.297	0.067	14.643	0.004		16.00	0.26667	37.1	11.6	30.5	2.103	0.010	0.009	0.000	0.308	0.26	
34	1/29/2004	12:57:59 PM		27.642	21.36	26.775	26.308	24.633	#	39.187	38.597	17.647	22.035	-1.222	-5.903		51.515	0.061	14.643	0.004		17.00	0.28333	37.1	12.6	30.6	2.111	0.009	0.009	0.000	0.283	0.24	
35	1/29/2004	12:58:59 PM		27.548	21.416	26.436	26.394	24.809	#	39.544	38.898	18.186	21.852	-1.219	-5.929		50.313	0.053	14.643	0.004		18.00	0.3	37.4	12.3	30.7	2.117	0.008	0.008	0.000	0.247	0.21	
36	1/29/2004	12:59:59 PM		27.488	21.456	26.101	26.439	25.034	#	39.677	39.02	18.395	21.784	-1.216	-5.938		51.84	0.051	14.643	0.004		19.00	0.31667	37.5	12.7	30.7	2.119	0.008	0.007	0.000	0.240	0.20	
37	1/29/2004	1:00:59 PM		27.428	21.481	25.846	26.413	25.163	#	39.144	38.556	18.166	21.501	-1.219	-5.869		50.201	0.049	14.643	0.004		20.00	0.33333	37.1	12.3	30.3	2.091	0.007	0.007	0.000	0.235	0.20	
38	1/29/2004	1:01:59 PM		27.329	21.517	25.561	26.398	25.098	#	39.448	38.778	18.845	21.085	-1.219	-5.964		52.623	0.047	14.643	0.003		21.00	0.35	37.3	12.9	30.3	2.087	0.007	0.007	0.000	0.228	0.19	
39	1/29/2004	1:02:59 PM		27.264	21.557	25.466	26.473	25.118	#	39.5	38.827	18.993	21.013	-1.216	-5.97		51.878	0.047	14.643	0.004		22.00	0.36667	37.4	12.7	30.3	2.086	0.007	0.007	0.000	0.229	0.19	
40	1/29/2004	1:03:59 PM		27.253	21.591	25.334	26.472	24.942	#	39.49	38.767	18.997	21.072	-1.219	-5.97		49.909	0.046	14.643	0.004		23.00	0.38333	37.3	12.2	30.3	2.088	0.007	0.007	0.000	0.224	0.19	
41	1/29/2004	1:04:59 PM		27.446	21.625	25.243	26.481	24.946	#	39.662	38.946	19.108	21.07	-1.222	-5.976		50.007	0.046	14.643	0.004		24.00	0.4	37.5	12.3	30.4	2.094	0.007	0.007	0.000	0.224	0.19	
42	1/29/2004	1:05:59 PM		27.316	21.665	25.173	26.53	24.966	#	39.666	38.987	19.083	21.068	-1.219	-5.973		51.496	0.045	14.643	0.003		25.00	0.41667	37.5	12.6	30.4	2.094	0.007	0.007	0.000	0.220	0.19	
43	1/29/2004	1:06:59 PM		27.175	21.704	25.086	26.559	25.029	#	39.504	38.821	18.891	21.124	-1.219	-5.976		51.092	0.045	14.643	0.003		26.00	0.43333	37.3	12.5	30.3	2.090	0.007	0.007	0.000	0.221	0.19	
44	1/29/2004	1:07:59 PM		27.035	21.728	25.026	26.604	25.054	#	39.728	39.055	18.877	21.329	-1.219	-5.973		49.56	0.045	14.643	0.004		27.00	0.45	37.6	12.1	30.5	2.105	0.007	0.007	0.000	0.220	0.19	
45	1/29/2004	1:08:59 PM		26.915	21.768	24.915	26.638	25.158	#	40.021	39.331	19.006	21.466	-1.216	-5.976		49.571	0.045	14.643	0.004		28.00	0.46667	37.9	12.1	30.7	2.120	0.007	0.007	0.000	0.219	0.19	
46	1/29/2004	1:09:59 PM		26.779	21.812	24.884	26.657	25.292	#	39.119	38.417	19.043	20.578	-1.216	-5.981		52.082	0.043	14.643	0.004		29.00	0.48333	36.9	12.8	29.8	2.058	0.006	0.006	0.000	0.215	0.18	
47	1/29/2004	1:10:59 PM		26.669	21.832	24.823	26.567	25.302	#	38.928	38.233	19.205	20.241	-1.219	-5.987		49.923	0.043	14.643	0.004		30.00	0.5	36.8	12.2	29.6	2.040	0.006	0.006	0.000	0.218	0.19	
48	1/29/2004	1:11:59 PM		26.552	21.866	24.762	26.445	25.425	#	39.15	38.467	19.259	20.407	-1.222	-5.984		52.257	0.044	14.643	0.003		31.00	0.51667	37.0	12.8	29.8	2.053	0.007	0.007	0.000	0.222	0.19	
49	1/29/2004	1:12:59 PM		26.441	21.889	24.675	26.278	25.588	#	39.299	38.597	19.335	20.479	-1.222	-5.901		51.974	0.02	14.643	0.003		32.00	0.53333	37.1	12.7	29.9	2.061	0.003	0.003	0.000	0.101	0.09	
50	1/29/2004	1:13:59 PM		26.354	21.928	24.648	26.172	25.502	#	38.87	38.616	19.287	20.06	-1.222	-5.539		51.235	0.043	14.643	0.003		33.00	0.55	37.1	12.6	29.5	2.032	0.006	0.006	0.000	0.220	0.19	
51	1/29/2004	1:14:59 PM		26.267	21.966	24.586	26.044	25.27	#	38.839	38.626	19.281	20.054	-1.219	-5.528		51.083	0.043	14.643	0.004		34.00	0.56667	37.2	12.5	29.4	2.030	0.006	0.006	0.000	0.220	0.19	
52	1/29/2004	1:15:59 PM		26.185	21.978	24.528	25.947	25.382	#	38.832	38.595	19.238	20.056	-1.222	-5.53		53.578	0.043	14.643	0.003		35.00	0.58333	37.1	13.1	29.4	2.030	0.006	0.006	0.000	0.221	0.19	
53	1/29/2004	1:16:59 PM		26.097	22.001	24.47	25.799	25.204	#	38.868	38.637	19.265	20.077	-1.225	-5.533		52.456	0.043	14.643	0.003		36.00	0.6	37.2	12.9	29.5	2.032	0.006	0.007	0.000	0.221	0.19	
54	1/29/2004	1:17:59 PM		26.045	22.055	24.454	25.732	25.448	#	38.882	38.653	19.206	20.161	-1.219	-5.516		51.354	0.043	14.643	0.004		37.00	0.61667	37.2	12.6	29.5	2.035	0.006	0.007	0.000	0.221	0.19	
55	1/29/2004	1:18:59 PM		25.968	22.067	24.396	25.624	25.51	#	38.832	38.614	19.116	20.188	-1.222	-5.516		54.022	0.043	14.643	0.004		38.00	0.63333	37.1	13.2	29.5	2.035	0.006	0.007	0.000	0.221	0.19	
56	1/29/2004	1:19:59 PM		25.891	22.096	24.354	25.548	24.624	#	38.826	38.589	19.143	20.198	-1.222	-5.516		50.833	0.043	14.643	0.003		39.00	0.65	37.1	12.5	29.5	2.035	0.006	0.007	0.000	0.221	0.19	
57	1/29/2004	1:20:59 PM		25.808	22.107	24.301	25.454	24.82	#	38.779	38.568	19.044	20.241	-1.222	-5.513		51.467	0.043	14.643	0.003		40.00	0.66667	37.1	12.6	29.5	2.035	0.006	0.007	0.000	0.222	0.19	
58	1/29/2004	1:21:59 PM		25.735	22.125	24.273	25.391	25.123	#	38.849	38.635	19.077	20.255	-1.219	-5.51		50.964	0.042	14.643	0.004		41.00	0.68333	37.2	12.5	29.6	2.038	0.006	0.006	0.000	0.216	0.18	
59	1/29/2004	1:22:59 PM		25.683	22.132	24.22	25.309	25.245	#	38.752	38.543	18.995	20.233	-1.219	-5.51		50.038	0.042	14.643	0.004		42.00	0.7	37.1	12.3	29.5	2.033	0.006	0.006	0.000	0.217	0.18	
60	1/29/2004	1:23:59 PM		25.59	22.144	24.187	25.265	25.242	#	38.737	38.537	18.961	20.247	-1.222	-5.507		45.397	0.042	14.643	0.004		43.00	0.71667	37.1	11.1	29.5	2.033	0.006	0.006	0.000	0.217	0.18	
61	1/29/2004	1:24:59 PM		25.532	22.161	24.144	25.197	25.124	#	38.893	38.66	19.118	20.262	-1.222	-5.504		54.22	0.042	14.643	0.004		44.00	0.73333	37.2	13.3	29.6	2.039	0.006	0.006	0.000	0.217	0.18	
62	1/29/2004	1:25:59 PM		25.469	22.168	24.106	25.014	25.221	#	38.81	38.649	18.966	20.268	-1.222	-5.502		51.361	0.042	14.643	0.003		45.00	0.75	37.2	12.6	29.5	2.037	0.006	0.006	0.000	0.217	0.19	
63	1/29/2004	1:26:59 PM		25.4	22.164	24.052	24.895	25.392	#	38.847	38.657	19.045	20.262	-1.225	-5.502		43.015	0.042	14.643	0.003		46.00	0.76667	37.2	10.5	29.6	2.038	0.006	0.006	0.000	0.218	0.19	
64	1/29/2004	1:27:59 PM		25.337	22.196	24.039	24.826	25.129	#	38.882	38.672	19.078	20.294	-1.222	-5.499		53.426	0.042	14.643	0.004		47.00	0.78333	37.2	13.1	29.6	2.040	0.006	0.006	0.000	0.217	0.19	
65	1/29/2004	1:28:59 PM		25.277	22.192	23.994	24.807	25.234	#	38.743	38.525	18.915	20.35	-1.219	-5.496		51.292	0.042	14.643	0.003		48.00	0.8	37.1	12.6	29.5	2.037	0.006	0.006	0.000	0.218	0.19	
66	1/29/2004	1:29:59 PM		25.219	22.209	23.966	24.778	25.271	#	38.984	38.782	19.095	20.364	-1.219	-5.493		51.429	0.042	14.643	0.004		49.00	0.81667	37.3	12.6	29.7	2.046	0.006	0.006	0.000	0.217	0.18	
67	1/29/2004	1:30:59 PM		25.137	22.237	23.944	24.716	25.529	#	38.864	38.682	18.931	20.391	-1.222	-5.49		54.525	0.042	14.643	0.004		50.00	0.83333	37.2	13.4	29.6	2.043	0.006	0.006	0.000	0.218	0.19	
68	1/29/2004	1:31:59 PM		25.068	22.243	23.91	24.697	25.56	#	38.779	38.591	18.869	20.407	-1.219	-5.487		52.652	0.042	14.643	0.004		51.00	0.85	37.1	12.9	29.6	2.040	0.006	0.006	0.000	0.218	0.19	
69	1/29/2004	1:32:59 PM		24.99	22.26	23.881	24.659	25.581	#	38.857	38.682	18.885	20.45	-1.219	-5.481		51.636	0.042	14.643	0.004		52.00	0.86667	37.2	12.7	29.7	2.045	0.006	0.006	0.000	0.218	0.19	
70	1/29/2004	1:33:59 PM		24.941	22.251	23.843	24.58	25.403	#	38.994	38.803	18.985	20.496	-1.222	-5.478		50.952	0.042	14.643	0.004		53.00	0.88333	37.3	12.5	29.7	2.051	0.006	0.006	0.000	0.218	0.19	

RUN # 1.08; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/29/2004	1:34:59 PM		24.908	22.273	23.814	24.572	25.514	#	38.949	38.79	18.877	20.514	-1.222	-5.478		51.189	0.042	14.643	0.004		54.00	0.9	37.3	12.5	29.7	2.050	0.006	0.006	0.000	0.218	0.19	
72	1/29/2004	1:35:59 PM		24.864	22.295	23.801	24.578	25.381	#	38.897	38.743	18.865	20.514	-1.219	-5.476		51.373	0.042	14.643	0.004		55.00	0.91667	37.3	12.6	29.7	2.048	0.006	0.006	0.000	0.218	0.19	
73	1/29/2004	1:36:59 PM		24.811	22.301	23.783	24.605	25.268	#	38.992	38.836	18.924	20.53	-1.219	-5.473		50.937	0.042	14.643	0.004		56.00	0.93333	37.4	12.5	29.8	2.052	0.006	0.006	0.000	0.218	0.19	
74	1/29/2004	1:37:59 PM		24.792	22.313	23.739	24.541	25.454	#	38.92	38.753	18.875	20.508	-1.222	-5.473		52.214	0.042	14.643	0.004		57.00	0.95	37.3	12.8	29.7	2.049	0.006	0.006	0.000	0.218	0.19	
75	1/29/2004	1:38:59 PM		24.734	22.325	23.715	24.513	25.391	#	39.027	38.875	18.945	20.506	-1.222	-5.467		52.589	0.042	14.643	0.003		58.00	0.96667	37.4	12.9	29.8	2.052	0.006	0.006	0.000	0.218	0.19	
76	1/29/2004	1:39:59 PM		24.705	22.341	23.701	24.479	24.957	#	38.785	38.612	18.81	20.492	-1.216	-5.461		52.266	0.042	14.643	0.004		59.00	0.98333	37.1	12.8	29.6	2.043	0.006	0.006	0.000	0.219	0.19	
77	1/29/2004	1:40:59 PM		24.664	22.325	23.651	24.388	23.901	#	39.034	38.859	19.034	20.51	-1.216	-5.461		51.965	0.042	14.643	0.004		60.00	1	37.4	12.7	29.8	2.053	0.006	0.007	0.000	0.219	0.19	
78	1/29/2004	1:41:59 PM		24.64	22.331	23.636	24.238	24.287	#	38.752	38.583	18.772	20.524	-1.219	-5.458		52.718	0.042	14.643	0.004		61.00	1.01667	37.1	12.9	29.6	2.043	0.006	0.007	0.000	0.220	0.19	
79	1/29/2004	1:42:59 PM		24.584	22.325	23.606	24.177	24.532	#	38.978	38.834	18.883	20.565	-1.216	-5.452		51.719	0.042	14.643	0.004		62.00	1.03333	37.4	12.7	29.8	2.053	0.006	0.007	0.000	0.219	0.19	
80	1/29/2004	1:43:59 PM		24.549	22.33	23.59	24.111	24.491	#	39.015	38.863	18.891	20.584	-1.219	-5.452		50.343	0.041	14.643	0.004		63.00	1.05	37.4	12.3	29.8	2.055	0.006	0.006	0.000	0.213	0.18	
81	1/29/2004	1:44:59 PM		24.509	22.335	23.565	24.061	24.871	#	38.928	38.78	18.793	20.602	-1.219	-5.45		55.411	0.042	14.643	0.004		64.00	1.06667	37.3	13.6	29.8	2.052	0.006	0.007	0.000	0.219	0.19	
82	1/29/2004	1:45:59 PM		24.477	22.338	23.564	24.09	24.905	#	38.851	38.711	18.773	20.602	-1.216	-5.444		51.523	0.041	14.643	0.004		65.00	1.08333	37.2	12.6	29.7	2.050	0.006	0.006	0.000	0.214	0.18	
83	1/29/2004	1:46:59 PM		24.422	22.323	23.523	24.08	24.265	#	38.93	38.788	18.825	20.582	-1.219	-5.444		50.614	0.041	14.643	0.004		66.00	1.1	37.3	12.4	29.8	2.052	0.006	0.006	0.000	0.214	0.18	
84	1/29/2004	1:47:59 PM		24.371	22.317	23.477	24.049	23.753	#	38.886	38.763	18.796	20.571	-1.225	-5.45		51.167	0.041	14.643	0.003		67.00	1.11667	37.3	12.5	29.7	2.050	0.006	0.006	0.000	0.215	0.18	
85	1/29/2004	1:48:59 PM		24.367	22.328	23.493	24.105	24.84	#	38.93	38.771	18.84	20.567	-1.222	-5.438		52.541	0.041	14.643	0.004		68.00	1.13333	37.3	12.9	29.7	2.051	0.006	0.006	0.000	0.214	0.18	
86	1/29/2004	1:49:59 PM		24.347	22.349	23.483	24.206	25.035	#	38.909	38.755	18.826	20.58	-1.216	-5.438		52.616	0.041	14.643	0.004		69.00	1.15	37.3	12.9	29.7	2.051	0.006	0.006	0.000	0.215	0.18	
87	1/29/2004	1:50:59 PM		24.324	22.351	23.466	24.303	25.447	#	38.816	38.67	18.746	20.578	-1.219	-5.438		50.005	0.041	14.643	0.003		70.00	1.16667	37.2	12.3	29.7	2.048	0.006	0.006	0.000	0.215	0.18	
88	1/29/2004	1:51:59 PM		24.286	22.362	23.452	24.38	25.513	#	38.853	38.714	18.778	20.584	-1.222	-5.435		53.515	0.041	14.643	0.003		71.00	1.18333	37.2	13.1	29.7	2.049	0.006	0.006	0.000	0.215	0.18	
89	1/29/2004	1:52:59 PM		24.283	22.38	23.444	24.417	25.171	#	39.019	38.906	18.903	20.586	-1.219	-5.429		52.049	0.041	14.643	0.004		72.00	1.2	37.4	12.8	29.8	2.055	0.006	0.006	0.000	0.214	0.18	
90	1/29/2004	1:53:59 PM		24.265	22.386	23.431	24.489	25.008	#	38.677	38.535	18.666	20.557	-1.222	-5.429		50.643	0.041	14.643	0.003		73.00	1.21667	37.1	12.4	29.6	2.042	0.006	0.006	0.000	0.216	0.18	
91																																	
92		Averages		26.1	21.9	24.9	25.4	24.9	#	38.4	38.8	19.2	19.7	-1.0	-4.9	#	53.4	0.0	14.6	0.0	#			37.3	13.1	29.0	2.003	0.007	0.007	0.0002	0.248	0.211	#
93		Maximum		28.6	22.4	28.3	26.7	25.6	#	40.0	39.5	21.3	22.0	0.4	0.6	#	73.8	0.1	14.6	0.0	#			38.1	18.1	30.7	2.120	0.016	0.014	0.0005	0.487	0.415	#
94		Median		25.8	22.1	24.3	25.5	25.1	#	38.9	38.7	19.0	20.5	-1.2	-5.5	#	51.7	0.0	14.6	0.0	#			37.3	12.7	29.7	2.048	0.006	0.006	0.0002	0.219	0.186	#
95		Minimum		24.3	21.0	23.4	24.0	23.7	#	32.7	38.2	17.6	12.6	-1.2	-6.0	#	43.0	0.0	14.6	0.0	#			36.8	10.5	22.7	1.563	0.003	0.003	0.0001	0.101	0.086	#
96		2 x Std Dev		2.706	0.868	3.057	1.806	1.028	#	3.684	0.566	1.651	5.019	0.999	3.950	#	10.838	0.025	0.000	0.001	#			0.567	2.656	4.337	0.299	0.004	0.003	0.0001	0.143	0.122	#
97		Number of Points Used*		68	68	68	68	68	#	68	68	68	68	68	68	0	68	68	68	68	0			68	68	68	68	68	68	68	68	68	0
98		* Backpulse points in box are not included																															
99																																	
100																											1.2-hour avg. =		0.0071				
101																											1-hour avg. =		0.0072				

RUN # 1.09; STEADY STATE TEST AT 25 WT% UDS



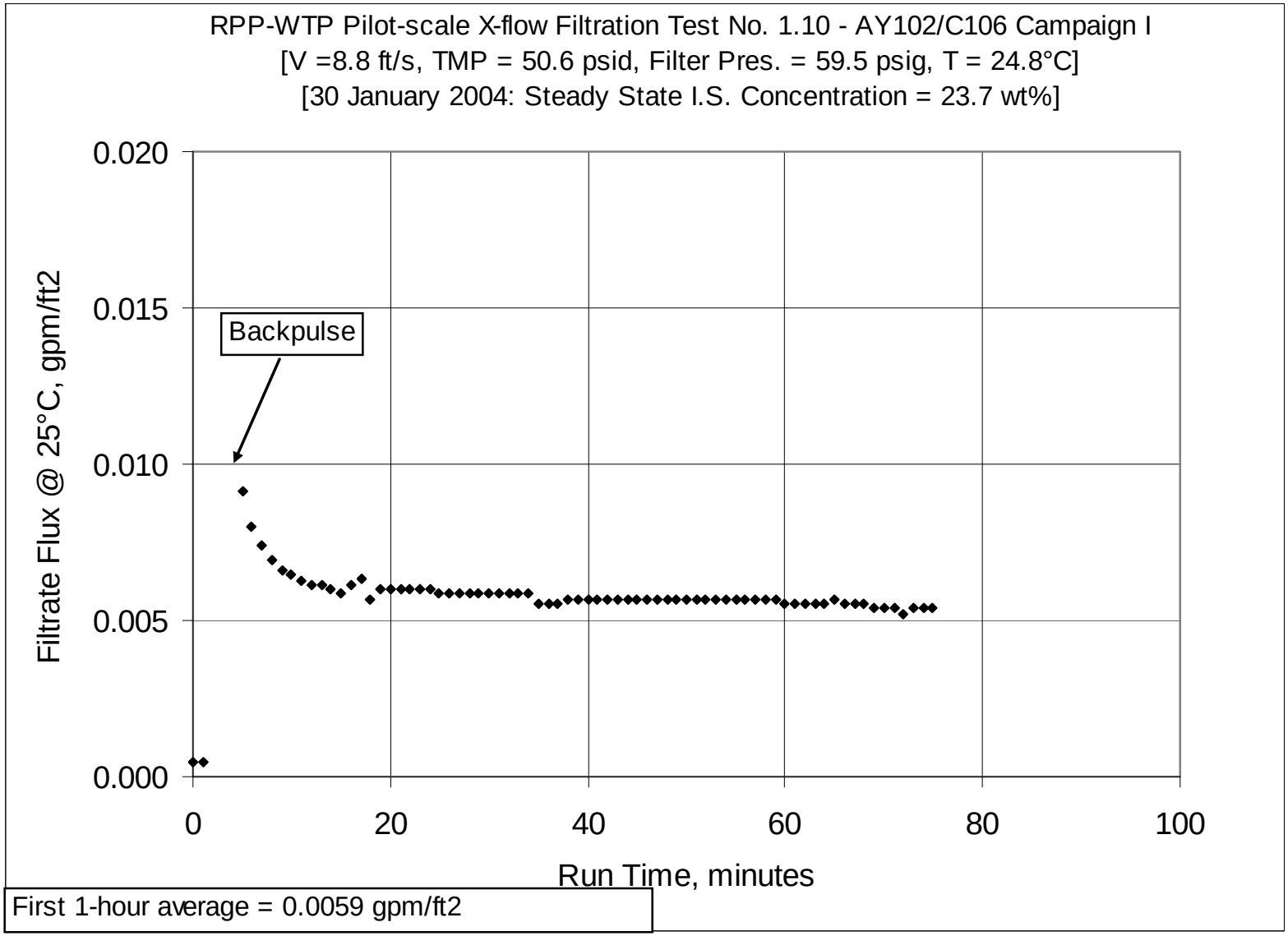
RUN # 1.09; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface		6.707	FT2						
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/29/2004	1:59:46 PM		24.349	22.466	23.997	25.386	25.227		24.072	61.374	20.625	3.715	31.903	100.665		50.023	0.003	14.643	0.003		0	0	59.9	12.3	13.9	0.958	0.000	0.000	0.000	0.033	0.03	
18	1/29/2004	2:00:46 PM		24.674	22.48	24.071	25.43	25.421		10.015	59.092	10.31	-0.025	43.848	46.135		53.131	0.003	14.643	0.005		1.00	0.01667	57.6	13.0	5.0	0.344	0.000	0.000	0.000	0.092	0.08	
19	1/29/2004	2:01:46 PM		24.643	22.515	24.121	25.42	25.451		54.565	60.487	15.611	39.588	0.315	0.323		51.148	0.122	14.643	0.004		2.00	0.03333	59.0	12.5	47.1	3.246	0.018	0.019	0.000	0.396	0.34	
20	1/29/2004	2:02:46 PM		24.744	22.536	24.152	25.41	25.786		55.608	61.469	18.562	37.628	0.251	0.352		51.757	0.084	14.643	0.003		3.00	0.05	60.0	12.7	46.6	3.214	2.183	2.236	0.048	47.965	40.82	
21	1/29/2004	2:03:46 PM		24.804	22.577	24.187	25.451	25.956		56.006	61.878	20.01	36.575	0.214	0.378		48.639	0.07	14.643	0.003		4.00	0.06667	60.4	11.9	46.3	3.192	2.183	2.234	0.048	48.257	41.07	
22	1/29/2004	2:04:46 PM		24.855	22.602	24.233	25.326	26.176		56.336	62.193	20.731	36.201	0.217	0.407		51.907	0.063	14.643	0.004		5.00	0.08333	60.7	12.7	46.3	3.190	0.009	0.010	0.000	0.207	0.18	
23	1/29/2004	2:05:46 PM		24.891	22.644	24.264	25.312	26.082		56.595	62.489	21.163	36.013	0.254	0.425		45.7	0.059	14.643	0.003		6.00	0.1	61.0	11.2	46.3	3.192	0.009	0.009	0.000	0.194	0.17	
24	1/29/2004	2:06:46 PM		24.919	22.657	24.272	25.26	26.35		56.456	62.282	21.355	35.797	0.257	0.436		47.936	0.057	14.643	0.004		7.00	0.11667	60.8	11.7	46.1	3.180	0.008	0.009	0.000	0.188	0.16	
25	1/29/2004	2:07:46 PM		24.947	22.67	24.285	25.193	25.904		56.795	62.632	21.65	35.816	0.298	0.448		46.92	0.056	14.643	0.004		8.00	0.13333	61.2	11.5	46.3	3.193	0.008	0.009	0.000	0.184	0.16	
26	1/29/2004	2:08:46 PM		25.003	22.706	24.327	25.134	25.59		56.869	62.775	21.772	35.727	0.324	0.485		46.428	0.054	14.643	0.004		9.00	0.15	61.3	11.4	46.3	3.192	0.008	0.008	0.000	0.177	0.15	
27	1/29/2004	2:09:46 PM		25.023	22.706	24.337	25.024	25.351		56.786	62.771	21.604	35.713	0.324	0.488		47.596	0.053	14.643	0.003		10.00	0.16667	61.3	11.7	46.2	3.189	0.008	0.008	0.000	0.174	0.15	
28	1/29/2004	2:10:46 PM		25.058	22.721	24.361	24.938	25.58		56.904	62.829	21.84	35.696	0.324	0.503		45.929	0.052	14.643	0.004		11.00	0.18333	61.4	11.3	46.3	3.192	0.008	0.008	0.000	0.170	0.15	
29	1/29/2004	2:11:46 PM		25.094	22.741	24.387	24.848	25.58		57.23	63.252	21.834	35.887	0.35	0.535		48.449	0.052	14.643	0.003		12.00	0.2	61.8	11.9	46.6	3.210	0.008	0.008	0.000	0.169	0.14	
30	1/29/2004	2:12:46 PM		25.123	22.756	24.406	24.802	25.565		57.068	63.041	21.585	36.072	0.361	0.537		46.893	0.052	14.643	0.004		13.00	0.21667	61.6	11.5	46.6	3.211	0.008	0.008	0.000	0.169	0.14	
31	1/29/2004	2:13:46 PM		25.119	22.762	24.427	24.753	25.63		63.587	63.43	21.819	41.847	-1.219	-5.539		46.939	0.071	14.643	0.004		14.00	0.23333	62.0	11.5	52.7	3.635	0.011	0.011	0.000	0.204	0.17	
32	1/29/2004	2:14:46 PM		25.119	22.772	24.473	24.698	25.716		61.658	61.221	25.01	36.723	-1.222	-5.759		53.219	0.051	14.643	0.003		15.00	0.25	59.7	13.0	49.2	3.392	0.008	0.008	0.000	0.157	0.13	
33	1/29/2004	2:15:46 PM		25.185	22.784	24.529	24.624	25.677		62.429	61.83	24.88	37.597	-1.222	-5.935		54.177	0.052	14.643	0.004		16.00	0.26667	60.4	13.3	50.0	3.448	0.008	0.008	0.000	0.157	0.13	
34	1/29/2004	2:16:46 PM		25.217	22.795	24.575	24.591	25.489		62.251	61.71	24.48	37.857	-1.222	-5.857		50.316	0.053	14.643	0.003		17.00	0.28333	60.2	12.3	50.1	3.451	0.008	0.008	0.000	0.160	0.14	
35	1/29/2004	2:17:46 PM		25.268	22.811	24.632	24.547	25.3		62.778	62.168	24.154	38.767	-1.222	-5.944		52.049	0.053	14.643	0.003		18.00	0.3	60.7	12.8	50.8	3.501	0.008	0.008	0.000	0.157	0.13	
36	1/29/2004	2:18:46 PM		25.308	22.812	24.667	24.527	25.426		62.608	62.015	23.6	39.089	-1.219	-5.938		49.529	0.053	14.643	0.004		19.00	0.31667	60.5	12.1	50.8	3.506	0.008	0.008	0.000	0.157	0.13	
37	1/29/2004	2:19:46 PM		25.36	22.823	24.709	24.488	25.612		62.713	62.162	23.575	39.187	-1.219	-5.941		50.622	0.053	14.643	0.004		20.00	0.33333	60.7	12.4	51.0	3.513	0.008	0.008	0.000	0.156	0.13	
38	1/29/2004	2:20:46 PM		25.385	22.839	24.759	24.484	25.582		62.664	62.104	23.471	39.255	-1.216	-5.935		51.292	0.053	14.643	0.004		21.00	0.35	60.6	12.6	51.0	3.513	0.008	0.008	0.000	0.156	0.13	
39	1/29/2004	2:21:46 PM		25.41	22.833	24.769	24.463	25.297		62.753	62.129	23.338	39.563	-1.219	-5.941		49.984	0.053	14.643	0.004		22.00	0.36667	60.7	12.2	51.2	3.527	0.008	0.008	0.000	0.155	0.13	
40	1/29/2004	2:22:46 PM		25.449	22.833	24.803	24.407	24.331		62.935	62.406	23.191	39.674	-1.219	-5.938		49.172	0.053	14.643	0.004		23.00	0.38333	60.9	12.1	51.3	3.537	0.008	0.008	0.000	0.155	0.13	
41	1/29/2004	2:23:46 PM		25.464	22.848	24.833	24.367	24.921		62.9	62.251	23.304	39.715	-1.219	-5.938		51.753	0.053	14.643	0.004		24.00	0.4	60.8	12.7	51.3	3.537	0.008	0.008	0.000	0.155	0.13	
42	1/29/2004	2:24:46 PM		25.493	22.842	24.868	24.362	25.291		62.869	62.199	23.167	39.803	-1.219	-5.938		49.809	0.053	14.643	0.004		25.00	0.41667	60.7	12.2	51.3	3.539	0.008	0.008	0.000	0.154	0.13	
43	1/29/2004	2:25:46 PM		25.513	22.847	24.888	24.372	25.246		62.765	62.16	23.065	39.772	-1.219	-5.938		54.713	0.053	14.643	0.004		26.00	0.43333	60.7	13.4	51.3	3.535	0.008	0.008	0.000	0.155	0.13	
44	1/29/2004	2:26:46 PM		25.57	22.858	24.919	24.433	25.012		62.732	62.108	23.031	39.787	-1.222	-5.941		50.063	0.053	14.643	0.004		27.00	0.45	60.6	12.3	51.3	3.534	0.008	0.008	0.000	0.155	0.13	
45	1/29/2004	2:27:46 PM		25.576	22.86	24.95	24.555	24.628		62.689	62.145	23.014	39.795	-1.219	-5.938		50.558	0.053	14.643	0.004		28.00	0.46667	60.7	12.4	51.2	3.533	0.008	0.008	0.000	0.154	0.13	
46	1/29/2004	2:28:46 PM		25.528	22.877	24.983	24.617	25.281		62.759	62.139	23.079	39.819	-1.222	-5.941		55.297	0.053	14.643	0.003		29.00	0.48333	60.7	13.6	51.3	3.536	0.008	0.008	0.000	0.154	0.13	
47	1/29/2004	2:29:46 PM		25.585	22.883	25.029	24.689	25.382		62.937	62.354	23.193	39.858	-1.216	-5.935		50.939	0.053	14.643	0.004		30.00	0.5	60.9	12.5	51.4	3.544	0.008	0.008	0.000	0.154	0.13	
48	1/29/2004	2:30:46 PM		25.625	22.889	25.05	24.684	25.687		62.942	62.419	23.076	39.854	-1.219	-5.938		50.541	0.053	14.643	0.004		31.00	0.51667	60.9	12.4	51.4	3.544	0.008	0.008	0.000	0.154	0.13	
49	1/29/2004	2:31:46 PM		25.652	22.901	25.077	24.772	25.409		63.251	62.632	22.89	40.462	-1.222	-5.938		50.799	0.054	14.643	0.003		32.00	0.53333	61.2	12.4	51.9	3.575	0.008	0.008	0.000	0.155	0.13	
50	1/29/2004	2:32:46 PM		25.69	22.918	25.124	24.854	25.886		61.37	60.738	25.334	36.179	-1.222	-5.95		56.648	0.05	14.643	0.003		33.00	0.55	59.3	13.9	48.8	3.363	0.007	0.007	0.000	0.152	0.13	
51	1/29/2004	2:33:46 PM		25.727	22.931	25.182	24.862	26.168		62.541	61.948	24.107	38.473	-1.222	-5.944		50.518	0.052	14.643	0.003		34.00	0.56667	60.5	12.4	50.5	3.482	0.008	0.008	0.000	0.153	0.13	
52	1/29/2004	2:34:46 PM		25.781	22.96	25.221	24.906	26.292		62.826	62.197	23.406	39.47	-1.219	-5.935		49.561	0.053	14.643	0.004		35.00	0.58333	60.7	12.1	51.1	3.526	0.008	0.008	0.000	0.154	0.13	
53	1/29/2004	2:35:46 PM		25.819	22.963	25.234	24.939	26.659		62.958	62.402	22.854	40.123	-1.219	-5.935		50.265	0.053	14.643	0.004		36.00	0.6	60.9	12.3	51.5	3.554	0.008	0.008	0.000	0.152	0.13	
54	1/29/2004	2:36:46 PM		25.848	22.993	25.273	25.064	26.618		63.128	62.57	22.884	40.345	-1.222	-5.846		54.264	0.054	14.643	0.003		37.00	0.61667	61.1	13.3	51.7	3.567	0.008	0.008	0.000	0.154	0.13	
55	1/29/2004	2:37:46 PM		25.911	23.001	25.281	25.067	25.808		63.02	62.354	22.024	41.178	-1.219	-5.938		46.288	0.055	14.643	0.003		38.00	0.63333	60.9	11.3	52.1	3.592	0.008	0.008	0.000	0.156	0.13	
56	1/29/2004	2:38:46 PM		25.931	23.025	25.296	25.176	25.972		63.39	62.784	22.123	41.357	-1.222	-5.941		49.604	0.054	14.643	0.003		39.00	0.65	61.3	12.2	52.4	3.611	0.008	0.008	0.000	0.152	0.13	
57	1/29/2004	2:39:46 PM		25.943	23.037	25.308	25.168	25.545		63.429	62.858	21.833	41.625	-1.219	-5.935		51.598	0.055	14.643	0.004		40.00	0.66667	61.4	12.6	52.5	3.622	0.008	0.008	0.000	0.155	0.13	
58	1/29/2004	2:40:46 PM		25.944	23.049	25.355	25.12	25.482		62.041	61.426	24.256	37.894	-1.222	-5.95		52.333	0.051	14.643	0.003		41.00	0.68333	60.0	12.8	50.0	3.445	0.008	0.008	0.000	0.151	0.13	
59	1/29/2004	2:41:46 PM		25.961	23.046	25.366	25.092	26.053		62.004	61.395	24.161	37.921	-1.222	-5.953		51.158	0.052	14.643	0.003		42.00	0.7	59.9	12.5	50.0	3.445	0.008	0.008	0.000	0.154	0.13	
60	1/29/2004	2:42:46 PM		25.998	23.083	25.438	25.079	25.61		62.292	61.588	24.176	38.245	-1.219	-5.95		50.376	0.052	14.643	0.003		43.00	0.71667	60.1	12.3	50.3	3.466	0.008	0.008	0.000	0.152	0.13	
61	1/29/2004	2:43:46 PM		26.025	23.08	25.44	25.05	25.313		62.114	61.519	23.777	38.488	-1.222	-5.95		50.774	0.052	14.643	0.003		44.00	0.73333	60.0	12.4	50.3	3.468	0.008	0.008	0.000	0.152	0.13	
62	1/29/2004	2:44:46 PM		26.097	23.118	25.523	25.138	25.33		62.421	61.874	23.778	38.621	-1.216	-5.944		54.639	0.052	14.643	0.004		45.00	0.75	60.4	13.4	50.5	3.483	0.008	0.008	0.000	0.151	0.13	
63	1/29/2004	2:45:46 PM		26.098	23.118	25.524	25.124	25.501		62.51	61.905	23.721	38.808	-1.219	-5.947		51.308	0.052	14.643	0.003		46.00	0.76667	60.4	12.6	50.7	3.493	0.008	0.008	0.000	0.151	0.13	
64	1/29/2004	2:46:46 PM		26.117	23.123	25.538	25.143	25.445		62.365	61.756	23.487	39.052	-1.222	-5.947		52.487	0.053	14.643	0.003		47.00	0.78333	60.3	12.9	50.7	3.496	0.008	0.008	0.000	0.153	0.13	
65	1/29/2004	2:47:46 PM		26.147	23.117	25.567	25.213	25.14		62.494	61.888	23.658	38.859	-1.222	-5.95		52.94	0.053	14.643	0.003		48.00	0.8	60.4	13.0	50.7	3.494	0.008	0.008	0.000	0.153	0.13	

RUN # 1.09; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
66	1/29/2004	2:48:46 PM		26.199	23.139	25.619	25.205	24.947		62.334	61.751	23.591	38.816	-1.219	-5.944		52.207	0.053	14.643	0.004		49.00	0.81667	60.3	12.8	50.6	3.487	0.008	0.008	0.000	0.154	0.13	
67	1/29/2004	2:49:46 PM		26.209	23.15	25.65	25.2	25.187		62.344	61.729	23.577	38.836	-1.222	-5.947		49.976	0.053	14.643	0.004		50.00	0.83333	60.3	12.2	50.6	3.488	0.008	0.008	0.000	0.153	0.13	
68	1/29/2004	2:50:46 PM		26.229	23.14	25.67	25.105	25.332		62.465	61.876	23.183	39.352	-1.219	-5.944		51.611	0.053	14.643	0.004		51.00	0.85	60.4	12.6	50.9	3.510	0.008	0.008	0.000	0.152	0.13	
69	1/29/2004	2:51:46 PM		26.254	23.144	25.674	24.999	25.806		62.668	62.07	23.234	39.495	-1.222	-5.947		51.605	0.053	14.643	0.003		52.00	0.86667	60.6	12.6	51.1	3.522	0.008	0.008	0.000	0.152	0.13	
70	1/29/2004	2:52:46 PM		26.279	23.14	25.705	24.9	25.592		62.641	62.031	23.227	39.464	-1.222	-5.95		51.409	0.053	14.643	0.003		53.00	0.88333	60.6	12.6	51.1	3.520	0.008	0.008	0.000	0.152	0.13	
71	1/29/2004	2:53:46 PM		26.304	23.145	25.725	24.839	25.342		62.293	61.71	23.001	39.39	-1.225	-5.953		49.852	0.053	14.643	0.003		54.00	0.9	60.2	12.2	50.8	3.505	0.008	0.008	0.000	0.152	0.13	
72	1/29/2004	2:54:46 PM		26.329	23.155	25.755	24.87	25.467		62.543	61.942	23.215	39.448	-1.219	-5.944		49.755	0.053	14.643	0.004		55.00	0.91667	60.5	12.2	51.0	3.516	0.008	0.008	0.000	0.152	0.13	
73	1/29/2004	2:55:46 PM		26.35	23.161	25.776	24.81	25.513		62.55	61.954	23.149	39.425	-1.219	-5.944		51.786	0.053	14.643	0.004		56.00	0.93333	60.5	12.7	51.0	3.515	0.008	0.008	0.000	0.152	0.13	
74	1/29/2004	2:56:46 PM		26.364	23.155	25.785	24.779	25.712		62.525	61.907	23.212	39.438	-1.219	-5.944		48.344	0.053	14.643	0.004		57.00	0.95	60.4	11.8	51.0	3.515	0.008	0.008	0.000	0.152	0.13	
75	1/29/2004	2:57:46 PM		26.399	23.155	25.8	24.739	25.522		62.608	62.013	23.215	39.491	-1.219	-5.947		51.058	0.053	14.643	0.003		58.00	0.96667	60.5	12.5	51.0	3.520	0.008	0.008	0.000	0.151	0.13	
76	1/29/2004	2:58:46 PM		26.403	23.154	25.814	24.794	25.786		62.647	62.006	23.154	39.661	-1.219	-5.944		52.126	0.053	14.643	0.004		59.00	0.98333	60.5	12.8	51.2	3.527	0.008	0.008	0.000	0.151	0.13	
77	1/29/2004	2:59:46 PM		26.469	23.17	25.84	24.824	25.792		62.382	61.782	22.884	39.635	-1.219	-5.947		54.3	0.054	14.643	0.003		60.00	1	60.3	13.3	51.0	3.517	0.008	0.008	0.000	0.154	0.13	
78	1/29/2004	3:00:46 PM		26.51	23.181	25.856	24.851	25.673		62.481	61.824	23.105	39.52	-1.222	-5.944		50.013	0.053	14.643	0.003		61.00	1.01667	60.4	12.3	51.0	3.516	0.008	0.008	0.000	0.151	0.13	
79	1/29/2004	3:01:46 PM		26.516	23.183	25.878	24.867	25.774		62.602	61.956	23.015	39.729	-1.225	-5.944		52.558	0.054	14.643	0.003		62.00	1.03333	60.5	12.9	51.2	3.528	0.008	0.008	0.000	0.154	0.13	
80	1/29/2004	3:02:46 PM		26.538	23.189	25.889	24.878	25.76		62.514	61.865	22.81	39.885	-1.219	-5.944		52.091	0.054	14.643	0.003		63.00	1.05	60.4	12.8	51.2	3.530	0.008	0.008	0.000	0.153	0.13	
81	1/29/2004	3:03:46 PM		26.556	23.207	25.907	24.862	25.853		62.349	61.687	22.689	39.848	-1.222	-5.947		49.454	0.054	14.643	0.003		64.00	1.06667	60.2	12.1	51.1	3.523	0.008	0.008	0.000	0.154	0.13	
82	1/29/2004	3:04:46 PM		26.547	23.218	25.938	24.918	25.615		62.546	61.876	22.813	39.891	-1.219	-5.938		50.693	0.054	14.643	0.004		65.00	1.08333	60.4	12.4	51.2	3.531	0.008	0.008	0.000	0.153	0.13	
83	1/29/2004	3:05:46 PM		26.624	23.231	25.946	24.87	25.388		62.602	62.083	22.694	40.064	-1.216	-5.877		48.628	0.055	14.643	0.004		66.00	1.1	60.6	11.9	51.3	3.539	0.008	0.008	0.000	0.156	0.13	
84	1/29/2004	3:06:46 PM		26.616	23.217	25.932	24.796	25.899		62.755	62.114	22.741	40.164	-1.219	-5.941		48.518	0.054	14.643	0.004		67.00	1.11667	60.6	11.9	51.5	3.548	0.008	0.008	0.000	0.152	0.13	
85	1/29/2004	3:07:46 PM		26.621	23.223	25.928	24.812	25.879		63.02	62.5	22.57	40.437	-1.219	-5.938		51.94	0.054	14.643	0.004		68.00	1.13333	61.0	12.7	51.7	3.566	0.008	0.008	0.000	0.152	0.13	
86	1/29/2004	3:08:46 PM		26.618	23.22	25.945	24.809	25.796		63.089	62.62	22.583	40.423	-1.219	-5.938		52.545	0.054	14.643	0.003		69.00	1.15	61.1	12.9	51.8	3.568	0.008	0.008	0.000	0.151	0.13	
87	1/29/2004	3:09:46 PM		26.625	23.221	25.916	24.735	25.563		62.732	62.124	22.478	40.408	-1.225	-5.941		51.269	0.054	14.643	0.003		70.00	1.16667	60.7	12.6	51.6	3.556	0.008	0.008	0.000	0.152	0.13	
88	1/29/2004	3:10:46 PM		26.666	23.238	25.947	24.716	25.739		62.682	62.145	22.433	40.347	-1.222	-5.941		47.039	0.054	14.643	0.003		71.00	1.18333	60.7	11.5	51.5	3.552	0.008	0.008	0.000	0.152	0.13	
89	1/29/2004	3:11:46 PM		26.67	23.237	25.952	24.676	25.928		62.79	62.307	22.462	40.404	-1.219	-5.941		51.496	0.054	14.643	0.003		72.00	1.2	60.8	12.6	51.6	3.557	0.008	0.008	0.000	0.152	0.13	
90	1/29/2004	3:12:46 PM		26.521	23.233	25.937	24.671	25.864		62.902	62.392	22.089	40.868	-1.222	-5.941		50.472	0.054	14.643	0.003		73.00	1.21667	60.9	12.4	51.9	3.577	0.008	0.008	0.000	0.151	0.13	
91	1/29/2004	3:13:46 PM		26.341	23.238	25.942	24.691	25.969		62.894	62.321	22.136	40.919	-1.222	-5.938		52.641	0.054	14.643	0.004		74.00	1.23333	60.8	12.9	51.9	3.579	0.008	0.008	0.000	0.151	0.13	
92	1/29/2004	3:14:46 PM		26.232	23.248	25.958	24.697	26.059		63.267	62.715	22.243	41.098	-1.222	-5.938		48.251	0.054	14.643	0.004		75.00	1.25	61.2	11.8	52.2	3.598	0.008	0.008	0.000	0.150	0.13	
93																																	
94		Averages		25.9	23.0	25.3	24.8	25.6	#	62.0	62.1	23.0	39.1	-1.0	-5.2	#	50.6	0.1	14.6	0.0	#			60.7	12.4	50.6	3.485	0.008	0.008	0.0002	0.157	0.134	#
95		Maximum		26.7	23.2	26.0	25.3	26.7	#	63.6	63.4	25.3	41.8	0.4	0.5	#	56.6	0.1	14.6	0.0	#			62.0	13.9	52.7	3.635	0.011	0.011	0.0002	0.204	0.174	#
96		Median		25.9	23.0	25.3	24.8	25.6	#	62.6	62.1	23.1	39.5	-1.2	-5.9	#	50.7	0.1	14.6	0.0	#			60.6	12.4	51.1	3.520	0.008	0.008	0.0002	0.154	0.131	#
97		Minimum		24.9	22.6	24.3	24.4	24.3	#	56.5	60.7	21.2	35.7	-1.2	-6.0	#	45.7	0.1	14.6	0.0	#			59.3	11.2	46.1	3.180	0.007	0.007	0.0002	0.150	0.128	#
98		2 x Std Dev		1.080	0.367	1.114	0.482	0.779	#	3.771	0.910	1.710	3.075	0.975	4.081	#	4.584	0.005	0.000	0.001	#			0.910	1.123	3.302	0.228	0.001	0.001	0.0000	0.021	0.018	#
99		Number of Points Used*		70	70	70	70	70	0	70	70	70	70	70	70	0	70	70	70	70	0			70	70	70	70	70	70	70	70	70	0
100		* Backpulse points in box are not included																															
101																																	
102																											1.3-hour avg. =	0.0079					
103																											1-hour avg. =	0.0079					

RUN # 1.10; STEADY STATE TEST AT 25 WT% UDS



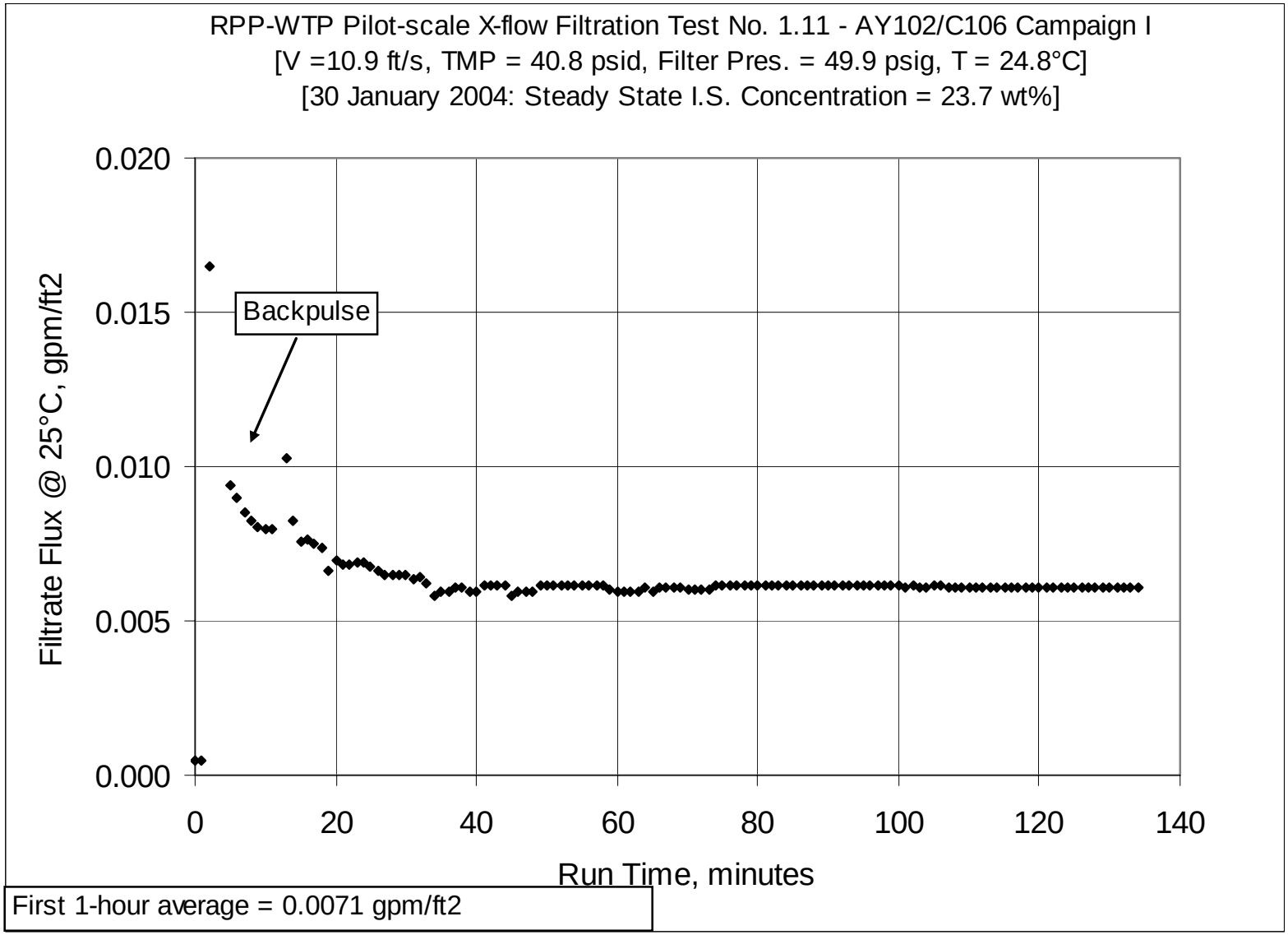
RUN # 1.10; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/30/2004	7:55:26 AM		23.13	17.795	14.599	23.739	14.969		0.05	-0.06	0.008	0	-0.212	0.04		-0.079	0.003	14.643	0.005				Filter Surface		6.707	FT2						
8	1/30/2004	7:55:43 AM		23.13	17.795	14.599	23.739	14.969		0.05	-0.06	0.008	0	-0.212	0.04		-0.079	0.003	14.643	0.005				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/30/2004	7:55:45 AM		23.12	17.785	14.599	23.664	14.989		0.048	-0.06	0.008	0	-0.177	0.037		-0.077	0.003	14.643	0.004													
10	1/30/2004	7:55:46 AM		23.125	17.79	14.599	23.664	14.989		0.05	-0.058	0.008	0.002	-0.206	0.04		-0.083	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/30/2004	7:55:47 AM		23.125	17.795	14.599	23.659	14.989		0.05	-0.06	0.008	0	-0.206	0.04		-0.077	0.003	14.643	0.005													
12	1/30/2004	7:55:48 AM		23.125	17.795	14.599	23.644	14.989		0.05	-0.06	0.008	0	-0.174	0.037		-0.081	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/30/2004	7:55:49 AM		23.12	17.79	14.599	23.639	14.989		0.05	-0.06	0.008	0	-0.2	0.037		-0.077	0.003	14.643	0.006				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/30/2004	7:55:50 AM		23.125	17.785	14.589	23.644	14.984		0.05	-0.06	0.008	0	-0.189	0.04		-0.081	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/30/2004	8:15:11 AM		24.381	18.168	23.866	23.788	19.606	#	44.067	61.096	17.935	26.443	11.661	100.208		36.136	0.003	14.643	0.004		0	0	59.6	8.9	35.3	2.431	0.000	0.000	0.000	0.013	0.01	
18	1/30/2004	8:16:11 AM		22.997	18.193	23.886	23.893	19.747	#	4.022	60.174	6.349	-2.073	52.267	57.328		37.748	0.003	14.643	0.209		1.00	0.01667	58.7	9.3	1.0	0.067	0.000	0.000	0.000	0.474	0.40	
19	1/30/2004	8:17:11 AM		24.23	18.239	24.051	23.863	19.954	#	49.036	59.747	8.37	40.864	5.633	0.451		39.263	0.655	14.643	0.004		2.00	0.03333	58.3	9.6	45.0	3.099	0.098	0.100	0.002	2.232	1.90	
20	1/30/2004	8:18:11 AM		24.556	18.28	24.122	23.863	19.964	#	54.617	60.41	10.893	43.79	0.257	0.485		37.955	0.099	14.643	0.004		3.00	0.05	58.9	9.3	49.2	3.392	2.183	2.238	0.045	45.483	38.71	
21	1/30/2004	8:19:11 AM		24.707	18.331	24.273	23.929	20.136	#	54.756	60.584	12.488	42.309	0.228	0.509		37.095	0.072	14.643	0.004		4.00	0.06667	59.1	9.1	48.5	3.346	2.183	2.228	0.046	45.916	39.07	
22	1/30/2004	8:20:11 AM		24.832	18.366	24.367	23.898	20.145	#	55.011	60.729	14.213	40.852	0.248	0.529		36.837	0.06	14.643	0.004		5.00	0.08333	59.3	9.0	47.9	3.305	0.009	0.009	0.000	0.190	0.16	
23	1/30/2004	8:21:11 AM		24.922	18.422	24.433	23.934	20.357	#	55.243	60.928	15.466	39.846	0.234	0.543		36.38	0.053	14.643	0.004		6.00	0.1	59.5	8.9	47.5	3.278	0.008	0.008	0.000	0.169	0.14	
24	1/30/2004	8:22:11 AM		24.992	18.472	24.558	23.918	20.599	#	55.461	61.177	16.285	39.29	0.257	0.558		36.025	0.049	14.643	0.004		7.00	0.11667	59.7	8.8	47.4	3.266	0.007	0.007	0.000	0.156	0.13	
25	1/30/2004	8:23:11 AM		25.047	18.507	24.648	23.958	20.805	#	55.169	60.945	16.987	38.202	0.257	0.572		36.103	0.046	14.643	0.004		8.00	0.13333	59.5	8.8	46.7	3.219	0.007	0.007	0.000	0.148	0.13	
26	1/30/2004	8:24:11 AM		25.122	18.563	24.728	23.973	20.931	#	55.502	61.308	17.362	38.198	0.26	0.587		35.648	0.044	14.643	0.004		9.00	0.15	59.8	8.7	46.9	3.230	0.007	0.007	0.000	0.141	0.12	
27	1/30/2004	8:25:11 AM		25.192	18.609	24.734	24.019	21.006	#	55.65	61.393	17.781	37.979	0.28	0.598		35.5	0.043	14.643	0.004		10.00	0.16667	59.9	8.7	46.8	3.228	0.006	0.006	0.000	0.138	0.12	
28	1/30/2004	8:26:11 AM		25.277	18.654	24.819	24.029	21.011	#	55.538	61.362	17.252	38.315	0.298	0.61		35.118	0.042	14.643	0.004		11.00	0.18333	59.9	8.6	46.9	3.235	0.006	0.006	0.000	0.134	0.11	
29	1/30/2004	8:27:11 AM		25.332	18.695	24.854	23.999	20.876	#	55.735	61.573	17.907	37.827	0.292	0.624		34.964	0.041	14.643	0.004		12.00	0.2	60.1	8.6	46.8	3.225	0.006	0.006	0.000	0.131	0.11	
30	1/30/2004	8:28:11 AM		25.388	18.751	24.9	24.03	21.037	#	55.809	61.726	17.778	38.026	0.327	0.636		34.713	0.041	14.643	0.004		13.00	0.21667	60.3	8.5	46.9	3.235	0.006	0.006	0.000	0.131	0.11	
31	1/30/2004	8:29:11 AM		25.442	18.801	24.919	24.014	21.263	#	55.675	61.559	17.775	37.788	0.327	0.647		34.684	0.04	14.643	0.004		14.00	0.23333	60.1	8.5	46.7	3.222	0.006	0.006	0.000	0.128	0.11	
32	1/30/2004	8:30:11 AM		25.483	18.842	24.809	24.07	21.44	#	56.193	62.037	18.374	37.753	0.327	0.653		34.411	0.039	14.643	0.004		15.00	0.25	60.6	8.4	47.0	3.239	0.006	0.006	0.000	0.124	0.11	
33	1/30/2004	8:31:11 AM		24.837	18.888	24.779	24.095	21.525	#	61.936	61.753	18.332	43.503	-1.216	-5.565		34.275	0.041	14.643	0.004		16.00	0.26667	60.3	8.4	52.7	3.635	0.006	0.006	0.000	0.117	0.10	
34	1/30/2004	8:32:11 AM		24.862	18.933	24.764	24.089	21.625	#	61.672	61.559	18.64	43.002	-1.216	-5.256		34.146	0.042	14.643	0.004		17.00	0.28333	60.1	8.4	52.3	3.608	0.006	0.006	0.000	0.120	0.10	
35	1/30/2004	8:33:11 AM		24.886	18.972	24.798	24.184	21.624	#	60.192	60.054	23.508	36.538	-1.216	-5.551		38.656	0.038	14.643	0.004		18.00	0.3	58.6	9.5	48.4	3.335	0.006	0.006	0.000	0.118	0.10	
36	1/30/2004	8:34:11 AM		24.922	19.029	24.849	24.22	21.695	#	60.496	60.332	20.1	40.456	-1.216	-5.556		36.839	0.04	14.643	0.004		19.00	0.31667	58.9	9.0	50.5	3.480	0.006	0.006	0.000	0.119	0.10	
37	1/30/2004	8:35:11 AM		24.932	19.059	24.844	24.225	21.509	#	60.61	60.39	20.486	40.162	-1.216	-5.551		36.76	0.04	14.643	0.004		20.00	0.33333	58.9	9.0	50.4	3.474	0.006	0.006	0.000	0.119	0.10	
38	1/30/2004	8:36:11 AM		24.936	19.094	24.849	24.194	21.765	#	60.772	60.607	20.169	40.624	-1.219	-5.556		36.566	0.04	14.643	0.004		21.00	0.35	59.1	9.0	50.7	3.495	0.006	0.006	0.000	0.118	0.10	
39	1/30/2004	8:37:11 AM		24.936	19.134	24.823	24.108	21.649	#	61.45	61.262	19.992	41.237	-1.219	-5.554		36.132	0.04	14.643	0.004		22.00	0.36667	59.8	8.9	51.3	3.540	0.006	0.006	0.000	0.117	0.10	
40	1/30/2004	8:38:11 AM		24.94	19.174	24.802	24.203	21.593	#	61.05	60.833	18.989	42.013	-1.216	-5.551		35.554	0.04	14.643	0.004		23.00	0.38333	59.4	8.7	51.5	3.553	0.006	0.006	0.000	0.116	0.10	
41	1/30/2004	8:39:11 AM		24.949	19.213	24.811	24.167	21.577	#	61.492	61.353	18.885	42.452	-1.216	-5.551		34.841	0.04	14.643	0.004		24.00	0.4	59.9	8.5	52.0	3.583	0.006	0.006	0.000	0.115	0.10	
42	1/30/2004	8:40:11 AM		24.953	19.242	24.815	24.21	21.917	#	60.864	60.696	19.899	40.919	-1.219	-5.559		36.027	0.039	14.643	0.003		25.00	0.41667	59.2	8.8	50.9	3.509	0.006	0.006	0.000	0.115	0.10	
43	1/30/2004	8:41:11 AM		24.952	19.272	24.815	24.255	21.917	#	61.328	61.279	20.305	40.854	-1.219	-5.562		36.142	0.039	14.643	0.004		26.00	0.43333	59.8	8.9	51.1	3.523	0.006	0.006	0.000	0.114	0.10	
44	1/30/2004	8:42:11 AM		24.981	19.327	24.844	24.28	21.72	#	61.202	61.053	19.662	41.435	-1.216	-5.559		35.861	0.039	14.643	0.004		27.00	0.45	59.6	8.8	51.3	3.538	0.006	0.006	0.000	0.114	0.10	
45	1/30/2004	8:43:11 AM		24.986	19.356	24.838	24.259	21.81	#	61.438	61.374	19.621	41.629	-1.216	-5.556		35.737	0.039	14.643	0.004		28.00	0.46667	59.9	8.8	51.5	3.553	0.006	0.006	0.000	0.113	0.10	
46	1/30/2004	8:44:11 AM		24.985	19.386	24.802	24.308	22.311	#	61.071	60.976	19.812	41.199	-1.216	-5.559		35.485	0.039	14.643	0.004		29.00	0.48333	59.5	8.7	51.1	3.526	0.006	0.006	0.000	0.114	0.10	
47	1/30/2004	8:45:11 AM		24.989	19.415	24.782	24.302	22.471	#	61.255	60.984	19.327	41.868	-1.222	-5.559		35.596	0.039	14.643	0.003		30.00	0.5	59.5	8.7	51.6	3.555	0.006	0.006	0.000	0.113	0.10	
48	1/30/2004	8:46:11 AM		25.009	19.465	24.831	24.372	22.506	#	61.009	60.891	19.167	41.827	-1.216	-5.559		35.5	0.039	14.643	0.004		31.00	0.51667	59.4	8.7	51.4	3.545	0.006	0.006	0.000	0.114	0.10	
49	1/30/2004	8:47:11 AM		25.028	19.5	24.851	24.382	22.606	#	61.2	61.082	19.233	41.872	-1.216	-5.559		35.443	0.039	14.643	0.004		32.00	0.53333	59.6	8.7	51.5	3.553	0.006	0.006	0.000	0.113	0.10	
50	1/30/2004	8:48:11 AM		25.027	19.539	24.835	24.365	22.549	#	62.025	61.93	19.066	42.68	-1.216	-5.556		34.726	0.039	14.643	0.004		33.00	0.55	60.5	8.5	52.4	3.610	0.006	0.006	0.000	0.112	0.09	
51	1/30/2004	8:49:11 AM		25.031	19.569	24.814	24.42	22.418	#	61.436	61.223	18.577	42.877	-1.219	-5.559		34.676	0.039	14.643	0.004		34.00	0.56667	59.8	8.5	52.2	3.596	0.006	0.006	0.000	0.112	0.10	
52	1/30/2004	8:50:11 AM		25.04	19.598	24.823	24.444	22.633	#	60.214	60.126	21.305	38.916	-1.216	-5.568		37.367	0.037	14.643	0.004		35.00	0.58333	58.7	9.2	49.6	3.417	0.006	0.006	0.000	0.112	0.10	
53	1/30/2004	8:51:11 AM		25.044	19.642	24.822	24.473	22.667	#	60.689	60.56	20.812	39.906	-1.219	-5.562		36.778	0.037	14.643	0.004		36.00	0.6	59.1	9.0	50.3	3.468	0.006	0.006	0.000	0.110	0.09	
54	1/30/2004	8:52:11 AM		25.053	19.672	24.846	24.477	22.45	#	60.623	60.485	20.775	39.77	-1.219	-5.565		36.72	0.037	14.643	0.003		37.00	0.61667	59.0	9.0	50.2	3.461	0.006	0.006	0.000	0.110	0.09	
55	1/30/2004	8:53:11 AM		25.052	19.696	24.859	24.485	22.373	#	61.021	60.873	20.539	40.306	-1.219	-5.562		36.559	0.038	14.643	0.004		38.00	0.63333	59.4	9.0	50.7	3.493	0.006	0.006	0.000	0.112	0.10	
56	1/30/2004	8:54:11 AM		25.05	19.714	24.873	24.489	22.788	#	60.812	60.674	20.458	40.261	-1.216	-5.562		36.593	0.038	14.643	0.004		39.00	0.65	59.2	9.0	50.5	3.484	0.006	0.006	0.000	0.113	0.10	
57	1/30/2004	8:55:11 AM		25.059	19.753	24.871	24.507	22.987	#	60.895	60.73	20.234	40.642	-1.216	-5.559		36.611	0.038	14.643	0.004		40.00	0.66667	59.3	9.0	50.8	3.500	0.006	0.006	0.000	0.112	0.10	
58	1/30/2004	8:56:11 AM		25.077	19.792	24.87	24.531	22.976	#	60.72	60.591	19.976	40.634	-1.216	-5.559		36.62	0.038	14.643	0.004		41.00	0.68333	59.1	9.0	50.7	3.494	0.006	0.006	0.000	0.112	0.10	
59	1/30/2004	8:57:11 AM		25.075	19.816	24.853	24.514	23.32	#	60.834	60.711	19.98	40.653	-1.216	-5.562		36.68	0.038	14.643	0.004		42.00	0.7	59.2	9.0	50.7	3.499	0.006	0.006	0.000	0.112	0.10	
60	1/30/2004	8:58:11 AM		25.083	19.844	24.861	24.507	23.243	#	60.702	60.501	20.096	40.577	-1.219	-5.565		36.434	0.038	14.643	0.004		43.00	0.71667	59.0	8.9	50.6	3.491	0.006	0.006	0.000	0.112	0.10	
61	1/30/2004	8:59:11 AM		25.097	19.898	24.89	24.566	23.307	#	60.681	60.615	19.9	40.767	-1.214	-5.556		36.411	0.038	14.643	0.004		44.00	0.73333	59.1	8.9	50.7	3.497	0.006	0.006	0.000	0.112	0.10	
62	1/30/2004	9:00:11 AM		25.101	19.917	24.889	24.59	23.376	#	60.694	60.41	19.851	40.944	-1.216	-5.562		36.411	0.038	14.643	0.003		45.00	0.75	58.9	8.9	50.8	3.504	0.006	0.006	0.000	0.112	0.10	
63	1/30/2004	9:01:11 AM		25.114	19.951	24.882	24.538	23.073	#	60.812	60.667	19.782	40.997	-1.216	-5.562		36.203	0.038	14.643	0.004		46.00	0.76667	59.2	8.9	50.9	3.510	0.006	0.006	0.000	0.112	0.10	
64	1/30/2004	9:02:11 AM		25.128	20	24.885	24.572	23.297	#	61.007	60.841	19.76	41.248	-1.216	-5.562		36.103	0.038	14.643	0.004		47.00	0.78333	59.4	8.8	51.1	3.525	0.006	0.006	0.000	0.111	0.09	
65	1/30/2004	9:03:11 AM		25.126	20.028	24.864	24.61	23.18	#	60.679	60.574	19.421	41.26	-1.219	-5.565		36.126	0.038	14.643	0.004		48.00	0.8	59.1	8.9	51.0	3.514	0.006	0.006	0.000	0.112	0.09	

RUN # 1.10; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
66	1/30/2004	9:04:11 AM		25.135	20.057	24.872	24.634	22.958	#	60.864	60.626	19.573	41.248	-1.219	-5.562		36.153	0.038	14.643	0.004		49.00	0.81667	59.2	8.9	51.1	3.520	0.006	0.006	0.000	0.111	0.09	
67	1/30/2004	9:05:11 AM		25.143	20.08	24.885	24.662	23.192	#	60.627	60.533	19.2	41.502	-1.219	-5.562		35.64	0.038	14.643	0.004		50.00	0.83333	59.1	8.7	51.1	3.521	0.006	0.006	0.000	0.111	0.09	
68	1/30/2004	9:06:11 AM		25.151	20.114	24.894	24.69	23.211	#	61.479	61.37	19.439	41.767	-1.219	-5.556		35.539	0.038	14.643	0.004		51.00	0.85	59.9	8.7	51.6	3.559	0.006	0.006	0.000	0.110	0.09	
69	1/30/2004	9:07:11 AM		25.159	20.142	24.907	24.693	23.484	#	61.087	61.043	18.436	42.621	-1.211	-5.554		35.241	0.038	14.643	0.004		52.00	0.86667	59.6	8.6	51.9	3.575	0.006	0.006	0.000	0.110	0.09	
70	1/30/2004	9:08:11 AM		25.162	20.171	24.86	24.716	23.237	#	61.395	61.217	18.627	42.773	-1.216	-5.556		35.043	0.038	14.643	0.003		53.00	0.88333	59.7	8.6	52.1	3.591	0.006	0.006	0.000	0.109	0.09	
71	1/30/2004	9:09:11 AM		25.17	20.204	24.862	24.674	23.299	#	61.444	61.299	18.945	42.391	-1.214	-5.554		35.08	0.038	14.643	0.004		54.00	0.9	59.8	8.6	51.9	3.580	0.006	0.006	0.000	0.110	0.09	
72	1/30/2004	9:10:11 AM		25.178	20.232	24.861	24.687	23.644	#	61.187	61.016	18.801	42.389	-1.216	-5.556		35.066	0.038	14.643	0.004		55.00	0.91667	59.5	8.6	51.8	3.571	0.006	0.006	0.000	0.110	0.09	
73	1/30/2004	9:11:11 AM		25.192	20.261	24.885	24.771	23.882	#	61.426	61.295	19.228	42.175	-1.214	-5.554		34.976	0.038	14.643	0.004		56.00	0.93333	59.8	8.6	51.8	3.571	0.006	0.006	0.000	0.110	0.09	
74	1/30/2004	9:12:11 AM		25.189	20.279	24.862	24.789	23.87	#	61.579	61.515	19.02	42.344	-1.222	-5.562		35.087	0.038	14.643	0.003		57.00	0.95	60.0	8.6	52.0	3.583	0.006	0.006	0.000	0.109	0.09	
75	1/30/2004	9:13:11 AM		25.192	20.312	24.845	24.747	23.532	#	61.519	61.422	19.172	42.229	-1.222	-5.562		35.033	0.038	14.643	0.003		58.00	0.96667	59.9	8.6	51.9	3.577	0.006	0.006	0.000	0.110	0.09	
76	1/30/2004	9:14:11 AM		25.2	20.33	24.823	24.799	23.49	#	61.218	61.028	19.236	42.067	-1.219	-5.559		34.928	0.038	14.643	0.004		59.00	0.98333	59.6	8.6	51.6	3.561	0.006	0.006	0.000	0.110	0.09	
77	1/30/2004	9:15:11 AM		25.218	20.364	24.841	24.803	23.984	#	61.395	61.341	18.982	42.333	-1.222	-5.559		35.099	0.037	14.643	0.003		60.00	1	59.9	8.6	51.9	3.576	0.006	0.006	0.000	0.107	0.09	
78	1/30/2004	9:16:11 AM		25.22	20.396	24.848	24.805	24.287	#	61.241	61.067	18.981	42.173	-1.219	-5.559		35.222	0.037	14.643	0.004		61.00	1.01667	59.6	8.6	51.7	3.565	0.006	0.006	0.000	0.107	0.09	
79	1/30/2004	9:17:11 AM		25.233	20.434	24.871	24.778	24.425	#	61.181	61.015	19.244	41.937	-1.216	-5.556		35.372	0.037	14.643	0.004		62.00	1.03333	59.5	8.7	51.6	3.555	0.006	0.006	0.000	0.107	0.09	
80	1/30/2004	9:18:11 AM		25.237	20.458	24.875	24.846	24.558	#	61.397	61.329	19.133	42.03	-1.216	-5.556		35.372	0.037	14.643	0.004		63.00	1.05	59.9	8.7	51.7	3.565	0.006	0.006	0.000	0.107	0.09	
81	1/30/2004	9:19:11 AM		25.24	20.496	24.833	24.889	24.566	#	61.291	61.244	18.912	42.247	-1.222	-5.565		34.947	0.037	14.643	0.003		64.00	1.06667	59.8	8.6	51.8	3.569	0.006	0.006	0.000	0.107	0.09	
82	1/30/2004	9:20:11 AM		25.247	20.539	24.83	24.907	24.534	#	61.208	61.088	18.59	42.578	-1.219	-5.556		34.859	0.038	14.643	0.004		65.00	1.08333	59.6	8.5	51.9	3.578	0.006	0.006	0.000	0.110	0.09	
83	1/30/2004	9:21:11 AM		25.251	20.583	24.849	24.911	24.597	#	61.299	61.25	18.869	42.298	-1.216	-5.556		34.678	0.037	14.643	0.004		66.00	1.1	59.8	8.5	51.8	3.571	0.006	0.006	0.000	0.107	0.09	
84	1/30/2004	9:22:11 AM		25.248	20.616	24.866	24.978	24.86	#	61.365	61.339	18.857	42.315	-1.216	-5.556		34.782	0.037	14.643	0.004		67.00	1.11667	59.9	8.5	51.8	3.574	0.006	0.006	0.000	0.107	0.09	
85	1/30/2004	9:23:11 AM		25.246	20.644	24.859	24.961	24.302	#	61.496	61.244	18.904	42.479	-1.219	-5.556		34.814	0.037	14.643	0.004		68.00	1.13333	59.8	8.5	52.0	3.584	0.006	0.006	0.000	0.107	0.09	
86	1/30/2004	9:24:11 AM		25.25	20.688	24.893	24.995	24.351	#	60.54	60.574	20.602	39.828	-1.214	-5.556		36.753	0.036	14.643	0.004		69.00	1.15	59.1	9.0	50.2	3.460	0.005	0.005	0.000	0.107	0.09	
87	1/30/2004	9:25:11 AM		25.242	20.701	24.845	24.992	24.058	#	60.389	60.416	20.825	39.577	-1.219	-5.559		36.651	0.036	14.643	0.004		70.00	1.16667	58.9	9.0	50.0	3.446	0.005	0.005	0.000	0.108	0.09	
88	1/30/2004	9:26:11 AM		25.255	20.744	24.883	24.98	24.286	#	60.922	60.916	20.547	40.242	-1.219	-5.556		36.574	0.036	14.643	0.004		71.00	1.18333	59.4	9.0	50.6	3.487	0.005	0.005	0.000	0.106	0.09	
89	1/30/2004	9:27:11 AM		25.262	20.776	24.906	25.027	24.429	#	60.567	60.555	20.669	39.758	-1.216	-5.626		36.906	0.035	14.643	0.004		72.00	1.2	59.1	9.0	50.2	3.459	0.005	0.005	0.000	0.104	0.09	
90	1/30/2004	9:28:11 AM		25.275	20.799	24.908	25.02	24.326	#	60.416	60.385	20.749	39.641	-1.222	-5.632		36.941	0.036	14.643	0.003		73.00	1.21667	58.9	9.1	50.0	3.449	0.005	0.005	0.000	0.108	0.09	
91	1/30/2004	9:29:11 AM		25.298	20.827	24.931	24.897	24.029	#	60.525	60.371	21.299	39.304	-1.219	-5.629		36.939	0.036	14.643	0.004		74.00	1.23333	58.9	9.1	49.9	3.441	0.005	0.005	0.000	0.108	0.09	
92	1/30/2004	9:30:11 AM		25.316	20.855	24.924	24.835	24.122	#	60.289	60.164	21.083	39.327	-1.219	-5.629		37.035	0.036	14.643	0.004		75.00	1.25	58.7	9.1	49.8	3.434	0.005	0.005	0.000	0.108	0.09	
93																																	
94		Averages		25.1	19.7	24.8	24.5	22.8	#	60.3	61.0	19.4	40.8	-1.0	-4.7	#	35.8	0.0	14.6	0.0	#			59.5	8.8	50.6	3.485	0.006	0.006	0.0001	0.115	0.098	#
95		Maximum		25.5	20.9	24.9	25.0	24.9	#	62.0	62.0	23.5	43.5	0.3	0.7	#	38.7	0.1	14.6	0.0	#			60.6	9.5	52.7	3.635	0.008	0.008	0.0002	0.169	0.144	#
96		Median		25.1	19.8	24.8	24.5	23.0	#	60.9	61.0	19.2	41.1	-1.2	-5.6	#	35.6	0.0	14.6	0.0	#			59.5	8.7	51.0	3.517	0.006	0.006	0.0001	0.112	0.095	#
97		Minimum		24.8	18.4	24.4	23.9	20.4	#	55.2	60.1	15.5	36.5	-1.2	-5.6	#	34.1	0.0	14.6	0.0	#			58.6	8.4	46.7	3.219	0.005	0.005	0.0001	0.104	0.089	#
98		2 x Std Dev		0.280	1.383	0.151	0.650	2.386	#	3.890	0.878	2.467	3.125	1.052	4.313	#	1.746	0.006	0.000	0.001	#			0.878	0.428	3.298	0.227	0.001	0.001	0.0000	0.023	0.020	#
99		Number of Points Used*		70	70	70	70	70	#	70	70	70	70	70	70	0	70	70	70	70	0			70	70	70	70	70	70	70	70	70	0
100		* Backpulse points in box are not included																															
101																																	
102																											2.0-hour avg. =		0.0058				
103																											1-hour avg. =		0.0059				

RUN # 1.11; STEADY STATE TEST AT 25 WT% UDS



RUN # 1.11; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface	6.707	FT2							
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/30/2004	9:44:25 AM		25.557	21.144	25.481	24.18	24.704		50.226	56.068	26.093	19.656	0.321	96.904		43.689	0.003	14.643	0.003		0	0	54.6	10.7	34.9	2.409	0.000	0.000	0.000	0.013	0.01	
18	1/30/2004	9:45:25 AM		24.465	21.168	25.49	24.168	24.682		7.396	54.493	8.413	-0.852	42.065	56.874		50.605	0.003	14.643	0.005		1.00	0.01667	53.0	12.4	3.3	0.226	0.000	0.000	0.000	0.135	0.11	
19	1/30/2004	9:46:25 AM		25.97	21.197	25.744	24.137	24.732		45.394	51.276	15.728	29.844	0.327	0.474		52.912	0.113	14.643	0.004		2.00	0.03333	49.8	13.0	37.6	2.594	0.017	0.016	0.000	0.439	0.37	
20	1/30/2004	9:47:25 AM		26.142	21.215	25.922	24.15	24.519		46.354	52.231	17.83	28.598	0.257	0.497		51.457	0.081	14.643	0.004		3.00	0.05	50.8	12.6	37.5	2.584	2.183	2.127	0.057	56.766	48.31	
21	1/30/2004	9:48:25 AM		26.255	21.203	26.015	24.138	24.257		46.977	52.859	18.797	28.239	0.251	0.514		56.262	0.071	14.643	0.003		4.00	0.06667	51.4	13.8	37.6	2.593	2.183	2.122	0.056	56.420	48.01	
22	1/30/2004	9:49:25 AM		26.398	21.226	26.088	24.146	24.801		47.012	52.947	19.072	28.031	0.254	0.532		48.791	0.065	14.643	0.003		5.00	0.08333	51.5	12.0	37.5	2.587	0.010	0.009	0.000	0.251	0.21	
23	1/30/2004	9:50:25 AM		26.48	21.239	26.086	24.124	24.388		47.408	53.268	19.396	28.235	0.251	0.552		47.155	0.062	14.643	0.004		6.00	0.1	51.8	11.6	37.8	2.608	0.009	0.009	0.000	0.237	0.20	
24	1/30/2004	9:51:25 AM		26.573	21.267	26.163	24.172	24.291		47.703	53.579	19.733	28.138	0.26	0.575		51.557	0.059	14.643	0.004		7.00	0.11667	52.1	12.6	37.9	2.614	0.009	0.009	0.000	0.225	0.19	
25	1/30/2004	9:52:25 AM		26.621	21.28	26.166	24.139	23.903		47.839	53.805	20.008	27.931	0.298	0.587		48.209	0.057	14.643	0.004		8.00	0.13333	52.3	11.8	37.9	2.612	0.008	0.008	0.000	0.217	0.18	
26	1/30/2004	9:53:25 AM		26.698	21.308	26.199	24.157	24.547		47.933	53.823	20.23	27.789	0.324	0.607		50.61	0.056	14.643	0.004		9.00	0.15	52.4	12.4	37.9	2.610	0.008	0.008	0.000	0.213	0.18	
27	1/30/2004	9:54:25 AM		26.715	21.305	26.151	24.069	24.703		47.839	53.827	20.057	27.853	0.335	0.618		50.096	0.055	14.643	0.003		10.00	0.16667	52.4	12.3	37.8	2.609	0.008	0.008	0.000	0.210	0.18	
28	1/30/2004	9:55:25 AM		26.742	21.317	26.123	24.071	24.53		48.14	54.113	20.343	27.826	0.35	0.65		48.782	0.055	14.643	0.003		11.00	0.18333	52.6	12.0	38.0	2.619	0.008	0.008	0.000	0.209	0.18	
29	1/30/2004	9:56:25 AM		26.669	21.339	26.065	24.073	24.457		52.504	53.821	20.287	32.208	-1.219	-4.423		49.116	0.245	14.643	0.004		12.00	0.2	52.3	12.0	42.4	2.920	0.037	0.035	0.001	0.837	0.71	
30	1/30/2004	9:57:25 AM		26.028	21.352	25.997	24.115	24.895		53.771	53.914	20.597	33.143	-1.219	-5.883		48.526	0.071	14.643	0.003		13.00	0.21667	52.4	11.9	43.5	2.996	0.011	0.010	0.000	0.237	0.20	
31	1/30/2004	9:58:25 AM		26.15	21.39	25.94	24.179	25.183		52.603	52.69	20.106	32.46	-1.216	-5.883		48.924	0.057	14.643	0.004		14.00	0.23333	51.2	12.0	42.5	2.932	0.008	0.008	0.000	0.195	0.17	
32	1/30/2004	9:59:25 AM		26.099	21.403	25.779	24.192	25.606		49.718	49.846	19.414	30.172	-1.219	-5.851		47.908	0.052	14.643	0.003		15.00	0.25	48.4	11.7	39.9	2.754	0.008	0.008	0.000	0.190	0.16	
33	1/30/2004	10:00:25 AM		26.063	21.433	25.608	24.191	25.815		49.138	49.185	17.249	31.783	-1.216	-5.892		44.969	0.052	14.643	0.004		16.00	0.26667	47.7	11.0	40.5	2.790	0.008	0.008	0.000	0.188	0.16	
34	1/30/2004	10:01:25 AM		26.037	21.452	25.506	24.18	25.863		50.098	50.138	17.453	32.632	-1.219	-5.903		43.234	0.051	14.643	0.003		17.00	0.28333	48.7	10.6	41.4	2.852	0.008	0.007	0.000	0.181	0.15	
35	1/30/2004	10:02:25 AM		26.01	21.475	25.4	24.188	25.387		50.654	50.64	17.736	32.924	-1.219	-5.825		42.637	0.05	14.643	0.004		18.00	0.3	49.2	10.4	41.8	2.881	0.007	0.007	0.000	0.176	0.15	
36	1/30/2004	10:03:25 AM		25.938	21.478	25.298	24.156	25.355		49.523	49.535	19.728	29.727	-1.219	-5.938		47.483	0.045	14.643	0.004		19.00	0.31667	48.1	11.6	39.6	2.732	0.007	0.007	0.000	0.168	0.14	
37	1/30/2004	10:04:25 AM		25.917	21.517	25.231	24.194	25.309		50.249	50.202	18.632	31.571	-1.222	-5.932		43.645	0.047	14.643	0.004		20.00	0.33333	48.7	10.7	40.9	2.821	0.007	0.007	0.000	0.170	0.14	
38	1/30/2004	10:05:25 AM		25.885	21.53	25.169	24.183	25.302		50.33	50.379	18.433	31.764	-1.219	-5.935		42.963	0.046	14.643	0.004		21.00	0.35	48.9	10.5	41.0	2.830	0.007	0.007	0.000	0.166	0.14	
39	1/30/2004	10:06:25 AM		25.843	21.553	25.072	24.166	25.55		50.737	50.762	18.646	31.978	-1.219	-5.935		43.632	0.046	14.643	0.004		22.00	0.36667	49.3	10.7	41.4	2.851	0.007	0.007	0.000	0.165	0.14	
40	1/30/2004	10:07:25 AM		25.801	21.576	24.995	24.164	25.777		50.938	50.942	18.284	32.526	-1.219	-5.932		42.537	0.046	14.643	0.004		23.00	0.38333	49.5	10.4	41.7	2.877	0.007	0.007	0.000	0.164	0.14	
41	1/30/2004	10:08:25 AM		25.763	21.599	24.912	24.151	26.179		51.137	51.106	18.203	32.858	-1.219	-5.938		41.999	0.046	14.643	0.004		24.00	0.4	49.6	10.3	42.0	2.896	0.007	0.007	0.000	0.164	0.14	
42	1/30/2004	10:09:25 AM		25.716	21.617	24.815	24.179	24.988		51.315	51.34	18.27	32.934	-1.219	-5.941		42.095	0.045	14.643	0.003		25.00	0.41667	49.9	10.3	42.1	2.904	0.007	0.007	0.000	0.160	0.14	
43	1/30/2004	10:10:25 AM		25.678	21.639	24.732	24.151	25.405		51.485	51.434	18.324	33.059	-1.219	-5.941		41.699	0.044	14.643	0.004		26.00	0.43333	50.0	10.2	42.3	2.915	0.007	0.007	0.000	0.156	0.13	
44	1/30/2004	10:11:25 AM		25.625	21.64	24.618	24.082	25.172		51.294	51.307	18.414	32.79	-1.225	-5.947		41.223	0.043	14.643	0.003		27.00	0.45	49.8	10.1	42.0	2.899	0.006	0.006	0.000	0.154	0.13	
45	1/30/2004	10:12:25 AM		25.586	21.667	24.59	24.079	24.738		51.166	51.123	18.238	32.924	-1.222	-5.944		41.359	0.043	14.643	0.003		28.00	0.46667	49.7	10.1	42.0	2.899	0.006	0.006	0.000	0.154	0.13	
46	1/30/2004	10:13:25 AM		25.548	21.694	24.511	24.045	25.32		51.377	51.523	18.438	32.883	-1.219	-5.533		41.244	0.043	14.643	0.004		29.00	0.48333	50.1	10.1	42.1	2.905	0.006	0.006	0.000	0.154	0.13	
47	1/30/2004	10:14:25 AM		25.485	21.696	24.403	24.057	24.852		51.238	51.429	17.433	33.776	-1.225	-5.542		40.368	0.043	14.643	0.003		30.00	0.5	50.0	9.9	42.5	2.931	0.006	0.007	0.000	0.153	0.13	
48	1/30/2004	10:15:25 AM		25.437	21.724	24.325	24.079	24.894		51.622	51.778	18.012	33.577	-1.222	-5.536		40.412	0.042	14.643	0.004		31.00	0.51667	50.3	9.9	42.6	2.937	0.006	0.006	0.000	0.150	0.13	
49	1/30/2004	10:16:25 AM		25.399	21.745	24.272	24.111	25.75		51.799	51.929	17.978	33.782	-1.216	-5.536		40.207	0.042	14.643	0.004		32.00	0.53333	50.5	9.9	42.8	2.950	0.006	0.006	0.000	0.149	0.13	
50	1/30/2004	10:17:25 AM		25.351	21.767	24.228	24.128	26.052		51.728	51.925	17.965	33.691	-1.219	-5.536		40.579	0.041	14.643	0.004		33.00	0.55	50.5	9.9	42.7	2.945	0.006	0.006	0.000	0.146	0.12	
51	1/30/2004	10:18:25 AM		25.294	21.775	24.231	24.171	26.394		50.538	50.687	22.03	28.516	-1.219	-5.554		46.15	0.038	14.643	0.004		34.00	0.56667	49.2	11.3	39.5	2.725	0.006	0.006	0.000	0.146	0.12	
52	1/30/2004	10:19:25 AM		25.256	21.798	24.199	24.154	26.182		51.133	51.293	21.554	29.458	-1.219	-5.548		44.723	0.039	14.643	0.004		35.00	0.58333	49.8	11.0	40.3	2.778	0.006	0.006	0.000	0.148	0.13	
53	1/30/2004	10:20:25 AM		25.208	21.8	24.165	24.165	25.634		51.485	51.67	20.786	30.609	-1.222	-5.545		44.525	0.039	14.643	0.003		36.00	0.6	50.2	10.9	41.0	2.830	0.006	0.006	0.000	0.145	0.12	
54	1/30/2004	10:21:25 AM		25.179	21.837	24.182	24.142	25.726		51.348	51.512	20.36	30.911	-1.219	-5.539		43.877	0.04	14.643	0.004		37.00	0.61667	50.0	10.8	41.1	2.836	0.006	0.006	0.000	0.148	0.13	
55	1/30/2004	10:22:25 AM		25.132	21.844	24.154	24.144	25.788		51.546	51.664	20.012	31.545	-1.219	-5.539		40.612	0.04	14.643	0.004		38.00	0.63333	50.2	10.0	41.5	2.864	0.006	0.006	0.000	0.147	0.13	
56	1/30/2004	10:23:25 AM		25.089	21.861	24.147	24.157	25.416		51.384	51.525	21.349	30.034	-1.219	-5.542		44.78	0.039	14.643	0.004		39.00	0.65	50.1	11.0	40.7	2.807	0.006	0.006	0.000	0.146	0.12	
57	1/30/2004	10:24:25 AM		25.041	21.874	24.124	24.139	24.864		51.342	51.55	20.775	30.471	-1.219	-5.539		44.415	0.039	14.643	0.003		40.00	0.66667	50.1	10.9	40.9	2.820	0.006	0.006	0.000	0.146	0.12	
58	1/30/2004	10:25:25 AM		25.014	21.886	24.111	24.116	25.311		51.137	51.33	20.411	30.71	-1.219	-5.539		43.781	0.04	14.643	0.003		41.00	0.68333	49.9	10.7	40.9	2.822	0.006	0.006	0.000	0.149	0.13	
59	1/30/2004	10:26:25 AM		24.975	21.898	24.077	24.112	25.132		51.071	51.346	20.152	30.857	-1.219	-5.539		43.808	0.04	14.643	0.004		42.00	0.7	49.9	10.7	41.0	2.824	0.006	0.006	0.000	0.149	0.13	
60	1/30/2004	10:27:25 AM		24.947	21.914	24.084	24.094	25.524		51.12	51.291	19.974	31.257	-1.219	-5.533		43.835	0.04	14.643	0.004		43.00	0.71667	49.8	10.7	41.2	2.840	0.006	0.006	0.000	0.149	0.13	
61	1/30/2004	10:28:25 AM		24.913	21.931	24.046	24.081	25.236		51.427	51.718	19.888	31.452	-1.219	-5.536		43.236	0.04	14.643	0.003		44.00	0.73333	50.2	10.6	41.4	2.857	0.006	0.006	0.000	0.148	0.13	
62	1/30/2004	10:29:25 AM		24.869	21.942	24.036	24.051	25.211		50.498	50.774	21.478	28.977	-1.219	-5.539		42.665	0.038	14.643	0.004		45.00	0.75	49.3	10.5	39.7	2.740	0.006	0.006	0.000	0.147	0.12	
63	1/30/2004	10:30:25 AM		24.85	21.953	24.038	24.042	25.277		51.118	51.384	21.056	29.909	-1.219	-5.539		44.944	0.039	14.643	0.003		46.00	0.76667	49.9	11.0	40.5	2.793	0.006	0.006	0.000	0.147	0.13	
64	1/30/2004	10:31:25 AM		24.822	21.975	24.034	24.054	25.599		51.205	51.446	20.86	30.236	-1.219	-5.536		46.628	0.039	14.643	0.003		47.00	0.78333	50.0	11.4	40.7	2.808	0.006	0.006	0.000	0.147	0.12	
65	1/30/2004	10:32:25 AM		24.809	21.998	24.032	24.172	25.641		50.867	51.085	20.337	30.531	-1.219	-5.533		42.711	0.039	14.643	0.004		48.00	0.8	49.6	10.5	40.7	2.806	0.006	0.006	0.000	0.147	0.12	
66	1/30/2004	10:33:25 AM		24.776	22.01	23.998	24.189	25.298		51.073	51.295	20.187	30.952	-1.219	-5.53		44.509	0.04	14.643	0.004		49.00	0.81667	49.8	10.9	41.0	2.828	0.006	0.006	0.000	0.150	0.13	
67	1/30/2004	10:34:25 AM		24.758	22.011	23.96	24.146	25.62		51.041	51.334	20.073	30.931	-1.222	-5.533		43.284	0.04	14.643	0.003		50.00	0.83333	49.9	10.6	41.0	2.826	0.006	0.006	0.000	0.150	0.13	
68	1/30/2004	10:35:25 AM		24.74	22.039	23.972	24.123	25.178		51.035	51.405	20.031	30.863	-1.222	-5.53		43.662	0.04	14.643	0.003		51.00	0.85	49.9	10.7	40.9	2.823	0.006	0.006	0.000	0.150	0.13	

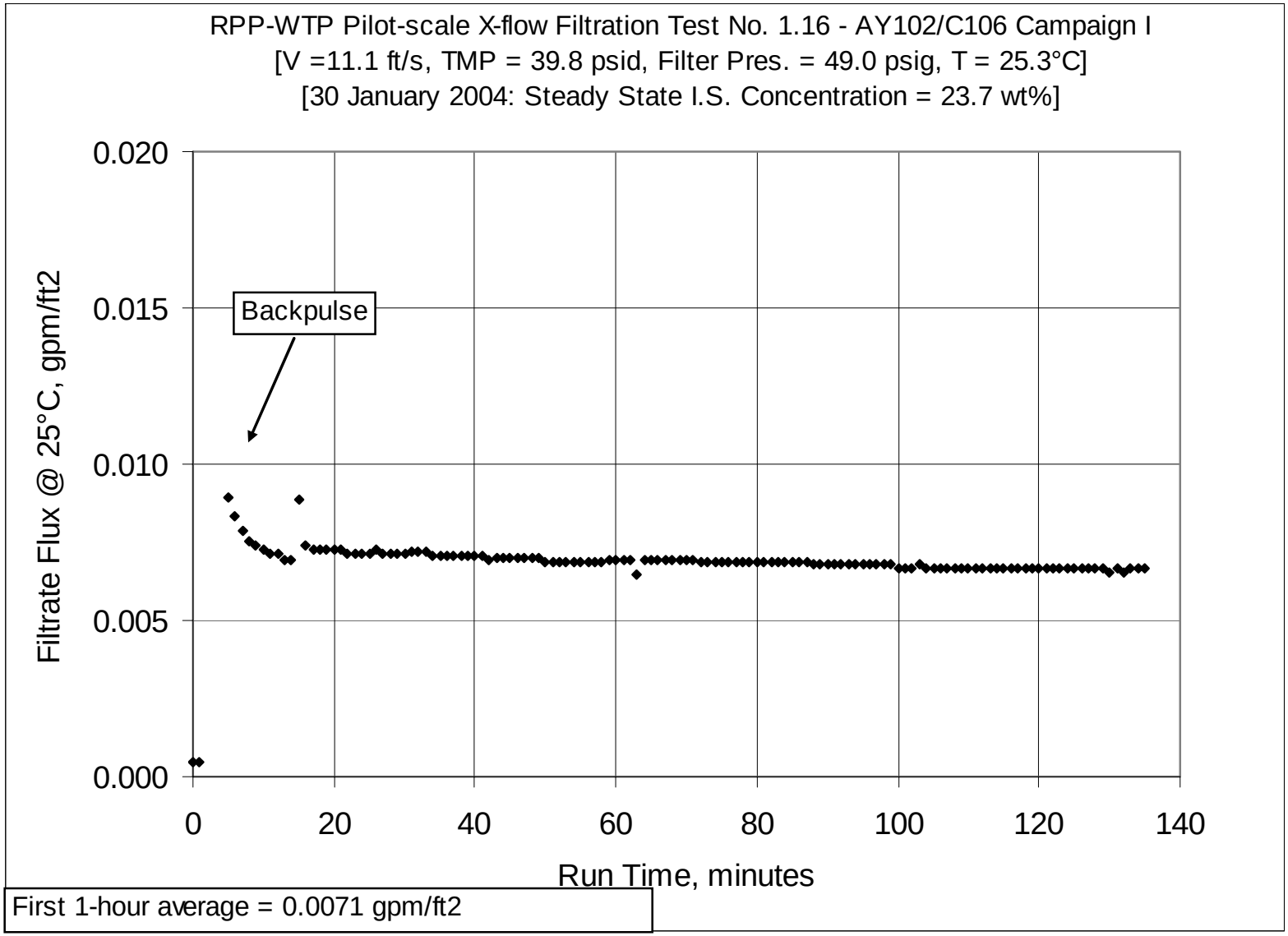
RUN # 1.11; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
69	1/30/2004	10:36:25 AM		24.716	22.045	23.959	24.084	25.089		51.056	51.417	19.996	30.859	-1.219	-5.533		43.234	0.04	14.643	0.004		52.00	0.86667	49.9	10.6	41.0	2.824	0.006	0.006	0.000	0.150	0.13	
70	1/30/2004	10:37:25 AM		24.699	22.063	23.946	24.086	25.011		51.073	51.392	20.069	30.931	-1.222	-5.533		44.112	0.04	14.643	0.003		53.00	0.88333	49.9	10.8	41.0	2.827	0.006	0.006	0.000	0.150	0.13	
71	1/30/2004	10:38:25 AM		24.665	22.049	23.892	24.072	25.742		51.095	51.45	20.023	30.943	-1.222	-5.533		44.233	0.04	14.643	0.003		54.00	0.9	50.0	10.8	41.0	2.828	0.006	0.006	0.000	0.150	0.13	
72	1/30/2004	10:39:25 AM		24.656	22.085	23.913	24.139	25.323		51.042	51.407	19.784	31.196	-1.222	-5.528		42.464	0.04	14.643	0.004		55.00	0.91667	49.9	10.4	41.1	2.835	0.006	0.006	0.000	0.150	0.13	
73	1/30/2004	10:40:25 AM		24.642	22.097	23.905	24.135	25.594		51.255	51.68	19.867	31.264	-1.216	-5.525		44.075	0.04	14.643	0.003		56.00	0.93333	50.2	10.8	41.3	2.845	0.006	0.006	0.000	0.149	0.13	
74	1/30/2004	10:41:25 AM		24.623	22.112	23.905	24.136	26.049		51.284	51.697	19.865	31.305	-1.222	-5.528		43.257	0.04	14.643	0.004		57.00	0.95	50.2	10.6	41.3	2.847	0.006	0.006	0.000	0.149	0.13	
75	1/30/2004	10:42:25 AM		24.604	22.124	23.871	24.157	25.801		50.382	50.808	19.7	30.591	-1.222	-5.528		44.842	0.04	14.643	0.003		58.00	0.96667	49.3	11.0	40.5	2.791	0.006	0.006	0.000	0.152	0.13	
76	1/30/2004	10:43:25 AM		24.596	22.135	23.953	24.124	26.032		50.548	51.009	20.559	29.93	-1.219	-5.53		44.068	0.039	14.643	0.004		59.00	0.98333	49.5	10.8	40.2	2.774	0.006	0.006	0.000	0.149	0.13	
77	1/30/2004	10:44:25 AM		24.598	22.167	24.03	24.186	26.214		50.701	51.091	20.453	30.203	-1.219	-5.528		45.078	0.039	14.643	0.003		60.00	1	49.6	11.0	40.5	2.789	0.006	0.006	0.000	0.148	0.13	
78	1/30/2004	10:45:25 AM		24.578	22.173	24.076	24.156	25.051		50.643	51.048	20.369	30.166	-1.219	-5.528		44.638	0.039	14.643	0.003		61.00	1.01667	49.6	10.9	40.4	2.786	0.006	0.006	0.000	0.148	0.13	
79	1/30/2004	10:46:25 AM		24.557	22.172	24.13	24.145	24.514		50.664	51.081	20.428	30.141	-1.222	-5.528		44.369	0.039	14.643	0.003		62.00	1.03333	49.6	10.9	40.4	2.786	0.006	0.006	0.000	0.147	0.13	
80	1/30/2004	10:47:25 AM		24.551	22.171	24.179	24.139	24.699		50.538	50.971	20.329	30.133	-1.222	-5.525		44.773	0.039	14.643	0.004		63.00	1.05	49.5	11.0	40.3	2.781	0.006	0.006	0.000	0.148	0.13	
81	1/30/2004	10:48:25 AM		24.561	22.191	24.254	24.104	24.558		50.788	51.253	20.45	30.217	-1.214	-5.519		45.076	0.04	14.643	0.004		64.00	1.06667	49.8	11.0	40.5	2.793	0.006	0.006	0.000	0.150	0.13	
82	1/30/2004	10:49:25 AM		24.581	22.216	24.329	24.129	24.338		50.853	51.326	20.489	30.246	-1.219	-5.522		45.579	0.039	14.643	0.004		65.00	1.08333	49.9	11.2	40.5	2.796	0.006	0.006	0.000	0.146	0.12	
83	1/30/2004	10:50:25 AM		24.57	22.22	24.354	24.123	25.033		50.33	50.762	20.121	30.199	-1.219	-5.522		44.986	0.04	14.643	0.003		66.00	1.1	49.3	11.0	40.3	2.776	0.006	0.006	0.000	0.151	0.13	
84	1/30/2004	10:51:25 AM		24.564	22.204	24.393	24.202	24.992		50.573	51.005	20.23	30.297	-1.219	-5.519		43.359	0.04	14.643	0.004		67.00	1.11667	49.5	10.6	40.4	2.788	0.006	0.006	0.000	0.150	0.13	
85	1/30/2004	10:52:25 AM		24.573	22.214	24.422	24.146	24.786		50.791	51.214	20.364	30.377	-1.222	-5.516		44.039	0.04	14.643	0.004		68.00	1.13333	49.7	10.8	40.6	2.798	0.006	0.006	0.000	0.149	0.13	
86	1/30/2004	10:53:25 AM		24.593	22.234	24.467	24.066	25.206		50.77	51.241	20.318	30.375	-1.219	-5.516		44.972	0.04	14.643	0.004		69.00	1.15	49.8	11.0	40.6	2.797	0.006	0.006	0.000	0.149	0.13	
87	1/30/2004	10:54:25 AM		24.613	22.249	24.512	24.071	24.906		50.681	51.253	20.196	30.385	-1.219	-5.516		44.214	0.04	14.643	0.003		70.00	1.16667	49.8	10.8	40.5	2.795	0.006	0.006	0.000	0.149	0.13	
88	1/30/2004	10:55:25 AM		24.608	22.228	24.517	24.045	24.77		50.863	51.394	20.357	30.459	-1.222	-5.519		44.64	0.04	14.643	0.003		71.00	1.18333	49.9	10.9	40.7	2.803	0.006	0.006	0.000	0.149	0.13	
89	1/30/2004	10:56:25 AM		24.621	22.236	24.57	24.074	24.303		50.78	51.278	20.219	30.43	-1.216	-5.513		45.383	0.04	14.643	0.004		72.00	1.2	49.8	11.1	40.6	2.800	0.006	0.006	0.000	0.149	0.13	
90	1/30/2004	10:57:25 AM		24.647	22.252	24.616	24.089	24.624		50.363	50.934	19.868	30.398	-1.216	-5.513		44.415	0.04	14.643	0.004		73.00	1.21667	49.5	10.9	40.4	2.784	0.006	0.006	0.000	0.149	0.13	
91	1/30/2004	10:58:25 AM		24.666	22.256	24.645	24.099	24.894		50.73	51.288	19.849	30.831	-1.219	-5.513		44.315	0.041	14.643	0.004		74.00	1.23333	49.8	10.9	40.8	2.812	0.006	0.006	0.000	0.151	0.13	
92	1/30/2004	10:59:25 AM		24.692	22.267	24.686	24.089	25.209		50.836	51.396	19.797	30.935	-1.216	-5.507		44.008	0.041	14.643	0.004		75.00	1.25	49.9	10.8	40.9	2.819	0.006	0.006	0.000	0.151	0.13	
93	1/30/2004	11:00:25 AM		24.707	22.273	24.721	24.07	24.975		50.345	50.917	19.487	30.911	-1.222	-5.51		44.275	0.041	14.643	0.003		76.00	1.26667	49.4	10.9	40.6	2.801	0.006	0.006	0.000	0.152	0.13	
94	1/30/2004	11:01:25 AM		24.719	22.294	24.743	24.111	25.276		50.48	51.073	19.655	30.863	-1.219	-5.51		44.235	0.041	14.643	0.004		77.00	1.28333	49.6	10.8	40.7	2.804	0.006	0.006	0.000	0.151	0.13	
95	1/30/2004	11:02:25 AM		24.725	22.29	24.744	24.052	25.327		50.681	51.307	19.756	30.831	-1.225	-5.51		44.944	0.041	14.643	0.003		78.00	1.3	49.8	11.0	40.8	2.810	0.006	0.006	0.000	0.151	0.13	
96	1/30/2004	11:03:25 AM		24.74	22.301	24.77	24.028	24.788		50.618	51.264	19.739	30.806	-1.219	-5.504		43.881	0.041	14.643	0.003		79.00	1.31667	49.8	10.8	40.7	2.807	0.006	0.006	0.000	0.151	0.13	
97	1/30/2004	11:04:25 AM		24.756	22.312	24.785	23.938	25.013		50.672	51.27	19.826	30.833	-1.222	-5.504		44.588	0.041	14.643	0.004		80.00	1.33333	49.8	10.9	40.8	2.810	0.006	0.006	0.000	0.151	0.13	
98	1/30/2004	11:05:25 AM		24.75	22.28	24.759	23.866	24.747		50.681	51.334	19.817	30.744	-1.222	-5.507		44.346	0.041	14.643	0.003		81.00	1.35	49.9	10.9	40.7	2.807	0.006	0.006	0.000	0.151	0.13	
99	1/30/2004	11:06:25 AM		24.79	22.31	24.799	23.851	24.762		50.592	51.21	19.756	30.761	-1.219	-5.504		44.181	0.041	14.643	0.004		82.00	1.36667	49.7	10.8	40.7	2.805	0.006	0.006	0.000	0.151	0.13	
100	1/30/2004	11:07:25 AM		24.793	22.309	24.812	23.779	24.67		50.637	51.253	19.874	30.746	-1.222	-5.502		43.918	0.041	14.643	0.004		83.00	1.38333	49.8	10.8	40.7	2.806	0.006	0.006	0.000	0.151	0.13	
101	1/30/2004	11:08:25 AM		24.817	22.308	24.837	23.764	24.885		50.822	51.454	19.961	30.769	-1.219	-5.499		45.088	0.041	14.643	0.004		84.00	1.4	50.0	11.0	40.8	2.813	0.006	0.006	0.000	0.151	0.13	
102	1/30/2004	11:09:25 AM		24.821	22.286	24.84	23.686	24.318		50.616	51.274	19.76	30.794	-1.219	-5.499		44.267	0.041	14.643	0.003		85.00	1.41667	49.8	10.8	40.7	2.806	0.006	0.006	0.000	0.151	0.13	
103	1/30/2004	11:10:25 AM		24.836	22.291	24.875	23.636	24.758		50.357	50.994	19.541	30.818	-1.219	-5.499		45.043	0.041	14.643	0.004		86.00	1.43333	49.5	11.0	40.6	2.798	0.006	0.006	0.000	0.151	0.13	
104	1/30/2004	11:11:25 AM		24.835	22.285	24.884	23.666	24.862		50.179	50.913	19.45	30.787	-1.222	-5.499		46.002	0.041	14.643	0.003		87.00	1.45	49.4	11.3	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
105	1/30/2004	11:12:25 AM		24.834	22.275	24.884	23.62	25.177		50.324	51.031	19.557	30.767	-1.219	-5.499		44.15	0.041	14.643	0.003		88.00	1.46667	49.6	10.8	40.5	2.795	0.006	0.006	0.000	0.151	0.13	
106	1/30/2004	11:13:25 AM		24.839	22.275	24.904	23.58	25.057		50.604	51.288	19.762	30.72	-1.222	-5.499		44.379	0.041	14.643	0.003		89.00	1.48333	49.8	10.9	40.7	2.804	0.006	0.006	0.000	0.151	0.13	
107	1/30/2004	11:14:25 AM		24.855	22.285	24.934	23.595	25.127		50.285	50.977	19.496	30.763	-1.219	-5.49		49.339	0.041	14.643	0.004		90.00	1.5	49.5	12.1	40.5	2.794	0.006	0.006	0.000	0.151	0.13	
108	1/30/2004	11:15:25 AM		24.828	22.253	24.907	23.553	24.365		50.548	51.295	19.629	30.824	-1.219	-5.493		44.759	0.041	14.643	0.003		91.00	1.51667	49.8	11.0	40.7	2.805	0.006	0.006	0.000	0.151	0.13	
109	1/30/2004	11:16:25 AM		24.828	22.243	24.912	23.493	24.35		50.32	51.029	19.475	30.855	-1.219	-5.49		46.211	0.041	14.643	0.004		92.00	1.53333	49.6	11.3	40.6	2.798	0.006	0.006	0.000	0.151	0.13	
110	1/30/2004	11:17:25 AM		24.826	22.231	24.895	23.446	24.143		50.562	51.282	19.483	31.063	-1.219	-5.49		43.804	0.041	14.643	0.003		93.00	1.55	49.8	10.7	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
111	1/30/2004	11:18:25 AM		24.835	22.225	24.924	23.409	24.252		50.417	51.127	19.234	31.2	-1.219	-5.487		43.284	0.041	14.643	0.004		94.00	1.56667	49.7	10.6	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
112	1/30/2004	11:19:25 AM		24.843	22.228	24.932	23.463	24.555		50.708	51.429	19.319	31.34	-1.216	-5.481		43.901	0.041	14.643	0.004		95.00	1.58333	50.0	10.8	41.0	2.828	0.006	0.006	0.000	0.149	0.13	
113	1/30/2004	11:20:25 AM		24.837	22.227	24.932	23.552	25.359		50.48	51.21	19.338	31.089	-1.219	-5.487		43.593	0.041	14.643	0.004		96.00	1.6	49.7	10.7	40.8	2.812	0.006	0.006	0.000	0.150	0.13	
114	1/30/2004	11:21:25 AM		24.836	22.231	24.935	23.581	24.718		50.544	51.276	19.393	31.153	-1.222	-5.484		43.826	0.041	14.643	0.004		97.00	1.61667	49.8	10.7	40.8	2.816	0.006	0.006	0.000	0.150	0.13	
115	1/30/2004	11:22:25 AM		24.852	22.242	24.972	23.668	24.74		50.674	51.407	19.359	31.233	-1.214	-5.481		44.335	0.041	14.643	0.004		98.00	1.63333	49.9	10.9	41.0	2.824	0.006	0.006	0.000	0.149	0.13	
116	1/30/2004	11:23:25 AM		24.843	22.243	24.967	23.769	24.795		50.397	51.218	19.203	31.104	-1.216	-5.484		43.778	0.041	14.643	0.004		99.00	1.65	49.7	10.7	40.8	2.810	0.006	0.006	0.000	0.150	0.13	
117	1/30/2004	11:24:25 AM		24.826	22.211	24.955	23.757	24.208		50.629	51.405	19.421	31.101	-1.219	-5.484		46.369	0.041	14.643	0.004		100.00	1.66667	49.9	11.4	40.9	2.817	0.006	0.006	0.000	0.150	0.13	
118	1/30/2004	11:25:25 AM		24.842	22.242	24.991	23.838	24.144		50.434	51.216	19.323	31.141	-1.214	-5.478		44.922	0.041	14.643	0.004		101.00	1.68333	49.7	11.0	40.8	2.812	0.006	0.006	0.000	0.150	0.13	
119	1/30/2004	11:26:25 AM		24.825	22.22	24.97	23.912	24.122		50.318	51.11	19.214	31.161	-1.216	-5.478		41.839	0.041	14.643	0.004		102.00	1.7	49.6	10.3	40.7	2.809	0.006	0.006	0.000	0.150	0.13	
120	1/30/2004	11:27:25 AM		24.847	22.237	24.991	24.059	24.384		50.098	50.818	19.151	31.067	-1.219	-5.481		44.085	0.041	14.643	0.004		103.00	1.71667	49.3	10.8	40.6	2.798	0.006	0.006	0.000	0.151	0.13	
121	1/30/2004	11:28:25 AM		24.852	22.247	24.991	24.169	24.344		50.627	51.514	19.409	31.128	-1.219	-5.481		44.98	0.041	14.643	0.003		104.00	1.73333	50.0	11.0	40.9	2.818	0.006	0.006	0.000	0.150	0.13	
122	1/30/2004	11:29:25 AM		24.85	22.24	24.969	24.233	24.407		50.676	51.535	19.449	31.141	-1.222	-5.478		44.529	0.041	14.643	0.004		105.00	1.75	50.1	10.9	40.9	2.820	0.006	0.006	0.000	0.150	0.13	
123	1/30/2004	11:30:25 AM		24.872	22.262	24.987	24.366	24.85		50.747	51.585	19.588	31.083	-1.222	-5.478		43.801	0.041	14.643	0.003		106.00	1.76667	50.1	10.7	40.9	2.821	0.006	0.006	0.000	0.149	0.13	
124	1/30/2004	11:31:25 AM		24.898	22.289	25.003	24.402	25.93		50.658	51.506	19.451	31.075	-1.222	-5.478		44.285	0.041	14.643	0.003		107.00	1.78333	50.0	10.9	40.9	2.818	0.006	0.006	0.000	0.150	0.13	
125	1/30/2004	11:32:25 AM		24.91	22.296	25.015	24.379	25.337		50.43	51.261	19.341	31.044	-1.222	-5.476		44.638	0.041	14.643	0.003		108.00	1.8	49.8	10.9	40.7	2.809	0.006	0.006	0.000	0.150	0.13	
126	1/30/2004	11:33:25 AM		24.896	22.276	25	24.344	24.453		50.674	51.61	19.454	31.099	-1.219	-5.476		44.116	0.041	14.643	0.003		109.00	1.81667	50.1	10.8	40.9	2.819	0.006	0.006	0.000	0.150	0.13	
127	1/30/2004	11:34:25 AM		24.907	22.287	25.011	24.35	24.419		50.531	51.373	19.37	31.085	-1.219	-5.473		45.124	0.041	14.643	0.004		110.00	1.83333	49.9	11.1	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
128	1/30/2004	11:35:25 AM		24.929	22.325	25.039	24.333	25.027		50.581	51.405	19.508	31.081	-1.222	-5.476		44.231	0.041	14.643	0.003		111.00	1.85	49.9	10.8	40.8	2.815	0.006	0.006	0.000	0.150	0.13	
129	1/30/2004	11:36:25 AM		24.929	22.32	25.034	24.288	24.937		50.544	51.45	19.387	31.097	-1.225	-5.476		43.078	0.041	14.643	0.003		112.00	1.86667	50.0	10.6	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
130	1/30/2004	11:37:25 AM		24.926	22.321	25.035	24.279	24.728		50.34	51.255	19.201	31.024	-1.222	-5.476		42.11	0.041	14.643	0.004		113.00	1.88333	49.8	10.3	40.7	2.805	0.006	0.006	0.000	0.150	0.13	
131	1/30/2004	11:38:25 AM		24.941	22.337	25.046	24.234	24.383		50.459	51.363	19.318	31.069	-1.219	-5.473		45.898	0.041	14.643	0.003		114.00	1.9	49.9	11.2	40.8	2.811	0.006	0.006	0.000	0.150	0.13	
132	1/30/2004	11:39:25 AM		24.962	22.338	25.056	24.25	24.619		50.349	51.338	19.344	30.968	-1.219	-5.47		44.25	0.041	14.643	0.004		115.00	1.91667	49.9	10.8	40.7	2.803	0.006	0.006	0.000	0.150	0.13	
133	1/30/2004	11:40:25 AM		24.973	22.358	25.067	24.2	25		50.517	51.471	19.365	30.997	-1.219	-5.467		43.916	0.041	14.643	0.004		116.00	1.93333	50.0	10.8	40.8	2.810	0.006	0.006	0.000	0.150	0.13	
134	1/30/2004	11:41:25 AM		24.958	22.343	25.042	24.195	25.055		50.575	51.533	19.421	30.999	-1.219	-5.467		44.961	0.041	14.643	0.003		117.00	1.95	50.1	11.0	40.8	2.812	0.006	0.006	0.000	0.150	0.13	
135	1/30/2004	11:42:25 AM		24.968	22.349	25.053	24.186	25.4		50.392	51.315	19.369	31.009	-1.219	-5.464		44.696	0.041	14.643	0.004		118.00	1.96667	49.8	11.0	40.7	2.806	0.006	0.006	0.000	0.150	0.13	
136	1/30/2004	11:43:25 AM		24.978	22.364	25.058	24.08	25.19		50.533	51.469	19.418	30.972	-1.219	-5.464		44.803	0.041	14.643	0.003		119.00	1.98333	50.0	11.0	40.8	2.810	0.006	0.006	0.000	0.150	0.13	

RUN # 1.11; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
131	1/30/2004	11:38:25 AM		24.941	22.337	25.046	24.234	24.383		50.459	51.363	19.318	31.069	-1.219	-5.473		45.898	0.041	14.643	0.003		114.00	1.9	49.9	11.2	40.8	2.811	0.006	0.006	0.000	0.150	0.13	
132	1/30/2004	11:39:25 AM		24.962	22.338	25.056	24.25	24.619		50.349	51.338	19.344	30.968	-1.219	-5.47		44.25	0.041	14.643	0.004		115.00	1.91667	49.9	10.8	40.7	2.803	0.006	0.006	0.000	0.150	0.13	
133	1/30/2004	11:40:25 AM		24.973	22.358	25.067	24.2	25		50.517	51.471	19.365	30.997	-1.219	-5.467		43.916	0.041	14.643	0.004		116.00	1.93333	50.0	10.8	40.8	2.810	0.006	0.006	0.000	0.150	0.13	
134	1/30/2004	11:41:25 AM		24.958	22.343	25.042	24.195	25.055		50.575	51.533	19.421	30.999	-1.219	-5.467		44.961	0.041	14.643	0.003		117.00	1.95	50.1	11.0	40.8	2.812	0.006	0.006	0.000	0.150	0.13	
135	1/30/2004	11:42:25 AM		24.968	22.349	25.053	24.186	25.4		50.392	51.315	19.369	31.009	-1.219	-5.464		44.696	0.041	14.643	0.004		118.00	1.96667	49.8	11.0	40.7	2.806	0.006	0.006	0.000	0.150	0.13	
136	1/30/2004	11:43:25 AM		24.978	22.364	25.058	24.08	25.19		50.533	51.469	19.418	30.972	-1.219	-5.464		44.803	0.041	14.643	0.003		119.00	1.98333	50.0	11.0	40.8	2.810	0.006	0.006	0.000	0.150	0.13	
137	1/30/2004	11:44:25 AM		24.984	22.37	25.068	24.006	25.656		50.44	51.413	19.356	30.956	-1.216	-5.458		45.072	0.041	14.643	0.004		120.00	2	49.9	11.0	40.7	2.806	0.006	0.006	0.000	0.150	0.13	
138	1/30/2004	11:45:25 AM		24.989	22.37	25.073	23.951	25.526		50.172	51.195	19.157	30.915	-1.222	-5.461		45.015	0.041	14.643	0.003		121.00	2.01667	49.7	11.0	40.5	2.795	0.006	0.006	0.000	0.150	0.13	
139	1/30/2004	11:46:25 AM		25.004	22.375	25.079	23.851	25.062		50.135	51.176	19.159	30.878	-1.219	-5.458		43.486	0.041	14.643	0.003		122.00	2.03333	49.7	10.7	40.5	2.793	0.006	0.006	0.000	0.151	0.13	
140	1/30/2004	11:47:25 AM		25.016	22.387	25.101	23.807	25.188		50.309	51.27	19.28	31.011	-1.219	-5.461		46.98	0.041	14.643	0.003		123.00	2.05	49.8	11.5	40.7	2.803	0.006	0.006	0.000	0.150	0.13	
141	1/30/2004	11:48:25 AM		25.011	22.371	25.08	23.762	25.842		50.471	51.502	19.414	30.956	-1.219	-5.458		42.176	0.041	14.643	0.003		124.00	2.06667	50.0	10.3	40.7	2.807	0.006	0.006	0.000	0.150	0.13	
142	1/30/2004	11:49:25 AM		25.006	22.367	25.086	23.692	25.078		50.488	51.541	19.435	30.939	-1.219	-5.452		44.241	0.041	14.643	0.004		125.00	2.08333	50.1	10.8	40.7	2.807	0.006	0.006	0.000	0.150	0.13	
143	1/30/2004	11:50:25 AM		25.018	22.379	25.092	23.699	25.37		49.971	51.112	18.972	30.874	-1.219	-5.452		44.039	0.041	14.643	0.004		126.00	2.1	49.6	10.8	40.4	2.787	0.006	0.006	0.000	0.151	0.13	
144	1/30/2004	11:51:25 AM		25.014	22.38	25.084	23.69	24.886		50.1	51.222	19.128	30.822	-1.222	-5.452		44.442	0.041	14.643	0.004		127.00	2.11667	49.7	10.9	40.5	2.790	0.006	0.006	0.000	0.151	0.13	
145	1/30/2004	11:52:25 AM		25.015	22.381	25.079	23.701	25.102		50.405	51.5	19.344	30.902	-1.219	-5.455		45.783	0.041	14.643	0.004		128.00	2.13333	50.0	11.2	40.7	2.803	0.006	0.006	0.000	0.150	0.13	
146	1/30/2004	11:53:25 AM		25	22.371	25.064	23.67	25.142		50.027	51.162	19.025	30.894	-1.219	-5.455		44.876	0.041	14.643	0.003		129.00	2.15	49.7	11.0	40.5	2.790	0.006	0.006	0.000	0.151	0.13	
147	1/30/2004	11:54:25 AM		25.01	22.381	25.07	23.701	25.512		50.314	51.375	19.295	30.941	-1.219	-5.452		44.35	0.041	14.643	0.003		130.00	2.16667	49.9	10.9	40.6	2.801	0.006	0.006	0.000	0.150	0.13	
148	1/30/2004	11:55:25 AM		25.012	22.387	25.071	23.692	25.529		50.114	51.222	19.219	30.905	-1.222	-5.447		45.084	0.041	14.643	0.004		131.00	2.18333	49.7	11.0	40.5	2.793	0.006	0.006	0.000	0.151	0.13	
149	1/30/2004	11:56:25 AM		25.007	22.388	25.072	23.653	25.884		50.166	51.218	19.159	30.917	-1.219	-5.447		44.241	0.041	14.643	0.004		132.00	2.2	49.7	10.8	40.5	2.795	0.006	0.006	0.000	0.150	0.13	
150	1/30/2004	11:57:25 AM		25.008	22.384	25.067	23.618	25.759		50.087	51.174	19.246	30.827	-1.222	-5.45		45.41	0.041	14.643	0.003		133.00	2.21667	49.7	11.1	40.5	2.789	0.006	0.006	0.000	0.151	0.13	
151	1/30/2004	11:58:25 AM		25.019	22.405	25.103	23.604	25.826		50.226	51.384	19.284	30.827	-1.219	-5.441		44.264	0.041	14.643	0.004		134.00	2.23333	49.9	10.8	40.5	2.794	0.006	0.006	0.000	0.150	0.13	
152																																	
153		Averages		25.1	22.1	24.8	24.0	25.1	#	50.6	51.4	19.6	30.9	-1.1	-5.3	#	44.5	0.0	14.6	0.0	#			49.9	10.9	40.8	2.811	0.007	0.007	0.0002	0.161	0.137	#
154		Maximum		26.7	22.4	26.2	24.4	26.4	#	53.8	54.1	22.0	33.8	0.4	0.7	#	51.6	0.2	14.6	0.0	#			52.6	12.6	43.5	2.996	0.037	0.035	0.0008	0.837	0.712	#
155		Median		24.9	22.2	24.9	24.1	25.1	#	50.6	51.3	19.5	30.9	-1.2	-5.5	#	44.3	0.0	14.6	0.0	#			49.8	10.9	40.7	2.808	0.006	0.006	0.0002	0.150	0.128	#
156		Minimum		24.6	21.2	23.9	23.4	23.9	#	47.4	49.2	17.2	27.8	-1.2	-5.9	#	40.2	0.0	14.6	0.0	#			47.7	9.9	37.8	2.608	0.006	0.006	0.0001	0.145	0.123	#
157		2 x Std Dev		1.073	0.663	1.123	0.457	1.057	#	1.662	1.473	1.611	2.190	0.641	2.610	#	3.893	0.037	0.000	0.001	#			1.473	0.954	1.769	0.122	0.006	0.005	0.0001	0.125	0.106	#
158		Number of Points Used*		129	129	129	129	129	0	129	129	129	129	129	129	0	129	129	129	129	0			129	129	129	129	129	129	129	129	129	0
159		* Backpulse points in box are not included																															
160																																	
161																											2.2-hour avg. =		0.0066				
162																											1-hour avg. =		0.0071				

RUN # 1.16; STEADY STATE TEST AT 25 WT% UDS



RUN # 1.16; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	1/29/2004	7:58:21 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Filter Surface		6.707	FT2						
8	1/29/2004	7:58:50 AM		19.97	14.564	11.286	20.431	11.485		0.059	-0.149	0.007	0.018	-0.186	0.098		-0.087	0.003	14.643	0.005				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	1/29/2004	7:58:52 AM		19.981	14.574	11.307	20.466	11.546		0.059	-0.149	0.007	0.021	-0.168	0.101		-0.083	0.003	14.643	0.004													
10	1/29/2004	7:58:53 AM		19.981	14.585	11.317	20.472	11.552		0.058	-0.149	0.007	0.021	-0.174	0.104		-0.087	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	1/29/2004	7:58:54 AM		19.991	14.575	11.317	20.477	11.552		0.059	-0.149	0.007	0.023	-0.168	0.104		-0.081	0.003	14.643	0.004													
12	1/29/2004	7:58:55 AM		19.986	14.58	11.317	20.472	11.562		0.061	-0.149	0.008	0.021	-0.177	0.104		-0.087	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	1/29/2004	7:58:56 AM		19.986	14.58	11.317	20.477	11.572		0.058	-0.149	0.008	0.023	-0.168	0.101		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	1/29/2004	7:58:57 AM		19.986	14.58	11.312	20.472	11.572		0.059	-0.149	0.008	0.023	-0.189	0.104		-0.087	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	1/30/2004	12:02:54 PM		25.387	22.387	25.071	23.552	24.604	#	39.152	50.725	19.529	19.8	6.134	91.466		44.711	0.003	14.643	0.004		0	0	49.3	11.0	29.5	2.032	0.000	0.000	0.000	0.015	0.01	
18	1/30/2004	12:03:54 PM		24.762	22.393	25.067	23.557	24.474	#	-7.304	56.344	13.637	-18.591	70.294	74.792		43.505	0.003	14.643	1.684		1.00	0.01667	54.9	10.7	-12.9	-0.893	0.000	0.000	0.000	-0.034	-0.03	
19	1/30/2004	12:04:54 PM		25.377	22.398	25.287	23.643	25.264	#	42.962	48.942	11.999	30.915	0.35	0.344		48.632	0.153	14.643	0.003		2.00	0.03333	47.5	11.9	36.9	2.547	0.023	0.023	0.001	0.613	0.52	
20	1/30/2004	12:05:54 PM		25.677	22.418	25.442	23.713	24.934	#	43.748	49.603	14.419	29.312	0.222	0.387		44.6	0.088	14.643	0.004		3.00	0.05	48.1	10.9	36.5	2.519	2.183	2.156	0.059	59.025	50.23	
21	1/30/2004	12:06:54 PM		25.84	22.396	25.575	23.721	23.671	#	44.37	50.215	16.028	28.255	0.208	0.416		45.151	0.07	14.643	0.004		4.00	0.06667	48.7	11.1	36.3	2.504	2.183	2.148	0.059	59.157	50.34	
22	1/30/2004	12:07:54 PM		25.96	22.396	25.7	23.696	23.701	#	44.679	50.561	16.921	27.664	0.254	0.433		45.249	0.061	14.643	0.003		5.00	0.08333	49.1	11.1	36.2	2.494	0.009	0.009	0.000	0.247	0.21	
23	1/30/2004	12:08:54 PM		26.079	22.406	25.745	23.836	24.652	#	44.903	50.76	17.692	27.159	0.254	0.468		45.589	0.057	14.643	0.004		6.00	0.1	49.3	11.2	36.0	2.484	0.008	0.008	0.000	0.231	0.20	
24	1/30/2004	12:09:54 PM		26.169	22.41	25.834	23.82	24.286	#	44.905	50.777	18.019	26.915	0.254	0.485		45.783	0.054	14.643	0.004		7.00	0.11667	49.3	11.2	35.9	2.476	0.008	0.008	0.000	0.219	0.19	
25	1/30/2004	12:10:54 PM		26.249	22.416	25.875	23.906	24.292	#	45.015	50.975	18.237	26.66	0.251	0.482		45.579	0.052	14.643	0.004		8.00	0.13333	49.5	11.2	35.8	2.471	0.008	0.008	0.000	0.211	0.18	
26	1/30/2004	12:11:54 PM		26.33	22.442	25.94	24.002	24.983	#	45.224	51.133	18.515	26.695	0.263	0.52		42.026	0.051	14.643	0.004		9.00	0.15	49.7	10.3	36.0	2.479	0.008	0.007	0.000	0.206	0.18	
27	1/30/2004	12:12:54 PM		26.358	22.41	25.939	24.011	24.206	#	45.353	51.278	18.608	26.667	0.318	0.514		45.145	0.05	14.643	0.004		10.00	0.16667	49.8	11.1	36.0	2.483	0.007	0.007	0.000	0.202	0.17	
28	1/30/2004	12:13:54 PM		26.415	22.427	25.986	24.023	25.123	#	45.253	51.177	18.586	26.603	0.324	0.532		44.233	0.049	14.643	0.004		11.00	0.18333	49.7	10.8	35.9	2.477	0.007	0.007	0.000	0.198	0.17	
29	1/30/2004	12:14:54 PM		26.451	22.433	26.001	24.014	25.583	#	45.43	51.353	18.822	26.572	0.324	0.543		45.612	0.049	14.643	0.003		12.00	0.2	49.9	11.2	36.0	2.482	0.007	0.007	0.000	0.197	0.17	
30	1/30/2004	12:15:54 PM		26.497	22.45	26.018	24.056	25.34	#	45.361	51.291	18.852	26.482	0.338	0.578		42.98	0.048	14.643	0.003		13.00	0.21667	49.8	10.5	35.9	2.477	0.007	0.007	0.000	0.194	0.16	
31	1/30/2004	12:16:54 PM		26.524	22.436	26.004	24.207	24.902	#	45.191	51.083	18.74	26.494	0.338	0.578		44.536	0.048	14.643	0.003		14.00	0.23333	49.6	10.9	35.8	2.471	0.007	0.007	0.000	0.194	0.17	
32	1/30/2004	12:17:54 PM		25.562	22.468	25.977	24.325	25.499	#	51.069	51.232	19.042	32.091	-1.222	-5.455		44.156	0.061	14.643	0.003		15.00	0.25	49.8	10.8	41.6	2.867	0.009	0.009	0.000	0.213	0.18	
33	1/30/2004	12:18:54 PM		25.692	22.453	25.942	24.345	24.494	#	50.674	50.77	19.34	31.348	-1.219	-5.632		45.695	0.051	14.643	0.003		16.00	0.26667	49.3	11.2	41.0	2.828	0.008	0.007	0.000	0.181	0.15	
34	1/30/2004	12:19:54 PM		25.768	22.47	25.963	24.462	24.725	#	50.581	50.623	20.312	30.287	-1.219	-5.805		46.768	0.05	14.643	0.004		17.00	0.28333	49.2	11.5	40.4	2.788	0.007	0.007	0.000	0.179	0.15	
35	1/30/2004	12:20:54 PM		25.814	22.486	25.964	24.458	24.582	#	50.384	50.474	19.948	30.441	-1.219	-5.814		47.208	0.05	14.643	0.004		18.00	0.3	49.0	11.6	40.4	2.786	0.007	0.007	0.000	0.180	0.15	
36	1/30/2004	12:21:54 PM		25.847	22.519	25.982	24.395	24.944	#	50.39	50.437	19.954	30.527	-1.219	-5.831		45.524	0.05	14.643	0.003		19.00	0.31667	49.0	11.2	40.5	2.789	0.007	0.007	0.000	0.179	0.15	
37	1/30/2004	12:22:54 PM		25.842	22.509	25.947	24.381	25.225	#	50.519	50.577	20.016	30.496	-1.219	-5.912		47.42	0.05	14.643	0.004		20.00	0.33333	49.1	11.6	40.5	2.793	0.007	0.007	0.000	0.179	0.15	
38	1/30/2004	12:23:54 PM		25.848	22.51	25.938	24.386	24.225	#	50.355	50.405	19.88	30.43	-1.219	-5.912		46.678	0.05	14.643	0.003		21.00	0.35	48.9	11.4	40.4	2.785	0.007	0.007	0.000	0.180	0.15	
39	1/30/2004	12:24:54 PM		25.839	22.51	25.939	24.397	23.81	#	50.399	50.41	20.006	30.476	-1.219	-5.912		45.481	0.049	14.643	0.004		22.00	0.36667	48.9	11.1	40.4	2.788	0.007	0.007	0.000	0.176	0.15	
40	1/30/2004	12:25:54 PM		25.845	22.532	25.935	24.329	24.458	#	50.397	50.443	19.959	30.494	-1.216	-5.929		48.607	0.049	14.643	0.003		23.00	0.38333	49.0	11.9	40.4	2.789	0.007	0.007	0.000	0.176	0.15	
41	1/30/2004	12:26:54 PM		25.857	22.544	25.927	24.36	24.739	#	50.341	50.435	19.851	30.508	-1.219	-5.927		44.362	0.049	14.643	0.003		24.00	0.4	49.0	10.9	40.4	2.787	0.007	0.007	0.000	0.176	0.15	
42	1/30/2004	12:27:54 PM		25.852	22.534	25.892	24.3	24.464	#	50.529	50.625	20.085	30.404	-1.219	-5.843		46.851	0.049	14.643	0.004		25.00	0.41667	49.2	11.5	40.5	2.790	0.007	0.007	0.000	0.176	0.15	
43	1/30/2004	12:28:54 PM		25.853	22.545	25.864	24.161	25.066	#	50.486	50.557	19.996	30.498	-1.222	-5.874		44.99	0.05	14.643	0.003		26.00	0.43333	49.1	11.0	40.5	2.792	0.007	0.007	0.000	0.180	0.15	
44	1/30/2004	12:29:54 PM		25.848	22.545	25.833	24.105	25.04	#	50.343	50.383	19.938	30.476	-1.219	-5.932		46.348	0.049	14.643	0.004		27.00	0.45	48.9	11.4	40.4	2.786	0.007	0.007	0.000	0.177	0.15	
45	1/30/2004	12:30:54 PM		25.848	22.545	25.813	23.995	25.515	#	50.465	50.602	19.942	30.443	-1.222	-5.932		43.463	0.049	14.643	0.003		28.00	0.46667	49.1	10.7	40.5	2.789	0.007	0.007	0.000	0.177	0.15	
46	1/30/2004	12:31:54 PM		25.837	22.544	25.762	23.923	25.084	#	50.552	50.706	20.013	30.492	-1.219	-5.935		47.066	0.049	14.643	0.004		29.00	0.48333	49.2	11.5	40.5	2.794	0.007	0.007	0.000	0.176	0.15	
47	1/30/2004	12:32:54 PM		25.827	22.549	25.727	23.853	24.989	#	50.181	50.32	19.742	30.465	-1.219	-5.935		45.779	0.049	14.643	0.004		30.00	0.5	48.8	11.2	40.3	2.780	0.007	0.007	0.000	0.178	0.15	
48	1/30/2004	12:33:54 PM		25.811	22.538	25.676	23.873	24.963	#	50.504	50.633	19.87	30.617	-1.216	-5.932		44.208	0.049	14.643	0.004		31.00	0.51667	49.2	10.8	40.6	2.797	0.007	0.007	0.000	0.177	0.15	
49	1/30/2004	12:34:54 PM		25.791	22.548	25.626	23.822	25.483	#	50.616	50.72	19.932	30.675	-1.219	-5.935		47.297	0.049	14.643	0.004		32.00	0.53333	49.2	11.6	40.6	2.802	0.007	0.007	0.000	0.177	0.15	
50	1/30/2004	12:35:54 PM		25.756	22.547	25.57	23.797	25.518	#	50.65	50.789	19.881	30.769	-1.222	-5.938		45.458	0.049	14.643	0.003		33.00	0.55	49.3	11.1	40.7	2.807	0.007	0.007	0.000	0.177	0.15	
51	1/30/2004	12:36:54 PM		25.727	22.549	25.557	23.828	24.934	#	50.681	50.847	19.968	30.671	-1.219	-5.935		45.639	0.048	14.643	0.003		34.00	0.56667	49.4	11.2	40.7	2.804	0.007	0.007	0.000	0.173	0.15	
52	1/30/2004	12:37:54 PM		25.691	22.552	25.55	23.787	23.997	#	50.513	50.607	19.887	30.71	-1.219	-5.932		46.557	0.048	14.643	0.003		35.00	0.58333	49.1	11.4	40.6	2.800	0.007	0.007	0.000	0.174	0.15	
53	1/30/2004	12:38:54 PM		25.641	22.548	25.501	23.687	24.913	#	50.063	50.225	19.735	30.369	-1.219	-5.938		45.272	0.048	14.643	0.004		36.00	0.6	48.8	11.1	40.2	2.773	0.007	0.007	0.000	0.175	0.15	
54	1/30/2004	12:39:54 PM		25.626	22.563	25.466	23.677	25.423	#	49.839	50.093	19.484	30.291	-1.219	-5.938		44.928	0.048	14.643	0.003		37.00	0.61667	48.6	11.0	40.1	2.762	0.007	0.007	0.000	0.176	0.15	
55	1/30/2004	12:40:54 PM		25.597	22.569	25.422	23.662	25.649	#	50.121	50.343	19.767	30.279	-1.219	-5.938		44.945	0.048	14.643	0.003		38.00	0.63333	48.9	11.0	40.2	2.772	0.007	0.007	0.000	0.176	0.15	
56	1/30/2004	12:41:54 PM		25.573	22.565	25.393	23.638	25.66	#	49.98	50.217	19.559	30.41	-1.222	-5.938		45.72	0.048	14.643	0.003		39.00	0.65	48.7	11.2	40.2	2.771	0.007	0.007	0.000	0.176	0.15	
57	1/30/2004	12:42:54 PM		25.544	22.571	25.369	23.63	25.651	#	49.924	50.171	19.568	30.381	-1.222	-5.854		45.218	0.048	14.643	0.003		40.00	0.66667	48.7	11.1	40.2	2.768	0.007	0.007	0.000	0.176	0.15	
58	1/30/2004	12:43:54 PM		25.515	22.582	25.32	23.64	25.602	#	49.789	50.061	19.393	30.414	-1.222	-5.938		45.053	0.048	14.643	0.003		41.00	0.68333	48.6	11.0	40.1	2.765	0.007	0.007	0.000	0.177	0.15	
59	1/30/2004	12:44:54 PM		25.491	22.588	25.276	23.626	25.788	#	49.77	49.995	19.468	30.332	-1.219	-5.938		46.265	0.047	14.643	0.004		42.00	0.7	48.5	11.3	40.1	2.761	0.007	0.007	0.000	0.174	0.15	
60	1/30/2004	12:45:54 PM		25.457	22.589	25.202	23.628	25.704	#	49.849	50.148	19.307	30.543	-1.225	-5.944		42.492	0.047	14.643	0.003		43.00	0.71667	48.7	10.4	40.2	2.771	0.007	0.007	0.000	0.173	0.15	
61	1/30/2004	12:46:54 PM		25.428	22.59	25.157	23.613	25.525	#	49.851	50.124	19.338	30.57	-1.222	-5.938		45.702	0.047	14.643	0.003		44.00	0.73333	48.7	11.2	40.2	2.772	0.007	0.007	0.000	0.173	0.15	
62	1/30/2004	12:47:54 PM		25.404	22.591	25.133	23.619	25.521	#	49.975	50.238	19.411	30.582	-1.219	-5.941		44.231	0.047	14.643	0.003		45.00	0.75	48.8	10.8	40.3	2.777	0.007	0.007	0.000	0.173	0.15	
63	1/30/2004	12:48:54 PM		25.405	22.613	25.13	23.606	25.497	#	49.963	50.287	19.471	30.502	-1.219	-5.938		45.783	0.047	14.643	0.004		46.00	0.76667	48.8	11.2	40.2	2.774	0.007	0.007	0.000	0.174	0.15	
64	1/30/2004	12:49:54 PM		25.371	22.608	25.075	23.566	25.308	#	49.727	50.007	19.367	30.531	-1.219	-5.941		47.059	0.047	14.643	0.004		47.00	0.78333	48.5	11.5	40.1	2.767	0.007	0.007	0.000	0.174	0.15	
65	1/30/2004	12:50:54 PM		25.342	22.614	25.041	23.582	25.384	#	49.893	50.275	19.334	30.5	-1.219	-5.938		44.79	0.047	14.643	0.003		48.00	0.8	48.8	11.0	40.2	2.771	0.007	0.007	0.000	0.174	0.15	
66	1/30/2004	12:51:54 PM		25.322	22.614	25.001	23.622	25.229	#	49.859	50.211	19.445	30.43	-1.219	-5.941		44.657	0.047	14.643	0.003		49.00	0.81667	48.7	10.9	40.1	2.768	0.007	0.007	0.000	0.175	0.15	
67	1/30/2004	12:52:54 PM		25.297	22.614	24.957	23.703	24.91	#	49.693	50.032	19.605	30.069	-1.219	-5.944		43.511	0.046	14.643	0.003		50.00	0.83333	48.6	10.7	39.9	2.750	0.007	0.007	0.000	0.172	0.15	
68	1/30/2004	12:53:54 PM		25.262	22.614	24.931	23.793	25.434	#	49.897	50.225	19.736	30.067	-1.219	-5.938		47.994	0.046	14.643	0.004		51.00	0.85	48.8	11.8	40.0	2.757	0.007	0.007	0.000	0.172	0.15	
69	1/30/2004	12:54:54 PM		25.253	22.631	24.923	23.83	25.615	#	49.863	50.267	19.737	30.077	-1.222	-5.944		44.227	0.046	14.643	0.003		52.00	0.86667	48.8	10.8	40.0	2.756	0.007	0.007	0.000	0.172	0.15	
70	1/30/2004	12:55:54 PM		25.224	22.636	24.898	24.011	25.941	#	49.565	49.939	19.59	30.057	-1.219	-5.941		44.425	0.046	14.643	0.004		53.00	0.88333	48.5	10.9	39.8	2.745	0.007	0.007	0.000	0.173	0.15	

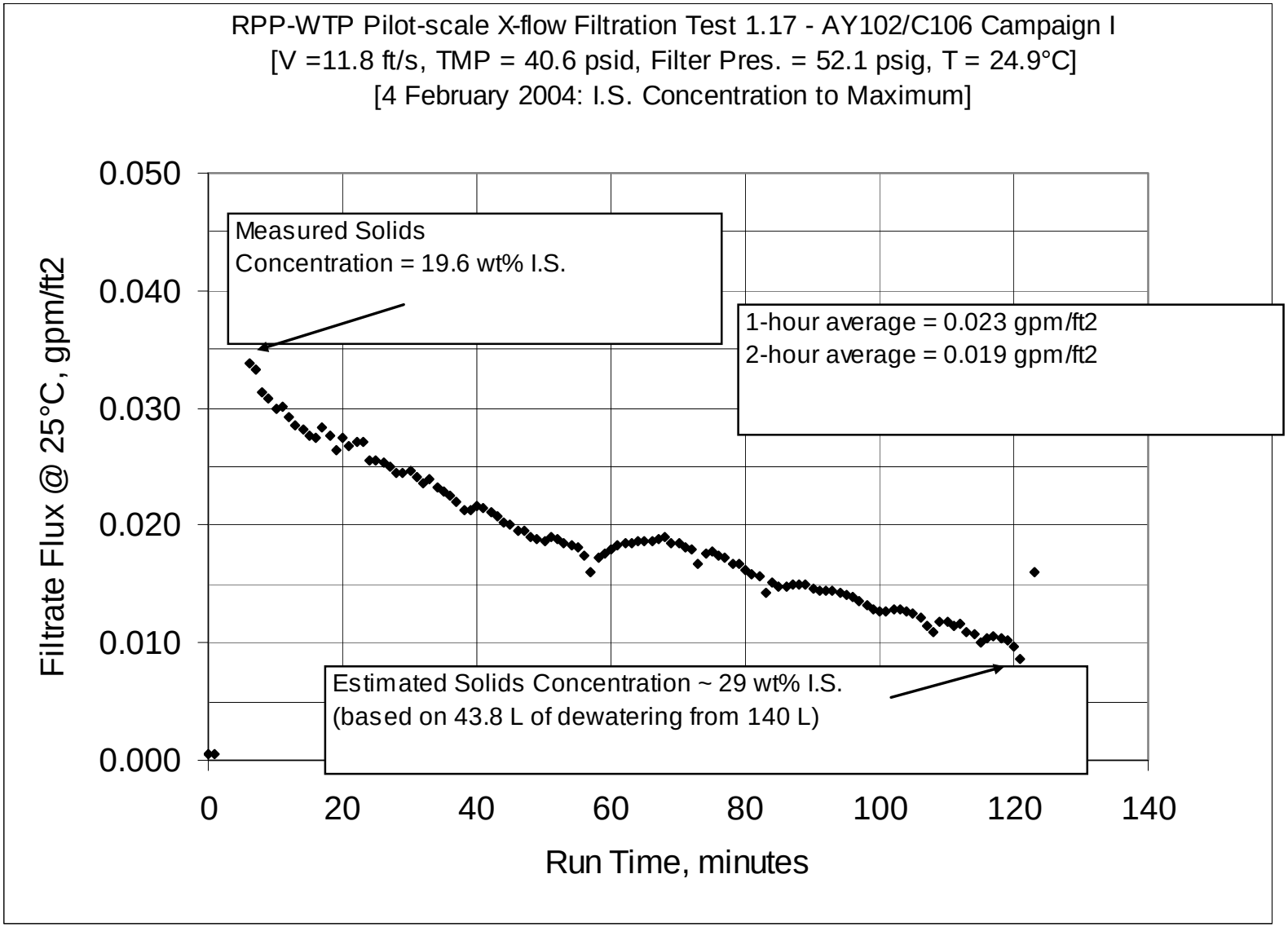
RUN # 1.16; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	1/30/2004	12:56:54 PM		25.21	22.643	24.875	23.952	25.033	#	49.646	50.043	19.514	30.137	-1.219	-5.944		44.721	0.046	14.643	0.003		54.00	0.9	48.6	11.0	39.9	2.750	0.007	0.007	0.000	0.173	0.15	
72	1/30/2004	12:57:54 PM		25.187	22.65	24.821	23.979	25.719	#	49.768	50.204	19.606	30.092	-1.222	-5.944		43.534	0.046	14.643	0.003		55.00	0.91667	48.7	10.7	39.9	2.753	0.007	0.007	0.000	0.173	0.15	
73	1/30/2004	12:58:54 PM		25.174	22.661	24.813	24.086	25.461	#	49.708	50.128	19.56	30.096	-1.219	-5.941		47.149	0.046	14.643	0.004		56.00	0.93333	48.7	11.6	39.9	2.751	0.007	0.007	0.000	0.173	0.15	
74	1/30/2004	12:59:54 PM		25.155	22.668	24.809	24.077	26.056	#	49.751	50.192	19.59	30.133	-1.219	-5.944		41.49	0.046	14.643	0.003		57.00	0.95	48.7	10.2	39.9	2.754	0.007	0.007	0.000	0.173	0.15	
75	1/30/2004	1:00:54 PM		25.143	22.675	24.787	24.085	25.769	#	49.835	50.31	19.523	30.303	-1.219	-5.944		45.804	0.046	14.643	0.004		58.00	0.96667	48.8	11.2	40.1	2.763	0.007	0.007	0.000	0.172	0.15	
76	1/30/2004	1:01:54 PM		25.123	22.675	24.742	24.145	25.135	#	50.05	50.503	19.563	30.412	-1.222	-5.944		46.659	0.046	14.643	0.003		59.00	0.98333	49.0	11.4	40.2	2.774	0.007	0.007	0.000	0.172	0.15	
77	1/30/2004	1:02:54 PM		25.116	22.709	24.72	24.254	25.008	#	49.72	50.202	19.233	30.449	-1.219	-5.944		45.583	0.046	14.643	0.003		60.00	1	48.7	11.2	40.1	2.764	0.007	0.007	0.000	0.172	0.15	
78	1/30/2004	1:03:54 PM		25.086	22.704	24.705	24.224	25.663	#	49.704	50.248	19.133	30.494	-1.222	-5.944		45.053	0.046	14.643	0.003		61.00	1.01667	48.8	11.0	40.1	2.765	0.007	0.007	0.000	0.172	0.15	
79	1/30/2004	1:04:54 PM		25.088	22.726	24.692	24.246	25.59	#	49.781	50.233	19.364	30.471	-1.222	-5.944		43.716	0.046	14.643	0.003		62.00	1.03333	48.8	10.7	40.1	2.767	0.007	0.007	0.000	0.172	0.15	
80	1/30/2004	1:05:54 PM		25.054	22.717	24.658	24.262	26.095	#	49.669	50.24	19.295	30.332	-1.225	-5.874		45.116	0.043	14.643	0.003		63.00	1.05	48.8	11.1	40.0	2.758	0.006	0.006	0.000	0.162	0.14	
81	1/30/2004	1:06:54 PM		25.062	22.75	24.666	24.35	26.293	#	49.694	50.275	19.105	30.445	-1.222	-5.895		44.287	0.046	14.643	0.003		64.00	1.06667	48.8	10.9	40.1	2.763	0.007	0.007	0.000	0.173	0.15	
82	1/30/2004	1:07:54 PM		25.049	22.767	24.638	24.392	26.31	#	49.942	50.443	19.325	30.599	-1.222	-5.938		46.914	0.046	14.643	0.004		65.00	1.08333	49.0	11.5	40.3	2.777	0.007	0.007	0.000	0.172	0.15	
83	1/30/2004	1:08:54 PM		25.036	22.785	24.625	24.43	26.582	#	49.729	50.265	19.279	30.408	-1.219	-5.938		44.669	0.046	14.643	0.003		66.00	1.1	48.8	10.9	40.1	2.763	0.007	0.007	0.000	0.173	0.15	
84	1/30/2004	1:09:54 PM		25.024	22.802	24.648	24.392	26.764	#	50.135	50.783	19.535	30.441	-1.222	-5.938		44.317	0.046	14.643	0.003		67.00	1.11667	49.3	10.9	40.3	2.778	0.007	0.007	0.000	0.172	0.15	
85	1/30/2004	1:10:54 PM		25.011	22.809	24.675	24.449	26.002	#	49.754	50.296	19.388	30.383	-1.219	-5.938		42.108	0.046	14.643	0.004		68.00	1.13333	48.8	10.3	40.1	2.763	0.007	0.007	0.000	0.173	0.15	
86	1/30/2004	1:11:54 PM		25.007	22.82	24.706	24.491	24.849	#	49.832	50.383	19.461	30.324	-1.222	-5.941		45.418	0.046	14.643	0.003		69.00	1.15	48.9	11.1	40.1	2.763	0.007	0.007	0.000	0.173	0.15	
87	1/30/2004	1:12:54 PM		24.981	22.805	24.726	24.42	24.148	#	49.907	50.509	19.497	30.34	-1.222	-5.938		46.023	0.046	14.643	0.003		70.00	1.16667	49.0	11.3	40.1	2.766	0.007	0.007	0.000	0.172	0.15	
88	1/30/2004	1:13:54 PM		24.994	22.832	24.773	24.427	24.901	#	49.627	50.221	19.293	30.316	-1.222	-5.941		44.26	0.046	14.643	0.003		71.00	1.18333	48.7	10.8	40.0	2.756	0.007	0.007	0.000	0.173	0.15	
89	1/30/2004	1:14:54 PM		24.996	22.859	24.815	24.474	25.967	#	49.542	50.14	19.191	30.412	-1.222	-5.941		46.772	0.046	14.643	0.003		72.00	1.2	48.7	11.5	40.0	2.756	0.007	0.007	0.000	0.172	0.15	
90	1/30/2004	1:15:54 PM		24.992	22.866	24.856	24.395	26.398	#	49.841	50.466	19.423	30.371	-1.219	-5.941		47.326	0.046	14.643	0.003		73.00	1.21667	49.0	11.6	40.1	2.765	0.007	0.007	0.000	0.172	0.15	
91	1/30/2004	1:16:54 PM		24.994	22.883	24.898	24.422	26.804	#	49.808	50.441	19.429	30.352	-1.219	-5.941		48.244	0.046	14.643	0.004		74.00	1.23333	49.0	11.8	40.1	2.763	0.007	0.007	0.000	0.172	0.15	
92	1/30/2004	1:17:54 PM		24.997	22.891	24.927	24.461	26.702	#	49.818	50.461	19.385	30.396	-1.222	-5.941		45.846	0.046	14.643	0.003		75.00	1.25	49.0	11.2	40.1	2.765	0.007	0.007	0.000	0.171	0.15	
93	1/30/2004	1:18:54 PM		25.021	22.92	24.971	24.595	26.476	#	49.687	50.439	19.278	30.276	-1.219	-5.938		43.386	0.046	14.643	0.004		76.00	1.26667	49.0	10.6	40.0	2.757	0.007	0.007	0.000	0.172	0.15	
94	1/30/2004	1:19:54 PM		25.018	22.937	24.983	24.577	26.843	#	49.729	50.441	19.352	30.285	-1.219	-5.941		46.409	0.046	14.643	0.004		77.00	1.28333	49.0	11.4	40.0	2.758	0.007	0.007	0.000	0.172	0.15	
95	1/30/2004	1:20:54 PM		25.031	22.945	25.006	24.495	26.731	#	49.615	50.312	19.347	30.24	-1.219	-5.941		44.552	0.046	14.643	0.003		78.00	1.3	48.8	10.9	39.9	2.753	0.007	0.007	0.000	0.172	0.15	
96	1/30/2004	1:21:54 PM		25.049	22.973	25.039	24.458	26.564	#	49.635	50.387	19.293	30.223	-1.219	-5.938		45.005	0.046	14.643	0.003		79.00	1.31667	48.9	11.0	39.9	2.753	0.007	0.007	0.000	0.172	0.15	
97	1/30/2004	1:22:54 PM		25.061	22.985	25.056	24.425	26.527	#	49.673	50.376	19.399	30.244	-1.222	-5.941		45.13	0.046	14.643	0.003		80.00	1.33333	48.9	11.1	40.0	2.755	0.007	0.007	0.000	0.171	0.15	
98	1/30/2004	1:23:54 PM		25.077	23.007	25.092	24.436	26.358	#	49.654	50.337	19.422	30.258	-1.219	-5.938		45.339	0.046	14.643	0.004		81.00	1.35	48.9	11.1	40.0	2.755	0.007	0.007	0.000	0.171	0.15	
99	1/30/2004	1:24:54 PM		25.069	23.014	25.054	24.317	26.355	#	49.694	50.42	19.36	30.299	-1.222	-5.944		46.217	0.046	14.643	0.003		82.00	1.36667	48.9	11.3	40.0	2.758	0.007	0.007	0.000	0.171	0.15	
100	1/30/2004	1:25:54 PM		25.096	23.035	25.1	24.264	26.441	#	49.536	50.271	19.157	30.332	-1.219	-5.941		44.719	0.046	14.643	0.004		83.00	1.38333	48.8	11.0	39.9	2.753	0.007	0.007	0.000	0.171	0.15	
101	1/30/2004	1:26:54 PM		25.097	23.041	25.102	24.23	26.358	#	49.588	50.345	19.2	30.328	-1.222	-5.941		45.453	0.046	14.643	0.003		84.00	1.4	48.9	11.1	40.0	2.755	0.007	0.007	0.000	0.171	0.15	
102	1/30/2004	1:27:54 PM		25.108	23.058	25.118	24.241	26.449	#	49.438	50.244	18.91	30.445	-1.219	-5.938		43.497	0.046	14.643	0.004		85.00	1.41667	48.8	10.7	39.9	2.754	0.007	0.007	0.000	0.171	0.15	
103	1/30/2004	1:28:54 PM		25.114	23.064	25.124	24.207	26.435	#	49.693	50.414	19.152	30.56	-1.219	-5.938		43.956	0.046	14.643	0.003		86.00	1.43333	48.9	10.8	40.1	2.767	0.007	0.007	0.000	0.170	0.14	
104	1/30/2004	1:29:54 PM		25.126	23.08	25.126	24.203	26.391	#	49.872	50.747	18.983	30.779	-1.222	-5.944		44.913	0.046	14.643	0.003		87.00	1.45	49.3	11.0	40.3	2.780	0.007	0.007	0.000	0.169	0.14	
105	1/30/2004	1:30:54 PM		25.142	23.087	25.137	24.195	26.448	#	49.751	50.457	18.994	30.765	-1.222	-5.938		45.095	0.046	14.643	0.003		88.00	1.46667	49.0	11.1	40.3	2.776	0.007	0.007	0.000	0.170	0.14	
106	1/30/2004	1:31:54 PM		25.148	23.103	25.143	24.156	26.254	#	49.843	50.638	19.056	30.751	-1.222	-5.941		45.27	0.046	14.643	0.003		89.00	1.48333	49.2	11.1	40.3	2.778	0.007	0.007	0.000	0.170	0.14	
107	1/30/2004	1:32:54 PM		25.138	23.093	25.133	24.106	25.296	#	49.971	50.758	19.216	30.71	-1.219	-5.941		43.399	0.046	14.643	0.003		90.00	1.5	49.3	10.6	40.3	2.781	0.007	0.007	0.000	0.169	0.14	
108	1/30/2004	1:33:54 PM		25.159	23.099	25.159	24.071	25.571	#	49.428	50.269	18.696	30.738	-1.219	-5.947		44.415	0.046	14.643	0.004		91.00	1.51667	48.8	10.9	40.1	2.764	0.007	0.007	0.000	0.170	0.14	
109	1/30/2004	1:34:54 PM		25.163	23.103	25.158	24.055	25.78	#	49.712	50.634	18.994	30.627	-1.222	-5.898		43.628	0.046	14.643	0.004		92.00	1.53333	49.2	10.7	40.2	2.770	0.007	0.007	0.000	0.170	0.14	
110	1/30/2004	1:35:54 PM		25.167	23.117	25.182	24.049	25.999	#	49.414	50.225	18.738	30.738	-1.222	-5.947		45.116	0.046	14.643	0.003		93.00	1.55	48.8	11.1	40.1	2.763	0.007	0.007	0.000	0.170	0.14	
111	1/30/2004	1:36:54 PM		25.16	23.11	25.175	24.002	26.007	#	49.25	50.053	18.723	30.642	-1.219	-5.947		45.702	0.046	14.643	0.004		94.00	1.56667	48.6	11.2	39.9	2.754	0.007	0.007	0.000	0.171	0.15	
112	1/30/2004	1:37:54 PM		25.165	23.114	25.179	24.032	25.901	#	49.708	50.571	18.961	30.687	-1.225	-5.953		45.75	0.046	14.643	0.003		95.00	1.58333	49.1	11.2	40.2	2.771	0.007	0.007	0.000	0.170	0.14	
113	1/30/2004	1:38:54 PM		25.163	23.113	25.188	24.055	25.44	#	49.119	50.034	18.616	30.588	-1.222	-5.947		44.742	0.046	14.643	0.003		96.00	1.6	48.6	11.0	39.9	2.748	0.007	0.007	0.000	0.171	0.15	
114	1/30/2004	1:39:54 PM		25.168	23.113	25.188	24.055	25.74	#	49.594	50.478	18.947	30.636	-1.219	-5.95		44.655	0.046	14.643	0.004		97.00	1.61667	49.0	10.9	40.1	2.766	0.007	0.007	0.000	0.170	0.14	
115	1/30/2004	1:40:54 PM		25.193	23.138	25.238	24.085	26.004	#	49.563	50.519	18.883	30.619	-1.216	-5.947		45.032	0.046	14.643	0.004		98.00	1.63333	49.0	11.0	40.1	2.764	0.007	0.007	0.000	0.170	0.14	
116	1/30/2004	1:41:54 PM		25.191	23.121	25.231	24.109	25.673	#	49.741	50.611	19.117	30.609	-1.216	-5.944		46.801	0.046	14.643	0.004		99.00	1.65	49.1	11.5	40.2	2.770	0.007	0.007	0.000	0.170	0.14	
117	1/30/2004	1:42:54 PM		25.182	23.112	25.222	24.044	25.689	#	49.615	50.544	19.046	30.527	-1.219	-5.95		44.842	0.045	14.643	0.003		100.00	1.66667	49.1	11.0	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
118	1/30/2004	1:43:54 PM		25.171	23.1	25.211	23.978	25.478	#	49.72	50.702	19.062	30.597	-1.222	-5.947		44.901	0.045	14.643	0.003		101.00	1.68333	49.2	11.0	40.2	2.769	0.007	0.007	0.000	0.166	0.14	
119	1/30/2004	1:44:54 PM		25.175	23.11	25.225	23.952	25.642	#	49.588	50.565	18.963	30.537	-1.219	-5.947		44.882	0.045	14.643	0.003		102.00	1.7	49.1	11.0	40.1	2.762	0.007	0.007	0.000	0.166	0.14	
120	1/30/2004	1:45:54 PM		25.183	23.108	25.233	23.945	25.755	#	49.488	50.515	18.845	30.56	-1.219	-5.947		45.107	0.046	14.643	0.004		103.00	1.71667	49.0	11.1	40.0	2.760	0.007	0.007	0.000	0.170	0.14	
121	1/30/2004	1:46:54 PM		25.161	23.08	25.205	23.912	24.963	#	49.472	50.49	18.973	30.453	-1.216	-5.947		44.427	0.045	14.643	0.004		104.00	1.73333	49.0	10.9	40.0	2.755	0.007	0.007	0.000	0.167	0.14	
122	1/30/2004	1:47:54 PM		25.165	23.09	25.205	23.901	25.497	#	49.631	50.615	19.043	30.552	-1.219	-5.95		44.878	0.045	14.643	0.003		105.00	1.75	49.1	11.0	40.1	2.764	0.007	0.007	0.000	0.166	0.14	
123	1/30/2004	1:48:54 PM		25.179	23.094	25.229	23.926	25.646	#	49.413	50.459	18.881	30.433	-1.222	-5.95		44.799	0.045	14.643	0.004		106.00	1.76667	49.0	11.0	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
124	1/30/2004	1:49:54 PM		25.189	23.094	25.239	23.926	25.911	#	49.32	50.403	18.717	30.519	-1.219	-5.95		44.573	0.045	14.643	0.003		107.00	1.78333	48.9	10.9	39.9	2.752	0.007	0.007	0.000	0.167	0.14	
125	1/30/2004	1:50:54 PM		25.194	23.093	25.254	23.95	25.925	#	49.706	50.75	19.1	30.453	-1.219	-5.95		44.242	0.045	14.643	0.004		108.00	1.8	49.3	10.8	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
126	1/30/2004	1:51:54 PM		25.199	23.089	25.254	24.001	26.066	#	49.694	50.673	19.087	30.498	-1.219	-5.95		45.172	0.045	14.643	0.004		109.00	1.81667	49.2	11.1	40.1	2.764	0.007	0.007	0.000	0.166	0.14	
127	1/30/2004	1:52:54 PM		25.204	23.094	25.264	24.026	26.071	#	49.467	50.522	18.982	30.398	-1.222	-5.95		44.888	0.045	14.643	0.003		110.00	1.83333	49.0	11.0	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
128	1/30/2004	1:53:54 PM		25.2	23.095	25.27	24.042	25.897	#	49.523	50.634	18.981	30.43	-1.219	-5.947		45.043	0.045	14.643	0.004		111.00	1.85	49.2	11.0	40.0	2.756	0.007	0.007	0.000	0.167	0.14	
129	1/30/2004	1:54:54 PM		25.206	23.095	25.265	24.073	26.072	#	49.544	50.59	19.017	30.51	-1.219	-5.947		46.304	0.045	14.643	0.004		112.00	1.86667	49.1	11.3	40.0	2.760	0.007	0.007	0.000	0.166	0.14	
130	1/30/2004	1:55:54 PM		25.206	23.09	25.265	24.078	26.002	#	49.401	50.486	18.861	30.449	-1.222	-5.95		46.874	0.045	14.643	0.004		113.00	1.88333	49.0	11.5	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
131	1/30/2004	1:56:54 PM		25.211	23.101	25.291	24.098	25.673	#	49.183	50.246	18.743	30.49	-1.216	-5.944		45.017	0.045	14.643	0.004		114.00	1.9	48.8	11.0	39.8	2.747	0.007	0.007	0.000	0.167	0.14	
132	1/30/2004	1:57:54 PM		25.222	23.107	25.307	24.094	25.933	#	49.366	50.478	18.908	30.379	-1.219	-5.947		44.836	0.045	14.643	0.004		115.00	1.91667	49.0	11.0	39.9	2.749	0.007	0.007	0.000	0.167	0.14	
133	1/30/2004	1:58:54 PM		25.206	23.086	25.271	24.043	25.788	#	49.629	50.745	19.16	30.359	-1.222	-5.953		45.654	0.045	14.643	0.003		116.00	1.93333	49.3	11.2	40.0	2.757	0.007	0.007	0.000	0.166	0.14	
134	1/30/2004	1:59:54 PM		25.221	23.096	25.276	24.078	25.798	#	49.407	50.555	18.966	30.363	-1.216	-5.947		46.922	0.045	14.643	0.003		117.00	1.95	49.1	11.5	39.9	2.750	0.007	0.007	0.000	0.167	0.14	
135	1/30/2004	2:00:54 PM		25.216	23.1	25.275	24.053	25.797	#	49.231	50.387	18.84	30.301	-1.222	-5.95		43.487	0.045	14.643	0.004		118.00	1.96667	48.9	10.7	39.8	2.742	0.007	0.007	0.000	0.167	0.14	
136	1/30/2004	2:01:54 PM		25.215	23.095	25.275	24.047	25.547	#	49.44	50.507	19.048	30.408	-1.219	-5.95		45.082	0.045	14.643	0.003		119.00	1.98333	49.0	11.0	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
137	1/30/2004	2:02:54 PM		25.21	23.095	25.265	24.047	25.737	#	49.161	50.399	18.808	30.26	-1.222	-5.903		44.44	0.045	14.643	0.003		120.00	2	48.9	10.9	39.7	2.738	0.007	0.007	0.000	0.168	0.14	
138	1/30/2004	2:03:54 PM		25.216	23.095	25.265	24.103	25.837	#	49.324	50.528	18.924	30.348	-1.219	-5.938		45.622	0.045	14.643	0.003		121.00	2.01667	49.1	11.2	39.8	2.747	0.007	0.007	0.000	0.167	0.14	
139	1/30/2004	2:04:54 PM		25.227	23.097	25.267	24.074	25.973	#	49.48	50.683	19.032	30.334	-1.222	-5.938		43.77	0.045	14.643	0.003		122.00	2.03333	49.2	10.7	39.9	2.751	0.007	0.007	0.000	0.167	0.14	
140	1/30/2004	2:05:54 PM		25.239	23.104	25.269	24.066	25.99	#	49.469	50.708	18.995	30.268	-1.222	-5.944		45.848	0.045	14.643	0.003		123.00	2.05	49.2	11.2	39.9	2.749	0.007	0.007	0.000	0.167	0.14	

RUN # 1.16; STEADY STATE TEST AT 25 WT% UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	1/30/2004	2:06:54 PM		25.228	23.098	25.263	24.05	25.985	#	49.326	50.47	19.016	30.318	-1.222	-5.941		45.176	0.045	14.643	0.003		124.00	2.06667	49.0	11.1	39.8	2.746	0.007	0.007	0.000	0.167	0.14	
142	1/30/2004	2:07:54 PM		25.229	23.104	25.274	24.036	26.04	#	48.893	50.034	18.746	30.217	-1.219	-5.944		44.356	0.045	14.643	0.004		125.00	2.08333	48.6	10.9	39.6	2.727	0.007	0.007	0.000	0.168	0.14	
143	1/30/2004	2:08:54 PM		25.234	23.104	25.274	24.021	26.09	#	49.275	50.434	18.938	30.287	-1.219	-5.941		43.559	0.045	14.643	0.004		126.00	2.1	49.0	10.7	39.8	2.743	0.007	0.007	0.000	0.167	0.14	
144	1/30/2004	2:09:54 PM		25.234	23.104	25.294	24.076	26.22	#	49.245	50.551	18.837	30.235	-1.216	-5.938		43.315	0.045	14.643	0.004		127.00	2.11667	49.1	10.6	39.7	2.740	0.007	0.007	0.000	0.167	0.14	
145	1/30/2004	2:10:54 PM		25.234	23.104	25.279	24.016	26.345	#	49.368	50.602	18.982	30.297	-1.219	-5.941		44.388	0.045	14.643	0.004		128.00	2.13333	49.1	10.9	39.8	2.746	0.007	0.007	0.000	0.167	0.14	
146	1/30/2004	2:11:54 PM		25.234	23.104	25.284	23.961	26.126	#	49.36	50.606	19.016	30.207	-1.219	-5.941		46.392	0.045	14.643	0.004		129.00	2.15	49.1	11.4	39.8	2.743	0.007	0.007	0.000	0.167	0.14	
147	1/30/2004	2:12:54 PM		25.224	23.093	25.279	23.945	26.05	#	49.318	50.542	19.059	30.266	-1.219	-5.941		44.559	0.044	14.643	0.003		130.00	2.16667	49.1	10.9	39.8	2.744	0.007	0.007	0.000	0.164	0.14	
148	1/30/2004	2:13:54 PM		25.218	23.103	25.288	23.995	26.069	#	49.32	50.596	18.991	30.217	-1.219	-5.941		44.3	0.045	14.643	0.004		131.00	2.18333	49.1	10.9	39.8	2.742	0.007	0.007	0.000	0.167	0.14	
149	1/30/2004	2:14:54 PM		25.222	23.097	25.292	24.03	26.044	#	49.494	50.762	19.157	30.192	-1.219	-5.941		45.841	0.044	14.643	0.004		132.00	2.2	49.3	11.2	39.8	2.747	0.007	0.007	0.000	0.163	0.14	
150	1/30/2004	2:15:54 PM		25.222	23.102	25.297	24.05	25.939	#	49.223	50.567	18.918	30.213	-1.222	-5.941		46.707	0.045	14.643	0.004		133.00	2.21667	49.1	11.4	39.7	2.738	0.007	0.007	0.000	0.168	0.14	
151	1/30/2004	2:16:54 PM		25.22	23.08	25.28	24.012	25.427	#	49.148	50.472	18.845	30.199	-1.219	-5.938		43.021	0.045	14.643	0.003		134.00	2.23333	49.0	10.5	39.7	2.735	0.007	0.007	0.000	0.168	0.14	
152	1/30/2004	2:17:54 PM		25.236	23.095	25.295	24.028	25.143	#	49.43	50.739	19.12	30.213	-1.214	-5.938		43.877	0.045	14.643	0.004		135.00	2.25	49.3	10.8	39.8	2.746	0.007	0.007	0.000	0.167	0.14	
153																																	
154		Averages		25.4	22.8	25.3	24.1	25.6	#	49.5	50.5	19.2	30.2	-1.1	-5.5	#	45.2	0.0	14.6	0.0	#	70.5	1.2	49.0	11.1	39.8	2.745	0.007	0.007	0.0002	0.174	0.148	#
155		Maximum		26.5	23.1	26.0	24.6	26.8	#	51.1	51.4	20.3	32.1	0.3	0.6	#	48.6	0.1	14.6	0.0	#	135.0	2.3	49.9	11.9	41.6	2.867	0.009	0.009	0.0002	0.231	0.197	#
156		Median		25.2	22.8	25.2	24.1	25.7	#	49.7	50.5	19.2	30.4	-1.2	-5.9	#	45.1	0.0	14.6	0.0	#	70.5	1.2	49.0	11.0	40.1	2.762	0.007	0.007	0.0002	0.172	0.146	#
157		Minimum		25.0	22.4	24.6	23.6	23.8	#	44.9	49.9	17.7	26.5	-1.2	-6.0	#	41.5	0.0	14.6	0.0	#	6.0	0.1	48.5	10.2	35.8	2.471	0.006	0.006	0.0002	0.162	0.138	#
158		2 x Std Dev		0.737	0.515	0.754	0.493	1.287	#	2.464	0.553	0.874	1.960	0.770	3.276	#	2.506	0.005	0.000	0.001	#	75.053	1.251	0.553	0.614	2.185	0.151	0.001	0.001	0.0000	0.021	0.018	#
159	Number of Points Used*			130	130	130	130	130	#	130	130	130	130	130	130	0	130	130	130	130	0	130	130	130	130	130	130	130	130	130	130	130	0
160		* Backpulse points in box are not included																															
161																																	
162																											2.3-hour avg. =		0.0069				
163																											1-hour avg. =		0.0071				

RUN # 1.17; STEADY STATE TEST AT <20 WT % UDS



RUN # 1.17; STEADY STATE TEST AT <20 WT % UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/4/2004	8:01:53 AM		22.179	17.007	13.889	22.838	14.707		0.054	-0.052	0.009	0.006	-0.174	0.075		-0.081	0.003	14.643	0.005				Filter Surface		6.707	FT2						
8	2/4/2004	8:02:24 AM		22.179	17.007	13.889	22.838	14.707		0.054	-0.052	0.009	0.006	-0.174	0.075		-0.081	0.003	14.643	0.005				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/4/2004	8:02:25 AM		22.168	16.992	13.853	22.757	14.733		0.052	-0.052	0.008	0.002	-0.183	0.072		-0.083	0.003	14.643	0.004													
10	2/4/2004	8:02:26 AM		22.169	17.003	13.859	22.763	14.743		0.052	-0.05	0.008	0.002	-0.174	0.069		-0.083	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/4/2004	8:02:27 AM		22.163	16.992	13.853	22.757	14.738		0.052	-0.05	0.008	0.002	-0.174	0.069		-0.083	0.003	14.643	0.004													
12	2/4/2004	8:02:28 AM		22.168	16.992	13.858	22.757	14.728		0.052	-0.05	0.008	0.002	-0.18	0.069		-0.083	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/4/2004	8:02:29 AM		22.174	16.997	13.864	22.758	14.743		0.052	-0.052	0.008	0.002	-0.215	0.069		-0.081	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/4/2004	8:02:30 AM		22.168	16.997	13.853	22.757	14.728		0.054	-0.052	0.008	0	-0.197	0.069		-0.083	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/4/2004	8:11:49 AM		22.263	17.062	22.403	22.887	16.238		9.476	48.841	10.662	-1.287	34.694	88.495		49.621	0.003	14.643	0.004		0	0	47.4	12.2	4.1	0.282	0.000	0.000	0.000	0.118	0.10	
18	2/4/2004	8:12:49 AM		22.013	17.098	22.313	22.943	16.422		-5.892	48.405	7.12	-13.062	49.93	50.859		50.249	0.003	14.643	0.966		1.00	0.01667	46.9	12.3	-9.5	-0.653	0.000	0.000	0.000	-0.051	-0.04	
19	2/4/2004	8:13:49 AM		22.457	17.121	22.1	22.895	16.592		41.999	48.405	8.692	32.891	1.548	0.329		51.411	0.537	14.643	0.004		2.00	0.03333	46.9	12.6	37.4	2.582	0.080	0.087	0.002	2.322	1.98	
20	2/4/2004	8:14:49 AM		22.526	17.16	21.962	22.939	16.858		43.559	49.253	11.501	31.539	0.665	0.407		48.015	0.238	14.643	0.004		3.00	0.05	47.8	11.8	37.5	2.589	2.183	2.380	0.063	63.388	53.94	
21	2/4/2004	8:15:49 AM		22.534	17.198	21.789	22.982	16.891		43.837	49.357	12.257	31.153	0.668	0.474		50.387	0.206	14.643	0.004		4.00	0.06667	47.9	12.3	37.5	2.585	2.183	2.392	0.064	63.796	54.29	
22	2/4/2004	8:16:49 AM		22.416	17.237	21.601	22.95	16.895		46.209	49.278	12.633	33.154	-1.214	-2.706		49.98	0.442	14.643	0.004		5.00	0.08333	47.8	12.2	39.7	2.736	0.066	0.073	0.002	1.829	1.56	
23	2/4/2004	8:17:49 AM		22.354	17.271	21.388	22.968	17.095		48.54	49.707	13.103	35.048	-1.214	-4.805		46.64	0.205	14.643	0.004		6.00	0.1	48.2	11.4	41.8	2.882	0.031	0.034	0.001	0.811	0.69	
24	2/4/2004	8:18:49 AM		22.358	17.33	21.215	23.037	17.175		48.294	49.446	13.254	34.599	-1.211	-4.79		49.31	0.2	14.643	0.004		7.00	0.11667	48.0	12.1	41.4	2.858	0.030	0.033	0.001	0.801	0.68	
25	2/4/2004	8:19:49 AM		22.291	17.364	21.058	23.016	17.234		48.862	49.452	13.466	34.988	-1.216	-5.895		49.187	0.188	14.643	0.004		8.00	0.13333	48.0	12.1	41.9	2.891	0.028	0.031	0.001	0.748	0.64	
26	2/4/2004	8:20:49 AM		22.22	17.414	20.946	23.065	17.395		48.93	49.462	13.599	34.894	-1.214	-5.981		53.332	0.184	14.643	0.004		9.00	0.15	48.0	13.1	41.9	2.890	0.027	0.031	0.001	0.735	0.63	
27	2/4/2004	8:21:49 AM		22.139	17.449	20.814	23.054	17.409		49.19	49.678	13.796	34.929	-1.214	-6.091		47.669	0.178	14.643	0.004		10.00	0.16667	48.2	11.7	42.1	2.900	0.027	0.030	0.001	0.711	0.61	
28	2/4/2004	8:22:49 AM		22.087	17.487	20.727	23.093	17.453		49.409	49.8	13.937	35.071	-1.214	-6.068		46.59	0.179	14.643	0.004		11.00	0.18333	48.3	11.4	42.2	2.912	0.027	0.030	0.001	0.714	0.61	
29	2/4/2004	8:23:49 AM		22.035	17.531	20.644	23.086	17.568		49.27	49.703	13.992	34.835	-1.211	-6.019		49.2	0.173	14.643	0.004		12.00	0.2	48.2	12.1	42.1	2.899	0.026	0.029	0.001	0.695	0.59	
30	2/4/2004	8:24:49 AM		21.983	17.566	20.558	23.105	17.648		49.669	50.08	14.246	34.951	-1.216	-6.138		48.507	0.168	14.643	0.004		13.00	0.21667	48.6	11.9	42.3	2.917	0.025	0.028	0.001	0.672	0.57	
31	2/4/2004	8:25:49 AM		21.937	17.615	20.521	23.134	17.808		48.148	48.61	15.783	31.904	-1.216	-6.036		51.826	0.166	14.643	0.004		14.00	0.23333	47.1	12.7	40.0	2.760	0.025	0.028	0.001	0.703	0.60	
32	2/4/2004	8:26:49 AM		21.911	17.685	20.5	23.178	18.039		48.789	49.154	15.127	33.174	-1.214	-6.138		50.628	0.163	14.643	0.004		15.00	0.25	47.7	12.4	41.0	2.826	0.024	0.028	0.001	0.674	0.57	
33	2/4/2004	8:27:49 AM		21.819	17.709	20.438	23.142	18.22		48.605	49.011	14.727	33.421	-1.219	-5.993		51.55	0.162	14.643	0.004		16.00	0.26667	47.5	12.6	41.0	2.828	0.024	0.028	0.001	0.671	0.57	
34	2/4/2004	8:28:49 AM		21.773	17.759	20.448	23.075	18.194		48.885	49.278	14.849	33.55	-1.214	-6.036		49.946	0.167	14.643	0.004		17.00	0.28333	47.8	12.2	41.2	2.842	0.025	0.028	0.001	0.688	0.59	
35	2/4/2004	8:29:49 AM		21.711	17.793	20.472	23.175	18.274		48.843	49.106	14.782	33.671	-1.214	-6.048		47.485	0.163	14.643	0.004		18.00	0.3	47.6	11.6	41.3	2.845	0.024	0.028	0.001	0.670	0.57	
36	2/4/2004	8:30:49 AM		21.671	17.853	20.501	23.194	18.314		49.057	49.338	15.012	33.609	-1.214	-6.01		45.201	0.156	14.643	0.004		19.00	0.31667	47.9	11.1	41.3	2.850	0.023	0.026	0.001	0.640	0.54	
37	2/4/2004	8:31:49 AM		21.639	17.903	20.525	23.228	18.358		49.389	49.68	15.169	33.702	-1.216	-6.1		51.615	0.162	14.643	0.004		20.00	0.33333	48.2	12.6	41.5	2.864	0.024	0.027	0.001	0.661	0.56	
38	2/4/2004	8:32:49 AM		21.608	17.942	20.554	23.323	18.407		49.32	49.568	15.278	33.597	-1.214	-6.051		49.974	0.158	14.643	0.004		21.00	0.35	48.1	12.2	41.5	2.858	0.024	0.027	0.001	0.645	0.55	
39	2/4/2004	8:33:49 AM		21.592	18.002	20.599	23.301	18.537		49.476	49.616	15.191	33.891	-1.214	-6.114		50.393	0.16	14.643	0.004		22.00	0.36667	48.1	12.3	41.7	2.874	0.024	0.027	0.001	0.649	0.55	
40	2/4/2004	8:34:49 AM		21.545	18.016	20.572	23.234	18.622		49.218	49.464	15.323	33.441	-1.216	-6.062		48.019	0.16	14.643	0.004		23.00	0.38333	48.0	11.8	41.3	2.850	0.024	0.027	0.001	0.655	0.56	
41	2/4/2004	8:35:49 AM		21.529	18.066	20.596	23.239	18.656		49.814	50.146	15.816	33.431	-1.214	-6.158		48.036	0.151	14.643	0.004		24.00	0.4	48.7	11.8	41.6	2.870	0.023	0.026	0.001	0.613	0.52	
42	2/4/2004	8:36:49 AM		21.523	18.105	20.626	23.288	18.802		49.733	49.956	15.872	33.386	-1.214	-6.097		48.388	0.151	14.643	0.004		25.00	0.41667	48.5	11.9	41.6	2.865	0.023	0.026	0.001	0.614	0.52	
43	2/4/2004	8:37:49 AM		21.527	18.154	20.66	23.322	18.725		49.532	49.707	15.852	33.223	-1.216	-6.195		45.239	0.15	14.643	0.004		26.00	0.43333	48.2	11.1	41.4	2.853	0.022	0.025	0.001	0.612	0.52	
44	2/4/2004	8:38:49 AM		21.535	18.193	20.694	23.336	18.829		49.554	49.836	15.875	33.213	-1.214	-6.195		50.887	0.148	14.643	0.004		27.00	0.45	48.4	12.5	41.4	2.853	0.022	0.025	0.001	0.603	0.51	
45	2/4/2004	8:39:49 AM		21.519	18.218	20.693	23.34	19.313		49.801	50.064	16.021	33.297	-1.214	-6.221		47.75	0.145	14.643	0.004		28.00	0.46667	48.6	11.7	41.5	2.865	0.022	0.024	0.001	0.588	0.50	
46	2/4/2004	8:40:49 AM		21.519	18.263	20.707	23.324	19.766		49.623	49.885	16.016	33.121	-1.216	-6.08		47.8	0.145	14.643	0.004		29.00	0.48333	48.4	11.7	41.4	2.852	0.022	0.024	0.001	0.591	0.50	
47	2/4/2004	8:41:49 AM		21.518	18.302	20.701	23.303	19.342		49.725	49.956	16.123	33.063	-1.219	-6.19		51.321	0.146	14.643	0.004		30.00	0.5	48.5	12.6	41.4	2.854	0.022	0.025	0.001	0.595	0.51	
48	2/4/2004	8:42:49 AM		21.543	18.363	20.731	23.328	19.795		49.55	49.734	16.139	33.02	-1.216	-6.207		46.843	0.143	14.643	0.004		31.00	0.51667	48.3	11.5	41.3	2.846	0.021	0.024	0.001	0.583	0.50	
49	2/4/2004	8:43:49 AM		21.551	18.391	20.73	23.341	19.531		49.797	50.039	16.336	33.039	-1.216	-6.227		48.395	0.14	14.643	0.004		32.00	0.53333	48.6	11.9	41.4	2.856	0.021	0.024	0.001	0.569	0.48	
50	2/4/2004	8:44:49 AM		21.576	18.457	20.754	23.346	20.14		49.955	50.302	16.456	32.969	-1.214	-6.201		47.873	0.142	14.643	0.004		33.00	0.55	48.8	11.7	41.5	2.859	0.021	0.024	0.001	0.576	0.49	
51	2/4/2004	8:45:49 AM		21.6	18.496	20.773	23.314	20.21		50.154	50.449	16.721	32.965	-1.216	-6.216		46.425	0.138	14.643	0.004		34.00	0.56667	49.0	11.4	41.6	2.865	0.021	0.023	0.001	0.559	0.48	
52	2/4/2004	8:46:49 AM		21.624	18.546	20.803	23.414	19.836		50.235	50.6	16.799	32.973	-1.216	-6.213		45.47	0.136	14.643	0.004		35.00	0.58333	49.1	11.1	41.6	2.868	0.020	0.023	0.001	0.549	0.47	
53	2/4/2004	8:47:49 AM		21.699	18.596	20.827	23.403	19.77		50.133	50.347	16.958	32.819	-1.214	-6.219		48.482	0.134	14.643	0.004		36.00	0.6	48.9	11.9	41.5	2.860	0.020	0.023	0.001	0.543	0.46	
54	2/4/2004	8:48:49 AM		21.753	18.64	20.851	23.352	20.318		50.071	50.347	18.198	31.35	-1.216	-6.236		46.945	0.131	14.643	0.004		37.00	0.61667	48.9	11.5	40.7	2.807	0.020	0.022	0.001	0.540	0.46	
55	2/4/2004	8:49:49 AM		21.772	18.694	20.916	23.401	20.422		49.592	49.877	18.05	31.116	-1.216	-6.245		52.422	0.127	14.643	0.004		38.00	0.63333	48.4	12.8	40.4	2.782	0.019	0.021	0.001	0.527	0.45	
56	2/4/2004	8:50:49 AM		21.785	18.739	20.959	23.435	20.169		49.801	50.151	17.871	31.44	-1.216	-6.172		49.763	0.127	14.643	0.004		39.00	0.65	48.7	12.2	40.6	2.801	0.019	0.021	0.001	0.523	0.45	
57	2/4/2004	8:51:49 AM		21.789	18.783	20.983	23.453	20.475		49.49	49.871	17.774	31.202	-1.216	-6.245		48.442	0.129	14.643	0.004		40.00	0.66667	48.4	11.9	40.3	2.782	0.019	0.022	0.001	0.535	0.45	
58	2/4/2004	8:52:49 AM		21.793	18.827	21.012	23.432	20.619		49.897	50.271	17.93	31.5	-1.216	-6.247		50.343	0.129	14.643	0.004		41.00	0.68333	48.8	12.3	40.7	2.806	0.019	0.022	0.001	0.530	0.45	
59	2/4/2004	8:53:49 AM		21.842	18.897	21.092	23.507	20.956		50.195	50.437	18.314	31.467	-1.211	-6.253		47.733	0.127	14.643	0.004		42.00	0.7	49.0	11.7	40.8	2.815	0.019	0.021	0.001	0.518	0.44	
60	2/4/2004	8:54:49 AM		21.841	18.926	21.106	23.475	21.07		49.855	50.269	18.521	30.87	-1.216	-6.242		43.117	0.125	14.643	0.004		43.00	0.71667	48.8	10.6	40.4	2.783	0.019	0.021	0.001	0.516	0.44	
61	2/4/2004	8:55:49 AM		21.864	18.975	21.154	23.448	21.199		50.075	50.37	18.875	30.781	-1.216	-6.256		50.351	0.122	14.643	0.004		44.00	0.73333	48.9	12.3	40.4	2.787	0.018	0.020	0.001	0.502	0.43	
62	2/4/2004	8:56:49 AM		21.893	19.024	21.224	23.537	21.585		50.284	50.743	19.158	30.601	-1.214	-6.273		45.848	0.121	14.643	0.004		45.00	0.75	49.3	11.2	40.4	2.788	0.018	0.020	0.000	0.497	0.42	
63	2/4/2004	8:57:49 AM		21.933	19.079	21.178	23.622	21.142		50.475	50.847	19.468	30.533	-1.216	-6.291		48.055	0.118	14.643	0.004		46.00	0.76667	49.4	11.8	40.5	2.793	0.018	0.020	0.000	0.484	0.41	
64	2/4/2004	8:58:49 AM		21.941	19.118	21.091	23.611	21.804		50.517	50.864	19.776	30.244	-1.216	-6.291		48.96	0.117	14.643	0.004		47.00	0.78333	49.4	12.0	40.4	2.784	0.017	0.020	0.000	0.483	0.41	
65	2/4/2004	8:59:49 AM		21.961	19.168	21.014	23.539	21.648		50.6	50.975	20.017	30.135	-1.219	-6.302		46.767	0.114	14.643	0.004		48.00	0.8	49.5	11.5	40.4	2.783	0.017	0.019	0.000	0.472	0.40	

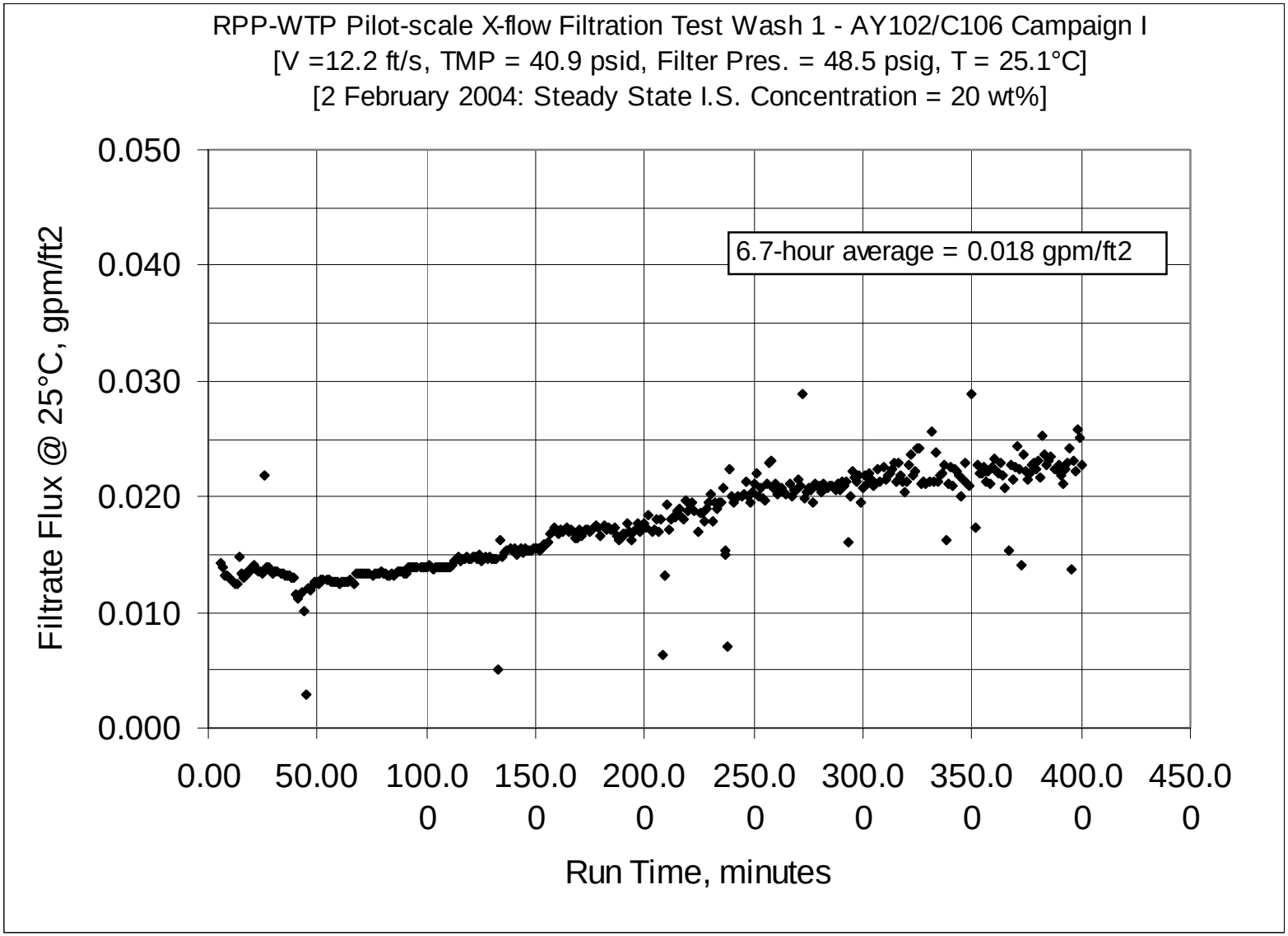
RUN # 1.17; STEADY STATE TEST AT <20 WT % UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
66	2/4/2004	9:00:49 AM		21.954	19.207	20.968	23.558	21.144		50.73	51.235	20.255	29.926	-1.216	-6.308		45.904	0.113	14.643	0.004		49.00	0.81667	49.8	11.2	40.3	2.780	0.017	0.019	0.000	0.469	0.40	
67	2/4/2004	9:01:49 AM		21.968	19.266	21.032	23.592	20.876		51.21	51.527	21.868	28.91	-1.216	-6.305		48.607	0.112	14.643	0.004		50.00	0.83333	50.1	11.9	40.1	2.762	0.017	0.019	0.000	0.467	0.40	
68	2/4/2004	9:02:49 AM		21.967	19.3	21.086	23.601	21.814		51.375	51.78	21.389	29.447	-1.216	-6.282		48.236	0.114	14.643	0.004		51.00	0.85	50.3	11.8	40.4	2.786	0.017	0.019	0.000	0.470	0.40	
69	2/4/2004	9:03:49 AM		21.981	19.355	21.115	23.615	21.819		51.46	51.788	21.194	29.891	-1.216	-6.308		47.896	0.113	14.643	0.004		52.00	0.86667	50.3	11.7	40.7	2.804	0.017	0.019	0.000	0.463	0.39	
70	2/4/2004	9:04:49 AM		21.989	19.399	21.124	23.683	21.48		51.456	51.933	21.331	29.7	-1.216	-6.302		49.31	0.111	14.643	0.004		53.00	0.88333	50.5	12.1	40.6	2.798	0.017	0.018	0.000	0.456	0.39	
71	2/4/2004	9:05:49 AM		22.013	19.443	21.178	23.737	21.554		51.85	52.246	21.692	29.726	-1.216	-6.308		46.795	0.11	14.643	0.004		54.00	0.9	50.8	11.5	40.8	2.812	0.016	0.018	0.000	0.448	0.38	
72	2/4/2004	9:06:49 AM		22.037	19.487	21.232	23.741	22.121		51.597	52.022	21.926	29.269	-1.214	-6.317		46.599	0.109	14.643	0.004		55.00	0.91667	50.5	11.4	40.4	2.788	0.016	0.018	0.000	0.448	0.38	
73	2/4/2004	9:07:49 AM		22.055	19.53	21.275	23.719	22.088		50.351	50.837	21.394	28.438	-1.216	-6.311		45.733	0.105	14.643	0.003		56.00	0.93333	49.4	11.2	39.4	2.716	0.016	0.017	0.000	0.442	0.38	
74	2/4/2004	9:08:49 AM		22.083	19.569	21.46	23.752	21.83		51.257	51.678	21.853	28.94	-1.214	-6.268		44.529	0.097	14.643	0.004		57.00	0.95	50.2	10.9	40.1	2.765	0.014	0.016	0.000	0.399	0.34	
75	2/4/2004	9:09:49 AM		22.107	19.608	21.875	23.846	21.246		52.456	52.961	23.636	28.354	-1.216	-6.305		51.198	0.106	14.643	0.004		58.00	0.96667	51.5	12.5	40.4	2.786	0.016	0.017	0.000	0.427	0.36	
76	2/4/2004	9:10:49 AM		22.165	19.651	22.216	23.854	21.239		51.788	52.126	22.93	28.542	-1.216	-6.308		50.672	0.109	14.643	0.004		59.00	0.98333	50.7	12.4	40.2	2.769	0.016	0.018	0.000	0.438	0.37	
77	2/4/2004	9:11:49 AM		22.274	19.696	22.536	23.878	21.65		51.848	52.428	22.313	29	-1.214	-6.288		50.839	0.112	14.643	0.004		60.00	1	51.0	12.5	40.4	2.787	0.017	0.018	0.000	0.443	0.38	
78	2/4/2004	9:12:49 AM		22.408	19.734	22.781	23.906	21.487		51.535	52.128	21.794	29.261	-1.216	-6.282		48.13	0.115	14.643	0.004		61.00	1.01667	50.7	11.8	40.4	2.785	0.017	0.018	0.000	0.452	0.38	
79	2/4/2004	9:13:49 AM		22.558	19.773	23.016	23.955	21.607		51.705	52.246	21.421	29.852	-1.214	-6.273		51.861	0.117	14.643	0.004		62.00	1.03333	50.8	12.7	40.8	2.812	0.017	0.018	0.000	0.453	0.39	
80	2/4/2004	9:14:49 AM		22.676	19.791	23.189	23.913	21.378		51.473	52.074	21.195	29.846	-1.216	-6.265		51.054	0.118	14.643	0.004		63.00	1.05	50.6	12.5	40.7	2.803	0.018	0.019	0.000	0.455	0.39	
81	2/4/2004	9:15:49 AM		22.824	19.835	23.353	23.991	21.391		51.218	51.885	20.785	29.944	-1.216	-6.265		50.445	0.119	14.643	0.004		64.00	1.06667	50.4	12.4	40.6	2.798	0.018	0.019	0.000	0.458	0.39	
82	2/4/2004	9:16:49 AM		22.958	19.873	23.491	24.02	21.375		51.365	52.076	20.67	30.25	-1.214	-6.213		50.56	0.12	14.643	0.004		65.00	1.08333	50.6	12.4	40.8	2.814	0.018	0.019	0.000	0.458	0.39	
83	2/4/2004	9:17:49 AM		23.108	19.918	23.636	24.028	21.419		51.504	52.209	20.497	30.523	-1.214	-6.256		51.185	0.121	14.643	0.004		66.00	1.1	50.7	12.5	41.0	2.828	0.018	0.019	0.000	0.457	0.39	
84	2/4/2004	9:18:49 AM		23.225	19.945	23.764	24.086	21.627		51.496	52.256	20.388	30.615	-1.211	-6.253		54.237	0.122	14.643	0.004		67.00	1.11667	50.8	13.3	41.1	2.831	0.018	0.019	0.000	0.459	0.39	
85	2/4/2004	9:19:49 AM		23.349	19.969	23.857	24.069	21.54		51.496	52.331	20.376	30.554	-1.216	-6.192		48.876	0.123	14.643	0.004		68.00	1.13333	50.9	12.0	41.0	2.829	0.018	0.019	0.000	0.462	0.39	
86	2/4/2004	9:20:49 AM		23.468	20.008	23.976	24.078	21.523		51.601	52.402	20.645	30.5	-1.211	-6.256		51.2	0.121	14.643	0.004		69.00	1.15	50.9	12.5	41.1	2.830	0.018	0.019	0.000	0.452	0.38	
87	2/4/2004	9:21:49 AM		23.571	20.031	24.069	24.03	21.652		51.952	52.831	20.831	30.551	-1.219	-6.273		48.818	0.121	14.643	0.003		70.00	1.16667	51.4	12.0	41.3	2.844	0.018	0.019	0.000	0.449	0.38	
88	2/4/2004	9:22:49 AM		23.669	20.058	24.182	24.163	22.222		52.022	52.764	21.188	30.439	-1.216	-6.276		49.886	0.119	14.643	0.004		71.00	1.18333	51.3	12.2	41.2	2.843	0.018	0.018	0.000	0.440	0.37	
89	2/4/2004	9:23:49 AM		23.782	20.107	24.311	24.142	22.857		51.977	52.818	21.427	30.061	-1.214	-6.276		48.891	0.118	14.643	0.004		72.00	1.2	51.3	12.0	41.0	2.828	0.018	0.018	0.000	0.437	0.37	
90	2/4/2004	9:24:49 AM		23.896	20.146	24.424	24.09	22.399		52.226	53.108	21.749	29.973	-1.216	-6.23		48.881	0.11	14.643	0.004		73.00	1.21667	51.6	12.0	41.1	2.834	0.016	0.017	0.000	0.406	0.35	
91	2/4/2004	9:25:49 AM		23.999	20.174	24.522	24.128	22.272		52.512	53.369	22.133	29.874	-1.216	-6.282		50.324	0.117	14.643	0.004		74.00	1.23333	51.9	12.3	41.2	2.840	0.017	0.018	0.000	0.429	0.37	
92	2/4/2004	9:26:49 AM		24.098	20.213	24.636	24.156	22.892		52.427	53.342	22.338	29.612	-1.219	-6.268		48.695	0.118	14.643	0.003		75.00	1.25	51.9	11.9	41.0	2.828	0.018	0.018	0.000	0.433	0.37	
93	2/4/2004	9:27:49 AM		24.196	20.257	24.77	24.195	22.474		52.495	53.313	22.694	29.341	-1.219	-6.288		49.156	0.116	14.643	0.004		76.00	1.26667	51.8	12.0	40.9	2.821	0.017	0.017	0.000	0.425	0.36	
94	2/4/2004	9:28:49 AM		24.285	20.286	24.874	24.154	22.639		52.887	53.753	23.06	29.335	-1.219	-6.285		49.17	0.115	14.643	0.004		77.00	1.28333	52.3	12.0	41.1	2.834	0.017	0.017	0.000	0.419	0.36	
95	2/4/2004	9:29:49 AM		24.389	20.33	24.987	24.177	22.898		53.047	53.886	23.352	29.246	-1.216	-6.308		47.929	0.112	14.643	0.004		78.00	1.3	52.4	11.7	41.1	2.837	0.017	0.017	0.000	0.406	0.35	
96	2/4/2004	9:30:49 AM		24.492	20.368	25.106	24.246	23.418		52.956	53.807	23.597	28.906	-1.219	-6.308		46.657	0.112	14.643	0.004		79.00	1.31667	52.3	11.4	40.9	2.822	0.017	0.017	0.000	0.407	0.35	
97	2/4/2004	9:31:49 AM		24.581	20.397	25.219	24.289	22.493		53.176	54.047	23.962	28.77	-1.216	-6.299		46.634	0.109	14.643	0.004		80.00	1.33333	52.6	11.4	41.0	2.825	0.016	0.016	0.000	0.394	0.34	
98	2/4/2004	9:32:49 AM		24.68	20.452	25.353	24.218	22.994		52.925	53.832	24.139	28.473	-1.216	-6.328		45.877	0.107	14.643	0.004		81.00	1.35	52.4	11.2	40.7	2.806	0.016	0.016	0.000	0.388	0.33	
99	2/4/2004	9:33:49 AM		24.768	20.485	25.467	24.06	22.611		53.478	54.536	24.662	28.233	-1.216	-6.334		46.063	0.106	14.643	0.004		82.00	1.36667	53.1	11.3	40.9	2.817	0.016	0.016	0.000	0.382	0.32	
100	2/4/2004	9:34:49 AM		24.871	20.518	25.585	23.898	22.594		53.561	54.654	25.046	27.853	-1.216	-6.262		45.155	0.097	14.643	0.004		83.00	1.38333	53.2	11.1	40.7	2.807	0.014	0.014	0.000	0.349	0.30	
101	2/4/2004	9:35:49 AM		24.943	20.535	25.702	23.699	22.581		53.636	54.563	25.454	27.703	-1.219	-6.334		46.046	0.103	14.643	0.004		84.00	1.4	53.1	11.3	40.7	2.804	0.015	0.015	0.000	0.370	0.32	
102	2/4/2004	9:36:49 AM		25.035	20.567	25.834	23.56	23.2		53.777	54.847	26.093	26.227	-1.222	-6.357		46.684	0.101	14.643	0.003		85.00	1.41667	53.4	11.4	40.0	2.758	0.015	0.015	0.000	0.368	0.31	
103	2/4/2004	9:37:49 AM		25.133	20.601	26.082	23.438	23.784		54.505	55.629	26.093	25.448	-1.216	-6.354		49.047	0.102	14.643	0.004		86.00	1.43333	54.2	12.0	40.0	2.756	0.015	0.015	0.000	0.369	0.31	
104	2/4/2004	9:38:49 AM		25.236	20.629	26.339	23.37	23.596		54.24	55.392	26.093	25.361	-1.219	-6.256		50.679	0.104	14.643	0.004		87.00	1.45	53.9	12.4	39.8	2.744	0.016	0.015	0.000	0.375	0.32	
105	2/4/2004	9:39:49 AM		25.368	20.646	26.571	23.287	23.167		54.524	55.707	26.093	25.521	-1.216	-6.328		49.5	0.105	14.643	0.004		88.00	1.46667	54.2	12.1	40.0	2.759	0.016	0.015	0.000	0.374	0.32	
106	2/4/2004	9:40:49 AM		25.526	20.684	26.789	23.275	22.789		54.598	55.817	26.093	25.677	-1.219	-6.34		49.736	0.106	14.643	0.004		89.00	1.48333	54.3	12.2	40.1	2.767	0.016	0.015	0.000	0.375	0.32	
107	2/4/2004	9:41:49 AM		25.668	20.697	27.001	23.237	22.591		54.621	55.683	26.093	25.955	-1.216	-6.343		48.801	0.104	14.643	0.004		90.00	1.5	54.2	12.0	40.3	2.778	0.016	0.015	0.000	0.364	0.31	
108	2/4/2004	9:42:49 AM		25.816	20.72	27.193	23.179	23.356		54.611	55.824	26.093	26.002	-1.219	-6.349		48.954	0.103	14.643	0.004		91.00	1.51667	54.4	12.0	40.3	2.779	0.015	0.014	0.000	0.358	0.30	
109	2/4/2004	9:43:49 AM		25.964	20.748	27.391	23.172	23.96		54.75	55.985	26.093	26.092	-1.219	-6.308		48.422	0.104	14.643	0.003		92.00	1.53333	54.5	11.9	40.4	2.787	0.016	0.015	0.000	0.359	0.31	
110	2/4/2004	9:44:49 AM		26.107	20.787	27.579	22.935	23.919		55.042	56.371	26.093	26.232	-1.219	-6.334		49.008	0.104	14.643	0.004		93.00	1.55	54.9	12.0	40.6	2.802	0.016	0.014	0.000	0.355	0.30	
111	2/4/2004	9:45:49 AM		26.256	20.811	27.753	22.909	23.502		54.737	55.989	26.093	26.045	-1.219	-6.349		48.799	0.103	14.643	0.004		94.00	1.56667	54.5	12.0	40.4	2.785	0.015	0.014	0.000	0.352	0.30	
112	2/4/2004	9:46:49 AM		26.379	20.829	27.915	22.902	23.234		54.835	55.875	26.093	25.774	-1.219	-6.354		48.086	0.103	14.643	0.003		95.00	1.58333	54.4	11.8	40.3	2.779	0.015	0.014	0.000	0.351	0.30	
113	2/4/2004	9:47:49 AM		26.522	20.853	28.098	22.884	23.663		55.558	57.015	26.093	25.558	-1.219	-6.253		47.614	0.102	14.643	0.004		96.00	1.6	55.5	11.7	40.6	2.796	0.015	0.014	0.000	0.344	0.29	
114	2/4/2004	9:48:49 AM		26.665	20.886	28.28	22.847	23.651		54.752	56.039	26.093	25.166	-1.216	-6.346		47.297	0.1	14.643	0.004		97.00	1.61667	54.6	11.6	40.0	2.755	0.015	0.014	0.000	0.341	0.29	
115	2/4/2004	9:49:49 AM		26.802	20.904	28.437	22.82	23.804		55.125	56.543	26.093	25.283	-1.216	-6.369		46.88	0.097	14.643	0.004		98.00	1.63333	55.1	11.5	40.2	2.772	0.014	0.013	0.000	0.327	0.28	
116	2/4/2004	9:50:49 AM		26.94	20.937	28.614	22.767	24.017		55.49	56.88	26.093	25.226	-1.216	-6.378		46.574	0.095	14.643	0.004		99.00	1.65	55.4	11.4	40.4	2.783	0.014	0.013	0.000	0.317	0.27	
117	2/4/2004	9:51:49 AM		27.072	20.96	28.767	22.725	24.056		55.561	57.048	26.093	25.146	-1.219	-6.386		46.019	0.094	14.643	0.003		100.00	1.66667	55.6	11.3	40.4	2.782	0.014	0.013	0.000	0.313	0.27	
118	2/4/2004	9:52:49 AM		27.209	20.988	29.063	22.728	23.873		56.631	58.066	26.093	24.077	-1.214	-6.375		49.321	0.095	14.643	0.004		101.00	1.68333	56.6	12.1	40.4	2.782	0.014	0.013	0.000	0.314	0.27	
119	2/4/2004	9:53:49 AM		27.357	21.001	29.31	22.706	23.836		57.074	58.514	26.093	24.619	-1.216	-6.366		49.125	0.097	14.643	0.004		102.00	1.7	57.0	12.0	40.8	2.816	0.014	0.013	0.000	0.314	0.27	
120	2/4/2004	9:54:49 AM		27.51	21.025	29.542	22.649	24.075		56.749	58.277	26.093	24.779	-1.219	-6.36		48.845	0.098	14.643	0.003		103.00	1.71667	56.8	12.0	40.8	2.811	0.015	0.013	0.000	0.316	0.27	
121	2/4/2004	9:55:49 AM		27.688	21.043	29.764	22.657	24.173		56.836	58.534	26.093	24.536	-1.216	-6.299		48.171	0.097	14.643	0.004		104.00	1.73333	57.1	11.8	40.7	2.805	0.014	0.013	0.000	0.311	0.27	
122	2/4/2004	9:56:49 AM		27.825	21.051	29.975	22.64	23.49		56.933	58.477	26.093	24.551	-1.219	-6.354		47.335	0.096	14.643	0.004		105.00	1.75	57.0	11.6	40.7	2.809	0.014	0.012	0.000	0.306	0.26	
123	2/4/2004	9:57:49 AM		27.971	21.063	30.176	22.622	23.512		57.489	58.839	26.093	24.432	-1.219	-6.369		46.864	0.094	14.643	0.004		106.00	1.76667	57.4	11.5	41.0	2.824	0.014	0.012	0.000	0.296	0.25	
124	2/4/2004	9:58:49 AM		28.099	21.091	30.353	22.6	24.471		56.772	58.392	26.093	21.873	-1.216	-6.395		47.804	0.089	14.643	0.004		107.00	1.78333	56.9	11.7	39.3	2.711	0.013	0.011	0.000	0.291	0.25	
125	2/4/2004	9:59:49 AM		28.262	21.12	30.481	22.593	25.165		58.308	60.085	26.093	23.065	-1.219	-6.331		49.314	0.085	14.643	0.003		108.00	1.8	58.6	12.1	40.7	2.805	0.013	0.011	0.000	0.268	0.23	
126	2/4/2004	10:00:49 AM		28.414	21.138	30.638	22.576	25.538		57.919	59.592	26.093	23.356	-1.219	-6.357		49.129	0.093	14.643	0.004		109.00	1.81667	58.1	12.0	40.6	2.802	0.014	0.012	0.000	0.292	0.25	
127	2/4/2004	10:01:49 AM		28.558	21.153	30.826	22.661	25.617		58.201	59.975	26.093	23.2	-1.216	-6.372		48.745	0.093	14.643	0.004		110.00	1.83333	58.5	11.9	40.7	2.806	0.014	0.012	0.000	0.290	0.25	
128	2/4/2004	10:02:49 AM		28.721	21.177	31.018	22.685	25.851		58.53	60.311	26.093	23.266	-1.219	-6.378		48.023	0.091	14.643	0.003		111.00	1.85	58.8	11.8	40.9	2.820	0.014	0.011	0.000	0.281	0.24	
129	2/4/2004	10:03:49 AM		28.81	21.191	31.221	22.72	25.895		58.808	60.713	26.093	23.077	-1.216	-6.372		47.214	0.092	14.643	0.004		112.00	1.86667	59.2	11.6	40.9	2.823	0.014	0.012	0.000	0.282	0.24	
130	2/4/2004	10:04:49 AM		28.934	21.211	31.444	22.694	25.955		59.476	61.196	26.093	22.905	-1.216	-6.363		46.373	0.088	14.643	0.003		113.00	1.88333	59.7	11.4	41.2	2.840	0.013	0.011	0.000	0.267	0.23	

RUN # 1.17; STEADY STATE TEST AT <20 WT % UDS – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
131	2/4/2004	10:05:49 AM		29.033	21.241	31.651	22.719	25.969		59.296	61.171	26.093	22.546	-1.219	-6.378		45.639	0.086	14.643	0.004		114.00	1.9	59.7	11.2	40.9	2.821	0.013	0.011	0.000	0.261	0.22	
132	2/4/2004	10:06:49 AM		29.111	21.245	32.106	22.773	26.013		60.273	61.928	26.093	20.773	-1.219	-6.389		47.75	0.082	14.643	0.004		115.00	1.91667	60.5	11.7	40.5	2.794	0.012	0.010	0.000	0.248	0.21	
133	2/4/2004	10:07:49 AM		29.305	21.275	32.853	22.742	25.852		59.97	61.917	26.093	20.37	-1.219	-6.351		49.663	0.086	14.643	0.004		116.00	1.93333	60.4	12.2	40.2	2.770	0.013	0.010	0.000	0.257	0.22	
134	2/4/2004	10:08:49 AM		29.601	21.298	33.524	22.756	25.881		59.841	61.756	26.093	20.699	-1.214	-6.346		49.585	0.089	14.643	0.004		117.00	1.95	60.3	12.2	40.3	2.776	0.013	0.011	0.000	0.261	0.22	
135	2/4/2004	10:09:49 AM		29.907	21.301	34.164	22.698	26.024		59.837	61.952	26.093	20.617	-1.219	-6.351		49.062	0.089	14.643	0.004		118.00	1.96667	60.5	12.0	40.2	2.774	0.013	0.010	0.000	0.257	0.22	
136	2/4/2004	10:10:49 AM		30.252	21.309	34.868	22.681	26.151		60.254	62.425	26.093	20.61	-1.219	-6.363		48.305	0.09	14.643	0.003		119.00	1.98333	61.0	11.8	40.4	2.788	0.013	0.010	0.000	0.254	0.22	
137	2/4/2004	10:11:49 AM		30.568	21.347	36.088	22.749	26.348		58.273	60.431	26.093	19.872	-1.216	-6.38		44.071	0.087	14.643	0.004		120.00	2	59.0	10.8	39.1	2.694	0.013	0.010	0.000	0.246	0.21	
138	2/4/2004	10:12:49 AM		30.963	21.371	37.925	22.763	26.257		58.483	60.709	26.093	19.209	-1.216	-6.317		42.231	0.082	14.643	0.004		121.00	2.01667	59.2	10.3	38.8	2.678	0.012	0.009	0.000	0.222	0.19	
139	2/4/2004	10:13:49 AM		31.401	21.393	39.879	22.77	26.169		54.206	58.215	26.093	16.233	-1.156	-6.6		39.064	0.003	14.643	0.004		122.00	2.03333	56.7	9.6	35.2	2.428	0.000	0.000	0.000	0.009	0.01	
140	2/4/2004	10:14:49 AM		31.759	21.399	41.855	22.706	26.315		52.779	58.105	26.093	14.6	0.312	-1.096		38.046	0.168	14.643	0.004		123.00	2.05	56.6	9.3	33.7	2.323	0.025	0.016	0.000	0.474	0.40	
141	2/4/2004	10:15:49 AM		32.533	21.416	43.89	22.647	26.247		55.507	58.52	26.093	16.557	-1.219	-4.874		37.108	0.036	14.643	0.003		124.00	2.06667	57.1	9.1	36.0	2.484	0.005	0.003	0.000	0.090	0.08	
142																																	
143		Averages		24.3	19.7	24.9	23.3	21.9	#	52.7	53.6	21.3	28.6	-1.2	-6.2	#	48.1	0.1	14.6	0.0	#			52.1	11.8	40.6	2.802	0.018	0.019	0.0005	0.453	0.386	#
144		Maximum		32.5	21.4	43.9	24.3	26.3	#	60.3	62.4	26.1	35.1	0.3	-1.1	#	54.2	0.2	14.6	0.0	#			61.0	13.3	42.3	2.917	0.031	0.034	0.0008	0.811	0.690	#
145		Median		23.0	19.9	23.5	23.3	21.8	#	51.7	52.3	21.7	29.7	-1.2	-6.3	#	48.4	0.1	14.6	0.0	#			50.8	11.9	40.7	2.807	0.017	0.018	0.0004	0.448	0.382	#
146		Minimum		21.5	17.3	20.4	22.6	17.1	#	48.1	48.6	13.1	14.6	-1.2	-6.6	#	37.1	0.0	14.6	0.0	#			47.1	9.1	33.7	2.323	0.000	0.000	0.0000	0.009	0.007	#
147		2 x Std Dev		5.865	2.524	10.014	0.981	5.060	#	6.549	7.713	8.761	9.004	0.279	1.062	#	5.160	0.061	0.000	0.001	#			7.716	1.265	2.215	0.153	0.009	0.012	0.0003	0.295	0.251	#
148	Number of Points Used*			119	119	119	119	119	0	119	119	119	119	119	119	0	119	119	119	119	0			119	119	119	119	119	119	119	119	119	0
149																																	
150																											2.1-hour avg. =		0.0185				
151																											1-hour avg. =		0.0231				

RUN # WASH1; CAMPAIGN I SLURRY WASH 1



RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/2/2004	10:20:32 AM		22.477	17.831	14.99	22.905	15.993		0.048	-0.056	0.016	0	-0.177	0.055		-0.083	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/2/2004	10:20:56 AM		22.477	17.831	14.99	22.905	15.993		0.048	-0.056	0.016	0	-0.177	0.055		-0.083	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/2/2004	10:20:57 AM		22.473	17.831	14.971	22.901	16.004		0.048	-0.054	0.014	-0.004	-0.212	0.049		-0.085	0.003	14.643	0.005													
10	2/2/2004	10:20:58 AM		22.468	17.826	14.966	22.896	15.994		0.05	-0.056	0.014	-0.004	-0.174	0.052		-0.077	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/2/2004	10:20:59 AM		22.473	17.826	14.971	22.886	15.994		0.046	-0.056	0.014	-0.004	-0.183	0.052		-0.081	0.003	14.643	0.004													
12	2/2/2004	10:21:00 AM		22.468	17.831	14.966	22.901	15.994		0.046	-0.056	0.014	-0.004	-0.192	0.049		-0.081	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/2/2004	10:21:01 AM		22.468	17.826	14.971	22.906	15.989		0.048	-0.056	0.014	-0.004	-0.174	0.049		-0.085	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>		
14	2/2/2004	10:21:02 AM		22.473	17.837	14.971	22.906	15.99		0.048	-0.054	0.015	-0.004	-0.218	0.052		-0.079	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/2/2004	12:03:31 PM		25.256	18.912	25.549	23.983	20.105		31.876	52.721	19.285	12.939	15.497	92.371		49.498	0.003	14.643	0.004		0	0	51.2	12.1	22.4	1.545	0.000	0.000	0.000	0.020	0.02	
18	2/2/2004	12:04:31 PM		23.589	18.973	25.559	24.044	20.126		9.248	50.316	10.747	-1.077	35.953	92.276		59.414	0.003	14.643	0.011		1.00	0.01667	48.8	14.6	4.1	0.282	0.000	0.000	0.000	0.108	0.09	
19	2/2/2004	12:05:31 PM		23.769	19.008	25.564	24.048	20.483		9.192	50.575	10.686	-1.172	36.202	5.394		52.931	0.003	14.643	0.006		2.00	0.03333	49.1	13.0	4.0	0.276	0.000	0.000	0.000	0.110	0.09	
20	2/2/2004	12:06:31 PM		25.711	19.058	25.569	24.003	20.765		45.423	51.274	12.73	32.649	0.327	0.251		52.927	0.168	14.643	0.004		3.00	0.05	49.8	13.0	39.0	2.691	2.183	2.149	0.055	55.039	46.84	
21	2/2/2004	12:07:31 PM		25.881	19.114	25.574	23.998	20.583		45.709	51.512	13.959	31.643	0.26	0.295		52.983	0.12	14.643	0.004		4.00	0.06667	50.0	13.0	38.7	2.667	2.183	2.148	0.056	55.544	47.27	
22	2/2/2004	12:08:31 PM		25.976	19.155	25.549	24.069	20.86		45.78	51.574	14.504	31.208	0.251	0.329		49.517	0.104	14.643	0.004		5.00	0.08333	50.1	12.1	38.5	2.654	0.016	0.015	0.000	0.397	0.34	
23	2/2/2004	12:09:31 PM		26.035	19.194	25.509	24.088	20.849		46.074	51.892	14.778	31.206	0.254	0.361		56.369	0.097	14.643	0.004		6.00	0.1	50.4	13.8	38.6	2.664	0.014	0.014	0.000	0.369	0.31	
24	2/2/2004	12:10:31 PM		26.04	19.234	25.503	24.147	20.36		46.077	51.885	14.666	31.385	0.257	0.39		53.129	0.094	14.643	0.004		7.00	0.11667	50.4	13.0	38.7	2.670	0.014	0.014	0.000	0.357	0.30	
25	2/2/2004	12:11:31 PM		26.052	19.272	25.485	24.14	20.745		46.17	51.995	14.971	31.104	0.286	0.419		50.816	0.09	14.643	0.004		8.00	0.13333	50.5	12.5	38.6	2.664	0.013	0.013	0.000	0.343	0.29	
26	2/2/2004	12:12:31 PM		26.056	19.321	25.474	24.153	21.403		46.431	52.292	15.05	31.264	0.327	0.445		53.025	0.089	14.643	0.004		9.00	0.15	50.8	13.0	38.8	2.678	0.013	0.013	0.000	0.337	0.29	
27	2/2/2004	12:13:31 PM		26.055	19.371	25.458	24.067	21.407		46.419	52.314	14.938	31.413	0.338	0.48		49.767	0.088	14.643	0.004		10.00	0.16667	50.8	12.2	38.9	2.683	0.013	0.013	0.000	0.333	0.28	
28	2/2/2004	12:14:31 PM		26.044	19.41	25.442	24.092	21.884		46.189	52.082	14.993	31.155	0.358	0.506		52.992	0.086	14.643	0.004		11.00	0.18333	50.6	13.0	38.7	2.666	0.013	0.013	0.000	0.327	0.28	
29	2/2/2004	12:15:31 PM		26.049	19.461	25.422	24.127	21.823		46.429	52.292	15.102	31.292	0.364	0.529		44.557	0.085	14.643	0.004		12.00	0.2	50.8	10.9	38.9	2.679	0.013	0.013	0.000	0.322	0.27	
30	2/2/2004	12:16:31 PM		26.053	19.516	25.457	24.161	21.763		46.479	52.416	15.126	31.333	0.408	0.558		51.304	0.085	14.643	0.004		13.00	0.21667	50.9	12.6	38.9	2.682	0.013	0.013	0.000	0.322	0.27	
31	2/2/2004	12:17:31 PM		25.268	19.545	25.441	24.171	21.822		51.562	52.596	15.119	36.421	-1.219	-5.559		49.842	0.1	14.643	0.004		14.00	0.23333	51.1	12.2	44.0	3.033	0.015	0.015	0.000	0.335	0.28	
32	2/2/2004	12:18:31 PM		25.448	19.611	25.471	24.241	22.124		51.726	52.681	15.296	36.304	-1.219	-5.687		50.359	0.091	14.643	0.004		15.00	0.25	51.2	12.3	44.0	3.035	0.014	0.013	0.000	0.304	0.26	
33	2/2/2004	12:19:31 PM		25.463	19.657	25.296	24.321	22.45		51.485	52.389	15.218	36.212	-1.219	-5.782		51.273	0.088	14.643	0.004		16.00	0.26667	50.9	12.6	43.8	3.023	0.013	0.013	0.000	0.297	0.25	
34	2/2/2004	12:20:31 PM		25.479	19.744	25.217	24.343	22.888		51.16	52.147	14.86	36.222	-1.216	-5.779		49.903	0.089	14.643	0.004		17.00	0.28333	50.7	12.2	43.7	3.012	0.013	0.013	0.000	0.302	0.26	
35	2/2/2004	12:21:31 PM		25.441	19.801	25.244	24.294	22.874		51.238	52.171	14.696	36.534	-1.216	-5.77		47.295	0.092	14.643	0.004		18.00	0.3	50.7	11.6	43.9	3.026	0.014	0.014	0.000	0.310	0.26	
36	2/2/2004	12:22:31 PM		25.407	19.873	25.26	24.415	23.116		51.28	52.227	14.601	36.651	-1.216	-5.768		57.332	0.092	14.643	0.004		19.00	0.31667	50.8	14.1	44.0	3.031	0.014	0.014	0.000	0.310	0.26	
37	2/2/2004	12:23:31 PM		25.384	19.95	25.272	24.502	23.494		51.386	52.288	14.51	36.95	-1.216	-5.765		52.024	0.094	14.643	0.004		20.00	0.33333	50.8	12.7	44.2	3.045	0.014	0.014	0.000	0.315	0.27	
38	2/2/2004	12:24:31 PM		25.355	20.017	25.253	24.494	23.725		52.089	53.104	13.755	38.293	-1.219	-5.762		50.626	0.095	14.643	0.004		21.00	0.35	51.6	12.4	45.2	3.116	0.014	0.014	0.000	0.311	0.26	
39	2/2/2004	12:25:31 PM		25.336	20.084	25.264	24.51	23.917		52.4	53.392	13.633	38.689	-1.222	-5.762		48.734	0.093	14.643	0.004		22.00	0.36667	51.9	11.9	45.5	3.140	0.014	0.014	0.000	0.302	0.26	
40	2/2/2004	12:26:31 PM		25.339	20.172	25.282	24.543	24.26		51.747	52.677	14.293	37.459	-1.219	-5.77		48.518	0.091	14.643	0.004		23.00	0.38333	51.2	11.9	44.6	3.075	0.014	0.013	0.000	0.302	0.26	
41	2/2/2004	12:27:31 PM		25.326	20.245	25.309	24.42	24.097		51.421	52.302	14.393	37.088	-1.219	-5.765		49.698	0.091	14.643	0.004		24.00	0.4	50.8	12.2	44.3	3.051	0.014	0.013	0.000	0.304	0.26	
42	2/2/2004	12:28:31 PM		25.323	20.308	25.306	24.481	24.004		51.715	52.735	14.519	37.051	-1.219	-5.782		50.46	0.09	14.643	0.003		25.00	0.41667	51.3	12.4	44.4	3.060	0.013	0.013	0.000	0.300	0.26	
43	2/2/2004	12:29:31 PM		25.33	20.39	25.243	24.473	23.71		52.363	53.025	14.266	38.005	-1.219	-6.748		48.672	0.148	14.643	0.004		26.00	0.43333	51.6	11.9	45.2	3.115	0.022	0.022	0.000	0.485	0.41	
44	2/2/2004	12:30:31 PM		25.251	20.442	25.234	24.545	23.832		52.213	52.574	14.343	37.818	-1.219	-7.626		52.341	0.094	14.643	0.003		27.00	0.45	51.1	12.8	45.0	3.104	0.014	0.014	0.000	0.309	0.26	
45	2/2/2004	12:31:31 PM		25.288	20.514	25.246	24.567	23.633		52.466	52.712	14.056	38.504	-1.216	-7.644		49.769	0.094	14.643	0.004		28.00	0.46667	51.2	12.2	45.5	3.136	0.014	0.014	0.000	0.306	0.26	
46	2/2/2004	12:32:31 PM		25.294	20.581	25.237	24.603	24.015		52.582	52.928	14.472	37.958	-1.222	-7.615		48.951	0.091	14.643	0.004		29.00	0.48333	51.5	12.0	45.3	3.121	0.014	0.013	0.000	0.298	0.25	
47	2/2/2004	12:33:31 PM		25.31	20.643	25.268	24.634	24.311		52.464	52.646	14.275	38.227	-1.214	-7.713		47.725	0.09	14.643	0.004		30.00	0.5	51.2	11.7	45.3	3.126	0.013	0.013	0.000	0.294	0.25	
48	2/2/2004	12:34:31 PM		25.317	20.695	25.245	24.595	24.358		52.616	52.847	14.088	38.504	-1.222	-7.693		46.941	0.091	14.643	0.003		31.00	0.51667	51.4	11.5	45.6	3.141	0.014	0.013	0.000	0.296	0.25	
49	2/2/2004	12:35:31 PM		25.323	20.762	25.261	24.642	24.804		52.773	53.019	14.106	38.67	-1.216	-7.71		50.42	0.091	14.643	0.004		32.00	0.53333	51.5	12.4	45.7	3.152	0.014	0.013	0.000	0.295	0.25	
50	2/2/2004	12:36:31 PM		25.339	20.824	25.288	24.659	24.646		52.873	53.092	14.291	38.563	-1.219	-7.725		52.875	0.09	14.643	0.004		33.00	0.55	51.6	13.0	45.7	3.152	0.013	0.013	0.000	0.291	0.25	
51	2/2/2004	12:37:31 PM		25.336	20.881	25.289	24.71	24.112		52.804	53.061	14.06	38.699	-1.219	-7.722		52.043	0.09	14.643	0.003		34.00	0.56667	51.6	12.8	45.8	3.154	0.013	0.013	0.000	0.291	0.25	
52	2/2/2004	12:38:31 PM		25.356	20.942	25.315	24.846	23.767		52.755	53.038	14.113	38.646	-1.219	-7.725		47.589	0.089	14.643	0.004		35.00	0.58333	51.6	11.7	45.7	3.151	0.013	0.013	0.000	0.288	0.24	
53	2/2/2004	12:39:31 PM		25.366	20.986	25.339	24.87	23.907		52.63	52.988	14.359	38.169	-1.211	-7.722		48.72	0.089	14.643	0.004		36.00	0.6	51.5	11.9	45.4	3.130	0.013	0.013	0.000	0.290	0.25	
54	2/2/2004	12:40:31 PM		25.376	21.032	25.329	24.815	24.072		52.703	52.907	14.229	38.514	-1.219	-7.67		53.169	0.089	14.643	0.004		37.00	0.61667	51.4	13.0	45.6	3.145	0.013	0.013	0.000	0.288	0.25	
55	2/2/2004	12:41:31 PM		25.385	21.072	25.349	24.85	24.397		52.52	52.839	14.114	38.383	-1.216	-7.719		47.439	0.088	14.643	0.004		38.00	0.63333	51.4	11.6	45.5	3.134	0.013	0.013	0.000	0.286	0.24	
56	2/2/2004	12:42:31 PM		25.389	21.096	25.328	24.794	24.02		52.858	53.141	14.154	38.711	-1.219	-7.719		49.782	0.088	14.643	0.003		39.00	0.65	51.7	12.2	45.8	3.157	0.013	0.013	0.000	0.284	0.24	
57	2/2/2004	12:43:31 PM		25.413	21.15	25.432	24.792	24.154		49.353	49.616	17.123	32.204	-1.214	-7.762		54.731	0.078	14.643	0.004		40.00	0.66667	48.1	13.4	40.8	2.812	0.012	0.011	0.000	0.282	0.24	
58	2/2/2004	12:44:31 PM		25.421	21.158	25.415	24.831	23.852		47.761	47.991	16.865	30.865	-1.222	-7.739		57.274	0.076	14.643	0.004		41.00	0.68333	46.5	14.0	39.3	2.710	0.011	0.011	0.000	0.285	0.24	
59	2/2/2004	12:45:31 PM		25.46	21.213	25.444	24.93	24.427		48.536	48.807	15.739	32.85	-1.219	-7.742		49.903	0.078	14.643	0.004		42.00	0.7	47.3	12.2	40.7	2.806	0.012	0.011	0.000	0.282	0.24	
60	2/2/2004	12:46:31 PM		25.448	21.231	25.427	24.933	23.794		49.127	49.336	15.266	33.919	-1.219	-7.725		55.614	0.08	14.643	0.004		43.00	0.71667	47.9	13.6	41.5	2.863	0.012	0.012	0.000	0.284	0.24	
61	2/2/2004	12:47:31 PM		25.457	21.27	25.426	24.967	24.443		49.61	49.906	15.422	34.139	-1.222	-7.615		55.125	0.069	14.643	0.003		44.00	0.73333	48.4	13.5	41.9	2.887	0.010	0.010	0.000	0.243	0.21	
62	2/2/2004	12:48:31 PM		25.935	21.308	25.434	24.995	25.107		46.301	49.605	15.155	31.106	-1.219	-2.027		49.923	0.019	14.643	0.003		45.00	0.75	48.1	12.2	38.7	2.668	0.003	0.003	0.000	0.072	0.06	
63	2/2/2004	12:49:31 PM		25.444	21.327	25.438	24.979	25.29		48.798	49.657	15.228	33.515	-1.216	-6.265		52.62	0.082	14.643	0.003		46.00	0.76667	48.2	12.9	41.2	2.838	0.012	0.012	0.000	0.293	0.25	
64	2/2/2004	12:50:31 PM		25.469	21.383	25.357	24.893	25.365		49.022	49.396	14.957	34.094	-1.219	-7.699		55.125	0.081	14.643	0.003		47.00	0.78333	47.9	13.5	41.6	2.865	0.012	0.012	0.000	0.288	0.24	
65	2/2/2004	12:51:31 PM		25.535	21.434	25.198	24.844	25.596		48.491	48.892	14.642	33.93	-1.219	-7.641		54.673	0.083	14.643	0.004		48.00	0.8	47.4	13.4	41.2	2.841	0.012	0.012	0.000	0.299	0.25	
66	2/2/2004	12:52:31 PM		25.53	21.475	25.229	24.855	25.961		48.648	49.058	14.744	33.89	-1.216	-7.664		49.648	0.085	14.643	0.003		49.00	0.81667	47.6	12.2	41.3	2.845	0.013	0.013	0.000	0.305	0.26	
67	2/2/2004	12:53:31 PM		25.521	21.531	25.225	24.806	25.478		48.758	49.166	14.729	34.038	-1.219	-7.667		53.586	0.085	14.643	0.003		50.00	0.83333	47.7	13.1	41.4	2.854	0.013	0.013	0.000	0.304	0.26	
68	2/2/2004	12:54:31 PM		25.512	21.582	25.221	24.761	25.624		48.314	48.689	14.446	33.866	-1.219	-7.661		51.432	0.084	14.643	0.004		51.00	0.85	47.2	12.6	41.1	2.833	0.013	0.012	0.000	0.303	0.26	
69	2/2/2004	12:55:31 PM		25.487	21.613	25.171	24.696	25.843		48.383	48.762	14.025	34.461	-1.219	-7.629		45.297	0.086	14.643	0.003		52.00	0.86667	47.3	11.1	41.4	2.856	0.013	0.013	0.000	0.308	0.26	
70	2/2/2004	12:56:31 PM		25.478	21.664	25.161	24.637	25.579		48.383	48.826	14.006	34.385	-1.219	-7.641		51.79	0.086	14.643	0.004		53.00	0.88333	47.4	12.7	41.4	2.853	0.013	0.013	0.000	0.308	0.26	

RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/2/2004	12:57:31 PM		25.474	21.715	25.153	24.658	25.375		48.617	49.125	14.197	34.334	-1.219	-7.644		53.267	0.086	14.643	0.004		54.00	0.9	47.7	13.1	41.5	2.860	0.013	0.013	0.000	0.308	0.26	
72	2/2/2004	12:58:31 PM		25.448	21.74	25.117	24.607	24.865		48.428	48.969	14.078	34.291	-1.219	-7.589		49.289	0.086	14.643	0.003		55.00	0.91667	47.5	12.1	41.4	2.852	0.013	0.013	0.000	0.309	0.26	
73	2/2/2004	12:59:31 PM		25.433	21.785	25.107	24.582	25.115		48.642	49.094	14.071	34.596	-1.222	-7.632		45.779	0.085	14.643	0.003		56.00	0.93333	47.6	11.2	41.6	2.869	0.013	0.013	0.000	0.304	0.26	
74	2/2/2004	1:00:31 PM		25.413	21.815	25.097	24.527	25.065		48.416	48.847	14.106	34.311	-1.219	-7.623		49.967	0.085	14.643	0.004		57.00	0.95	47.4	12.2	41.4	2.852	0.013	0.013	0.000	0.306	0.26	
75	2/2/2004	1:01:31 PM		25.398	21.856	25.087	24.472	25.235		48.265	48.762	14.196	34.038	-1.222	-7.621		50.681	0.085	14.643	0.004		58.00	0.96667	47.3	12.4	41.2	2.837	0.013	0.013	0.000	0.307	0.26	
76	2/2/2004	1:02:31 PM		25.372	21.875	25.076	24.416	25.923		48.312	48.822	14.199	34.069	-1.222	-7.621		47.222	0.085	14.643	0.004		59.00	0.98333	47.3	11.6	41.2	2.840	0.013	0.013	0.000	0.307	0.26	
77	2/2/2004	1:03:31 PM		25.362	21.915	25.076	24.4	25.758		48.406	49.019	14.234	34.065	-1.219	-7.551		48.346	0.084	14.643	0.003		60.00	1	47.5	11.8	41.2	2.843	0.013	0.012	0.000	0.303	0.26	
78	2/2/2004	1:04:31 PM		25.356	21.949	25.075	24.354	25.133		48.439	48.973	14.267	34.061	-1.219	-7.606		51.675	0.085	14.643	0.003		61.00	1.01667	47.5	12.7	41.3	2.844	0.013	0.013	0.000	0.307	0.26	
79	2/2/2004	1:05:31 PM		25.335	21.973	25.064	24.348	25.202		48.246	48.863	14.165	34.001	-1.216	-7.595		50.883	0.085	14.643	0.004		62.00	1.03333	47.4	12.5	41.1	2.835	0.013	0.013	0.000	0.308	0.26	
80	2/2/2004	1:06:31 PM		25.329	21.992	25.048	24.327	25.411		48.468	49.004	14.305	34.135	-1.219	-7.6		50.341	0.085	14.643	0.003		63.00	1.05	47.5	12.3	41.3	2.848	0.013	0.013	0.000	0.306	0.26	
81	2/2/2004	1:07:31 PM		25.312	22.016	25.026	24.26	25.789		48.601	49.201	14.241	34.336	-1.219	-7.595		52.134	0.085	14.643	0.004		64.00	1.06667	47.7	12.8	41.5	2.859	0.013	0.013	0.000	0.305	0.26	
82	2/2/2004	1:08:31 PM		25.306	22.05	25.025	24.249	25.693		48.244	48.783	14.001	34.25	-1.222	-7.592		49.986	0.086	14.643	0.003		65.00	1.08333	47.3	12.2	41.2	2.844	0.013	0.013	0.000	0.311	0.26	
83	2/2/2004	1:09:31 PM		25.309	22.063	24.948	24.272	25.216		48.213	48.832	13.944	34.235	-1.219	-7.589		52.063	0.085	14.643	0.003		66.00	1.1	47.4	12.8	41.2	2.842	0.013	0.013	0.000	0.308	0.26	
84	2/2/2004	1:10:31 PM		25.307	22.076	24.806	24.285	25.254		47.586	48.192	13.657	33.929	-1.219	-7.554		51.392	0.083	14.643	0.003		67.00	1.11667	46.7	12.6	40.8	2.810	0.012	0.012	0.000	0.305	0.26	
85	2/2/2004	1:11:31 PM		25.289	22.108	24.808	24.337	25.381		47.7	48.277	13.795	33.886	-1.219	-7.56		50.22	0.089	14.643	0.003		68.00	1.13333	46.8	12.3	40.8	2.813	0.013	0.013	0.000	0.327	0.28	
86	2/2/2004	1:12:31 PM		25.272	22.126	24.811	24.461	25.749		47.817	48.484	13.65	34.122	-1.216	-7.554		53.511	0.089	14.643	0.004		69.00	1.15	47.0	13.1	41.0	2.825	0.013	0.013	0.000	0.326	0.28	
87	2/2/2004	1:13:31 PM		25.25	22.149	24.809	24.509	25.762		47.651	48.267	13.76	33.893	-1.216	-7.548		48.311	0.089	14.643	0.004		70.00	1.16667	46.8	11.8	40.8	2.811	0.013	0.013	0.000	0.327	0.28	
88	2/2/2004	1:14:31 PM		25.217	22.162	24.831	24.606	26.198		47.958	48.637	13.865	33.997	-1.219	-7.543		52.155	0.089	14.643	0.004		71.00	1.18333	47.2	12.8	41.0	2.825	0.013	0.013	0.000	0.325	0.28	
89	2/2/2004	1:15:31 PM		25.2	22.189	24.889	24.629	25.906		47.676	48.295	13.724	34.02	-1.219	-7.54		49.423	0.089	14.643	0.004		72.00	1.2	46.8	12.1	40.8	2.816	0.013	0.013	0.000	0.326	0.28	
90	2/2/2004	1:16:31 PM		25.192	22.222	24.951	24.706	26.138		47.806	48.569	13.797	33.86	-1.219	-7.534		48.835	0.09	14.643	0.004		73.00	1.21667	47.1	12.0	40.8	2.815	0.013	0.013	0.000	0.329	0.28	
91	2/2/2004	1:17:31 PM		25.199	22.254	25.003	24.784	25.931		47.51	48.304	13.576	33.813	-1.216	-7.531		47.302	0.09	14.643	0.004		74.00	1.23333	46.8	11.6	40.7	2.803	0.013	0.013	0.000	0.330	0.28	
92	2/2/2004	1:18:31 PM		25.211	22.276	25.07	24.891	26.307		47.644	48.374	13.731	33.862	-1.219	-7.531		51.208	0.089	14.643	0.003		75.00	1.25	46.9	12.5	40.8	2.810	0.013	0.013	0.000	0.325	0.28	
93	2/2/2004	1:19:31 PM		25.208	22.293	25.122	24.878	26.613		47.586	48.366	13.664	33.87	-1.222	-7.522		46.152	0.09	14.643	0.004		76.00	1.26667	46.9	11.3	40.7	2.808	0.013	0.013	0.000	0.328	0.28	
94	2/2/2004	1:20:31 PM		25.22	22.321	25.175	24.835	26.426		47.717	48.449	13.76	33.966	-1.222	-7.516		51.277	0.09	14.643	0.004		77.00	1.28333	47.0	12.6	40.8	2.816	0.013	0.013	0.000	0.327	0.28	
95	2/2/2004	1:21:31 PM		25.242	22.353	25.236	24.822	25.883		47.692	48.443	13.666	34.032	-1.219	-7.511		48.638	0.09	14.643	0.004		78.00	1.3	47.0	11.9	40.9	2.817	0.013	0.013	0.000	0.326	0.28	
96	2/2/2004	1:22:31 PM		25.265	22.396	25.274	24.965	26.43		47.721	48.48	13.581	34.112	-1.222	-7.511		47.377	0.091	14.643	0.003		79.00	1.31667	47.0	11.6	40.9	2.821	0.014	0.013	0.000	0.329	0.28	
97	2/2/2004	1:23:31 PM		25.287	22.408	25.322	24.992	25.794		47.767	48.567	13.653	34.075	-1.222	-7.467		50.409	0.091	14.643	0.004		80.00	1.33333	47.1	12.4	40.9	2.821	0.014	0.013	0.000	0.329	0.28	
98	2/2/2004	1:24:31 PM		25.305	22.431	25.37	24.995	26.351		47.632	48.478	13.596	33.96	-1.219	-7.496		48.334	0.091	14.643	0.003		81.00	1.35	47.0	11.8	40.8	2.813	0.014	0.013	0.000	0.329	0.28	
99	2/2/2004	1:25:31 PM		25.344	22.486	25.429	24.964	26.27		47.559	48.43	13.656	33.858	-1.219	-7.488		49.621	0.09	14.643	0.004		82.00	1.36667	47.0	12.2	40.7	2.807	0.013	0.013	0.000	0.326	0.28	
100	2/2/2004	1:26:31 PM		25.367	22.514	25.467	24.967	26.173		47.435	48.258	13.613	33.808	-1.219	-7.488		50.804	0.09	14.643	0.003		83.00	1.38333	46.8	12.5	40.6	2.801	0.013	0.013	0.000	0.326	0.28	
101	2/2/2004	1:27:31 PM		25.39	22.532	25.505	24.925	25.932		47.522	48.474	13.627	33.761	-1.219	-7.482		52.61	0.091	14.643	0.003		84.00	1.4	47.0	12.9	40.6	2.802	0.014	0.013	0.000	0.329	0.28	
102	2/2/2004	1:28:31 PM		25.423	22.565	25.548	24.878	25.865		47.742	48.677	13.729	33.946	-1.219	-7.479		52.583	0.09	14.643	0.004		85.00	1.41667	47.2	12.9	40.8	2.816	0.013	0.013	0.000	0.324	0.28	
103	2/2/2004	1:29:31 PM		25.446	22.583	25.586	24.876	26.401		47.752	48.662	13.71	33.975	-1.219	-7.47		47.639	0.091	14.643	0.004		86.00	1.43333	47.2	11.7	40.9	2.817	0.014	0.013	0.000	0.327	0.28	
104	2/2/2004	1:30:31 PM		25.454	22.596	25.589	24.848	26.494		47.792	48.714	13.649	34.079	-1.222	-7.464		50.213	0.092	14.643	0.003		87.00	1.45	47.2	12.3	40.9	2.822	0.014	0.013	0.000	0.330	0.28	
105	2/2/2004	1:31:31 PM		25.497	22.625	25.642	24.847	26.687		48.022	49.067	13.576	34.342	-1.222	-7.462		44.381	0.092	14.643	0.003		88.00	1.46667	47.6	10.9	41.2	2.839	0.014	0.013	0.000	0.327	0.28	
106	2/2/2004	1:32:31 PM		25.525	22.663	25.68	24.83	26.106		47.823	48.789	13.581	34.211	-1.219	-7.436		53.628	0.093	14.643	0.004		89.00	1.48333	47.3	13.1	41.0	2.828	0.014	0.014	0.000	0.332	0.28	
107	2/2/2004	1:33:31 PM		25.563	22.691	25.728	24.868	26.254		47.553	48.495	13.79	33.728	-1.214	-7.441		47.813	0.092	14.643	0.004		90.00	1.5	47.0	11.7	40.6	2.802	0.014	0.013	0.000	0.331	0.28	
108	2/2/2004	1:34:31 PM		25.587	22.7	25.652	24.807	26.537		47.197	48.208	13.564	33.611	-1.219	-7.441		56.671	0.091	14.643	0.004		91.00	1.51667	46.7	13.9	40.4	2.786	0.014	0.013	0.000	0.330	0.28	
109	2/2/2004	1:35:31 PM		25.591	22.724	25.526	24.79	26.566		46.881	48.038	13.367	33.388	-1.222	-7.43		55.939	0.094	14.643	0.003		92.00	1.53333	46.6	13.7	40.1	2.767	0.014	0.014	0.000	0.344	0.29	
110	2/2/2004	1:36:31 PM		25.625	22.753	25.585	24.795	26.435		46.885	47.933	13.36	33.451	-1.219	-7.421		48.87	0.095	14.643	0.003		93.00	1.55	46.5	12.0	40.2	2.769	0.014	0.014	0.000	0.347	0.30	
111	2/2/2004	1:37:31 PM		25.624	22.772	25.609	24.748	26.988		47.329	48.486	13.634	33.519	-1.219	-7.424		52.625	0.095	14.643	0.003		94.00	1.56667	47.0	12.9	40.4	2.787	0.014	0.014	0.000	0.344	0.29	
112	2/2/2004	1:38:31 PM		25.638	22.806	25.628	24.818	26.304		47.105	48.264	13.51	33.458	-1.216	-7.418		44.744	0.095	14.643	0.004		95.00	1.58333	46.8	11.0	40.3	2.777	0.014	0.014	0.000	0.345	0.29	
113	2/2/2004	1:39:31 PM		25.642	22.821	25.592	24.757	26.413		46.742	47.908	13.31	33.31	-1.219	-7.421		48.313	0.095	14.643	0.003		96.00	1.6	46.4	11.8	40.0	2.760	0.014	0.014	0.000	0.348	0.30	
114	2/2/2004	1:40:31 PM		25.632	22.83	25.571	24.736	26.841		47.07	48.217	13.396	33.615	-1.225	-7.424		54.383	0.095	14.643	0.003		97.00	1.61667	46.7	13.3	40.3	2.781	0.014	0.014	0.000	0.345	0.29	
115	2/2/2004	1:41:31 PM		25.645	22.859	25.57	24.755	27.094		46.854	47.995	13.325	33.48	-1.216	-7.415		51.548	0.095	14.643	0.004		98.00	1.63333	46.5	12.6	40.2	2.769	0.014	0.014	0.000	0.347	0.30	
116	2/2/2004	1:42:31 PM		25.655	22.888	25.565	24.719	26.25		47.209	48.443	13.541	33.478	-1.219	-7.418		48.782	0.095	14.643	0.004		99.00	1.65	47.0	12.0	40.3	2.782	0.014	0.014	0.000	0.346	0.29	
117	2/2/2004	1:43:31 PM		25.653	22.907	25.558	24.683	26.139		47.138	48.366	13.513	33.486	-1.222	-7.412		50.574	0.095	14.643	0.004		100.00	1.66667	46.9	12.4	40.3	2.779	0.014	0.014	0.000	0.346	0.29	
118	2/2/2004	1:44:31 PM		25.641	22.925	25.531	24.715	26.511		46.887	48.204	13.376	33.324	-1.222	-7.404		48.098	0.096	14.643	0.003		101.00	1.68333	46.7	11.8	40.1	2.765	0.014	0.014	0.000	0.352	0.30	
119	2/2/2004	1:45:31 PM		25.629	22.943	25.519	24.723	26.719		46.601	47.871	13.799	32.643	-1.222	-7.412		51.882	0.094	14.643	0.003		102.00	1.7	46.4	12.7	39.6	2.732	0.014	0.014	0.000	0.349	0.30	
120	2/2/2004	1:46:31 PM		25.637	22.976	25.537	24.741	26.338		46.533	47.767	13.632	32.766	-1.222	-7.41		49.828	0.094	14.643	0.003		103.00	1.71667	46.3	12.2	39.6	2.734	0.014	0.014	0.000	0.348	0.30	
121	2/2/2004	1:47:31 PM		25.634	22.983	25.529	24.753	25.546		46.863	48.13	13.808	32.926	-1.219	-7.404		52.404	0.095	14.643	0.004		104.00	1.73333	46.7	12.8	39.9	2.751	0.014	0.014	0.000	0.350	0.30	
122	2/2/2004	1:48:31 PM		25.641	23	25.516	24.725	26.022		46.601	47.864	13.676	32.873	-1.225	-7.412		49.369	0.094	14.643	0.003		105.00	1.75	46.4	12.1	39.7	2.740	0.014	0.014	0.000	0.348	0.30	
123	2/2/2004	1:49:31 PM		25.648	23.017	25.523	24.787	26.328		46.626	48.096	13.674	32.665	-1.219	-7.401		52.299	0.095	14.643	0.003		106.00	1.76667	46.6	12.8	39.6	2.733	0.014	0.014	0.000	0.352	0.30	
124	2/2/2004	1:50:31 PM		25.645	23.039	25.53	24.789	26.156		46.748	48.065	13.677	32.996	-1.219	-7.404		48.15	0.095	14.643	0.003		107.00	1.78333	46.6	11.8	39.9	2.749	0.014	0.014	0.000	0.350	0.30	
125	2/2/2004	1:51:31 PM		25.637	23.042	25.522	24.777	26.268		46.636	48.028	13.61	32.895	-1.219	-7.404		53.617	0.095	14.643	0.004		108.00	1.8	46.6	13.1	39.8	2.742	0.014	0.014	0.000	0.351	0.30	
126	2/2/2004	1:52:31 PM		25.634	23.064	25.519	24.799	26.524		46.786	48.223	13.719	32.912	-1.219	-7.36		46.494	0.095	14.643	0.004		109.00	1.81667	46.8	11.4	39.8	2.747	0.014	0.014	0.000	0.350	0.30	
127	2/2/2004	1:53:31 PM		25.642	23.087	25.507	24.807	25.984		46.657	48.138	13.486	33.02	-1.222	-7.392		45.128	0.095	14.643	0.003		110.00	1.83333	46.7	11.1	39.8	2.747	0.014	0.014	0.000	0.350	0.30	
128	2/2/2004	1:54:31 PM		25.644	23.099	25.514	24.779	26.17		46.875	48.358	13.556	33.15	-1.222	-7.389		50.397	0.095	14.643	0.003		111.00	1.85	46.9	12.4	40.0	2.759	0.014	0.014	0.000	0.349	0.30	
129	2/2/2004	1:55:31 PM		25.646	23.116	25.321	24.806	26.152		46.323	47.842	13.32	32.84	-1.219	-7.384		55.153	0.095	14.643	0.003		112.00	1.86667	46.4	13.5	39.6	2.729	0.014	0.014	0.000	0.355	0.30	
130	2/2/2004	1:56:31 PM		25.617	23.132	25.307	24.832	26.438		46.093	47.618	13.285	32.7	-1.222	-7.369		51.404	0.098	14.643	0.004		113.00	1.88333	46.1	12.6	39.4	2.716	0.015	0.014	0.000	0.368	0.31	
131	2/2/2004	1:57:31 PM		25.604	23.139	25.289	24.789	26.105		46.344	47.922	13.341	32.84	-1.222	-7.366		49.54	0.099	14.643	0.003		114.00	1.9	46.4	12.1	39.6	2.730	0.015	0.015	0.000	0.370	0.31	
132	2/2/2004	1:58:31 PM		25.596	23.161	25.306	24.816	26.017		46.05	47.645	13.196	32.737	-1.219	-7.36		51.419	0.1	14.643	0.003		115.00	1.91667	46.2	12.6	39.4	2.716	0.015	0.015	0.000	0.375	0.32	
133	2/2/2004	1:59:31 PM		25.594	23.179	25.284	24.763	26.499		46.388	48.038	13.378	32.811	-1.225	-7.366		53.342	0.098	14.643	0.003		116.00	1.93333	46.6	13.1	39.6	2.730	0.015	0.014	0.000	0.366	0.31	
134	2/2/2004	2:00:31 PM		25.585	23.2	25.295	24.704	26.575		46.421	48.053	13.392	32.871	-1.222	-7.36		51.477	0.099	14.643	0.003		117.00	1.95	46.6	12.6	39.6	2.733	0.015	0.015	0.000	0.369	0.31	
135	2/2/2004	2:00:35 PM		25.585	23.195	25.29	24.699	26.635		46.052	47.653	13.227	32.717	-1.222	-7.36		50.996	0.099	14.643	0.003		117.07	1.95111	46.2	12.5	39.4	2.715	0.015	0.015	0.000	0.372	0.32	
136	2/2/2004	2:01:35 PM		25.572	23.212	25.292	24.691	26.467		46.066	47.647	13.257	32.733	-1.222	-7.355		52.896	0.1	14.643	0.003		118.07	1.96778	46.2	13.0	39.4	2.716	0.015	0.015	0.000	0.375	0.32	
137	2/2/2004	2:02:35 PM		25.584	23.25	25.329	24.648	26.146		46.348	47.993	13.198	33.026	-1.219	-7.358		50.217	0.099	14.643	0.003		119.07	1.98444	46.5	12.3	39.7	2.736	0.015	0.015	0.000	0.368	0.31	
138	2/2/2004	2:03:35 PM		25.566	23.242	25.291	24.686	25.783		46.195	47.844	13.178	32.895	-1.219	-7.355		49.12	0.099	14.643	0.003		120.07	2.00111	46.4	12.0	39.5	2.726	0.015	0.015	0.000	0.370	0.32	
139	2/2/2004	2:04:35 PM		25.568	23.269	25.293	24.687	26.189		46.149	47.937	13.169	32.801	-1.222	-7.323		44.857	0.1	14.643	0.003		121.07	2.01778	46.5	11.0	39.5	2.722	0.015	0.015	0.000	0.375	0.32	
140	2/2/2004	2:05:35 PM		25.56	23.261	25.29	24.709	26.156		46.172	47.881	13.144	32.908	-1.219	-7.346		51.467	0.1	14.643	0.003		122.07	2.03444	46.4	12.6	39.5	2.726	0.015	0.015	0.000	0.374	0.32	

RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	2/2/2004	2:06:35 PM		25.557	23.278	25.292	24.696	26.118		46.249	48.043	13.173	32.949	-1.222	-7.346		52.372	0.099	14.643	0.003		123.07	2.05111	46.6	12.8	39.6	2.730	0.015	0.015	0.000	0.370	0.31	
142	2/2/2004	2:07:35 PM		25.554	23.285	25.294	24.728	26.115		46.34	48.126	13.244	32.942	-1.219	-7.337		47.326	0.101	14.643	0.003		124.07	2.06778	46.7	11.6	39.6	2.733	0.015	0.015	0.000	0.377	0.32	
143	2/2/2004	2:08:35 PM		25.545	23.311	25.305	24.71	26.466		46.394	48.246	13.254	32.973	-1.222	-7.346		57.627	0.098	14.643	0.003		125.07	2.08444	46.8	14.1	39.7	2.736	0.015	0.014	0.000	0.365	0.31	
144	2/2/2004	2:09:35 PM		25.548	23.324	25.308	24.762	26.513		46.101	48.016	13.103	32.829	-1.219	-7.34		46.409	0.099	14.643	0.004		126.07	2.10111	46.5	11.4	39.5	2.721	0.015	0.015	0.000	0.371	0.32	
145	2/2/2004	2:10:35 PM		25.549	23.34	25.309	24.774	25.906		46.195	48.055	13.268	32.729	-1.219	-7.334		50.516	0.1	14.643	0.004		127.07	2.11778	46.6	12.4	39.5	2.721	0.015	0.015	0.000	0.375	0.32	
146	2/2/2004	2:11:35 PM		25.545	23.346	25.306	24.77	26.007		46.342	48.244	13.317	32.782	-1.219	-7.337		53.943	0.099	14.643	0.003		128.07	2.13444	46.8	13.2	39.6	2.728	0.015	0.015	0.000	0.370	0.31	
147	2/2/2004	2:12:35 PM		25.557	23.364	25.317	24.752	25.894		46.216	48.103	13.233	32.869	-1.222	-7.337		56.077	0.1	14.643	0.004		129.07	2.15111	46.6	13.7	39.5	2.726	0.015	0.015	0.000	0.374	0.32	
148	2/2/2004	2:13:35 PM		25.558	23.369	25.323	24.793	25.78		45.927	47.898	13.161	32.61	-1.219	-7.308		50.047	0.099	14.643	0.003		130.07	2.16778	46.4	12.3	39.3	2.707	0.015	0.015	0.000	0.372	0.32	
149	2/2/2004	2:14:35 PM		25.564	23.376	25.314	24.759	25.921		46.209	48.19	13.442	32.565	-1.219	-7.331		50.213	0.099	14.643	0.004		131.07	2.18444	46.7	12.3	39.4	2.716	0.015	0.015	0.000	0.371	0.32	
150	2/2/2004	2:15:35 PM		25.581	23.412	25.341	24.745	26.132		46.263	48.246	13.37	32.686	-1.222	-7.326		49.175	0.099	14.643	0.004		132.07	2.20111	46.8	12.1	39.5	2.722	0.015	0.015	0.000	0.370	0.32	
151	2/2/2004	2:16:35 PM		25.617	23.398	25.322	24.726	26.313		42.603	47.792	13.082	29.314	-0.365	-0.532		46.574	0.034	14.643	0.003		133.07	2.21778	46.3	11.4	36.0	2.479	0.005	0.005	0.000	0.140	0.12	
152	2/2/2004	2:17:35 PM		25.623	23.404	25.328	24.662	26.787		45.996	48.204	13.302	32.497	-1.216	-7.268		50.9	0.11	14.643	0.004		134.07	2.23444	46.7	12.5	39.2	2.706	0.016	0.016	0.000	0.414	0.35	
153	2/2/2004	2:18:35 PM		25.648	23.419	25.087	24.677	26.264		45.373	47.553	12.921	32.265	-1.219	-7.32		47.938	0.1	14.643	0.003		135.07	2.25111	46.1	11.7	38.8	2.676	0.015	0.015	0.000	0.383	0.33	
154	2/2/2004	2:19:35 PM		25.629	23.435	25.139	24.623	26.38		45.807	48.068	13.061	32.442	-1.219	-7.305		52.856	0.102	14.643	0.004		136.07	2.26778	46.6	13.0	39.1	2.697	0.015	0.015	0.000	0.387	0.33	
155	2/2/2004	2:20:35 PM		25.6	23.442	25.135	24.664	26.74		45.405	47.63	12.972	32.267	-1.222	-7.268		52.456	0.103	14.643	0.004		137.07	2.28444	46.2	12.9	38.8	2.678	0.015	0.015	0.000	0.394	0.34	
156	2/2/2004	2:21:35 PM		25.591	23.462	25.136	24.63	26.82		45.405	47.668	12.797	32.382	-1.222	-7.291		52.714	0.104	14.643	0.003		138.07	2.30111	46.2	12.9	38.9	2.682	0.016	0.015	0.000	0.397	0.34	
157	2/2/2004	2:22:35 PM		25.577	23.464	25.137	24.486	27.25		45.413	47.697	12.854	32.405	-1.222	-7.294		52.076	0.103	14.643	0.003		139.07	2.31778	46.2	12.8	38.9	2.683	0.015	0.015	0.000	0.393	0.33	
158	2/2/2004	2:23:35 PM		25.569	23.471	25.139	24.533	26.614		45.276	47.585	12.851	32.224	-1.219	-7.279		51.648	0.105	14.643	0.004		140.07	2.33444	46.1	12.7	38.8	2.672	0.016	0.016	0.000	0.402	0.34	
159	2/2/2004	2:24:35 PM		25.557	23.493	25.142	24.556	25.918		45.235	47.529	12.762	32.331	-1.222	-7.265		47.775	0.101	14.643	0.004		141.07	2.35111	46.1	11.7	38.8	2.674	0.015	0.015	0.000	0.387	0.33	
160	2/2/2004	2:25:35 PM		25.543	23.495	25.133	24.622	25.755		45.261	47.58	12.814	32.318	-1.222	-7.285		52.139	0.103	14.643	0.003		142.07	2.36778	46.1	12.8	38.8	2.674	0.015	0.015	0.000	0.394	0.34	
161	2/2/2004	2:26:35 PM		25.539	23.521	25.139	24.694	26.315		45.16	47.464	12.767	32.257	-1.222	-7.277		51.062	0.104	14.643	0.003		143.07	2.38444	46.0	12.5	38.7	2.669	0.016	0.015	0.000	0.399	0.34	
162	2/2/2004	2:27:35 PM		25.525	23.522	25.135	24.644	26.186		45.251	47.539	12.928	32.187	-1.219	-7.285		53.111	0.102	14.643	0.004		144.07	2.40111	46.1	13.0	38.7	2.670	0.015	0.015	0.000	0.391	0.33	
163	2/2/2004	2:28:35 PM		25.521	23.533	25.136	24.685	25.982		45.073	47.473	12.916	32.062	-1.222	-7.268		50.505	0.104	14.643	0.003		145.07	2.41778	46.0	12.4	38.6	2.659	0.016	0.015	0.000	0.400	0.34	
164	2/2/2004	2:29:35 PM		25.516	23.548	25.136	24.681	26.617		45.27	47.668	12.86	32.329	-1.222	-7.277		49.696	0.103	14.643	0.003		146.07	2.43444	46.2	12.2	38.8	2.675	0.015	0.015	0.000	0.394	0.34	
165	2/2/2004	2:30:35 PM		25.507	23.554	25.137	24.601	26.443		45.369	47.752	12.984	32.288	-1.219	-7.274		47.026	0.103	14.643	0.004		147.07	2.45111	46.3	11.5	38.8	2.677	0.015	0.015	0.000	0.394	0.34	
166	2/2/2004	2:31:35 PM		25.513	23.57	25.148	24.632	26.524		45.154	47.686	12.878	32.06	-1.219	-7.268		50.678	0.103	14.643	0.004		148.07	2.46778	46.2	12.4	38.6	2.662	0.015	0.015	0.000	0.396	0.34	
167	2/2/2004	2:32:35 PM		25.494	23.561	25.134	24.633	27.078		45.297	47.742	12.913	32.319	-1.222	-7.262		52.766	0.104	14.643	0.003		149.07	2.48444	46.3	12.9	38.8	2.676	0.016	0.015	0.000	0.398	0.34	
168	2/2/2004	2:33:35 PM		25.501	23.593	25.151	24.695	27.06		45.214	47.79	12.903	32.082	-1.219	-7.262		54.929	0.104	14.643	0.003		150.07	2.50111	46.3	13.5	38.6	2.665	0.016	0.015	0.000	0.399	0.34	
169	2/2/2004	2:34:35 PM		25.502	23.604	25.142	24.646	27.166		45.058	47.587	12.868	32.082	-1.222	-7.242		50.209	0.104	14.643	0.004		151.07	2.51778	46.1	12.3	38.6	2.659	0.016	0.015	0.000	0.400	0.34	
170	2/2/2004	2:35:35 PM		25.499	23.616	25.149	24.658	27.177		45.195	47.806	12.887	32.093	-1.219	-7.262		51.267	0.103	14.643	0.003		152.07	2.53444	46.3	12.6	38.6	2.664	0.015	0.015	0.000	0.396	0.34	
171	2/2/2004	2:36:35 PM		25.504	23.632	24.974	24.648	26.809		44.737	47.346	12.748	31.785	-1.219	-7.256		48.905	0.104	14.643	0.004		153.07	2.55111	45.9	12.0	38.3	2.638	0.016	0.016	0.000	0.406	0.35	
172	2/2/2004	2:37:35 PM		25.486	23.638	24.98	24.735	26.501		44.785	47.46	12.779	31.808	-1.222	-7.248		55.983	0.106	14.643	0.003		154.07	2.56778	46.0	13.7	38.3	2.640	0.016	0.016	0.000	0.413	0.35	
173	2/2/2004	2:38:35 PM		25.461	23.639	24.981	24.726	26.342		44.563	47.24	12.883	31.51	-1.219	-7.236		46.367	0.107	14.643	0.003		155.07	2.58444	45.8	11.4	38.0	2.622	0.016	0.016	0.000	0.420	0.36	
174	2/2/2004	2:39:35 PM		25.437	23.654	24.967	24.716	26.368		44.583	47.296	12.66	31.729	-1.222	-7.213		44.052	0.108	14.643	0.003		156.07	2.60111	45.8	10.8	38.2	2.631	0.016	0.016	0.000	0.422	0.36	
175	2/2/2004	2:40:35 PM		25.448	23.68	24.987	24.772	27.151		46.243	49.116	11.344	34.613	-1.219	-7.204		45.727	0.113	14.643	0.004		157.07	2.61778	47.6	11.2	40.4	2.787	0.017	0.017	0.000	0.417	0.35	
176	2/2/2004	2:41:35 PM		25.444	23.691	24.974	24.819	26.928		46.79	49.628	11.902	34.656	-1.222	-7.199		50.472	0.114	14.643	0.004		158.07	2.63444	48.2	12.4	40.7	2.808	0.017	0.017	0.000	0.418	0.36	
177	2/2/2004	2:42:35 PM		25.451	23.714	24.991	24.805	26.98		46.939	49.809	11.837	34.851	-1.216	-7.184		48.953	0.116	14.643	0.004		159.07	2.65111	48.3	12.0	40.9	2.820	0.017	0.017	0.000	0.423	0.36	
178	2/2/2004	2:43:35 PM		25.438	23.726	24.988	24.762	26.379		46.655	49.496	12.191	34.268	-1.225	-7.201		47.971	0.113	14.643	0.003		160.07	2.66778	48.0	11.8	40.5	2.790	0.017	0.017	0.000	0.417	0.35	
179	2/2/2004	2:44:35 PM		25.434	23.726	24.993	24.753	26.684		46.518	49.44	11.841	34.453	-1.219	-7.187		50.12	0.115	14.643	0.004		161.07	2.68444	48.0	12.3	40.5	2.791	0.017	0.017	0.000	0.424	0.36	
180	2/2/2004	2:45:35 PM		25.431	23.748	25	24.78	26.835		46.624	49.545	12.003	34.426	-1.222	-7.187		49.273	0.114	14.643	0.004		162.07	2.70111	48.1	12.1	40.5	2.794	0.017	0.017	0.000	0.419	0.36	
181	2/2/2004	2:46:35 PM		25.426	23.754	24.986	24.786	26.98		46.539	49.589	11.73	34.57	-1.222	-7.19		47.946	0.115	14.643	0.003		163.07	2.71778	48.1	11.7	40.6	2.796	0.017	0.017	0.000	0.423	0.36	
182	2/2/2004	2:47:35 PM		25.423	23.76	24.987	24.852	26.658		46.935	49.881	11.908	34.873	-1.222	-7.178		47.886	0.116	14.643	0.003		164.07	2.73444	48.4	11.7	40.9	2.820	0.017	0.017	0.000	0.423	0.36	
183	2/2/2004	2:48:35 PM		25.418	23.776	24.993	24.823	26.459		46.614	49.591	11.777	34.658	-1.222	-7.181		47.913	0.114	14.643	0.004		165.07	2.75111	48.1	11.7	40.6	2.802	0.017	0.017	0.000	0.418	0.36	
184	2/2/2004	2:49:35 PM		25.43	23.793	24.99	24.83	26.66		47.201	50.306	12.052	34.853	-1.225	-7.181		53.071	0.115	14.643	0.003		166.07	2.76778	48.8	13.0	41.0	2.829	0.017	0.017	0.000	0.418	0.36	
185	2/2/2004	2:50:35 PM		25.436	23.809	25.006	24.851	26.606		47.008	50.101	12.131	34.607	-1.222	-7.167		47.783	0.114	14.643	0.003		167.07	2.78444	48.6	11.7	40.8	2.814	0.017	0.017	0.000	0.416	0.35	
186	2/2/2004	2:51:35 PM		25.432	23.805	25.001	24.886	27.25		46.852	49.929	12.096	34.613	-1.222	-7.115		49.037	0.11	14.643	0.003		168.07	2.80111	48.5	12.0	40.7	2.808	0.016	0.016	0.000	0.403	0.34	
187	2/2/2004	2:52:35 PM		25.434	23.822	25.014	24.828	27.342		47.016	50.254	12.217	34.459	-1.222	-7.155		48.791	0.11	14.643	0.003		169.07	2.81778	48.8	12.0	40.7	2.809	0.016	0.016	0.000	0.402	0.34	
188	2/2/2004	2:53:35 PM		25.436	23.839	25.021	24.871	27.638		46.931	50.155	12.003	34.738	-1.222	-7.149		45.426	0.115	14.643	0.004		170.07	2.83444	48.7	11.1	40.8	2.815	0.017	0.017	0.000	0.420	0.36	
189	2/2/2004	2:54:35 PM		25.439	23.847	24.994	24.949	27.631		47.095	50.244	12.08	34.791	-1.225	-7.181		47.984	0.111	14.643	0.003		171.07	2.85111	48.8	11.8	40.9	2.823	0.017	0.017	0.000	0.404	0.34	
190	2/2/2004	2:55:35 PM		25.432	23.87	24.831	24.916	27.728		46.276	49.458	11.668	34.42	-1.219	-7.146		48.785	0.113	14.643	0.004		172.07	2.86778	48.0	12.0	40.3	2.782	0.017	0.017	0.000	0.420	0.36	
191	2/2/2004	2:56:35 PM		25.425	23.883	24.87	24.965	27.293		46.599	49.956	11.765	34.506	-1.222	-7.089		49.341	0.115	14.643	0.004		173.07	2.88444	48.5	12.1	40.6	2.796	0.017	0.017	0.000	0.424	0.36	
192	2/2/2004	2:57:35 PM		25.397	23.875	24.842	24.957	27.22		46.649	50.105	11.703	34.58	-1.225	-7.016		49.75	0.114	14.643	0.003		174.07	2.90111	48.6	12.2	40.6	2.800	0.017	0.017	0.000	0.420	0.36	
193	2/2/2004	2:58:35 PM		25.404	23.917	24.869	25.024	27.208		46.734	50.005	11.603	34.91	-1.219	-7.106		46.864	0.113	14.643	0.004		175.07	2.91778	48.5	11.5	40.8	2.815	0.017	0.017	0.000	0.414	0.35	
194	2/2/2004	2:59:35 PM		25.391	23.904	24.856	24.956	26.367		46.641	49.981	11.502	34.878	-1.225	-7.109		48.023	0.115	14.643	0.003		176.07	2.93444	48.5	11.8	40.8	2.810	0.017	0.017	0.000	0.422	0.36	
195	2/2/2004	3:00:35 PM		25.392	23.931	24.852	24.947	26.259		46.742	50.082	11.542	34.954	-1.219	-7.074		48.334	0.116	14.643	0.003		177.07	2.95111	48.6	11.8	40.8	2.816	0.017	0.017	0.000	0.425	0.36	
196	2/2/2004	3:01:35 PM		25.388	23.952	24.843	24.928	26.693		46.72	50.008	11.407	35.165	-1.222	-7.083		46.042	0.117	14.643	0.003		178.07	2.96778	48.5	11.3	40.9	2.823	0.017	0.018	0.000	0.428	0.36	
197	2/2/2004	3:02:35 PM		25.389	23.957	24.849	25.034	27.252		46.761	50.157	11.43	35.124	-1.216	-7.042		46.063	0.116	14.643	0.004		179.07	2.98444	48.7	11.3	40.9	2.823	0.017	0.017	0.000	0.424	0.36	
198	2/2/2004	3:03:35 PM		25.38	23.968	24.839	25.11	27.582		46.896	50.391	11.469	35.151	-1.222	-7.048		48.28	0.111	14.643	0.003		180.07	3.00111	48.9	11.8	41.0	2.828	0.017	0.017	0.000	0.405	0.34	
199	2/2/2004	3:04:35 PM		25.361	23.959	24.816	24.981	27.782		46.728	50.169	11.407	35.073	-1.222	-7.068		45.189	0.117	14.643	0.003		181.07	3.01778	48.7	11.1	40.9	2.820	0.017	0.018	0.000	0.429	0.36	
200	2/2/2004	3:05:35 PM		25.368	23.982	24.833	24.973	27.63		46.975	50.347	11.41	35.387	-1.225	-7.031		46.584	0.115	14.643	0.003		182.07	3.03444	48.9	11.4	41.2	2.839	0.017	0.017	0.000	0.418	0.36	
201	2/2/2004	3:06:35 PM		25.37	24.004	24.835	25.075	27.139		47.184	50.619	11.396	35.651	-1.222	-6.996		45.56	0.116	14.643	0.003		183.07	3.05111	49.1	11.2	41.4	2.856	0.017	0.017	0.000	0.420	0.36	
202	2/2/2004	3:07:35 PM		25.381	24.019	24.845	25.011	27.712		47.01	50.49	11.542	35.206	-1.222	-7.045		45.318	0.115	14.643	0.003		184.07	3.06778	49.0	11.1	41.1	2.834	0.017	0.017	0.000	0.419	0.36	
203	2/2/2004	3:08:35 PM		25.372	24.026	24.822	25.047	27.285		47.097	50.495	11.613	35.341	-1.222	-7.016		43.683	0.114	14.643	0.003		185.07	3.08444	49.0	10.7	41.2	2.842	0.017	0.017	0.000	0.414	0.35	
204	2/2/2004	3:09:35 PM		25.378	24.037	24.828	25.079	27.047		47.13	50.712	11.635	35.202	-1.222	-7.034		42.129	0.116	14.643	0.003		186.07	3.10111	49.2	10.3	41.2	2.838	0.017	0.017	0.000	0.422	0.36	
205	2/2/2004	3:10:35 PM		25.369	24.043	24.824	25.079	26.963		47.535	51.145	11.859	35.337	-1.222	-7.025		47.274	0.111	14.643	0.003		187.07	3.11778	49.7	11.6	41.4	2.857	0.017	0.017	0.000	0.401	0.34	
206	2/2/2004	3:11:35 PM		25.37	24.044	24.82	25.045	27.228		47.24	50.909	11.765	35.107	-1.225	-7.008		47.333	0.108	14.643	0.003		188.07	3.13444	49.4	11.6	41.2	2.839	0.016	0.016	0.000	0.393	0.33	
207	2/2/2004	3:12:35 PM		25.375	24.059	24.789	25.11	26.75		47.595	51.077	11.923	35.44	-1.222	-7.086		46.596	0.109	14.643	0.004		189.07	3.15111	49.6	11.4	41.5	2.862	0.016	0.016	0.000	0.394	0.34	
208	2/2/2004	3:13:35 PM		25.366	24.065	24.676	25.131	27.09		46.896	50.478	11.451	35.214	-1.222	-7.028		43.459	0.111	14.643	0.003		190.07	3.16778	49.0	10.7	41.1	2.831	0.017	0.017	0.000	0.407	0.35	
209	2/2/2004	3:14:35 PM		25.347	24.076	24.681	25.137	26.886		47.06	50.617	11.415	35.385	-1.219	-7.022		45.195	0.111	14.643	0.003		191.07	3.18444	49.1	11.1	41.2	2.842	0.017	0.017	0.000	0.405	0.34	
210	2/2/2004	3:15:35 PM		25.323	24.077	24.663	25.128	27.496		46.719	50.333	11.34	35.157	-1.222	-7.008		46.928	0.118	14.643	0.003		192.07	3.20111	48.9	11.5	40.9	2.823	0.018	0.018	0.000	0.434	0.37	

RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	2/2/2004	3:16:35 PM		25.31	24.084	24.67	25.166	27.353		46.305	49.995	11.982	33.997	-1.222	-7.071		45.547	0.113	14.643	0.003		193.07	3.21778	48.5	11.2	40.2	2.768	0.017	0.017	0.000	0.424	0.36	
212	2/2/2004	3:17:35 PM		25.296	24.095	24.686	25.166	27.493		45.469	49.108	12.815	32.345	-1.219	-7.112		47.11	0.108	14.643	0.004		194.07	3.23444	47.6	11.5	38.9	2.683	0.016	0.016	0.000	0.418	0.36	
213	2/2/2004	3:18:35 PM		25.282	24.101	24.732	25.168	27.171		47.564	51.228	14.028	33.285	-1.222	-7.008		52.821	0.113	14.643	0.003		195.07	3.25111	49.8	12.9	40.4	2.787	0.017	0.017	0.000	0.420	0.36	
214	2/2/2004	3:19:35 PM		25.278	24.082	24.788	25.128	27.271		47.597	51.32	13.59	33.757	-1.222	-7.011		48.449	0.114	14.643	0.003		196.07	3.26778	49.8	11.9	40.7	2.805	0.017	0.017	0.000	0.420	0.36	
215	2/2/2004	3:20:35 PM		25.289	24.083	24.869	25.1	27.362		47.69	51.477	13.505	33.913	-1.219	-6.947		51.25	0.118	14.643	0.004		197.07	3.28444	50.0	12.6	40.8	2.813	0.018	0.018	0.000	0.433	0.37	
216	2/2/2004	3:21:35 PM		25.301	24.09	24.906	25.107	27.369		46.788	50.501	12.982	33.62	-1.225	-6.956		46.797	0.113	14.643	0.003		198.07	3.30111	49.0	11.5	40.2	2.772	0.017	0.017	0.000	0.420	0.36	
217	2/2/2004	3:22:35 PM		25.332	24.106	24.972	25.112	27.151		46.869	50.72	12.827	33.759	-1.216	-6.976		49.41	0.115	14.643	0.004		199.07	3.31778	49.2	12.1	40.3	2.780	0.017	0.017	0.000	0.426	0.36	
218	2/2/2004	3:23:35 PM		25.339	24.103	24.979	25.064	27.332		47.002	50.743	12.953	33.78	-1.222	-6.97		50.499	0.119	14.643	0.003		200.07	3.33444	49.3	12.4	40.4	2.785	0.018	0.018	0.000	0.440	0.37	
219	2/2/2004	3:24:35 PM		25.349	24.093	24.999	25.049	27.138		46.908	50.679	12.686	34.061	-1.222	-6.846		50.776	0.116	14.643	0.003		201.07	3.35111	49.2	12.4	40.5	2.791	0.017	0.017	0.000	0.427	0.36	
220	2/2/2004	3:25:35 PM		25.369	24.098	25.024	25.044	26.689		47.097	51.104	12.812	33.919	-1.222	-6.753		48.805	0.124	14.643	0.003		202.07	3.36778	49.6	12.0	40.5	2.793	0.018	0.018	0.000	0.456	0.39	
221	2/2/2004	3:26:35 PM		25.379	24.088	25.049	25.004	27.033		47.25	50.975	12.576	34.492	-1.219	-6.99		45.793	0.114	14.643	0.003		203.07	3.38444	49.5	11.2	40.9	2.818	0.017	0.017	0.000	0.415	0.35	
222	2/2/2004	3:27:35 PM		25.394	24.088	25.064	24.963	26.434		47.281	51.158	12.653	34.43	-1.219	-6.597		50.474	0.115	14.643	0.003		204.07	3.40111	49.7	12.4	40.9	2.817	0.017	0.017	0.000	0.419	0.36	
223	2/2/2004	3:28:35 PM		25.408	24.097	25.093	24.983	26.857		47.165	51.042	12.503	34.391	-1.222	-6.713		53.837	0.121	14.643	0.003		205.07	3.41778	49.6	13.2	40.8	2.812	0.018	0.018	0.000	0.441	0.38	
224	2/2/2004	3:29:35 PM		25.421	24.085	25.107	24.976	27.105		47.572	51.396	12.698	34.518	-1.219	-6.935		49.882	0.114	14.643	0.004		206.07	3.43444	49.9	12.2	41.0	2.830	0.017	0.017	0.000	0.413	0.35	
225	2/2/2004	3:30:35 PM		25.426	24.07	25.117	24.976	27.185		47.503	51.328	12.582	34.588	-1.219	-6.947		50.777	0.121	14.643	0.003		207.07	3.45111	49.9	12.4	41.0	2.830	0.018	0.018	0.000	0.438	0.37	
226	2/2/2004	3:31:35 PM		25.501	24.09	25.161	25.001	27.418		43.92	51.135	12.444	31.286	1.823	0.387		47.085	0.043	14.643	0.003		208.07	3.46778	49.7	11.5	37.6	2.593	0.006	0.006	0.000	0.170	0.14	
227	2/2/2004	3:32:35 PM		25.556	24.08	25.117	24.976	27.13		46.749	51.077	12.453	34.028	-1.106	-5.042		53.599	0.089	14.643	0.003		209.07	3.48444	49.6	13.1	40.4	2.785	0.013	0.013	0.000	0.327	0.28	
228	2/2/2004	3:33:35 PM		25.517	24.071	25.012	24.962	27.191		47.298	50.855	12.353	34.658	-1.222	-6.762		48.584	0.129	14.643	0.003		210.07	3.50111	49.4	11.9	41.0	2.825	0.019	0.019	0.000	0.469	0.40	
229	2/2/2004	3:34:35 PM		25.528	24.092	25.053	24.978	27.017		46.873	50.642	12.197	34.385	-1.222	-6.652		51.809	0.115	14.643	0.003		211.07	3.51778	49.2	12.7	40.6	2.801	0.017	0.017	0.000	0.421	0.36	
230	2/2/2004	3:35:35 PM		25.527	24.071	25.057	24.942	26.573		47.402	50.992	12.231	34.951	-1.222	-6.889		50.036	0.121	14.643	0.003		212.07	3.53444	49.5	12.3	41.2	2.839	0.018	0.018	0.000	0.437	0.37	
231	2/2/2004	3:36:35 PM		25.537	24.081	25.082	24.932	26.832		46.995	50.654	12.101	34.611	-1.222	-6.907		45.935	0.122	14.643	0.003		213.07	3.55111	49.2	11.3	40.8	2.813	0.018	0.018	0.000	0.445	0.38	
232	2/2/2004	3:37:35 PM		25.536	24.065	25.092	24.946	27.021		47.028	50.627	12.025	34.859	-1.219	-6.921		48.737	0.122	14.643	0.003		214.07	3.56778	49.2	11.9	40.9	2.823	0.018	0.018	0.000	0.443	0.38	
233	2/2/2004	3:38:35 PM		25.542	24.071	25.107	24.922	27.106		47.155	50.884	12.169	34.722	-1.219	-6.909		47.473	0.126	14.643	0.003		215.07	3.58444	49.4	11.6	40.9	2.823	0.019	0.019	0.000	0.457	0.39	
234	2/2/2004	3:39:35 PM		25.548	24.067	25.124	24.928	27.232		47.043	50.776	12.133	34.633	-1.222	-6.881		49.765	0.128	14.643	0.003		216.07	3.60111	49.3	12.2	40.8	2.816	0.019	0.019	0.000	0.466	0.40	
235	2/2/2004	3:40:35 PM		25.538	24.067	25.133	24.903	27.396		47.615	51.431	12.459	34.816	-1.216	-6.811		47.756	0.123	14.643	0.004		217.07	3.61778	50.0	11.7	41.2	2.842	0.018	0.018	0.000	0.443	0.38	
236	2/2/2004	3:41:35 PM		25.543	24.067	25.153	24.898	27.625		47.284	51.116	12.229	34.775	-1.222	-6.895		43.747	0.122	14.643	0.003		218.07	3.63444	49.6	10.7	41.0	2.829	0.018	0.018	0.000	0.441	0.38	
237	2/2/2004	3:42:35 PM		25.547	24.066	25.162	24.947	27.549		47.058	50.766	12.101	34.806	-1.219	-6.921		50.762	0.132	14.643	0.003		219.07	3.65111	49.3	12.4	40.9	2.822	0.020	0.020	0.000	0.479	0.41	
238	2/2/2004	3:43:35 PM		25.542	24.056	25.162	24.877	27.709		47.383	51.232	12.296	34.767	-1.222	-6.606		50.412	0.126	14.643	0.004		220.07	3.66778	49.8	12.4	41.1	2.832	0.019	0.019	0.000	0.455	0.39	
239	2/2/2004	3:44:35 PM		25.548	24.062	25.168	24.923	27.714		47.288	51.208	12.101	34.834	-1.228	-6.8		50.808	0.13	14.643	0.003		221.07	3.68444	49.7	12.5	41.1	2.831	0.019	0.019	0.000	0.470	0.40	
240	2/2/2004	3:45:35 PM		25.568	24.082	25.214	24.973	27.705		47.375	51.179	12.032	35.122	-1.222	-6.831		49.805	0.132	14.643	0.003		222.07	3.70111	49.7	12.2	41.2	2.844	0.020	0.020	0.000	0.474	0.40	
241	2/2/2004	3:46:35 PM		25.559	24.063	25.19	25.094	27.845		47.338	51.098	12.336	34.74	-1.225	-6.857		50.422	0.127	14.643	0.003		223.07	3.71778	49.6	12.4	41.0	2.829	0.019	0.019	0.000	0.459	0.39	
242	2/2/2004	3:47:35 PM		25.576	24.085	25.231	25.051	27.777		47.352	51.253	12.341	34.648	-1.222	-6.753		51.135	0.114	14.643	0.003		224.07	3.73444	49.8	12.5	41.0	2.827	0.017	0.017	0.000	0.412	0.35	
243	2/2/2004	3:48:35 PM		25.576	24.085	25.122	25.066	27.359		46.79	50.729	12.097	34.397	-1.222	-6.623		52.268	0.125	14.643	0.003		225.07	3.75111	49.3	12.8	40.6	2.799	0.019	0.019	0.000	0.458	0.39	
244	2/2/2004	3:49:35 PM		25.573	24.097	25.109	24.998	27.69		46.817	50.754	12.007	34.404	-1.219	-6.863		52.829	0.125	14.643	0.003		226.07	3.76778	49.3	12.9	40.6	2.800	0.019	0.019	0.000	0.458	0.39	
245	2/2/2004	3:50:35 PM		25.56	24.089	25.11	25.03	27.92		46.45	50.292	11.995	34.229	-1.225	-6.73		49.327	0.12	14.643	0.003		227.07	3.78444	48.8	12.1	40.3	2.781	0.018	0.018	0.000	0.442	0.38	
246	2/2/2004	3:51:35 PM		25.557	24.111	25.132	25.112	27.31		46.398	50.316	12.093	33.999	-1.222	-6.802		50.927	0.128	14.643	0.004		228.07	3.80111	48.8	12.5	40.2	2.772	0.019	0.019	0.000	0.473	0.40	
247	2/2/2004	3:52:35 PM		25.563	24.107	25.133	25.103	26.604		46.773	50.667	12.189	34.295	-1.228	-6.713		51.358	0.131	14.643	0.003		229.07	3.81778	49.2	12.6	40.5	2.795	0.020	0.019	0.000	0.480	0.41	
248	2/2/2004	3:53:35 PM		25.58	24.129	25.161	25.065	26.895		46.653	50.503	12.117	34.243	-1.222	-6.794		52.837	0.136	14.643	0.004		230.07	3.83444	49.0	12.9	40.4	2.789	0.020	0.020	0.000	0.499	0.42	
249	2/2/2004	3:54:35 PM		25.571	24.13	25.166	25.181	27.503		46.863	50.681	12.109	34.441	-1.225	-6.791		48.858	0.12	14.643	0.003		231.07	3.85111	49.2	12.0	40.7	2.803	0.018	0.018	0.000	0.438	0.37	
250	2/2/2004	3:55:35 PM		25.572	24.146	25.177	25.292	27.828		46.317	50.273	11.924	34.182	-1.222	-6.609		44.805	0.132	14.643	0.003		232.07	3.86778	48.8	11.0	40.2	2.775	0.020	0.020	0.000	0.487	0.41	
251	2/2/2004	3:56:35 PM		25.577	24.142	25.183	25.188	28.167		46.79	50.841	12.1	34.348	-1.222	-6.724		48.584	0.128	14.643	0.003		233.07	3.88444	49.4	11.9	40.6	2.797	0.019	0.019	0.000	0.468	0.40	
252	2/2/2004	3:57:35 PM		25.589	24.154	25.2	25.16	27.492		46.765	50.621	12.057	34.377	-1.225	-6.736		51.477	0.131	14.643	0.003		234.07	3.90111	49.1	12.6	40.6	2.797	0.020	0.019	0.000	0.479	0.41	
253	2/2/2004	3:58:35 PM		25.596	24.17	25.221	25.136	27.797		46.956	50.803	12.093	34.56	-1.222	-6.482		49.706	0.131	14.643	0.003		235.07	3.91778	49.3	12.2	40.8	2.810	0.020	0.019	0.000	0.476	0.41	
254	2/2/2004	3:59:35 PM		25.608	24.182	25.228	25.128	27.092		46.958	50.973	12.134	34.508	-1.225	-6.192		53.903	0.14	14.643	0.003		236.07	3.93444	49.5	13.2	40.7	2.808	0.021	0.021	0.001	0.509	0.43	
255	2/2/2004	4:00:35 PM		25.61	24.194	25.241	25.175	27.313		46.945	50.526	12	34.668	-1.222	-6.632		53.697	0.104	14.643	0.003		237.07	3.95111	49.1	13.2	40.8	2.813	0.016	0.015	0.000	0.377	0.32	
256	2/2/2004	4:00:38 PM		25.615	24.189	25.241	25.185	27.353		47.028	50.716	12.047	34.757	-1.222	-6.545		49.327	0.101	14.643	0.004		237.12	3.95194	49.2	12.1	40.9	2.819	0.015	0.015	0.000	0.366	0.31	
257	2/2/2004	4:01:38 PM		25.621	24.195	25.246	25.171	27.852		47.209	50.754	12.045	34.851	-1.219	-5.204		50.968	0.047	14.643	0.004		238.12	3.96861	49.3	12.5	41.0	2.829	0.007	0.007	0.000	0.170	0.14	
258	2/2/2004	4:02:38 PM		25.608	24.207	25.258	25.238	28.118		47.545	50.718	11.961	35.224	-1.222	-6.372		50.518	0.151	14.643	0.003		239.12	3.98528	49.2	12.4	41.4	2.853	0.023	0.022	0.001	0.540	0.46	
259	2/2/2004	4:03:38 PM		25.624	24.219	25.28	25.29	28.169		47.638	50.806	12.124	35.237	-1.219	-6.525		55.399	0.136	14.643	0.004		240.12	4.00194	49.3	13.6	41.4	2.857	0.020	0.020	0.000	0.485	0.41	
260	2/2/2004	4:04:38 PM		25.643	24.227	25.108	25.359	28.331		47.118	50.26	11.728	35.075	-1.222	-6.828		48.153	0.131	14.643	0.003		241.12	4.01861	48.8	11.8	41.1	2.833	0.020	0.019	0.000	0.474	0.40	
261	2/2/2004	4:05:38 PM		25.621	24.231	25.137	25.407	28.37		47.495	50.679	11.873	35.268	-1.222	-6.814		53.964	0.134	14.643	0.003		242.12	4.03528	49.2	13.2	41.4	2.853	0.020	0.020	0.000	0.481	0.41	
262	2/2/2004	4:06:38 PM		25.634	24.254	25.165	25.4	28.079		47.468	50.636	11.82	35.37	-1.222	-6.823		48.23	0.135	14.643	0.003		243.12	4.05194	49.2	11.8	41.4	2.856	0.020	0.020	0.000	0.484	0.41	
263	2/2/2004	4:07:38 PM		25.611	24.241	25.127	25.367	28.116		47.487	50.691	11.648	35.553	-1.225	-6.817		51.198	0.135	14.643	0.003		244.12	4.06861	49.2	12.5	41.5	2.863	0.020	0.020	0.000	0.483	0.41	
264	2/2/2004	4:08:38 PM		25.623	24.278	25.159	25.409	28.083		47.161	50.395	11.537	35.424	-1.222	-6.629		51.119	0.136	14.643	0.004		245.12	4.08528	48.9	12.5	41.3	2.847	0.020	0.020	0.000	0.489	0.42	
265	2/2/2004	4:09:38 PM		25.631	24.281	25.167	25.442	28.081		47.242	50.642	11.575	35.337	-1.222	-6.516		50.482	0.143	14.643	0.003		246.12	4.10194	49.2	12.4	41.3	2.847	0.021	0.021	0.001	0.514	0.44	
266	2/2/2004	4:10:38 PM		25.653	24.313	25.204	25.449	27.934		47.333	50.718	11.666	35.327	-1.219	-6.528		49.852	0.135	14.643	0.004		247.12	4.11861	49.2	12.2	41.3	2.850	0.020	0.020	0.000	0.484	0.41	
267	2/2/2004	4:11:38 PM		25.63	24.304	25.185	25.396	27.472		47.02	50.318	11.467	35.292	-1.222	-6.745		49.89	0.131	14.643	0.003		248.12	4.13528	48.8	12.2	41.2	2.838	0.020	0.019	0.000	0.472	0.40	
268	2/2/2004	4:12:38 PM		25.641	24.321	25.197	25.447	27.618		47.381	50.714	11.652	35.462	-1.222	-6.739		48.079	0.137	14.643	0.003		249.12	4.15194	49.2	11.8	41.4	2.856	0.020	0.020	0.000	0.490	0.42	
269	2/2/2004	4:13:38 PM		25.632	24.312	25.192	25.468	27.425		47.914	51.009	11.62	36.041	-1.222	-6.427		52.205	0.142	14.643	0.004		250.12	4.16861	49.5	12.8	42.0	2.894	0.021	0.021	0.001	0.502	0.43	
270	2/2/2004	4:14:38 PM		25.653	24.327	25.188	25.509	27.64		47.468	51.048	11.553	35.655	-1.222	-5.528		46.236	0.148	14.643	0.003		251.12	4.18528	49.6	11.3	41.6	2.866	0.022	0.022	0.001	0.528	0.45	
271	2/2/2004	4:15:38 PM		25.654	24.344	25.2	25.55	27.905		47.783	50.928	11.631	35.918	-1.222	-6.554		51.173	0.135	14.643	0.003		252.12	4.20194	49.5	12.5	41.9	2.885	0.020	0.020	0.000	0.478	0.41	
272	2/2/2004	4:16:38 PM		25.655	24.355	25.206	25.522	27.817		47.887	51.073	11.699	35.834	-1.222	-6.693		49.15	0.14	14.643	0.004		253.12	4.21861	49.6	12.0	41.9	2.886	0.021	0.021	0.000	0.496	0.42	
273	2/2/2004	4:17:38 PM		25.658	24.348	25.194	25.474	27.959		47.85	51.104	11.743	35.703	-1.225	-6.693		48.735	0.134	14.643	0.003		254.12	4.23528	49.6	11.9	41.8	2.880	0.020	0.020	0.000	0.476	0.40	
274	2/2/2004	4:18:38 PM		25.665	24.38	25.226	25.431	28.07		47.835	50.922	11.788	35.85	-1.219	-6.69		49.323	0.133	14.643	0.004		255.12	4.25194	49.4	12.1	41.8	2.885	0.020	0.020	0.000	0.471	0.40	
275	2/2/2004	4:19:38 PM		25.677	24.382	25.047	25.403	28.032		47.008	50.128	11.406	35.36	-1.219	-6.617		48.822	0.142	14.643	0.003		256.12	4.26861	48.7	12.0	41.2	2.839	0.021	0.021	0.001	0.513	0.44	
276	2/2/2004	4:20:38 PM		25.649	24.379	25.055	25.44	28.009		47.109	50.13	11.386	35.43	-1.222	-6.539		48.159	0.154	14.643	0.003		257.12	4.28528	48.7	11.8	41.3	2.845	0.023	0.023	0.001	0.555	0.47	
277	2/2/2004	4:21:38 PM		25.656	24.386	25.072	25.432	27.977		46.968	50.25	11.405	35.237	-1.219	-6.247		52.829	0.155	14.643	0.004		258.12	4.30194	48.8	12.9	41.1	2.834	0.023	0.023	0.001	0.561	0.48	
278	2/2/2004	4:22:38 PM		25.648	24.403	25.068	25.404	27.899		47.062	50.15	11.399	35.446	-1.222	-6.548		48.513	0.14	14.643	0.003		259.12	4.31861	48.7	11.9	41.3	2.844	0.021	0.021	0.001	0.505	0.43	
279	2/2/2004	4:23:38 PM		25.628	24.398	25.063	25.273	27.53		47.663	50.882	11.472	35.813	-1.222	-6.649		52.848	0.142	14.643	0.003		260.12	4.33528	49.4	13.0	41.7	2.878	0.021	0.021	0.001	0.506	0.43	
280	2/2/2004	4:24:38 PM		25.633	24.403	25.069	25.154	27.516		47.437	50.683	11.458	35.633	-1.219	-6.635		49.481	0.136	14.643	0.004		261.12	4.35194	49.2	12.1	41.5	2.864	0.020	0.020	0.000	0.487	0.41	

RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	2/2/2004	4:25:38 PM		25.623	24.413	25.074	25.013	27.526		47.263	50.532	11.366	35.575	-1.222	-6.583		57.775	0.138	14.643	0.003		262.12	4.36861	49.1	14.2	41.4	2.856	0.021	0.021	0.000	0.496	0.42	
282	2/2/2004	4:26:38 PM		25.619	24.409	25.075	25.034	27.452		47.532	50.834	11.48	35.68	-1.222	-6.597		49.07	0.139	14.643	0.003		263.12	4.38528	49.4	12.0	41.6	2.869	0.021	0.021	0.000	0.497	0.42	
283	2/2/2004	4:27:38 PM		25.619	24.414	25.08	25.029	27.492		47.4	50.619	11.605	35.52	-1.219	-6.493		50.134	0.137	14.643	0.004		264.12	4.40194	49.1	12.3	41.5	2.859	0.020	0.020	0.000	0.492	0.42	
284	2/2/2004	4:28:38 PM		25.619	24.409	25.075	25.034	27.442		47.47	50.747	11.478	35.688	-1.222	-6.612		50.8	0.136	14.643	0.003		265.12	4.41861	49.3	12.4	41.6	2.867	0.020	0.020	0.000	0.487	0.41	
285	2/2/2004	4:29:38 PM		25.618	24.403	25.084	25.049	27.596		47.387	50.748	11.579	35.454	-1.219	-6.51		53.661	0.142	14.643	0.004		266.12	4.43528	49.3	13.2	41.4	2.856	0.021	0.021	0.001	0.510	0.43	
286	2/2/2004	4:30:38 PM		25.618	24.393	25.078	25.003	27.401		47.499	50.901	11.595	35.616	-1.225	-6.38		52.353	0.135	14.643	0.003		267.12	4.45194	49.4	12.8	41.6	2.865	0.020	0.020	0.000	0.483	0.41	
287	2/2/2004	4:31:38 PM		25.618	24.398	25.088	25.048	27.465		47.474	50.857	11.465	35.619	-1.222	-6.684		51.64	0.138	14.643	0.003		268.12	4.46861	49.4	12.7	41.5	2.864	0.021	0.021	0.000	0.494	0.42	
288	2/2/2004	4:32:38 PM		25.607	24.387	25.082	25.002	27.455		47.649	50.828	11.505	35.828	-1.222	-6.536		49.905	0.138	14.643	0.003		269.12	4.48528	49.4	12.2	41.7	2.878	0.021	0.021	0.000	0.492	0.42	
289	2/2/2004	4:33:38 PM		25.642	24.397	25.117	24.967	27.435		47.035	50.907	11.593	35.126	-1.219	-4.597		49.327	0.145	14.643	0.003		270.12	4.50194	49.4	12.1	41.1	2.832	0.022	0.022	0.001	0.525	0.45	
290	2/2/2004	4:34:38 PM		25.582	24.372	25.097	24.937	27.375		47.937	51.011	11.695	35.906	-1.222	-6.571		47.6	0.141	14.643	0.003		271.12	4.51861	49.5	11.7	41.9	2.890	0.021	0.021	0.001	0.500	0.43	
291	2/2/2004	4:35:38 PM		25.556	24.366	25.107	24.941	27.339		47.267	50.826	11.634	35.344	-1.222	-5.481		49.354	0.194	14.643	0.003		272.12	4.53528	49.4	12.1	41.3	2.848	0.029	0.029	0.001	0.698	0.59	
292	2/2/2004	4:36:38 PM		25.55	24.36	25.055	24.809	27.537		47.732	50.913	11.72	35.653	-1.222	-6.482		49.362	0.133	14.643	0.003		273.12	4.55194	49.4	12.1	41.7	2.875	0.020	0.020	0.000	0.475	0.40	
293	2/2/2004	4:37:38 PM		25.55	24.365	24.965	24.859	27.453		47.441	50.609	11.434	35.635	-1.222	-6.617		49.998	0.137	14.643	0.003		274.12	4.56861	49.1	12.3	41.5	2.864	0.020	0.020	0.000	0.492	0.42	
294	2/2/2004	4:38:38 PM		25.533	24.353	24.969	24.798	27.486		47.478	50.575	11.536	35.61	-1.225	-6.675		44.99	0.139	14.643	0.003		275.12	4.58528	49.1	11.0	41.5	2.864	0.021	0.021	0.000	0.499	0.42	
295	2/2/2004	4:39:38 PM		25.543	24.363	25.008	24.792	27.236		47.441	50.667	11.474	35.604	-1.219	-6.597		53.052	0.138	14.643	0.004		276.12	4.60194	49.2	13.0	41.5	2.863	0.021	0.021	0.000	0.495	0.42	
296	2/2/2004	4:40:38 PM		25.517	24.342	24.977	24.741	27.225		47.207	50.312	11.389	35.602	-1.225	-6.43		48.922	0.131	14.643	0.003		277.12	4.61861	48.8	12.0	41.4	2.855	0.020	0.020	0.000	0.472	0.40	
297	2/2/2004	4:41:38 PM		25.5	24.33	24.971	24.785	27.304		47.729	51.044	11.506	35.774	-1.222	-6.565		47.562	0.142	14.643	0.003		278.12	4.63528	49.6	11.7	41.8	2.879	0.021	0.021	0.001	0.507	0.43	
298	2/2/2004	4:42:38 PM		25.495	24.325	24.975	24.719	27.368		47.611	50.878	11.495	35.764	-1.225	-6.589		50.072	0.14	14.643	0.003		279.12	4.65194	49.4	12.3	41.7	2.874	0.021	0.021	0.001	0.501	0.43	
299	2/2/2004	4:43:38 PM		25.489	24.319	24.984	24.673	27.347		47.348	50.679	11.34	35.651	-1.222	-6.421		48.511	0.14	14.643	0.003		280.12	4.66861	49.2	11.9	41.5	2.861	0.021	0.021	0.001	0.503	0.43	
300	2/2/2004	4:44:38 PM		25.483	24.323	24.994	24.708	27.282		47.709	51.044	11.548	35.83	-1.225	-6.395		49.513	0.137	14.643	0.003		281.12	4.68528	49.6	12.1	41.8	2.880	0.020	0.020	0.000	0.489	0.42	
301	2/2/2004	4:45:38 PM		25.483	24.317	25.008	24.762	27.331		47.267	50.615	11.394	35.584	-1.222	-6.487		43.912	0.142	14.643	0.003		282.12	4.70194	49.1	10.8	41.4	2.856	0.021	0.021	0.001	0.511	0.43	
302	2/2/2004	4:46:38 PM		25.461	24.291	24.981	24.761	27.349		47.308	50.783	11.357	35.534	-1.222	-6.404		50.234	0.139	14.643	0.003		283.12	4.71861	49.3	12.3	41.4	2.856	0.021	0.021	0.001	0.501	0.43	
303	2/2/2004	4:47:38 PM		25.454	24.289	24.989	24.743	27.631		47.501	50.793	11.497	35.715	-1.222	-6.513		48.697	0.139	14.643	0.003		284.12	4.73528	49.3	11.9	41.6	2.869	0.021	0.021	0.000	0.498	0.42	
304	2/2/2004	4:48:38 PM		25.472	24.282	25.012	24.706	27.694		47.398	50.928	11.431	35.528	-1.216	-6.51		47.662	0.14	14.643	0.004		285.12	4.75194	49.5	11.7	41.5	2.859	0.021	0.021	0.001	0.503	0.43	
305	2/2/2004	4:49:38 PM		25.46	24.264	24.99	24.664	27.766		47.223	50.565	11.462	35.462	-1.222	-6.461		47.06	0.141	14.643	0.003		286.12	4.76861	49.1	11.5	41.3	2.850	0.021	0.021	0.001	0.509	0.43	
306	2/2/2004	4:50:38 PM		25.473	24.282	24.878	24.812	27.699		47.053	50.592	11.392	35.309	-1.219	-6.418		48.115	0.137	14.643	0.003		287.12	4.78528	49.1	11.8	41.2	2.839	0.020	0.020	0.000	0.498	0.42	
307	2/2/2004	4:51:38 PM		25.461	24.27	24.866	24.85	27.802		46.829	50.37	11.222	35.243	-1.219	-6.435		47.602	0.141	14.643	0.003		288.12	4.80194	48.9	11.7	41.0	2.829	0.021	0.021	0.001	0.514	0.44	
308	2/2/2004	4:52:38 PM		25.459	24.269	24.869	24.894	27.79		47.221	50.621	11.397	35.502	-1.222	-6.531		51.54	0.137	14.643	0.003		289.12	4.81861	49.1	12.6	41.4	2.852	0.020	0.021	0.000	0.496	0.42	
309	2/2/2004	4:53:38 PM		25.463	24.268	24.873	24.963	27.864		47.097	50.548	11.254	35.541	-1.222	-6.487		51.772	0.142	14.643	0.003		290.12	4.83528	49.1	12.7	41.3	2.849	0.021	0.021	0.001	0.514	0.44	
310	2/2/2004	4:54:38 PM		25.458	24.267	24.878	25.018	27.859		46.587	50.099	11.161	35.107	-1.219	-6.505		51.517	0.14	14.643	0.003		291.12	4.85194	48.6	12.6	40.8	2.816	0.021	0.021	0.001	0.513	0.44	
311	2/2/2004	4:55:38 PM		25.452	24.267	24.882	24.982	27.928		47.004	50.428	11.226	35.565	-1.222	-6.276		53.816	0.142	14.643	0.003		292.12	4.86861	49.0	13.2	41.3	2.846	0.021	0.021	0.001	0.515	0.44	
312	2/2/2004	4:56:38 PM		25.468	24.283	24.914	25.159	28.014		46.527	50.325	11.25	34.962	-1.219	-5.244		47.516	0.108	14.643	0.003		293.12	4.88528	48.9	11.6	40.7	2.809	0.016	0.016	0.000	0.396	0.34	
313	2/2/2004	4:57:38 PM		25.434	24.289	24.914	25.124	28.084		46.912	50.283	11.163	35.428	-1.219	-6.432		46.503	0.134	14.643	0.004		294.12	4.90194	48.8	11.4	41.2	2.839	0.020	0.020	0.000	0.486	0.41	
314	2/2/2004	4:58:38 PM		25.439	24.279	24.914	25.225	28.179		47.236	50.627	11.321	35.567	-1.219	-6.522		49.252	0.148	14.643	0.003		295.12	4.91861	49.2	12.1	41.4	2.854	0.022	0.022	0.001	0.534	0.45	
315	2/2/2004	4:59:38 PM		25.456	24.295	24.931	25.216	28.175		47.221	50.687	11.274	35.553	-1.219	-6.441		53.401	0.145	14.643	0.003		296.12	4.93528	49.2	13.1	41.4	2.853	0.022	0.022	0.001	0.523	0.45	
316	2/2/2004	5:00:38 PM		25.467	24.312	24.947	25.192	27.823		47.041	50.482	11.31	35.426	-1.222	-6.343		50.512	0.143	14.643	0.003		297.12	4.95194	49.0	12.4	41.2	2.843	0.021	0.021	0.001	0.518	0.44	
317	2/2/2004	5:01:38 PM		25.457	24.302	24.942	25.273	27.873		47.234	50.725	11.407	35.491	-1.222	-6.372		51.371	0.146	14.643	0.003		298.12	4.96861	49.3	12.6	41.4	2.852	0.022	0.022	0.001	0.527	0.45	
318	2/2/2004	5:02:38 PM		25.448	24.297	24.923	25.273	27.809		47.029	50.478	11.306	35.456	-1.228	-6.421		52.558	0.131	14.643	0.003		299.12	4.98528	49.0	12.9	41.2	2.844	0.020	0.020	0.000	0.475	0.40	
319	2/2/2004	5:03:38 PM		25.473	24.322	24.888	25.333	27.655		46.778	50.211	11.297	35.149	-1.222	-6.487		47.748	0.139	14.643	0.004		300.12	5.00194	48.7	11.7	41.0	2.824	0.021	0.021	0.001	0.508	0.43	
320	2/2/2004	5:04:38 PM		25.463	24.323	24.833	25.339	27.954		46.79	50.339	11.251	35.183	-1.219	-6.378		48.219	0.146	14.643	0.003		301.12	5.01861	48.9	11.8	41.0	2.826	0.022	0.022	0.001	0.534	0.45	
321	2/2/2004	5:05:38 PM		25.428	24.308	24.813	25.199	27.924		46.738	50.333	11.236	35.107	-1.222	-6.395		53.428	0.141	14.643	0.003		302.12	5.03528	48.9	13.1	40.9	2.821	0.021	0.021	0.001	0.516	0.44	
322	2/2/2004	5:06:38 PM		25.439	24.339	24.839	25.154	27.89		46.645	50.163	11.17	35.097	-1.219	-6.424		50.87	0.147	14.643	0.003		303.12	5.05194	48.7	12.5	40.9	2.818	0.022	0.022	0.001	0.539	0.46	
323	2/2/2004	5:07:38 PM		25.435	24.34	24.84	25.165	27.891		46.997	50.532	11.13	35.483	-1.222	-6.487		51.356	0.143	14.643	0.003		304.12	5.06861	49.1	12.6	41.2	2.843	0.021	0.021	0.001	0.519	0.44	
324	2/2/2004	5:08:38 PM		25.436	24.341	24.846	25.292	28.066		46.954	50.519	11.111	35.512	-1.219	-6.467		50.021	0.14	14.643	0.004		305.12	5.08528	49.0	12.3	41.2	2.843	0.021	0.021	0.001	0.508	0.43	
325	2/2/2004	5:09:38 PM		25.443	24.358	24.853	25.348	27.998		46.525	50.15	11.009	35.22	-1.225	-6.25		51.548	0.141	14.643	0.003		306.12	5.10194	48.7	12.6	40.9	2.818	0.021	0.021	0.001	0.516	0.44	
326	2/2/2004	5:10:38 PM		25.438	24.363	24.858	25.328	27.59		46.564	50.215	10.982	35.341	-1.225	-6.259		52.353	0.15	14.643	0.003		307.12	5.11861	48.7	12.8	41.0	2.824	0.022	0.022	0.001	0.548	0.47	
327	2/2/2004	5:11:38 PM		25.443	24.368	24.858	25.273	27.819		46.807	50.486	11.05	35.391	-1.222	-6.424		48.255	0.142	14.643	0.003		308.12	5.13528	49.0	11.8	41.1	2.834	0.021	0.021	0.001	0.517	0.44	
328	2/2/2004	5:12:38 PM		25.438	24.383	24.863	25.289	28.014		46.661	50.265	10.988	35.333	-1.219	-6.461		48.138	0.151	14.643	0.004		309.12	5.15194	48.8	11.8	41.0	2.827	0.023	0.023	0.001	0.551	0.47	
329	2/2/2004	5:13:38 PM		25.44	24.385	24.865	25.22	28.05		46.809	50.492	11.159	35.304	-1.225	-6.395		55.303	0.144	14.643	0.003		310.12	5.16861	49.0	13.6	41.1	2.831	0.021	0.022	0.001	0.525	0.45	
330	2/2/2004	5:14:38 PM		25.45	24.406	24.876	25.301	28.1		46.732	50.484	11.102	35.204	-1.222	-6.401		50.038	0.146	14.643	0.003		311.12	5.18528	49.0	12.3	41.0	2.825	0.022	0.022	0.001	0.533	0.45	
331	2/2/2004	5:15:38 PM		25.442	24.407	24.877	25.338	28.241		46.541	50.207	11.058	35.14	-1.222	-6.404		48.887	0.147	14.643	0.003		312.12	5.20194	48.7	12.0	40.8	2.816	0.022	0.022	0.001	0.538	0.46	
332	2/2/2004	5:16:38 PM		25.453	24.403	24.879	25.434	28.302		46.722	50.335	11.14	35.304	-1.222	-6.441		49.982	0.15	14.643	0.004		313.12	5.21861	48.9	12.2	41.0	2.828	0.022	0.022	0.001	0.547	0.47	
333	2/2/2004	5:17:38 PM		25.449	24.409	24.884	25.365	27.91		46.657	50.318	11.095	35.222	-1.222	-6.395		43.326	0.153	14.643	0.004		314.12	5.23528	48.8	10.6	40.9	2.823	0.023	0.023	0.001	0.559	0.48	
334	2/2/2004	5:18:38 PM		25.461	24.431	24.901	25.316	27.941		47.026	50.596	11.136	35.608	-1.222	-6.418		54.881	0.142	14.643	0.004		315.12	5.25194	49.1	13.4	41.3	2.849	0.021	0.021	0.001	0.514	0.44	
335	2/2/2004	5:19:38 PM		25.466	24.426	24.756	25.412	28.146		46.73	50.376	10.976	35.382	-1.219	-6.331		48.722	0.153	14.643	0.004		316.12	5.26861	48.9	11.9	41.1	2.831	0.023	0.023	0.001	0.559	0.48	
336	2/2/2004	5:20:38 PM		25.459	24.449	24.784	25.365	28.144		46.51	50.15	10.804	35.473	-1.225	-6.386		48.032	0.146	14.643	0.004		317.12	5.28528	48.7	11.8	41.0	2.826	0.022	0.022	0.001	0.534	0.45	
337	2/2/2004	5:21:38 PM		25.444	24.459	24.789	25.395	28.089		46.404	50.086	10.771	35.329	-1.222	-6.363		49.955	0.142	14.643	0.003		318.12	5.30194	48.6	12.2	40.9	2.818	0.021	0.021	0.001	0.521	0.44	
338	2/2/2004	5:22:38 PM		25.436	24.471	24.791	25.326	27.767		46.79	50.611	10.909	35.516	-1.222	-6.297		52.775	0.136	14.643	0.003		319.12	5.31861	49.1	12.9	41.2	2.837	0.020	0.020	0.000	0.496	0.42	
339	2/2/2004	5:23:38 PM		25.411	24.451	24.776	25.306	27.498		46.736	50.592	10.945	35.413	-1.222	-6.161		50.845	0.142	14.643	0.003		320.12	5.33528	49.1	12.5	41.1	2.832	0.021	0.021	0.001	0.519	0.44	
340	2/2/2004	5:24:38 PM		25.422	24.487	24.802	25.423	27.694		46.589	50.364	10.911	35.362	-1.222	-6.169		49.398	0.152	14.643	0.003		321.12	5.35194	48.9	12.1	41.0	2.825	0.023	0.023	0.001	0.556	0.47	
341	2/2/2004	5:25:38 PM		25.403	24.488	24.798	25.343	27.43		46.908	50.725	10.975	35.547	-1.219	-6.213		48.04	0.158	14.643	0.003		322.12	5.36861	49.3	11.8	41.2	2.842	0.024	0.024	0.001	0.575	0.49	
342	2/2/2004	5:26:38 PM		25.403	24.479	24.798	25.344	27.705		46.848	50.629	10.884	35.602	-1.225	-6.305		48.872	0.146	14.643	0.003		323.12	5.38528	49.2	12.0	41.2	2.842	0.022	0.022	0.001	0.531	0.45	
343	2/2/2004	5:27:38 PM		25.399	24.484	24.809	25.335	27.581		46.765	50.406	10.872	35.561	-1.219	-6.363		51.761	0.148	14.643	0.003		324.12	5.40194	48.9	12.7	41.2	2.838	0.022	0.022	0.001	0.539	0.46	
344	2/2/2004	5:28:38 PM		25.396	24.491	24.811	25.286	27.722		46.879	50.464	10.856	35.621	-1.225	-6.282		46.684	0.161	14.643	0.003		325.12	5.41861	49.0	11.4	41.3	2.844	0.024	0.024	0.001	0.585	0.50	
345	2/2/2004	5:29:38 PM		25.391	24.491	24.811	25.286	27.573		47.045	50.88	10.993	35.6	-1.219	-6.045		46.657	0.161	14.643	0.004		326.12	5.43528	49.4	11.4	41.3	2.849	0.024	0.024	0.001	0.584	0.50	
346	2/2/2004	5:30:38 PM		25.396	24.496	24.826	25.241	27.583		46.865	50.517	10.944	35.586	-1.216	-6.271		48.68	0.141	14.643	0.004		327.12	5.45194	49.0	11.9	41.2	2.842	0.021	0.021	0.001	0.512	0.44	
347	2/2/2004	5:31:38 PM		25.401	24.497	24.816	25.172	27.598		46.943	50.658	11.036	35.561	-1.222	-6.256		45.768	0.142	14.643	0.003		328.12	5.46861	49.2	11.2	41.3	2.844	0.021	0.021	0.001	0.516	0.44	
348	2/2/2004	5:32:38 PM		25.391	24.487	24.811	25.117	27.369		46.57	50.213	10.913	35.384	-1.222	-6.291		46.451	0.141	14.643	0.003		329.12	5.48528	48.7	11.4	41.0	2.825	0.021	0.021	0.001	0.516	0.44	
349	2/2/2004	5:33:38 PM		25.401	24.497	24.831	25.092	27.389		46.838	50.577	11.109	35.38	-1.219	-6.198		49.508	0.142	14.643	0.003		330.12	5.50194	49.1	12.1	41.1	2.834	0.021	0.021	0.001	0.517	0.44	
350	2/2/2004	5:34:38 PM		25.371	24.491	24.826	25.066	27.085		46.966	50.872	11.348	35.317	-1.219	-5.473		47.9	0.171	14.643	0.003		331.12	5.51861	49.4	11.7	41.1	2.837	0.025	0.026	0.001	0.623	0.53	

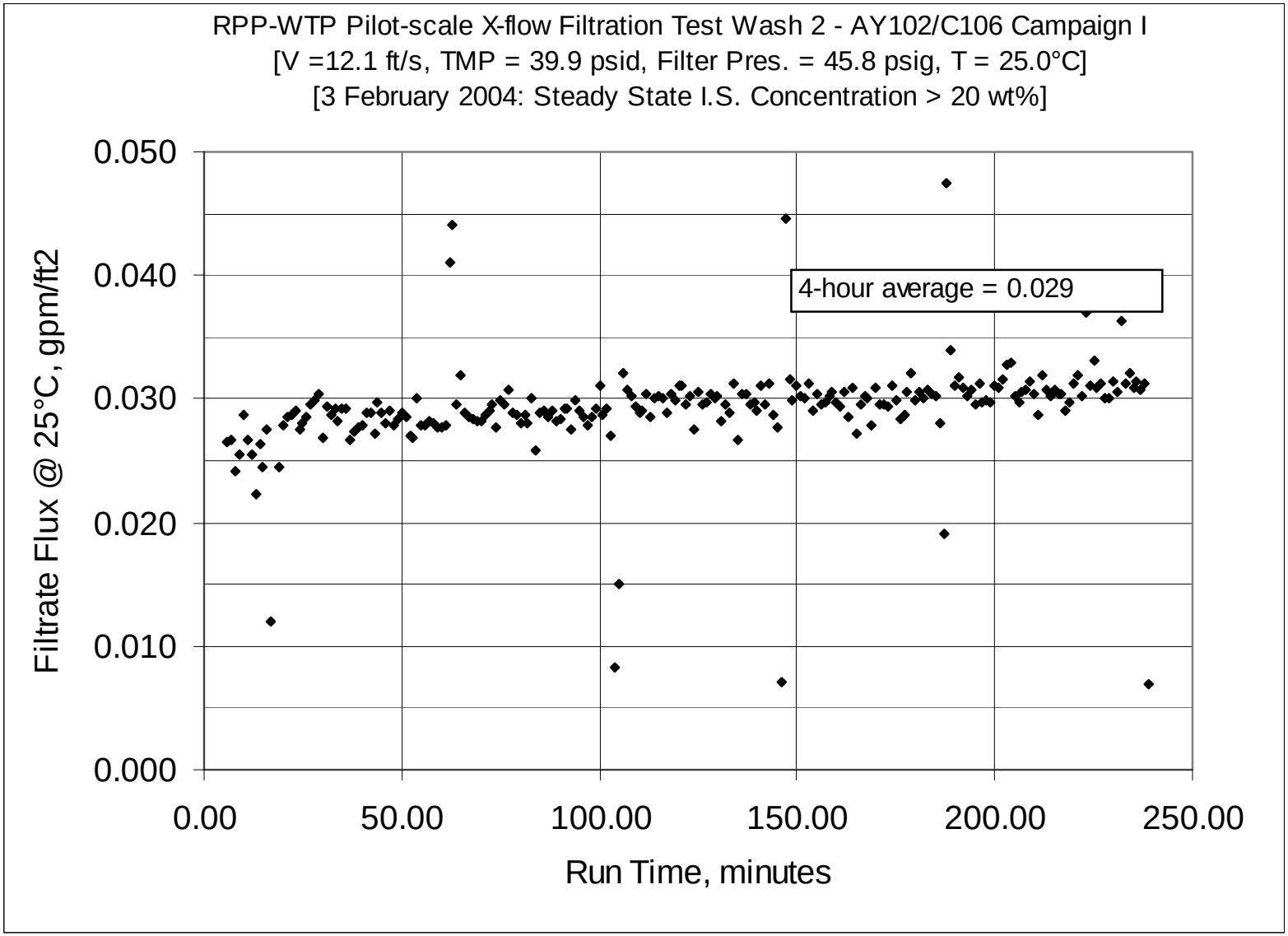
RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	2/2/2004	5:35:38 PM		25.379	24.469	24.719	24.984	27.188		46.448	50.277	10.938	35.19	-1.222	-6.068		53.63	0.142	14.643	0.003		332.12	5.53528	48.8	13.1	40.8	2.814	0.021	0.021	0.001	0.523	0.44	
352	2/2/2004	5:36:38 PM		25.388	24.474	24.713	24.958	27.063		46.572	50.49	10.934	35.272	-1.222	-5.724		48.499	0.159	14.643	0.003		333.12	5.55194	49.0	11.9	40.9	2.821	0.024	0.024	0.001	0.584	0.50	
353	2/2/2004	5:37:38 PM		25.368	24.468	24.723	24.923	27.201		46.776	50.503	10.863	35.493	-1.219	-6.184		45.068	0.142	14.643	0.004		334.12	5.56861	49.0	11.0	41.1	2.836	0.021	0.021	0.001	0.519	0.44	
354	2/2/2004	5:38:38 PM		25.356	24.466	24.726	24.861	27.379		46.854	50.463	10.961	35.532	-1.222	-6.354		50.236	0.145	14.643	0.003		335.12	5.58528	49.0	12.3	41.2	2.840	0.022	0.022	0.001	0.529	0.45	
355	2/2/2004	5:39:38 PM		25.341	24.456	24.705	24.795	27.204		46.549	50.236	10.787	35.395	-1.225	-6.288		46.513	0.147	14.643	0.003		336.12	5.60194	48.8	11.4	41.0	2.825	0.022	0.022	0.001	0.539	0.46	
356	2/2/2004	5:40:38 PM		25.329	24.439	24.704	24.688	27.193		46.736	50.577	10.909	35.339	-1.219	-6.323		50.19	0.151	14.643	0.003		337.12	5.61861	49.1	12.3	41.0	2.829	0.023	0.023	0.001	0.553	0.47	
357	2/2/2004	5:41:38 PM		25.334	24.444	24.724	24.473	27.332		46.985	50.449	10.905	35.692	-1.219	-5.779		45.952	0.108	14.643	0.003		338.12	5.63528	49.0	11.3	41.3	2.850	0.016	0.016	0.000	0.393	0.33	
358	2/2/2004	5:42:38 PM		25.313	24.433	24.723	24.471	27.44		47.047	50.671	11.006	35.536	-1.222	-6.123		43.791	0.141	14.643	0.003		339.12	5.65194	49.2	10.7	41.3	2.847	0.021	0.021	0.001	0.513	0.44	
359	2/2/2004	5:43:38 PM		25.312	24.412	24.732	24.521	27.46		46.547	50.084	10.737	35.436	-1.222	-6.236		47.316	0.15	14.643	0.003		340.12	5.66861	48.6	11.6	41.0	2.826	0.022	0.023	0.001	0.550	0.47	
360	2/2/2004	5:44:38 PM		25.306	24.401	24.771	24.5	27.27		47.147	50.654	10.979	35.801	-1.225	-6.247		48.021	0.14	14.643	0.003		341.12	5.68528	49.2	11.8	41.5	2.859	0.021	0.021	0.001	0.507	0.43	
361	2/2/2004	5:45:38 PM		25.311	24.39	24.821	24.429	27.383		46.96	50.495	10.991	35.621	-1.222	-6.302		51.728	0.149	14.643	0.003		342.12	5.70194	49.0	12.7	41.3	2.847	0.022	0.022	0.001	0.541	0.46	
362	2/2/2004	5:46:38 PM		25.321	24.38	24.866	24.399	27.184		46.883	50.269	11.065	35.569	-1.219	-6.302		51.354	0.148	14.643	0.003		343.12	5.71861	48.8	12.6	41.2	2.842	0.022	0.022	0.001	0.537	0.46	
363	2/2/2004	5:47:38 PM		25.325	24.37	24.695	24.398	27.139		46.593	50.242	10.782	35.43	-1.228	-6.245		49.5	0.145	14.643	0.003		344.12	5.73528	48.8	12.1	41.0	2.828	0.022	0.022	0.001	0.532	0.45	
364	2/2/2004	5:48:38 PM		25.32	24.35	24.785	24.454	27.104		46.452	50.049	10.792	35.339	-1.219	-6.242		48.159	0.134	14.643	0.003		345.12	5.75194	48.6	11.8	40.9	2.820	0.020	0.020	0.000	0.491	0.42	
365	2/2/2004	5:49:38 PM		25.312	24.337	24.812	24.486	27.295		46.325	49.997	10.715	35.333	-1.219	-6.138		49.755	0.143	14.643	0.004		346.12	5.76861	48.5	12.2	40.8	2.815	0.021	0.021	0.001	0.525	0.45	
366	2/2/2004	5:50:38 PM		25.319	24.324	24.834	24.573	27.521		46.34	50.128	10.624	35.337	-1.222	-6.178		51.033	0.153	14.643	0.003		347.12	5.78528	48.7	12.5	40.8	2.816	0.023	0.023	0.001	0.561	0.48	
367	2/2/2004	5:51:38 PM		25.357	24.347	24.892	24.681	27.47		46.402	50.136	10.686	35.36	-1.216	-6.117		47.627	0.141	14.643	0.004		348.12	5.80194	48.7	11.7	40.9	2.819	0.021	0.021	0.001	0.516	0.44	
368	2/2/2004	5:52:38 PM		25.36	24.335	24.905	24.779	27.592		46.659	50.37	10.741	35.528	-1.222	-6.242		48.086	0.14	14.643	0.003		349.12	5.81861	48.9	11.8	41.1	2.833	0.021	0.021	0.001	0.509	0.43	
369	2/2/2004	5:53:38 PM		25.388	24.333	24.964	24.848	27.476		47.257	50.406	10.789	36.158	-1.219	-5.802		48.534	0.193	14.643	0.003		350.12	5.83528	48.9	11.9	41.7	2.876	0.029	0.029	0.001	0.691	0.59	
370	2/2/2004	5:54:38 PM		25.396	24.316	24.936	24.826	27.678		46.317	50.136	10.682	35.305	-1.225	-5.106		47.938	0.116	14.643	0.003		351.12	5.85194	48.7	11.7	40.8	2.814	0.017	0.017	0.000	0.425	0.36	
371	2/2/2004	5:55:38 PM		25.43	24.325	24.99	24.86	27.726		47.001	50.329	10.666	36.058	-1.222	-6.299		45.332	0.152	14.643	0.003		352.12	5.86861	48.9	11.1	41.5	2.863	0.023	0.023	0.001	0.546	0.46	
372	2/2/2004	5:56:38 PM		25.468	24.328	25.034	24.878	27.795		47.051	50.439	10.783	35.924	-1.222	-6.291		51.073	0.148	14.643	0.003		353.12	5.88528	49.0	12.5	41.5	2.860	0.022	0.022	0.001	0.531	0.45	
373	2/2/2004	5:57:38 PM		25.488	24.323	25.043	24.943	27.63		46.85	50.339	10.762	35.756	-1.225	-6.265		51.809	0.148	14.643	0.003		354.12	5.90194	48.9	12.7	41.3	2.848	0.022	0.022	0.001	0.534	0.45	
374	2/2/2004	5:58:38 PM		25.513	24.323	25.083	24.973	27.923		46.945	50.464	10.797	35.826	-1.222	-6.175		48.528	0.152	14.643	0.004		355.12	5.91861	49.0	11.9	41.4	2.853	0.023	0.023	0.001	0.546	0.46	
375	2/2/2004	5:59:38 PM		25.538	24.333	25.108	24.978	27.938		46.85	50.453	10.871	35.614	-1.222	-6.106		48.557	0.143	14.643	0.003		356.12	5.93528	49.0	11.9	41.2	2.843	0.021	0.021	0.001	0.516	0.44	
376	2/2/2004	5:59:57 PM		25.558	24.338	25.128	24.998	27.839		46.678	50.25	10.918	35.378	-1.219	-6.161		47.681	0.149	14.643	0.003		356.43	5.94056	48.8	11.7	41.0	2.829	0.022	0.022	0.001	0.540	0.46	
377	2/2/2004	6:00:57 PM		25.573	24.348	25.148	25.088	27.66		47.12	50.826	11.092	35.53	-1.216	-6.178		50.128	0.15	14.643	0.004		357.43	5.95722	49.4	12.3	41.3	2.849	0.022	0.022	0.001	0.539	0.46	
378	2/2/2004	6:01:57 PM		25.588	24.348	24.994	25.099	27.839		46.299	49.925	10.735	35.185	-1.222	-6.187		47.877	0.142	14.643	0.003		358.43	5.97389	48.5	11.7	40.7	2.809	0.021	0.021	0.001	0.520	0.44	
379	2/2/2004	6:02:57 PM		25.588	24.348	25.039	25.089	27.486		46.325	50.018	10.673	35.266	-1.222	-6.117		44.427	0.152	14.643	0.003		359.43	5.99056	48.5	10.9	40.8	2.813	0.023	0.023	0.001	0.555	0.47	
380	2/2/2004	6:03:57 PM		25.573	24.348	25.049	25.069	27.566		46.392	50.018	10.71	35.399	-1.219	-6.135		53.753	0.156	14.643	0.003		360.43	6.00722	48.5	13.2	40.9	2.820	0.023	0.023	0.001	0.568	0.48	
381	2/2/2004	6:04:57 PM		25.59	24.365	25.09	25.1	28.005		46.243	50.01	10.709	35.165	-1.219	-6.146		48.88	0.149	14.643	0.003		361.43	6.02389	48.5	12.0	40.7	2.806	0.022	0.022	0.001	0.544	0.46	
382	2/2/2004	6:05:57 PM		25.59	24.36	25.1	25.14	27.816		46.315	50.111	10.73	35.241	-1.219	-6.042		49.677	0.148	14.643	0.004		362.43	6.04056	48.6	12.2	40.8	2.812	0.022	0.022	0.001	0.540	0.46	
383	2/2/2004	6:06:57 PM		25.606	24.36	25.116	25.166	27.996		46.255	50.049	10.699	35.265	-1.222	-5.97		49.84	0.154	14.643	0.003		363.43	6.05722	48.6	12.2	40.8	2.810	0.023	0.023	0.001	0.561	0.48	
384	2/2/2004	6:07:57 PM		25.616	24.361	25.127	25.061	27.942		46.384	50.25	10.732	35.222	-1.219	-6.039		45.802	0.147	14.643	0.003		364.43	6.07389	48.8	11.2	40.8	2.813	0.022	0.022	0.001	0.535	0.46	
385	2/2/2004	6:08:57 PM		25.643	24.368	25.153	25.198	27.953		46.34	50.194	10.646	35.268	-1.219	-6.048		51.267	0.14	14.643	0.003		365.43	6.09056	48.7	12.6	40.8	2.813	0.021	0.021	0.001	0.509	0.43	
386	2/2/2004	6:09:57 PM		25.679	24.379	25.18	25.28	28.059		46.255	50.451	10.501	35.354	-1.196	-4.727		47.817	0.103	14.643	0.003		366.43	6.10722	49.0	11.7	40.8	2.813	0.015	0.015	0.000	0.374	0.32	
387	2/2/2004	6:10:57 PM		25.685	24.396	25.196	25.326	28.195		46.45	50.134	10.458	35.641	-1.222	-6.065		49.129	0.154	14.643	0.003		367.43	6.12389	48.7	12.0	41.0	2.830	0.023	0.023	0.001	0.556	0.47	
388	2/2/2004	6:11:57 PM		25.708	24.398	25.218	25.308	28.212		46.717	50.333	10.639	35.766	-1.222	-6.031		50.497	0.145	14.643	0.003		368.43	6.14056	48.9	12.4	41.2	2.843	0.022	0.021	0.001	0.521	0.44	
389	2/2/2004	6:12:57 PM		25.708	24.398	25.229	25.314	28.043		46.568	50.35	10.634	35.569	-1.222	-5.929		51.991	0.152	14.643	0.003		369.43	6.15722	48.9	12.7	41.1	2.832	0.023	0.023	0.001	0.548	0.47	
390	2/2/2004	6:13:57 PM		25.735	24.411	25.241	25.336	27.981		46.902	50.584	10.783	35.735	-1.222	-6.166		48.603	0.165	14.643	0.003		370.43	6.17389	49.1	11.9	41.3	2.849	0.025	0.024	0.001	0.591	0.50	
391	2/2/2004	6:14:57 PM		25.737	24.412	25.247	25.373	28.012		46.522	50.238	10.732	35.479	-1.219	-6.109		51.277	0.151	14.643	0.003		371.43	6.19056	48.8	12.6	41.0	2.827	0.023	0.022	0.001	0.545	0.46	
392	2/2/2004	6:15:57 PM		25.773	24.423	25.169	25.389	27.944		46.371	50.132	10.749	35.241	-1.222	-5.418		50.535	0.095	14.643	0.003		372.43	6.20722	48.7	12.4	40.8	2.813	0.014	0.014	0.000	0.345	0.29	
393	2/2/2004	6:16:57 PM		25.755	24.431	25.171	25.301	28.1		46.298	49.908	10.524	35.407	-1.219	-6.002		47.967	0.159	14.643	0.003		373.43	6.22389	48.4	11.8	40.9	2.817	0.024	0.024	0.001	0.577	0.49	
394	2/2/2004	6:17:57 PM		25.753	24.444	25.194	25.349	28.123		46.576	50.219	10.57	35.612	-1.219	-6.06		47.27	0.15	14.643	0.004		374.43	6.24056	48.7	11.6	41.1	2.833	0.022	0.022	0.001	0.541	0.46	
395	2/2/2004	6:18:57 PM		25.736	24.451	25.197	25.387	28.046		46.355	49.976	10.526	35.502	-1.222	-5.97		49.898	0.145	14.643	0.003		375.43	6.25722	48.5	12.2	40.9	2.822	0.022	0.021	0.001	0.525	0.45	
396	2/2/2004	6:19:57 PM		25.748	24.459	25.209	25.444	27.959		46.29	49.92	10.449	35.493	-1.222	-6.1		45.414	0.149	14.643	0.003		376.43	6.27389	48.4	11.1	40.9	2.819	0.022	0.022	0.001	0.540	0.46	
397	2/2/2004	6:20:57 PM		25.761	24.461	25.217	25.382	27.827		46.415	50.101	10.563	35.475	-1.222	-6.1		50.096	0.153	14.643	0.003		377.43	6.29056	48.6	12.3	40.9	2.823	0.023	0.023	0.001	0.554	0.47	
398	2/2/2004	6:21:57 PM		25.763	24.474	25.234	25.234	27.67		46.41	50.107	10.514	35.528	-1.222	-6.071		46.793	0.155	14.643	0.003		378.43	6.30722	48.6	11.5	41.0	2.825	0.023	0.023	0.001	0.560	0.48	
399	2/2/2004	6:22:57 PM		25.75	24.455	25.22	25.165	27.527		46.419	50.229	10.553	35.403	-1.222	-6.086		48.78	0.151	14.643	0.003		379.43	6.32389	48.8	12.0	40.9	2.821	0.023	0.022	0.001	0.547	0.47	
400	2/2/2004	6:23:57 PM		25.777	24.477	25.238	25.122	27.574		46.301	50.064	10.55	35.382	-1.222	-6.013		49.277	0.156	14.643	0.003		380.43	6.34056	48.6	12.1	40.8	2.816	0.023	0.023	0.001	0.566	0.48	
401	2/2/2004	6:24:57 PM		25.772	24.467	25.238	25.097	27.569		46.419	50.173	10.624	35.436	-1.222	-6.065		45.015	0.146	14.643	0.003		381.43	6.35722	48.7	11.0	40.9	2.822	0.022	0.022	0.001	0.528	0.45	
402	2/2/2004	6:25:57 PM		25.788	24.468	25.273	25.068	27.729		46.539	50.138	10.54	35.627	-1.216	-5.866		43.952	0.171	14.643	0.004		382.43	6.37389	48.7	10.8	41.1	2.833	0.025	0.025	0.001	0.616	0.52	
403	2/2/2004	6:26:57 PM		25.793	24.469	25.269	25.019	27.665		46.583	50.43	10.642	35.483	-1.222	-5.724		46.457	0.16	14.643	0.003		383.43	6.39056	49.0	11.4	41.0	2.829	0.024	0.024	0.001	0.577	0.49	
404	2/2/2004	6:27:57 PM		25.814	24.464	25.28	24.949	27.706		46.717	50.378	10.8	35.555	-1.222	-5.996		47.035	0.154	14.643	0.003		384.43	6.40722	48.9	11.5	41.1	2.836	0.023	0.023	0.001	0.554	0.47	
405	2/2/2004	6:28:57 PM		25.824	24.474	25.155	24.934	27.611		46.203	49.877	10.529	35.294	-1.219	-6.077		48.951	0.156	14.643	0.003		385.43	6.42389	48.4	12.0	40.7	2.809	0.023	0.023	0.001	0.568	0.48	
406	2/2/2004	6:29:57 PM		25.785	24.45	25.17	24.87	27.532		46.209	49.908	10.456	35.333	-1.222	-6.091		50.555	0.158	14.643	0.003		386.43	6.44056	48.4	12.4	40.8	2.811	0.024	0.023	0.001	0.575	0.49	
407	2/2/2004	6:30:57 PM		25.759	24.454	25.18	24.874	27.591		46.278	50.059	10.465	35.415	-1.219	-5.984		46.236	0.151	14.643	0.004		387.43	6.45722	48.6	11.3	40.8	2.816	0.023	0.022	0.001	0.548	0.47	
408	2/2/2004	6:31:57 PM		25.763	24.449	25.189	24.893	27.396		46.228	50.041	10.48	35.305	-1.216	-6.01		45.864	0.151	14.643	0.004		388.43	6.47389	48.6	11.2	40.8	2.811	0.023	0.022	0.001	0.549	0.47	
409	2/2/2004	6:32:57 PM		25.758	24.438	25.198	24.857	27.48		46.176	50.078	10.512	35.214	-1.219	-5.979		51.158	0.153	14.643	0.003		389.43	6.49056	48.6	12.5	40.7	2.806	0.023	0.023	0.001	0.557	0.47	
410	2/2/2004	6:33:57 PM		25.757	24.437	25.193	24.807	27.236		46.054	49.943	10.458	35.216	-1.225	-5.95		51.313	0.147	14.643	0.003		390.43	6.50722	48.5	12.6	40.6	2.802	0.022	0.022	0.001	0.536	0.46	

RUN # WASH1; CAMPAIGN I SLURRY WASH 1 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
411	2/2/2004	6:34:57 PM		25.76	24.431	25.201	24.77	27.194		45.962	49.838	10.458	35.12	-1.219	-5.947		48.949	0.142	14.643	0.004		391.43	6.52389	48.4	12.0	40.5	2.795	0.021	0.021	0.001	0.519	0.44	
412	2/2/2004	6:35:57 PM		25.764	24.424	25.21	24.713	27.153		45.84	49.777	10.414	35.071	-1.222	-5.953		47.969	0.151	14.643	0.003		392.43	6.54056	48.3	11.8	40.5	2.789	0.023	0.022	0.001	0.553	0.47	
413	2/2/2004	6:36:57 PM		25.751	24.401	25.182	24.63	26.861		45.936	49.835	10.338	35.247	-1.225	-6.074		52.875	0.155	14.643	0.003		393.43	6.55722	48.4	13.0	40.6	2.799	0.023	0.023	0.001	0.566	0.48	
414	2/2/2004	6:37:57 PM		25.773	24.403	25.218	24.612	26.693		46.062	50.028	10.468	35.198	-1.219	-5.961		48.693	0.163	14.643	0.003		394.43	6.57389	48.6	11.9	40.6	2.801	0.024	0.024	0.001	0.594	0.51	
415	2/2/2004	6:38:57 PM		25.773	24.393	25.208	24.566	26.822		46.159	49.937	10.428	35.343	-1.219	-5.308		51.308	0.092	14.643	0.003		395.43	6.59056	48.5	12.6	40.8	2.810	0.014	0.014	0.000	0.335	0.28	
416	2/2/2004	6:39:57 PM		25.783	24.393	25.239	24.577	26.828		46.354	50.068	10.559	35.454	-1.216	-5.883		49.938	0.156	14.643	0.004		396.43	6.60722	48.6	12.2	40.9	2.820	0.023	0.023	0.001	0.565	0.48	
417	2/2/2004	6:40:57 PM		25.784	24.369	25.22	24.568	26.988		46.174	49.976	10.473	35.337	-1.219	-5.86		49.794	0.15	14.643	0.003		397.43	6.62389	48.5	12.2	40.8	2.810	0.022	0.022	0.001	0.545	0.46	
418	2/2/2004	6:41:57 PM		25.79	24.36	25.236	24.62	27.114		46.439	49.979	10.445	35.602	-1.219	-5.828		48.23	0.174	14.643	0.004		398.43	6.64056	48.5	11.8	41.0	2.828	0.026	0.026	0.001	0.628	0.53	
419	2/2/2004	6:42:57 PM		25.793	24.353	25.243	24.712	27.256		46.383	50.18	10.566	35.358	-1.222	-5.759		48.956	0.17	14.643	0.003		399.43	6.65722	48.7	12.0	40.9	2.818	0.025	0.025	0.001	0.616	0.52	
420	2/2/2004	6:43:57 PM		25.81	24.35	25.26	24.749	26.471		46.551	50.291	10.672	35.475	-1.222	-5.906		47.316	0.154	14.643	0.003		400.43	6.67389	48.8	11.6	41.0	2.828	0.023	0.023	0.001	0.556	0.47	
421																																	
422		Averages		25.5	23.4	25.1	24.9	26.7	#	47.2	50.0	12.3	34.7	-1.2	-6.6	#	49.7	0.1	14.6	0.0	#			48.5	12.2	40.9	2.823	0.018	0.018	0.0004	0.432	0.367	#
423		Maximum		26.1	24.5	25.7	25.6	28.4	#	52.9	53.4	17.1	38.7	1.8	0.6	#	57.8	0.2	14.6	0.0	#			51.9	14.2	45.8	3.157	0.029	0.029	0.0007	0.698	0.594	#
424		Median		25.5	24.1	25.1	24.9	27.2	#	46.9	50.3	12.0	35.1	-1.2	-6.7	#	49.8	0.1	14.6	0.0	#			48.8	12.2	40.9	2.823	0.017	0.017	0.0004	0.423	0.360	#
425		Minimum		25.2	19.2	24.7	24.1	20.4	#	42.6	47.2	10.3	29.3	-1.2	-7.8	#	42.1	0.0	14.6	0.0	#			45.8	10.3	36.0	2.479	0.003	0.003	0.0001	0.072	0.062	#
426		2 x Std Dev		0.316	2.618	0.448	0.606	2.816	#	3.060	2.684	2.754	2.937	0.535	2.599	#	5.452	0.053	0.000	0.001	#			2.684	1.336	2.721	0.188	0.008	0.008	0.0002	0.192	0.163	#
427	Number of Points Used*			398	398	398	398	398	0	398	398	398	398	398	398	0	398	398	398	398	0			398	398	398	398	398	398	398	398	398	0
428																																	
429																											6.7-hour avg. =		0.0177				
430																											1-hour avg. =		0.0129				

RUN # WASH2; CAMPAIGN II SLURRY WASH 2



RUN # WASH2; CAMPAIGN II SLURRY WASH 2 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/3/2004	8:11:15 AM		23.157	18.127	15.664	23.677	16.209		0.048	-0.019	0.008	-0.002	-0.206	0.049		-0.077	0.003	14.643	0.004				Filter Surface	6.707	FT2							
8	2/3/2004	8:11:28 AM		23.157	18.127	15.664	23.677	16.209		0.048	-0.019	0.008	-0.002	-0.206	0.049		-0.077	0.003	14.643	0.004				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	2/3/2004	8:11:29 AM		23.152	18.127	15.644	23.667	16.245		0.048	-0.019	0.008	-0.004	-0.177	0.046		-0.085	0.003	14.643	0.004													
10	2/3/2004	8:11:30 AM		23.152	18.127	15.649	23.667	16.255		0.048	-0.019	0.008	-0.006	-0.215	0.046		-0.079	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/3/2004	8:11:31 AM		23.152	18.127	15.644	23.662	16.25		0.048	-0.019	0.008	-0.002	-0.218	0.046		-0.083	0.003	14.643	0.004													
12	2/3/2004	8:11:32 AM		23.152	18.122	15.639	23.657	16.25		0.048	-0.019	0.008	-0.004	-0.18	0.046		-0.079	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/3/2004	8:11:33 AM		23.152	18.122	15.644	23.657	16.255		0.05	-0.019	0.008	-0.006	-0.18	0.046		-0.083	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/3/2004	8:11:34 AM		23.152	18.127	15.649	23.677	16.25		0.048	-0.021	0.008	-0.004	-0.174	0.043		-0.079	0.003	14.643	0.004								at 25C			x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/3/2004	8:30:50 AM		24.627	18.2	24.604	23.744	18.109		10.051	50.151	11.697	-1.547	35.25	89.946		49.677	0.003	14.643	0.004		0	0	48.7	12.2	4.3	0.293	0.000	0.000	0.000	0.106	0.09	
18	2/3/2004	8:31:50 AM		23.417	18.202	24.736	23.671	18.146		-4.176	49.465	7.167	-11.232	49.169	49.858		53.196	0.003	14.643	0.845		1.00	0.01667	48.0	13.0	-7.7	-0.531	0.000	0.000	0.000	-0.058	-0.05	
19	2/3/2004	8:32:50 AM		24.642	18.24	24.679	23.718	18.376		43.841	49.856	10.061	33.447	0.801	0.335		51.936	0.324	14.643	0.004		2.00	0.03333	48.4	12.7	38.6	2.664	0.048	0.049	0.001	1.261	1.07	
20	2/3/2004	8:33:50 AM		24.954	18.257	24.671	23.785	18.514		44.643	50.412	12.429	31.859	0.55	0.404		52.522	0.203	14.643	0.004		3.00	0.05	48.9	12.9	38.3	2.637	2.183	2.203	0.058	57.606	49.02	
21	2/3/2004	8:34:50 AM		25.057	18.296	24.699	23.819	18.331		44.948	50.747	13.174	31.381	0.573	0.465		47.844	0.178	14.643	0.004		4.00	0.06667	49.3	11.7	38.2	2.631	2.183	2.202	0.058	57.691	49.10	
22	2/3/2004	8:35:50 AM		25.125	18.308	24.726	23.786	18.247		44.66	50.526	13.366	30.816	0.596	0.529		45.026	0.168	14.643	0.004		5.00	0.08333	49.1	11.0	37.7	2.602	0.025	0.025	0.001	0.669	0.57	
23	2/3/2004	8:36:50 AM		24.757	18.326	24.749	23.733	18.245		48.75	50.843	13.852	34.455	-1.216	-5.01		45.032	0.177	14.643	0.004		6.00	0.1	49.4	11.0	41.6	2.868	0.026	0.027	0.001	0.639	0.54	
24	2/3/2004	8:37:50 AM		24.854	18.359	24.461	23.746	18.489		48.121	50.128	13.219	34.449	-1.214	-5.088		51.171	0.176	14.643	0.004		7.00	0.11667	48.7	12.5	41.3	2.846	0.026	0.027	0.001	0.645	0.55	
25	2/3/2004	8:38:50 AM		24.887	18.391	24.503	23.808	18.618		48.207	50.097	12.948	34.915	-1.211	-4.776		55.071	0.16	14.643	0.004		8.00	0.13333	48.6	13.5	41.6	2.865	0.024	0.024	0.001	0.582	0.50	
26	2/3/2004	8:39:50 AM		24.834	18.388	24.144	23.72	18.741		48.48	49.856	12.833	35.302	-1.219	-5.866		47.808	0.167	14.643	0.003		9.00	0.15	48.4	11.7	41.9	2.888	0.025	0.026	0.001	0.609	0.52	
27	2/3/2004	8:40:50 AM		24.822	18.427	24.222	23.753	18.941		49.142	50.267	12.771	36.049	-1.216	-6.49		46.311	0.188	14.643	0.004		10.00	0.16667	48.8	11.3	42.6	2.937	0.028	0.029	0.001	0.673	0.57	
28	2/3/2004	8:41:50 AM		24.799	18.439	24.29	23.695	18.949		49.061	50.032	12.649	36.132	-1.219	-6.502		49.89	0.176	14.643	0.004		11.00	0.18333	48.6	12.2	42.6	2.937	0.026	0.027	0.001	0.628	0.53	
29	2/3/2004	8:42:50 AM		24.797	18.473	24.404	23.794	19.133		47.846	48.756	14.243	33.246	-1.214	-6.643		52.879	0.168	14.643	0.004		12.00	0.2	47.3	13.0	40.5	2.796	0.025	0.025	0.001	0.628	0.53	
30	2/3/2004	8:43:50 AM		24.775	18.496	24.472	23.776	18.985		46.628	47.469	13.108	33.207	-1.214	-6.496		54.377	0.147	14.643	0.004		13.00	0.21667	46.0	13.3	39.9	2.752	0.022	0.022	0.001	0.557	0.47	
31	2/3/2004	8:44:50 AM		24.823	18.534	24.554	23.769	18.988		46.599	47.535	13.014	33.263	-1.216	-6.398		50.38	0.174	14.643	0.004		14.00	0.23333	46.1	12.3	39.9	2.753	0.026	0.026	0.001	0.658	0.56	
32	2/3/2004	8:45:50 AM		24.85	18.531	24.611	23.731	19.463		47.155	48.13	12.787	33.966	-1.214	-6.36		46.417	0.163	14.643	0.004		15.00	0.25	46.7	11.4	40.6	2.797	0.024	0.025	0.001	0.606	0.52	
33	2/3/2004	8:46:50 AM		24.903	18.559	24.665	23.749	19.401		47.25	48.032	12.597	34.315	-1.214	-6.484		46.709	0.183	14.643	0.004		16.00	0.26667	46.6	11.4	40.8	2.812	0.027	0.028	0.001	0.675	0.57	
34	2/3/2004	8:47:50 AM		24.971	18.587	24.718	23.787	19.601		46.182	48.125	12.385	33.355	-1.216	-3.767		48.945	0.08	14.643	0.004		17.00	0.28333	46.7	12.0	39.8	2.742	0.012	0.012	0.000	0.302	0.26	
35	2/3/2004	8:48:50 AM		24.838	18.62	24.805	23.789	19.537		45.187	48.026	12.211	32.657	-1.211	-2.625		50.115	0.411	14.643	0.004		18.00	0.3	46.6	12.3	38.9	2.684	0.061	0.062	0.002	1.583	1.35	
36	2/3/2004	8:49:50 AM		24.955	18.632	24.672	23.776	19.938		47.126	47.896	12.121	34.676	-1.216	-6.349		49.047	0.163	14.643	0.004		19.00	0.31667	46.4	12.0	40.9	2.820	0.024	0.025	0.001	0.600	0.51	
37	2/3/2004	8:50:50 AM		25.023	18.661	24.73	23.819	20.051		47.049	47.839	11.95	34.693	-1.214	-6.571		51.346	0.185	14.643	0.004		20.00	0.33333	46.4	12.6	40.9	2.818	0.028	0.028	0.001	0.680	0.58	
38	2/3/2004	8:51:50 AM		25.035	18.667	24.797	23.816	20.038		47.354	48.101	11.996	35.017	-1.214	-6.473		48.369	0.19	14.643	0.004		21.00	0.35	46.6	11.9	41.2	2.840	0.028	0.028	0.001	0.692	0.59	
39	2/3/2004	8:52:50 AM		25.063	18.716	24.865	23.834	20.081		47.246	47.968	12.086	34.837	-1.216	-6.432		48.169	0.192	14.643	0.004		22.00	0.36667	46.5	11.8	41.0	2.830	0.029	0.029	0.001	0.700	0.60	
40	2/3/2004	8:53:50 AM		25.09	18.728	24.932	23.841	20.109		47.01	47.808	11.963	34.631	-1.214	-6.482		49.769	0.194	14.643	0.004		23.00	0.38333	46.3	12.2	40.8	2.814	0.029	0.029	0.001	0.710	0.60	
41	2/3/2004	8:54:50 AM		25.133	18.766	24.995	23.859	20.071		47.172	47.842	11.987	34.845	-1.216	-6.536		47.621	0.185	14.643	0.004		24.00	0.4	46.4	11.7	41.0	2.827	0.028	0.028	0.001	0.673	0.57	
42	2/3/2004	8:55:50 AM		25.171	18.754	25.018	23.812	20.11		47.134	47.862	11.972	34.767	-1.214	-6.432		49.162	0.188	14.643	0.004		25.00	0.41667	46.4	12.0	41.0	2.823	0.028	0.028	0.001	0.684	0.58	
43	2/3/2004	8:56:50 AM		25.182	18.751	25.024	23.778	19.914		47.234	47.989	12.037	34.765	-1.216	-6.432		47.973	0.192	14.643	0.004		26.00	0.43333	46.5	11.8	41.0	2.827	0.029	0.029	0.001	0.698	0.59	
44	2/3/2004	8:57:50 AM		25.266	18.79	25.088	23.877	20.371		47.138	47.752	11.971	34.841	-1.214	-6.464		50.856	0.199	14.643	0.004		27.00	0.45	46.3	12.5	41.0	2.826	0.030	0.030	0.001	0.722	0.61	
45	2/3/2004	8:58:50 AM		25.315	18.819	25.147	23.881	20.149		47.275	47.964	12.063	34.845	-1.214	-6.427		47.911	0.201	14.643	0.004		28.00	0.46667	46.5	11.7	41.1	2.831	0.030	0.030	0.001	0.727	0.62	
46	2/3/2004	8:59:50 AM		25.365	18.84	24.952	23.856	20.547		46.751	47.464	11.838	34.613	-1.216	-6.158		46.838	0.204	14.643	0.004		29.00	0.48333	46.0	11.5	40.7	2.805	0.030	0.030	0.001	0.749	0.64	
47	2/3/2004	9:00:50 AM		25.371	18.861	25.069	23.828	20.87		46.79	47.456	11.82	34.598	-1.216	-6.467		49.973	0.181	14.643	0.004		30.00	0.5	46.0	12.2	40.7	2.806	0.027	0.027	0.001	0.662	0.56	
48	2/3/2004	9:01:50 AM		25.367	18.877	25.12	23.793	20.675		46.889	47.518	11.861	34.658	-1.216	-6.447		48.14	0.198	14.643	0.004		31.00	0.51667	46.0	11.8	40.8	2.811	0.030	0.029	0.001	0.722	0.61	
49	2/3/2004	9:02:50 AM		25.389	18.899	25.166	23.84	20.259		47.085	47.763	11.806	34.892	-1.214	-6.496		47.412	0.194	14.643	0.004		32.00	0.53333	46.3	11.6	41.0	2.826	0.029	0.029	0.001	0.702	0.60	
50	2/3/2004	9:03:50 AM		25.421	18.922	25.194	23.893	20.407		46.883	47.668	11.728	34.716	-1.214	-6.458		46.421	0.197	14.643	0.004		33.00	0.55	46.2	11.4	40.8	2.813	0.029	0.029	0.001	0.716	0.61	
51	2/3/2004	9:04:50 AM		25.453	18.928	25.235	23.879	21.022		46.86	47.705	11.658	34.789	-1.216	-6.291		51.361	0.191	14.643	0.004		34.00	0.56667	46.2	12.6	40.8	2.815	0.028	0.028	0.001	0.693	0.59	
52	2/3/2004	9:05:50 AM		25.48	18.95	25.272	23.911	20.743		47.085	47.825	11.683	35.029	-1.216	-6.435		51.699	0.197	14.643	0.004		35.00	0.58333	46.4	12.7	41.1	2.831	0.029	0.029	0.001	0.710	0.60	
53	2/3/2004	9:06:50 AM		25.521	18.967	25.319	23.923	20.744		46.904	47.902	11.641	34.759	-1.216	-6.398		49.264	0.198	14.643	0.004		36.00	0.6	46.4	12.1	40.8	2.815	0.030	0.029	0.001	0.717	0.61	
54	2/3/2004	9:07:50 AM		25.569	18.995	25.346	23.85	20.878		46.672	47.508	11.75	34.545	-1.214	-6.383		49.099	0.181	14.643	0.004		37.00	0.61667	46.0	12.0	40.6	2.800	0.027	0.027	0.001	0.658	0.56	
55	2/3/2004	9:08:50 AM		25.596	19.007	25.384	23.852	21.116		47.06	48.012	11.95	34.722	-1.216	-6.325		53.649	0.186	14.643	0.004		38.00	0.63333	46.5	13.1	40.9	2.819	0.028	0.027	0.001	0.671	0.57	
56	2/3/2004	9:09:50 AM		25.618	19.025	25.275	23.869	20.696		46.91	47.794	11.995	34.502	-1.216	-6.456		50.92	0.187	14.643	0.004		39.00	0.65	46.3	12.5	40.7	2.807	0.028	0.028	0.001	0.680	0.58	
57	2/3/2004	9:10:50 AM		25.625	19.047	25.263	23.862	21.276		46.595	47.659	11.573	34.572	-1.214	-6.389		54.164	0.188	14.643	0.004		40.00	0.66667	46.2	13.3	40.6	2.798	0.028	0.028	0.001	0.686	0.58	
58	2/3/2004	9:11:50 AM		25.617	19.07	25.295	23.889	21.264		46.693	47.69	11.514	34.794	-1.219	-6.36		47.214	0.195	14.643	0.004		41.00	0.68333	46.2	11.6	40.7	2.809	0.029	0.029	0.001	0.708	0.60	
59	2/3/2004	9:12:50 AM		25.62	19.092	25.347	23.921	21.08		46.643	47.676	11.554	34.705	-1.214	-6.409		48.943	0.196	14.643	0.004		42.00	0.7	46.2	12.0	40.7	2.804	0.029	0.029	0.001	0.711	0.61	
60	2/3/2004	9:13:50 AM		25.642	19.099	25.374	23.943	21.102		46.639	47.68	11.503	34.787	-1.214	-6.288		50.293	0.184	14.643	0.004		43.00	0.71667	46.2	12.3	40.7	2.807	0.027	0.027	0.001	0.667	0.57	
61	2/3/2004	9:14:50 AM		25.674	19.122	25.397	23.916	21.049		46.576	47.757	11.524	34.58	-1.219	-6.392		49.268	0.202	14.643	0.004		44.00	0.73333	46.3	12.1	40.6	2.798	0.030	0.030	0.001	0.734	0.62	
62	2/3/2004	9:15:50 AM		25.696	19.144	25.419	23.932	21.322		46.433	47.672	11.522	34.43	-1.216	-6.383		48.582	0.196	14.643	0.004		45.00	0.75	46.2	11.9	40.4	2.788	0.029	0.029	0.001	0.714	0.61	
63	2/3/2004	9:16:50 AM		25.724	19.162	25.451	23.96	21.476		46.498	47.601	11.502	34.644	-1.216	-6.458		47.863	0.19	14.643	0.004		46.00	0.76667	46.1	11.7	40.6	2.797	0.028	0.028	0.001	0.689	0.59	
64	2/3/2004	9:17:50 AM		25.741	19.174	25.489	23.943	21.297		46.56	47.79	11.437	34.677	-1.216	-6.444		48.747	0.198	14.643	0.004		47.00	0.78333	46.3	11.9	40.6	2.801	0.030	0.029	0.001	0.717	0.61	
65	2/3/2004	9:18:50 AM		25.773	19.202	25.526	23.915	21.078		46.551	47.786	11.717	34.432	-1.216	-6.473		44.947	0.19	14.643	0.004		48.00	0.8	46.3	11.0	40.5	2.792	0.028	0.028	0.001	0.689	0.59	
66	2/3/2004	9:19:50 AM		25.776	19.219	25.539	23.922	21.277		46.759	48.157	11.831	34.484	-1.216	-6.325		46.907	0.193	14.643	0.004		49.00	0.81667	46.7	11.5	40.6	2.801	0.029	0.028	0.001	0.698	0.59	
67	2/3/2004	9:20:50 AM		25.777	19.231	25.245	23.853	21.414		45.915	47.311	11.451	34.01	-1.219	-6.412		45.939	0.195	14.643	0.003		50.00	0.83333	45.8	11.3	40.0	2.755	0.029	0.029	0.001	0.723	0.61	
68	2/3/2004	9:21:50 AM		25.765	19.255	25.378	23.882	21.473		45.938	47.373	11.378	34.151	-1.216	-6.354		46.888	0.193	14.643	0.004		51.00	0.85	45.9	11.5	40.0	2.761	0.029	0.028	0.001	0.711	0.61	
69	2/3/2004	9:22:50 AM		25.752	19.287	25.435	23.889	21.359		46.027	47.427	11.513	34.071	-1.216	-6.386		50.155	0.184	14.643	0.004		52.00	0.86667	46.0	12.3	40.0	2.761	0.027	0.027	0.001	0.677	0.58	
70	2/3/2004	9:23:50 AM		25.749	19.299	25.473	23.916	21.321		45.985	47.553	11.496	33.958	-1.214	-6.435		48.676	0.182	14.643	0.004		53.00	0.88333	46.1	11.9	40.0	2.756	0.027	0.027	0.001	0.670	0.57	

RUN # WASH2; CAMPAIGN II SLURRY WASH 2 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/3/2004	9:24:50 AM		25.757	19.312	25.475	23.898	21.55		46.018	47.439	11.401	34.202	-1.216	-6.378		49.825	0.204	14.643	0.004		54.00	0.9	46.0	12.2	40.1	2.765	0.030	0.030	0.001	0.748	0.64	
72	2/3/2004	9:25:50 AM		25.759	19.329	25.502	23.895	21.441		45.875	47.468	11.446	33.991	-1.214	-6.467		50.647	0.19	14.643	0.004		55.00	0.91667	46.0	12.4	39.9	2.753	0.028	0.028	0.001	0.699	0.60	
73	2/3/2004	9:26:50 AM		25.78	19.34	25.518	23.916	21.502		46.054	47.763	11.527	33.952	-1.214	-6.404		41.376	0.19	14.643	0.004		56.00	0.93333	46.3	10.1	40.0	2.758	0.028	0.028	0.001	0.698	0.59	
74	2/3/2004	9:27:50 AM		25.803	19.368	25.541	23.969	21.797		45.907	47.591	11.449	34.014	-1.216	-6.421		49.725	0.192	14.643	0.004		57.00	0.95	46.1	12.2	40.0	2.755	0.029	0.028	0.001	0.706	0.60	
75	2/3/2004	9:28:50 AM		25.814	19.38	25.547	23.936	21.662		45.627	47.369	11.432	33.747	-1.216	-6.363		51.4	0.191	14.643	0.004		58.00	0.96667	45.9	12.6	39.7	2.736	0.028	0.028	0.001	0.707	0.60	
76	2/3/2004	9:29:50 AM		25.82	19.391	25.564	23.952	21.644		45.797	47.583	11.523	33.806	-1.216	-6.415		49.894	0.189	14.643	0.004		59.00	0.98333	46.1	12.2	39.8	2.744	0.028	0.028	0.001	0.697	0.59	
77	2/3/2004	9:30:50 AM		25.858	19.424	25.611	23.97	22.159		45.878	47.649	11.557	33.884	-1.214	-6.395		50.359	0.189	14.643	0.004		60.00	1	46.2	12.3	39.9	2.750	0.028	0.028	0.001	0.695	0.59	
78	2/3/2004	9:31:50 AM		25.87	19.446	25.628	24.042	21.839		45.94	47.723	11.745	33.718	-1.216	-6.453		50.447	0.19	14.643	0.004		61.00	1.01667	46.3	12.4	39.8	2.746	0.028	0.028	0.001	0.699	0.59	
79	2/3/2004	9:32:50 AM		25.837	19.473	25.615	23.994	21.7		44.54	47.815	11.567	32.557	-1.216	-3.81		49.873	0.28	14.643	0.004		62.00	1.03333	46.3	12.2	38.5	2.658	0.042	0.041	0.001	1.064	0.91	
80	2/3/2004	9:33:50 AM		25.639	19.49	25.392	24.036	22.305		45.307	47.29	11.358	33.431	-1.216	-4.903		51.844	0.299	14.643	0.004		63.00	1.05	45.8	12.7	39.4	2.714	0.045	0.044	0.001	1.120	0.95	
81	2/3/2004	9:34:50 AM		25.791	19.508	25.394	24.053	22.197		46.726	47.386	11.448	34.931	-1.219	-6.349		51.502	0.201	14.643	0.004		64.00	1.06667	45.9	12.6	40.8	2.815	0.030	0.030	0.001	0.726	0.62	
82	2/3/2004	9:35:50 AM		25.814	19.526	25.387	24.036	21.522		46.294	47.207	11.411	34.5	-1.216	-6.094		49.951	0.216	14.643	0.004		65.00	1.08333	45.7	12.2	40.4	2.785	0.032	0.032	0.001	0.789	0.67	
83	2/3/2004	9:36:50 AM		25.807	19.549	25.385	24.034	21.836		46.552	47.396	11.333	34.855	-1.214	-6.395		51.675	0.196	14.643	0.004		66.00	1.1	45.9	12.7	40.7	2.806	0.029	0.029	0.001	0.710	0.60	
84	2/3/2004	9:37:50 AM		25.794	19.577	25.367	24.066	21.758		46.446	47.286	11.316	34.779	-1.216	-6.369		48.313	0.194	14.643	0.004		67.00	1.11667	45.8	11.8	40.6	2.800	0.029	0.029	0.001	0.705	0.60	
85	2/3/2004	9:38:50 AM		25.771	19.594	25.345	23.998	21.429		46.377	47.431	11.48	34.397	-1.222	-6.288		52.055	0.192	14.643	0.004		68.00	1.13333	46.0	12.8	40.4	2.785	0.029	0.028	0.001	0.702	0.60	
86	2/3/2004	9:39:50 AM		25.774	19.627	25.377	24.031	21.657		46.63	47.64	11.518	34.689	-1.216	-6.311		50.549	0.191	14.643	0.004		69.00	1.15	46.2	12.4	40.7	2.803	0.028	0.028	0.001	0.693	0.59	
87	2/3/2004	9:40:50 AM		25.756	19.639	25.349	24.083	21.8		46.51	47.603	11.532	34.512	-1.219	-6.369		49.066	0.191	14.643	0.004		70.00	1.16667	46.1	12.0	40.5	2.793	0.028	0.028	0.001	0.696	0.59	
88	2/3/2004	9:41:50 AM		25.752	19.666	25.175	24.15	22.038		46.006	47.023	11.415	34.163	-1.216	-6.32		47.946	0.193	14.643	0.004		71.00	1.18333	45.6	11.7	40.1	2.764	0.029	0.029	0.001	0.714	0.61	
89	2/3/2004	9:42:50 AM		25.689	19.672	25.127	24.111	22.275		45.857	46.988	11.385	34.022	-1.219	-6.354		49.289	0.196	14.643	0.004		72.00	1.2	45.5	12.1	39.9	2.754	0.029	0.029	0.001	0.729	0.62	
90	2/3/2004	9:43:50 AM		25.666	19.71	25.164	24.104	22.393		46.062	47.184	11.429	34.198	-1.211	-6.389		50.159	0.199	14.643	0.004		73.00	1.21667	45.7	12.3	40.1	2.767	0.030	0.030	0.001	0.736	0.63	
91	2/3/2004	9:44:50 AM		25.638	19.727	25.161	24.15	22.269		46.346	47.394	11.416	34.599	-1.216	-6.398		50.009	0.187	14.643	0.004		74.00	1.23333	45.9	12.3	40.5	2.790	0.028	0.028	0.001	0.686	0.58	
92	2/3/2004	9:45:50 AM		25.614	19.744	25.167	24.132	22.456		45.575	46.787	11.256	33.87	-1.219	-6.291		49.683	0.201	14.643	0.004		75.00	1.25	45.3	12.2	39.7	2.739	0.030	0.030	0.001	0.751	0.64	
93	2/3/2004	9:46:50 AM		25.606	19.765	25.164	24.168	22.493		45.927	47.108	11.402	34.102	-1.216	-6.325		48.545	0.199	14.643	0.004		76.00	1.26667	45.6	11.9	40.0	2.759	0.030	0.030	0.001	0.738	0.63	
94	2/3/2004	9:47:50 AM		25.608	19.782	25.171	24.145	21.972		46.087	47.518	11.461	34.088	-1.216	-6.083		45.46	0.207	14.643	0.004		77.00	1.28333	46.0	11.1	40.1	2.764	0.031	0.031	0.001	0.766	0.65	
95	2/3/2004	9:48:50 AM		25.589	19.794	25.172	24.106	22.526		46.141	47.39	11.423	34.295	-1.216	-6.259		50.14	0.195	14.643	0.004		78.00	1.3	45.9	12.3	40.2	2.773	0.029	0.029	0.001	0.719	0.61	
96	2/3/2004	9:49:50 AM		25.585	19.821	25.173	24.128	21.775		46.018	47.278	11.434	34.159	-1.216	-6.271		50.128	0.193	14.643	0.004		79.00	1.31667	45.8	12.3	40.1	2.764	0.029	0.029	0.001	0.714	0.61	
97	2/3/2004	9:50:50 AM		25.591	19.847	25.189	24.189	21.866		45.967	47.321	11.491	34.024	-1.214	-6.192		49.077	0.189	14.643	0.004		80.00	1.33333	45.8	12.0	40.0	2.758	0.028	0.028	0.001	0.701	0.60	
98	2/3/2004	9:51:50 AM		25.587	19.848	25.165	24.135	22.028		46.234	47.663	11.537	34.205	-1.216	-6.256		48.678	0.193	14.643	0.004		81.00	1.35	46.2	11.9	40.2	2.773	0.029	0.029	0.001	0.712	0.61	
99	2/3/2004	9:52:50 AM		25.579	19.865	25.167	24.136	21.964		46.043	47.359	11.44	34.126	-1.216	-6.343		49.139	0.189	14.643	0.004		82.00	1.36667	45.9	12.0	40.1	2.764	0.028	0.028	0.001	0.700	0.60	
100	2/3/2004	9:53:50 AM		25.575	19.891	24.868	24.218	22.432		45.656	46.954	11.241	34.024	-1.216	-6.308		48.649	0.201	14.643	0.003		83.00	1.38333	45.5	11.9	39.8	2.747	0.030	0.030	0.001	0.755	0.64	
101	2/3/2004	9:54:50 AM		25.526	19.907	25.019	24.219	22.348		46.006	47.481	11.41	34.135	-1.214	-6.155		47.487	0.174	14.643	0.004		84.00	1.4	46.0	11.6	40.1	2.763	0.026	0.026	0.001	0.647	0.55	
102	2/3/2004	9:55:50 AM		25.503	19.925	25.021	24.276	22.616		45.73	47.203	11.335	33.944	-1.222	-6.216		41.966	0.194	14.643	0.003		85.00	1.41667	45.7	10.3	39.8	2.747	0.029	0.029	0.001	0.726	0.62	
103	2/3/2004	9:56:50 AM		25.505	19.966	25.053	24.313	22.251		45.539	46.936	11.188	33.932	-1.216	-6.314		46.984	0.195	14.643	0.004		86.00	1.43333	45.5	11.5	39.7	2.740	0.029	0.029	0.001	0.731	0.62	
104	2/3/2004	9:57:50 AM		25.466	19.952	25.019	24.269	21.991		45.761	47.28	11.228	34.014	-1.219	-6.305		47.763	0.192	14.643	0.004		87.00	1.45	45.8	11.7	39.9	2.750	0.029	0.029	0.001	0.717	0.61	
105	2/3/2004	9:58:50 AM		25.482	19.989	25.055	24.28	22.535		45.878	47.34	11.236	34.213	-1.216	-6.288		48.173	0.195	14.643	0.004		88.00	1.46667	45.9	11.8	40.0	2.761	0.029	0.029	0.001	0.725	0.62	
106	2/3/2004	9:59:50 AM		25.474	20.001	25.062	24.272	22.285		45.564	47.141	11.192	33.893	-1.219	-6.166		51.358	0.19	14.643	0.004		89.00	1.48333	45.7	12.6	39.7	2.739	0.028	0.028	0.001	0.712	0.61	
107	2/3/2004	10:00:50 AM		25.475	20.017	25.053	24.293	22.733		45.792	47.305	11.27	34.106	-1.219	-6.219		53.194	0.191	14.643	0.003		90.00	1.5	45.8	13.0	39.9	2.754	0.028	0.028	0.001	0.712	0.61	
108	2/3/2004	10:01:50 AM		25.487	20.049	25.07	24.31	22.499		45.821	47.404	11.281	34.069	-1.216	-6.23		49.951	0.196	14.643	0.004		91.00	1.51667	45.9	12.2	39.9	2.754	0.029	0.029	0.001	0.730	0.62	
109	2/3/2004	10:02:50 AM		25.482	20.06	25.065	24.31	22.354		45.863	47.481	11.307	34.042	-1.216	-6.273		52.529	0.196	14.643	0.004		92.00	1.53333	46.0	12.9	40.0	2.755	0.029	0.029	0.001	0.730	0.62	
110	2/3/2004	10:03:50 AM		25.465	20.083	24.913	24.283	22.919		45.409	47.025	11.15	33.802	-1.219	-6.152		48.534	0.184	14.643	0.004		93.00	1.55	45.6	11.9	39.6	2.731	0.027	0.028	0.001	0.694	0.59	
111	2/3/2004	10:04:50 AM		25.426	20.094	24.929	24.274	22.167		45.533	47.135	11.158	33.948	-1.214	-6.187		49.099	0.2	14.643	0.004		94.00	1.56667	45.7	12.0	39.7	2.740	0.030	0.030	0.001	0.752	0.64	
112	2/3/2004	10:05:50 AM		25.402	20.11	24.935	24.31	22.068		45.268	46.955	11.141	33.652	-1.216	-6.135		49.663	0.195	14.643	0.004		95.00	1.58333	45.5	12.2	39.5	2.721	0.029	0.029	0.001	0.738	0.63	
113	2/3/2004	10:06:50 AM		25.398	20.116	24.946	24.336	21.873		45.525	47.236	11.21	33.812	-1.216	-6.21		48.328	0.191	14.643	0.004		96.00	1.6	45.8	11.8	39.7	2.735	0.028	0.029	0.001	0.719	0.61	
114	2/3/2004	10:07:50 AM		25.399	20.142	24.982	24.327	21.728		45.494	47.176	11.266	33.773	-1.211	-6.166		49.195	0.187	14.643	0.004		97.00	1.61667	45.7	12.1	39.6	2.733	0.028	0.028	0.001	0.704	0.60	
115	2/3/2004	10:08:50 AM		25.395	20.158	24.978	24.358	22.095		45.15	46.84	11.197	33.488	-1.219	-6.181		48.036	0.191	14.643	0.004		98.00	1.63333	45.4	11.8	39.3	2.711	0.028	0.028	0.001	0.725	0.62	
116	2/3/2004	10:09:50 AM		25.386	20.165	24.979	24.369	22.162		45.419	47.097	11.278	33.681	-1.216	-6.233		47.247	0.196	14.643	0.004		99.00	1.65	45.6	11.6	39.6	2.727	0.029	0.029	0.001	0.739	0.63	
117	2/3/2004	10:10:50 AM		25.377	20.176	24.985	24.4	22.042		45.448	47.155	11.278	33.683	-1.216	-6.195		45.739	0.208	14.643	0.004		100.00	1.66667	45.7	11.2	39.6	2.728	0.031	0.031	0.001	0.784	0.67	
118	2/3/2004	10:11:50 AM		25.378	20.181	24.971	24.361	22.625		45.328	47.093	11.253	33.531	-1.219	-6.181		50.439	0.192	14.643	0.004		101.00	1.68333	45.6	12.4	39.4	2.719	0.029	0.029	0.001	0.727	0.62	
119	2/3/2004	10:12:50 AM		25.379	20.208	24.997	24.362	22.461		45.834	47.564	11.275	34.09	-1.216	-6.207		51.544	0.196	14.643	0.004		102.00	1.7	46.1	12.6	40.0	2.755	0.029	0.029	0.001	0.731	0.62	
120	2/3/2004	10:13:50 AM		25.385	20.219	25.003	24.328	21.929		45.488	47.22	11.365	33.667	-1.219	-6.114		48.628	0.181	14.643	0.004		103.00	1.71667	45.7	11.9	39.6	2.729	0.027	0.027	0.001	0.682	0.58	
121	2/3/2004	10:14:50 AM		25.411	20.23	25.004	24.369	22.001		41.097	47.454	11.274	29.351	1.195	-0.278		49.55	0.055	14.643	0.003		104.00	1.73333	46.0	12.1	35.2	2.429	0.008	0.008	0.000	0.233	0.20	
122	2/3/2004	10:15:50 AM		25.298	20.257	24.87	24.401	22.344		44.243	47.062	11.099	32.692	-1.216	-2.987		47.483	0.101	14.643	0.004		105.00	1.75	45.6	11.6	38.5	2.652	0.015	0.015	0.000	0.393	0.33	
123	2/3/2004	10:16:50 AM		25.243	20.263	24.851	24.437	23.107		46.041	46.853	11.093	34.49	-1.216	-5.973		49.623	0.214	14.643	0.004		106.00	1.76667	45.4	12.2	40.3	2.776	0.032	0.032	0.001	0.796	0.68	
124	2/3/2004	10:17:50 AM		25.31	20.275	24.863	24.449	22.854		46.195	46.994	11.151	34.635	-1.216	-6.201		48.795	0.205	14.643	0.004		107.00	1.78333	45.5	12.0	40.4	2.786	0.031	0.031	0.001	0.759	0.65	
125	2/3/2004	10:18:50 AM		25.336	20.291	24.884	24.46	22.599		46.157	47.085	11.222	34.506	-1.219	-5.984		50.126	0.202	14.643	0.004		108.00	1.8	45.6	12.3	40.3	2.781	0.030	0.030	0.001	0.749	0.64	
126	2/3/2004	10:19:50 AM		25.337	20.302	24.885	24.426	22.62		46.004	46.869	11.067	34.51	-1.219	-6.155		51.82	0.197	14.643	0.004		109.00	1.81667	45.4	12.7	40.3	2.776	0.029	0.029	0.001	0.732	0.62	
127	2/3/2004	10:20:50 AM		25.333	20.313	24.905	24.406	22.961		45.973	47.037	11.1	34.356	-1.216	-6.097		48.991	0.193	14.643	0.004		110.00	1.83333	45.6	12.0	40.2	2.769	0.029	0.029	0.001	0.718	0.61	
128	2/3/2004	10:21:50 AM		25.338	20.338	24.926	24.417	22.566		46.218	47.211	11.096	34.683	-1.219	-6.065		45.397	0.195	14.643	0.004		111.00	1.85	45.7	11.1	40.5	2.789	0.029	0.029	0.001	0.720	0.61	
129	2/3/2004	10:22:50 AM		25.334	20.344	24.932	24.408	22.536		46.093	47.158	11.179	34.447	-1.216	-6.094		50.472	0.203	14.643	0.004		112.00	1.86667	45.7	12.4	40.3	2.776	0.030	0.030	0.001	0.753	0.64	
130	2/3/2004	10:23:50 AM		25.335	20.355	24.923	24.409	21.985		46.097	47.143	11.085	34.537	-1.219	-6.033		44.433	0.191	14.643	0.004		113.00	1.88333	45.7	10.9	40.3	2.780	0.028	0.029	0.001	0.708	0.60	
131	2/3/2004	10:24:50 AM		25.342	20.372	24.94	24.395	21.851		46.168	47.16	11.216	34.525	-1.219	-6.152		47.276	0.201	14.643	0.004		114.00	1.9	45.7	11.6	40.3	2.782	0.030	0.030	0.001	0.744	0.63	
132	2/3/2004	10:25:50 AM		25.332	20.383	24.95	24.436	21.801		46.16	47.106	11.347	34.393	-1.216	-6.195		47.42	0.202	14.643	0.004		115.00	1.91667	45.6	11.6	40.3	2.777	0.030	0.030	0.001	0.749	0.64	
133	2/3/2004	10:26:50 AM		25.339	20.409	24.796	24.447	22.862		45.622	46.602	11.044	34.188	-1.216	-6.106		45.929	0.2	14.643	0.004		116.00	1.93333	45.1	11.3	39.9	2.751	0.030	0.030	0.001	0.752	0.64	
134	2/3/2004	10:27:50 AM		25.309	20.42	24.817	24.498	22.692		46.027	47.129	10.988	34.605	-1.219	-6.031		49.556	0.193	14.643	0.004		117.00	1.95	45.7	12.1	40.3	2.780	0.029	0.029	0.001	0.717	0.61	
135	2/3/2004	10:28:50 AM		25.284	20.425	24.822	24.488	22.506		46.058	47.222	11.08	34.496	-1.225	-5.976		53.636	0.203	14.643	0.003		118.00	1.96667	45.7	13.1	40.3	2.777	0.030	0.030	0.001	0.755	0.64	
136	2/3/2004	10:29:50 AM		25.285	20.441	24.853	24.514	22.643		45.724	46.782	11.103	34.239	-1.216	-5.964		48.981	0.2	14.643	0.004		119.00	1.98333	45.3	12.0	40.0	2.757	0.030	0.030	0.001	0.749	0.64	
137	2/3/2004	10:30:50 AM		25.276	20.462	24.859	24.535	22.333		45.871	46.981	11.106	34.301	-1.219	-6.077		51.431	0.208	14.643	0.004		120.00	2	45.5	12.6	40.1	2.764	0.031	0.031	0.001	0.777	0.66	
138	2/3/2004	10:31:50 AM		25.277	20.479	24.87	24.526	22.253		45.965	47.06	11.117	34.408	-1.216	-6.033		49.867	0.208	14.643	0.003		121.00	2.01667	45.6	12.2	40.2	2.771	0.031	0.031	0.001	0.775	0.66	
139	2/3/2004	10:32:49 AM		25.283	20.495	24.886	24.502	22.29		46.089	47.211	11.055	34.57	-1.216	-6.106		49.631	0.198	14.643	0.004		121.98	2.03306	45.7	12.2	40.3	2.781	0.030	0.030	0.001	0.734	0.62	
140	2/3/2004	10:33:49 AM		25.289	20.496	24.897	24.528	22.245		46.035	47.187	11.015	34.568	-1.216	-6.013		54.099	0.202	14.643	0.004		122.98	2.04972	45.7	13.3	40.3	2.779	0.030	0.030	0.001	0.749	0.64	

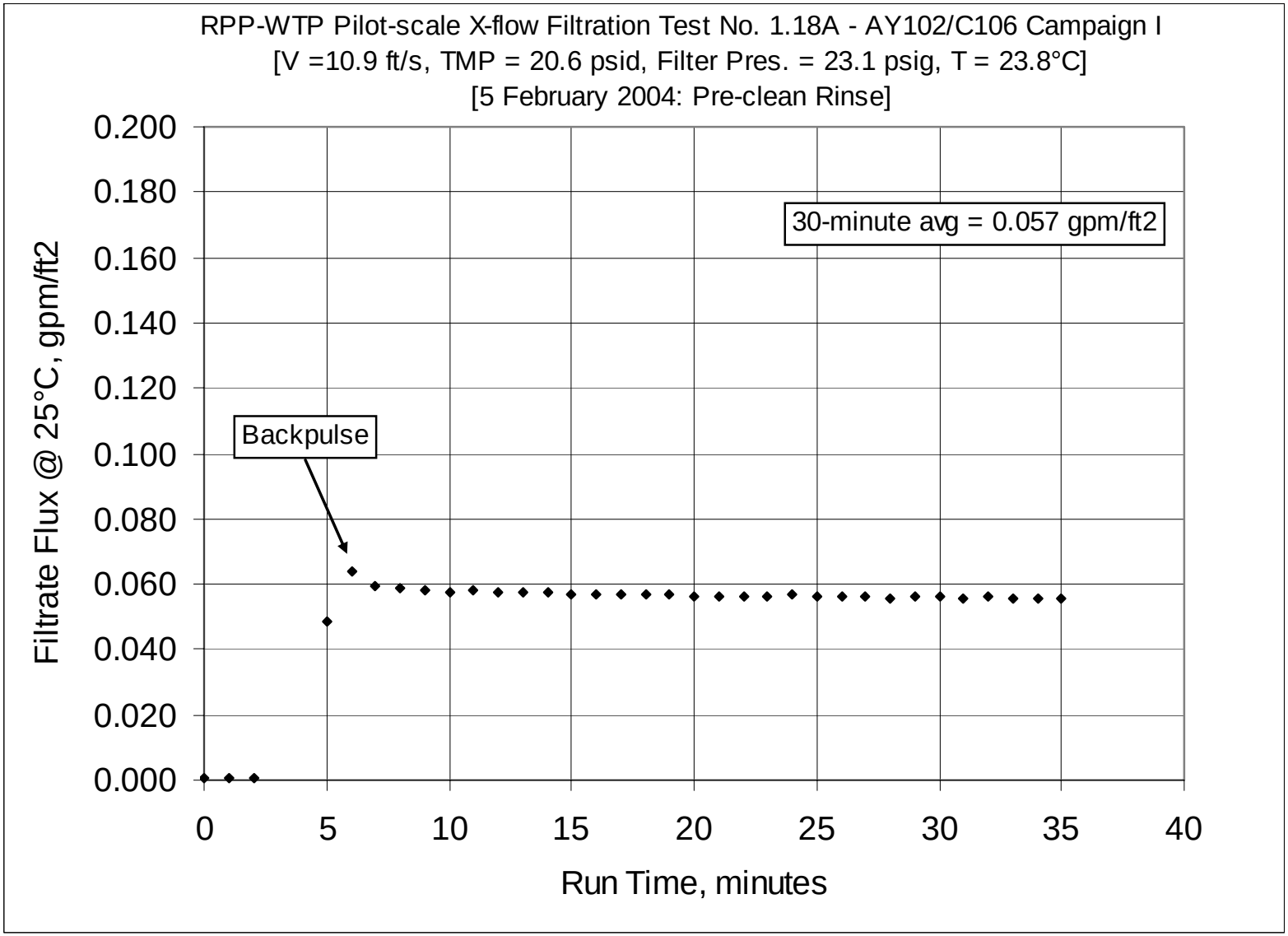
RUN # WASH2; CAMPAIGN II SLURRY WASH 2 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	2/3/2004	10:34:49 AM		25.296	20.518	24.919	24.545	22.619		46.089	47.301	11.076	34.492	-1.216	-6.138		51.092	0.184	14.643	0.004		123.98	2.06639	45.8	12.5	40.3	2.778	0.027	0.027	0.001	0.682	0.58	
142	2/3/2004	10:35:49 AM		25.303	20.545	24.751	24.572	23.012		45.792	47.006	10.972	34.36	-1.216	-6.071		46.815	0.204	14.643	0.004		124.98	2.08306	45.5	11.5	40.1	2.763	0.030	0.031	0.001	0.764	0.65	
143	2/3/2004	10:36:49 AM		25.275	20.562	24.798	24.629	23.14		46.072	47.158	10.966	34.64	-1.216	-5.921		50.754	0.197	14.643	0.004		125.98	2.09972	45.7	12.4	40.4	2.782	0.029	0.030	0.001	0.732	0.62	
144	2/3/2004	10:37:49 AM		25.242	20.56	24.78	24.646	23.578		45.83	47.071	10.929	34.412	-1.219	-5.996		49.683	0.198	14.643	0.004		126.98	2.11639	45.6	12.2	40.1	2.766	0.030	0.030	0.001	0.740	0.63	
145	2/3/2004	10:38:49 AM		25.24	20.587	24.813	24.614	23.275		46.023	47.292	11.023	34.492	-1.216	-6.042		47.854	0.203	14.643	0.004		127.98	2.13306	45.8	11.7	40.3	2.776	0.030	0.030	0.001	0.756	0.64	
146	2/3/2004	10:39:49 AM		25.247	20.61	24.84	24.657	23.272		45.96	47.178	10.954	34.518	-1.219	-6.138		47.886	0.201	14.643	0.004		128.98	2.14972	45.7	11.7	40.2	2.774	0.030	0.030	0.001	0.748	0.64	
147	2/3/2004	10:40:49 AM		25.249	20.627	24.852	24.653	23.048		45.425	46.666	10.829	34.143	-1.216	-5.944		49.973	0.202	14.643	0.004		129.98	2.16639	45.2	12.2	39.8	2.743	0.030	0.030	0.001	0.760	0.65	
148	2/3/2004	10:41:49 AM		25.261	20.648	24.873	24.71	22.904		45.902	47.218	11.05	34.381	-1.216	-5.901		49.571	0.189	14.643	0.004		130.98	2.18306	45.7	12.1	40.1	2.768	0.028	0.028	0.001	0.704	0.60	
149	2/3/2004	10:42:49 AM		25.247	20.655	24.87	24.676	22.555		45.689	47.141	10.996	34.126	-1.219	-5.921		51.137	0.197	14.643	0.004		131.98	2.19972	45.7	12.5	39.9	2.751	0.029	0.029	0.001	0.739	0.63	
150	2/3/2004	10:43:49 AM		25.274	20.687	24.902	24.738	22.511		45.757	47.01	10.988	34.282	-1.219	-6.016		50.701	0.193	14.643	0.004		132.98	2.21639	45.5	12.4	40.0	2.759	0.029	0.029	0.001	0.721	0.61	
151	2/3/2004	10:44:49 AM		25.286	20.694	24.904	24.73	22.939		45.805	47.073	11.007	34.401	-1.216	-5.886		47.969	0.209	14.643	0.004		133.98	2.23306	45.6	11.8	40.1	2.765	0.031	0.031	0.001	0.779	0.66	
152	2/3/2004	10:45:49 AM		25.273	20.701	24.7	24.732	23.533		45.382	46.619	10.887	34.075	-1.216	-6.065		52.833	0.178	14.643	0.004		134.98	2.24972	45.1	12.9	39.7	2.739	0.027	0.027	0.001	0.674	0.57	
153	2/3/2004	10:46:49 AM		25.25	20.723	24.778	24.779	23.485		45.656	47.019	10.941	34.17	-1.216	-6.016		53.01	0.203	14.643	0.004		135.98	2.26639	45.5	13.0	39.9	2.752	0.030	0.030	0.001	0.763	0.65	
154	2/3/2004	10:47:49 AM		25.242	20.741	24.805	24.762	23.152		45.494	46.807	10.944	34.055	-1.216	-6.057		52.101	0.203	14.643	0.004		136.98	2.28306	45.3	12.8	39.8	2.742	0.030	0.030	0.001	0.765	0.65	
155	2/3/2004	10:48:49 AM		25.249	20.758	24.827	24.768	22.592		45.581	46.903	10.861	34.241	-1.214	-5.973		50.447	0.197	14.643	0.004		137.98	2.29972	45.4	12.4	39.9	2.752	0.029	0.030	0.001	0.740	0.63	
156	2/3/2004	10:49:49 AM		25.245	20.769	24.828	24.88	23.095		45.562	46.969	10.862	34.194	-1.219	-5.947		48.816	0.199	14.643	0.004		138.98	2.31639	45.5	12.0	39.9	2.749	0.030	0.030	0.001	0.748	0.64	
157	2/3/2004	10:50:49 AM		25.257	20.801	24.845	24.942	23.813		45.568	47.091	10.908	34.11	-1.216	-5.883		49.84	0.194	14.643	0.004		139.98	2.33306	45.6	12.2	39.8	2.747	0.029	0.029	0.001	0.729	0.62	
158	2/3/2004	10:51:49 AM		25.254	20.818	24.847	24.884	23.594		45.724	47.164	10.905	34.295	-1.216	-5.912		45.564	0.208	14.643	0.004		140.98	2.34972	45.7	11.2	40.0	2.759	0.031	0.031	0.001	0.778	0.66	
159	2/3/2004	10:52:49 AM		25.251	20.821	24.854	24.911	23.281		45.896	47.272	10.933	34.467	-1.222	-5.984		46.392	0.198	14.643	0.003		141.98	2.36639	45.8	11.4	40.2	2.770	0.030	0.030	0.001	0.738	0.63	
160	2/3/2004	10:53:49 AM		25.263	20.837	24.881	24.988	23.282		45.822	47.174	11.043	34.311	-1.219	-5.967		45.964	0.209	14.643	0.004		142.98	2.38306	45.7	11.3	40.1	2.762	0.031	0.031	0.001	0.780	0.66	
161	2/3/2004	10:54:49 AM		25.289	20.859	24.897	25.059	23.259		45.765	47.193	10.97	34.278	-1.219	-5.912		48.795	0.192	14.643	0.004		143.98	2.39972	45.7	12.0	40.0	2.759	0.029	0.029	0.001	0.717	0.61	
162	2/3/2004	10:55:49 AM		25.306	20.886	24.93	25.046	23.502		45.392	47.124	10.971	33.934	-1.216	-5.389		49.008	0.186	14.643	0.004		144.98	2.41639	45.7	12.0	39.7	2.735	0.028	0.028	0.001	0.701	0.60	
163	2/3/2004	10:56:49 AM		25.398	20.893	24.926	25.093	23.157		34.68	46.919	10.846	23.358	7	6.608		53.651	0.047	14.643	0.004		145.98	2.43306	45.4	13.1	29.0	2.001	0.007	0.007	0.000	0.242	0.21	
164	2/3/2004	10:57:49 AM		25.28	20.91	24.748	25.04	23.981		45.098	46.927	10.907	33.708	-1.214	-4.493		46.84	0.297	14.643	0.004		146.98	2.44972	45.5	11.5	39.4	2.717	0.044	0.045	0.001	1.132	0.96	
165	2/3/2004	10:58:49 AM		25.262	20.927	24.8	25.042	24.644		46.259	47.044	10.958	34.908	-1.216	-5.915		51.726	0.211	14.643	0.004		147.98	2.46639	45.6	12.7	40.6	2.798	0.031	0.032	0.001	0.780	0.66	
166	2/3/2004	10:59:49 AM		25.264	20.945	24.817	25.074	24.025		45.991	46.905	10.848	34.726	-1.219	-6.005		52.62	0.2	14.643	0.004		148.98	2.48306	45.4	12.9	40.4	2.783	0.030	0.030	0.001	0.743	0.63	
167	2/3/2004	11:00:49 AM		25.272	20.973	24.84	25.062	23.507		46	46.841	10.809	34.8	-1.219	-5.932		54.462	0.207	14.643	0.004		149.98	2.49972	45.4	13.3	40.4	2.785	0.031	0.031	0.001	0.767	0.65	
168	2/3/2004	11:01:49 AM		25.273	20.979	24.852	25.079	23.609		46.108	47.031	10.912	34.804	-1.219	-5.944		51.869	0.202	14.643	0.004		150.98	2.51639	45.6	12.7	40.5	2.789	0.030	0.030	0.001	0.748	0.64	
169	2/3/2004	11:02:49 AM		25.284	21.005	24.863	25.08	23.715		45.915	46.952	10.836	34.586	-1.216	-5.932		48.96	0.201	14.643	0.004		151.98	2.53306	45.5	12.0	40.3	2.775	0.030	0.030	0.001	0.747	0.64	
170	2/3/2004	11:03:49 AM		25.292	21.023	24.885	25.082	23.702		45.85	46.791	10.836	34.596	-1.219	-6.002		49.815	0.209	14.643	0.004		152.98	2.54972	45.3	12.2	40.2	2.773	0.031	0.031	0.001	0.777	0.66	
171	2/3/2004	11:04:49 AM		25.308	21.039	24.881	25.118	23.839		46.07	47.193	10.952	34.642	-1.219	-5.932		49.327	0.194	14.643	0.004		153.98	2.56639	45.7	12.1	40.4	2.782	0.029	0.029	0.001	0.719	0.61	
172	2/3/2004	11:05:49 AM		25.32	21.056	24.908	25.13	23.745		45.906	47.139	10.956	34.426	-1.216	-5.811		48.966	0.203	14.643	0.004		154.98	2.58306	45.7	12.0	40.2	2.769	0.030	0.030	0.001	0.755	0.64	
173	2/3/2004	11:06:49 AM		25.326	21.067	24.924	25.216	23.476		46.004	47.081	10.974	34.555	-1.219	-5.701		51.751	0.198	14.643	0.004		155.98	2.59972	45.6	12.7	40.3	2.777	0.030	0.030	0.001	0.734	0.63	
174	2/3/2004	11:07:49 AM		25.317	21.083	24.775	25.212	23.798		45.521	46.716	10.807	34.301	-1.219	-5.591		46.886	0.198	14.643	0.004		156.98	2.61639	45.2	11.5	39.9	2.752	0.030	0.030	0.001	0.744	0.63	
175	2/3/2004	11:08:49 AM		25.313	21.1	24.807	25.129	23.589		45.913	47.06	10.896	34.51	-1.219	-5.935		49.185	0.202	14.643	0.004		157.98	2.63306	45.6	12.1	40.2	2.772	0.030	0.030	0.001	0.753	0.64	
176	2/3/2004	11:09:49 AM		25.31	21.127	24.828	25.17	23.791		45.693	46.919	10.872	34.313	-1.214	-5.843		51.772	0.204	14.643	0.004		158.98	2.64972	45.4	12.7	40.0	2.758	0.030	0.031	0.001	0.764	0.65	
177	2/3/2004	11:10:49 AM		25.317	21.149	24.845	25.223	23.693		45.604	46.87	10.834	34.28	-1.216	-5.822		48.503	0.199	14.643	0.003		159.98	2.66639	45.4	11.9	39.9	2.754	0.030	0.030	0.001	0.746	0.63	
178	2/3/2004	11:11:49 AM		25.294	21.161	24.867	25.264	23.775		45.653	46.801	10.794	34.455	-1.216	-5.892		55.319	0.196	14.643	0.004		160.98	2.68306	45.3	13.6	40.1	2.762	0.029	0.029	0.001	0.732	0.62	
179	2/3/2004	11:12:49 AM		25.29	21.168	24.869	25.246	23.24		45.581	46.795	10.831	34.319	-1.216	-5.918		47.656	0.204	14.643	0.004		161.98	2.69972	45.3	11.7	40.0	2.754	0.030	0.031	0.001	0.764	0.65	
180	2/3/2004	11:13:49 AM		25.296	21.174	24.865	25.267	23.532		45.745	47.102	10.927	34.299	-1.222	-5.744		47.833	0.191	14.643	0.004		162.98	2.71639	45.6	11.7	40.0	2.759	0.028	0.029	0.001	0.714	0.61	
181	2/3/2004	11:14:49 AM		25.328	21.2	24.911	25.273	23.638		45.992	47.27	10.965	34.529	-1.219	-5.86		51.204	0.207	14.643	0.004		163.98	2.73306	45.8	12.5	40.3	2.776	0.031	0.031	0.001	0.768	0.65	
182	2/3/2004	11:15:49 AM		25.344	21.211	24.912	25.239	23.158		45.506	46.928	10.838	34.202	-1.216	-5.554		49.091	0.182	14.643	0.004		164.98	2.74972	45.5	12.0	39.9	2.748	0.027	0.027	0.001	0.683	0.58	
183	2/3/2004	11:16:49 AM		25.344	21.232	24.767	25.26	23.745		45.456	46.7	10.818	34.192	-1.214	-5.869		49.771	0.197	14.643	0.004		165.98	2.76639	45.2	12.2	39.8	2.746	0.029	0.030	0.001	0.742	0.63	
184	2/3/2004	11:17:49 AM		25.335	21.237	24.778	25.295	24.061		45.206	46.409	10.861	33.905	-1.219	-5.967		48.109	0.202	14.643	0.004		166.98	2.78306	44.9	11.8	39.6	2.727	0.030	0.030	0.001	0.766	0.65	
185	2/3/2004	11:18:49 AM		25.321	21.239	24.804	25.312	23.727		45.479	46.867	10.972	33.973	-1.219	-5.814		46.596	0.2	14.643	0.004		167.98	2.79972	45.4	11.4	39.7	2.739	0.030	0.030	0.001	0.755	0.64	
186	2/3/2004	11:19:49 AM		25.307	21.255	24.815	25.267	23.372		45.334	46.731	10.852	33.991	-1.219	-5.739		49.821	0.186	14.643	0.004		168.98	2.81639	45.3	12.2	39.7	2.735	0.028	0.028	0.001	0.703	0.60	
187	2/3/2004	11:20:49 AM		25.313	21.286	24.856	25.288	23.663		45.488	46.778	10.924	34.141	-1.216	-5.84		43.735	0.206	14.643	0.004		169.98	2.83306	45.3	10.7	39.8	2.745	0.031	0.031	0.001	0.775	0.66	
188	2/3/2004	11:21:49 AM		25.309	21.293	24.853	25.315	23.74		45.409	46.838	10.919	33.948	-1.219	-5.892		55.105	0.198	14.643	0.003		170.98	2.84972	45.4	13.5	39.7	2.736	0.030	0.030	0.001	0.747	0.64	
189	2/3/2004	11:22:49 AM		25.311	21.314	24.869	25.326	24.192		45.446	46.851	10.94	33.987	-1.216	-5.684		48.234	0.198	14.643	0.004		171.98	2.86639	45.4	11.8	39.7	2.738	0.030	0.030	0.001	0.746	0.63	
190	2/3/2004	11:23:49 AM		25.328	21.331	24.886	25.368	24.144		45.662	47.033	10.954	34.221	-1.219	-5.773		51.924	0.196	14.643	0.004		172.98	2.88306	45.6	12.7	39.9	2.754	0.029	0.029	0.001	0.734	0.62	
191	2/3/2004	11:24:49 AM		25.33	21.343	24.908	25.366	23.941		45.774	47.251	11.05	34.188	-1.216	-5.805		48.132	0.208	14.643	0.004		173.98	2.89972	45.8	11.8	40.0	2.757	0.031	0.031	0.001	0.778	0.66	
192	2/3/2004	11:25:49 AM		25.343	21.356	24.916	25.383	24.584		45.527	46.872	10.959	34.112	-1.219	-5.739		48.653	0.2	14.643	0.004		174.98	2.91639	45.4	11.9	39.8	2.745	0.030	0.030	0.001	0.751	0.64	
193	2/3/2004	11:26:49 AM		25.36	21.389	24.944	25.391	24.197		45.593	47.056	10.973	34.126	-1.219	-5.655		42.306	0.19	14.643	0.004		175.98	2.93306	45.6	10.4	39.9	2.748	0.028	0.028	0.001	0.712	0.61	
194	2/3/2004	11:27:49 AM		25.359	21.398	24.782	25.41	24.14		45.212	46.556	10.958	33.79	-1.222	-5.782		46.601	0.191	14.643	0.003		176.98	2.94972	45.1	11.4	39.5	2.723	0.028	0.029	0.001	0.725	0.62	
195	2/3/2004	11:28:49 AM		25.331	21.425	24.814	25.472	24.353		45.266	46.687	10.889	33.882	-1.216	-5.811		54.014	0.204	14.643	0.004		177.98	2.96639	45.2	13.2	39.6	2.728	0.030	0.031	0.001	0.773	0.66	
196	2/3/2004	11:29:49 AM		25.319	21.428	24.822	25.49	24.381		45.009	46.428	10.834	33.724	-1.219	-5.75		52.766	0.214	14.643	0.004		178.98	2.98306	45.0	12.9	39.4	2.714	0.032	0.032	0.001	0.815	0.69	
197	2/3/2004	11:30:49 AM		25.326	21.456	24.834	25.502	24.193		45.442	46.838	10.926	34.024	-1.219	-5.874		51.759	0.2	14.643	0.004		179.98	2.99972	45.4	12.7	39.7	2.739	0.030	0.030	0.001	0.754	0.64	
198	2/3/2004	11:31:49 AM		25.312	21.462	24.841	25.483	23.873		45.245	46.697	10.918	33.812	-1.219	-5.762		48.993	0.204	14.643	0.004		180.98	3.01639	45.2	12.0	39.5	2.725	0.030	0.031	0.001	0.773	0.66	
199	2/3/2004	11:32:49 AM		25.328	21.493	24.882	25.499	24.165		45.189	46.652	10.939	33.735	-1.219	-5.814		47.366	0.201	14.643	0.004		181.98	3.03306	45.2	11.6	39.5	2.721	0.030	0.030	0.001	0.762	0.65	
200	2/3/2004	11:33:49 AM		25.329	21.494	24.873	25.475	24.026		45.486	47.11	11.049	33.862	-1.219	-5.643		48.799	0.206	14.643	0.004		182.98	3.04972	45.6	12.0	39.7	2.735	0.031	0.031	0.001	0.777	0.66	
201	2/3/2004	11:34:49 AM		25.345	21.515	24.894	25.516	23.285		45.187	46.726	10.971	33.687	-1.219	-5.77		51.377	0.203	14.643	0.004		183.98	3.06639	45.3	12.6	39.4	2.719	0.030	0.030	0.001	0.770	0.66	
202	2/3/2004	11:35:49 AM		25.357	21.527	24.9	25.498	23.777		45.373	46.832	10.975	33.929	-1.222	-5.802		52.168	0.202	14.643	0.004		184.98	3.08306	45.4	12.8	39.7	2.734	0.030	0.030	0.001	0.762	0.65	
203	2/3/2004	11:36:49 AM		25.377	21.547	24.921	25.548	23.823		45.434	46.847	10.975	34.075	-1.216	-5.661		52.479	0.188	14.643	0.004		185.98	3.09972	45.4	12.9	39.8	2.741	0.028	0.028	0.001	0.707	0.60	
204	2/3/2004	11:37:49 AM		25.418	21.558	24.941	25.564	24.014		43.559	47.22	11.059	31.91	-1.214	-3.024		50.011	0.128	14.643	0.004		186.98	3.11639	45.7	12.3	37.7	2.602	0.019	0.019	0.001	0.507	0.43	
205	2/3/2004	11:38:49 AM		25.354	21.57	24.953	25.615	24.266		45.709	46.722	10.85	34.469	-1.219	-3.712		49.596	0.318	14.643	0.004		187.98	3.13306	45.2	12.2	40.1	2.764	0.047	0.047	0.001	1.184	1.01	
206	2/3/2004	11:39:49 AM		25.351	21.581	24.799	25.612	24.358		45.873	46.712	10.794	34.66	-1.222	-5.554		51.99	0.226	14.643	0.003		188.98	3.14972	45.2	12.7	40.3	2.776	0.034	0.034	0.001	0.842	0.72	
207	2/3/2004	11:40:49 AM		25.363	21.608	24.851	25.619	24.269		46.143	46.967	10.82	34.847	-1.219	-5.799		48.249	0.208	14.643	0.004		189.98	3.16639	45.5	11.8	40.5	2.792	0.031	0.031	0.001	0.769	0.65	
208	2/3/2004	11:41:49 AM		25.359	21.62	24.848	25.665	24.386		45.865	46.876	10.793	34.541	-1.222	-5.765		53.01	0.212	14.643	0.004		190.98	3.18306	45.4	13.0	40.2	2.772	0.032	0.032	0.001	0.790	0.67	
209	2/3/2004	11:42:49 AM		25.366	21.637	24.865	25.663	24.198		45.921	46.87	10.797	34.646	-1.219	-5.753		49.077	0.207	14.643	0.004		191.98	3.19972	45.4	12.0	40.3	2.777	0.031	0.031	0.001	0.769	0.65	
210	2/3/2004	11:43:49 AM		25.379	21.65	24.882	25.61	24.46		45.676	46.685	10.725	34.49	-1.219	-5.704		56.252	0.202	14.643	0.004		192.98	3.21639	45.2	13.8	40.1	2.764	0.030	0.030	0.001	0.754	0.64	

RUN # WASH2; CAMPAIGN II SLURRY WASH 2 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	2/3/2004	11:44:49 AM		25.386	21.678	24.905	25.537	24.238		46.008	47.166	10.844	34.621	-1.219	-5.759		47.06	0.206	14.643	0.004		193.98	3.23306	45.7	11.5	40.3	2.780	0.031	0.031	0.001	0.764	0.65	
212	2/3/2004	11:45:49 AM		25.389	21.68	24.918	25.475	24.236		45.763	46.874	10.755	34.588	-1.219	-5.617		49.45	0.198	14.643	0.004		194.98	3.24972	45.4	12.1	40.2	2.770	0.030	0.030	0.001	0.736	0.63	
213	2/3/2004	11:46:49 AM		25.407	21.713	24.966	25.433	24.459		45.583	46.828	10.781	34.323	-1.216	-5.551		46.261	0.209	14.643	0.004		195.98	3.26639	45.4	11.3	40.0	2.755	0.031	0.031	0.001	0.781	0.66	
214	2/3/2004	11:47:49 AM		25.405	21.716	24.743	25.345	24.892		45.394	46.712	10.756	34.104	-1.219	-5.609		54.483	0.198	14.643	0.004		196.98	3.28306	45.2	13.4	39.7	2.741	0.030	0.030	0.001	0.748	0.64	
215	2/3/2004	11:48:49 AM		25.373	21.719	24.801	25.248	24.779		45.235	46.443	10.696	34.069	-1.219	-5.684		45.045	0.199	14.643	0.004		197.98	3.29972	45.0	11.0	39.7	2.734	0.030	0.030	0.001	0.752	0.64	
216	2/3/2004	11:49:49 AM		25.37	21.752	24.829	25.201	24.047		45.289	46.501	10.614	34.254	-1.219	-5.704		51.475	0.199	14.643	0.004		198.98	3.31639	45.0	12.6	39.8	2.742	0.030	0.030	0.001	0.750	0.64	
217	2/3/2004	11:50:49 AM		25.363	21.759	24.841	25.168	23.769		45.268	46.538	10.652	34.153	-1.219	-5.698		44.102	0.208	14.643	0.004		199.98	3.33306	45.1	10.8	39.7	2.738	0.031	0.031	0.001	0.784	0.67	
218	2/3/2004	11:51:49 AM		25.364	21.77	24.862	25.129	23.94		45.413	46.731	10.728	34.243	-1.219	-5.649		51.988	0.207	14.643	0.004		200.98	3.34972	45.3	12.7	39.8	2.746	0.031	0.031	0.001	0.778	0.66	
219	2/3/2004	11:52:49 AM		25.351	21.778	24.87	25.071	24.223		45.529	46.959	10.759	34.243	-1.219	-5.632		49.093	0.211	14.643	0.004		201.98	3.36639	45.5	12.0	39.9	2.750	0.031	0.032	0.001	0.792	0.67	
220	2/3/2004	11:53:49 AM		25.373	21.805	24.897	25.043	24.005		45.149	46.869	10.787	33.864	-1.219	-5.198		51.577	0.219	14.643	0.004		202.98	3.38306	45.4	12.6	39.5	2.724	0.033	0.033	0.001	0.829	0.71	
221	2/3/2004	11:54:49 AM		25.38	21.827	24.924	25.035	23.991		45.417	46.861	10.76	34.168	-1.216	-5.545		52.691	0.221	14.643	0.004		203.98	3.39972	45.4	12.9	39.8	2.744	0.033	0.033	0.001	0.830	0.71	
222	2/3/2004	11:55:49 AM		25.397	21.834	24.921	25.022	24.459		45.496	46.961	10.814	34.188	-1.219	-5.4		52.076	0.202	14.643	0.004		204.98	3.41639	45.5	12.8	39.8	2.747	0.030	0.030	0.001	0.758	0.64	
223	2/3/2004	11:56:49 AM		25.399	21.837	24.928	25.019	24.446		45.425	46.813	10.782	34.174	-1.219	-5.585		48.292	0.199	14.643	0.003		205.98	3.43306	45.3	11.8	39.8	2.744	0.030	0.030	0.001	0.747	0.64	
224	2/3/2004	11:57:49 AM		25.402	21.854	24.715	24.997	24.569		45.382	46.756	10.737	34.174	-1.219	-5.71		51.179	0.203	14.643	0.004		206.98	3.44972	45.3	12.5	39.8	2.743	0.030	0.031	0.001	0.767	0.65	
225	2/3/2004	11:58:49 AM		25.384	21.881	24.812	24.989	24.361		45.064	46.67	10.734	33.732	-1.216	-5.614		50.881	0.205	14.643	0.004		207.98	3.46639	45.2	12.5	39.4	2.716	0.031	0.031	0.001	0.780	0.66	
226	2/3/2004	11:59:49 AM		25.336	21.874	24.825	25.001	24.153		45.093	46.521	10.749	33.915	-1.216	-5.623		52.587	0.21	14.643	0.004		208.98	3.48306	45.0	12.9	39.5	2.724	0.031	0.031	0.001	0.796	0.68	
227	2/3/2004	12:00:49 PM		25.322	21.885	24.831	24.997	23.944		45.166	46.668	10.727	33.948	-1.219	-5.603		48.941	0.203	14.643	0.003		209.98	3.49972	45.2	12.0	39.6	2.727	0.030	0.030	0.001	0.769	0.65	
228	2/3/2004	12:01:49 PM		25.33	21.897	24.843	24.924	24.146		45.038	46.542	10.693	33.878	-1.222	-5.389		49.312	0.192	14.643	0.003		210.98	3.51639	45.1	12.1	39.5	2.720	0.029	0.029	0.001	0.729	0.62	
229	2/3/2004	12:02:49 PM		25.33	21.908	24.849	24.895	24.122		45.104	46.546	10.786	33.798	-1.219	-5.554		48.993	0.213	14.643	0.004		211.98	3.53306	45.1	12.0	39.5	2.720	0.032	0.032	0.001	0.808	0.69	
230	2/3/2004	12:03:49 PM		25.331	21.919	24.855	24.841	24.258		45.349	46.869	10.762	34.085	-1.222	-5.704		50.583	0.205	14.643	0.004		212.98	3.54972	45.4	12.4	39.7	2.738	0.031	0.031	0.001	0.773	0.66	
231	2/3/2004	12:04:49 PM		25.357	21.935	24.881	24.852	24.074		45.112	46.704	10.693	33.911	-1.219	-5.565		48.616	0.202	14.643	0.003		213.98	3.56639	45.2	11.9	39.5	2.724	0.030	0.030	0.001	0.765	0.65	
232	2/3/2004	12:05:49 PM		25.368	21.951	24.912	24.863	24.019		45.417	46.944	10.773	34.122	-1.214	-5.646		49.852	0.206	14.643	0.004		214.98	3.58306	45.5	12.2	39.8	2.742	0.031	0.031	0.001	0.774	0.66	
233	2/3/2004	12:06:49 PM		25.365	21.968	24.918	24.824	24.567		45.51	47.118	10.766	34.252	-1.219	-5.606		47.875	0.203	14.643	0.004		215.98	3.59972	45.6	11.7	39.9	2.750	0.030	0.030	0.001	0.761	0.65	
234	2/3/2004	12:07:49 PM		25.365	21.973	24.929	24.83	24.072		45.278	46.814	10.766	34.02	-1.219	-5.626		50.339	0.203	14.643	0.004		216.98	3.61639	45.3	12.3	39.6	2.734	0.030	0.030	0.001	0.765	0.65	
235	2/3/2004	12:08:49 PM		25.377	21.99	24.72	24.776	24.734		44.847	46.453	10.64	33.687	-1.219	-5.669		53.307	0.193	14.643	0.004		217.98	3.63306	45.0	13.1	39.3	2.707	0.029	0.029	0.001	0.739	0.63	
236	2/3/2004	12:09:49 PM		25.353	22.012	24.802	24.753	24.43		44.952	46.538	10.663	33.817	-1.216	-5.629		52.295	0.198	14.643	0.004		218.98	3.64972	45.1	12.8	39.4	2.715	0.030	0.030	0.001	0.754	0.64	
237	2/3/2004	12:10:49 PM		25.329	22.002	24.817	24.708	24.085		44.897	46.59	10.687	33.681	-1.219	-5.519		51.008	0.208	14.643	0.003		219.98	3.66639	45.1	12.5	39.3	2.709	0.031	0.031	0.001	0.793	0.68	
238	2/3/2004	12:11:49 PM		25.35	22.044	24.864	24.755	24.132		44.977	46.633	10.71	33.794	-1.219	-5.583		49.963	0.213	14.643	0.004		220.98	3.68306	45.2	12.2	39.4	2.715	0.032	0.032	0.001	0.809	0.69	
239	2/3/2004	12:12:49 PM		25.327	22.036	24.856	24.711	24.859		45.347	47.064	10.867	33.909	-1.219	-5.594		51.071	0.202	14.643	0.004		221.98	3.69972	45.6	12.5	39.6	2.732	0.030	0.030	0.001	0.763	0.65	
240	2/3/2004	12:13:49 PM		25.329	22.048	24.863	24.723	24.115		44.666	46.724	10.699	33.486	-1.219	-4.967		47.568	0.247	14.643	0.004		222.98	3.71639	45.3	11.7	39.1	2.694	0.037	0.037	0.001	0.946	0.81	
241	2/3/2004	12:14:49 PM		25.321	22.059	24.879	24.685	24.117		45.349	46.814	10.729	34.106	-1.219	-5.438		49.316	0.208	14.643	0.004		223.98	3.73306	45.3	12.1	39.7	2.739	0.031	0.031	0.001	0.783	0.67	
242	2/3/2004	12:15:49 PM		25.343	22.082	24.877	24.652	23.804		45.429	46.954	10.726	34.184	-1.219	-5.473		51.594	0.221	14.643	0.003		224.98	3.74972	45.5	12.6	39.8	2.745	0.033	0.033	0.001	0.831	0.71	
243	2/3/2004	12:16:49 PM		25.355	22.089	24.893	24.629	24.261		45.427	46.903	10.806	34.126	-1.219	-5.597		52.902	0.207	14.643	0.004		225.98	3.76639	45.4	13.0	39.8	2.742	0.031	0.031	0.001	0.778	0.66	
244	2/3/2004	12:17:49 PM		25.361	22.1	24.845	24.625	24.188		45.458	46.83	10.716	34.315	-1.219	-5.58		49.306	0.209	14.643	0.004		226.98	3.78306	45.4	12.1	39.9	2.750	0.031	0.031	0.001	0.785	0.67	
245	2/3/2004	12:18:49 PM		25.373	22.122	24.802	24.657	24.6		44.928	46.542	10.739	33.691	-1.219	-5.426		53.791	0.2	14.643	0.004		227.98	3.79972	45.1	13.2	39.3	2.710	0.030	0.030	0.001	0.763	0.65	
246	2/3/2004	12:19:49 PM		25.329	22.118	24.778	24.608	24.681		45.056	46.677	10.73	33.79	-1.219	-5.499		50.299	0.2	14.643	0.004		228.98	3.81639	45.2	12.3	39.4	2.718	0.030	0.030	0.001	0.761	0.65	
247	2/3/2004	12:20:49 PM		25.326	22.145	24.79	24.59	24.823		45.125	46.668	10.731	33.929	-1.219	-5.539		46.609	0.21	14.643	0.003		229.98	3.83306	45.2	11.4	39.5	2.725	0.031	0.031	0.001	0.797	0.68	
248	2/3/2004	12:21:49 PM		25.301	22.145	24.79	24.58	24.838		45.448	47.145	10.875	33.95	-1.219	-5.548		51.4	0.204	14.643	0.004		230.98	3.84972	45.7	12.6	39.7	2.737	0.030	0.031	0.001	0.771	0.66	
249	2/3/2004	12:22:49 PM		25.278	22.167	24.811	24.552	24.039		44.668	46.675	10.681	33.425	-1.219	-5.126		48.148	0.242	14.643	0.004		231.98	3.86639	45.2	11.8	39.0	2.692	0.036	0.036	0.001	0.929	0.79	
250	2/3/2004	12:23:49 PM		25.248	22.182	24.852	24.562	24.099		45.251	46.677	10.727	33.999	-1.216	-5.545		52.426	0.209	14.643	0.004		232.98	3.88306	45.2	12.8	39.6	2.732	0.031	0.031	0.001	0.790	0.67	
251	2/3/2004	12:24:49 PM		25.259	22.184	24.848	24.533	24.221		45.172	46.629	10.721	33.968	-1.222	-5.504		47.245	0.214	14.643	0.004		233.98	3.89972	45.2	11.6	39.6	2.728	0.032	0.032	0.001	0.810	0.69	
252	2/3/2004	12:25:49 PM		25.264	22.189	24.853	24.538	23.54		45.353	46.797	10.786	34.057	-1.219	-5.556		49.512	0.207	14.643	0.004		234.98	3.91639	45.3	12.1	39.7	2.738	0.031	0.031	0.001	0.781	0.66	
253	2/3/2004	12:26:49 PM		25.264	22.189	24.853	24.462	24.025		45.239	46.776	10.772	33.946	-1.219	-5.528		51.847	0.21	14.643	0.004		235.98	3.93306	45.3	12.7	39.6	2.730	0.031	0.031	0.001	0.794	0.68	
254	2/3/2004	12:27:49 PM		25.259	22.199	24.868	24.478	24.126		45.421	46.932	10.785	34.141	-1.219	-5.559		46.74	0.206	14.643	0.004		236.98	3.94972	45.5	11.5	39.8	2.743	0.031	0.031	0.001	0.775	0.66	
255	2/3/2004	12:28:49 PM		25.269	22.209	24.898	24.478	23.846		45.179	46.737	10.767	33.911	-1.216	-5.481		50.09	0.209	14.643	0.004		237.98	3.96639	45.3	12.3	39.5	2.726	0.031	0.031	0.001	0.790	0.67	
256	2/3/2004	12:29:49 PM		25.431	22.215	24.91	24.464	24.463		31.667	46.863	10.757	20.467	9.863	9.696		52.983	0.046	14.643	0.004		238.98	3.98306	45.4	13.0	26.1	1.797	0.007	0.007	0.000	0.264	0.22	
257																																	
258		Averages		25.4	20.5	25.0	24.6	22.6	#	45.8	47.2	11.2	34.1	-1.1	-5.8	#	49.6	0.2	14.6	0.0	#			45.8	12.1	39.9	2.754	0.029	0.029	0.0007	0.735	0.625	#
259		Maximum		25.9	22.2	25.6	25.7	24.9	#	49.1	50.8	14.2	36.1	9.9	9.7	#	56.3	0.4	14.6	0.0	#			49.4	13.8	42.6	2.937	0.061	0.062	0.0016	1.583	1.347	#
260		Median		25.3	20.5	24.9	24.5	22.8	#	45.8	47.1	11.1	34.2	-1.2	-6.0	#	49.6	0.2	14.6	0.0	#			45.6	12.1	40.0	2.756	0.030	0.030	0.0007	0.738	0.628	#
261		Minimum		24.8	18.3	24.1	23.7	18.2	#	31.7	46.4	10.6	20.5	-1.2	-6.6	#	41.4	0.0	14.6	0.0	#			44.9	10.1	26.1	1.797	0.007	0.007	0.0002	0.233	0.198	#
262		2 x Std Dev		0.432	2.259	0.491	1.120	3.059	#	2.875	1.271	1.131	2.547	1.822	2.930	#	4.881	0.060	0.000	0.001	#			1.271	1.196	2.663	0.184	0.009	0.009	0.0002	0.224	0.191	#
263		Number of Points Used*		234	234	234	234	234	0	234	234	234	234	234	234	0	234	234	234	234	0			234	234	234	234	234	234	234	234	234	0
264																																	
265																											4.0-hour avg. =		0.0294				
266																											1-hour avg. =		0.0287				

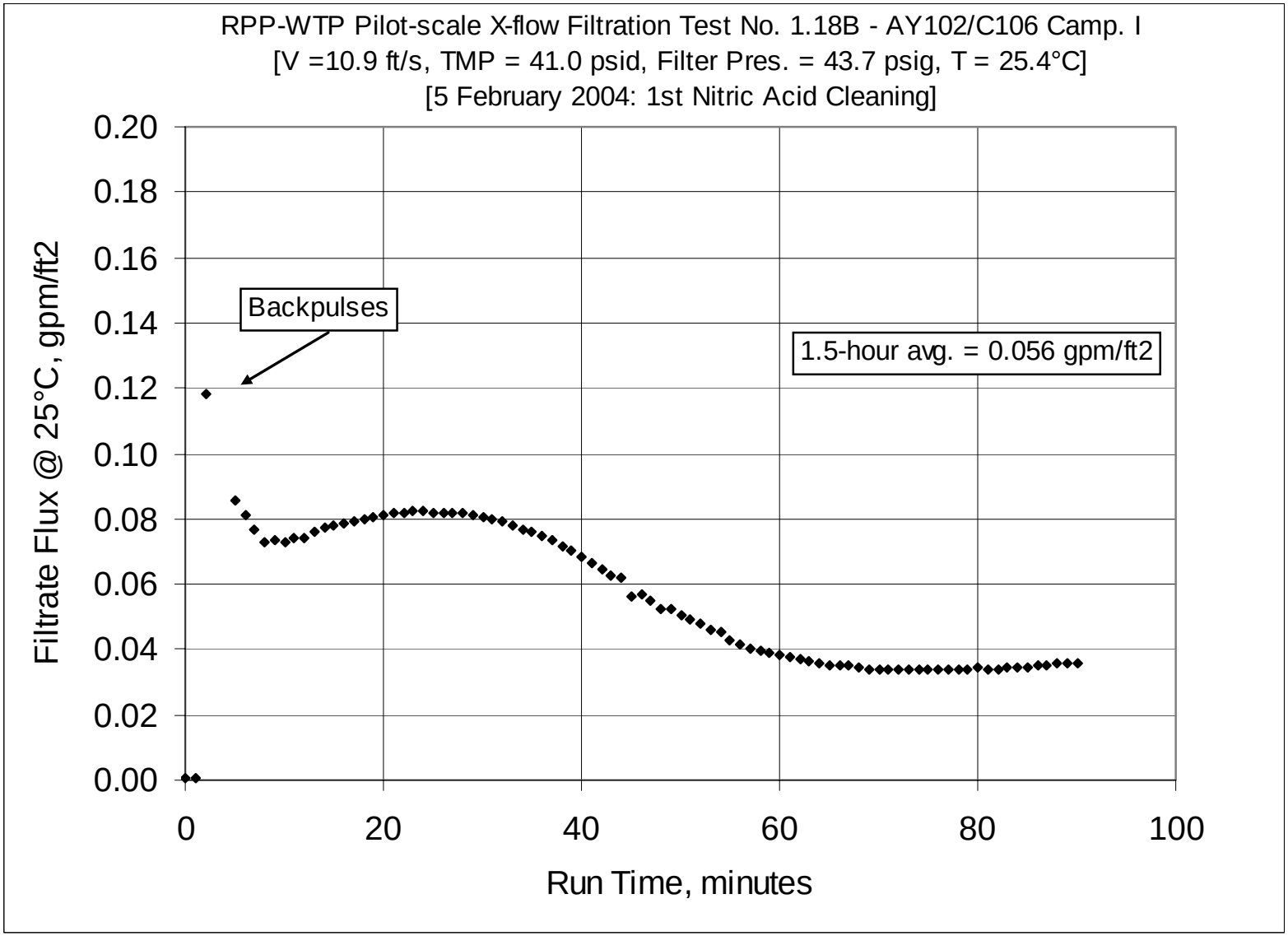
RUN # 1.18; FIRST SLURRY RINSE WITH 0.1 M NAOH



RUN # 1.18; FIRST SLURRY RINSE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface A		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/5/2004	10:50:08 AM		21.93	19.015	22.533	19.164	22.295	#	3.225	24.4	4.262	-1.313	16.31	64.966		43.051	0.003	14.643	0.004		0	0	22.9	10.6	1.0	0.066	0.000	0.000	0.001	0.502	0.43	
18	2/5/2004	10:51:08 AM		21.729	19.011	22.649	19.129	22.18	#	-7.372	24.59	4.15	-15.024	30.93	32.869		43.007	0.003	14.643	1.251		1.00	0.01667	23.1	10.5	-11.2	-0.772	0.000	0.000	0.000	-0.043	-0.04	
19	2/5/2004	10:52:08 AM		21.533	19.016	22.881	19.13	22.04	#	3.816	24.476	4.234	-0.714	15.856	35.306		47.5	0.003	14.643	0.005		2.00	0.03333	23.0	11.6	1.6	0.107	0.000	0.000	0.000	0.306	0.26	
20	2/5/2004	10:53:08 AM		22.027	19.032	22.992	19.12	21.97	#	7.616	24.255	4.137	3.048	12.127	0.384		46.857	0.229	14.643	0.003		3.00	0.05	22.8	11.5	5.3	0.368	2.183	2.311	0.433	433.420	368.85	
21	2/5/2004	10:54:08 AM		22.711	19.043	23.064	19.106	22.067	#	18.759	24.391	4.241	13.99	0.662	0.465		45.869	0.312	14.643	0.004		4.00	0.06667	22.9	11.2	16.4	1.129	2.183	2.306	0.141	140.844	119.86	
22	2/5/2004	10:55:08 AM		23.038	19.044	23.255	19.153	22.058	#	18.605	24.3	4.177	13.894	0.723	0.555		44.798	0.31	14.643	0.004		5.00	0.08333	22.8	11.0	16.2	1.120	0.046	0.049	0.003	2.988	2.54	
23	2/5/2004	10:56:08 AM		22.749	19.056	23.337	19.169	22.19	#	21.754	24.219	4.158	17.222	-1.211	-2.9		45.581	0.407	14.643	0.004		6.00	0.1	22.7	11.2	19.5	1.344	0.061	0.064	0.003	3.264	2.78	
24	2/5/2004	10:57:08 AM		23.323	19.068	23.354	19.227	22.051	#	22.421	24.227	4.138	17.807	-1.214	-3.536		44.49	0.38	14.643	0.003		7.00	0.11667	22.8	10.9	20.1	1.387	0.057	0.059	0.003	2.951	2.51	
25	2/5/2004	10:58:08 AM		23.414	19.064	23.385	19.182	22.197	#	22.689	24.472	4.129	18.027	-1.214	-3.565		45.059	0.376	14.643	0.004		8.00	0.13333	23.0	11.0	20.4	1.404	0.056	0.059	0.003	2.882	2.45	
26	2/5/2004	10:59:08 AM		23.49	19.065	23.457	19.229	22.154	#	22.865	24.584	4.198	18.181	-1.211	-3.594		46.259	0.373	14.643	0.004		9.00	0.15	23.1	11.3	20.5	1.415	0.056	0.058	0.003	2.831	2.41	
27	2/5/2004	11:00:08 AM		23.527	19.062	23.539	19.246	22.095	#	22.679	24.373	4.19	17.99	-1.214	-3.599		46.123	0.372	14.643	0.004		10.00	0.16667	22.9	11.3	20.3	1.402	0.055	0.058	0.003	2.843	2.42	
28	2/5/2004	11:01:08 AM		23.614	19.073	23.555	19.343	22.096	#	22.83	24.474	4.204	18.158	-1.211	-3.596		44.949	0.373	14.643	0.004		11.00	0.18333	23.0	11.0	20.5	1.413	0.056	0.058	0.003	2.827	2.41	
29	2/5/2004	11:02:08 AM		23.656	19.086	23.588	19.366	22.164	#	22.741	24.294	4.152	18.158	-1.214	-3.611		44.091	0.371	14.643	0.004		12.00	0.2	22.8	10.8	20.4	1.410	0.055	0.058	0.003	2.815	2.40	
30	2/5/2004	11:03:08 AM		23.692	19.082	23.609	19.372	22.195	#	22.741	24.344	4.118	18.195	-1.214	-3.599		46	0.37	14.643	0.004		13.00	0.21667	22.9	11.3	20.5	1.411	0.055	0.057	0.003	2.803	2.39	
31	2/5/2004	11:04:08 AM		23.734	19.094	23.686	19.414	22.172	#	22.984	24.677	4.172	18.296	-1.216	-3.623		44.179	0.37	14.643	0.003		14.00	0.23333	23.2	10.8	20.6	1.423	0.055	0.057	0.003	2.774	2.36	
32	2/5/2004	11:05:08 AM		23.791	19.101	23.743	19.411	22.189	#	22.641	24.265	4.076	18.121	-1.216	-3.625		45.141	0.37	14.643	0.003		15.00	0.25	22.8	11.1	20.4	1.405	0.055	0.057	0.003	2.805	2.39	
33	2/5/2004	11:06:08 AM		23.813	19.097	23.734	19.418	22.225	#	22.869	24.422	4.091	18.339	-1.216	-3.628		42.781	0.369	14.643	0.003		16.00	0.26667	22.9	10.5	20.6	1.421	0.055	0.057	0.003	2.767	2.36	
34	2/5/2004	11:07:08 AM		23.859	19.098	23.756	19.48	22.322	#	22.801	24.385	4.079	18.275	-1.214	-3.628		44.548	0.37	14.643	0.004		17.00	0.28333	22.9	10.9	20.5	1.416	0.055	0.057	0.003	2.782	2.37	
35	2/5/2004	11:08:08 AM		23.885	19.104	23.767	19.445	22.122	#	23.048	24.677	4.177	18.369	-1.216	-3.637		44.164	0.368	14.643	0.004		18.00	0.3	23.2	10.8	20.7	1.428	0.055	0.057	0.003	2.743	2.33	
36	2/5/2004	11:09:08 AM		23.902	19.106	23.828	19.381	22.134	#	22.758	24.404	4.098	18.131	-1.216	-3.64		46.19	0.368	14.643	0.004		19.00	0.31667	22.9	11.3	20.4	1.410	0.055	0.057	0.003	2.774	2.36	
37	2/5/2004	11:10:08 AM		23.928	19.107	23.875	19.307	22.331	#	22.911	24.493	4.178	18.226	-1.214	-3.64		45.435	0.367	14.643	0.004		20.00	0.33333	23.0	11.1	20.6	1.418	0.055	0.056	0.003	2.746	2.34	
38	2/5/2004	11:11:08 AM		23.955	19.109	23.861	19.344	22.292	#	22.898	24.487	4.138	18.269	-1.214	-3.646		43.968	0.367	14.643	0.004		21.00	0.35	23.0	10.8	20.6	1.419	0.055	0.057	0.003	2.745	2.34	
39	2/5/2004	11:12:08 AM		23.986	19.12	23.862	19.375	22.319	#	22.988	24.59	4.164	18.335	-1.214	-3.646		43.486	0.367	14.643	0.003		22.00	0.36667	23.1	10.7	20.7	1.425	0.055	0.057	0.003	2.735	2.33	
40	2/5/2004	11:13:08 AM		23.982	19.106	23.858	19.406	22.289	#	22.913	24.466	4.077	18.413	-1.216	-3.646		44.208	0.367	14.643	0.003		23.00	0.38333	23.0	10.8	20.7	1.425	0.055	0.057	0.003	2.735	2.33	
41	2/5/2004	11:14:08 AM		23.999	19.113	23.905	19.348	22.291	#	23.183	24.854	4.116	18.546	-1.216	-3.643		46.357	0.368	14.643	0.004		24.00	0.4	23.4	11.4	20.9	1.439	0.055	0.057	0.003	2.712	2.31	
42	2/5/2004	11:15:08 AM		24.021	19.13	23.958	19.43	22.519	#	23.037	24.646	4.057	18.489	-1.214	-3.643		44.995	0.367	14.643	0.004		25.00	0.41667	23.2	11.0	20.8	1.432	0.055	0.056	0.003	2.714	2.31	
43	2/5/2004	11:16:08 AM		24.017	19.116	23.938	19.467	22.58	#	23.054	24.731	4.052	18.443	-1.214	-3.651		43.366	0.366	14.643	0.004		26.00	0.43333	23.3	10.6	20.7	1.431	0.055	0.056	0.003	2.710	2.31	
44	2/5/2004	11:17:08 AM		24.034	19.133	23.945	19.57	22.492	#	23.038	24.634	4.078	18.486	-1.214	-3.651		44.404	0.366	14.643	0.004		27.00	0.45	23.2	10.9	20.8	1.431	0.055	0.056	0.003	2.708	2.30	
45	2/5/2004	11:18:08 AM		24.04	19.124	23.937	19.591	22.564	#	23.297	24.997	4.17	18.54	-1.216	-3.634		43.351	0.362	14.643	0.004		28.00	0.46667	23.5	10.6	20.9	1.442	0.054	0.056	0.003	2.659	2.26	
46	2/5/2004	11:19:08 AM		24.072	19.136	23.953	19.598	22.64	#	23.149	24.779	4.065	18.569	-1.216	-3.654		44.999	0.365	14.643	0.004		29.00	0.48333	23.3	11.0	20.9	1.438	0.054	0.056	0.003	2.687	2.29	
47	2/5/2004	11:20:08 AM		24.073	19.137	23.999	19.604	22.345	#	23.11	24.71	4.057	18.564	-1.214	-3.649		44.171	0.366	14.643	0.004		30.00	0.5	23.2	10.8	20.8	1.437	0.055	0.056	0.003	2.694	2.29	
48	2/5/2004	11:21:08 AM		24.075	19.139	24.037	19.566	22.101	#	22.905	24.478	3.978	18.47	-1.214	-3.637		44.235	0.361	14.643	0.004		31.00	0.51667	23.0	10.8	20.7	1.426	0.054	0.055	0.003	2.673	2.28	
49	2/5/2004	11:22:08 AM		24.075	19.129	23.987	19.562	22.328	#	23.062	24.661	4.046	18.525	-1.216	-3.663		43.935	0.365	14.643	0.003		32.00	0.53333	23.2	10.8	20.8	1.434	0.054	0.056	0.003	2.693	2.29	
50	2/5/2004	11:23:08 AM		24.113	19.157	24.009	19.584	22.37	#	23.135	24.744	4.031	18.599	-1.214	-3.649		43.614	0.362	14.643	0.003		33.00	0.55	23.3	10.7	20.9	1.439	0.054	0.056	0.003	2.660	2.26	
51	2/5/2004	11:24:08 AM		24.098	19.143	23.97	19.585	22.602	#	23.278	24.941	4.09	18.679	-1.219	-3.672		44.06	0.364	14.643	0.003		34.00	0.56667	23.5	10.8	21.0	1.446	0.054	0.056	0.003	2.663	2.27	
52	2/5/2004	11:25:08 AM		24.1	19.164	24.017	19.627	22.669	#	23.261	24.909	4.075	18.634	-1.214	-3.669		42.4	0.363	14.643	0.004		35.00	0.58333	23.4	10.4	20.9	1.444	0.054	0.056	0.003	2.656	2.26	
53																																	
54		Averages		23.8	19.1	23.8	19.4	22.3	#	22.9	24.6	4.1	18.3	-1.2	-3.6	#	44.6	0.4	14.6	0.0	#			23.1	10.9	20.6	1.420	0.055	0.057	0.0028	2.768	2.356	#
55		Maximum		24.1	19.2	24.0	19.6	22.7	#	23.3	25.0	4.2	18.7	-1.2	-2.9	#	46.4	0.4	14.6	0.0	#			23.5	11.4	21.0	1.446	0.061	0.064	0.0033	3.264	2.778	#
56		Median		23.9	19.1	23.9	19.4	22.3	#	22.9	24.5	4.1	18.3	-1.2	-3.6	#	44.3	0.4	14.6	0.0	#			23.1	10.9	20.7	1.424	0.055	0.057	0.0027	2.744	2.335	#
57		Minimum		22.7	19.1	23.3	19.2	22.1	#	21.8	24.2	4.0	17.2	-1.2	-3.7	#	42.4	0.4	14.6	0.0	#			22.7	10.4	19.5	1.344	0.054	0.055	0.0027	2.656	2.261	#
58		2 x Std Dev		0.594	0.057	0.418	0.264	0.354	#	0.587	0.418	0.112	0.578	0.003	0.269	#	2.030	0.016	0.000	0.001	#			0.418	0.497	0.578	0.040	0.002	0.003	0.0002	0.231	0.197	#
59	Number of Points Used*			30	30	30	30	30	#	30	30	30	30	30	30	0	30	30	30	30	0			30	30	30	30	30	30	30	30	30	0
60		* Backpulse points in box are not included																															
61																																	
62																											30-min. avg. =		0.0570				

RUN # 1.18; FIRST ACID CLEAN WITH 2.0 M HNO3



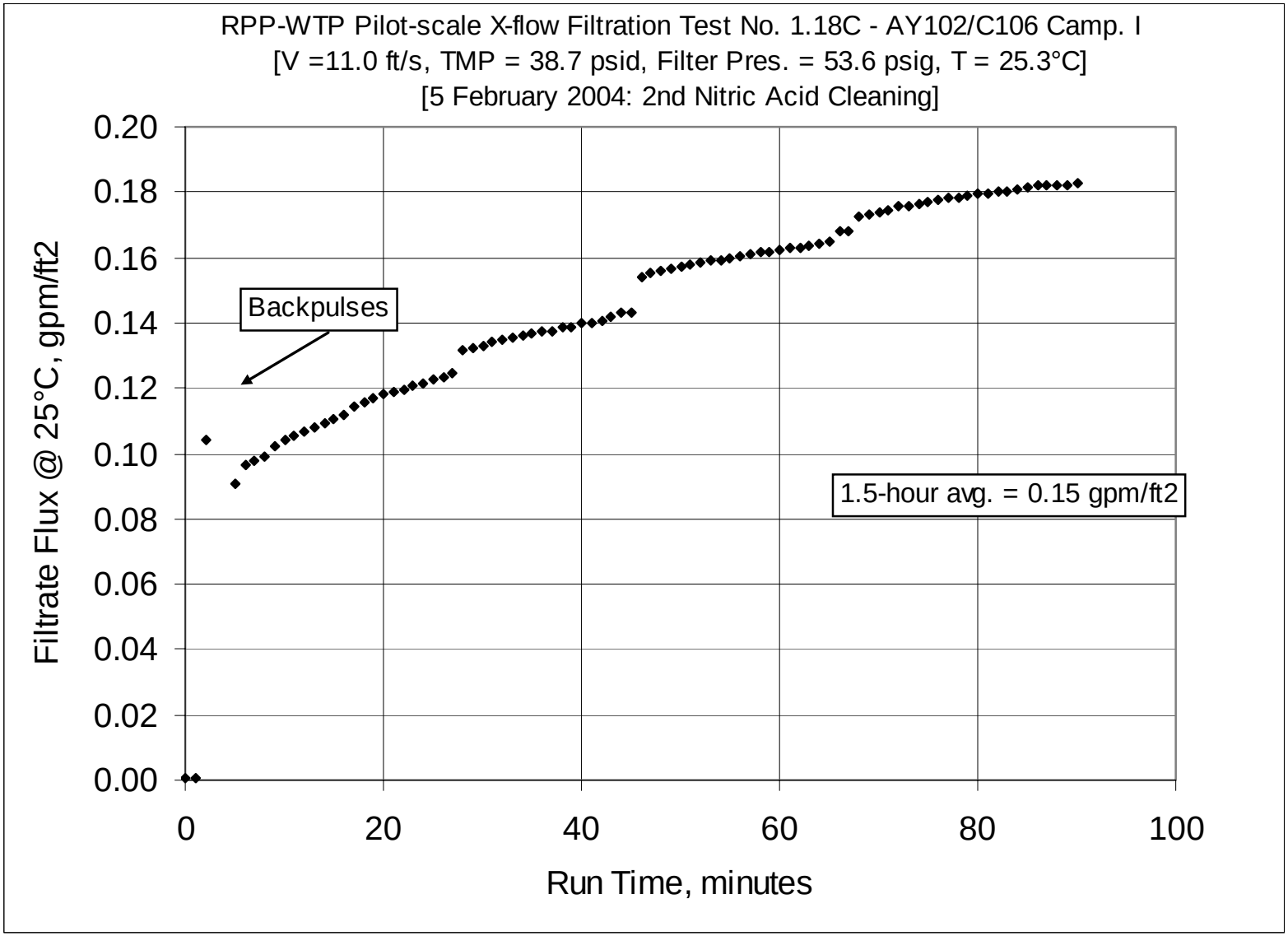
RUN # 1.18; FIRST ACID CLEAN WITH 2.0 M HNO3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/5/2004	1:13:09 PM		24.162	19.004	25.401	19.315	20.826		3.14	47.004	3.387	-0.263	39.355	87.228		41.188	0.003	14.643	0.003		0	0	45.5	10.1	1.4	0.099	0.000	0.000	0.000	0.307	0.26	
18	2/5/2004	1:14:09 PM		23.281	19.016	25.527	19.427	20.707		2.742	46.965	3.298	-0.657	39.702	43.712		45.862	0.003	14.643	0.004		1.00	0.01667	45.5	11.2	1.0	0.072	0.000	0.000	0.000	0.423	0.36	
19	2/5/2004	1:15:09 PM		25.356	19.022	25.629	19.505	20.975		38.424	46.921	3.333	34.89	3.404	0.543		42.156	0.806	14.643	0.004		2.00	0.03333	45.4	10.3	36.7	2.527	0.120	0.118	0.003	3.221	2.74	
20	2/5/2004	1:16:09 PM		25.812	19.034	25.715	19.613	20.922		40.164	47.071	3.42	36.22	1.586	-0.272		42.794	0.68	14.643	0.004		3.00	0.05	45.6	10.5	38.2	2.633	2.183	2.140	0.056	56.026	47.68	
21	2/5/2004	1:17:09 PM		26.059	19.056	25.812	19.766	20.808		41.284	46.898	3.341	37.609	0.367	-1.133		42.911	0.622	14.643	0.004		4.00	0.06667	45.4	10.5	39.4	2.720	2.183	2.134	0.054	54.097	46.04	
22	2/5/2004	1:18:09 PM		26.166	19.053	25.874	19.783	21.071		41.723	46.697	3.262	38.171	-0.082	-1.434		42.825	0.588	14.643	0.003		5.00	0.08333	45.2	10.5	39.9	2.754	0.088	0.086	0.002	2.141	1.82	
23	2/5/2004	1:19:09 PM		26.243	19.06	25.936	19.846	20.993		42.171	46.722	3.351	38.43	-0.536	-1.723		42.706	0.557	14.643	0.004		6.00	0.1	45.2	10.5	40.3	2.779	0.083	0.081	0.002	2.007	1.71	
24	2/5/2004	1:20:09 PM		26.315	19.073	26.009	19.884	21.191		42.812	46.886	3.337	39.095	-0.991	-2.059		41.893	0.531	14.643	0.004		7.00	0.11667	45.4	10.3	41.0	2.824	0.079	0.077	0.002	1.879	1.60	
25	2/5/2004	1:21:09 PM		26.356	19.064	26.08	19.936	21.364		42.748	46.465	3.655	38.709	-1.216	-2.241		44.976	0.502	14.643	0.003		8.00	0.13333	45.0	11.0	40.7	2.808	0.075	0.073	0.002	1.783	1.52	
26	2/5/2004	1:22:09 PM		26.413	19.081	26.067	20.069	21.029		42.686	46.053	3.395	39.083	-1.216	-2.455		45.099	0.507	14.643	0.004		9.00	0.15	44.6	11.1	40.9	2.819	0.076	0.073	0.002	1.794	1.53	
27	2/5/2004	1:23:09 PM		26.399	19.093	26.023	20.116	19.237		43.387	46.967	3.504	39.462	-1.216	-2.484		44.584	0.502	14.643	0.003		10.00	0.16667	45.5	10.9	41.4	2.856	0.075	0.073	0.002	1.756	1.49	
28	2/5/2004	1:24:09 PM		26.421	19.105	25.98	20.092	20.161		43.177	46.799	3.456	39.343	-1.216	-2.498		44.872	0.51	14.643	0.004		11.00	0.18333	45.3	11.0	41.3	2.845	0.076	0.074	0.002	1.793	1.53	
29	2/5/2004	1:25:09 PM		26.428	19.121	25.932	20.013	20.943		43.034	46.583	3.683	39.076	-1.216	-2.495		42.402	0.511	14.643	0.003		12.00	0.2	45.1	10.4	41.1	2.831	0.076	0.074	0.002	1.808	1.54	
30	2/5/2004	1:26:09 PM		26.423	19.117	25.872	20.084	21.336		42.385	45.987	3.51	38.535	-1.214	-2.362		44.519	0.521	14.643	0.004		13.00	0.21667	44.5	10.9	40.5	2.790	0.078	0.076	0.002	1.873	1.59	
31	2/5/2004	1:27:09 PM		26.395	19.133	25.829	20.172	21.131		42.559	46.192	3.553	38.789	-1.214	-2.313		44.054	0.529	14.643	0.004		14.00	0.23333	44.7	10.8	40.7	2.804	0.079	0.077	0.002	1.894	1.61	
32	2/5/2004	1:28:09 PM		26.412	19.135	25.806	20.174	20.806		42.582	46.318	3.591	38.76	-1.216	-2.261		42.925	0.535	14.643	0.003		15.00	0.25	44.8	10.5	40.7	2.804	0.080	0.078	0.002	1.917	1.63	
33	2/5/2004	1:29:09 PM		26.368	19.147	25.777	20.215	21.411		42.435	46.279	3.604	38.461	-1.153	-2.212		42.708	0.54	14.643	0.004		16.00	0.26667	44.8	10.5	40.4	2.789	0.081	0.079	0.002	1.947	1.66	
34	2/5/2004	1:30:09 PM		26.34	19.164	25.759	20.166	21.533		42.663	46.521	3.715	38.652	-1.089	-2.157		44.899	0.545	14.643	0.004		17.00	0.28333	45.0	11.0	40.7	2.803	0.081	0.080	0.002	1.956	1.66	
35	2/5/2004	1:31:09 PM		26.308	19.182	25.747	19.932	21.722		42.404	46.414	3.586	38.477	-1.022	-2.116		43.739	0.549	14.643	0.004		18.00	0.3	44.9	10.7	40.4	2.788	0.082	0.080	0.002	1.982	1.69	
36	2/5/2004	1:32:09 PM		26.28	19.184	25.714	19.444	21.815		42.244	46.204	3.499	38.455	-0.976	-2.087		46.682	0.552	14.643	0.004		19.00	0.31667	44.7	11.4	40.3	2.782	0.082	0.081	0.002	1.999	1.70	
37	2/5/2004	1:33:09 PM		26.253	19.182	25.682	19.25	20.193		42.223	46.19	3.51	38.529	-0.933	-2.05		45.003	0.555	14.643	0.003		20.00	0.33333	44.7	11.0	40.4	2.784	0.083	0.081	0.002	2.010	1.71	
38	2/5/2004	1:34:09 PM		26.225	19.189	25.668	19.292	17.844		42.335	46.264	3.541	38.602	-0.875	-2.03		44.604	0.557	14.643	0.004		21.00	0.35	44.8	10.9	40.5	2.790	0.083	0.082	0.002	2.014	1.71	
39	2/5/2004	1:35:09 PM		26.195	19.164	25.619	19.262	18.385		42.464	46.677	3.5	38.66	-0.881	-2.018		43.509	0.558	14.643	0.003		22.00	0.36667	45.2	10.7	40.6	2.797	0.083	0.082	0.002	2.016	1.72	
40	2/5/2004	1:36:09 PM		26.144	19.148	25.573	19.216	18.545		42.41	46.735	3.485	38.492	-0.878	-1.998		44.233	0.56	14.643	0.004		23.00	0.38333	45.3	10.8	40.5	2.789	0.083	0.082	0.002	2.031	1.73	
41	2/5/2004	1:37:09 PM		26.128	19.137	25.557	19.23	17.068		42.377	46.411	3.512	38.566	-0.855	-2.007		44.07	0.56	14.643	0.004		24.00	0.4	44.9	10.8	40.5	2.790	0.083	0.082	0.002	2.031	1.73	
42	2/5/2004	1:38:09 PM		26.118	19.121	25.546	19.27	16.354		42.084	46.382	3.469	38.198	-0.875	-2.012		43.899	0.558	14.643	0.004		25.00	0.41667	44.9	10.8	40.1	2.768	0.083	0.082	0.002	2.041	1.74	
43	2/5/2004	1:39:09 PM		26.096	19.089	25.504	19.243	16.261		42.277	46.422	3.488	38.416	-0.878	-2.021		45.197	0.557	14.643	0.003		26.00	0.43333	44.9	11.1	40.3	2.782	0.083	0.082	0.002	2.029	1.73	
44	2/5/2004	1:40:09 PM		26.089	19.066	25.502	19.195	15.63		42.451	46.604	3.46	38.674	-0.912	-2.047		43.232	0.555	14.643	0.004		27.00	0.45	45.1	10.6	40.6	2.797	0.083	0.082	0.002	2.011	1.71	
45	2/5/2004	1:41:09 PM		26.067	19.039	25.5	19.188	16.464		42.271	45.986	3.413	38.68	-0.933	-2.056		42.679	0.555	14.643	0.003		28.00	0.46667	44.5	10.5	40.5	2.791	0.083	0.082	0.002	2.016	1.72	
46	2/5/2004	1:42:09 PM		26.071	19.033	25.529	19.207	16.747		42.767	46.967	3.419	39.046	-0.927	-2.085		45.022	0.552	14.643	0.004		29.00	0.48333	45.5	11.0	40.9	2.820	0.082	0.081	0.002	1.982	1.69	
47	2/5/2004	1:43:09 PM		26.04	19.002	25.509	19.196	17.212		42.787	46.756	3.403	39.122	-0.988	-2.154		42.239	0.549	14.643	0.004		30.00	0.5	45.3	10.4	41.0	2.824	0.082	0.081	0.002	1.970	1.68	
48	2/5/2004	1:44:09 PM		26.025	18.966	25.488	19.186	16.229		42.918	46.805	3.411	39.167	-1.092	-2.16		42.638	0.545	14.643	0.003		31.00	0.51667	45.3	10.4	41.0	2.830	0.081	0.080	0.002	1.953	1.66	
49	2/5/2004	1:45:09 PM		25.983	18.908	25.446	19.168	17.042		42.914	46.77	3.344	39.183	-1.185	-2.246		41.192	0.537	14.643	0.004		32.00	0.53333	45.3	10.1	41.0	2.830	0.080	0.079	0.002	1.926	1.64	
50	2/5/2004	1:46:09 PM		25.975	18.896	25.449	19.222	16.766		43.21	46.936	3.419	39.499	-1.214	-2.296		42.669	0.531	14.643	0.004		33.00	0.55	45.5	10.5	41.4	2.851	0.079	0.078	0.002	1.890	1.61	
51	2/5/2004	1:47:09 PM		25.958	18.868	25.421	19.224	16.632		43.096	46.836	3.409	39.292	-1.216	-2.377		44.675	0.522	14.643	0.003		34.00	0.56667	45.4	10.9	41.2	2.840	0.078	0.077	0.002	1.867	1.59	
52	2/5/2004	1:48:09 PM		25.967	18.862	25.44	19.264	16.18		43.018	46.399	3.297	39.53	-1.211	-2.466		43.349	0.515	14.643	0.004		35.00	0.58333	44.9	10.6	41.3	2.846	0.077	0.076	0.002	1.837	1.56	
53	2/5/2004	1:49:09 PM		25.946	18.836	25.399	19.253	16.686		43.177	46.612	3.351	39.524	-1.216	-2.556		44.29	0.506	14.643	0.004		36.00	0.6	45.1	10.9	41.4	2.851	0.075	0.075	0.002	1.804	1.54	
54	2/5/2004	1:50:09 PM		25.914	18.803	25.377	19.18	16.978		43.627	47.019	3.422	39.828	-1.214	-2.643		44.986	0.496	14.643	0.004		37.00	0.61667	45.5	11.0	41.7	2.877	0.074	0.073	0.002	1.754	1.49	
55	2/5/2004	1:51:09 PM		25.913	18.797	25.381	19.189	17.108		43.409	46.366	3.343	39.748	-1.216	-2.761		43.507	0.486	14.643	0.004		38.00	0.63333	44.9	10.7	41.6	2.867	0.072	0.072	0.002	1.724	1.47	
56	2/5/2004	1:52:09 PM		25.876	18.765	25.364	19.137	17.501		43.546	46.55	3.365	39.813	-1.216	-2.868		41.968	0.475	14.643	0.003		39.00	0.65	45.1	10.3	41.7	2.874	0.071	0.070	0.002	1.682	1.43	
57	2/5/2004	1:53:09 PM		25.881	18.754	25.359	19.121	17.576		43.631	46.511	3.402	39.863	-1.214	-2.969		43.518	0.465	14.643	0.004		40.00	0.66667	45.0	10.7	41.7	2.878	0.069	0.069	0.002	1.644	1.40	
58	2/5/2004	1:54:09 PM		25.857	18.735	25.355	19.061	17.567		44.044	46.979	3.454	40.066	-1.219	-3.047		44.206	0.451	14.643	0.004		41.00	0.68333	45.5	10.8	42.1	2.900	0.067	0.067	0.002	1.583	1.35	
59	2/5/2004	1:55:09 PM		25.857	18.73	25.375	19.046	17.547		44.299	46.851	3.41	40.571	-1.216	-3.174		42.464	0.439	14.643	0.003		42.00	0.7	45.4	10.4	42.4	2.926	0.065	0.065	0.002	1.526	1.30	
60	2/5/2004	1:56:09 PM		25.836	18.704	25.364	19.081	16.651		44.548	47.143	3.502	40.546	-1.216	-3.255		41.907	0.425	14.643	0.004		43.00	0.71667	45.7	10.3	42.5	2.933	0.063	0.063	0.001	1.474	1.25	
61	2/5/2004	1:57:09 PM		25.825	18.668	25.368	19.105	17.525		44.604	46.907	3.356	40.952	-1.216	-3.397		42.994	0.418	14.643	0.003		44.00	0.73333	45.4	10.5	42.8	2.949	0.062	0.062	0.001	1.442	1.23	
62	2/5/2004	1:58:09 PM		25.809	18.657	25.383	19.14	19.499		42.808	44.855	4.621	37.681	-1.214	-3.706		48.05	0.381	14.643	0.004		45.00	0.75	43.4	11.8	40.2	2.775	0.057	0.056	0.001	1.396	1.19	
63	2/5/2004	1:59:09 PM		25.753	18.651	25.382	19.346	20.405		43.217	45.031	4.084	38.791	-1.216	-3.683		47.091	0.384	14.643	0.003		46.00	0.76667	43.6	11.5	41.0	2.827	0.057	0.057	0.001	1.381	1.18	
64	2/5/2004	2:00:09 PM		25.775	18.647	25.393	19.322	20.713		43.83	45.651	4.076	39.312	-1.214	-3.784		44.327	0.372	14.643	0.004		47.00	0.78333	44.2	10.9	41.6	2.866	0.055	0.055	0.001	1.319	1.12	
65	2/5/2004	2:01:09 PM		25.772	18.64	25.395	19.203	20.962		43.835	45.375	3.921	39.536	-1.214	-3.831		47.55	0.357	14.643	0.004		48.00	0.8	43.9	11.7	41.7	2.874	0.053	0.053	0.001	1.263	1.07	
66	2/5/2004	2:02:09 PM		25.734	18.621	25.382	19.155	21.286		43.764	45.155	3.9	39.6	-1.214	-3.929		45.082	0.355	14.643	0.004		49.00	0.81667	43.7	11.0	41.7	2.874	0.053	0.052	0.001	1.256	1.07	
67	2/5/2004	2:03:09 PM		25.671	18.608	25.364	19.177	21.283		44.262	45.613	3.922	39.979	-1.219	-4.019		46.432	0.343	14.643	0.003		50.00	0.83333	44.1	11.4	42.1	2.904	0.051	0.051	0.001	1.202	1.02	
68	2/5/2004	2:04:09 PM		25.749	18.595	25.367	19.205	21.265		44.239	45.839	4.033	39.667	-1.216	-4.076		45.927	0.335	14.643	0.004		51.00	0.85	44.4	11.3	42.0	2.893	0.050	0.049	0.001	1.178	1.00	
69	2/5/2004	2:05:09 PM		25.715	18.597	25.373	19.201	21.216		44.519	45.854	4.023	40.06	-1.211	-4.154		46.423	0.323	14.643	0.004		52.00	0.86667	44.4	11.4	42.3	2.916	0.048	0.048	0.001	1.127	0.96	
70	2/5/2004	2:06:09 PM		25.646	18.577	25.379	19.212	21.619		44.424	45.365	3.894	40.289	-1.214	-4.212		45.973	0.311	14.643	0.004		53.00	0.88333	43.9	11.3	42.4	2.920	0.046	0.046	0.001	1.083	0.92	

RUN # 1.18; FIRST ACID CLEAN WITH 2.0 M HNO3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/5/2004	2:07:09 PM		25.566	18.577	25.379	19.444	21.478		44.604	45.817	3.904	40.252	-1.214	-4.279		47.516	0.307	14.643	0.004		54.00	0.9	44.3	11.6	42.4	2.925	0.046	0.045	0.001	1.067	0.91	
72	2/5/2004	2:08:09 PM		25.406	18.587	25.359	19.636	21.694		42.796	43.603	3.737	38.781	-1.219	-4.389		45.435	0.292	14.643	0.003		55.00	0.91667	42.1	11.1	40.8	2.812	0.044	0.043	0.001	1.057	0.90	
73	2/5/2004	2:09:09 PM		25.197	18.623	25.38	19.854	21.992		42.671	43.191	3.683	38.719	-1.214	-4.429		44.702	0.281	14.643	0.004		56.00	0.93333	41.7	11.0	40.7	2.806	0.042	0.041	0.001	1.019	0.87	
74	2/5/2004	2:10:09 PM		25.092	18.65	25.356	19.946	22.143		42.968	43.978	3.777	38.736	-1.214	-4.501		45.33	0.274	14.643	0.004		57.00	0.95	42.5	11.1	40.9	2.817	0.041	0.040	0.001	0.990	0.84	
75	2/5/2004	2:11:09 PM		25.028	18.681	25.322	20.104	22.194		42.877	43.539	3.749	38.841	-1.214	-4.522		44.386	0.268	14.643	0.004		58.00	0.96667	42.1	10.9	40.9	2.817	0.040	0.040	0.001	0.969	0.82	
76	2/5/2004	2:12:09 PM		24.95	18.713	25.303	20.141	22.271		42.879	43.7	3.782	38.658	-1.216	-4.571		44.208	0.265	14.643	0.004		59.00	0.98333	42.2	10.8	40.8	2.811	0.040	0.039	0.001	0.961	0.82	
77	2/5/2004	2:13:09 PM		24.896	18.734	25.259	20.167	22.342		43.024	43.615	3.742	38.949	-1.216	-4.603		44.018	0.258	14.643	0.004		60.00	1	42.1	10.8	41.0	2.826	0.038	0.038	0.001	0.932	0.79	
78	2/5/2004	2:14:09 PM		24.862	18.791	25.26	20.264	22.394		43.016	43.543	3.742	38.884	-1.216	-4.637		44.45	0.254	14.643	0.004		61.00	1.01667	42.1	10.9	41.0	2.823	0.038	0.038	0.001	0.918	0.78	
79	2/5/2004	2:15:09 PM		24.834	18.819	25.232	20.296	22.331		42.85	43.261	3.635	38.955	-1.214	-4.663		42.821	0.25	14.643	0.004		62.00	1.03333	41.8	10.5	40.9	2.820	0.037	0.037	0.001	0.905	0.77	
80	2/5/2004	2:16:09 PM		24.832	18.846	25.21	20.36	22.469		42.862	43.3	3.622	38.992	-1.214	-4.683		44.283	0.246	14.643	0.003		63.00	1.05	41.8	10.9	40.9	2.822	0.037	0.036	0.001	0.891	0.76	
81	2/5/2004	2:17:09 PM		24.824	18.895	25.208	20.403	22.472		42.758	43.45	3.633	38.672	-1.214	-4.712		44.788	0.242	14.643	0.004		64.00	1.06667	42.0	11.0	40.7	2.807	0.036	0.036	0.001	0.881	0.75	
82	2/5/2004	2:18:09 PM		24.801	18.906	25.184	20.424	22.458		42.87	43.551	3.664	38.791	-1.214	-4.73		44.613	0.238	14.643	0.004		65.00	1.08333	42.1	10.9	40.8	2.815	0.035	0.035	0.001	0.865	0.74	
83	2/5/2004	2:19:09 PM		24.768	18.918	25.171	20.467	22.676		43.007	43.632	3.632	38.904	-1.216	-4.744		45.02	0.236	14.643	0.004		66.00	1.1	42.2	11.0	41.0	2.824	0.035	0.035	0.001	0.855	0.73	
84	2/5/2004	2:20:09 PM		24.764	18.95	25.162	20.438	22.657		43.242	43.833	3.659	39.138	-1.214	-4.753		43.612	0.235	14.643	0.004		67.00	1.11667	42.4	10.7	41.2	2.840	0.035	0.035	0.001	0.847	0.72	
85	2/5/2004	2:21:09 PM		24.756	18.967	25.154	20.42	22.634		43.306	43.647	3.694	39.333	-1.214	-4.77		44.083	0.232	14.643	0.004		68.00	1.13333	42.2	10.8	41.3	2.849	0.035	0.034	0.001	0.833	0.71	
86	2/5/2004	2:22:09 PM		24.763	18.984	25.136	20.436	22.721		43.084	43.503	3.622	39.101	-1.216	-4.782		45.005	0.23	14.643	0.004		69.00	1.15	42.0	11.0	41.1	2.833	0.034	0.034	0.001	0.831	0.71	
87	2/5/2004	2:23:09 PM		24.765	19.021	25.143	20.469	22.678		43.167	43.611	3.635	39.173	-1.216	-4.793		45.685	0.229	14.643	0.004		70.00	1.16667	42.1	11.2	41.2	2.839	0.034	0.034	0.001	0.826	0.70	
88	2/5/2004	2:24:09 PM		24.782	19.034	25.145	20.546	22.519		43.156	43.398	3.672	39.185	-1.214	-4.79		45.005	0.228	14.643	0.004		71.00	1.18333	41.9	11.0	41.2	2.839	0.034	0.034	0.001	0.822	0.70	
89	2/5/2004	2:25:09 PM		24.813	19.045	25.141	20.558	22.51		42.825	43.11	3.642	38.927	-1.216	-4.796		44.377	0.228	14.643	0.004		72.00	1.2	41.6	10.9	40.9	2.818	0.034	0.034	0.001	0.828	0.70	
90	2/5/2004	2:26:09 PM		24.861	19.058	25.109	20.596	22.608		42.736	43.13	3.565	38.918	-1.219	-4.793		45.209	0.228	14.643	0.003		73.00	1.21667	41.7	11.1	40.8	2.815	0.034	0.034	0.001	0.830	0.71	
91	2/5/2004	2:27:09 PM		24.828	19.095	25.126	20.699	22.701		42.922	43.578	3.597	38.908	-1.216	-4.799		42.934	0.227	14.643	0.003		74.00	1.23333	42.1	10.5	40.9	2.821	0.034	0.034	0.001	0.824	0.70	
92	2/5/2004	2:28:09 PM		24.835	19.102	25.123	20.736	22.748		43.188	43.684	3.605	39.212	-1.216	-4.796		46.442	0.227	14.643	0.004		75.00	1.25	42.2	11.4	41.2	2.841	0.034	0.034	0.001	0.819	0.70	
93	2/5/2004	2:29:09 PM		24.821	19.103	25.079	20.681	22.814		42.986	43.559	3.561	38.96	-1.216	-4.802		44.01	0.228	14.643	0.003		76.00	1.26667	42.1	10.8	41.0	2.825	0.034	0.034	0.001	0.828	0.70	
94	2/5/2004	2:30:09 PM		24.868	19.141	25.091	20.779	22.876		43.016	43.452	3.514	39.206	-1.214	-4.793		44.465	0.229	14.643	0.003		77.00	1.28333	42.0	10.9	41.1	2.834	0.034	0.034	0.001	0.828	0.70	
95	2/5/2004	2:31:09 PM		24.94	19.158	25.088	20.807	22.843		43.488	44.194	3.747	39.196	-1.219	-4.793		44.65	0.229	14.643	0.004		78.00	1.3	42.7	10.9	41.3	2.850	0.034	0.034	0.001	0.824	0.70	
96	2/5/2004	2:32:09 PM		25.252	19.18	25.075	20.89	22.911		43.198	43.763	3.652	39.142	-1.216	-4.788		43.518	0.229	14.643	0.003		79.00	1.31667	42.3	10.7	41.2	2.839	0.034	0.034	0.001	0.828	0.70	
97	2/5/2004	2:33:09 PM		25.37	19.188	25.068	20.938	22.953		43.063	43.503	3.524	39.245	-1.216	-4.788		43.979	0.23	14.643	0.003		80.00	1.33333	42.0	10.8	41.2	2.837	0.034	0.034	0.001	0.832	0.71	
98	2/5/2004	2:34:09 PM		25.398	19.216	25.076	20.976	22.65		42.491	43.064	3.714	38.436	-1.216	-4.799		46.075	0.227	14.643	0.003		81.00	1.35	41.6	11.3	40.5	2.790	0.034	0.034	0.001	0.835	0.71	
99	2/5/2004	2:35:09 PM		25.425	19.229	25.083	21.019	22.793		42.725	43.34	3.833	38.442	-1.216	-4.793		47.898	0.229	14.643	0.003		82.00	1.36667	41.9	11.7	40.6	2.798	0.034	0.034	0.001	0.839	0.71	
100	2/5/2004	2:36:09 PM		25.428	19.252	25.096	21.077	22.902		42.335	42.72	3.668	38.36	-1.216	-4.782		46.286	0.23	14.643	0.004		83.00	1.38333	41.2	11.3	40.3	2.782	0.034	0.034	0.001	0.848	0.72	
101	2/5/2004	2:37:09 PM		25.326	19.27	25.104	21.07	22.974		42.999	43.696	3.901	38.719	-1.216	-4.779		43.489	0.231	14.643	0.004		84.00	1.4	42.2	10.7	40.9	2.817	0.034	0.034	0.001	0.840	0.72	
102	2/5/2004	2:38:09 PM		25.424	19.298	25.112	21.088	23.113		42.462	43.103	3.723	38.36	-1.216	-4.764		46.79	0.233	14.643	0.003		85.00	1.41667	41.6	11.5	40.4	2.786	0.035	0.035	0.001	0.857	0.73	
103	2/5/2004	2:39:09 PM		25.396	19.301	25.114	21.045	23.13		42.653	43.197	3.87	38.399	-1.216	-4.759		45.614	0.235	14.643	0.003		86.00	1.43333	41.7	11.2	40.5	2.794	0.035	0.035	0.001	0.862	0.73	
104	2/5/2004	2:40:09 PM		25.414	19.329	25.122	20.983	23.033		42.812	43.315	3.878	38.566	-1.216	-4.744		46.922	0.237	14.643	0.003		87.00	1.45	41.8	11.5	40.7	2.805	0.035	0.035	0.001	0.865	0.74	
105	2/5/2004	2:41:09 PM		25.426	19.346	25.119	21.015	22.975		42.684	43.342	3.672	38.684	-1.216	-4.724		44.557	0.24	14.643	0.004		88.00	1.46667	41.9	10.9	40.7	2.805	0.036	0.036	0.001	0.877	0.75	
106	2/5/2004	2:42:09 PM		25.444	19.364	25.117	21.133	22.902		42.791	43.619	3.816	38.442	-1.214	-4.724		44.742	0.24	14.643	0.004		89.00	1.48333	42.1	11.0	40.6	2.800	0.036	0.036	0.001	0.878	0.75	
107	2/5/2004	2:43:09 PM		25.456	19.362	25.094	21.156	22.91		42.653	43.381	3.738	38.477	-1.216	-4.718		46.2	0.242	14.643	0.003		90.00	1.5	41.9	11.3	40.6	2.797	0.036	0.036	0.001	0.887	0.75	
108																																	
109		Averages		25.6	19.0	25.4	19.9	20.6	#	43.0	45.1	3.6	39.1	-1.2	-3.5	#	44.5	0.4	14.6	0.0	#			43.7	10.9	41.0	2.830	0.057	0.056	0.0014	1.369	1.165	#
110		Maximum		26.4	19.4	26.1	21.2	23.1	#	44.6	47.1	4.6	41.0	-0.5	-1.7	#	48.1	0.6	14.6	0.0	#			45.7	11.8	42.8	2.949	0.083	0.082	0.0020	2.041	1.737	#
111		Median		25.8	19.0	25.4	19.9	21.4	#	42.9	45.7	3.6	38.9	-1.2	-3.8	#	44.5	0.4	14.6	0.0	#			44.2	10.9	40.9	2.822	0.053	0.053	0.0013	1.263	1.075	#
112		Minimum		24.8	18.6	25.1	19.0	15.6	#	42.1	42.7	3.3	37.7	-1.2	-4.8	#	41.2	0.2	14.6	0.0	#			41.2	10.1	40.1	2.768	0.034	0.034	0.0008	0.819	0.697	#
113		2 x Std Dev		1.110	0.449	0.543	1.386	4.781	#	1.209	2.979	0.433	1.176	0.259	2.300	#	2.908	0.271	0.000	0.001	#			2.980	0.713	1.164	0.080	0.040	0.039	0.0010	0.966	0.822	#
114		Number of Points Used*		85	85	85	85	85	0	85	85	85	85	85	85	0	85	85	85	85	0			85	85	85	85	85	85	85	85	85	0
115		* Backpulse points in box are not included																															
116																																	
117																											1.5-hour avg. =		0.0561				

RUN # 1.18; SECOND ACID CLEAN WITH 2.0 M HNO3



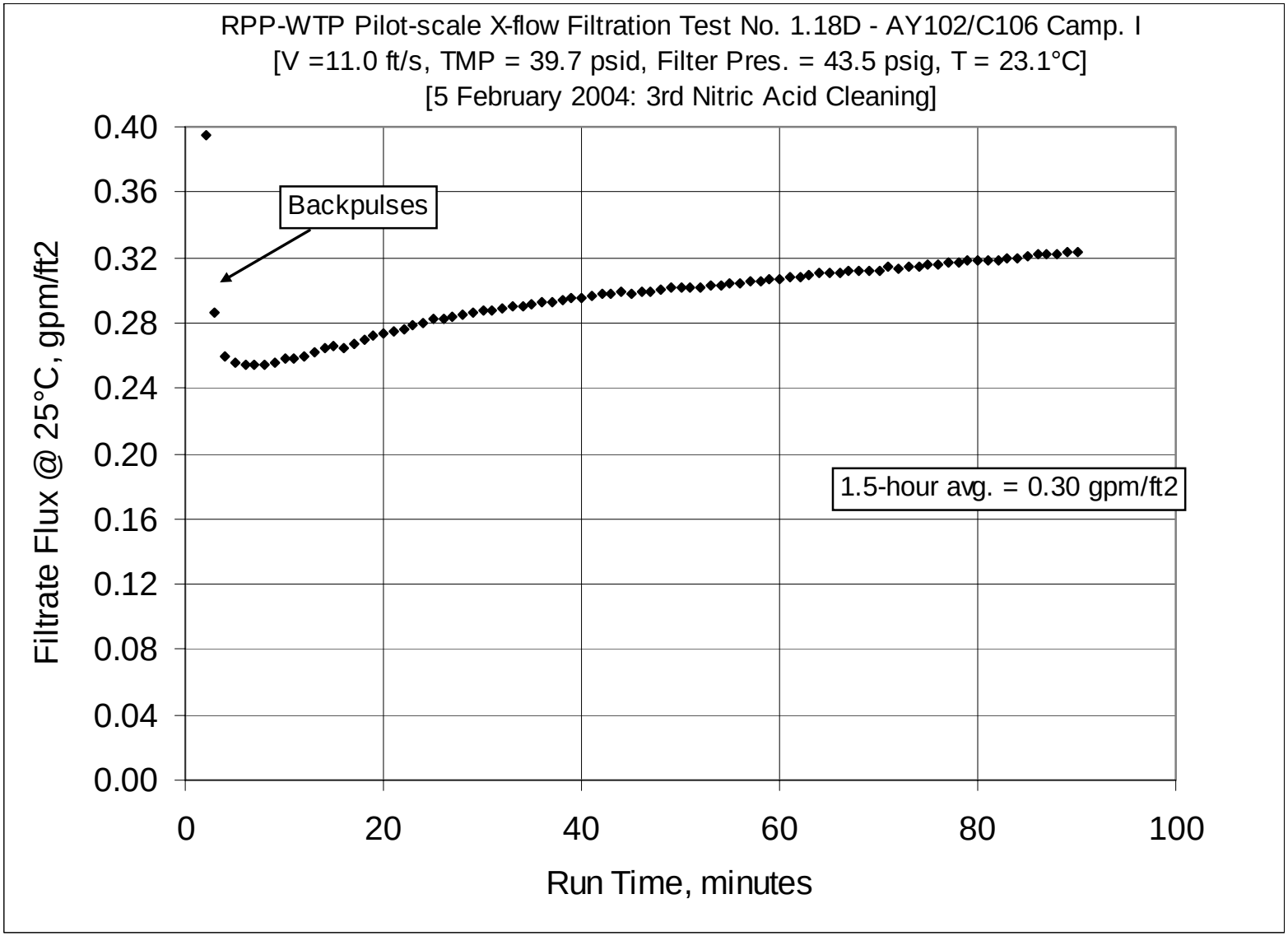
RUN # 1.18; SECOND ACID CLEAN WITH 2.0 M HNO3 - CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/5/2004	3:17:34 PM		22.884	19.758	23.322	20.397	22.019		2.663	43.137	3.644	-0.977	35.823	83.308		43.831	0.003	14.643	0.003		0	0	41.7	10.7	0.8	0.058	0.000	0.000	0.001	0.556	0.47	
18	2/5/2004	3:18:34 PM		23.265	19.762	23.442	20.532	22.134		2.877	43.533	3.675	-0.903	35.774	42.157		43.301	0.003	14.643	0.005		1.00	0.01667	42.1	10.6	1.0	0.068	0.000	0.000	0.000	0.474	0.40	
19	2/5/2004	3:19:34 PM		23.52	19.772	23.552	20.592	22.409		35.504	42.992	3.604	31.881	2.368	0.569		45.237	0.671	14.643	0.004		2.00	0.03333	41.5	11.1	33.7	2.323	0.100	0.104	0.003	3.093	2.63	
20	2/5/2004	3:20:34 PM		23.695	19.771	23.637	20.44	22.062		38.104	43.205	3.683	34.19	0.026	-1.342		44.753	0.603	14.643	0.004		3.00	0.05	41.7	11.0	36.1	2.492	2.183	2.269	0.063	62.770	53.42	
21	2/5/2004	3:21:34 PM		23.926	19.777	23.723	20.467	22.189		38.807	43.346	3.725	34.832	-0.646	-1.876		44.838	0.569	14.643	0.004		4.00	0.06667	41.9	11.0	36.8	2.539	2.183	2.263	0.061	61.473	52.31	
22	2/5/2004	3:22:34 PM		24.046	19.772	23.813	20.411	22.459		39.786	44.764	4.096	35.436	-0.351	-1.665		50.56	0.587	14.643	0.004		5.00	0.08333	43.3	12.4	37.6	2.593	0.088	0.091	0.002	2.406	2.05	
23	2/5/2004	3:23:34 PM		24.141	19.782	23.913	20.481	22.309		41.107	46.662	3.505	37.506	0.327	-1.212		44.581	0.627	14.643	0.004		6.00	0.1	45.2	10.9	39.3	2.710	0.093	0.096	0.002	2.452	2.09	
24	2/5/2004	3:24:34 PM		24.276	19.787	24.018	20.577	22.123		41.246	46.845	3.434	37.642	0.578	-1.084		43.607	0.637	14.643	0.003		7.00	0.11667	45.4	10.7	39.4	2.720	0.095	0.098	0.002	2.475	2.11	
25	2/5/2004	3:25:34 PM		24.432	19.797	24.144	20.587	21.988		40.825	46.691	3.278	37.537	0.726	-0.946		43.194	0.649	14.643	0.004		8.00	0.13333	45.2	10.6	39.2	2.701	0.097	0.099	0.003	2.530	2.15	
26	2/5/2004	3:26:34 PM		24.542	19.803	24.24	20.593	22.068		41.999	48.399	3.555	38.196	1.181	-0.668		44.367	0.673	14.643	0.004		9.00	0.15	46.9	10.9	40.1	2.765	0.100	0.103	0.003	2.557	2.18	
27	2/5/2004	3:27:34 PM		24.704	19.799	24.326	20.559	22.074		42.331	48.905	3.632	38.602	1.464	-0.512		44.329	0.687	14.643	0.003		10.00	0.16667	47.4	10.9	40.5	2.790	0.102	0.104	0.003	2.580	2.20	
28	2/5/2004	3:28:34 PM		24.819	19.809	24.457	20.539	21.839		41.798	48.729	3.439	38.235	1.716	-0.399		45.176	0.697	14.643	0.003		11.00	0.18333	47.3	11.1	40.0	2.759	0.104	0.106	0.003	2.637	2.24	
29	2/5/2004	3:29:34 PM		24.886	19.811	24.538	20.364	22.338		41.313	48.339	3.432	37.743	1.873	-0.258		44.494	0.708	14.643	0.003		12.00	0.2	46.9	10.9	39.5	2.725	0.106	0.107	0.003	2.705	2.30	
30	2/5/2004	3:30:34 PM		24.976	19.791	24.614	20.203	22.403		41.68	49.044	3.452	38.057	2.02	-0.156		44.534	0.717	14.643	0.003		13.00	0.21667	47.6	10.9	39.9	2.749	0.107	0.108	0.003	2.711	2.31	
31	2/5/2004	3:31:34 PM		25.082	19.777	24.69	20.112	21.927		41.663	48.988	3.531	37.999	2.243	-0.026		44.035	0.728	14.643	0.003		14.00	0.23333	47.5	10.8	39.8	2.746	0.109	0.109	0.003	2.749	2.34	
32	2/5/2004	3:32:34 PM		25.162	19.777	24.775	20.284	21.696		41.334	48.932	3.443	37.853	2.414	0.078		44.617	0.736	14.643	0.004		15.00	0.25	47.5	10.9	39.6	2.730	0.110	0.110	0.003	2.789	2.37	
33	2/5/2004	3:33:34 PM		25.256	19.771	24.844	20.465	21.861		41.045	48.899	3.418	37.465	2.64	0.211		43.415	0.746	14.643	0.003		16.00	0.26667	47.4	10.6	39.3	2.706	0.111	0.112	0.003	2.846	2.42	
34	2/5/2004	3:34:34 PM		25.316	19.776	24.92	20.632	21.776		41.155	49.446	3.533	37.427	3.054	0.465		44.102	0.766	14.643	0.003		17.00	0.28333	48.0	10.8	39.3	2.709	0.114	0.114	0.003	2.913	2.48	
35	2/5/2004	3:35:34 PM		25.406	19.771	25	20.753	21.67		41.107	49.655	3.448	37.461	3.259	0.584		44.143	0.776	14.643	0.003		18.00	0.3	48.2	10.8	39.3	2.708	0.116	0.116	0.003	2.945	2.51	
36	2/5/2004	3:36:34 PM		25.471	19.771	25.07	20.849	22.178		41.161	49.593	3.576	37.525	3.456	0.685		45.018	0.784	14.643	0.003		19.00	0.31667	48.1	11.0	39.3	2.713	0.117	0.117	0.003	2.965	2.52	
37	2/5/2004	3:37:34 PM		25.562	19.782	25.14	20.91	21.992		40.925	49.697	3.478	37.39	3.61	0.803		43.804	0.794	14.643	0.004		20.00	0.33333	48.2	10.7	39.2	2.700	0.118	0.118	0.003	3.011	2.56	
38	2/5/2004	3:38:34 PM		25.627	19.792	25.186	21.011	21.907		40.755	49.864	3.455	37.158	3.835	0.899		44.488	0.801	14.643	0.004		21.00	0.35	48.4	10.9	39.0	2.686	0.119	0.119	0.003	3.050	2.60	
39	2/5/2004	3:39:34 PM		25.703	19.788	25.242	21.032	22.074		40.601	49.748	3.486	36.975	4	1.009		43.203	0.809	14.643	0.004		22.00	0.36667	48.3	10.6	38.8	2.674	0.121	0.120	0.003	3.088	2.63	
40	2/5/2004	3:40:34 PM		25.734	19.794	25.288	21.043	21.798		40.249	49.558	3.459	36.675	4.157	1.09		43.474	0.816	14.643	0.004		23.00	0.38333	48.1	10.7	38.5	2.652	0.122	0.121	0.003	3.138	2.67	
41	2/5/2004	3:41:34 PM		25.81	19.805	25.334	21.11	21.739		39.948	49.605	3.532	36.218	4.299	1.188		45.182	0.823	14.643	0.004		24.00	0.4	48.1	11.1	38.1	2.626	0.123	0.122	0.003	3.192	2.72	
42	2/5/2004	3:42:34 PM		25.84	19.81	25.369	21.165	21.669		40.255	50.101	3.506	36.505	4.519	1.295		44.091	0.831	14.643	0.004		25.00	0.41667	48.6	10.8	38.4	2.646	0.124	0.123	0.003	3.195	2.72	
43	2/5/2004	3:43:34 PM		25.916	19.816	25.41	21.161	21.861		40.267	50.113	3.588	36.493	4.672	1.37		44.317	0.837	14.643	0.004		26.00	0.43333	48.6	10.9	38.4	2.646	0.125	0.123	0.003	3.214	2.74	
44	2/5/2004	3:44:34 PM		25.946	19.832	25.47	21.177	21.947		39.481	49.431	3.501	35.809	4.875	1.477		45.155	0.845	14.643	0.004		27.00	0.45	48.0	11.1	37.6	2.595	0.126	0.124	0.003	3.303	2.81	
45	2/5/2004	3:45:34 PM		25.982	19.827	25.496	21.157	22.314		41.636	53.007	3.681	37.687	6.134	2.234		45.407	0.895	14.643	0.003		28.00	0.46667	51.5	11.1	39.7	2.735	0.133	0.132	0.003	3.318	2.82	
46	2/5/2004	3:46:34 PM		26.078	19.854	25.627	21.213	22.099		41.754	53.342	3.815	37.699	6.351	2.382		45.902	0.904	14.643	0.004		29.00	0.48333	51.9	11.2	39.7	2.739	0.135	0.132	0.003	3.333	2.84	
47	2/5/2004	3:47:34 PM		26.149	19.865	25.703	21.26	22.185		41.535	53.572	3.736	37.457	6.531	2.489		45.247	0.911	14.643	0.004		30.00	0.5	52.1	11.1	39.5	2.723	0.136	0.133	0.003	3.372	2.87	
48	2/5/2004	3:48:34 PM		26.21	19.861	25.759	21.281	22.362		40.709	52.553	3.629	36.979	6.69	2.601		45.927	0.918	14.643	0.003		31.00	0.51667	51.1	11.3	38.8	2.678	0.137	0.134	0.003	3.449	2.94	
49	2/5/2004	3:49:34 PM		26.301	19.877	25.835	21.302	22.027		40.987	52.934	3.716	37.186	6.898	2.682		45.456	0.924	14.643	0.004		32.00	0.53333	51.5	11.1	39.1	2.695	0.138	0.135	0.003	3.443	2.93	
50	2/5/2004	3:50:34 PM		26.381	19.893	25.886	21.308	22.163		40.73	53.021	3.645	36.959	7.043	2.775		45.589	0.93	14.643	0.003		33.00	0.55	51.5	11.2	38.8	2.678	0.139	0.135	0.003	3.482	2.96	
51	2/5/2004	3:51:34 PM		26.423	19.899	25.942	21.355	22.26		40.477	52.667	3.744	36.585	7.205	2.888		46.021	0.936	14.643	0.004		34.00	0.56667	51.2	11.3	38.5	2.657	0.140	0.136	0.004	3.527	3.00	
52	2/5/2004	3:52:34 PM		26.499	19.91	25.998	21.356	22.391		40.131	52.474	3.722	36.314	7.362	2.98		46.559	0.943	14.643	0.004		35.00	0.58333	51.0	11.4	38.2	2.635	0.141	0.137	0.004	3.577	3.04	
53	2/5/2004	3:53:34 PM		26.544	19.917	26.049	21.357	22.141		39.865	52.426	3.56	36.31	7.506	3.058		46.117	0.947	14.643	0.004		36.00	0.6	51.0	11.3	38.1	2.626	0.141	0.137	0.004	3.599	3.06	
54	2/5/2004	3:54:34 PM		26.615	19.933	26.125	21.393	21.801		40.321	53.003	3.743	36.487	7.703	3.194		45.881	0.953	14.643	0.003		37.00	0.61667	51.5	11.2	38.4	2.648	0.142	0.138	0.004	3.585	3.05	
55	2/5/2004	3:55:34 PM		26.651	19.949	26.171	21.42	21.762		40.048	53.117	3.693	36.125	7.886	3.255		45.585	0.959	14.643	0.003		38.00	0.63333	51.6	11.2	38.1	2.626	0.143	0.138	0.004	3.633	3.09	
56	2/5/2004	3:56:34 PM		26.727	19.955	26.217	21.466	21.924		39.88	53.061	3.737	35.883	8.013	3.344		45.595	0.964	14.643	0.004		39.00	0.65	51.6	11.2	37.9	2.612	0.144	0.139	0.004	3.667	3.12	
57	2/5/2004	3:57:34 PM		26.733	19.976	26.243	21.487	22.21		39.994	53.108	3.788	36.054	8.158	3.466		46.087	0.97	14.643	0.003		40.00	0.66667	51.6	11.3	38.0	2.622	0.145	0.140	0.004	3.673	3.13	
58	2/5/2004	3:58:34 PM		26.803	19.981	26.288	21.462	22.427		39.249	52.526	3.632	35.543	8.274	3.541		45.885	0.975	14.643	0.004		41.00	0.68333	51.1	11.2	37.4	2.578	0.145	0.140	0.004	3.749	3.19	
59	2/5/2004	3:59:34 PM		26.849	19.998	26.294	21.448	22.719		39.367	52.859	3.696	35.621	8.389	3.596		45.46	0.978	14.643	0.004		42.00	0.7	51.4	11.1	37.5	2.585	0.146	0.141	0.004	3.750	3.19	
60	2/5/2004	4:00:34 PM		26.825	19.988	26.105	21.539	22.122		39.28	52.731	3.752	35.436	8.494	3.657		45.877	0.982	14.643	0.003		43.00	0.71667	51.3	11.2	37.4	2.576	0.146	0.142	0.004	3.799	3.23	
61	2/5/2004	4:01:34 PM		26.756	20.004	26.021	21.671	22.143		38.986	52.727	3.69	35.188	8.615	3.72		45.614	0.986	14.643	0.004		44.00	0.73333	51.3	11.2	37.1	2.557	0.147	0.143	0.004	3.852	3.28	
62	2/5/2004	4:02:34 PM		26.687	20.025	25.937	21.733	22.325		39.208	53.146	3.639	35.356	8.656	3.738		45.71	0.987	14.643	0.003		45.00	0.75	51.7	11.2	37.3	2.570	0.147	0.143	0.004	3.845	3.27	
63	2/5/2004	4:03:34 PM		26.634	20.052	25.909	21.77	22.457		41.199	56.601	3.296	38.054	10.766	5.041		45.629	1.06	14.643	0.004		46.00	0.76667	55.1	11.2	39.6	2.732	0.158	0.154	0.004	3.888	3.31	
64	2/5/2004	4:04:34 PM		26.58	20.059	25.85	21.736	22.378		41.126	57.167	3.343	37.636	10.975	5.148		43.866	1.065	14.643	0.003		47.00	0.78333	55.7	10.8	39.4	2.715	0.159	0.155	0.004	3.937	3.35	
65	2/5/2004	4:05:34 PM		26.536	20.054	25.791	21.746	22.504		40.707	56.634	3.245	37.443	11.099	5.226		44.557	1.069	14.643	0.004		48.00	0.8	55.2	10.9	39.1	2.694	0.159	0.156	0.004	3.989	3.39	
66	2/5/2004	4:06:34 PM		26.528	20.076	25.778	21.803	22.441		40.944	57.322	3.349	37.379	11.206	5.302		43.005	1.073	14.643	0.004		49.00	0.81667	55.8	10.5	39.2	2.700	0.160	0.157	0.004	3.997	3.40	
67	2/5/2004	4:07:34 PM		26.509	20.088	25.769	21.845	22.116		41.45	57.865	3.566	37.701	11.328	5.377		44.06	1.077	14.643	0.003		50.00	0.83333	56.4	10.8	39.6	2.729	0.161	0.157	0.004	3.971	3.38	
68	2/5/2004	4:08:34 PM		26.486	20.105	25.761	21.827	21.912		40.62	56.887	3.392	37.291	11.397	5.409		44.719	1.08	14.643	0.004		51.00	0.85	55.4	11.0	39.0	2.686	0.161	0.158	0.004	4.046	3.44	
69	2/5/2004	4:09:34 PM		26.467	20.121	25.757	21.853	21.983		40.763	57.536	3.488	37.026	11.533	5.521		43.436	1.084	14.643	0.004		52.00	0.86667	56.1	10.6	38.9	2.682	0.162	0.158	0.004	4.068	3.46	
70	2/5/2004	4:10:34 PM		26.438	20.122	25.718	21.779	21.964		40.485	57.117	3.291	37.135	11.641	5.568		43.564	1.087	14.643	0.003		53.00	0.88333	55.6	10.7	38.8	2.676	0.162	0.159	0.004	4.092	3.48	

RUN # 1.18; SECOND ACID CLEAN WITH 2.0 M HNO3 - CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/5/2004	4:11:34 PM		26.414	20.128	25.684	21.77	22.302		40.589	57.336	3.449	37.018	11.724	5.582		43.76	1.089	14.643	0.003		54.00	0.9	55.9	10.7	38.8	2.675	0.162	0.159	0.004	4.105	3.49	
72	2/5/2004	4:12:34 PM		26.4	20.139	25.665	21.791	22.057		40.535	57.225	3.356	37.215	11.849	5.677		43.201	1.092	14.643	0.004		55.00	0.91667	55.8	10.6	38.9	2.680	0.163	0.160	0.004	4.110	3.50	
73	2/5/2004	4:13:34 PM		26.371	20.14	25.621	21.787	21.917		40.178	56.823	3.303	37.026	11.892	5.738		42.293	1.096	14.643	0.003		56.00	0.93333	55.4	10.4	38.6	2.661	0.163	0.161	0.004	4.160	3.54	
74	2/5/2004	4:14:34 PM		26.372	20.167	25.652	21.823	21.742		40.259	57.193	3.465	36.79	12.043	5.787		44.6	1.099	14.643	0.004		57.00	0.95	55.7	10.9	38.5	2.656	0.164	0.161	0.004	4.176	3.55	
75	2/5/2004	4:15:34 PM		26.349	20.173	25.639	21.805	22.05		40.116	57.237	3.312	36.702	12.121	5.857		45.549	1.102	14.643	0.004		58.00	0.96667	55.8	11.2	38.4	2.648	0.164	0.161	0.004	4.202	3.58	
76	2/5/2004	4:16:34 PM		26.34	20.184	25.625	21.796	22.117		39.88	57.204	3.381	36.339	12.188	5.871		46.392	1.105	14.643	0.004		59.00	0.98333	55.7	11.4	38.1	2.628	0.165	0.162	0.004	4.248	3.61	
77	2/5/2004	4:17:34 PM		26.331	20.191	25.596	21.817	21.927		39.859	56.92	3.383	36.517	12.306	5.961		43.931	1.108	14.643	0.004		60.00	1	55.4	10.8	38.2	2.633	0.165	0.162	0.004	4.254	3.62	
78	2/5/2004	4:18:34 PM		26.317	20.207	25.587	21.813	21.848		39.946	57.368	3.485	36.304	12.332	5.998		46.571	1.11	14.643	0.004		61.00	1.01667	55.9	11.4	38.1	2.629	0.165	0.163	0.004	4.270	3.63	
79	2/5/2004	4:19:34 PM		26.309	20.213	25.584	21.799	21.824		39.898	57.419	3.513	36.146	12.477	6.059		44.131	1.113	14.643	0.004		62.00	1.03333	55.9	10.8	38.0	2.621	0.166	0.163	0.004	4.293	3.65	
80	2/5/2004	4:20:34 PM		26.29	20.214	25.579	21.79	21.599		39.527	57.079	3.434	35.91	12.55	6.134		43.912	1.117	14.643	0.003		63.00	1.05	55.6	10.8	37.7	2.601	0.167	0.164	0.004	4.344	3.70	
81	2/5/2004	4:21:34 PM		26.286	20.235	25.58	21.786	21.961		39.575	57.289	3.437	36.008	12.634	6.163		44.118	1.12	14.643	0.004		64.00	1.06667	55.8	10.8	37.8	2.606	0.167	0.164	0.004	4.347	3.70	
82	2/5/2004	4:22:34 PM		26.266	20.235	25.555	21.751	21.821		39.757	57.382	3.381	36.437	12.686	6.235		43.564	1.122	14.643	0.004		65.00	1.08333	55.9	10.7	38.1	2.627	0.167	0.165	0.004	4.323	3.68	
83	2/5/2004	4:23:34 PM		26.277	20.246	25.551	21.777	21.968		40.002	58.464	3.487	36.343	13.424	6.614		45.387	1.143	14.643	0.004		66.00	1.1	57.0	11.1	38.2	2.632	0.170	0.168	0.004	4.396	3.74	
84	2/5/2004	4:24:34 PM		26.273	20.268	25.567	21.783	22.094		40.429	58.789	3.504	36.883	13.482	6.712		44.49	1.146	14.643	0.003		67.00	1.11667	57.3	10.9	38.7	2.665	0.171	0.168	0.004	4.350	3.70	
85	2/5/2004	4:25:34 PM		26.293	20.273	25.607	21.793	22.265		41.091	60.651	3.623	37.289	14.547	7.314		45.155	1.177	14.643	0.003		68.00	1.13333	59.2	11.1	39.2	2.702	0.175	0.173	0.004	4.402	3.75	
86	2/5/2004	4:26:34 PM		26.319	20.284	25.548	21.885	21.894		40.726	60.354	3.601	37.028	14.593	7.354		45.802	1.179	14.643	0.004		69.00	1.15	58.9	11.2	38.9	2.680	0.176	0.173	0.004	4.452	3.79	
87	2/5/2004	4:27:34 PM		26.274	20.285	25.414	21.976	21.649		40.664	60.294	3.525	37.123	14.657	7.383		45.543	1.18	14.643	0.004		70.00	1.16667	58.8	11.2	38.9	2.682	0.176	0.174	0.004	4.471	3.80	
88	2/5/2004	4:28:34 PM		26.184	20.285	25.299	21.916	21.91		40.481	60.114	3.578	36.842	14.663	7.377		45.18	1.182	14.643	0.004		71.00	1.18333	58.6	11.1	38.7	2.666	0.176	0.175	0.005	4.520	3.85	
89	2/5/2004	4:29:34 PM		26.116	20.311	25.225	21.942	21.765		40.912	60.875	3.711	36.948	14.715	7.455		44.824	1.184	14.643	0.003		72.00	1.2	59.4	11.0	38.9	2.684	0.177	0.175	0.005	4.506	3.83	
90	2/5/2004	4:30:34 PM		26.042	20.317	25.141	21.943	21.555		40.388	60.145	3.514	36.87	14.744	7.493		46.776	1.184	14.643	0.004		73.00	1.21667	58.7	11.5	38.6	2.663	0.177	0.176	0.005	4.552	3.87	
91	2/5/2004	4:31:34 PM		25.963	20.323	25.062	21.939	21.773		40.784	60.682	3.69	36.905	14.88	7.501		45.595	1.185	14.643	0.003		74.00	1.23333	59.2	11.2	38.8	2.678	0.177	0.176	0.005	4.540	3.86	
92	2/5/2004	4:32:34 PM		25.894	20.334	24.998	21.975	21.723		40.695	60.468	3.63	36.961	14.883	7.533		44.273	1.187	14.643	0.003		75.00	1.25	59.0	10.8	38.8	2.677	0.177	0.177	0.005	4.558	3.88	
93	2/5/2004	4:33:34 PM		25.83	20.335	24.938	21.991	21.679		40.628	60.296	3.589	37.133	14.99	7.577		44.972	1.188	14.643	0.003		76.00	1.26667	58.8	11.0	38.9	2.681	0.177	0.177	0.005	4.563	3.88	
94	2/5/2004	4:34:34 PM		25.761	20.346	24.884	21.992	21.504		40.236	60.228	3.619	36.487	15.005	7.614		44.938	1.19	14.643	0.003		77.00	1.28333	58.8	11.0	38.4	2.645	0.177	0.178	0.005	4.640	3.95	
95	2/5/2004	4:35:34 PM		25.696	20.352	24.83	22.028	21.645		40.45	60.45	3.607	36.844	15.005	7.626		45.489	1.19	14.643	0.004		78.00	1.3	59.0	11.1	38.6	2.665	0.177	0.178	0.005	4.613	3.93	
96	2/5/2004	4:36:34 PM		25.648	20.353	24.781	22.019	21.657		40.116	60.045	3.608	36.464	15.068	7.626		45.954	1.192	14.643	0.004		79.00	1.31667	58.6	11.3	38.3	2.640	0.178	0.179	0.005	4.670	3.97	
97	2/5/2004	4:37:34 PM		25.584	20.359	24.727	22.07	21.396		40.558	60.64	3.672	36.813	15.06	7.66		44.227	1.193	14.643	0.004		80.00	1.33333	59.2	10.8	38.7	2.667	0.178	0.179	0.005	4.633	3.94	
98	2/5/2004	4:38:34 PM		25.545	20.375	24.698	22.071	21.553		40.467	60.553	3.632	36.87	15.135	7.687		45.735	1.195	14.643	0.004		81.00	1.35	59.1	11.2	38.7	2.666	0.178	0.180	0.005	4.647	3.95	
99	2/5/2004	4:39:34 PM		25.511	20.391	24.674	22.012	21.549		40.38	60.852	3.607	36.599	15.239	7.741		45.193	1.197	14.643	0.004		82.00	1.36667	59.4	11.1	38.5	2.654	0.178	0.180	0.005	4.679	3.98	
100	2/5/2004	4:40:34 PM		25.466	20.387	24.634	21.982	21.575		39.867	59.95	3.492	36.341	15.207	7.733		44.617	1.198	14.643	0.003		83.00	1.38333	58.5	10.9	38.1	2.627	0.179	0.180	0.005	4.736	4.03	
101	2/5/2004	4:41:34 PM		25.417	20.398	24.595	22.004	21.837		40.359	60.684	3.588	36.755	15.274	7.817		44.871	1.2	14.643	0.003		84.00	1.4	59.2	11.0	38.6	2.658	0.179	0.181	0.005	4.693	3.99	
102	2/5/2004	4:42:34 PM		25.398	20.409	24.566	22	21.798		39.888	60.508	3.57	36.103	15.392	7.872		45.622	1.203	14.643	0.003		85.00	1.41667	59.0	11.2	38.0	2.620	0.179	0.182	0.005	4.779	4.07	
103	2/5/2004	4:43:34 PM		25.353	20.404	24.521	22.01	21.748		40.133	60.572	3.565	36.485	15.392	7.906		45.024	1.203	14.643	0.003		86.00	1.43333	59.1	11.0	38.3	2.641	0.179	0.182	0.005	4.746	4.04	
104	2/5/2004	4:44:34 PM		25.314	20.41	24.492	22.04	21.663		40.162	60.883	3.667	36.32	15.43	7.909		45.222	1.204	14.643	0.003		87.00	1.45	59.4	11.1	38.2	2.637	0.180	0.182	0.005	4.762	4.05	
105	2/5/2004	4:45:34 PM		25.305	20.435	24.472	22.056	21.864		39.604	60.164	3.505	36.008	15.505	7.973		46.957	1.204	14.643	0.003		88.00	1.46667	58.7	11.5	37.8	2.607	0.180	0.182	0.005	4.819	4.10	
106	2/5/2004	4:46:34 PM		25.275	20.435	24.437	22.081	21.689		39.517	59.981	3.575	35.912	15.505	7.955		45.153	1.204	14.643	0.003		89.00	1.48333	58.5	11.1	37.7	2.600	0.180	0.182	0.005	4.836	4.12	
107	2/5/2004	4:47:34 PM		25.246	20.452	24.418	22.082	21.549		40.035	60.607	3.651	36.347	15.627	7.999		44.961	1.204	14.643	0.003		90.00	1.5	59.1	11.0	38.2	2.633	0.180	0.182	0.005	4.778	4.07	
108																																	
109		Averages		25.9	20.1	25.3	21.5	22.0	#	40.5	55.1	3.5	36.8	9.5	4.3	#	44.9	1.0	14.6	0.0	#			53.6	11.0	38.7	2.666	0.149	0.148	0.0038	3.834	3.262	#
110		Maximum		26.8	20.5	26.3	22.1	22.7	#	42.3	60.9	3.8	38.6	15.6	8.0	#	47.0	1.2	14.6	0.0	#			59.4	11.5	40.5	2.790	0.180	0.182	0.0048	4.836	4.115	#
111		Median		26.1	20.1	25.5	21.8	21.9	#	40.5	56.8	3.5	36.9	11.1	5.2	#	45.0	1.1	14.6	0.0	#			55.4	11.0	38.7	2.666	0.159	0.156	0.0040	3.971	3.379	#
112		Minimum		24.1	19.8	23.9	20.1	21.4	#	39.0	46.7	3.2	35.2	0.3	-1.2	#	42.3	0.6	14.6	0.0	#			45.2	10.4	37.1	2.557	0.093	0.096	0.0025	2.452	2.087	#
113		2 x Std Dev		1.268	0.452	1.183	1.066	0.547	#	1.376	8.966	0.260	1.416	9.652	5.800	#	1.916	0.351	0.000	0.001	#			8.966	0.470	1.383	0.095	0.052	0.052	0.0014	1.398	1.190	#
114		Number of Points Used*		85	85	85	85	85	0	85	85	85	85	85	85	0	85	85	85	85	0			85	85	85	85	85	85	85	85	85	0
115		* Backpulse points in box are not included																															
116																																	
117																											1.5-hour avg. =		0.1480				

RUN # 1.18; THIRD ACID CLEAN WITH 2.0 M HNO3



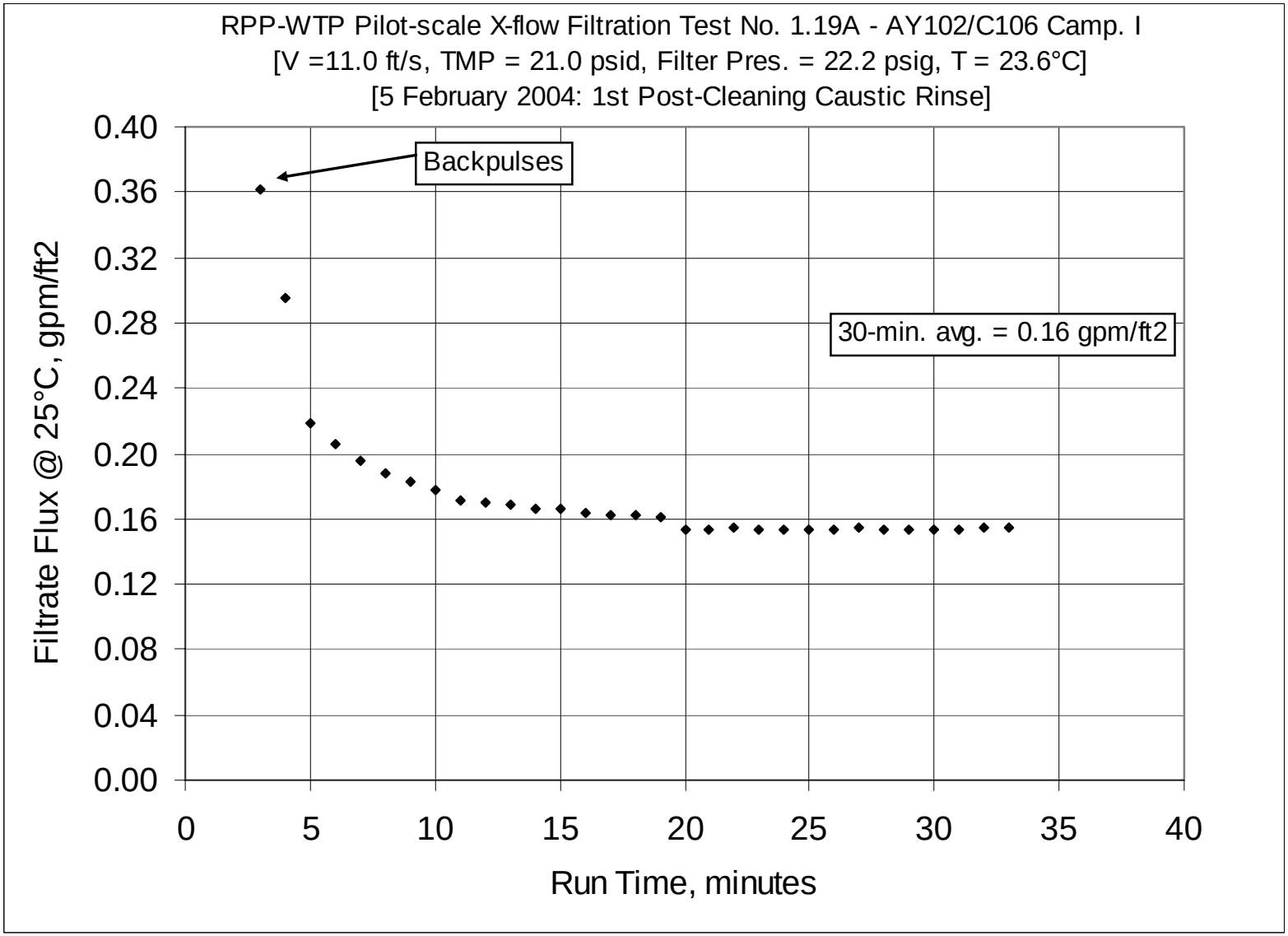
RUN # 1.18; THIRD ACID CLEAN WITH 2.0 M HNO3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000	
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar
17	2/5/2004	5:26:33 PM		23.116	20.441	22.686	21.477	21.945	#	2.678	45.645	3.071	-0.536	38.263	85.913		40.702	0.003	-0.012	0.004		0	0	44.2	10.0	1.1	0.074	-0.002	-0.002	-0.002	-1.784	-1.52
18	2/5/2004	5:27:33 PM		23.212	20.447	22.692	21.473	21.921	#	2.564	45.912	3.111	-0.692	38.423	42.544		40.278	0.003	14.643	0.006		1.00	0.01667	44.4	9.9	0.9	0.065	2.183	2.331	2.490	2490.261	######
19	2/5/2004	5:28:33 PM		23.272	20.431	22.682	21.417	21.629	#	38.623	44.666	3.044	36.156	0.483	1.734		41.54	0.004	2.478	0.004		2.00	0.03333	43.2	10.2	37.4	2.578	0.369	0.395	0.011	10.553	8.98
20	2/5/2004	5:29:33 PM		23.332	20.452	22.717	21.448	22.006	#	42.091	45.075	3.157	39.195	-1.219	1.295		41.759	0.003	1.803	0.003		3.00	0.05	43.6	10.2	40.6	2.802	0.269	0.287	0.007	7.057	6.01
21	2/5/2004	5:30:33 PM		23.364	20.463	22.738	21.524	21.741	#	41.493	43.914	3.735	37.872	-1.219	1.208		42.402	0.003	1.628	0.004		4.00	0.06667	42.4	10.4	39.7	2.736	0.243	0.259	0.007	6.522	5.55
22	2/5/2004	5:31:33 PM		23.369	20.458	22.763	21.519	21.751	#	41.67	44.19	3.565	38.089	-1.216	1.197		43.099	0.003	1.606	0.003		5.00	0.08333	42.7	10.6	39.9	2.750	0.239	0.255	0.006	6.397	5.44
23	2/5/2004	5:32:33 PM		23.364	20.438	22.748	21.494	21.736	#	42.144	44.552	3.542	38.617	-1.219	1.191		45.207	0.003	1.597	0.003		6.00	0.1	43.1	11.1	40.4	2.784	0.238	0.254	0.006	6.285	5.35
24	2/5/2004	5:33:33 PM		23.399	20.458	22.783	21.489	21.897	#	42.061	44.474	3.595	38.51	-1.216	1.191		43.62	0.003	1.599	0.005		7.00	0.11667	43.0	10.7	40.3	2.778	0.238	0.254	0.006	6.302	5.36
25	2/5/2004	5:34:33 PM		23.419	20.463	22.799	21.494	22.283	#	42.213	44.563	3.479	38.762	-1.216	1.191		43.887	0.003	1.603	0.004		8.00	0.13333	43.1	10.8	40.5	2.791	0.239	0.254	0.006	6.283	5.35
26	2/5/2004	5:35:33 PM		23.433	20.462	22.818	21.483	21.941	#	42.03	44.476	3.361	38.789	-1.216	1.197		42.969	0.003	1.61	0.004		9.00	0.15	43.0	10.5	40.4	2.786	0.240	0.255	0.006	6.319	5.38
27	2/5/2004	5:36:33 PM		23.454	20.473	22.839	21.519	21.741	#	42.259	44.757	3.412	38.849	-1.214	1.199		43.395	0.003	1.625	0.005		10.00	0.16667	43.3	10.6	40.6	2.796	0.242	0.258	0.006	6.352	5.41
28	2/5/2004	5:37:33 PM		23.464	20.453	22.854	21.504	21.58	#	42.377	44.988	3.515	38.904	-1.219	1.194		43.199	0.003	1.632	0.006		11.00	0.18333	43.5	10.6	40.6	2.802	0.243	0.259	0.006	6.363	5.41
29	2/5/2004	5:38:33 PM		23.478	20.457	22.863	21.483	21.775	#	41.964	44.627	3.31	38.84	-1.216	1.199		43.372	0.003	1.64	0.004		12.00	0.2	43.2	10.6	40.4	2.786	0.245	0.260	0.006	6.430	5.47
30	2/5/2004	5:39:33 PM		23.493	20.457	22.873	21.493	22.222	#	41.914	44.556	3.336	38.726	-1.214	1.205		43.457	0.003	1.657	0.005		13.00	0.21667	43.1	10.6	40.3	2.780	0.247	0.262	0.007	6.508	5.54
31	2/5/2004	5:40:33 PM		23.522	20.466	22.897	21.548	22.021	#	42.049	44.824	3.307	39.007	-1.214	1.211		42.558	0.003	1.672	0.007		14.00	0.23333	43.4	10.4	40.5	2.794	0.249	0.265	0.007	6.529	5.56
32	2/5/2004	5:41:33 PM		23.537	20.476	22.892	21.532	21.955	#	41.96	44.71	3.395	38.707	-1.216	1.208		43.232	0.003	1.677	0.005		15.00	0.25	43.2	10.6	40.3	2.781	0.250	0.265	0.007	6.581	5.60
33	2/5/2004	5:42:33 PM		23.531	20.47	22.901	21.502	21.829	#	41.744	44.583	3.766	38.106	-1.219	1.208		44.942	0.003	1.675	0.004		16.00	0.26667	43.1	11.0	39.9	2.753	0.250	0.265	0.007	6.638	5.65
34	2/5/2004	5:43:33 PM		23.531	20.465	22.916	21.512	21.703	#	41.958	44.888	3.821	38.243	-1.216	1.208		46.098	0.003	1.69	0.004		17.00	0.28333	43.4	11.3	40.1	2.765	0.252	0.267	0.007	6.666	5.67
35	2/5/2004	5:44:33 PM		23.562	20.475	22.957	21.532	21.673	#	41.858	44.737	3.794	38.276	-1.216	1.214		45.96	0.003	1.703	0.006		18.00	0.3	43.3	11.3	40.1	2.762	0.254	0.269	0.007	6.715	5.71
36	2/5/2004	5:45:33 PM		23.582	20.475	22.992	21.522	21.728	#	42.057	45.066	3.755	38.483	-1.216	1.217		45.42	0.003	1.723	0.005		19.00	0.31667	43.6	11.1	40.3	2.776	0.257	0.272	0.007	6.753	5.75
37	2/5/2004	5:46:33 PM		23.612	20.481	23.027	21.512	21.573	#	41.684	44.726	3.632	38.227	-1.216	1.217		45.443	0.003	1.734	0.005		20.00	0.33333	43.3	11.1	40.0	2.755	0.259	0.273	0.007	6.842	5.82
38	2/5/2004	5:47:33 PM		23.638	20.492	23.054	21.528	21.599	#	41.584	44.542	3.627	38.161	-1.211	1.223		46.069	0.003	1.744	0.006		21.00	0.35	43.1	11.3	39.9	2.749	0.260	0.275	0.007	6.891	5.86
39	2/5/2004	5:48:33 PM		23.654	20.493	23.054	21.519	21.343	#	41.846	44.776	3.663	38.424	-1.216	1.22		45.188	0.003	1.756	0.004		22.00	0.36667	43.3	11.1	40.1	2.767	0.262	0.277	0.007	6.893	5.87
40	2/5/2004	5:49:33 PM		23.659	20.477	23.049	21.483	21.434	#	41.628	44.83	3.619	38.143	-1.216	1.225		45.512	0.003	1.768	0.005		23.00	0.38333	43.4	11.2	39.9	2.750	0.264	0.279	0.007	6.984	5.94
41	2/5/2004	5:50:33 PM		23.69	20.499	23.09	21.53	21.867	#	41.81	45.045	3.659	38.282	-1.214	1.228		45.23	0.003	1.779	0.005		24.00	0.4	43.6	11.1	40.0	2.761	0.265	0.280	0.007	6.992	5.95
42	2/5/2004	5:51:33 PM		23.696	20.494	23.076	21.5	21.591	#	41.806	44.988	3.647	38.395	-1.216	1.225		45.211	0.003	1.79	0.005		25.00	0.41667	43.5	11.1	40.1	2.765	0.267	0.282	0.007	7.028	5.98
43	2/5/2004	5:52:33 PM		23.711	20.495	23.091	21.46	21.546	#	41.86	45.166	3.695	38.278	-1.214	1.228		44.824	0.003	1.798	0.006		26.00	0.43333	43.7	11.0	40.1	2.763	0.268	0.283	0.007	7.062	6.01
44	2/5/2004	5:53:33 PM		23.717	20.491	23.108	21.456	21.623	#	41.572	44.844	3.655	38.114	-1.214	1.231		45.22	0.003	1.803	0.004		27.00	0.45	43.4	11.1	39.8	2.747	0.269	0.284	0.007	7.118	6.06
45	2/5/2004	5:54:33 PM		23.738	20.496	23.118	21.472	22.015	#	41.672	45.143	3.724	37.954	-1.219	1.231		45.295	0.003	1.813	0.004		28.00	0.46667	43.7	11.1	39.8	2.745	0.270	0.285	0.007	7.161	6.09
46	2/5/2004	5:55:33 PM		23.738	20.496	23.128	21.497	21.794	#	41.528	44.869	3.616	38.118	-1.219	1.231		43.916	0.003	1.817	0.004		29.00	0.48333	43.4	10.8	39.8	2.746	0.271	0.286	0.007	7.173	6.10
47	2/5/2004	5:56:33 PM		23.748	20.502	23.139	21.503	21.659	#	41.587	45.012	3.582	38.26	-1.216	1.234		45.293	0.003	1.83	0.004		30.00	0.5	43.5	11.1	39.9	2.753	0.273	0.288	0.007	7.204	6.13
48	2/5/2004	5:57:33 PM		23.749	20.482	23.129	21.478	21.665	#	41.433	44.944	3.588	37.958	-1.222	1.231		44.792	0.003	1.832	0.006		31.00	0.51667	43.5	11.0	39.7	2.737	0.273	0.288	0.007	7.255	6.17
49	2/5/2004	5:58:33 PM		23.754	20.477	23.134	21.473	21.675	#	41.408	44.813	3.619	38.057	-1.219	1.237		44.832	0.003	1.841	0.005		32.00	0.53333	43.3	11.0	39.7	2.739	0.274	0.289	0.007	7.283	6.20
50	2/5/2004	5:59:33 PM		23.785	20.504	23.16	21.54	21.716	#	41.678	45.029	3.693	38.231	-1.216	1.24		44.438	0.003	1.846	0.007		33.00	0.55	43.6	10.9	40.0	2.755	0.275	0.290	0.007	7.257	6.18
51	2/5/2004	6:00:33 PM		23.791	20.514	23.156	21.53	21.636	#	41.877	45.375	3.742	38.375	-1.216	1.24		45.211	0.003	1.848	0.004		34.00	0.56667	43.9	11.1	40.1	2.767	0.276	0.290	0.007	7.235	6.16
52	2/5/2004	6:01:33 PM		23.796	20.51	23.157	21.511	21.702	#	41.518	45.016	3.562	38.303	-1.219	1.246		44.882	0.003	1.858	0.005		35.00	0.58333	43.5	11.0	39.9	2.752	0.277	0.292	0.007	7.313	6.22
53	2/5/2004	6:02:33 PM		23.806	20.515	23.172	21.541	22.003	#	41.404	44.996	3.708	37.888	-1.214	1.249		45.255	0.003	1.861	0.006		36.00	0.6	43.5	11.1	39.6	2.733	0.277	0.292	0.007	7.370	6.27
54	2/5/2004	6:03:33 PM		23.811	20.505	23.187	21.531	21.808	#	41.334	45.081	3.646	37.798	-1.214	1.249		45.61	0.003	1.866	0.004		37.00	0.61667	43.6	11.2	39.6	2.728	0.278	0.293	0.007	7.402	6.30
55	2/5/2004	6:04:33 PM		23.817	20.505	23.197	21.521	21.939	#	41.659	45.236	3.674	38.184	-1.216	1.246		45.218	0.003	1.873	0.005		38.00	0.63333	43.8	11.1	39.9	2.752	0.279	0.294	0.007	7.361	6.26
56	2/5/2004	6:05:33 PM		23.817	20.506	23.188	21.537	21.809	#	41.742	45.4	3.707	38.288	-1.222	1.246		45.111	0.003	1.881	0.005		39.00	0.65	43.9	11.1	40.0	2.759	0.280	0.295	0.007	7.377	6.28
57	2/5/2004	6:06:33 PM		23.827	20.515	23.202	21.577	21.833	#	41.284	44.851	3.633	37.898	-1.219	1.251		45.307	0.003	1.881	0.004		40.00	0.66667	43.4	11.1	39.6	2.730	0.280	0.295	0.007	7.454	6.34
58	2/5/2004	6:07:33 PM		23.827	20.521	23.193	21.587	21.773	#	41.307	44.985	3.616	37.938	-1.219	1.257		45.324	0.003	1.89	0.005		41.00	0.68333	43.5	11.1	39.6	2.732	0.282	0.297	0.007	7.485	6.37
59	2/5/2004	6:08:33 PM		23.827	20.515	23.182	21.526	21.833	#	41.543	45.197	3.695	38.04	-1.219	1.254		45.347	0.003	1.894	0.005		42.00	0.7	43.7	11.1	39.8	2.743	0.282	0.297	0.007	7.471	6.36
60	2/5/2004	6:09:33 PM		23.842	20.526	23.193	21.537	21.567	#	41.439	45.236	3.67	38.013	-1.219	1.254		44.924	0.003	1.894	0.006		43.00	0.71667	43.8	11.0	39.7	2.739	0.282	0.297	0.007	7.481	6.37
61	2/5/2004	6:10:33 PM		23.842	20.521	23.208	21.497	21.598	#	41.222	44.934	3.689	37.835	-1.214	1.263		44.942	0.003	1.903	0.005		44.00	0.73333	43.5	11.0	39.5	2.725	0.284	0.298	0.008	7.551	6.43
62	2/5/2004	6:11:33 PM		23.842	20.521	23.203	21.517	21.618	#	41.369	45.017	3.637	38.013	-1.219	1.26		44.707	0.003	1.9	0.005		45.00	0.75	43.5	11.0	39.7	2.737	0.283	0.298	0.008	7.510	6.39
63	2/5/2004	6:12:33 PM		23.847	20.526	23.223	21.466	21.758	#	40.971	44.428	3.503	37.909	-1.219	1.26		44.919	0.003	1.907	0.005		46.00	0.76667	43.0	11.0	39.4	2.719	0.284	0.299	0.008	7.581	6.45
64	2/5/2004	6:13:33 PM		23.847	20.53	23.232	21.446	21.552	#	41.13	44.979	3.562	37.784	-1.216	1.263		45.147	0.003	1.911	0.004		47.00	0.78333	43.5	11.1	39.5	2.720	0.285	0.300	0.008	7.592	6.46
65	2/5/2004	6:14:33 PM		23.847	20.52	23.227	21.486	21.592	#	41.489	45.288	3.66	38.108	-1.216	1.266		45.032	0.003	1.916	0.004		48.00	0.8	43.8	11.0	39.8	2.744	0.286	0.300	0.008	7.547	6.42
66	2/5/2004	6:15:33 PM		23.851	20.525	23.212	21.435	21.627	#	40.884	44.581	3.495	37.704	-1.216	1.263		44.36	0.003	1.92	0.005		49.00	0.81667	43.1	10.9	39.3	2.709	0.286	0.301	0.008	7.663	6.52
67	2/5/2004	6:16:33 PM		23.857	20.536	23.223	21.466	21.487	#	41.103	44.826	3.609	37.806	-1.219	1.266		45.831	0.003	1.926	0.005		50.00	0.83333	43.4	11.2	39.5	2.720	0.287	0.302	0.008	7.654	6.51
68	2/5/2004	6:17:33 PM		23.867	20.536	23.228	21.537	21.487	#	41.427	45.168	3.73	37.917	-1.214	1.272		45.339	0.003	1.925	0.006		51.00	0.85	43.7	11.1	39.7	2.735	0.287	0.302	0.008	7.607	6.47
69	2/5/2004	6:18:33 PM		23.872	20.541	23.228	21.537	21.618	#	41.238	45.029	3.668	37.773	-1.216	1.272		46.632	0.003	1.927	0.005		52.00	0.86667	43.6	11.4	39.5	2.724	0.287	0.302	0.008	7.647	6.51
70	2/5/2004	6:19:33 PM		23.862	20.531	23.218	21.542	21.437	#	41.095	44.985	3.705	37.535	-1.219	1.269		45.449	0.003	1.93	0.005		53.00	0.88333	43.5	11.1	39.3	2.711	0.288	0.303	0.008	7.698	6.55

RUN # 1.18; THIRD ACID CLEAN WITH 2.0 M HNO3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/5/2004	6:20:33 PM		23.858	20.531	23.238	21.542	21.694	#	41.025	44.88	3.601	37.775	-1.216	1.272		45.059	0.003	1.932	0.004		54.00	0.9	43.4	11.0	39.4	2.716	0.288	0.303	0.008	7.685	6.54	
72	2/5/2004	6:21:33 PM		23.862	20.531	23.238	21.517	21.703	#	40.859	44.623	3.501	37.728	-1.216	1.272		44.823	0.003	1.937	0.004		55.00	0.91667	43.1	11.0	39.3	2.709	0.289	0.304	0.008	7.726	6.57	
73	2/5/2004	6:22:33 PM		23.847	20.516	23.213	21.522	21.778	#	41.097	44.959	3.681	37.648	-1.219	1.269		45.687	0.003	1.942	0.005		56.00	0.93333	43.5	11.2	39.4	2.715	0.290	0.305	0.008	7.736	6.58	
74	2/5/2004	6:23:33 PM		23.867	20.52	23.232	21.516	21.964	#	40.857	44.654	3.622	37.531	-1.216	1.275		45.81	0.003	1.946	0.004		57.00	0.95	43.2	11.2	39.2	2.702	0.290	0.305	0.008	7.783	6.62	
75	2/5/2004	6:24:33 PM		23.877	20.546	23.247	21.496	21.863	#	41.269	45.141	3.683	37.857	-1.216	1.28		45.287	0.003	1.952	0.005		58.00	0.96667	43.7	11.1	39.6	2.728	0.291	0.306	0.008	7.730	6.58	
76	2/5/2004	6:25:33 PM		23.877	20.536	23.223	21.497	21.668	#	41.213	45.141	3.687	37.724	-1.216	1.277		45.503	0.003	1.954	0.005		59.00	0.98333	43.7	11.2	39.5	2.721	0.291	0.306	0.008	7.762	6.61	
77	2/5/2004	6:26:33 PM		23.882	20.551	23.243	21.542	21.708	#	41.108	45.075	3.576	37.845	-1.214	1.283		45.451	0.003	1.961	0.005		60.00	1	43.6	11.1	39.5	2.722	0.292	0.307	0.008	7.784	6.62	
78	2/5/2004	6:27:33 PM		23.874	20.542	23.234	21.508	21.684	#	41.338	45.207	3.632	38.026	-1.216	1.283		44.776	0.003	1.964	0.004		61.00	1.01667	43.7	11.0	39.7	2.736	0.293	0.308	0.008	7.757	6.60	
79	2/5/2004	6:28:33 PM		23.879	20.547	23.244	21.528	21.508	#	41.445	45.317	3.604	38.19	-1.216	1.283		45.191	0.003	1.968	0.005		62.00	1.03333	43.8	11.1	39.8	2.745	0.293	0.308	0.008	7.745	6.59	
80	2/5/2004	6:29:33 PM		23.858	20.537	23.229	21.523	21.548	#	41.219	45.238	3.545	37.917	-1.219	1.286		45.074	0.003	1.97	0.006		63.00	1.05	43.8	11.0	39.6	2.728	0.294	0.309	0.008	7.805	6.64	
81	2/5/2004	6:30:33 PM		23.88	20.548	23.245	21.519	21.62	#	41.122	45.077	3.533	37.929	-1.219	1.283		45.007	0.003	1.978	0.004		64.00	1.06667	43.6	11.0	39.5	2.725	0.295	0.310	0.008	7.841	6.67	
82	2/5/2004	6:31:33 PM		23.874	20.543	23.24	21.508	21.72	#	40.811	44.786	3.493	37.609	-1.219	1.286		44.959	0.003	1.979	0.005		65.00	1.08333	43.3	11.0	39.2	2.703	0.295	0.310	0.008	7.909	6.73	
83	2/5/2004	6:32:33 PM		23.874	20.533	23.229	21.513	21.845	#	40.991	44.867	3.492	37.892	-1.214	1.292		44.949	0.003	1.982	0.004		66.00	1.1	43.4	11.0	39.4	2.719	0.295	0.311	0.008	7.877	6.70	
84	2/5/2004	6:33:33 PM		23.869	20.527	23.204	21.493	21.695	#	40.9	44.822	3.506	37.802	-1.222	1.289		45.164	0.003	1.984	0.005		67.00	1.11667	43.3	11.1	39.4	2.713	0.296	0.311	0.008	7.909	6.73	
85	2/5/2004	6:34:33 PM		23.874	20.543	23.224	21.503	21.675	#	41.085	45.048	3.602	37.821	-1.216	1.292		44.922	0.003	1.988	0.007		68.00	1.13333	43.6	11.0	39.5	2.720	0.296	0.312	0.008	7.900	6.72	
86	2/5/2004	6:35:33 PM		23.884	20.543	23.229	21.468	21.644	#	41.056	44.948	3.547	37.927	-1.219	1.292		44.638	0.003	1.992	0.005		69.00	1.15	43.5	10.9	39.5	2.723	0.297	0.312	0.008	7.907	6.73	
87	2/5/2004	6:36:33 PM		23.88	20.548	23.245	21.494	21.283	#	41.107	45.106	3.562	37.808	-1.219	1.292		44.594	0.003	1.994	0.004		70.00	1.16667	43.6	10.9	39.5	2.720	0.297	0.312	0.008	7.918	6.74	
88	2/5/2004	6:37:33 PM		23.875	20.548	23.25	21.489	21.66	#	41.008	45.166	3.542	37.728	-1.216	1.298		45.518	0.003	2.003	0.005		71.00	1.18333	43.7	11.2	39.4	2.714	0.299	0.314	0.008	7.971	6.78	
89	2/5/2004	6:38:33 PM		23.88	20.544	23.251	21.494	21.821	#	40.94	45.054	3.485	37.786	-1.219	1.295		44.415	0.003	2	0.005		72.00	1.2	43.6	10.9	39.4	2.714	0.298	0.313	0.008	7.960	6.77	
90	2/5/2004	6:39:33 PM		23.885	20.548	23.245	21.514	21.791	#	41.114	45.054	3.501	38.046	-1.216	1.298		44.738	0.003	2.008	0.005		73.00	1.21667	43.6	11.0	39.6	2.729	0.299	0.315	0.008	7.949	6.76	
91	2/5/2004	6:40:33 PM		23.865	20.528	23.215	21.463	21.449	#	40.975	45.118	3.575	37.706	-1.216	1.298		44.821	0.003	2.008	0.005		74.00	1.23333	43.6	11.0	39.3	2.712	0.299	0.315	0.008	8.004	6.81	
92	2/5/2004	6:41:33 PM		23.88	20.548	23.22	21.489	21.379	#	40.722	44.902	3.494	37.552	-1.216	1.301		44.721	0.003	2.01	0.004		75.00	1.25	43.4	11.0	39.1	2.698	0.300	0.315	0.008	8.053	6.85	
93	2/5/2004	6:42:33 PM		23.885	20.559	23.241	21.464	21.314	#	40.977	45.033	3.524	37.724	-1.216	1.303		44.746	0.003	2.012	0.004		76.00	1.26667	43.6	11.0	39.4	2.713	0.300	0.315	0.008	8.012	6.82	
94	2/5/2004	6:43:33 PM		23.88	20.559	23.231	21.434	21.746	#	41.02	45.259	3.597	37.665	-1.216	1.303		44.775	0.003	2.02	0.004		77.00	1.28333	43.8	11.0	39.3	2.713	0.301	0.317	0.008	8.048	6.85	
95	2/5/2004	6:44:33 PM		23.875	20.539	23.216	21.439	21.736	#	40.601	44.762	3.441	37.57	-1.222	1.301		45.205	0.003	2.02	0.005		78.00	1.3	43.3	11.1	39.1	2.695	0.301	0.317	0.008	8.105	6.90	
96	2/5/2004	6:45:33 PM		23.865	20.543	23.225	21.474	22.192	#	41.159	45.274	3.621	37.81	-1.219	1.306		44.805	0.003	2.028	0.005		79.00	1.31667	43.8	11.0	39.5	2.722	0.302	0.318	0.008	8.052	6.85	
97	2/5/2004	6:46:33 PM		23.87	20.549	23.236	21.514	22.303	#	41.101	45.512	3.587	37.656	-1.216	1.306		44.819	0.003	2.027	0.005		80.00	1.33333	44.0	11.0	39.4	2.715	0.302	0.318	0.008	8.068	6.87	
98	2/5/2004	6:47:33 PM		23.87	20.548	23.245	21.504	22.187	#	41.025	45.327	3.61	37.693	-1.216	1.309		44.957	0.003	2.033	0.006		81.00	1.35	43.9	11.0	39.4	2.714	0.303	0.319	0.008	8.093	6.89	
99	2/5/2004	6:48:33 PM		23.875	20.548	23.24	21.489	21.941	#	40.693	44.905	3.458	37.601	-1.216	1.309		44.88	0.003	2.031	0.004		82.00	1.36667	43.4	11.0	39.1	2.699	0.303	0.318	0.008	8.130	6.92	
100	2/5/2004	6:49:33 PM		23.885	20.563	23.245	21.474	21.66	#	40.778	45.116	3.492	37.543	-1.219	1.309		44.738	0.003	2.04	0.005		83.00	1.38333	43.6	11.0	39.2	2.700	0.304	0.320	0.008	8.162	6.95	
101	2/5/2004	6:50:33 PM		23.871	20.544	23.211	21.47	21.591	#	40.633	44.828	3.566	37.379	-1.222	1.309		45.366	0.003	2.041	0.004		84.00	1.4	43.4	11.1	39.0	2.689	0.304	0.320	0.008	8.207	6.98	
102	2/5/2004	6:51:33 PM		23.881	20.544	23.226	21.46	21.701	#	40.915	45.342	3.599	37.55	-1.219	1.312		44.532	0.003	2.045	0.005		85.00	1.41667	43.9	10.9	39.2	2.705	0.305	0.321	0.008	8.172	6.95	
103	2/5/2004	6:52:33 PM		23.876	20.555	23.237	21.455	21.777	#	40.446	44.762	3.471	37.283	-1.219	1.315		45.107	0.003	2.052	0.004		86.00	1.43333	43.3	11.1	38.9	2.680	0.306	0.322	0.008	8.275	7.04	
104	2/5/2004	6:53:33 PM		23.881	20.555	23.242	21.49	21.848	#	40.643	44.983	3.49	37.55	-1.216	1.315		44.951	0.003	2.054	0.005		87.00	1.45	43.5	11.0	39.1	2.696	0.306	0.322	0.008	8.233	7.01	
105	2/5/2004	6:54:33 PM		23.882	20.555	23.247	21.491	22.034	#	40.96	45.137	3.608	37.759	-1.216	1.318		44.871	0.003	2.055	0.004		88.00	1.46667	43.7	11.0	39.4	2.714	0.306	0.322	0.008	8.180	6.96	
106	2/5/2004	6:55:33 PM		23.867	20.55	23.237	21.476	21.893	#	40.492	44.687	3.579	37.287	-1.222	1.315		44.621	0.003	2.06	0.004		89.00	1.48333	43.2	10.9	38.9	2.681	0.307	0.323	0.008	8.302	7.06	
107	2/5/2004	6:56:33 PM		23.877	20.55	23.247	21.466	21.979	#	40.628	45.039	3.475	37.422	-1.216	1.321		44.725	0.003	2.063	0.004		90.00	1.5	43.6	11.0	39.0	2.691	0.308	0.323	0.008	8.283	7.05	
108																																	
109		Averages		23.8	20.5	23.1	21.5	21.7	#	41.3	45.0	3.6	38.0	-1.2	1.3	#	44.9	0.0	1.9	0.0	#			43.5	11.0	39.7	2.735	0.281	0.296	0.0075	7.469	6.357	#
110		Maximum		23.9	20.6	23.3	21.6	22.3	#	42.4	45.5	3.8	39.0	-1.2	1.3	#	46.6	0.0	2.1	0.0	#			44.0	11.4	40.6	2.802	0.308	0.323	0.0083	8.302	7.065	#
111		Median		23.8	20.5	23.2	21.5	21.7	#	41.3	45.0	3.6	37.9	-1.2	1.3	#	45.0	0.0	1.9	0.0	#			43.5	11.0	39.6	2.729	0.286	0.300	0.0076	7.592	6.461	#
112		Minimum		23.4	20.4	22.7	21.4	21.3	#	40.4	44.4	3.3	37.3	-1.2	1.2	#	42.6	0.0	1.6	0.0	#			43.0	10.4	38.9	2.680	0.238	0.254	0.0063	6.283	5.347	#
113		2 x Std Dev		0.290	0.063	0.272	0.061	0.409	#	0.908	0.475	0.209	0.773	0.005	0.075	#	1.395	0.000	0.264	0.002	#			0.475	0.342	0.828	0.057	0.039	0.040	0.0011	1.135	0.966	#
114	Number of Points Used*			85	85	85	85	85	#	85	85	85	85	85	85	0	85	85	85	85	0			85	85	85	85	85	85	85	85	85	0
115		* Backpulse points in box are not included																															
116																																	
117																											1.5-hour avg. =		0.2961				

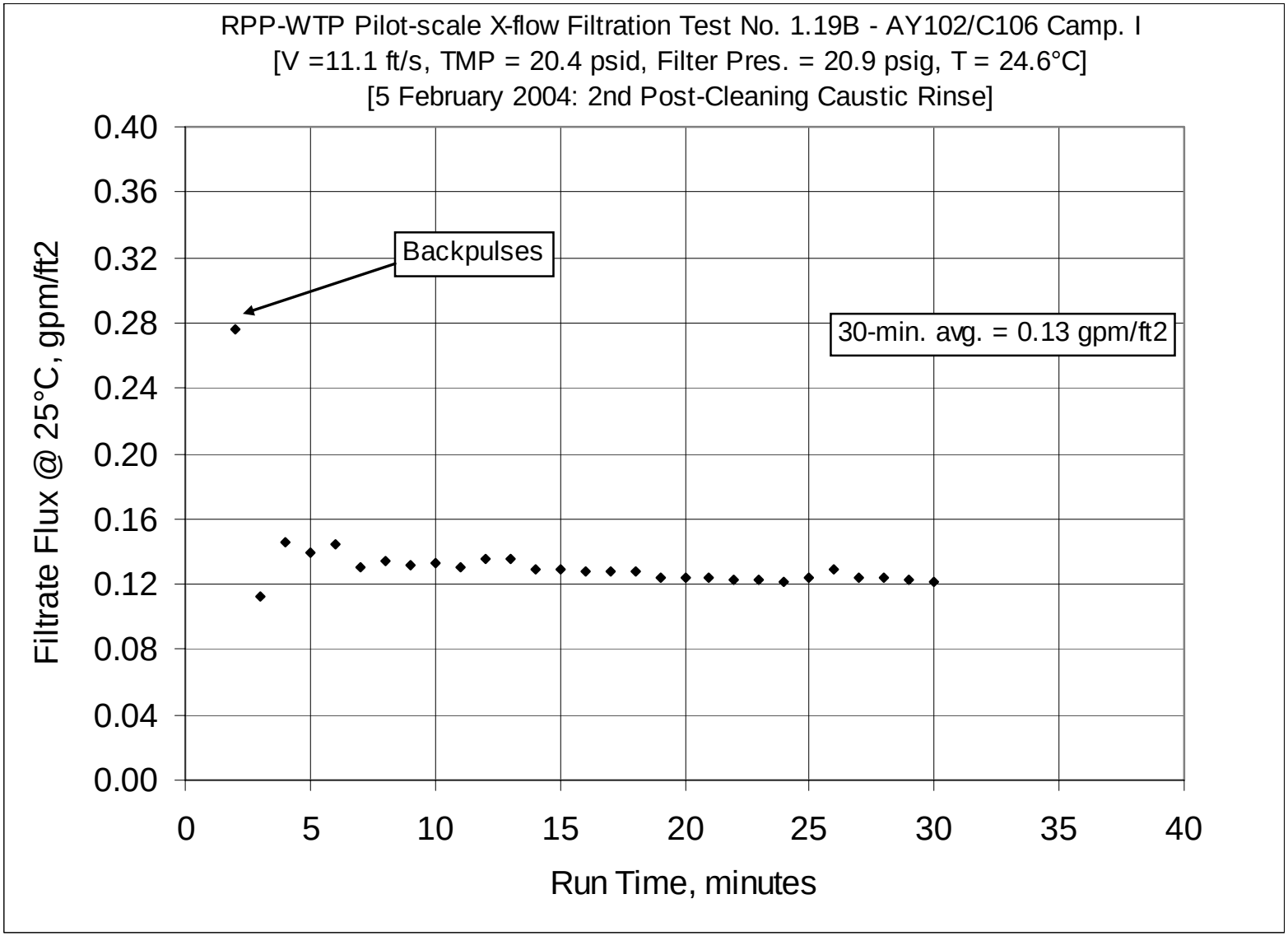
RUN # 1.19; SECOND SLURRY RINSE WITH 0.1 M NAOH



RUN # 1.19; SECOND SLURRY RINSE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface A	6.707	FT2							
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/5/2004	7:23:35 PM		21.441	20.504	21.849	20.603	23.468		3.317	23.517	3.284	-0.425	15.627	61.641		43.682	0.003	-0.01	0.007		0	0	22.0	10.7	1.4	0.100	-0.001	-0.002	-0.001	-1.128	-0.96	
18	2/5/2004	7:24:35 PM		22.068	20.503	22.004	20.571	23.657		2.786	23.506	3.077	-0.811	16.067	25.931		43.461	0.003	14.643	0.084		1.00	0.01667	22.0	10.7	1.0	0.068	2.183	2.377	2.407	2407.393	2048.73	
19	2/5/2004	7:25:35 PM		22.268	20.487	22.179	20.51	23.676		15.273	22.924	3.336	12.135	2.333	1.567		46.14	0.005	2.853	0.003		2.00	0.03333	21.5	11.3	13.7	0.945	0.425	0.461	0.034	33.630	28.62	
20	2/5/2004	7:26:35 PM		22.563	20.506	22.314	20.559	23.254		19.344	24.296	2.672	16.654	-0.449	1.419		42.519	0.003	2.247	0.004		3.00	0.05	22.8	10.4	18.0	1.241	0.335	0.362	0.020	20.088	17.10	
21	2/5/2004	7:27:35 PM		22.774	20.51	22.554	20.568	22.988		23.139	26.354	3.175	19.839	-1.214	1.228		44.98	0.003	1.849	0.004		4.00	0.06667	24.9	11.0	21.5	1.482	0.276	0.295	0.014	13.751	11.70	
22	2/5/2004	7:28:35 PM		22.878	20.484	22.654	20.593	23.308		21.3	23.044	3.14	17.961	-1.216	1.006		44.433	0.003	1.369	0.004		5.00	0.08333	21.6	10.9	19.6	1.353	0.204	0.218	0.011	11.113	9.46	
23	2/5/2004	7:29:35 PM		23.018	20.494	22.769	20.617	23.132		22.146	23.711	3.113	18.811	-1.216	0.983		45.076	0.003	1.292	0.004		6.00	0.1	22.2	11.0	20.5	1.412	0.193	0.205	0.010	10.021	8.53	
24	2/5/2004	7:30:35 PM		23.123	20.478	22.904	20.607	23.347		22.422	23.817	3.092	19.156	-1.216	0.954		44.738	0.003	1.234	0.006		7.00	0.11667	22.3	11.0	20.8	1.433	0.184	0.195	0.009	9.392	7.99	
25	2/5/2004	7:31:35 PM		23.232	20.477	22.998	20.666	23.391		22.594	23.854	3.089	19.305	-1.211	0.945		44.127	0.003	1.189	0.005		8.00	0.13333	22.4	10.8	20.9	1.444	0.177	0.188	0.009	8.956	7.62	
26	2/5/2004	7:32:35 PM		23.342	20.487	23.074	20.727	23.275		22.787	24.016	3.11	19.385	-1.214	0.928		43.824	0.003	1.16	0.006		9.00	0.15	22.5	10.7	21.1	1.454	0.173	0.183	0.009	8.662	7.37	
27	2/5/2004	7:33:35 PM		23.417	20.476	23.203	20.68	23.284		23.118	24.279	3.241	19.566	-1.216	0.919		43.82	0.003	1.135	0.006		10.00	0.16667	22.8	10.7	21.3	1.471	0.169	0.178	0.008	8.343	7.10	
28	2/5/2004	7:34:35 PM		23.511	20.48	23.268	20.66	22.135		22.772	23.759	3.302	19.26	-1.216	0.907		44.567	0.003	1.097	0.006		11.00	0.18333	22.3	10.9	21.0	1.449	0.164	0.172	0.008	8.174	6.96	
29	2/5/2004	7:35:35 PM		23.595	20.469	23.316	20.562	22.249		22.855	23.923	3.153	19.439	-1.219	0.902		44.832	0.003	1.088	0.006		12.00	0.2	22.4	11.0	21.1	1.458	0.162	0.170	0.008	8.045	6.85	
30	2/5/2004	7:36:35 PM		23.676	20.449	23.403	20.467	19.981		22.805	23.875	3.015	19.513	-1.216	0.902		44.035	0.003	1.085	0.004		13.00	0.21667	22.4	10.8	21.2	1.459	0.162	0.169	0.008	7.999	6.81	
31	2/5/2004	7:37:35 PM		23.739	20.407	23.456	20.399	19.44		22.894	23.821	3.15	19.566	-1.216	0.896		43.845	0.003	1.07	0.005		14.00	0.23333	22.3	10.7	21.2	1.464	0.160	0.167	0.008	7.850	6.68	
32	2/5/2004	7:38:35 PM		23.813	20.375	23.49	20.373	19.474		23.176	24.107	3.168	19.765	-1.216	0.893		43.897	0.003	1.064	0.005		15.00	0.25	22.6	10.8	21.5	1.480	0.159	0.166	0.008	7.711	6.56	
33	2/5/2004	7:39:35 PM		23.866	20.358	23.527	20.275	20.334		23.064	23.968	3.101	19.775	-1.219	0.89		43.781	0.003	1.053	0.006		16.00	0.26667	22.5	10.7	21.4	1.477	0.157	0.164	0.008	7.641	6.50	
34	2/5/2004	7:40:35 PM		23.909	20.331	23.611	20.258	21.665		23.033	23.871	3.15	19.691	-1.216	0.887		43.824	0.003	1.049	0.005		17.00	0.28333	22.4	10.7	21.4	1.473	0.156	0.163	0.008	7.615	6.48	
35	2/5/2004	7:41:35 PM		23.95	20.296	23.641	20.223	22.318		23	23.919	3.151	19.619	-1.219	0.89		44.1	0.003	1.045	0.006		18.00	0.3	22.4	10.8	21.3	1.469	0.156	0.162	0.008	7.598	6.47	
36	2/5/2004	7:42:35 PM		24.012	20.298	23.678	20.265	22.445		23.22	24.163	3.167	19.79	-1.216	0.884		43.901	0.003	1.039	0.006		19.00	0.31667	22.7	10.8	21.5	1.483	0.155	0.161	0.007	7.478	6.36	
37	2/5/2004	7:43:35 PM		24.046	20.277	23.697	20.33	22.479		22.569	23.345	3.517	18.827	-1.219	0.87		46.267	0.003	0.995	0.007		20.00	0.33333	21.9	11.3	20.7	1.427	0.148	0.154	0.007	7.436	6.33	
38	2/5/2004	7:44:35 PM		24.085	20.276	23.752	20.42	22.665		22.556	23.33	3.394	19.004	-1.216	0.87		45.072	0.003	0.997	0.007		21.00	0.35	21.9	11.0	20.8	1.433	0.149	0.154	0.007	7.410	6.31	
39	2/5/2004	7:45:35 PM		24.105	20.261	23.822	20.445	22.765		22.681	23.467	3.458	18.975	-1.211	0.876		46.079	0.003	1	0.006		22.00	0.36667	22.0	11.3	20.8	1.436	0.149	0.154	0.007	7.401	6.30	
40	2/5/2004	7:46:35 PM		24.152	20.262	23.863	20.492	22.972		22.66	23.5	3.399	19	-1.216	0.873		45.875	0.003	0.999	0.006		23.00	0.38333	22.0	11.2	20.8	1.436	0.149	0.154	0.007	7.384	6.28	
41	2/5/2004	7:47:35 PM		24.168	20.243	23.854	20.538	23.073		22.612	23.409	3.316	19.112	-1.216	0.87		45.7	0.003	0.995	0.005		24.00	0.4	21.9	11.2	20.9	1.438	0.148	0.153	0.007	7.345	6.25	
42	2/5/2004	7:48:35 PM		24.189	20.249	23.866	20.554	23.054		22.764	23.517	3.371	19.197	-1.216	0.873		45.105	0.003	1	0.006		25.00	0.41667	22.0	11.1	21.0	1.447	0.149	0.154	0.007	7.338	6.24	
43	2/5/2004	7:49:35 PM		24.23	20.246	23.897	20.576	23.121		22.934	23.745	3.424	19.238	-1.219	0.873		44.823	0.003	1	0.005		26.00	0.43333	22.3	11.0	21.1	1.454	0.149	0.154	0.007	7.294	6.21	
44	2/5/2004	7:50:35 PM		24.261	20.252	23.958	20.592	23.112		22.724	23.494	3.351	19.186	-1.216	0.873		45.783	0.003	1.004	0.005		27.00	0.45	22.0	11.2	21.0	1.445	0.150	0.154	0.007	7.357	6.26	
45	2/5/2004	7:51:35 PM		24.272	20.243	23.974	20.619	23.022		22.585	23.405	3.349	18.973	-1.214	0.873		45.543	0.003	0.998	0.006		28.00	0.46667	21.9	11.2	20.8	1.433	0.149	0.153	0.007	7.371	6.27	
46	2/5/2004	7:52:35 PM		24.309	20.249	23.986	20.65	23.094		22.612	23.448	3.302	19.073	-1.214	0.873		45.322	0.003	1.002	0.006		29.00	0.48333	22.0	11.1	20.8	1.437	0.149	0.154	0.007	7.376	6.28	
47	2/5/2004	7:53:35 PM		24.315	20.24	23.967	20.727	23.125		22.708	23.498	3.317	19.195	-1.216	0.87		45.762	0.003	1.001	0.004		30.00	0.5	22.0	11.2	21.0	1.445	0.149	0.154	0.007	7.334	6.24	
48	2/5/2004	7:54:35 PM		24.346	20.246	23.993	20.738	23.056		22.662	23.494	3.356	19.059	-1.216	0.873		45.9	0.003	1.002	0.004		31.00	0.51667	22.0	11.2	20.9	1.438	0.149	0.154	0.007	7.368	6.27	
49	2/5/2004	7:55:35 PM		24.352	20.237	24.044	20.679	22.992		22.54	23.303	3.275	19.123	-1.216	0.873		45.773	0.003	1.006	0.005		32.00	0.53333	21.8	11.2	20.8	1.436	0.150	0.154	0.007	7.397	6.29	
50	2/5/2004	7:56:35 PM		24.373	20.243	24.065	20.771	23.133		22.795	23.587	3.34	19.209	-1.214	0.873		45.789	0.003	1.008	0.005		33.00	0.55	22.1	11.2	21.0	1.448	0.150	0.154	0.007	7.347	6.25	
51																																	
52		Averages		23.9	20.3	23.6	20.5	22.4	#	22.8	23.7	3.3	19.3	-1.2	0.9	#	44.9	0.0	1.1	0.0	#			22.2	11.0	21.0	1.449	0.158	0.164	0.0078	7.809	6.645	#
53		Maximum		24.4	20.5	24.1	20.8	23.4	#	23.2	24.3	3.5	19.8	-1.2	1.0	#	46.3	0.0	1.3	0.0	#			22.8	11.3	21.5	1.483	0.193	0.205	0.0100	10.021	8.528	#
54		Median		24.0	20.3	23.7	20.6	23.0	#	22.7	23.7	3.3	19.2	-1.2	0.9	#	45.0	0.0	1.0	0.0	#			22.3	11.0	21.0	1.446	0.153	0.158	0.0075	7.457	6.346	#
55		Minimum		23.0	20.2	22.8	20.2	19.4	#	22.1	23.3	3.0	18.8	-1.2	0.9	#	43.8	0.0	1.0	0.0	#			21.8	10.7	20.5	1.412	0.148	0.153	0.0073	7.294	6.208	#
56		2 x Std Dev		0.791	0.196	0.731	0.319	2.304	#	0.470	0.538	0.261	0.565	0.004	0.057	#	1.673	0.000	0.156	0.002	#			0.538	0.410	0.502	0.035	0.023	0.028	0.0014	1.358	1.156	#
57	Number of Points Used*			28	28	28	28	28	0	28	28	28	28	28	28	0	28	28	28	28	0			28	28	28	28	28	28	28	28	28	0
58		* Backpulse points in box are not included																															
59																																	
60																											30-minute avg.		0.1641				

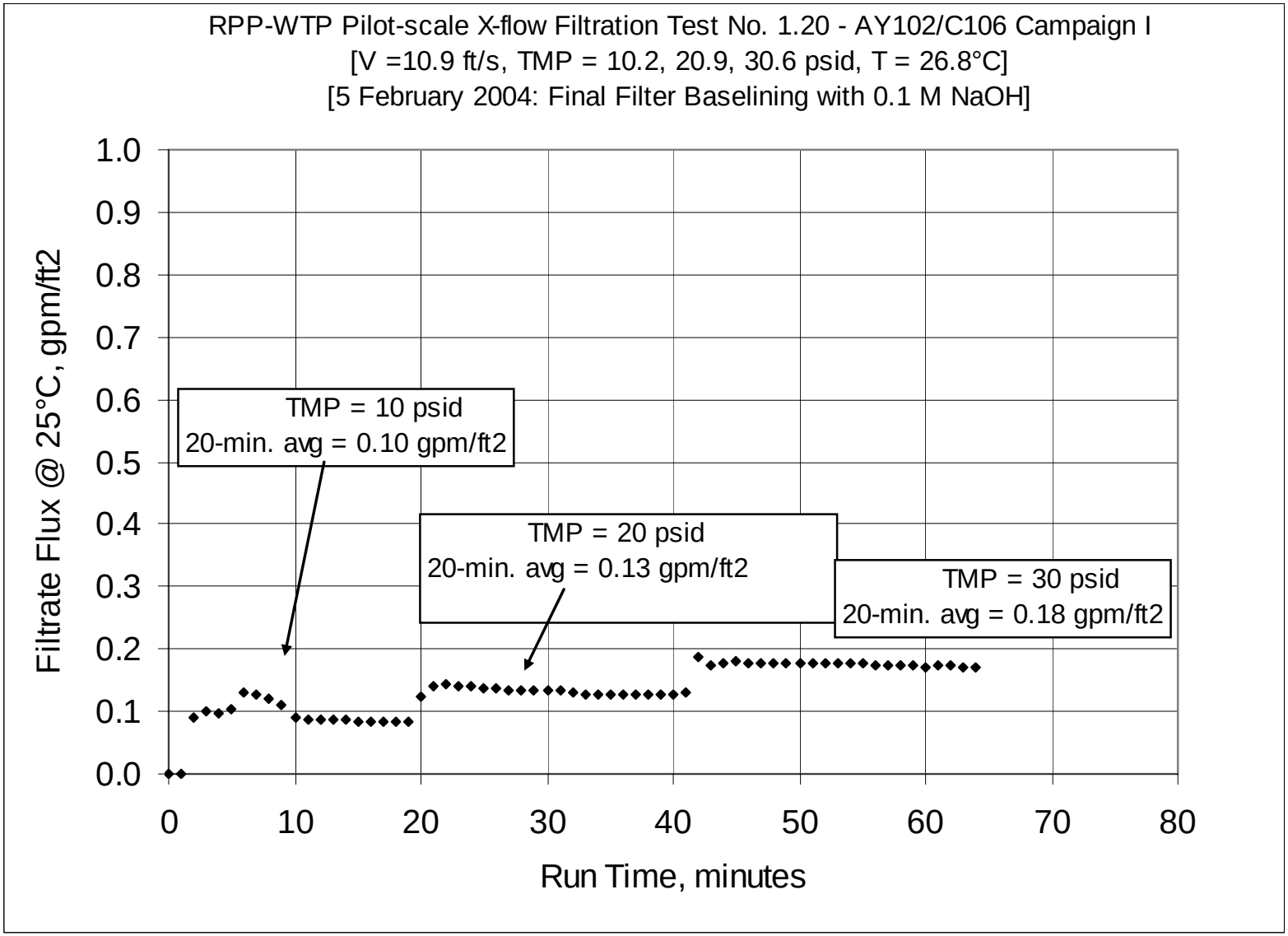
RUN # 1.19; THIRD SLURRY RINSE WITH 0.1 M NAOH



RUN # 1.19; THIRD SLURRY RINSE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	2/5/2004	8:19:26 PM		22.627	20.293	23.237	20.199	23.549		2.858	22.601	3.407	-0.909	14.938	63.214		44.994	0.003	14.643	0.004		0	0	21.1	11.0	1.0	0.067	2.183	2.295	2.355	2354.960	2004.11	
18	2/5/2004	8:20:26 PM		22.095	20.288	23.357	20.27	23.488		2.972	22.63	3.419	-0.893	14.903	27.026		44.834	0.003	14.643	0.006		1.00	0.01667	21.2	11.0	1.0	0.072	2.183	2.287	2.200	2200.173	1872.38	
19	2/5/2004	8:21:26 PM		23.576	20.298	23.534	20.346	23.684		18.991	21.948	3.281	15.853	-1.216	0.922		46.037	0.003	1.779	0.004		2.00	0.03333	20.5	11.3	17.4	1.201	0.265	0.276	0.016	15.869	13.50	
20	2/5/2004	8:22:26 PM		23.896	20.282	23.643	20.35	23.363		21.652	22.364	3.333	18.207	-1.216	0.85		45.326	0.003	0.725	0.003		3.00	0.05	20.9	11.1	19.9	1.374	0.108	0.112	0.006	5.636	4.80	
21	2/5/2004	8:23:26 PM		23.976	20.287	23.803	20.395	23.427		21.741	22.227	3.357	18.24	-1.216	0.829		45.395	0.003	0.945	0.004		4.00	0.06667	20.8	11.1	20.0	1.378	0.141	0.146	0.007	7.290	6.20	
22	2/5/2004	8:24:26 PM		24.095	20.296	23.882	20.409	23.115		21.843	22.25	3.354	18.316	-1.216	0.815		45.437	0.003	0.907	0.004		5.00	0.08333	20.8	11.1	20.1	1.384	0.135	0.140	0.007	6.951	5.92	
23	2/5/2004	8:25:26 PM		24.19	20.281	23.972	20.404	23.276		21.953	22.343	3.345	18.468	-1.222	0.806		45.349	0.003	0.937	0.003		6.00	0.1	20.9	11.1	20.2	1.393	0.140	0.144	0.007	7.116	6.06	
24	2/5/2004	8:26:26 PM		24.25	20.295	24.077	20.404	23.33		21.963	22.271	3.353	18.425	-1.216	0.803		45.385	0.003	0.853	0.004		7.00	0.11667	20.8	11.1	20.2	1.392	0.127	0.131	0.006	6.464	5.50	
25	2/5/2004	8:27:26 PM		24.364	20.274	24.147	20.388	23.174		21.76	22.031	3.287	18.306	-1.216	0.803		45.107	0.003	0.875	0.006		8.00	0.13333	20.6	11.1	20.0	1.381	0.130	0.134	0.007	6.671	5.68	
26	2/5/2004	8:28:26 PM		24.423	20.263	24.215	20.442	23.048		22.027	22.221	3.293	18.618	-1.219	0.798		45.335	0.003	0.863	0.006		9.00	0.15	20.7	11.1	20.3	1.401	0.129	0.132	0.006	6.473	5.51	
27	2/5/2004	8:29:26 PM		24.503	20.278	24.29	20.477	23.183		21.857	22.095	3.265	18.445	-1.219	0.798		45.284	0.003	0.871	0.005		10.00	0.16667	20.6	11.1	20.2	1.389	0.130	0.132	0.007	6.575	5.60	
28	2/5/2004	8:30:26 PM		24.582	20.272	24.365	20.452	23.142		22.013	22.368	3.376	18.353	-1.216	0.798		45.48	0.003	0.859	0.006		11.00	0.18333	20.9	11.1	20.2	1.392	0.128	0.130	0.006	6.460	5.50	
29	2/5/2004	8:31:26 PM		24.642	20.277	24.435	20.461	23.041		22.003	22.254	3.221	18.624	-1.219	0.795		45.168	0.003	0.894	0.005		12.00	0.2	20.8	11.1	20.3	1.401	0.133	0.135	0.007	6.667	5.67	
30	2/5/2004	8:32:26 PM		24.702	20.282	24.48	20.517	22.976		22.102	22.377	3.288	18.616	-1.219	0.789		45.287	0.003	0.897	0.004		13.00	0.21667	20.9	11.1	20.4	1.404	0.134	0.136	0.007	6.666	5.67	
31	2/5/2004	8:33:26 PM		24.747	20.271	24.509	20.516	22.926		22.218	22.449	3.379	18.628	-1.216	0.792		45.18	0.003	0.852	0.006		14.00	0.23333	21.0	11.1	20.4	1.408	0.127	0.129	0.006	6.306	5.37	
32	2/5/2004	8:34:26 PM		24.816	20.26	24.518	20.515	23.055		22.154	22.428	3.318	18.593	-1.219	0.792		45.138	0.003	0.857	0.006		15.00	0.25	21.0	11.1	20.4	1.405	0.128	0.130	0.006	6.357	5.41	
33	2/5/2004	8:35:26 PM		24.851	20.266	24.599	20.536	22.88		22.262	22.455	3.36	18.725	-1.216	0.789		45.214	0.003	0.851	0.005		16.00	0.26667	21.0	11.1	20.5	1.413	0.127	0.128	0.006	6.261	5.33	
34	2/5/2004	8:36:26 PM		24.886	20.27	24.639	20.56	22.854		22.254	22.482	3.286	18.839	-1.219	0.789		45.239	0.003	0.848	0.005		17.00	0.28333	21.0	11.1	20.5	1.417	0.126	0.128	0.006	6.216	5.29	
35	2/5/2004	8:37:26 PM		24.925	20.27	24.658	20.58	23.044		22.034	22.281	3.21	18.651	-1.214	0.792		44.703	0.003	0.846	0.005		18.00	0.3	20.8	11.0	20.3	1.403	0.126	0.127	0.006	6.260	5.33	
36	2/5/2004	8:38:26 PM		24.965	20.27	24.668	20.55	22.874		21.832	22.097	3.171	18.513	-1.219	0.786		45.46	0.003	0.824	0.007		19.00	0.31667	20.6	11.1	20.2	1.391	0.123	0.124	0.006	6.147	5.23	
37	2/5/2004	8:39:26 PM		24.995	20.27	24.708	20.555	22.964		22.185	22.443	3.267	18.686	-1.214	0.789		45.082	0.003	0.826	0.007		20.00	0.33333	21.0	11.0	20.4	1.409	0.123	0.124	0.006	6.076	5.17	
38	2/5/2004	8:40:26 PM		25.015	20.264	24.768	20.585	22.918		22.015	22.211	3.236	18.64	-1.216	0.786		45.068	0.003	0.822	0.007		21.00	0.35	20.7	11.0	20.3	1.402	0.123	0.123	0.006	6.068	5.16	
39	2/5/2004	8:41:26 PM		25.04	20.26	24.778	20.55	23.145		22.235	22.459	3.359	18.663	-1.216	0.786		45.214	0.003	0.822	0.006		22.00	0.36667	21.0	11.1	20.4	1.410	0.123	0.123	0.006	6.031	5.13	
40	2/5/2004	8:42:26 PM		25.07	20.254	24.763	20.549	23.164		22.129	22.343	3.205	18.702	-1.222	0.783		45.088	0.003	0.816	0.006		23.00	0.38333	20.9	11.0	20.4	1.408	0.122	0.122	0.006	5.999	5.11	
41	2/5/2004	8:43:26 PM		25.09	20.255	24.783	20.57	23.084		22.013	22.29	3.202	18.583	-1.214	0.786		45.065	0.003	0.813	0.005		24.00	0.4	20.8	11.0	20.3	1.399	0.121	0.122	0.006	6.008	5.11	
42	2/5/2004	8:44:26 PM		25.13	20.265	24.838	20.6	23.175		22.289	22.489	3.303	18.761	-1.216	0.786		45.099	0.003	0.826	0.004		25.00	0.41667	21.0	11.1	20.5	1.415	0.123	0.124	0.006	6.027	5.13	
43	2/5/2004	8:45:26 PM		25.145	20.26	24.878	20.62	23.46		22.181	22.362	3.261	18.649	-1.214	0.659		45.095	0.003	0.865	0.006		26.00	0.43333	20.9	11.1	20.4	1.408	0.129	0.129	0.006	6.339	5.39	
44	2/5/2004	8:46:26 PM		25.155	20.265	24.868	20.62	23.445		22.278	22.406	3.309	18.772	-1.219	0.708		45.205	0.003	0.827	0.006		27.00	0.45	20.9	11.1	20.5	1.415	0.123	0.124	0.006	6.030	5.13	
45	2/5/2004	8:47:26 PM		25.179	20.248	24.862	20.624	23.434		22.202	22.323	3.318	18.714	-1.216	0.711		45.109	0.003	0.831	0.006		28.00	0.46667	20.9	11.1	20.5	1.411	0.124	0.124	0.006	6.080	5.17	
46	2/5/2004	8:48:26 PM		25.194	20.253	24.887	20.609	23.194		22.175	22.412	3.226	18.725	-1.216	0.714		45.203	0.003	0.822	0.005		29.00	0.48333	20.9	11.1	20.5	1.410	0.123	0.123	0.006	6.012	5.12	
47	2/5/2004	8:49:26 PM		25.208	20.252	24.926	20.608	23.032		22.341	22.611	3.268	18.839	-1.216	0.708		45.02	0.003	0.815	0.006		30.00	0.5	21.1	11.0	20.6	1.420	0.122	0.122	0.006	5.914	5.03	
48																																	
49		Averages		24.8	20.3	24.6	20.5	23.1	#	22.1	22.3	3.3	18.6	-1.2	0.8	#	45.2	0.0	0.8	0.0	#			20.9	11.1	20.4	1.404	0.127	0.128	0.0063	6.289	5.352	#
50		Maximum		25.2	20.3	24.9	20.6	23.5	#	22.3	22.6	3.4	18.8	-1.2	0.8	#	45.5	0.0	0.9	0.0	#			21.1	11.1	20.6	1.420	0.140	0.144	0.0071	7.116	6.056	#
51		Median		24.9	20.3	24.7	20.6	23.1	#	22.1	22.4	3.3	18.6	-1.2	0.8	#	45.2	0.0	0.8	0.0	#			20.9	11.1	20.4	1.405	0.126	0.128	0.0063	6.260	5.328	#
52		Minimum		24.2	20.2	24.0	20.4	22.9	#	21.8	22.0	3.2	18.3	-1.2	0.7	#	44.7	0.0	0.8	0.0	#			20.6	11.0	20.0	1.381	0.121	0.122	0.0059	5.914	5.033	#
53		2 x Std Dev		0.607	0.021	0.541	0.142	0.346	#	0.302	0.268	0.115	0.271	0.005	0.077	#	0.314	0.000	0.059	0.002	#			0.268	0.077	0.276	0.019	0.009	0.011	0.0006	0.572	0.487	#
54		Number of Points Used*		25	25	25	25	25	0	25	25	25	25	25	25	0	25	25	25	25	0			25	25	25	25	25	25	25	25	25	0
55		* Backpulse points in box are not included																															
56																																	
57																											30-minute avg.	0.1280					

RUN # 1.21A, B, C; POST-TEST BASELINE WITH THE THIRD CAUSTIC RINSE SOLUTION



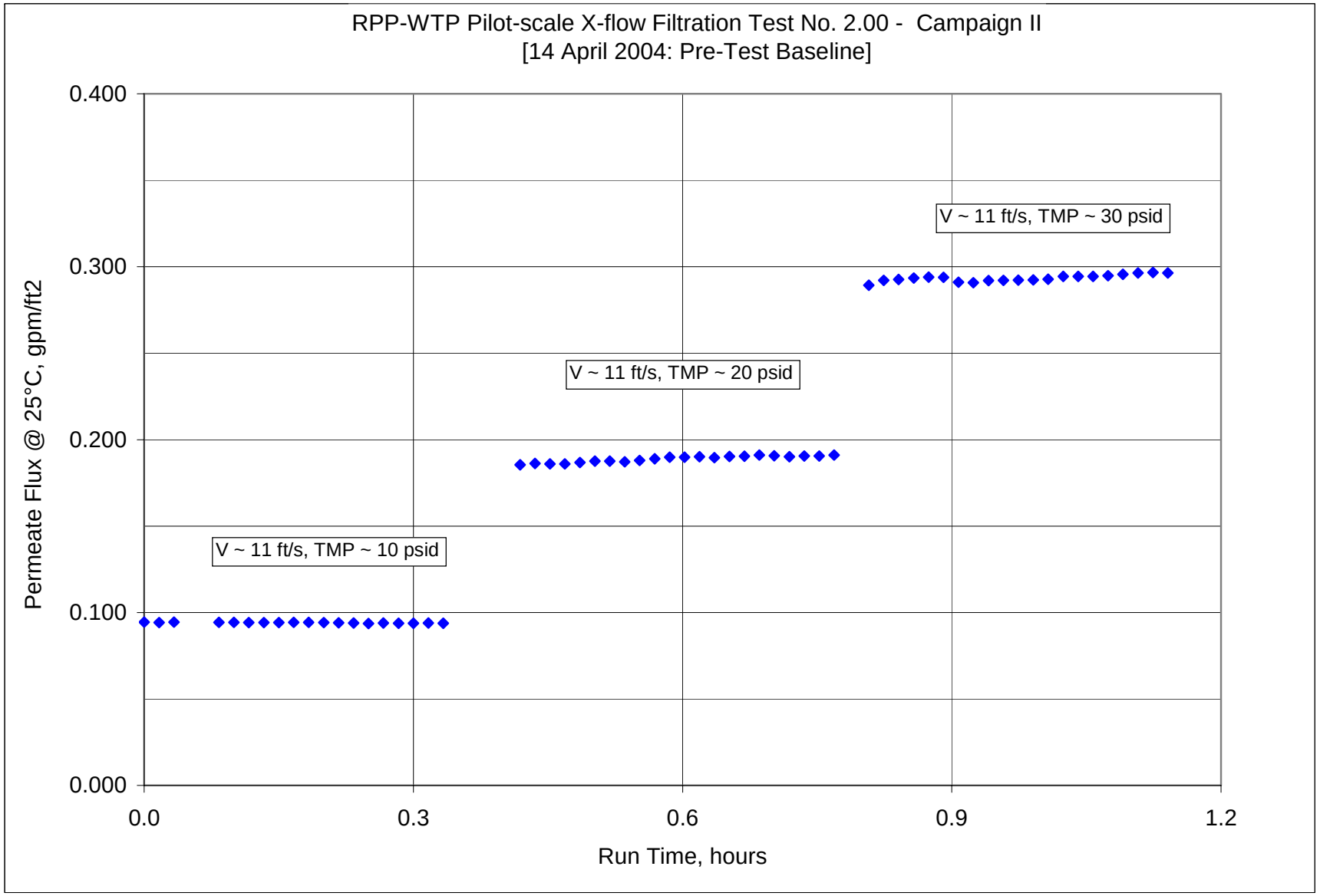
RUN # 1.21A, B, C; POST-TEST BASELINE WITH THE THIRD CAUSTIC RINSE SOLUTION – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>						<<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	2/5/2004	9:26:34 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Filter Surface		6.707	FT2						
8	2/5/2004	9:26:52 AM		19.191	18.592	16.892	19.019	18.202		0.056	-0.05	-0.029	0	-0.177	0.121		-0.093	0.003	14.643	0.004				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	2/5/2004	9:26:53 AM		19.187	18.582	16.872	19.03	18.157		0.056	-0.05	-0.029	0	-0.18	0.124		-0.091	0.003	14.643	0.004													
10	2/5/2004	9:26:54 AM		19.181	18.571	16.861	19.024	18.146		0.058	-0.05	-0.029	-0.002	-0.18	0.121		-0.091	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	2/5/2004	9:26:55 AM		19.181	18.577	16.867	19.024	18.152		0.058	-0.05	-0.029	0.002	-0.177	0.121		-0.093	0.003	14.643	0.004													
12	2/5/2004	9:26:56 AM		19.181	18.577	16.872	19.024	18.157		0.056	-0.048	-0.029	0	-0.177	0.121		-0.091	0.003	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	2/5/2004	9:26:57 AM		19.186	18.572	16.867	19.029	18.152		0.056	-0.05	-0.029	0	-0.177	0.118		-0.093	0.003	14.643	0.004				VVVV				< Filtrate Flux		<< PERMIABILITY >>		
14	2/5/2004	9:26:58 AM		19.192	18.587	16.877	19.03	18.162		0.058	-0.05	-0.028	0	-0.177	0.121		-0.091	0.003	14.643	0.005								at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar
17	2/5/2004	9:23:33 PM		22.362	20.208	22.725	20.114	23.724		2.676	13.769	3.295	-0.919	6.221	52.281		44.133	0.003	14.643	0.004		0	0	12.3	10.8	0.9	0.061	0.000	0.000	0.001	0.543	0.46
18	2/5/2004	9:24:33 PM		22.383	20.188	22.852	20.075	23.901		2.761	13.566	3.446	-0.985	5.897	0.633		44.623	0.003	5.654	0.004		1.00	0.01667	12.1	10.9	0.9	0.061	0.000	0.000	0.001	0.535	0.46
19	2/5/2004	9:25:33 PM		22.961	20.194	23.008	20.101	24.107		6.598	13.3	3.332	2.998	1.742	0.578		48.086	0.578	14.643	0.004		2.00	0.03333	11.8	11.8	4.8	0.331	0.086	0.091	0.019	19.004	16.17
20	2/5/2004	9:26:33 PM		23.127	20.179	23.139	20.071	24.202		8.041	13.605	3.364	4.308	0.639	-0.911		44.696	0.646	14.643	0.003		3.00	0.05	12.1	11.0	6.2	0.426	0.096	0.102	0.016	16.443	13.99
21	2/5/2004	9:27:33 PM		23.313	20.185	23.29	20.076	24.148		8.615	13.707	3.475	4.671	0.107	-1.243		45.116	0.618	14.643	0.003		4.00	0.06667	12.2	11.1	6.6	0.458	0.092	0.097	0.015	14.558	12.39
22	2/5/2004	9:28:33 PM		23.393	20.159	23.4	20.066	24.052		9.547	15.547	3.248	5.995	1.019	-0.645		44.429	0.668	14.643	0.003		5.00	0.08333	14.1	10.9	7.8	0.536	0.100	0.104	0.013	13.410	11.41
23	2/5/2004	9:29:33 PM		23.593	20.169	23.591	20.04	22.98		12.268	21.832	3.38	8.623	4.574	1.474		45.307	0.844	14.643	0.004		6.00	0.1	20.4	11.1	10.4	0.720	0.126	0.131	0.013	12.536	10.67
24	2/5/2004	9:30:33 PM		23.764	20.159	23.791	20.035	22.398		13.103	22.043	3.321	9.385	3.98	1.081		45.007	0.816	14.643	0.003		7.00	0.11667	20.6	11.0	11.2	0.775	0.122	0.126	0.011	11.196	9.53
25	2/5/2004	9:31:33 PM		23.989	20.159	24.002	20.05	22.578		14.008	22.126	3.28	10.468	3.21	0.653		44.694	0.781	14.643	0.004		8.00	0.13333	20.7	11.0	12.2	0.844	0.116	0.120	0.010	9.787	8.33
26	2/5/2004	9:32:33 PM		24.109	20.159	24.192	20.055	22.728		13.925	20.878	3.854	9.793	2.116	0.02		47.885	0.724	14.643	0.004		9.00	0.15	19.4	11.7	11.9	0.818	0.108	0.110	0.009	9.312	7.92
27	2/5/2004	9:33:33 PM		24.309	20.148	24.352	20.024	22.989		12.703	17.383	3.389	8.864	-0.351	-1.532		45.249	0.594	14.643	0.004		10.00	0.16667	15.9	11.1	10.8	0.743	0.089	0.090	0.008	8.364	7.12
28	2/5/2004	9:34:33 PM		24.43	20.138	24.478	19.989	23.631		12.749	17.284	3.303	9.058	-0.478	-1.628		45.153	0.584	14.643	0.003		11.00	0.18333	15.8	11.1	10.9	0.752	0.087	0.088	0.008	8.104	6.90
29	2/5/2004	9:35:33 PM		24.574	20.148	24.622	20.014	23.831		13.143	17.5	3.432	9.373	-0.559	-1.694		44.807	0.578	14.643	0.004		12.00	0.2	16.0	11.0	11.3	0.776	0.086	0.087	0.008	7.737	6.58
30	2/5/2004	9:36:33 PM		24.72	20.143	24.758	20.025	24.036		12.946	17.269	3.289	9.282	-0.646	-1.738		44.874	0.573	14.643	0.003		13.00	0.21667	15.8	11.0	11.1	0.766	0.085	0.086	0.008	7.739	6.59
31	2/5/2004	9:37:33 PM		24.83	20.123	24.883	20.004	24.101		13.043	17.344	3.259	9.405	-0.704	-1.761		44.705	0.572	14.643	0.004		14.00	0.23333	15.9	11.0	11.2	0.774	0.085	0.086	0.008	7.623	6.49
32	2/5/2004	9:38:33 PM		24.954	20.117	25.013	20.004	24.025		13.025	17.27	3.246	9.373	-0.765	-1.816		44.803	0.567	14.643	0.004		15.00	0.25	15.8	11.0	11.2	0.772	0.085	0.085	0.008	7.546	6.42
33	2/5/2004	9:39:33 PM		25.115	20.133	25.163	20.014	24.151		13.245	17.446	3.288	9.543	-0.8	-1.848		44.842	0.565	14.643	0.004		16.00	0.26667	16.0	11.0	11.4	0.786	0.084	0.084	0.007	7.359	6.26
34	2/5/2004	9:40:33 PM		25.169	20.122	25.278	19.983	24.211		13.052	17.185	3.153	9.586	-0.814	-1.876		44.876	0.562	14.643	0.003		17.00	0.28333	15.7	11.0	11.3	0.780	0.084	0.083	0.007	7.345	6.25
35	2/5/2004	9:41:33 PM		25.324	20.117	25.407	19.968	24.175		13.421	17.524	3.348	9.686	-0.878	-1.897		44.871	0.561	14.643	0.004		18.00	0.3	16.1	11.0	11.6	0.797	0.084	0.083	0.007	7.157	6.09
36	2/5/2004	9:42:33 PM		25.494	20.112	25.532	19.978	24.215		13.34	17.535	3.227	9.709	-0.814	-1.888		44.508	0.561	14.643	0.004		19.00	0.31667	16.1	10.9	11.5	0.795	0.084	0.082	0.007	7.150	6.08
37	2/5/2004	9:43:33 PM		25.598	20.116	25.682	19.987	23.854		17.861	27.208	2.908	14.731	4.423	1.33		43.134	0.838	14.643	0.004		20.00	0.33333	25.7	10.6	16.3	1.124	0.125	0.123	0.008	7.521	6.40
38	2/5/2004	9:44:33 PM		25.788	20.106	25.937	19.987	22.586		20.995	33.517	3.364	17.292	7.55	3.197		44.823	0.965	14.643	0.003		21.00	0.35	32.0	11.0	19.1	1.320	0.144	0.140	0.007	7.320	6.23
39	2/5/2004	9:45:33 PM		26.108	20.127	26.262	20.059	22.19		22.432	35.49	3.288	18.938	8.245	3.619		44.761	0.992	14.643	0.004		22.00	0.36667	34.0	11.0	20.7	1.426	0.148	0.143	0.007	6.902	5.87
40	2/5/2004	9:46:33 PM		26.392	20.111	26.551	19.987	22.003		22.442	35.432	3.11	19.143	8.039	3.527		44.352	0.986	14.643	0.004		23.00	0.38333	34.0	10.9	20.8	1.434	0.147	0.141	0.007	6.770	5.76
41	2/5/2004	9:47:33 PM		26.676	20.111	26.831	19.951	22.013		22.521	35.258	3.06	19.35	7.941	3.451		43.95	0.981	14.643	0.004		24.00	0.4	33.8	10.8	20.9	1.443	0.146	0.139	0.007	6.637	5.65
42	2/5/2004	9:48:33 PM		27.01	20.125	27.105	19.941	21.495		22.826	35.77	3.113	19.297	7.889	3.394		44.106	0.978	14.643	0.004		25.00	0.41667	34.3	10.8	21.1	1.452	0.146	0.137	0.007	6.527	5.55
43	2/5/2004	9:49:33 PM		27.204	20.104	27.354	19.96	21.308		22.857	35.559	3.066	19.588	7.816	3.359		43.97	0.976	14.643	0.004		26.00	0.43333	34.1	10.8	21.2	1.463	0.146	0.136	0.006	6.420	5.46
44	2/5/2004	9:50:33 PM		27.537	20.119	27.642	19.965	21.524		22.886	35.723	3.069	19.543	7.848	3.382		44.041	0.978	14.643	0.004		27.00	0.45	34.3	10.8	21.2	1.463	0.146	0.135	0.006	6.385	5.43
45	2/5/2004	9:51:33 PM		27.742	20.135	27.922	19.95	21.856		22.963	35.797	3.019	19.677	7.889	3.376		43.801	0.978	14.643	0.004		28.00	0.46667	34.3	10.7	21.3	1.470	0.146	0.134	0.006	6.304	5.36
46	2/5/2004	9:52:33 PM		28.036	20.13	28.156	19.96	21.912		23.189	36.125	3.085	19.816	7.883	3.37		43.714	0.978	14.643	0.003		29.00	0.48333	34.7	10.7	21.5	1.483	0.146	0.134	0.006	6.210	5.29
47	2/5/2004	9:53:33 PM		28.334	20.129	28.415	20.026	21.851		23.044	35.803	3.008	19.835	7.889	3.388		43.762	0.98	14.643	0.004		30.00	0.5	34.3	10.7	21.4	1.478	0.146	0.133	0.006	6.197	5.27
48	2/5/2004	9:54:33 PM		28.533	20.134	28.669	19.99	21.7		22.909	35.783	2.96	19.708	7.944	3.396		43.68	0.982	14.643	0.004		31.00	0.51667	34.3	10.7	21.3	1.469	0.146	0.132	0.006	6.204	5.28
49	2/5/2004	9:55:33 PM		28.827	20.139	28.928	19.99	21.785		23.031	35.998	2.989	19.81	8.004	3.428		43.781	0.984	14.643	0.003		32.00	0.53333	34.5	10.7	21.4	1.477	0.147	0.132	0.006	6.141	5.23
50	2/5/2004	9:56:33 PM		29.026	20.139	29.167	20.021	21.705		22.341	34.504	3.212	18.88	7.252	2.974		45.205	0.956	14.643	0.003		33.00	0.55	33.0	11.1	20.6	1.421	0.143	0.127	0.006	6.160	5.24
51	2/5/2004	9:57:33 PM		29.268	20.128	29.384	20.025	22.056		22.419	34.709	3.238	18.92	7.318	3.024		45.174	0.958	14.643	0.003		34.00	0.56667	33.2	11.1	20.7	1.425	0.143	0.126	0.006	6.119	5.21
52	2/5/2004	9:58:33 PM		29.48	20.126	29.303	20.179	22.134		22.227	34.448	3.144	18.823	7.272	2.998		44.761	0.958	14.643	0.004		35.00	0.58333	33.0	11.0	20.5	1.415	0.143	0.127	0.006	6.176	5.26
53	2/5/2004	9:59:33 PM		29.503	20.129	29.122	20.314	22.167		22.529	34.603	3.189	19.149	7.249	2.989		45.216	0.958	14.643	0.003		36.00	0.6	33.1	11.1	20.8	1.437	0.143	0.127	0.006	6.113	5.20
54	2/5/2004	10:00:33 PM		29.416	20.132	28.945	20.432	21.949		22.48	34.721	3.197	19.01	7.202	2.972		44.878	0.956	14.643	0.003		37.00	0.61667	33.3	11.0	20.7	1.430	0.143	0.128	0.006	6.157	5.24
55	2/5/2004	10:01:33 PM		29.31	20.135	28.794	20.527	21.716		22.575	34.564	3.166	19.274	7.136	2.917		44.821	0.953	14.643	0.004		38.00	0.63333	33.1	11.0	20.9	1.443	0.142	0.128	0.006	6.111	5.20
56	2/5/2004	10:02:33 PM		29.189	20.139	28.643	20.585	21.991		22.712	34.829	3.218	19.182	7.133	2.891		44.921	0.95	14.643	0.003		39.00	0.65	33.4	11.0	20.9	1.444	0.142	0.128	0.006	6.110	5.20
57	2/5/2004	10:03:33 PM		29.089	20.148	28.513	20.625	22.035		22.967	34.945	3.271	19.41	7.055	2.856		44.725	0.949	14.643	0.003		40.00	0.66667	33.5	11.0	21.2	1.461	0.141	0.128	0.006	6.056	5.15
58	2/5/2004	10:04:33 PM		28.979	20.147	28.397	20.654	21.823		22.672	34.676	3.108	19.309	7.046	2.85		44.995	0.95	14.643	0.003		41.00	0.68333	33.2	11.0	21.0	1.447	0.142	0.129	0.006	6.139	5.22
59	2/5/2004	10:05:33 PM		28.859	20.166	28.292	20.689	21.757		33.129	34.637	3.194	29.704	-1.216	-4.88		45.159	0.003	1.367	0.003		42.00	0.7	33.2	11.1	31.4	2.166	0.204	0.186	0.006	5.919	5.04
60	2/5/2004	10:06:33 PM		28.729	20.166	28.182	20.729	21.892		31.787	33.03	3.228	28.384	-1.216	-4.897		45.22	0.003	1.282	0.004		43.00	0.71667	31.6	11.1	30.1	2.074	0.191	0.175	0.006	5.814	4.95
61	2/5/2004	10:07:33 PM		28.62	20.161	28.068	20.734	21.868		31.933	33.063	3.153	28.713	-1.216	-4.897		45.005	0.003	1.299	0.003		44.00	0.73333	31.6	11.0	30.3	2.091	0.194	0.178	0.006	5.864	4.99
62	2/5/2004	10:08:33 PM		28.52	20.166	27.973	20.759	22.249		32.148	33.536	3.071	28.768	-1.216	-4.9		44.471	0.003	1.306	0.003		45.00	0.75	32.1	10.9	30.5	2.100	0.195	0.179	0.006	5.884	5.01
63	2/5/2004	10:09:33 PM		28.411	20.166	27.879	20.78	22.36		32.063	33.353	3.133	28.659	-1.216	-4.903		44.675	0.003	1.284	0.004		46.00	0.76667	31.9	10.9	30.4	2.093	0.191	0.177	0.006	5.819	4.95
64	2/5/2004	10:10:33 PM		28.337	20.172	27.809	20.821	22.205		31.937	33.142	3.074	28.694	-1.216	-4.915		44.484	0.003	1.285	0.004		47.00	0.78333	31.7	10.9	30.3	2.090	0.192	0.177	0.006	5.843	4.97
65	2/5/2004	10:11:33 PM		28.247	20.182	27.73	20.815	22.531		32.136	33.374	3.073	28.858	-1.214	-4.993		44.513	0.003	1.278	0.004		48.00	0.8	31.9	10.9	30.5	2.103	0.191	0.177	0.006	5.790	4.93
66	2/5/2004	10:12:33 PM		28.158	20.188	27.645	20.841	22.672		32.192	33.383	3.07	28.92	-1.216	-5.007		44.273	0.003	1.274	0.005		49.00	0.81667	31.9	10.8	30.6	2.107	0.190	0.176	0.006	5.774	4.91
67	2/5/2004	10:13:33 PM		28.089	20.188	27.576	20.847	22.622		32.511	33.847	3.082	29.152	-1.216	-5.007		44.027	0.003	1.279	0.003		50.00	0.83333	32.4	10.8	30.8	2.126	0.191	0.177	0.006	5.756	4.90
68	2/5/2004	10:14:33 PM		28.025	20.204	27.522	20.878	22.773		32.204	33.399	2.989	28.963	-1.216	-5.01		44.062	0.003	1.274	0.004		51.00	0.85	31.9	10.8	30.6	2.109	0.190	0.177	0.006	5.788	4.93
69	2/5/2004	10:15:33 PM		27.951	20.195	27.433	20.884	22.749		32.268	33.552	2.997	28.957	-1.216	-5.016		44.01	0.003	1.271	0.003		52.00	0.86667	32.1	10.8	30.6	2.111	0.189	0.177	0.006	5.784	4.92
70	2/5/2004	10:16:33 PM		27.902	20.211	27.399	20.94	22.715		32.268	33.488	2.966	29.086	-1.219	-5.013		43.791	0.003	1.268	0.004		53.00	0.88333	32.0	10.7	30.7	2.115	0.189	0.177	0.006	5.763	4.90

RUN # 1.21A, B, C; POST-TEST BASELINE WITH THE THIRD CAUSTIC RINSE SOLUTION – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	2/5/2004	10:17:33 PM		27.843	20.201	27.335	20.951	22.756		32.333	33.449	2.919	29.326	-1.216	-5.013		43.804	0.003	1.264	0.004		54.00	0.9	32.0	10.7	30.8	2.126	0.188	0.177	0.006	5.727	4.87	
72	2/5/2004	10:18:33 PM		27.799	20.213	27.291	20.927	22.812		32.188	33.358	2.922	29.057	-1.219	-5.016		43.614	0.003	1.257	0.003		55.00	0.91667	31.9	10.7	30.6	2.111	0.187	0.176	0.006	5.741	4.89	
73	2/5/2004	10:19:33 PM		27.749	20.223	27.256	20.982	22.351		32.43	33.627	3.021	29.174	-1.214	-5.013		43.564	0.003	1.254	0.005		56.00	0.93333	32.2	10.7	30.8	2.124	0.187	0.176	0.006	5.699	4.85	
74	2/5/2004	10:20:33 PM		27.711	20.229	27.213	20.979	22.508		32.463	33.722	3.045	29.172	-1.216	-5.016		43.599	0.003	1.249	0.005		57.00	0.95	32.3	10.7	30.8	2.125	0.186	0.175	0.006	5.680	4.83	
75	2/5/2004	10:21:33 PM		27.678	20.241	27.179	21.036	22.62		32.571	33.863	3.026	29.254	-1.214	-5.013		43.699	0.003	1.244	0.009		58.00	0.96667	32.4	10.7	30.9	2.131	0.185	0.175	0.006	5.645	4.80	
76	2/5/2004	10:22:33 PM		27.643	20.252	27.145	21.051	22.56		31.993	33.155	2.978	28.768	-1.216	-5.022		44.175	0.003	1.233	0.008		59.00	0.98333	31.7	10.8	30.4	2.095	0.184	0.173	0.006	5.699	4.85	
77	2/5/2004	10:23:33 PM		27.6	20.253	27.121	21.037	22.471		32.32	33.465	3.137	28.916	-1.216	-5.025		44.654	0.003	1.221	0.004		60.00	1	32.0	10.9	30.6	2.111	0.182	0.172	0.006	5.603	4.77	
78	2/5/2004	10:24:33 PM		27.565	20.258	27.097	21.028	22.511		32.154	33.231	3.131	28.787	-1.216	-5.022		44.394	0.003	1.226	0.004		61.00	1.01667	31.8	10.9	30.5	2.101	0.183	0.172	0.006	5.657	4.81	
79	2/5/2004	10:25:33 PM		27.546	20.274	27.092	21.033	22.492		32.08	33.21	3.071	28.782	-1.214	-5.022		44.279	0.003	1.225	0.005		62.00	1.03333	31.7	10.9	30.4	2.098	0.183	0.172	0.006	5.661	4.82	
80	2/5/2004	10:26:33 PM		27.522	20.28	27.078	21.009	22.473		32.192	33.364	3.066	28.785	-1.211	-5.022		44.398	0.003	1.222	0.004		63.00	1.05	31.9	10.9	30.5	2.102	0.182	0.172	0.006	5.638	4.80	
81	2/5/2004	10:27:33 PM		27.488	20.271	27.049	20.97	22.514		32.418	33.441	3.082	29.216	-1.216	-5.025		44.298	0.003	1.222	0.004		64.00	1.06667	32.0	10.9	30.8	2.125	0.182	0.172	0.006	5.583	4.75	
82																																	
83		Averages		24.3	20.1	24.3	20.0	23.7	#	12.0	17.6	3.3	8.3	0.6	-0.9	#	45.2	0.6	14.6	0.0	#			16.1	11.1	10.2	0.703	0.094	0.096	0.0101	10.1	8.6	#
84		Maximum		25.5	20.2	25.5	20.1	24.2	#	14.0	22.1	3.9	10.5	4.6	1.5	#	48.1	0.8	14.6	0.0	#			20.7	11.8	12.2	0.844	0.126	0.131	0.0190	19.0	16.2	#
85		Median		24.4	20.1	24.4	20.0	24.0	#	13.0	17.4	3.3	9.4	-0.4	-1.6	#	44.9	0.6	14.6	0.0	#			15.9	11.0	11.2	0.773	0.087	0.089	0.0082	8.2	7.0	#
86		Minimum		23.0	20.1	23.0	20.0	22.4	#	6.6	13.3	3.2	3.0	-0.9	-1.9	#	44.4	0.6	14.6	0.0	#			11.8	10.9	4.8	0.331	0.084	0.082	0.0071	7.1	6.1	#
87		2 x Std Dev		1.546	0.048	1.587	0.072	1.249	#	4.300	5.236	0.290	4.300	3.487	2.253	#	2.010	0.183	0.000	0.001	#			5.236	0.493	4.297	0.296	0.027	0.031	0.0070	7.015	5.970	#
88	Number of Points Used*			18	18	18	18	18	0	18	18	18	18	18	18	0	18	18	18	18	0			18	18	18	18	18	18	18	18	18	0
89		* Backpulse points in box are not included																															
90																																	
91																											18-min. avg. =		0.10				
92																																	
93		Averages		28.2	20.1	28.1	20.1	21.9	#	22.6	35.2	3.1	19.2	7.6	3.2	#	44.4	1.0	14.6	0.0	#			33.7	10.9	20.9	1.443	0.144	0.133	0.0063	6.3	5.4	#
94		Maximum		29.5	20.1	29.4	20.7	22.6	#	23.2	36.1	3.4	19.8	8.2	3.6	#	45.2	1.0	14.6	0.0	#			34.7	11.1	21.5	1.483	0.148	0.143	0.0073	7.3	6.2	#
95		Median		28.5	20.1	28.4	20.0	21.9	#	22.7	35.3	3.1	19.3	7.8	3.4	#	44.7	1.0	14.6	0.0	#			33.8	11.0	20.9	1.444	0.146	0.132	0.0062	6.2	5.3	#
96		Minimum		25.8	20.1	25.9	19.9	21.3	#	21.0	33.5	3.0	17.3	7.0	2.9	#	43.7	0.9	14.6	0.0	#			32.0	10.7	19.1	1.320	0.141	0.126	0.0061	6.1	5.2	#
97		2 x Std Dev		2.375	0.024	2.047	0.499	0.543	#	0.894	1.307	0.208	1.073	0.765	0.490	#	1.085	0.027	0.000	0.001	#			1.307	0.266	0.978	0.067	0.004	0.010	0.0006	0.634	0.539	#
98	Number of Points Used*			21	21	21	21	21	0	21	21	21	21	21	21	0	21	21	21	21	0			21	21	21	21	21	21	21	21	21	0
99		* Backpulse points in box are not included																															
100																																	
101																											21-min. avg. =		0.13				
102																																	
103		Averages		28.0	20.2	27.5	20.9	22.5	#	32.2	33.5	3.1	29.0	-1.2	-5.0	#	44.3	0.0	1.3	0.0	#			32.0	10.8	30.6	2.110	0.189	0.176	0.0057	5.7	4.9	#
104		Maximum		28.9	20.3	28.3	21.1	22.8	#	33.1	34.6	3.2	29.7	-1.2	-4.9	#	45.2	0.0	1.4	0.0	#			33.2	11.1	31.4	2.166	0.204	0.186	0.0059	5.9	5.0	#
105		Median		27.9	20.2	27.4	20.9	22.5	#	32.2	33.4	3.1	28.9	-1.2	-5.0	#	44.3	0.0	1.3	0.0	#			31.9	10.9	30.6	2.109	0.189	0.176	0.0058	5.8	4.9	#
106		Minimum		27.5	20.2	27.0	20.7	21.8	#	31.8	33.0	2.9	28.4	-1.2	-5.0	#	43.6	0.0	1.2	0.0	#			31.6	10.7	30.1	2.074	0.182	0.172	0.0056	5.6	4.8	#
107		2 x Std Dev		0.813	0.077	0.754	0.223	0.571	#	0.536	0.661	0.156	0.548	0.003	0.104	#	0.937	0.000	0.067	0.003	#			0.661	0.230	0.533	0.037	0.010	0.006	0.0002	0.178	0.151	#
108	Number of Points Used*			23	23	23	23	23	0	23	23	23	23	23	23	0	23	23	23	23	0			23	23	23	23	23	23	23	23	23	0
109		* Backpulse points in box are not included																															
110																																	
111																											23-min. avg. =		0.18				
112																																	
113		Averages		27.0	20.2	26.8	20.4	22.6	#	23.0	29.4	3.2	19.6	2.3	-1.0	#	44.6	0.5	9.8	0.0	#			27.9	10.9	21.3	1.470	0.146	0.138	0.0072	7.2	6.1	#
114		Maximum		29.5	20.3	29.4	21.1	24.2	#	33.1	36.1	3.9	29.7	8.2	3.6	#	48.1	1.0	14.6	0.0	#			34.7	11.8	31.4	2.166	0.204	0.186	0.0190	19.0	16.2	#
115		Median		27.6	20.1	27.2	20.1	22.5	#	22.8	33.4	3.1	19.4	-0.5	-1.6	#	44.7	0.6	14.6	0.0	#			32.0	10.9	21.1	1.452	0.146	0.134	0.0062	6.2	5.2	#
116		Minimum		23.0	20.1	23.0	19.9	21.3	#	6.6	13.3	2.9	3.0	-1.2	-5.0	#	43.1	0.0	1.2	0.0	#			11.8	10.6	4.8	0.331	0.084	0.082	0.0056	5.6	4.8	#
117		2 x Std Dev		3.821	0.092	3.511	0.849	1.681	#	16.421	15.373	0.323	16.743	7.925	6.977	#	1.621	0.831	12.882	0.002	#			15.374	0.397	####	1.143	0.077	0.067	0.0053	5.302	4.512	#
118	Number of Points Used*			63	63	63	63	63	0	63	63	63	63	63	63	0	63	63	63	63	0			63	63	63	63	63	63	63	63	63	0
119		* Backpulse points in box are not included																															
120																																	
121																											1-hour avg. =		0.14				

RUN # 2.00A, B, AND C; PRE-TEST BASELINE WITH 0.1 M NAOH



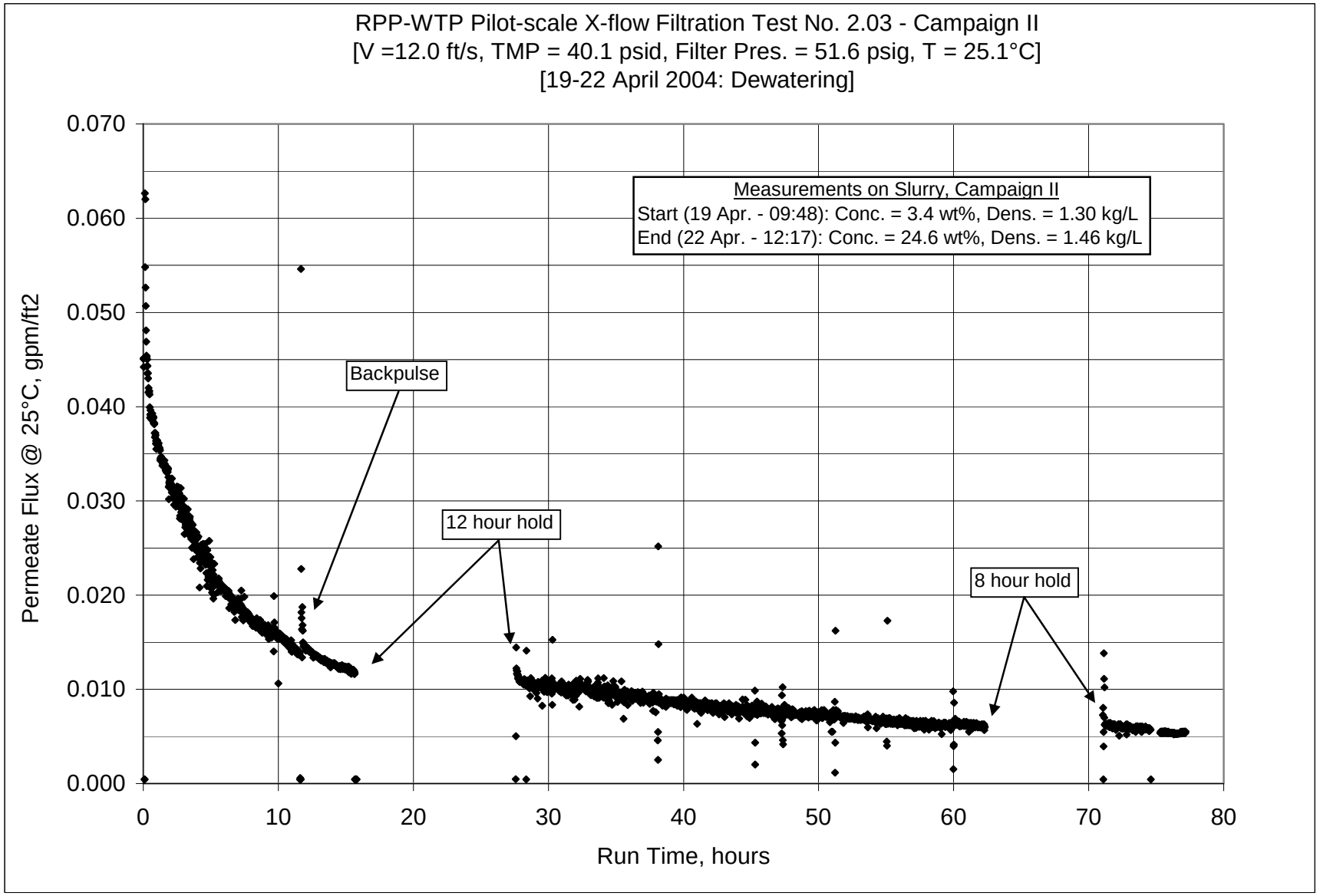
RUN # 2.00A, B, AND C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	4/14/2004	1:30:58 PM		24.687	21.862	24.835	24.226	22.583		0.054	0.02	-0.021	-0.005	-0.179	0.099		-0.08	0.003	0.086	0.005				Filter Surface A		6.707	FT2						
8	4/19/2004	7:37:13 AM		22.595	22.228	23.926	21.772	22.175		0.046	0.082	-0.025	-0.009	-0.179	0.143		-0.086	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	4/19/2004	8:21:39 AM		22.248	22.333	22.324	22.194	22.199		-0.008	0.059	0.002	0.007	-0.132	0.131		-0.084	0.003	14.643	0.005													
10	4/20/2004	12:41:36 PM		22.772	22.767	22.049	23.603	24.746		-0.004	0.045	-0.009	-0.007	-0.176	0.108		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	4/22/2004	8:40:43 AM		22.558	21.446	24.471	22.716	22.489		0.01	0.028	0.001	0.001	-0.205	0.096		46.562	0.043	14.643	0.004													
12	4/23/2004	8:53:20 AM		21.548	21.737	22.041	21.89	21.369		-0.004	0.026	0.003	-0.005	-0.196	0.082		-0.082	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	4/26/2004	9:00:47 AM		22.379	22.907	23.455	22.416	21.819		-0.012	0.08	0	-0.009	-0.205	0.044		-0.08	0.003	14.643	0.005				VVVV				< Filtrate Flux >< PERMIABILITY >>					
14	4/27/2004	9:14:59 AM		20.374	19.305	19.368	20.841	19.777		-0.002	0.02	-0.001	0.005	-0.193	0.111		-0.084	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Baseline 1A																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	4/14/2004	1:40:10 PM		23.391	21.99	22.85	23.631	24.248		12.056	16.786	3.818	7.996	-0.196	-1.523		44.821	0.596	-0.014	0.003		0	0	15.3	11.0	10.0	0.691	0.089	0.094	0.009	9.420	8.02	
18	4/14/2004	1:41:10 PM		23.219	21.983	22.819	23.675	24.357		12.138	16.828	3.742	8.234	-0.274	-1.525		44.906	0.594	-0.013	0.003		1.00	0.01667	15.4	11.0	10.2	0.702	0.089	0.094	0.009	9.249	7.87	
19	4/14/2004	1:42:10 PM		23.044	22.014	22.784	23.64	24.997		12.124	16.821	3.765	8.173	-0.207	-1.514		44.841	0.595	-0.013	0.003		2.00	0.03333	15.3	11.0	10.1	0.700	0.089	0.094	0.009	9.308	7.92	
20	4/14/2004	1:43:10 PM		22.93	22.015	22.735	23.666	25.438		12.358	17.066	3.798	8.395	-0.239	-1.514		44.798	0.595	-0.013	0.003		3.00	0.05	15.6	11.0	10.4	0.715	-0.002	-0.002	0.000	-0.199	-0.17	
21	4/14/2004	1:44:10 PM		22.83	22.031	22.786	23.677	25.37		12.058	16.728	3.748	8.22	-0.236	-1.502		44.779	0.595	-0.009	0.003		4.00	0.06667	15.3	11.0	10.1	0.699	-0.001	-0.001	0.000	-0.141	-0.12	
22	4/14/2004	1:45:10 PM		22.79	22.025	22.886	23.697	24.844		12.163	16.91	3.756	8.204	-0.213	-1.499		44.648	0.596	-0.013	0.003		5.00	0.08333	15.4	10.9	10.2	0.702	0.089	0.094	0.009	9.265	7.88	
23	4/14/2004	1:46:10 PM		22.758	22.019	22.97	23.67	24.458		12.136	16.896	3.774	8.173	-0.216	-1.496		44.842	0.597	-0.013	0.003		6.00	0.1	15.4	11.0	10.2	0.700	0.089	0.094	0.009	9.284	7.90	
24	4/14/2004	1:47:10 PM		22.741	21.967	23.014	23.638	19.468		12	16.713	3.759	8.079	-0.181	-1.485		44.708	0.597	-0.013	0.003		7.00	0.11667	15.2	11.0	10.0	0.692	0.089	0.094	0.009	9.379	7.98	
25	4/14/2004	1:48:10 PM		22.777	21.917	23.004	23.558	18.924		12.188	16.987	3.812	8.142	-0.187	-1.488		44.944	0.597	-0.014	0.003		8.00	0.13333	15.5	11.0	10.2	0.701	0.089	0.094	0.009	9.266	7.89	
26	4/14/2004	1:49:10 PM		22.806	21.845	23.058	23.502	16.977		12.188	16.939	3.806	8.21	-0.179	-1.468		44.62	0.598	-0.014	0.003		9.00	0.15	15.5	10.9	10.2	0.703	0.089	0.094	0.009	9.236	7.86	
27	4/14/2004	1:50:10 PM		22.858	21.767	23.085	23.413	16.939		12.136	16.956	3.749	8.222	-0.106	-1.453		44.841	0.599	-0.013	0.003		10.00	0.16667	15.5	11.0	10.2	0.702	0.089	0.094	0.009	9.263	7.88	
28	4/14/2004	1:51:10 PM		22.899	21.642	23.076	23.344	16.514		12.277	17.004	3.859	8.3	-0.126	-1.462		44.775	0.599	-0.013	0.003		11.00	0.18333	15.5	11.0	10.3	0.709	0.089	0.094	0.009	9.166	7.80	
29	4/14/2004	1:52:10 PM		22.939	21.541	23.181	23.248	18.188		12.143	16.995	3.806	8.142	-0.106	-1.439		44.766	0.6	-0.01	0.003		12.00	0.2	15.5	11.0	10.1	0.699	0.089	0.094	0.009	9.286	7.90	
30	4/14/2004	1:53:10 PM		22.989	21.47	23.241	23.238	20.643		12.105	16.946	3.77	8.113	-0.109	-1.453		44.77	0.6	-0.013	0.003		13.00	0.21667	15.5	11.0	10.1	0.697	0.089	0.094	0.009	9.301	7.92	
31	4/14/2004	1:54:10 PM		23.015	21.405	23.266	23.304	22.042		11.983	16.786	3.734	8.052	-0.109	-1.456		44.731	0.6	-0.013	0.003		14.00	0.23333	15.3	11.0	10.0	0.691	0.089	0.094	0.009	9.379	7.98	
32	4/14/2004	1:55:10 PM		23.049	21.359	23.301	23.479	23.987		12.066	16.875	3.703	8.187	-0.109	-1.456		44.756	0.599	-0.013	0.003		15.00	0.25	15.4	11.0	10.1	0.698	0.089	0.094	0.009	9.254	7.87	
33	4/14/2004	1:56:10 PM		23.072	21.342	23.349	23.693	24.024		12.047	16.867	3.702	8.202	-0.109	-1.442		44.754	0.601	-0.012	0.003		16.00	0.26667	15.4	11.0	10.1	0.698	0.090	0.094	0.009	9.274	7.89	
34	4/14/2004	1:57:10 PM		23.086	21.325	23.398	23.927	24.209		12.209	17.062	3.846	8.117	-0.106	-1.436		44.579	0.601	-0.013	0.003		17.00	0.28333	15.6	10.9	10.2	0.701	0.090	0.094	0.009	9.226	7.85	
35	4/14/2004	1:58:10 PM		23.095	21.315	23.427	24.123	24.698		12.13	16.968	3.753	8.185	-0.109	-1.424		44.693	0.602	-0.013	0.003		18.00	0.3	15.5	11.0	10.2	0.700	0.090	0.094	0.009	9.238	7.86	
36	4/14/2004	1:59:10 PM		23.111	21.316	23.438	24.42	25.064		12.17	17.008	3.752	8.239	-0.103	-1.43		44.566	0.603	-0.011	0.003		19.00	0.31667	15.5	10.9	10.2	0.704	0.090	0.094	0.009	9.208	7.84	
37	4/14/2004	2:00:10 PM		23.127	21.332	23.434	24.631	25.14		12.192	17.024	3.837	8.148	-0.109	-1.436		44.781	0.602	-0.013	0.003		20.00	0.33333	15.6	11.0	10.2	0.701	0.090	0.094	0.009	9.225	7.85	
38																																	
39																																	
40		Averages		22.9	21.6	23.2	23.7	21.6		12.1	16.9	3.8	8.2	-0.1	-1.5		44.7	0.6	0.0	0.0				15.5	11.0	10.2	0.700	0.089	0.094	0.009	9.3	7.9	
41		Maximum		23.1	22.0	23.4	24.6	25.1		12.3	17.1	3.9	8.3	-0.1	-1.4		44.9	0.6	0.0	0.0				15.6	11.0	10.3	0.709	0.090	0.094	0.009	9.4	8.0	
42		Median		23.0	21.5	23.2	23.6	23.0		12.1	17.0	3.8	8.2	-0.1	-1.5		44.8	0.6	0.0	0.0				15.5	11.0	10.2	0.701	0.089	0.094	0.009	9.3	7.9	
43		Minimum		22.7	21.3	22.9	23.2	16.5		12.0	16.7	3.7	8.1	-0.2	-1.5		44.6	0.6	0.0	0.0				15.2	10.9	10.0	0.691	0.089	0.094	0.009	9.2	7.8	
44		2 x Std Dev		0.271	0.542	0.358	0.792	6.415		0.151	0.176	0.092	0.121	0.082	0.046		0.193	0.004	0.002	0.000				0.176	0.047	0.123	0.008	0.001	0.000	0.000	0.107	0.091	
45		Number of Points Used*		16	16	16	16	16		16	16	16	16	16	16		16	16	16	16				16	16	16	16	16	16	16	16	16	
46		* Backpulse points in box are not included																															

RUN # 2.00A, B, AND C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
49	Baseline 1B																																
50	4/14/2004	2:05:18 PM		23.658	21.538	24.036	25.097	26.263		21.977	23.193	3.744	18.114	-1.218	-4.743		45.054	0.003	1.21	0.003		25.13	0.41889	21.7	11.0	20.0	1.382	0.180	0.185	0.009	9.248	7.87	
51	4/14/2004	2:06:18 PM		23.705	21.595	24.048	25.069	26.5		22.066	23.242	3.731	18.29	-1.218	-4.74		44.816	0.003	1.216	0.003		26.13	0.43556	21.8	11.0	20.2	1.391	0.181	0.186	0.009	9.230	7.85	
52	4/14/2004	2:07:18 PM		23.751	21.641	24.059	24.999	26.74		22.243	23.487	3.755	18.414	-1.218	-4.737		44.869	0.003	1.215	0.003		27.13	0.45222	22.0	11.0	20.3	1.402	0.181	0.186	0.009	9.151	7.79	
53	4/14/2004	2:08:18 PM		23.788	21.708	24.081	24.876	26.846		22.056	23.294	3.713	18.262	-1.221	-4.737		44.737	0.003	1.215	0.005		28.13	0.46889	21.8	11.0	20.2	1.390	0.181	0.186	0.009	9.222	7.85	
54	4/14/2004	2:09:18 PM		23.834	21.754	24.111	24.771	26.668		22.174	23.429	3.655	18.45	-1.218	-4.731		44.702	0.003	1.222	0.005		29.13	0.48556	22.0	11.0	20.3	1.400	0.182	0.187	0.009	9.198	7.83	
55	4/14/2004	2:10:18 PM		23.859	21.805	24.147	24.681	26.433		22.257	23.458	3.595	18.623	-1.218	-4.726		44.527	0.003	1.228	0.003		30.13	0.50222	22.0	10.9	20.4	1.409	0.183	0.188	0.009	9.175	7.81	
56	4/14/2004	2:11:18 PM		23.878	21.834	24.176	24.585	26.188		22.039	23.342	3.586	18.391	-1.221	-4.723		44.57	0.003	1.229	0.004		31.13	0.51889	21.9	10.9	20.2	1.394	0.183	0.188	0.009	9.278	7.90	
57	4/14/2004	2:12:18 PM		23.938	21.909	24.241	24.519	26.203		22.015	23.242	3.528	18.411	-1.215	-4.717		44.476	0.003	1.229	0.004		32.13	0.53556	21.8	10.9	20.2	1.394	0.183	0.187	0.009	9.261	7.88	
58	4/14/2004	2:13:18 PM		23.946	21.928	24.219	24.412	26.326		22.085	23.3	3.617	18.457	-1.218	-4.717		44.464	0.003	1.233	0.003		33.13	0.55222	21.8	10.9	20.3	1.398	0.184	0.188	0.009	9.271	7.89	
59	4/14/2004	2:14:18 PM		23.975	21.977	23.902	24.351	26.22		21.936	23.155	3.586	18.323	-1.221	-4.717		44.524	0.003	1.228	0.004		34.13	0.56889	21.7	10.9	20.1	1.388	0.183	0.189	0.009	9.382	7.98	
60	4/14/2004	2:15:18 PM		24.004	22.016	23.916	24.31	26.189		22.334	23.692	3.675	18.514	-1.218	-4.711		44.41	0.003	1.235	0.005		35.13	0.58556	22.2	10.9	20.4	1.408	0.184	0.190	0.009	9.296	7.91	
61	4/14/2004	2:16:18 PM		24.018	22.055	23.92	24.294	26.123		22.185	23.431	3.591	18.557	-1.218	-4.711		44.406	0.003	1.235	0.005		36.13	0.60222	22.0	10.9	20.4	1.405	0.184	0.190	0.009	9.319	7.93	
62	4/14/2004	2:17:18 PM		24.042	22.095	23.969	24.273	25.748		22.286	23.64	3.657	18.537	-1.215	-4.702		44.318	0.003	1.239	0.005		37.13	0.61889	22.2	10.9	20.4	1.407	0.185	0.190	0.009	9.317	7.93	
63	4/14/2004	2:18:18 PM		24.067	22.134	24.014	24.277	25.747		22.222	23.444	3.638	18.58	-1.218	-4.705		44.355	0.003	1.237	0.004		38.13	0.63556	22.0	10.9	20.4	1.407	0.184	0.190	0.009	9.295	7.91	
64	4/14/2004	2:19:18 PM		24.075	22.147	24.021	24.25	25.075		22.29	23.562	3.644	18.561	-1.218	-4.7		44.358	0.003	1.241	0.006		39.13	0.65222	22.1	10.9	20.4	1.408	0.185	0.190	0.009	9.312	7.92	
65	4/14/2004	2:20:18 PM		24.093	22.17	24.019	24.188	25.198		22.079	23.388	3.517	18.5	-1.215	-4.697		44.138	0.003	1.242	0.004		40.13	0.66889	21.9	10.8	20.3	1.399	0.185	0.190	0.009	9.383	7.98	
66	4/14/2004	2:21:18 PM		24.111	22.193	24.017	24.155	25.736		22.097	23.358	3.575	18.459	-1.218	-4.7		44.166	0.003	1.246	0.006		41.13	0.68556	21.9	10.8	20.3	1.398	0.186	0.191	0.009	9.419	8.02	
67	4/14/2004	2:22:18 PM		24.129	22.227	24.031	24.164	25.579		22.274	23.562	3.566	18.608	-1.215	-4.694		44.203	0.003	1.244	0.004		42.13	0.70222	22.1	10.8	20.4	1.409	0.185	0.191	0.009	9.325	7.94	
68	4/14/2004	2:23:18 PM		24.152	22.26	24.054	24.172	25.453		22.201	23.493	3.547	18.58	-1.218	-4.691		44.201	0.003	1.242	0.005		43.13	0.71889	22.0	10.8	20.4	1.406	0.185	0.190	0.009	9.327	7.94	
69	4/14/2004	2:24:18 PM		24.15	22.268	24.036	24.139	25.49		22.234	23.58	3.555	18.592	-1.218	-4.688		44.005	0.003	1.244	0.004		44.13	0.73556	22.1	10.8	20.4	1.407	0.185	0.191	0.009	9.337	7.95	
70	4/14/2004	2:25:18 PM		24.151	22.285	24.053	24.121	25.307		22.199	23.51	3.587	18.518	-1.218	-4.685		44.184	0.003	1.244	0.004		45.13	0.75222	22.0	10.8	20.4	1.404	0.185	0.190	0.009	9.357	7.96	
71	4/14/2004	2:26:18 PM		24.163	22.312	24.09	24.118	25.429		22.153	23.533	3.561	18.492	-1.218	-4.682		44.174	0.003	1.249	0.005		46.13	0.76889	22.1	10.8	20.3	1.401	0.186	0.191	0.009	9.402	8.00	
72																																	
73		Averages		24.0	22.0	24.1	24.4	26.0		22.2	23.4	3.6	18.5	-1.2	-4.7		44.4	0.0	1.2	0.0				22.0	10.9	20.3	1.400	0.184	0.189	0.009	9.3	7.9	
74		Maximum		24.2	22.3	24.2	25.1	26.8		22.3	23.7	3.8	18.6	-1.2	-4.7		45.1	0.0	1.2	0.0				22.2	11.0	20.4	1.409	0.186	0.191	0.009	9.4	8.0	
75		Median		24.0	22.0	24.0	24.3	26.2		22.2	23.4	3.6	18.5	-1.2	-4.7		44.4	0.0	1.2	0.0				22.0	10.9	20.3	1.401	0.184	0.190	0.009	9.3	7.9	
76		Minimum		23.7	21.5	23.9	24.1	25.1		21.9	23.2	3.5	18.1	-1.2	-4.7		44.0	0.0	1.2	0.0				21.7	10.8	20.0	1.382	0.180	0.185	0.009	9.2	7.8	
77		2 x Std Dev		0.306	0.471	0.173	0.640	1.020		0.218	0.285	0.137	0.250	0.003	0.037		0.527	0.000	0.022	0.002				0.285	0.129	0.220	0.015	0.003	0.004	0.000	0.141	0.120	
78	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
79		* Backpulse points in box are not included																															
80																																	
81	Baseline 1C																																
82	4/14/2004	2:28:37 PM		24.373	22.366	24.36	24.087	25.977		32.187	35.755	3.665	28.482	-1.215	-4.471		44.927	0.003	1.906	0.005		48.45	0.8075	34.3	11.0	30.3	2.091	0.284	0.289	0.010	9.538	8.12	
83	4/14/2004	2:29:37 PM		24.475	22.374	24.312	24.089	25.999		32.602	36.074	3.453	29.389	-1.224	-4.465		44.097	0.003	1.922	0.005		49.45	0.82417	34.6	10.8	31.0	2.137	0.287	0.292	0.009	9.426	8.02	
84	4/14/2004	2:30:37 PM		24.517	22.401	24.284	24.176	26.116		32.544	36.041	3.473	29.163	-1.221	-4.463		43.984	0.003	1.924	0.003		50.45	0.84083	34.6	10.8	30.9	2.127	0.287	0.293	0.009	9.487	8.07	
85	4/14/2004	2:31:37 PM		24.515	22.438	24.262	24.239	26.567		33.066	36.748	3.565	29.51	-1.221	-4.457		43.853	0.003	1.928	0.006		51.45	0.8575	35.3	10.7	31.3	2.157	0.287	0.293	0.009	9.381	7.98	
86	4/14/2004	2:32:37 PM		24.503	22.482	24.245	24.293	26.506		32.728	36.226	3.461	29.411	-1.221	-4.451		43.69	0.003	1.93	0.005		52.45	0.87417	34.8	10.7	31.1	2.142	0.288	0.294	0.009	9.461	8.05	
87	4/14/2004	2:33:37 PM		24.481	22.515	24.212	24.325	26.499		32.552	36.101	3.431	29.175	-1.218	-4.451		43.751	0.003	1.928	0.006		53.45	0.89083	34.6	10.7	30.9	2.128	0.287	0.294	0.010	9.523	8.10	
88	4/14/2004	2:34:37 PM		24.469	22.563	24.211	24.354	26.432		32.531	36.023	3.595	28.983	-1.218	-4.457		44.718	0.003	1.909	0.005		54.45	0.9075	34.6	11.0	30.8	2.121	0.285	0.291	0.009	9.462	8.05	
89	4/14/2004	2:35:37 PM		24.456	22.611	24.203	24.366	26.534		32.452	35.987	3.552	28.882	-1.221	-4.454		44.606	0.003	1.907	0.005		55.45	0.92417	34.5	10.9	30.7	2.114	0.284	0.291	0.009	9.482	8.07	
90	4/14/2004	2:36:37 PM		24.413	22.628	24.145	24.333	26.611		32.216	35.751	3.483	28.825	-1.221	-4.451		44.205	0.003	1.912	0.005		56.45	0.94083	34.3	10.8	30.5	2.104	0.285	0.292	0.010	9.568	8.14	
91	4/14/2004	2:37:37 PM		24.4	22.666	24.132	24.335	26.194		32.625	36.07	3.568	29.204	-1.221	-4.451		44.257	0.003	1.912	0.005		57.45	0.9575	34.6	10.8	30.9	2.131	0.285	0.292	0.009	9.450	8.04	
92	4/14/2004	2:38:37 PM		24.393	22.714	24.135	24.348	26.681		32.394	35.855	3.498	28.944	-1.221	-4.445		44.241	0.003	1.913	0.005		58.45	0.97417	34.4	10.8	30.7	2.115	0.285	0.292	0.010	9.530	8.11	
93	4/14/2004	2:39:37 PM		24.386	22.762	24.133	24.376	26.564		32.608	36.049	3.536	29.167	-1.218	-4.442		44.385	0.003	1.914	0.004		59.45	0.99083	34.6	10.9	30.9	2.130	0.285	0.292	0.009	9.468	8.06	
94	4/14/2004	2:40:37 PM		24.353	22.794	24.115	24.378	26.651		32.343	35.743	3.424	29.04	-1.221	-4.439		44.051	0.003	1.915	0.005		60.45	1.0075	34.3	10.8	30.7	2.116	0.286	0.293	0.010	9.538	8.12	
95	4/14/2004	2:41:37 PM		24.361	22.848	24.118	24.426	26.694		32.656	36.17	3.441	29.282	-1.218	-4.434		43.707	0.003	1.926	0.005		61.45	1.02417	34.7	10.7	31.0	2.135	0.287	0.294	0.010	9.506	8.09	
96	4/14/2004	2:42:37 PM		24.339	22.88	24.106	24.449	26.387		32.525	36.004	3.389	29.27	-1.218	-4.428		43.673	0.003	1.925	0.005		62.45	1.04083	34.5	10.7	30.9	2.130	0.287	0.294	0.010	9.526	8.11	
97	4/14/2004	2:43:37 PM		24.336	22.923	24.093	24.512	26.4		32.795	36.356	3.441	29.405	-1.218	-4.425		43.486	0.003	1.925	0.004		63.45	1.0575	34.9	10.7	31.1	2.144	0.287	0.294	0.009	9.468	8.06	
98	4/14/2004	2:44:37 PM		24.324	22.956	24.071	24.55	26.328		32.699	36.17	3.391	29.387	-1.218	-4.425		43.554	0.003	1.926	0.004		64.45	1.07417	34.7	10.7	31.0	2.140	0.287	0.295	0.009	9.496	8.08	
99	4/14/2004	2:45:37 PM		24.312	22.999	24.049	24.603	26.795		32.761	36.477	3.414	29.313	-1.224	-4.425		43.333	0.003	1.93	0.005		65.45	1.09083	35.0	10.6	31.0	2.140	0.288	0.296	0.010	9.523	8.10	
100	4/14/2004	2:46:37 PM		24.299	23.021	24.036	24.605	26.931		33.008	36.532	3.425	29.689	-1.218	-4.419		43.146	0.003	1.935	0.004		66.45	1.1075	35.1	10.6	31.3	2.161	0.288	0.296	0.009	9.457	8.05	
101	4/14/2004	2:47:37 PM		24.307	23.065	24.039	24.578	27.507		32.37	35.906	3.329	29.145	-1.221	-4.416		43.167	0.003	1.937	0.003		67.45	1.12417	34.4	10.6	30.8	2.121	0.289	0.297	0.010	9.648	8.21	
102	4/14/2004	2:48:37 PM		24.289	23.087	24.021	24.55	27.001		32.996	36.595	3.39	29.66	-1.218	-4.41		43.142	0.003	1.934	0.004		68.45	1.14083	35.1	10.6	31.3	2.160	0.288	0.296	0.009	9.462	8.05	
103																																	
104		Averages		24.4	22.7	24.2	24.4	26.5		32.6	36.1	3.5	29.2	-1.2	-4.4		43.9	0.0	1.9	0.0				34.7	10.8	30.9	2.131	0.287	0.293	0.009	9.5	8.1	
105		Maximum		24.5	23.1	24.4	24.6	27.5		33.1	36.7	3.7	29.7	-1.2	-4.4		44.9	0.0	1.9	0.0				35.3	11.0	31.3	2.161	0.289	0.297	0.010	9.6	8.2	
106		Median		24.4	22.7	24.1	24.4	26.5		32.6	36.1	3.5	29.2	-1.2	-4.4		43.9	0.0	1.9	0.0				34.6	10.7	30.9	2.130	0.287	0.293	0.009	9.5	8.1	
107		Minimum		24.3	22.4	24.0	24.1	26.0		32.2	35.7	3.3	28.5	-1.2	-4.5		43.1	0.0	1.9	0.0				34.3	10.6	30.3	2.091	0.284	0.289	0.009	9.4	8.0	
108		2 x Std Dev		0.148	0.466	0.188	0.299	0.682		0.468	0.547	0.160	0.557	0.004	0.034		1.006	0.000	0.019	0.002				0.547	0.247	0.501	0.035	0.003	0.004	0.000	0.109	0.093	
109	Number of Points Used*			21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
110		* Backpulse points in box are not included																															
111																																	
112	All																																
113		Averages		23.8	22.1	23.9	24.2	25.0		23.2	26.2	3.6	19.5	-0.9	-3.7		44.3	0.2	1.1	0.0				24.7	10.9	21.3	1.470	0.195	0.200	0.009	9.4	8.0	
114		Maximum		24.5	23.1	24.4	25.1	27.5		33.1	36.7	3.9	29.7	-0.1	-1.4		45.1	0.6	1.9	0.0				35.3	11.0	31.3	2.161	0.289	0.297	0.010	9.6	8.2	
115		Median		24.1	22.1	24.0	24.3	26.1		22.2	23.5	3.6	18.5	-1.2	-4.5		44.4	0.0	1.2	0.0				22.0	10.9	20.4	1.405	0.185	0.190	0.009	9.3	7.9	
116		Minimum		22.7	21.3	22.9	23.2	16.5		12.0	16.7	3.3	8.1	-1.2	-4.7		43.1	0.0	0.0	0.0				15.2	10.6	10.0	0.691	0.089	0.094	0.009	9.2	7.8	
117		2 x Std Dev		1.183	1.032	0.847	0.885	5.368		16.138	15.654	0.274	16.587	0.964	2.786		0.964	0.530	1.525	0.002				15.654	0.236	####	1.128	0.156	0.157	0.000	0.238	0.202	
118	Number of Points Used*			59	59	59	59	59		59	59	59	59	59	59		59	59	59	59				59	59	59	59	59	59	59	59	59	
119		* Backpulse points in box are not included																															

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING



RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	4/14/2004	1:30:58 PM		24.687	21.862	24.835	24.226	22.583		0.054	0.02	-0.021	-0.005	-0.179	0.099		-0.08	0.003	0.086	0.005				Filter Surface		6.707	FT2						
8	4/19/2004	7:37:13 AM		22.595	22.228	23.926	21.772	22.175		0.046	0.082	-0.025	-0.009	-0.179	0.143		-0.086	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	4/19/2004	8:21:39 AM		22.248	22.333	22.324	22.194	22.199		-0.008	0.059	0.002	0.007	-0.132	0.131		-0.084	0.003	14.643	0.005													
10	4/20/2004	12:41:36 PM		22.772	22.767	22.049	23.603	24.746		-0.004	0.045	-0.009	-0.007	-0.176	0.108		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	4/22/2004	8:40:43 AM		22.558	21.446	24.471	22.716	22.489		0.01	0.028	0.001	0.001	-0.205	0.096		46.562	0.043	14.643	0.004													
12	4/23/2004	8:53:20 AM		21.548	21.737	22.041	21.89	21.369		-0.004	0.026	0.003	-0.005	-0.196	0.082		-0.082	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	4/26/2004	9:00:47 AM		22.379	22.907	23.455	22.416	21.819		-0.012	0.08	0	-0.009	-0.205	0.044		-0.08	0.003	14.643	0.005				VVVV				< Filtrate Flux >	<<< PERMIABILITY >>			
14	4/27/2004	9:14:59 AM		20.374	19.305	19.368	20.841	19.777		-0.002	0.02	-0.001	0.005	-0.193	0.111		-0.084	0.003	14.643	0.006									at 25C		x 1000	
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	4/19/2004	9:42:07 AM		25.89	22.072	26.109	23.471	23.694		43.936	45.793	9.157	35.531	-1.215	-4.679		49.877	0.312	14.643	0.003		0.0	0	44.3	12.2	39.7	2.739	0.047	0.045	0.001	1.135	0.97	
18	4/19/2004	9:43:14 AM		25.89	22.072	26.109	23.471	23.694		43.936	45.793	9.157	35.531	-1.215	-4.679		49.877	0.312	14.643	0.003		1.1	0.01861	44.3	12.2	39.7	2.739	0.047	0.045	0.001	1.135	0.97	
19	4/19/2004	9:44:14 AM		25.711	22.117	25.889	23.331	23.629		44.137	45.876	8.933	35.946	-1.215	-4.882		49.531	0.304	14.643	0.003		2.1	0.03528	44.4	12.1	40.0	2.761	0.045	0.044	0.001	1.104	0.94	
20	4/19/2004	9:45:14 AM		26.071	22.123	25.785	23.282	23.625		5.516	45.957	8.655	-2.532	35.022	19.234		49.82	0.004	14.643	0.003		3.1	0.05194	44.5	12.2	1.5	0.103	2.183	2.136	1.431	1431.334	1218.09	
21	4/19/2004	9:46:14 AM		25.897	22.128	25.69	23.262	23.64		6.464	46.678	8.732	-1.596	34.791	20.578		47.511	0.003	14.643	0.003		4.1	0.06861	45.2	11.6	2.4	0.168	2.183	2.141	0.880	879.721	748.66	
22	4/19/2004	9:47:14 AM		25.838	22.16	25.651	23.228	23.651		6.126	45.406	8.863	-2.049	34.142	19.188		49.952	0.003	14.643	0.003		5.1	0.08528	43.9	12.2	2.0	0.141	0.000	0.000	0.000	0.215	0.18	
23	4/19/2004	9:48:14 AM		25.144	22.156	25.562	23.214	23.447		5.884	45.723	8.557	-1.965	34.568	46.307		50.267	0.003	14.643	0.006		6.1	0.10194	44.3	12.3	2.0	0.135	0.000	0.000	0.000	0.225	0.19	
24	4/19/2004	9:49:14 AM		25.49	22.156	25.488	23.214	23.593		38.317	45.671	8.52	30.425	1.706	0.469		47.812	0.426	14.643	0.003		7.1	0.11861	44.2	11.7	34.4	2.370	0.064	0.063	0.002	1.823	1.55	
25	4/19/2004	9:50:14 AM		25.841	22.173	25.419	23.206	23.69		38.345	45.675	8.572	30.436	1.585	0.608		49.218	0.372	14.643	0.003		8.1	0.13528	44.2	12.1	34.4	2.371	0.055	0.055	0.002	1.594	1.36	
26	4/19/2004	9:51:14 AM		25.852	22.184	25.351	23.242	23.811		42.996	46.166	8.507	35.199	-1.218	-3.743		47.995	0.42	14.643	0.003		9.1	0.15194	44.7	11.8	39.1	2.696	0.063	0.062	0.002	1.586	1.35	
27	4/19/2004	9:52:14 AM		25.772	22.174	25.285	23.252	23.871		43.956	46.173	8.465	36.206	-1.215	-4.731		49.697	0.356	14.643	0.003		10.1	0.16861	44.7	12.2	40.1	2.763	0.053	0.053	0.001	1.314	1.12	
28	4/19/2004	9:53:14 AM		25.717	22.179	25.21	23.222	23.851		44.234	46.328	8.488	36.401	-1.218	-4.789		48.312	0.342	14.643	0.003		11.1	0.18528	44.9	11.8	40.3	2.780	0.051	0.051	0.001	1.257	1.07	
29	4/19/2004	9:54:14 AM		25.634	22.18	25.147	23.218	23.882		44.286	46.175	8.542	36.514	-1.221	-4.919		48.775	0.324	14.643	0.003		12.1	0.20194	44.7	12.0	40.4	2.785	0.048	0.048	0.001	1.191	1.01	
30	4/19/2004	9:55:14 AM		25.594	22.206	25.162	23.269	23.842		44.639	46.318	8.519	36.935	-1.218	-4.989		47.065	0.316	14.643	0.003		13.1	0.21861	44.8	11.5	40.8	2.812	0.047	0.047	0.001	1.150	0.98	
31	4/19/2004	9:56:14 AM		25.54	22.207	25.168	23.295	23.844		44.697	46.309	9.28	36.054	-1.218	-5.032		49.145	0.306	14.643	0.003		14.1	0.23528	44.8	12.0	40.4	2.784	0.046	0.045	0.001	1.125	0.96	
32	4/19/2004	9:57:14 AM		25.511	22.193	25.149	23.246	23.845		44.896	46.378	9.244	36.389	-1.218	-5.061		52.811	0.305	14.643	0.003		15.1	0.25194	44.9	12.9	40.6	2.802	0.045	0.045	0.001	1.114	0.95	
33	4/19/2004	9:58:14 AM		25.402	22.194	25.12	23.222	24.036		45.203	46.8	9.21	36.683	-1.218	-5.072		50.058	0.298	14.643	0.003		16.1	0.26861	45.3	12.3	40.9	2.823	0.044	0.044	0.001	1.081	0.92	
34	4/19/2004	9:59:14 AM		25.483	22.195	25.111	23.228	24.112		45.234	46.778	9.12	36.773	-1.218	-5.052		46.591	0.303	14.643	0.003		17.1	0.28528	45.3	11.4	41.0	2.827	0.045	0.045	0.001	1.098	0.93	
35	4/19/2004	10:00:14 AM		25.435	22.196	25.087	23.239	24.204		45.321	46.871	9.018	37.038	-1.218	-5.084		50.223	0.298	14.643	0.003		18.1	0.30194	45.4	12.3	41.2	2.839	0.044	0.044	0.001	1.076	0.92	
36	4/19/2004	10:01:14 AM		25.401	22.208	25.129	23.261	24.36		45.441	46.883	9.053	37.194	-1.215	-5.098		52.657	0.293	14.643	0.003		19.1	0.31861	45.4	12.9	41.3	2.849	0.044	0.044	0.001	1.053	0.90	
37	4/19/2004	10:02:14 AM		25.418	22.204	25.11	23.338	24.467		45.419	47.113	9.107	37.122	-1.218	-5.093		48.421	0.293	14.643	0.003		20.1	0.33528	45.6	11.9	41.3	2.845	0.044	0.044	0.001	1.055	0.90	
38	4/19/2004	10:03:14 AM		25.374	22.221	25.087	23.4	24.554		45.539	46.838	9.065	37.321	-1.218	-5.113		45.976	0.293	14.643	0.003		21.1	0.35194	45.4	11.3	41.4	2.856	0.044	0.044	0.001	1.052	0.90	
39	4/19/2004	10:04:14 AM		25.35	22.217	25.063	23.501	24.72		44.942	46.423	8.949	36.648	-1.218	-5.116		49.22	0.289	14.643	0.003		22.1	0.36861	45.0	12.1	40.8	2.813	0.043	0.043	0.001	1.054	0.90	
40	4/19/2004	10:05:14 AM		25.322	22.244	25.054	23.598	24.816		44.776	46.085	9.528	35.958	-1.215	-5.205		50.188	0.279	14.643	0.003		23.1	0.38528	44.6	12.3	40.4	2.783	0.042	0.042	0.001	1.029	0.88	
41	4/19/2004	10:06:14 AM		25.325	22.267	25.042	23.641	24.864		44.902	46.156	9.19	36.621	-1.218	-5.174		52.824	0.282	14.643	0.003		24.1	0.40194	44.7	12.9	40.8	2.810	0.042	0.042	0.001	1.030	0.88	
42	4/19/2004	10:07:14 AM		25.317	22.284	25.08	23.679	24.921		45.23	46.577	9.211	36.826	-1.218	-5.153		47.442	0.279	14.643	0.003		25.1	0.41861	45.1	11.6	41.0	2.829	0.042	0.042	0.001	1.012	0.86	
43	4/19/2004	10:08:14 AM		25.304	22.306	25.057	23.691	24.843		45.195	46.61	9.185	36.748	-1.221	-5.153		51.101	0.279	14.643	0.003		26.1	0.43528	45.1	12.5	41.0	2.825	0.042	0.042	0.001	1.014	0.86	
44	4/19/2004	10:09:14 AM		25.312	22.339	25.07	23.648	24.906		45.126	46.43	9.136	36.713	-1.218	-5.174		48.341	0.28	14.643	0.003		27.1	0.45194	45.0	11.8	40.9	2.821	0.042	0.042	0.001	1.018	0.87	
45	4/19/2004	10:10:14 AM		25.282	22.32	25	23.584	24.677		45.587	47	9.222	37.087	-1.224	-5.22		48.039	0.277	14.643	0.003		28.1	0.46861	45.5	11.8	41.3	2.850	0.041	0.041	0.001	0.999	0.85	
46	4/19/2004	10:11:14 AM		25.225	22.352	25.012	23.546	24.794		44.288	45.449	9.74	35.375	-1.218	-5.284		51.742	0.268	14.643	0.003		29.1	0.48528	44.0	12.7	39.8	2.746	0.040	0.040	0.001	1.003	0.85	
47	4/19/2004	10:12:14 AM		25.107	22.365	25.075	23.533	24.697		44.124	45.364	9.53	35.338	-1.218	-5.286		50.446	0.261	14.643	0.003		30.1	0.50194	43.9	12.4	39.7	2.739	0.039	0.039	0.001	0.977	0.83	
48	4/19/2004	10:13:14 AM		25.059	22.367	25.057	23.495	24.524		44.139	45.159	9.514	35.441	-1.218	-5.336		47.933	0.263	14.643	0.003		31.1	0.51861	43.7	11.7	39.8	2.743	0.039	0.039	0.001	0.984	0.84	
49	4/19/2004	10:14:14 AM		25.026	22.369	25.039	23.497	24.641		44.622	45.847	9.366	35.917	-1.218	-5.321		50.163	0.266	14.643	0.003		32.1	0.53528	44.4	12.3	40.3	2.776	0.040	0.040	0.001	0.984	0.84	
50	4/19/2004	10:15:14 AM		25.004	22.377	25.011	23.495	24.703		44.49	45.544	9.138	36.172	-1.218	-5.252		48.919	0.263	14.643	0.003		33.1	0.55194	44.1	12.0	40.3	2.781	0.039	0.039	0.001	0.972	0.83	
51	4/19/2004	10:16:14 AM		24.975	22.378	24.983	23.486	24.579		44.514	45.623	9.215	36.067	-1.221	-5.341		50.165	0.262	14.643	0.003		34.1	0.56861	44.2	12.3	40.3	2.778	0.039	0.039	0.001	0.970	0.83	
52	4/19/2004	10:17:14 AM		24.951	22.375	24.964	23.478	24.851		44.301	45.489	9.159	35.993	-1.218	-5.327		49.19	0.259	14.643	0.003		35.1	0.58528	44.0	12.1	40.1	2.768	0.039	0.039	0.001	0.963	0.82	
53	4/19/2004	10:18:14 AM		24.948	22.386	25.026	23.469	24.778		44.78	45.92	9.227	36.305	-1.215	-5.347		49.537	0.262	14.643	0.004		36.1	0.60194	44.4	12.1	40.5	2.795	0.039	0.039	0.001	0.963	0.82	
54	4/19/2004	10:19:14 AM		24.935	22.383	25.003	23.436	24.725		44.564	45.789	9.239	36.073	-1.218	-5.353		48.978	0.26	14.643	0.003		37.1	0.61861	44.3	12.0	40.3	2.780	0.039	0.039	0.001	0.961	0.82	
55	4/19/2004	10:20:14 AM		24.927	22.376	24.975	23.423	24.507		44.753	45.772	9.236	36.291	-1.215	-5.341		49.885	0.261	14.643	0.003		38.1	0.63528	44.3	12.2	40.5	2.794	0.039	0.039	0.001	0.961	0.82	
56	4/19/2004	10:21:14 AM		24.904	22.362	24.952	23.435	24.584		44.44	45.48	9.077	36.208	-1.218	-5.373		48.102	0.26	14.643	0.003		39.1	0.65194	44.0	11.8	40.3	2.780	0.039	0.039	0.001	0.963	0.82	
57	4/19/2004	10:22:14 AM		24.902	22.365	24.93	23.422	24.506		45.174	46.305	9.286	36.611	-1.218	-5.356		49.236	0.263	14.643	0.003		40.1	0.66861	44.8	12.1	40.9	2.819	0.039	0.039	0.001	0.961	0.82	
58	4/19/2004	10:23:14 AM		24.882	22.35	24.91	23.403	24.782		44.703	45.802	9.107	36.313	-1.218	-5.373		47.472	0.258	14.643	0.003		41.1	0.68528	44.3	11.6	40.5	2.793	0.038	0.039	0.001	0.952	0.81	
59	4/19/2004	10:24:14 AM		24.868	22.351	24.911	23.449	24.908		45.002	46.17	9.12	36.574	-1.215	-5.362		49.257	0.26	14.643	0.003		42.1	0.70194	44.7	12.1	40.8	2.812	0.039	0.039	0.001	0.953	0.81	
60	4/19/2004	10:25:14 AM		24.859	22.347	24.972	23.385	24.949		44.973	46.065	8.95	36.81	-1.218	-5.379		48.204	0.26	14.643	0.003		43.1	0.71861	44.6	11.8	40.9	2.819	0.039	0.039	0.001	0.949	0.81	
61	4/19/2004	10:26:14 AM		24.859	22.332	24.952	23.4	24.859		45.182	46.293	8.925	36.99	-1.221	-5.379		48.573	0.261	14.643	0.003		44.1	0.73528	44.8	11.9	41.1	2.833	0.039	0.039	0.001	0.948	0.81	
62	4/19/2004	10:27:14 AM		25.026	22.349	24.939	23.472	24.986		45.578	46.529	8.976	37.306	-1.218	-5.373		50.703	0.26	14.643	0.003		45.1	0.75194	45.1	12.4	41.4	2.857	0.039	0.039	0.001	0.937	0.80	
63	4/19/2004	10:28:14 AM		24.938	22.351	24.911	23.504	24.988		45.134	46.079	8.86	37.023	-1.224	-5.373		48.298	0.256	14.643	0.003		46.1	0.76861	44.6	11.8	41.1	2.832	0.038	0.038	0.001	0.931	0.79	
64	4/19/2004	10:29:14 AM		24.925	22.373	24.913	23.651	25.109		45.657	46.747	8.963	37.536	-1.218	-5.416		49.497	0.256	14.643	0.003		47.1	0.78528	45.3	12.1	41.6	2.868	0.038	0.038	0.001	0.920	0.78	
65	4/19/2004	10:30:14 AM		24.876	22.374	24.879	23.708	25.29		45.416	46.293	8.908	37.239	-1.221	-5.437		46.537	0.255	14.643	0.003		48.1	0.80194	44.8	11.4	41.3	2.849	0.038	0.038	0.001	0.923	0.79	
66	4/19/2004	10:31:14 AM		24.847	22.38	24.93	23.805	25.352		45.421	46.239	8.8	37.514	-1.221	-5.425		48.888	0.256	14.643	0.003		49.1	0.81861	44.8	12.0	41.5	2.859	0.038	0.038	0.001	0.922	0.78	
67	4/19/2004	10:32:14 AM		24.864	22.418	24.942	23.882	25.439		45.761	46.672	8.734	37.877	-1.215	-5.416		47.365	0.256	14.643	0.004		50.1	0.83528	45.2	11.6	41.8	2.883	0.038	0.038	0.001	0.914	0.78	
68	4/19/2004	10:33:14 AM		24.857	22.435	24.925	23.87	25.381		45.176	46.034	9.089	36.828	-1.218	-5.486		48.646	0.249	14.643	0.003		51.1	0.85194	44.6	11.9	41.0	2.827	0.037	0.037	0.001	0.907	0.77	
69	4/19/2004	10:34:14 AM		24.833	22.447	24.926	23.886	25.338		44.861	45.681	9.415	36.317	-1.218	-5.515		51.23	0.246	14.643	0.003		52.1	0.86861	44.2	12.6	40.6	2.798	0.037	0.037	0.001	0.905	0.77	
70	4/19/2004	10:35:14 AM		24.84	22.469	24.913	23.888	25.16		44.819	45.522	9.351	36.212	-1.218	-5.489		49.032	0.246	14.643	0.003		53.1	0.88528	44.0	12.0	40.5	2.793	0.037	0.037	0.001	0.907	0.77	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	4/19/2004	10:36:14 AM		24.837	22.486	24.91	23.87	25.257		45.062	45.99	9.245	36.574	-1.218	-5.469		48.033	0.249	14.643	0.003		54.1	0.90194	44.5	11.8	40.8	2.814	0.037	0.037	0.001	0.912	0.78	
72	4/19/2004	10:37:14 AM		24.82	22.499	24.999	23.863	25.385		45.091	46.007	9.069	36.777	-1.218	-5.463		48.917	0.248	14.643	0.003		55.1	0.91861	44.5	12.0	40.9	2.822	0.037	0.037	0.001	0.903	0.77	
73	4/19/2004	10:38:14 AM		24.829	22.517	24.997	23.856	25.448		44.485	45.314	9.525	35.722	-1.218	-5.547		52.797	0.242	14.643	0.003		56.1	0.93528	43.8	12.9	40.1	2.765	0.036	0.036	0.001	0.900	0.77	
74	4/19/2004	10:39:14 AM		24.842	22.526	25	23.849	25.361		44.79	45.708	9.449	36.087	-1.218	-5.532		49.975	0.244	14.643	0.003		57.1	0.95194	44.2	12.2	40.4	2.788	0.036	0.036	0.001	0.900	0.77	
75	4/19/2004	10:40:14 AM		24.824	22.523	24.987	23.847	25.154		45.197	45.988	9.18	36.771	-1.215	-5.469		48.006	0.238	14.643	0.004		58.1	0.96861	44.5	11.8	41.0	2.826	0.035	0.035	0.001	0.866	0.74	
76	4/19/2004	10:41:14 AM		24.817	22.531	24.965	23.83	25.312		45.122	46.085	9.281	36.584	-1.218	-5.523		48.627	0.243	14.643	0.003		59.1	0.98528	44.6	11.9	40.9	2.817	0.036	0.036	0.001	0.888	0.76	
77	4/19/2004	10:42:14 AM		24.784	22.513	24.937	23.822	25.029		45.226	46.266	9.194	36.82	-1.221	-5.526		49.357	0.244	14.643	0.003		60.1	1.00194	44.8	12.1	41.0	2.828	0.036	0.036	0.001	0.888	0.76	
78	4/19/2004	10:43:14 AM		24.831	22.525	24.939	23.788	25.036		45.058	45.876	9.203	36.582	-1.215	-5.526		51.36	0.244	14.643	0.003		61.1	1.01861	44.4	12.6	40.8	2.814	0.036	0.036	0.001	0.893	0.76	
79	4/19/2004	10:44:14 AM		24.868	22.537	25.021	23.77	25.268		45.313	46.286	9.242	36.783	-1.218	-5.541		49.779	0.244	14.643	0.003		62.1	1.03528	44.8	12.2	41.0	2.830	0.036	0.036	0.001	0.886	0.75	
80	4/19/2004	10:45:14 AM		24.873	22.517	24.997	23.776	25.188		45.215	45.795	9.151	36.894	-1.218	-5.547		49.015	0.243	14.643	0.003		63.1	1.05194	44.3	12.0	41.1	2.831	0.036	0.036	0.001	0.883	0.75	
81	4/19/2004	10:46:14 AM		24.875	22.519	24.988	23.737	25.209		45.12	45.994	9.258	36.664	-1.218	-5.552		46.979	0.242	14.643	0.003		64.1	1.06861	44.5	11.5	40.9	2.819	0.036	0.036	0.001	0.883	0.75	
82	4/19/2004	10:47:14 AM		24.881	22.52	24.979	23.728	25.226		45.197	46.21	9.116	36.721	-1.218	-5.538		47.66	0.242	14.643	0.003		65.1	1.08528	44.7	11.7	41.0	2.824	0.036	0.036	0.001	0.881	0.75	
83	4/19/2004	10:48:14 AM		24.873	22.517	24.976	23.73	24.387		45.325	46.351	9.33	36.627	-1.218	-5.541		48.692	0.241	14.643	0.003		66.1	1.10194	44.9	11.9	41.0	2.825	0.036	0.036	0.001	0.877	0.75	
84	4/19/2004	10:49:14 AM		24.859	22.518	24.967	23.711	22.856		45.28	46.239	9.327	36.644	-1.218	-5.555		48.752	0.24	14.643	0.003		67.1	1.11861	44.8	11.9	41.0	2.824	0.036	0.036	0.001	0.874	0.74	
85	4/19/2004	10:50:14 AM		24.867	22.516	24.97	23.724	22.473		44.631	45.385	9.12	36.276	-1.218	-5.547		50.425	0.242	14.643	0.003		68.1	1.13528	43.9	12.4	40.5	2.789	0.036	0.036	0.001	0.893	0.76	
86	4/19/2004	10:51:14 AM		24.854	22.508	25.042	23.746	22.334		45.197	46.145	9.214	36.666	-1.218	-5.558		53.293	0.239	14.643	0.003		69.1	1.15194	44.7	13.1	40.9	2.822	0.036	0.036	0.001	0.870	0.74	
87	4/19/2004	10:52:14 AM		24.861	22.5	25.029	23.778	22.296		45.047	45.86	9.198	36.52	-1.218	-5.575		48.704	0.238	14.643	0.003		70.1	1.16861	44.4	11.9	40.8	2.812	0.035	0.035	0.001	0.869	0.74	
88	4/19/2004	10:53:14 AM		24.872	22.491	25.015	23.754	22.307		45.238	46.096	9.146	36.855	-1.215	-5.57		50.515	0.239	14.643	0.003		71.1	1.18528	44.6	12.4	41.0	2.830	0.036	0.036	0.001	0.868	0.74	
89	4/19/2004	10:54:14 AM		24.885	22.499	25.008	23.742	22.299		45.097	46.199	9.224	36.541	-1.215	-5.532		48.736	0.239	14.643	0.003		72.1	1.20194	44.7	11.9	40.8	2.814	0.036	0.036	0.001	0.873	0.74	
90	4/19/2004	10:55:14 AM		24.881	22.49	24.979	23.738	22.321		45.305	46.272	9.199	36.828	-1.218	-5.59		46.558	0.238	14.643	0.003		73.1	1.21861	44.8	11.4	41.1	2.831	0.035	0.036	0.001	0.865	0.74	
91	4/19/2004	10:56:14 AM		24.877	22.476	24.971	23.755	22.282		45.174	45.969	9.202	36.818	-1.224	-5.599		48.819	0.237	14.643	0.003		74.1	1.23528	44.5	12.0	41.0	2.827	0.035	0.035	0.001	0.863	0.73	
92	4/19/2004	10:57:14 AM		24.878	22.482	24.997	23.771	22.343		44.307	45.163	9.684	35.387	-1.218	-5.645		52.54	0.23	14.643	0.003		75.1	1.25194	43.7	12.9	39.8	2.747	0.034	0.034	0.001	0.861	0.73	
93	4/19/2004	10:58:14 AM		24.884	22.468	25.088	23.782	22.409		44.541	45.455	9.613	35.702	-1.218	-5.63		50.644	0.232	14.643	0.003		76.1	1.26861	44.0	12.4	40.1	2.766	0.035	0.035	0.001	0.860	0.73	
94	4/19/2004	10:59:14 AM		24.895	22.473	25.083	23.797	22.485		44.931	45.998	9.583	36.089	-1.215	-5.639		50.932	0.231	14.643	0.003		77.1	1.28528	44.5	12.5	40.5	2.793	0.034	0.034	0.001	0.848	0.72	
95	4/19/2004	11:00:14 AM		24.9	22.463	25.063	23.883	22.696		44.514	45.426	9.42	35.855	-1.218	-5.628		50.244	0.232	14.643	0.003		78.1	1.30194	44.0	12.3	40.2	2.771	0.035	0.035	0.001	0.859	0.73	
96	4/19/2004	11:01:14 AM		24.915	22.483	25.068	23.983	22.836		45.251	46.517	9.386	36.58	-1.218	-5.625		50.052	0.232	14.643	0.003		79.1	1.31861	45.0	12.3	40.9	2.821	0.035	0.035	0.001	0.844	0.72	
97	4/19/2004	11:02:14 AM		24.915	22.488	25.043	24.053	23.032		45.191	46.164	9.319	36.658	-1.218	-5.625		47.952	0.233	14.643	0.003		80.1	1.33528	44.7	11.8	40.9	2.822	0.035	0.035	0.001	0.848	0.72	
98	4/19/2004	11:03:14 AM		24.925	22.509	25.038	24.139	23.047		45.244	46.336	9.413	36.57	-1.218	-5.57		52.169	0.232	14.643	0.003		81.1	1.35194	44.9	12.8	40.9	2.820	0.035	0.035	0.001	0.845	0.72	
99	4/19/2004	11:04:14 AM		24.932	22.531	25.051	24.176	22.979		45.085	46.243	9.365	36.428	-1.218	-5.636		51.159	0.231	14.643	0.003		82.1	1.36861	44.8	12.5	40.8	2.810	0.034	0.034	0.001	0.844	0.72	
100	4/19/2004	11:05:14 AM		24.941	22.56	25.144	24.22	22.942		45.265	46.344	9.39	36.639	-1.218	-5.639		49.22	0.231	14.643	0.003		83.1	1.38528	44.9	12.1	41.0	2.823	0.034	0.034	0.001	0.838	0.71	
101	4/19/2004	11:06:14 AM		24.958	22.562	25.127	24.242	22.87		45.128	46.349	9.16	36.67	-1.218	-5.628		49.895	0.232	14.643	0.003		84.1	1.40194	44.9	12.2	40.9	2.820	0.035	0.034	0.001	0.843	0.72	
102	4/19/2004	11:07:14 AM		24.954	22.563	25.103	24.238	22.776		45.251	46.405	9.208	36.717	-1.218	-5.587		49.236	0.227	14.643	0.003		85.1	1.41861	44.9	12.1	41.0	2.826	0.034	0.034	0.001	0.823	0.70	
103	4/19/2004	11:08:14 AM		24.966	22.59	25.089	24.195	22.732		45.139	46.378	9.344	36.453	-1.218	-5.547		53.454	0.229	14.643	0.003		86.1	1.43528	44.9	13.1	40.8	2.813	0.034	0.034	0.001	0.835	0.71	
104	4/19/2004	11:09:14 AM		24.977	22.606	25.09	24.171	22.683		45.199	46.373	9.419	36.461	-1.221	-5.645		48.594	0.231	14.643	0.003		87.1	1.45194	44.9	11.9	40.8	2.815	0.034	0.034	0.001	0.841	0.72	
105	4/19/2004	11:10:14 AM		24.977	22.606	25.065	24.141	22.713		44.948	46.096	9.305	36.327	-1.221	-5.645		49.837	0.228	14.643	0.003		88.1	1.46861	44.6	12.2	40.6	2.802	0.034	0.034	0.001	0.835	0.71	
106	4/19/2004	11:11:14 AM		24.988	22.632	25.086	24.166	22.744		44.74	45.967	9.264	36.198	-1.218	-5.656		50.471	0.229	14.643	0.003		89.1	1.48528	44.5	12.4	40.5	2.790	0.034	0.034	0.001	0.842	0.72	
107	4/19/2004	11:12:14 AM		24.998	22.623	25.177	24.167	22.699		45.261	46.371	9.31	36.687	-1.218	-5.636		49.618	0.229	14.643	0.003		90.1	1.50194	44.9	12.2	41.0	2.825	0.034	0.034	0.001	0.829	0.71	
108	4/19/2004	11:13:14 AM		25.009	22.629	25.153	24.178	22.605		45.078	46.295	9.192	36.623	-1.221	-5.656		48.438	0.229	14.643	0.003		91.1	1.51861	44.8	11.9	40.9	2.816	0.034	0.034	0.001	0.832	0.71	
109	4/19/2004	11:14:14 AM		25.015	22.63	25.144	24.139	22.521		45.209	46.556	9.258	36.611	-1.218	-5.654		47.997	0.228	14.643	0.003		92.1	1.53528	45.1	11.8	40.9	2.821	0.034	0.034	0.001	0.828	0.70	
110	4/19/2004	11:15:14 AM		25.036	22.636	25.135	24.125	22.502		45.385	46.62	9.246	36.867	-1.218	-5.654		48.876	0.229	14.643	0.003		93.1	1.55194	45.1	12.0	41.1	2.835	0.034	0.034	0.001	0.827	0.70	
111	4/19/2004	11:16:14 AM		25.046	22.651	25.145	24.15	22.572		45.213	46.485	9.114	36.884	-1.215	-5.636		47.04	0.231	14.643	0.003		94.1	1.56861	45.0	11.5	41.0	2.830	0.034	0.034	0.001	0.836	0.71	
112	4/19/2004	11:17:14 AM		25.037	22.642	25.105	24.101	22.518		45.363	46.618	9.139	37.015	-1.218	-5.659		51.562	0.228	14.643	0.003		95.1	1.58528	45.1	12.6	41.2	2.840	0.034	0.034	0.001	0.823	0.70	
113	4/19/2004	11:18:14 AM		25.038	22.643	25.132	24.097	22.599		45.166	46.521	9.296	36.563	-1.218	-5.662		52.542	0.228	14.643	0.003		96.1	1.60194	45.0	12.9	40.9	2.817	0.034	0.034	0.001	0.829	0.71	
114	4/19/2004	11:19:14 AM		25.038	22.633	25.167	24.092	22.549		45.06	45.967	9.187	36.822	-1.224	-5.665		48.784	0.226	14.643	0.003		97.1	1.61861	44.5	12.0	40.9	2.823	0.034	0.034	0.001	0.819	0.70	
115	4/19/2004	11:20:14 AM		25.054	22.633	25.172	24.128	22.55		45.02	46.145	9.249	36.467	-1.218	-5.674		48.923	0.227	14.643	0.003		98.1	1.63528	44.7	12.0	40.7	2.809	0.034	0.034	0.001	0.827	0.70	
116	4/19/2004	11:21:14 AM		25.075	22.645	25.164	24.134	22.546		45.054	46.313	9.093	36.682	-1.218	-5.648		49.556	0.224	14.643	0.003		99.1	1.65194	44.8	12.1	40.9	2.818	0.033	0.033	0.001	0.813	0.69	
117	4/19/2004	11:22:14 AM		25.06	22.644	25.148	24.133	22.55		45.027	46.336	9.148	36.607	-1.221	-5.694		48.842	0.226	14.643	0.003		100.1	1.66861	44.9	12.0	40.8	2.814	0.034	0.034	0.001	0.822	0.70	
118	4/19/2004	11:23:14 AM		25.07	22.645	25.154	24.119	22.601		45.334	46.568	9.153	37.019	-1.215	-5.677		48.648	0.225	14.643	0.003		101.1	1.68528	45.1	11.9	41.2	2.839	0.034	0.033	0.001	0.811	0.69	
119	4/19/2004	11:24:14 AM		25.05	22.62	25.109	24.109	22.611		44.691	45.982	9.117	36.229	-1.221	-5.697		48.884	0.223	14.643	0.003		102.1	1.70194	44.5	12.0	40.5	2.790	0.033	0.033	0.001	0.819	0.70	
120	4/19/2004	11:25:14 AM		25.06	22.63	25.224	24.109	22.596		45.275	46.686	9.106	37.017	-1.218	-5.703		50.448	0.223	14.643	0.003		103.1	1.71861	45.2	12.4	41.1	2.837	0.033	0.033	0.001	0.803	0.68	
121	4/19/2004	11:26:14 AM		25.087	22.641	25.225	24.155	22.567		44.956	46.512	9.151	36.414	-1.218	-5.697		49.802	0.224	14.643	0.003		104.1	1.73528	45.0	12.2	40.7	2.805	0.033	0.033	0.001	0.816	0.69	
122	4/19/2004	11:27:14 AM		25.091	22.635	25.204	24.145	22.501		45.211	46.539	9.109	36.84	-1.218	-5.691		49.476	0.226	14.643	0.003		105.1	1.75194	45.1	12.1	41.0	2.829	0.034	0.034	0.001	0.817	0.69	
123	4/19/2004	11:28:14 AM		25.096	22.63	25.194	24.14	22.542		45.705	47.116	9.181	37.257	-1.215	-5.694		47.655	0.224	14.643	0.003		106.1	1.76861	45.6	11.7	41.5	2.860	0.033	0.033	0.001	0.801	0.68	
124	4/19/2004	11:29:14 AM		25.095	22.629	25.178	24.128	22.545		45.742	47.136	9.183	37.393	-1.218	-5.7		49.499	0.226	14.643	0.003		107.1	1.78528	45.7	12.1	41.6	2.866	0.034	0.034	0.001	0.807	0.69	
125	4/19/2004	11:30:14 AM		25.105	22.629	25.178	24.118	22.53		45.568	47.105	9.265	36.955	-1.218	-5.703		49.916	0.224	14.643	0.003		108.1	1.80194	45.6	12.2	41.3	2.845	0.033	0.033	0.001	0.805	0.69	
126	4/19/2004	11:31:14 AM		25.113	22.638	25.187	24.157	22.529		45.632	47.043	9.166	37.265	-1.218	-5.677		48.59	0.223	14.643	0.003		109.1	1.81861	45.6	11.9	41.4	2.858	0.033	0.033	0.001	0.798	0.68	
127	4/19/2004	11:32:14 AM		25.108	22.637	25.181	24.151	22.573		45.553	46.825	9.102	37.253	-1.221	-5.708		48.314	0.225	14.643	0.003		110.1	1.83528	45.4	11.8	41.4	2.855	0.034	0.033	0.001	0.806	0.69	
128	4/19/2004	11:33:14 AM		25.123	22.643	25.307	24.172	22.549		45.62	47.097	9.128	37.284	-1.215	-5.688		46.798	0.226	14.643	0.003		111.1	1.85194	45.6	11.5	41.5	2.858	0.034	0.033	0.001	0.806	0.69	
129	4/19/2004	11:34:14 AM		25.138	22.643	25.297	24.152	22.569		45.244	46.823	9.397	36.383	-1.218	-5.703		49.295	0.22	14.643	0.003		112.1	1.86861	45.4	12.1	40.8	2.814	0.033	0.033	0.001	0.797	0.68	
130	4/19/2004	11:35:14 AM		25.153	22.648	25.297	24.182	22.519		44.313	45.69	9.751	35.375	-1.218	-5.711		46.925	0.213	14.643	0.003		113.1	1.88528	44.2	11.5	39.8	2.747	0.032	0.031	0.001	0.790	0.67	
131	4/19/2004	11:36:14 AM		25.153	22.648	25.287	24.192	22.499		44.234	45.515	9.581	35.429	-1.221	-5.691		49.779	0.204	14.643	0.003		114.1	1.90194	44.0	12.2	39.8	2.746	0.030	0.030	0.001	0.757	0.64	
132	4/19/2004	11:37:14 AM		25.153	22.642	25.271	24.202	22.513		44.672	46.251	9.609	35.8	-1.218	-5.752		48.961	0.216	14.643	0.003		115.1	1.91861	44.8	12.0	40.2	2.774	0.032	0.032	0.001	0.794	0.68	
133	4/19/2004	11:38:14 AM		25.158	22.638	25.262	24.172	22.494		44.886	46.508	9.537	36.11	-1.218	-5.729		49.289	0.214	14.643	0.003		116.1	1.93528	45.0	12.1	40.5	2.792	0.032	0.032	0.001	0.782	0.67	
134	4/19/2004	11:39:14 AM		25.163	22.643	25.262	24.162	22.434		44.475	45.998	9.54	35.615	-1.218	-5.76		49.316	0.215	14.643	0.003		117.1	1.95194	44.5	12.1	40.0	2.761	0.032	0.032	0.001	0.795	0.68	
135	4/19/2004	11:40:14 AM		25.158	22.628	25.207	24.187	22.479		44.917	46.506	9.569	36.118	-1.218	-5.746		46.118	0.217	14.643	0.003		118.1	1.96861	45.0	11.3	40.5	2.794	0.032	0.032	0.001	0.794	0.68	
136	4/19/2004	11:41:14 AM		25.164	22.638	25.278	24.203	22.499		44.728	46.208	9.381	36.167	-1.218	-5.729		44.249	0.217	14.643	0.003		119.1	1.98528	44.7	10.8	40.4	2.789	0.032	0.032	0.001	0.794	0.68	
137	4/19/2004	11:42:14 AM		25.15	22.624	25.198	24.204	22.525		44.714	46.208	9.508	35.964	-1.221	-5.752		48.024	0.214	14.643	0.003		120.1	2.00194	44.7	11.8	40.3	2.781	0.032	0.032	0.001	0.787	0.67	
138	4/19/2004	11:43:14 AM		25.16	22.625	25.189	24.244	22.606		44.568	46.036	9.447	35.979	-1.218	-5.755		49.274	0.214	14.643	0.003		121.1	2.01861	44.6	12.1	40.3	2.777	0.032	0.032	0.001	0.788	0.67	
139	4/19/2004	11:44:14 AM		25.143	22.618	25.202	24.217	22.599		44.628	45.967	9.376	36.042	-1.221	-5.755		49.099	0.211	14.643	0.003		122.1	2.03528	44.5	12.0	40.3	2.781	0.031	0.031	0.001	0.776	0.66	
140	4/19/2004	11:45:14 AM		25.14	22.614	25.229	24.284	22.721		44.581	46.156	9.573	35.667	-1.218	-5.749		49.735	0.215	14.643	0.003		123.1	2.05194	44.7	12.2	40.1	2.766	0.032	0.032	0.001	0.794	0.68	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	4/19/2004	11:46:14 AM		25.147	22.611	25.245	24.346	22.773		44.193	45.621	9.453	35.455	-1.218	-5.752		50.233	0.213	14.643	0.003		124.1	2.06861	44.1	12.3	39.8	2.746	0.032	0.032	0.001	0.792	0.67	
142	4/19/2004	11:47:14 AM		25.149	22.603	25.232	24.363	22.765		44.574	46.071	9.569	35.833	-1.221	-5.726		50.202	0.211	14.643	0.003		125.1	2.08528	44.6	12.3	40.2	2.772	0.031	0.031	0.001	0.777	0.66	
143	4/19/2004	11:48:14 AM		25.161	22.616	25.305	24.456	22.748		44.465	46.158	9.594	35.543	-1.218	-5.723		48.792	0.209	14.643	0.003		126.1	2.10194	44.7	12.0	40.0	2.758	0.031	0.031	0.001	0.772	0.66	
144	4/19/2004	11:48:18 AM		25.171	22.626	25.315	24.471	22.722		44.699	46.357	9.538	35.839	-1.215	-5.723		47.13	0.213	14.643	0.003		126.2	2.10306	44.9	11.5	40.3	2.776	0.032	0.031	0.001	0.782	0.67	
145	4/19/2004	11:49:18 AM		25.183	22.622	25.302	24.493	22.539		44.519	46.029	9.546	35.632	-1.221	-5.755		51.456	0.219	14.643	0.003		127.2	2.11972	44.6	12.6	40.1	2.763	0.033	0.032	0.001	0.808	0.69	
146	4/19/2004	11:50:18 AM		25.175	22.619	25.298	24.51	22.661		44.421	46.092	9.522	35.644	-1.218	-5.781		50.922	0.211	14.643	0.003		128.2	2.13639	44.6	12.5	40.0	2.760	0.031	0.031	0.001	0.779	0.66	
147	4/19/2004	11:51:18 AM		25.202	22.641	25.315	24.537	22.929		44.38	45.915	9.446	35.701	-1.215	-5.781		48.865	0.21	14.643	0.004		129.2	2.15306	44.4	12.0	40.0	2.761	0.031	0.031	0.001	0.775	0.66	
148	4/19/2004	11:52:18 AM		25.204	22.633	25.287	24.549	22.966		44.726	46.359	9.482	35.96	-1.218	-5.656		45.92	0.205	14.643	0.003		130.2	2.16972	44.9	11.3	40.3	2.782	0.031	0.030	0.001	0.752	0.64	
149	4/19/2004	11:53:18 AM		25.206	22.636	25.28	24.581	22.888		44.548	46.015	9.389	36.011	-1.218	-5.804		48.502	0.21	14.643	0.003		131.2	2.18639	44.5	11.9	40.3	2.777	0.031	0.031	0.001	0.771	0.66	
150	4/19/2004	11:54:18 AM		25.214	22.643	25.282	24.659	23.326		44.55	46.154	9.504	35.792	-1.215	-5.784		46.604	0.209	14.643	0.003		132.2	2.20306	44.7	11.4	40.2	2.770	0.031	0.031	0.001	0.770	0.65	
151	4/19/2004	11:55:18 AM		25.228	22.663	25.281	24.668	23.02		44.226	45.808	9.477	35.41	-1.218	-5.714		49.307	0.205	14.643	0.003		133.2	2.21972	44.3	12.1	39.8	2.745	0.031	0.030	0.001	0.762	0.65	
152	4/19/2004	11:56:18 AM		25.227	22.666	25.29	24.677	22.878		44.543	46.289	9.5	35.757	-1.221	-5.749		48.73	0.211	14.643	0.003		134.2	2.23639	44.8	11.9	40.2	2.768	0.031	0.031	0.001	0.777	0.66	
153	4/19/2004	11:57:18 AM		25.226	22.681	25.284	24.697	22.807		44.641	46.224	9.47	35.911	-1.215	-5.758		47.687	0.208	14.643	0.003		135.2	2.25306	44.8	11.7	40.3	2.777	0.031	0.031	0.001	0.764	0.65	
154	4/19/2004	11:58:18 AM		25.235	22.68	25.274	24.721	22.857		44.604	46.243	9.507	35.804	-1.218	-5.76		50.857	0.2	14.643	0.003		136.2	2.26972	44.8	12.5	40.2	2.772	0.030	0.030	0.001	0.736	0.63	
155	4/19/2004	11:59:18 AM		25.214	22.664	25.233	24.705	22.916		44.38	45.876	9.429	35.714	-1.221	-5.772		48.702	0.212	14.643	0.003		137.2	2.28639	44.4	11.9	40.0	2.761	0.032	0.031	0.001	0.784	0.67	
156	4/19/2004	12:00:18 PM		25.222	22.687	25.236	24.713	22.919		44.857	46.517	9.62	35.956	-1.218	-5.821		47.017	0.21	14.643	0.003		138.2	2.30306	45.0	11.5	40.4	2.786	0.031	0.031	0.001	0.770	0.66	
157	4/19/2004	12:01:18 PM		25.227	22.691	25.23	24.742	22.858		44.541	46.106	9.527	35.734	-1.218	-5.795		49.468	0.205	14.643	0.003		139.2	2.31972	44.6	12.1	40.1	2.767	0.031	0.030	0.001	0.757	0.64	
158	4/19/2004	12:02:18 PM		25.225	22.69	25.198	24.75	22.952		44.467	45.93	9.48	35.794	-1.224	-5.81		46.61	0.211	14.643	0.003		140.2	2.33639	44.5	11.4	40.1	2.767	0.031	0.031	0.001	0.780	0.66	
159	4/19/2004	12:03:18 PM		25.224	22.709	25.218	24.825	22.886		44.732	46.293	9.433	36.026	-1.218	-5.763		49.41	0.211	14.643	0.003		141.2	2.35306	44.8	12.1	40.4	2.784	0.031	0.031	0.001	0.774	0.66	
160	4/19/2004	12:04:18 PM		25.229	22.708	25.202	24.869	22.905		44.502	45.949	9.403	35.853	-1.218	-5.83		47.595	0.207	14.643	0.003		142.2	2.36972	44.5	11.7	40.2	2.770	0.031	0.031	0.001	0.764	0.65	
161	4/19/2004	12:05:18 PM		25.228	22.723	25.186	24.859	22.91		44.73	46.065	9.408	36.155	-1.215	-5.792		48.189	0.208	14.643	0.003		143.2	2.38639	44.6	11.8	40.4	2.788	0.031	0.031	0.001	0.763	0.65	
162	4/19/2004	12:06:18 PM		25.227	22.722	25.17	24.853	22.938		44.888	46.44	9.58	36.112	-1.218	-5.804		45.127	0.21	14.643	0.003		144.2	2.40306	45.0	11.1	40.5	2.792	0.031	0.031	0.001	0.769	0.65	
163	4/19/2004	12:07:18 PM		25.225	22.741	25.154	24.896	23.113		44.475	46.011	9.506	35.634	-1.224	-5.758		49.653	0.198	14.643	0.003		145.2	2.41972	44.5	12.2	40.1	2.762	0.030	0.029	0.001	0.734	0.62	
164	4/19/2004	12:08:18 PM		25.219	22.739	25.137	24.925	23.231		44.518	46.189	9.61	35.607	-1.218	-5.772		49.839	0.206	14.643	0.003		146.2	2.43639	44.7	12.2	40.1	2.762	0.031	0.031	0.001	0.764	0.65	
165	4/19/2004	12:09:18 PM		25.212	22.742	25.126	24.948	23.1		44.799	46.376	9.549	36.083	-1.215	-5.775		48.51	0.203	14.643	0.003		147.2	2.45306	44.9	11.9	40.4	2.788	0.030	0.030	0.001	0.746	0.63	
166	4/19/2004	12:10:18 PM		25.196	22.741	25.089	24.992	23.534		44.753	46.204	9.473	36.122	-1.221	-5.763		48.75	0.201	14.643	0.003		148.2	2.46972	44.7	11.9	40.4	2.788	0.030	0.030	0.001	0.739	0.63	
167	4/19/2004	12:11:18 PM		25.205	22.77	25.108	25.081	23.242		44.964	46.463	9.477	36.266	-1.218	-5.827		49.622	0.201	14.643	0.004		149.2	2.48639	45.0	12.2	40.6	2.800	0.030	0.030	0.001	0.736	0.63	
168	4/19/2004	12:12:18 PM		25.204	22.775	25.077	25.071	23.051		44.705	46.204	9.47	35.97	-1.221	-5.787		50.513	0.212	14.643	0.003		150.2	2.50306	44.7	12.4	40.3	2.781	0.032	0.032	0.001	0.782	0.67	
169	4/19/2004	12:13:18 PM		25.199	22.79	25.072	25.076	23.117		44.666	46.108	9.552	35.86	-1.218	-5.81		53.323	0.203	14.643	0.003		151.2	2.51972	44.6	13.1	40.3	2.776	0.030	0.030	0.001	0.750	0.64	
170	4/19/2004	12:14:18 PM		25.209	22.79	25.062	25.076	23.122		44.923	46.587	9.542	36.091	-1.218	-5.847		46.779	0.204	14.643	0.003		152.2	2.53639	45.1	11.5	40.5	2.793	0.030	0.030	0.001	0.750	0.64	
171	4/19/2004	12:15:18 PM		25.194	22.804	25.037	25.075	23.191		44.769	46.21	9.428	36.163	-1.218	-5.847		49.518	0.205	14.643	0.003		153.2	2.55306	44.7	12.1	40.5	2.790	0.031	0.031	0.001	0.755	0.64	
172	4/19/2004	12:16:18 PM		25.188	22.809	25.026	25.094	23.19		44.923	46.307	9.457	36.348	-1.215	-5.804		49.785	0.202	14.643	0.004		154.2	2.56972	44.8	12.2	40.6	2.802	0.030	0.030	0.001	0.741	0.63	
173	4/19/2004	12:17:18 PM		25.198	22.829	25.011	25.13	23.135		44.966	46.492	9.545	36.241	-1.218	-5.758		48.871	0.204	14.643	0.003		155.2	2.58639	45.0	12.0	40.6	2.799	0.030	0.030	0.001	0.749	0.64	
174	4/19/2004	12:18:18 PM		25.188	22.834	24.986	25.145	23.286		44.954	46.413	9.507	36.229	-1.218	-5.792		48.187	0.211	14.643	0.003		156.2	2.60306	44.9	11.8	40.6	2.799	0.031	0.031	0.001	0.775	0.66	
175	4/19/2004	12:19:18 PM		25.172	22.838	24.965	25.154	23.265		45.284	46.869	9.51	36.561	-1.218	-5.824		49.211	0.207	14.643	0.003		157.2	2.61972	45.4	12.1	40.9	2.821	0.031	0.031	0.001	0.755	0.64	
176	4/19/2004	12:20:18 PM		25.158	22.844	24.946	25.155	23.226		44.693	46.03	9.544	35.886	-1.221	-5.865		47.272	0.203	14.643	0.003		158.2	2.63639	44.6	11.6	40.3	2.778	0.030	0.030	0.001	0.752	0.64	
177	4/19/2004	12:21:18 PM		25.174	22.869	24.942	25.18	23.216		45.027	46.521	9.595	36.165	-1.218	-5.876		45.213	0.199	14.643	0.003		159.2	2.65306	45.0	11.1	40.6	2.799	0.030	0.030	0.001	0.732	0.62	
178	4/19/2004	12:22:18 PM		25.164	22.875	24.917	25.181	23.212		44.765	46.295	9.53	36.016	-1.218	-5.836		50.365	0.206	14.643	0.003		160.2	2.66972	44.8	12.3	40.4	2.785	0.031	0.031	0.001	0.762	0.65	
179	4/19/2004	12:23:18 PM		25.155	22.891	24.908	25.222	23.153		44.873	46.32	9.49	36.075	-1.218	-5.818		49.727	0.196	14.643	0.003		161.2	2.68639	44.8	12.2	40.5	2.791	0.029	0.029	0.001	0.724	0.62	
180	4/19/2004	12:24:18 PM		25.15	22.896	24.883	25.217	23.073		45.016	46.533	9.542	36.252	-1.218	-5.778		43.957	0.188	14.643	0.003		162.2	2.70306	45.1	10.8	40.6	2.802	0.028	0.028	0.001	0.692	0.59	
181	4/19/2004	12:25:18 PM		25.13	22.896	24.863	25.237	23.183		45.035	46.517	9.568	36.225	-1.221	-5.804		45.252	0.19	14.643	0.003		163.2	2.71972	45.0	11.1	40.6	2.801	0.028	0.028	0.001	0.700	0.60	
182	4/19/2004	12:26:18 PM		25.131	22.907	24.904	25.213	23.189		45.056	46.539	9.532	36.184	-1.218	-5.87		47.557	0.198	14.643	0.003		164.2	2.73639	45.1	11.7	40.6	2.801	0.030	0.030	0.001	0.729	0.62	
183	4/19/2004	12:27:18 PM		25.125	22.912	24.903	25.202	23.183		45.195	46.689	9.56	36.251	-1.221	-5.83		49.516	0.198	14.643	0.003		165.2	2.75306	45.2	12.1	40.7	2.808	0.030	0.030	0.001	0.727	0.62	
184	4/19/2004	12:28:18 PM		25.137	22.938	24.945	25.264	23.37		45.045	46.811	9.517	36.231	-1.215	-5.815		48.892	0.21	14.643	0.004		166.2	2.76972	45.3	12.0	40.6	2.802	0.031	0.031	0.001	0.772	0.66	
185	4/19/2004	12:29:18 PM		25.138	22.944	24.941	25.255	23.331		45.072	46.61	9.535	36.268	-1.218	-5.688		50.284	0.188	14.643	0.003		167.2	2.78639	45.1	12.3	40.7	2.804	0.028	0.028	0.001	0.690	0.59	
186	4/19/2004	12:30:18 PM		25.144	22.956	24.957	25.261	23.387		44.834	46.257	9.521	36.116	-1.218	-5.844		51.75	0.193	14.643	0.003		168.2	2.80306	44.8	12.7	40.5	2.791	0.029	0.029	0.001	0.712	0.61	
187	4/19/2004	12:31:18 PM		25.14	22.972	24.983	25.242	23.288		45.365	46.732	9.565	36.678	-1.218	-5.891		49.007	0.196	14.643	0.003		169.2	2.81972	45.3	12.0	41.0	2.828	0.029	0.029	0.001	0.713	0.61	
188	4/19/2004	12:32:18 PM		25.151	22.977	24.994	25.253	23.234		45.331	46.823	9.595	36.516	-1.218	-5.893		48.473	0.197	14.643	0.003		170.2	2.83639	45.4	11.9	40.9	2.822	0.029	0.029	0.001	0.718	0.61	
189	4/19/2004	12:33:18 PM		25.15	22.977	24.973	25.222	23.479		44.622	46.264	9.486	35.977	-1.221	-5.691		48.838	0.204	14.643	0.003		171.2	2.85306	44.8	12.0	40.3	2.779	0.030	0.030	0.001	0.755	0.64	
190	4/19/2004	12:34:18 PM		25.172	22.998	25.03	25.299	23.51		45.054	46.672	9.508	36.251	-1.215	-5.818		50.843	0.202	14.643	0.003		172.2	2.86972	45.2	12.5	40.7	2.803	0.030	0.030	0.001	0.740	0.63	
191	4/19/2004	12:35:18 PM		25.162	22.999	25.015	25.284	23.536		44.998	46.618	9.538	36.202	-1.218	-5.656		46.944	0.198	14.643	0.003		173.2	2.88639	45.1	11.5	40.6	2.799	0.030	0.030	0.001	0.727	0.62	
192	4/19/2004	12:36:18 PM		25.182	23.019	25.025	25.344	23.39		45.11	46.726	9.626	36.235	-1.215	-5.697		48.008	0.197	14.643	0.003		174.2	2.90306	45.3	11.8	40.7	2.804	0.029	0.029	0.001	0.722	0.61	
193	4/19/2004	12:37:18 PM		25.174	23.015	25.042	25.295	23.166		45.132	46.875	9.562	36.258	-1.221	-5.665		49.624	0.188	14.643	0.003		175.2	2.91972	45.4	12.2	40.7	2.806	0.028	0.028	0.001	0.688	0.59	
194	4/19/2004	12:38:18 PM		25.179	23.035	25.047	25.29	23.136		44.927	46.591	9.637	36.028	-1.218	-5.714		50.313	0.195	14.643	0.003		176.2	2.93639	45.1	12.3	40.5	2.791	0.029	0.029	0.001	0.717	0.61	
195	4/19/2004	12:39:18 PM		25.194	23.045	25.062	25.381	23.096		44.686	46.365	9.568	35.802	-1.212	-5.729		44.184	0.193	14.643	0.003		177.2	2.95306	44.9	10.8	40.2	2.775	0.029	0.029	0.001	0.714	0.61	
196	4/19/2004	12:40:18 PM		25.198	23.035	25.071	25.33	23.08		45.023	46.643	9.661	36.143	-1.218	-5.737		49.57	0.195	14.643	0.003		178.2	2.96972	45.2	12.1	40.6	2.798	0.029	0.029	0.001	0.715	0.61	
197	4/19/2004	12:41:18 PM		25.213	23.05	25.061	25.335	23.13		45.151	46.776	9.573	36.338	-1.218	-5.896		45.709	0.198	14.643	0.003		179.2	2.98639	45.3	11.2	40.7	2.809	0.030	0.029	0.001	0.723	0.62	
198	4/19/2004	12:42:18 PM		25.227	23.054	25.09	25.213	22.848		45.176	46.745	9.611	36.262	-1.218	-5.847		48.969	0.196	14.643	0.003		180.2	3.00306	45.3	12.0	40.7	2.807	0.029	0.029	0.001	0.716	0.61	
199	4/19/2004	12:43:18 PM		25.225	23.037	25.044	25.142	22.837		44.946	46.487	9.553	36.116	-1.218	-5.818		47.937	0.203	14.643	0.003		181.2	3.01972	45.0	11.7	40.5	2.794	0.030	0.030	0.001	0.746	0.63	
200	4/19/2004	12:44:18 PM		25.234	23.03	25.037	25.095	22.659		44.749	46.081	9.852	35.714	-1.218	-5.893		50.801	0.196	14.643	0.003		182.2	3.03639	44.6	12.4	40.2	2.774	0.029	0.029	0.001	0.726	0.62	
201	4/19/2004	12:45:18 PM		25.232	23.024	25.075	25.004	22.759		44.641	46.085	9.99	35.433	-1.218	-5.83		51.458	0.178	14.643	0.003		183.2	3.05306	44.6	12.6	40.0	2.760	0.027	0.026	0.001	0.661	0.56	
202	4/19/2004	12:46:18 PM		25.231	23.012	25.069	24.932	22.837		44.618	46.125	9.966	35.324	-1.218	-5.917		49.082	0.191	14.643	0.003		184.2	3.06972	44.7	12.0	40.0	2.756	0.028	0.028	0.001	0.711	0.61	
203	4/19/2004	12:47:18 PM		25.251	23.012	25.109	24.952	22.982		44.716	46.197	9.816	35.624	-1.218	-5.836		46.846	0.195	14.643	0.003		185.2	3.08639	44.7	11.5	40.2	2.770	0.029	0.029	0.001	0.722	0.61	
204	4/19/2004	12:48:18 PM		25.239	23.001	25.102	24.94	23.081		44.834	46.345	9.766	35.825	-1.218	-5.911		50.457	0.183	14.643	0.003		186.2	3.10306	44.9	12.4	40.3	2.781	0.027	0.027	0.001	0.675	0.57	
205	4/19/2004	12:49:18 PM		25.255	22.996	25.108	24.971	23.047		44.68	46.266	9.783	35.644	-1.218	-5.737		50.156	0.187	14.643	0.003		187.2	3.11972	44.8	12.3	40.2	2.769	0.028	0.028	0.001	0.692	0.59	
206	4/19/2004	12:50:18 PM		25.254	22.996	25.142	24.98	23.122		44.927	46.359	9.697	36.067	-1.218	-5.821		46.994	0.185	14.643	0.003		188.2	3.13639	44.9	11.5	40.5	2.792	0.028	0.027	0.001	0.678	0.58	
207	4/19/2004	12:51:18 PM		25.238	22.964	25.116	24.964	22.95		45.114	46.529	9.622	36.212	-1.221	-5.859		48.967	0.186	14.643	0.003		189.2	3.15306	45.1	12.0	40.7	2.804	0.028	0.028	0.001	0.680	0.58	
208	4/19/2004	12:52:18 PM		25.257	22.979	25.111	25.014	23.12		45.387	46.935	9.62	36.449	-1.218	-5.914		48.828	0.191	14.643	0.003		190.2	3.16972	45.5	12.0	40.9	2.821	0.028	0.028	0.001	0.694	0.59	
209	4/19/2004	12:53:18 PM		25.257	22.958	25.1	25.058	23.139		45.261	46.827	9.592	36.369	-1.218	-5.919		48.59	0.193	14.643	0.003		191.2	3.18639	45.4	11.9	40.8	2.814	0.029	0.029	0.001	0.703	0.60	
210	4/19/2004	12:54:18 PM		25.251	22.952	25.084	25.157	23.288		45.344	46.792	9.553	36.555	-1.221	-5.917		47.175	0.195	14.643	0.003		192.2	3.20306	45.3	11.6	40.9	2.823	0.029	0.029	0.001	0.708	0.60	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	4/19/2004	12:55:18 PM		25.275	22.956	25.148	25.212	23.142		45.215	46.765	9.615	36.293	-1.218	-5.873		49.284	0.189	14.643	0.003		193.2	3.21972	45.3	12.1	40.8	2.810	0.028	0.028	0.001	0.689	0.59	
212	4/19/2004	12:56:18 PM		25.265	22.946	25.128	25.232	23.363		45.332	46.854	9.629	36.438	-1.218	-5.865		49.823	0.182	14.643	0.003		194.2	3.23639	45.4	12.2	40.9	2.819	0.027	0.027	0.001	0.661	0.56	
213	4/19/2004	12:57:18 PM		25.28	22.951	25.148	25.267	23.112		45.132	46.614	9.605	36.245	-1.218	-5.928		47.438	0.187	14.643	0.003		195.2	3.25306	45.1	11.6	40.7	2.805	0.028	0.028	0.001	0.682	0.58	
214	4/19/2004	12:58:18 PM		25.279	22.956	25.158	25.251	23.016		45.694	47.271	9.634	36.894	-1.215	-5.74		48.919	0.179	14.643	0.004		196.2	3.26972	45.8	12.0	41.3	2.847	0.027	0.027	0.001	0.643	0.55	
215	4/19/2004	12:59:18 PM		25.279	22.945	25.127	25.255	22.991		45.518	47.02	9.498	36.783	-1.218	-5.896		47.1	0.196	14.643	0.003		197.2	3.28639	45.5	11.5	41.2	2.837	0.029	0.029	0.001	0.708	0.60	
216	4/19/2004	1:00:18 PM		25.274	22.94	25.147	25.25	23.011		44.56	46.059	10.08	35.078	-1.218	-5.859		47.491	0.188	14.643	0.003		198.2	3.30306	44.6	11.6	39.8	2.745	0.028	0.028	0.001	0.701	0.60	
217	4/19/2004	1:01:18 PM		25.294	22.95	25.092	25.271	22.981		44.429	45.938	10.194	35.024	-1.218	-5.946		50.25	0.189	14.643	0.003		199.2	3.31972	44.5	12.3	39.7	2.739	0.028	0.028	0.001	0.707	0.60	
218	4/19/2004	1:02:18 PM		25.298	22.964	25.121	25.29	23.01		44.718	46.108	9.988	35.494	-1.215	-5.983		50.139	0.186	14.643	0.003		200.2	3.33639	44.6	12.3	40.1	2.765	0.028	0.028	0.001	0.689	0.59	
219	4/19/2004	1:03:18 PM		25.303	22.964	25.141	25.295	23.06		44.792	46.172	9.969	35.589	-1.218	-5.836		48.487	0.178	14.643	0.003		201.2	3.35306	44.7	11.9	40.2	2.771	0.027	0.026	0.001	0.658	0.56	
220	4/19/2004	1:04:18 PM		25.298	22.98	25.141	25.305	23.075		44.894	46.344	10.023	35.677	-1.221	-5.96		52.015	0.186	14.643	0.003		202.2	3.36972	44.9	12.7	40.3	2.778	0.028	0.028	0.001	0.686	0.58	
221	4/19/2004	1:05:18 PM		25.299	22.98	25.147	25.301	22.986		44.896	46.173	9.956	35.761	-1.224	-5.998		50.782	0.184	14.643	0.003		203.2	3.38639	44.7	12.4	40.3	2.781	0.027	0.027	0.001	0.677	0.58	
222	4/19/2004	1:06:18 PM		25.303	22.98	25.141	25.33	23.05		45.149	46.502	9.815	36.11	-1.221	-5.98		49.551	0.181	14.643	0.003		204.2	3.40306	45.0	12.1	40.6	2.801	0.027	0.027	0.001	0.662	0.56	
223	4/19/2004	1:07:18 PM		25.324	22.996	25.193	25.331	23.056		45.263	46.784	9.687	36.391	-1.218	-5.963		49.822	0.189	14.643	0.004		205.2	3.41972	45.3	12.2	40.8	2.815	0.028	0.028	0.001	0.686	0.58	
224	4/19/2004	1:08:18 PM		25.331	23.012	25.194	25.342	22.822		45.257	46.651	9.537	36.533	-1.218	-5.917		46.698	0.19	14.643	0.003		206.2	3.43639	45.2	11.4	40.9	2.820	0.028	0.028	0.001	0.689	0.59	
225	4/19/2004	1:09:18 PM		25.33	22.991	25.193	25.267	22.741		45.22	46.672	9.552	36.41	-1.218	-5.931		47.774	0.191	14.643	0.003		207.2	3.45306	45.2	11.7	40.8	2.814	0.028	0.028	0.001	0.694	0.59	
226	4/19/2004	1:10:18 PM		25.335	22.991	25.178	25.162	22.53		45.327	46.975	9.69	36.375	-1.218	-5.847		49.216	0.179	14.643	0.003		208.2	3.46972	45.5	12.1	40.9	2.817	0.027	0.027	0.001	0.650	0.55	
227	4/19/2004	1:11:18 PM		25.338	22.99	25.106	25.125	22.523		45.508	46.885	9.657	36.734	-1.218	-5.969		49.975	0.187	14.643	0.003		209.2	3.48639	45.4	12.2	41.1	2.835	0.028	0.028	0.001	0.676	0.58	
228	4/19/2004	1:12:18 PM		25.331	22.968	25.099	25.048	22.396		45.273	46.819	9.741	36.155	-1.221	-5.873		48.279	0.186	14.643	0.003		210.2	3.50306	45.3	11.8	40.7	2.807	0.028	0.028	0.001	0.679	0.58	
229	4/19/2004	1:13:18 PM		25.34	22.966	25.133	25.021	22.274		45.576	46.972	9.651	36.787	-1.218	-5.977		49.61	0.185	14.643	0.003		211.2	3.51972	45.5	12.2	41.2	2.839	0.028	0.027	0.001	0.667	0.57	
230	4/19/2004	1:14:18 PM		25.337	22.938	25.13	24.943	22.447		45.5	46.995	9.583	36.676	-1.218	-5.951		46.06	0.177	14.643	0.003		212.2	3.53639	45.5	11.3	41.1	2.833	0.026	0.026	0.001	0.640	0.54	
231	4/19/2004	1:15:18 PM		25.335	22.931	25.168	24.885	22.49		45.259	46.68	9.596	36.461	-1.218	-5.879		51.283	0.175	14.643	0.003		213.2	3.55306	45.2	12.6	40.9	2.817	0.026	0.026	0.001	0.636	0.54	
232	4/19/2004	1:16:18 PM		25.328	22.919	25.151	24.869	22.815		45.591	47.155	9.577	36.777	-1.218	-5.917		47.002	0.176	14.643	0.003		214.2	3.56972	45.7	11.5	41.2	2.839	0.026	0.026	0.001	0.634	0.54	
233	4/19/2004	1:17:18 PM		25.338	22.919	25.216	24.894	23.045		44.682	46.002	10.04	35.543	-1.218	-5.98		50.822	0.179	14.643	0.003		215.2	3.58639	44.5	12.5	40.1	2.766	0.027	0.027	0.001	0.661	0.56	
234	4/19/2004	1:18:18 PM		25.345	22.921	25.253	25.001	22.936		44.979	46.552	10.021	35.724	-1.218	-5.972		50.736	0.169	14.643	0.003		216.2	3.60306	45.1	12.4	40.4	2.782	0.025	0.025	0.001	0.620	0.53	
235	4/19/2004	1:19:18 PM		25.349	22.89	25.247	24.99	22.76		44.784	46.324	10.061	35.457	-1.218	-5.983		49.074	0.186	14.643	0.003		217.2	3.61972	44.9	12.0	40.1	2.766	0.028	0.028	0.001	0.686	0.58	
236	4/19/2004	1:20:18 PM		25.343	22.879	25.221	25.035	22.774		44.79	46.135	9.971	35.636	-1.218	-6.006		48.141	0.177	14.643	0.003		218.2	3.63639	44.7	11.8	40.2	2.773	0.026	0.026	0.001	0.652	0.56	
237	4/19/2004	1:21:18 PM		25.342	22.873	25.165	25.104	22.813		44.682	46.26	9.963	35.433	-1.218	-5.862		50.513	0.185	14.643	0.003		219.2	3.65306	44.8	12.4	40.1	2.762	0.028	0.027	0.001	0.685	0.58	
238	4/19/2004	1:22:18 PM		25.346	22.877	25.204	25.117	22.867		45.168	46.653	10.011	35.88	-1.218	-6		49.184	0.181	14.643	0.003		220.2	3.66972	45.2	12.1	40.5	2.794	0.027	0.027	0.001	0.662	0.56	
239	4/19/2004	1:23:18 PM		25.356	22.882	25.209	25.177	22.832		45.085	46.581	9.931	36.003	-1.218	-5.957		49.662	0.182	14.643	0.003		221.2	3.68639	45.1	12.2	40.5	2.795	0.027	0.027	0.001	0.665	0.57	
240	4/19/2004	1:24:18 PM		25.361	22.892	25.255	25.208	22.973		45.014	46.515	10.033	35.759	-1.218	-6.006		47.757	0.181	14.643	0.003		222.2	3.70306	45.0	11.7	40.4	2.785	0.027	0.027	0.001	0.663	0.56	
241	4/19/2004	1:25:18 PM		25.373	22.899	25.282	25.18	23.055		44.884	46.32	9.98	35.609	-1.218	-5.94		50.528	0.161	14.643	0.003		223.2	3.71972	44.8	12.4	40.2	2.775	0.024	0.024	0.001	0.592	0.50	
242	4/19/2004	1:26:18 PM		25.381	22.892	25.289	25.237	23.148		44.966	46.398	9.956	35.724	-1.218	-6.015		46.875	0.18	14.643	0.003		224.2	3.73639	44.9	11.5	40.3	2.782	0.027	0.027	0.001	0.660	0.56	
243	4/19/2004	1:27:18 PM		25.383	22.904	25.286	25.314	23.15		44.871	46.295	9.938	35.636	-1.218	-5.983		47.872	0.17	14.643	0.003		225.2	3.75306	44.8	11.7	40.3	2.775	0.025	0.025	0.001	0.625	0.53	
244	4/19/2004	1:28:18 PM		25.391	22.912	25.314	25.348	23.163		44.728	46.289	9.894	35.562	-1.218	-5.989		50.632	0.178	14.643	0.003		226.2	3.76972	44.8	12.4	40.1	2.768	0.027	0.026	0.001	0.655	0.56	
245	4/19/2004	1:29:18 PM		25.413	22.934	25.281	25.385	23.175		45.201	46.647	9.896	36.096	-1.215	-6.021		48.809	0.175	14.643	0.003		227.2	3.78639	45.2	12.0	40.6	2.803	0.026	0.026	0.001	0.637	0.54	
246	4/19/2004	1:30:18 PM		25.415	22.941	25.278	25.452	23.258		44.713	46.311	9.877	35.455	-1.218	-5.839		49.451	0.173	14.643	0.003		228.2	3.80306	44.8	12.1	40.1	2.764	0.026	0.026	0.001	0.638	0.54	
247	4/19/2004	1:31:18 PM		25.414	22.95	25.292	25.396	23.221		45.068	46.465	9.822	36.153	-1.218	-6		49.157	0.18	14.643	0.003		229.2	3.81972	45.0	12.0	40.6	2.800	0.027	0.027	0.001	0.655	0.56	
248	4/19/2004	1:32:18 PM		25.427	22.968	25.305	25.429	23.264		45.112	46.645	9.785	36.112	-1.215	-5.94		49.468	0.171	14.643	0.003		230.2	3.83639	45.2	12.1	40.6	2.800	0.025	0.025	0.001	0.622	0.53	
249	4/19/2004	1:33:18 PM		25.439	22.986	25.353	25.446	23.177		45.219	46.784	9.782	36.18	-1.215	-6.009		50.288	0.178	14.643	0.003		231.2	3.85306	45.3	12.3	40.7	2.806	0.027	0.026	0.001	0.646	0.55	
250	4/19/2004	1:34:18 PM		25.42	22.967	25.309	25.418	23.053		45.172	46.649	9.787	36.153	-1.221	-5.992		49.966	0.178	14.643	0.003		232.2	3.86972	45.2	12.2	40.7	2.804	0.027	0.026	0.001	0.647	0.55	
251	4/19/2004	1:35:18 PM		25.453	22.994	25.356	25.37	22.9		45.205	46.838	9.842	36.11	-1.218	-5.983		50.555	0.179	14.643	0.003		233.2	3.88639	45.4	12.4	40.7	2.803	0.027	0.026	0.001	0.650	0.55	
252	4/19/2004	1:36:18 PM		25.449	22.996	25.373	25.291	22.72		45.23	46.784	9.767	36.258	-1.215	-5.998		47.655	0.179	14.643	0.004		234.2	3.90306	45.3	11.7	40.7	2.809	0.027	0.026	0.001	0.648	0.55	
253	4/19/2004	1:37:18 PM		25.46	22.987	25.239	25.272	22.671		45.327	46.73	9.75	36.364	-1.218	-5.94		48.661	0.167	14.643	0.003		235.2	3.91972	45.3	11.9	40.8	2.816	0.025	0.025	0.001	0.605	0.52	
254	4/19/2004	1:38:18 PM		25.455	22.992	25.239	25.167	22.571		45.018	46.401	9.718	35.985	-1.218	-6.018		50.636	0.18	14.643	0.003		236.2	3.93639	44.9	12.4	40.5	2.792	0.027	0.027	0.001	0.658	0.56	
255	4/19/2004	1:39:18 PM		25.45	22.977	25.234	25.132	22.501		45.352	46.807	9.765	36.426	-1.221	-5.998		48.636	0.176	14.643	0.003		237.2	3.95306	45.3	11.9	40.9	2.819	0.026	0.026	0.001	0.638	0.54	
256	4/19/2004	1:40:18 PM		25.465	22.992	25.304	25.177	22.431		45.375	46.977	9.814	36.299	-1.215	-6.009		47.459	0.178	14.643	0.003		238.2	3.96972	45.5	11.6	40.8	2.816	0.027	0.026	0.001	0.644	0.55	
257	4/19/2004	1:41:18 PM		25.455	22.971	25.273	25.086	22.455		45.584	47.285	9.806	36.467	-1.218	-6.038		48.385	0.178	14.643	0.003		239.2	3.98639	45.8	11.9	41.0	2.829	0.027	0.026	0.001	0.642	0.55	
258	4/19/2004	1:42:18 PM		25.464	22.971	25.308	25.041	22.63		45.24	46.74	10.039	36.098	-1.221	-6.006		50.317	0.176	14.643	0.003		240.2	4.00306	45.3	12.3	40.7	2.804	0.026	0.026	0.001	0.640	0.54	
259	4/19/2004	1:43:18 PM		25.459	22.96	25.347	25.01	22.695		44.691	46.156	10.122	35.31	-1.218	-6.029		50.653	0.177	14.643	0.003		241.2	4.01972	44.7	12.4	40.0	2.758	0.026	0.026	0.001	0.653	0.56	
260	4/19/2004	1:44:18 PM		25.463	22.954	25.346	25.004	22.829		44.803	46.521	10.237	35.221	-1.218	-5.896		48.632	0.163	14.643	0.003		242.2	4.03639	45.0	11.9	40.0	2.759	0.024	0.024	0.001	0.601	0.51	
261	4/19/2004	1:45:18 PM		25.469	22.945	25.372	25.05	22.925		44.948	46.517	10.154	35.511	-1.218	-6.044		48.898	0.168	14.643	0.003		243.2	4.05306	45.0	12.0	40.2	2.774	0.025	0.025	0.001	0.616	0.52	
262	4/19/2004	1:46:18 PM		25.469	22.955	25.407	25.1	22.92		44.919	46.44	10.135	35.58	-1.218	-6.015		49.485	0.167	14.643	0.003		244.2	4.06972	45.0	12.1	40.2	2.775	0.025	0.025	0.001	0.612	0.52	
263	4/19/2004	1:47:18 PM		25.494	22.961	25.428	25.176	22.946		44.96	46.508	10.048	35.628	-1.218	-6.029		48.767	0.178	14.643	0.003		245.2	4.08639	45.0	12.0	40.3	2.778	0.027	0.026	0.001	0.651	0.55	
264	4/19/2004	1:48:18 PM		25.5	22.952	25.429	25.142	23.058		44.657	46.282	10.076	35.293	-1.218	-5.954		47.034	0.169	14.643	0.003		246.2	4.10306	44.8	11.5	40.0	2.756	0.025	0.025	0.001	0.623	0.53	
265	4/19/2004	1:49:18 PM		25.497	22.953	25.3	25.233	23.104		44.896	46.421	10.036	35.543	-1.218	-6.024		49.524	0.17	14.643	0.003		247.2	4.11972	44.9	12.1	40.2	2.773	0.025	0.025	0.001	0.625	0.53	
266	4/19/2004	1:50:18 PM		25.482	22.953	25.315	25.208	23.144		45.112	46.743	10.083	35.693	-1.218	-5.992		49.414	0.166	14.643	0.004		248.2	4.13639	45.3	12.1	40.4	2.786	0.025	0.025	0.001	0.607	0.52	
267	4/19/2004	1:51:18 PM		25.504	22.97	25.337	25.341	23.131		44.855	46.328	10.061	35.513	-1.218	-5.998		47.021	0.162	14.643	0.003		249.2	4.15306	44.9	11.5	40.2	2.771	0.024	0.024	0.001	0.595	0.51	
268	4/19/2004	1:52:18 PM		25.5	22.966	25.363	25.387	23.202		44.759	46.318	9.935	35.576	-1.218	-5.749		51.433	0.141	14.643	0.003		250.2	4.16972	44.8	12.6	40.2	2.769	0.021	0.021	0.001	0.518	0.44	
269	4/19/2004	1:53:18 PM		25.507	22.988	25.41	25.419	23.154		45.178	46.767	10.144	35.738	-1.218	-6.003		50.605	0.159	14.643	0.003		251.2	4.18639	45.3	12.4	40.5	2.789	0.024	0.023	0.001	0.579	0.49	
270	4/19/2004	1:54:18 PM		25.512	22.984	25.411	25.49	23.125		44.89	46.504	10.008	35.677	-1.212	-5.873		49.683	0.167	14.643	0.004		252.2	4.20306	45.0	12.2	40.3	2.777	0.025	0.025	0.001	0.611	0.52	
271	4/19/2004	1:55:18 PM		25.515	23.001	25.433	25.482	23.182		44.942	46.39	10.109	35.558	-1.218	-6.024		49.076	0.169	14.643	0.003		253.2	4.21972	44.9	12.0	40.3	2.775	0.025	0.025	0.001	0.618	0.53	
272	4/19/2004	1:55:43 PM		25.52	22.997	25.429	25.483	23.248		44.911	46.558	10.08	35.529	-1.221	-6.026		49.528	0.161	14.643	0.003		253.6	4.22667	45.1	12.1	40.2	2.773	0.024	0.024	0.001	0.590	0.50	
273	4/19/2004	1:56:44 PM		25.537	23.014	25.421	25.51	23.21		45.164	46.687	9.915	35.983	-1.218	-5.937		47.977	0.155	14.643	0.003		254.6	4.24361	45.2	11.8	40.6	2.797	0.023	0.023	0.001	0.563	0.48	
274	4/19/2004	1:57:44 PM		25.539	23.021	25.398	25.557	23.217		44.935	46.301	9.918	35.792	-1.218	-6.024		51.986	0.171	14.643	0.003		255.6	4.26028	44.8	12.7	40.4	2.783	0.025	0.025	0.001	0.625	0.53	
275	4/19/2004	1:58:44 PM		25.555	23.042	25.309	25.603	23.298		45.108	46.877	10.021	35.829	-1.212	-5.833		47.758	0.168	14.643	0.004		256.6	4.27694	45.4	11.7	40.5	2.790	0.025	0.025	0.001	0.614	0.52	
276	4/19/2004	1:59:44 PM		25.618	23.045	25.191	25.59	23.181		45.11	46.772	10.012	35.702	-1.218	-6.076		48.206	0.171	14.643	0.003		257.6	4.29361	45.3	11.8	40.4	2.786	0.025	0.025	0.001	0.628	0.53	
277	4/19/2004	2:00:44 PM		25.655	23.057	25.163	25.607	22.992		45.379	46.962	10.042	36.063	-1.218	-6.038		47.724	0.168	14.643	0.003		258.6	4.31028	45.5	11.7	40.7	2.808	0.025	0.025	0.001	0.612	0.52	
278	4/19/2004	2:01:44 PM		25.575	23.052	25.123	25.582	22.811		45.19	46.84	10.004	35.913	-1.218	-6.078		50.527	0.164	14.643	0.003		259.6	4.32694	45.4	12.4	40.6	2.796	0.024	0.024	0.001	0.601	0.51	
279	4/19/2004	2:02:44 PM		25.546	23.058	25.135	25.513	22.722		45.556	47.097	9.918	36.459	-1.221	-6.041		48.946	0.168	14.643	0.003		260.6	4.34361	45.6	12.0	41.0	2.827	0.025	0.025	0.001	0.608	0.52	
280	4/19/2004	2:03:44 PM		25.507	23.039	25.09	25.364	22.588		45.228	46.993	9.983	35.882	-1.224	-6.087		49.155	0.169	14.643	0.003		261.6	4.36028	45.5	12.0	40.6	2.796	0.025	0.025	0.001	0.620	0.53	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	4/19/2004	2:04:44 PM		25.477	23.054	25.086	25.339	22.438		45.031	46.801	9.893	35.999	-1.218	-5.841		45.53	0.165	14.643	0.003		262.6	4.37694	45.3	11.2	40.5	2.793	0.025	0.025	0.001	0.606	0.52	
282	4/19/2004	2:05:44 PM		25.462	23.044	25.07	25.339	22.788		45.22	46.626	9.9	36.159	-1.218	-6.047		50.404	0.169	14.643	0.003		263.6	4.39361	45.2	12.4	40.7	2.805	0.025	0.025	0.001	0.618	0.53	
283	4/19/2004	2:06:44 PM		25.437	23.049	25.096	25.389	22.608		44.989	46.666	9.943	35.702	-1.218	-6.029		49.011	0.16	14.643	0.003		264.6	4.41028	45.2	12.0	40.3	2.782	0.024	0.024	0.001	0.590	0.50	
284	4/19/2004	2:07:44 PM		25.407	23.049	25.075	25.424	22.743		45.528	46.877	9.933	36.518	-1.218	-6.07		47.776	0.171	14.643	0.003		265.6	4.42694	45.4	11.7	41.0	2.828	0.025	0.025	0.001	0.620	0.53	
285	4/19/2004	2:08:44 PM		25.381	23.033	24.984	25.373	23.008		45.363	46.846	9.979	36.229	-1.215	-6.047		48.444	0.163	14.643	0.003		266.6	4.44361	45.4	11.9	40.8	2.813	0.024	0.024	0.001	0.596	0.51	
286	4/19/2004	2:09:44 PM		25.386	23.017	24.919	25.393	22.912		45.155	46.616	9.909	36.015	-1.218	-6.087		45.553	0.166	14.643	0.003		267.6	4.46028	45.1	11.2	40.6	2.798	0.025	0.025	0.001	0.611	0.52	
287	4/19/2004	2:10:44 PM		25.362	23.029	24.951	25.399	22.979		45.255	46.921	9.986	35.985	-1.218	-6.116		48.473	0.164	14.643	0.003		268.6	4.47694	45.4	11.9	40.6	2.801	0.024	0.024	0.001	0.603	0.51	
288	4/19/2004	2:11:44 PM		25.348	23.025	24.931	25.42	23.025		45.321	46.89	10.001	36.11	-1.218	-6.096		47.954	0.167	14.643	0.003		269.6	4.49361	45.4	11.8	40.7	2.807	0.025	0.025	0.001	0.613	0.52	
289	4/19/2004	2:12:44 PM		25.349	23.025	24.917	25.496	23.071		45.246	46.925	10.026	35.913	-1.218	-6.058		48.36	0.161	14.643	0.003		270.6	4.51028	45.5	11.9	40.6	2.798	0.024	0.024	0.001	0.593	0.50	
290	4/19/2004	2:13:44 PM		25.324	23.011	24.902	25.441	23.077		45.232	46.751	9.969	36.001	-1.221	-6.081		51.777	0.158	14.643	0.003		271.6	4.52694	45.3	12.7	40.6	2.800	0.024	0.024	0.001	0.582	0.49	
291	4/19/2004	2:14:44 PM		25.326	23.027	24.929	25.508	23.238		45.236	46.736	9.979	36.003	-1.218	-6.078		47.586	0.163	14.643	0.003		272.6	4.54361	45.3	11.7	40.6	2.801	0.024	0.024	0.001	0.599	0.51	
292	4/19/2004	2:15:44 PM		25.322	23.034	24.925	25.574	23.215		45.578	47.232	10.048	36.13	-1.218	-6.087		49.374	0.159	14.643	0.003		273.6	4.56028	45.8	12.1	40.9	2.817	0.024	0.024	0.001	0.581	0.49	
293	4/19/2004	2:16:44 PM		25.308	23.039	24.901	25.575	23.2		45.031	46.948	10.019	35.671	-1.218	-5.85		47.885	0.17	14.643	0.003		274.6	4.57694	45.5	11.7	40.4	2.782	0.025	0.025	0.001	0.630	0.54	
294	4/19/2004	2:17:44 PM		25.273	23.029	24.795	25.6	23.215		45.489	46.993	9.88	36.42	-1.218	-6.067		47.513	0.16	14.643	0.003		275.6	4.59361	45.5	11.6	41.0	2.824	0.024	0.024	0.001	0.586	0.50	
295	4/19/2004	2:18:44 PM		25.278	23.05	24.776	25.641	23.251		45.528	47.2	9.967	36.272	-1.221	-6.041		48.302	0.156	14.643	0.003		276.6	4.61028	45.7	11.8	40.9	2.820	0.023	0.023	0.001	0.572	0.49	
296	4/19/2004	2:19:44 PM		25.284	23.066	24.802	25.707	23.232		45.363	47.107	10.015	36.046	-1.218	-6.081		49.316	0.155	14.643	0.003		277.6	4.62694	45.6	12.1	40.7	2.806	0.023	0.023	0.001	0.571	0.49	
297	4/19/2004	2:20:44 PM		25.261	23.063	24.794	25.738	23.294		45.257	46.854	9.946	36.116	-1.224	-6.136		46.56	0.159	14.643	0.003		278.6	4.64361	45.4	11.4	40.7	2.805	0.024	0.024	0.001	0.586	0.50	
298	4/19/2004	2:21:44 PM		25.267	23.089	24.835	25.845	23.335		44.792	46.359	10.402	35.076	-1.218	-6.136		50.494	0.16	14.643	0.003		279.6	4.66028	44.9	12.4	39.9	2.753	0.024	0.024	0.001	0.600	0.51	
299	4/19/2004	2:22:44 PM		25.231	23.073	24.794	25.793	23.173		44.94	46.324	10.411	35.344	-1.224	-6.131		50.313	0.149	14.643	0.003		280.6	4.67694	44.9	12.3	40.1	2.768	0.022	0.022	0.001	0.557	0.47	
300	4/19/2004	2:23:44 PM		25.239	23.076	24.827	25.766	22.956		44.68	46.44	10.353	35.035	-1.221	-6.105		49.024	0.162	14.643	0.003		281.6	4.69361	45.0	12.0	39.9	2.748	0.024	0.024	0.001	0.609	0.52	
301	4/19/2004	2:24:44 PM		25.238	23.079	24.835	25.775	22.904		44.807	46.496	10.336	35.184	-1.218	-5.986		46.884	0.14	14.643	0.003		282.6	4.71028	45.0	11.5	40.0	2.758	0.021	0.021	0.001	0.524	0.45	
302	4/19/2004	2:25:44 PM		25.236	23.088	24.834	25.718	22.757		45.045	46.711	10.398	35.476	-1.218	-6.102		48.463	0.166	14.643	0.003		283.6	4.72694	45.2	11.9	40.3	2.776	0.025	0.025	0.001	0.618	0.53	
303	4/19/2004	2:26:44 PM		25.233	23.09	24.776	25.635	22.614		45.066	46.61	10.384	35.404	-1.215	-6.09		48.681	0.165	14.643	0.003		284.6	4.74361	45.1	11.9	40.2	2.774	0.025	0.025	0.001	0.615	0.52	
304	4/19/2004	2:27:44 PM		25.236	23.098	24.753	25.528	22.616		44.825	46.581	10.321	35.191	-1.218	-5.998		49.184	0.144	14.643	0.003		285.6	4.76028	45.1	12.1	40.0	2.758	0.021	0.022	0.001	0.540	0.46	
305	4/19/2004	2:28:44 PM		25.227	23.089	24.75	25.439	22.548		45.141	46.73	10.227	35.685	-1.218	-6.159		49.437	0.155	14.643	0.003		286.6	4.77694	45.3	12.1	40.4	2.786	0.023	0.023	0.001	0.576	0.49	
306	4/19/2004	2:29:44 PM		25.226	23.082	24.778	25.312	22.511		45.195	46.676	10.266	35.697	-1.218	-6.038		48.339	0.149	14.643	0.003		287.6	4.79361	45.2	11.8	40.4	2.789	0.022	0.022	0.001	0.553	0.47	
307	4/19/2004	2:30:44 PM		25.203	23.075	24.761	25.24	22.398		45.356	46.937	10.078	36.02	-1.218	-6.157		48.306	0.155	14.643	0.003		288.6	4.81028	45.5	11.8	40.7	2.805	0.023	0.023	0.001	0.572	0.49	
308	4/19/2004	2:31:44 PM		25.195	23.052	24.768	25.207	22.425		44.896	46.531	10.047	35.621	-1.218	-6.041		50.947	0.146	14.643	0.003		289.6	4.82694	45.1	12.5	40.3	2.776	0.022	0.022	0.001	0.544	0.46	
309	4/19/2004	2:32:44 PM		25.204	23.06	24.811	25.24	22.534		45.394	47.051	10.183	35.899	-1.215	-6.128		49.118	0.161	14.643	0.003		290.6	4.84361	45.6	12.0	40.6	2.802	0.024	0.024	0.001	0.594	0.51	
310	4/19/2004	2:33:44 PM		25.213	23.06	24.806	25.31	22.609		45.139	46.865	10.121	35.763	-1.224	-5.966		47.805	0.148	14.643	0.003		291.6	4.86028	45.4	11.7	40.5	2.789	0.022	0.022	0.001	0.548	0.47	
311	4/19/2004	2:34:44 PM		25.197	23.039	24.825	25.334	22.698		45.11	46.703	10.08	35.777	-1.218	-6.073		48.696	0.172	14.643	0.003		292.6	4.87694	45.2	11.9	40.4	2.788	0.026	0.026	0.001	0.637	0.54	
312	4/19/2004	2:35:44 PM		25.198	23.035	24.821	25.365	22.764		45.143	46.896	10.136	35.673	-1.221	-6.035		49.785	0.16	14.643	0.003		293.6	4.89361	45.4	12.2	40.4	2.786	0.024	0.024	0.001	0.593	0.50	
313	4/19/2004	2:36:44 PM		25.204	23.036	24.832	25.476	22.886		45.302	46.995	10.121	35.905	-1.218	-6.131		48.152	0.157	14.643	0.003		294.6	4.91028	45.5	11.8	40.6	2.799	0.023	0.024	0.001	0.579	0.49	
314	4/19/2004	2:37:44 PM		25.201	23.033	24.729	25.523	22.938		45.721	47.356	10.115	36.33	-1.218	-6.142		50.252	0.16	14.643	0.003		295.6	4.92694	45.9	12.3	41.0	2.829	0.024	0.024	0.001	0.586	0.50	
315	4/19/2004	2:38:44 PM		25.207	23.034	24.715	25.61	23.049		45.555	47.064	10.07	36.223	-1.218	-6.145		48.367	0.154	14.643	0.003		296.6	4.94361	45.6	11.9	40.9	2.819	0.023	0.023	0.001	0.566	0.48	
316	4/19/2004	2:39:44 PM		25.189	23.026	24.717	25.587	23.006		45.668	47.279	10.057	36.469	-1.218	-6.139		47.766	0.16	14.643	0.003		297.6	4.96028	45.8	11.7	41.1	2.832	0.024	0.024	0.001	0.585	0.50	
317	4/19/2004	2:40:44 PM		25.181	23.023	24.714	25.588	23.103		45.987	47.542	10.013	36.834	-1.224	-6.09		46.631	0.155	14.643	0.003		298.6	4.97694	46.1	11.4	41.4	2.855	0.023	0.023	0.001	0.563	0.48	
318	4/19/2004	2:41:44 PM		25.183	23.025	24.736	25.66	23.09		45.653	47.263	10.034	36.428	-1.218	-6.154		49.923	0.157	14.643	0.003		299.6	4.99361	45.8	12.2	41.0	2.830	0.023	0.024	0.001	0.575	0.49	
319	4/19/2004	2:42:44 PM		25.179	23.031	24.787	25.647	23.092		44.448	46.293	11.023	34.08	-1.218	-6.136		51.94	0.151	14.643	0.003		300.6	5.01028	44.8	12.7	39.3	2.707	0.023	0.023	0.001	0.577	0.49	
320	4/19/2004	2:43:44 PM		25.181	23.033	24.799	25.679	23.144		44.577	46.185	10.913	34.351	-1.218	-6.113		50.106	0.156	14.643	0.003		301.6	5.02694	44.7	12.3	39.5	2.721	0.023	0.023	0.001	0.593	0.50	
321	4/19/2004	2:44:44 PM		25.178	23.05	24.826	25.681	23.146		44.18	45.793	10.793	34.181	-1.218	-6.09		51.858	0.138	14.643	0.003		302.6	5.04361	44.3	12.7	39.2	2.701	0.021	0.021	0.001	0.528	0.45	
322	4/19/2004	2:45:44 PM		25.184	23.046	24.847	25.687	22.996		44.577	46.166	10.584	34.751	-1.218	-6.061		49.693	0.143	14.643	0.003		303.6	5.06028	44.7	12.2	39.7	2.735	0.021	0.021	0.001	0.540	0.46	
323	4/19/2004	2:46:44 PM		25.184	23.045	24.792	25.726	22.825		44.475	46.409	10.656	34.466	-1.218	-5.943		47.939	0.14	14.643	0.003		304.6	5.07694	44.9	11.7	39.5	2.721	0.021	0.021	0.001	0.532	0.45	
324	4/19/2004	2:47:44 PM		25.174	23.055	24.742	25.731	22.745		44.966	46.73	10.682	34.928	-1.215	-6.096		50.938	0.135	14.643	0.004		305.6	5.09361	45.3	12.5	39.9	2.754	0.020	0.020	0.001	0.508	0.43	
325	4/19/2004	2:48:44 PM		25.188	23.05	24.751	25.706	22.579		44.689	46.309	10.66	34.77	-1.212	-6.194		51.516	0.148	14.643	0.004		306.6	5.11028	44.8	12.6	39.7	2.739	0.022	0.022	0.001	0.559	0.48	
326	4/19/2004	2:49:44 PM		25.186	23.033	24.749	25.548	22.547		44.724	46.506	10.481	35.043	-1.218	-5.977		49.151	0.146	14.643	0.003		307.6	5.12694	45.0	12.0	39.9	2.750	0.022	0.022	0.001	0.550	0.47	
327	4/19/2004	2:50:44 PM		25.186	23.047	24.788	25.443	22.456		44.811	46.552	10.498	35.063	-1.218	-6.191		48.871	0.151	14.643	0.003		308.6	5.14361	45.1	12.0	39.9	2.754	0.023	0.023	0.001	0.567	0.48	
328	4/19/2004	2:51:44 PM		25.169	23.03	24.771	25.346	22.474		44.813	46.602	10.593	34.805	-1.218	-6.185		50.438	0.146	14.643	0.003		309.6	5.16028	45.1	12.4	39.8	2.745	0.022	0.022	0.001	0.550	0.47	
329	4/19/2004	2:52:44 PM		25.157	23.013	24.795	25.309	22.487		44.587	46.212	10.486	34.838	-1.218	-6.165		50.165	0.145	14.643	0.003		310.6	5.17694	44.7	12.3	39.7	2.738	0.022	0.022	0.001	0.548	0.47	
330	4/19/2004	2:53:44 PM		25.171	23.018	24.809	25.243	22.602		44.695	46.345	10.665	34.735	-1.221	-6.119		52.058	0.131	14.643	0.003		311.6	5.19361	44.9	12.8	39.7	2.738	0.020	0.020	0.000	0.494	0.42	
331	4/19/2004	2:54:44 PM		25.186	23.023	24.854	25.208	22.667		44.606	46.231	10.605	34.836	-1.215	-6.209		51.414	0.148	14.643	0.003		312.6	5.21028	44.8	12.6	39.7	2.739	0.022	0.022	0.001	0.558	0.47	
332	4/19/2004	2:55:44 PM		25.176	23.003	24.874	25.253	22.757		44.587	46.278	10.578	34.883	-1.218	-6.159		48.302	0.14	14.643	0.003		313.6	5.22694	44.8	11.8	39.7	2.740	0.021	0.021	0.001	0.527	0.45	
333	4/19/2004	2:56:44 PM		25.198	23.02	24.926	25.375	22.9		44.686	46.481	10.667	34.747	-1.215	-6.061		50.544	0.134	14.643	0.003		314.6	5.24361	45.0	12.4	39.7	2.738	0.020	0.020	0.001	0.504	0.43	
334	4/19/2004	2:57:44 PM		25.193	23	24.911	25.47	23.251		44.834	46.581	10.746	34.836	-1.218	-6.139		48.865	0.156	14.643	0.003		315.6	5.26028	45.1	12.0	39.8	2.746	0.023	0.023	0.001	0.585	0.50	
335	4/19/2004	2:58:44 PM		25.199	23.005	24.912	25.576	23.116		44.672	46.61	10.733	34.721	-1.215	-6.035		52.58	0.144	14.643	0.003		316.6	5.27694	45.1	12.9	39.7	2.737	0.021	0.022	0.001	0.542	0.46	
336	4/19/2004	2:59:44 PM		25.22	23.011	24.798	25.642	23.187		44.519	46.272	10.536	34.782	-1.218	-6.041		50.325	0.144	14.643	0.003		317.6	5.29361	44.8	12.3	39.7	2.734	0.021	0.022	0.001	0.545	0.46	
337	4/19/2004	3:00:44 PM		25.206	23.002	24.768	25.688	23.153		44.552	46.286	10.617	34.749	-1.218	-6.044		50.809	0.143	14.643	0.003		318.6	5.31028	44.8	12.5	39.7	2.734	0.021	0.021	0.001	0.541	0.46	
338	4/19/2004	3:01:44 PM		25.207	23.008	24.805	25.709	23.174		44.583	46.421	10.535	34.776	-1.221	-6.044		50.265	0.144	14.643	0.003		319.6	5.32694	44.9	12.3	39.7	2.736	0.021	0.022	0.001	0.544	0.46	
339	4/19/2004	3:02:44 PM		25.209	23.025	24.817	25.776	23.201		44.962	46.788	10.519	35.271	-1.221	-6.05		49.243	0.143	14.643	0.003		320.6	5.34361	45.3	12.1	40.1	2.766	0.021	0.021	0.001	0.534	0.45	
340	4/19/2004	3:03:44 PM		25.209	23.036	24.842	25.837	23.267		44.686	46.572	10.55	34.916	-1.218	-6.05		48.642	0.143	14.643	0.003		321.6	5.36028	45.1	11.9	39.8	2.744	0.021	0.021	0.001	0.538	0.46	
341	4/19/2004	3:04:44 PM		25.211	23.042	24.859	25.888	23.278		44.38	46.228	10.56	34.608	-1.218	-6.052		50.601	0.142	14.643	0.003		322.6	5.37694	44.8	12.4	39.5	2.723	0.021	0.021	0.001	0.538	0.46	
342	4/19/2004	3:05:44 PM		25.223	23.069	24.876	25.895	23.325		44.504	46.386	10.686	34.536	-1.218	-6.05		52.832	0.142	14.643	0.003		323.6	5.39361	44.9	12.9	39.5	2.725	0.021	0.021	0.001	0.538	0.46	
343	4/19/2004	3:06:44 PM		25.224	23.076	24.898	25.857	23.322		44.604	46.487	10.592	34.831	-1.218	-6.024		52.822	0.141	14.643	0.003		324.6	5.41028	45.0	12.9	39.7	2.738	0.021	0.021	0.001	0.531	0.45	
344	4/19/2004	3:07:44 PM		25.231	23.068	24.894	25.894	23.164		44.564	46.224	10.397	35.02	-1.218	-6.047		49.03	0.143	14.643	0.003		325.6	5.42694	44.8	12.0	39.8	2.744	0.021	0.021	0.001	0.537	0.46	
345	4/19/2004	3:08:44 PM		25.253	23.095	24.936	25.965	22.939		44.564	46.614	10.55	34.751	-1.218	-6.044		52.044	0.143	14.643	0.003		326.6	5.44361	45.1	12.8	39.7	2.734	0.021	0.021	0.001	0.539	0.46	
346	4/19/2004	3:09:44 PM		25.253	23.095	24.926	25.871	22.775		44.703	46.56	10.48	34.996	-1.218	-6.047		50.196	0.143	14.643	0.003		327.6	5.46028	45.1	12.3	39.8	2.747	0.021	0.021	0.001	0.536	0.46	
347	4/19/2004	3:10:44 PM		25.257	23.094	24.915	25.88	22.648		44.371	46.289	10.5	34.626	-1.218	-6.058		50.394	0.141	14.643	0.003		328.6	5.47694	44.8	12.3	39.5	2.723	0.021	0.021	0.001	0.533	0.45	
348	4/19/2004	3:11:44 PM		25.256	23.093	24.929	25.853	22.571		44.587	46.347	10.438	34.983	-1.218	-6.05		49.366	0.142	14.643	0.003		329.6	5.49361	44.9	12.1	39.8	2.743	0.021	0.021	0.001	0.533	0.45	
349	4/19/2004	3:12:44 PM		25.264	23.086	24.912	25.746	22.449		44.407	46.322	10.368	34.813	-1.221	-6.032		50.058	0.145	14.643	0.003		330.6	5.51028	44.8	12.3	39.6	2.731	0.022	0.022	0.001	0.547	0.47	
350	4/19/2004	3:13:44 PM		25.268	23.079	24.941	25.775	22.483		45.3	46.842	10.487	35.474	-1.221	-6.931		49.829	0.136	14.643	0.003		331.6	5.52694	45.4	12.2	40.4	2.785	0.020	0.020	0.001	0.503	0.43	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	4/19/2004	3:14:44 PM		25.281	23.083	24.944	25.713	22.401		45.172	46.68	10.476	35.433	-1.221	-7.09		49.347	0.144	14.643	0.003		332.6	5.54361	45.2	12.1	40.3	2.779	0.021	0.022	0.001	0.534	0.45	
352	4/19/2004	3:15:44 PM		25.278	23.06	24.956	25.701	22.443		45.217	46.718	10.439	35.521	-1.218	-7.108		50.071	0.144	14.643	0.003		333.6	5.56028	45.2	12.3	40.4	2.783	0.021	0.021	0.001	0.532	0.45	
353	4/19/2004	3:16:44 PM		25.291	23.043	24.954	25.679	22.647		45.238	46.821	10.43	35.441	-1.218	-7.085		50.413	0.145	14.643	0.003		334.6	5.57694	45.3	12.4	40.3	2.781	0.022	0.022	0.001	0.537	0.46	
354	4/19/2004	3:17:44 PM		25.295	23.047	24.983	25.647	22.576		45.319	46.423	10.363	35.767	-1.218	-6.969		49.916	0.146	14.643	0.003		335.6	5.59361	45.0	12.2	40.5	2.795	0.022	0.022	0.001	0.537	0.46	
355	4/19/2004	3:18:44 PM		25.305	23.052	24.988	25.697	22.696		45.126	46.401	10.398	35.515	-1.218	-6.871		48.365	0.144	14.643	0.003		336.6	5.61028	44.9	11.9	40.3	2.780	0.021	0.021	0.001	0.533	0.45	
356	4/19/2004	3:19:44 PM		25.325	23.062	25.033	25.737	22.796		45.406	46.535	10.431	35.79	-1.212	-7.076		49.845	0.142	14.643	0.004		337.6	5.62694	45.1	12.2	40.6	2.799	0.021	0.021	0.001	0.521	0.44	
357	4/19/2004	3:20:44 PM		25.33	23.037	25.023	25.772	22.957		45.396	46.85	10.458	35.652	-1.218	-7.073		50.365	0.143	14.643	0.003		338.6	5.64361	45.4	12.3	40.5	2.794	0.021	0.021	0.001	0.526	0.45	
358	4/19/2004	3:21:44 PM		25.336	23.042	25.029	25.773	23.138		45.334	46.823	10.526	35.63	-1.221	-7.058		49.522	0.142	14.643	0.003		339.6	5.66028	45.4	12.1	40.5	2.791	0.021	0.021	0.001	0.523	0.44	
359	4/19/2004	3:22:44 PM		25.336	23.033	24.889	25.729	22.998		45.118	46.492	10.39	35.453	-1.221	-7.053		46.802	0.142	14.643	0.003		340.6	5.67694	45.0	11.5	40.3	2.778	0.021	0.021	0.001	0.527	0.45	
360	4/19/2004	3:23:44 PM		25.337	23.039	24.895	25.775	22.989		45.251	46.703	10.45	35.492	-1.218	-7.047		49.491	0.142	14.643	0.003		341.6	5.69361	45.2	12.1	40.4	2.783	0.021	0.021	0.001	0.526	0.45	
361	4/19/2004	3:24:44 PM		25.333	23.035	24.931	25.731	23.196		45.483	47.01	10.527	35.697	-1.218	-7.058		49.881	0.142	14.643	0.003		342.6	5.71028	45.5	12.2	40.6	2.799	0.021	0.021	0.001	0.523	0.44	
362	4/19/2004	3:25:44 PM		25.324	23.035	24.932	25.821	23.231		45.07	46.566	10.41	35.344	-1.218	-7.012		46.725	0.137	14.643	0.003		343.6	5.72694	45.1	11.5	40.2	2.772	0.020	0.020	0.001	0.509	0.43	
363	4/19/2004	3:26:44 PM		25.325	23.047	24.958	25.863	23.243		45.294	46.923	10.361	35.642	-1.218	-7.044		50.89	0.142	14.643	0.003		344.6	5.74361	45.5	12.5	40.5	2.790	0.021	0.021	0.001	0.524	0.45	
364	4/19/2004	3:27:44 PM		25.326	23.042	24.944	25.893	23.203		45.528	47.114	10.484	35.767	-1.218	-7.006		48.646	0.141	14.643	0.003		345.6	5.76028	45.6	11.9	40.6	2.803	0.021	0.021	0.001	0.518	0.44	
365	4/19/2004	3:28:44 PM		25.467	23.049	24.95	25.945	23.179		45.219	46.722	10.318	35.706	-1.218	-7.044		49.021	0.141	14.643	0.003		346.6	5.77694	45.2	12.0	40.5	2.790	0.021	0.021	0.001	0.520	0.44	
366	4/19/2004	3:29:44 PM		25.423	23.05	24.936	25.941	23.381		45.388	47.037	10.462	35.605	-1.218	-6.972		47.443	0.137	14.643	0.003		347.6	5.79361	45.6	11.6	40.5	2.792	0.020	0.020	0.001	0.505	0.43	
367	4/19/2004	3:30:44 PM		25.405	23.062	24.958	25.963	23.423		45.029	46.579	10.404	35.363	-1.218	-7.041		47.758	0.14	14.643	0.003		348.6	5.81028	45.1	11.7	40.2	2.771	0.021	0.021	0.001	0.520	0.44	
368	4/19/2004	3:31:44 PM		25.386	23.078	24.939	25.994	23.259		45.052	46.467	10.397	35.408	-1.218	-7.041		49.758	0.14	14.643	0.003		349.6	5.82694	45.0	12.2	40.2	2.774	0.021	0.021	0.001	0.520	0.44	
369	4/19/2004	3:32:44 PM		25.352	23.079	24.86	25.995	23.019		45.263	46.927	10.381	35.527	-1.218	-6.978		48.072	0.139	14.643	0.003		350.6	5.84361	45.5	11.8	40.4	2.785	0.021	0.021	0.001	0.515	0.44	
370	4/19/2004	3:33:44 PM		25.328	23.09	24.806	26.025	22.869		45.601	47.227	10.46	35.829	-1.221	-7.041		50.586	0.14	14.643	0.003		351.6	5.86028	45.8	12.4	40.7	2.807	0.021	0.021	0.001	0.515	0.44	
371	4/19/2004	3:34:44 PM		25.291	23.073	24.779	25.909	22.793		45.309	47.016	10.421	35.691	-1.215	-7.044		51.556	0.139	14.643	0.003		352.6	5.87694	45.5	12.6	40.5	2.792	0.021	0.021	0.001	0.515	0.44	
372	4/19/2004	3:35:44 PM		25.274	23.066	24.797	25.832	22.48		45.367	46.964	10.406	35.745	-1.221	-7.038		50.552	0.138	14.643	0.003		353.6	5.89361	45.5	12.4	40.6	2.796	0.021	0.021	0.001	0.510	0.43	
373	4/19/2004	3:36:44 PM		25.268	23.075	24.816	25.721	22.428		45.166	46.79	10.429	35.507	-1.221	-7.041		48.014	0.138	14.643	0.003		354.6	5.91028	45.3	11.8	40.3	2.781	0.021	0.021	0.001	0.513	0.44	
374	4/19/2004	3:37:44 PM		25.251	23.057	24.794	25.598	22.36		44.958	46.572	10.388	35.248	-1.221	-7.038		51.132	0.138	14.643	0.003		355.6	5.92694	45.1	12.5	40.1	2.765	0.021	0.021	0.001	0.516	0.44	
375	4/19/2004	3:38:44 PM		25.248	23.06	24.841	25.545	22.353		45.247	46.97	10.484	35.459	-1.212	-6.986		50.298	0.138	14.643	0.004		356.6	5.94361	45.5	12.3	40.4	2.782	0.021	0.021	0.001	0.512	0.44	
376	4/19/2004	3:39:44 PM		25.249	23.046	24.852	25.562	22.53		45.311	46.927	10.467	35.624	-1.215	-7.021		50.3	0.138	14.643	0.004		357.6	5.96028	45.5	12.3	40.5	2.790	0.021	0.021	0.001	0.511	0.43	
377	4/19/2004	3:40:44 PM		25.242	23.043	24.835	25.564	22.552		45.018	46.726	10.419	35.305	-1.218	-7.024		50.684	0.138	14.643	0.003		358.6	5.97694	45.3	12.4	40.2	2.769	0.021	0.021	0.001	0.515	0.44	
378	4/19/2004	3:41:44 PM		25.251	23.052	24.863	25.603	22.596		45.027	46.575	10.378	35.449	-1.221	-7.021		47.451	0.138	14.643	0.003		359.6	5.99361	45.1	11.6	40.2	2.774	0.021	0.021	0.001	0.513	0.44	
379	4/19/2004	3:42:44 PM		25.254	23.04	24.862	25.641	22.715		45.51	47.279	10.519	35.794	-1.215	-7.006		48.946	0.139	14.643	0.004		360.6	6.01028	45.8	12.0	40.7	2.803	0.021	0.021	0.001	0.512	0.44	
380	4/19/2004	3:43:44 PM		25.258	23.05	24.841	25.61	22.87		45.352	46.948	10.465	35.644	-1.218	-7.009		51.892	0.137	14.643	0.003		361.6	6.02694	45.5	12.7	40.5	2.792	0.020	0.021	0.001	0.507	0.43	
381	4/19/2004	3:44:44 PM		25.264	23.04	24.726	25.656	22.981		44.832	46.5	10.403	35.125	-1.218	-7.018		48.471	0.137	14.643	0.003		362.6	6.04361	45.0	11.9	40.0	2.756	0.020	0.021	0.001	0.515	0.44	
382	4/19/2004	3:45:44 PM		25.249	23.036	24.752	25.682	23.187		45.174	46.871	10.391	35.548	-1.218	-6.986		50.755	0.138	14.643	0.003		363.6	6.06028	45.4	12.4	40.4	2.783	0.021	0.021	0.001	0.513	0.44	
383	4/19/2004	3:46:44 PM		25.255	23.037	24.788	25.717	23.233		45.356	47.099	10.482	35.574	-1.218	-7.012		49.376	0.137	14.643	0.003		364.6	6.07694	45.6	12.1	40.5	2.790	0.020	0.021	0.001	0.508	0.43	
384	4/19/2004	3:47:44 PM		25.251	23.053	24.834	25.824	23.354		45.286	47.082	10.524	35.443	-1.215	-7.012		47.384	0.136	14.643	0.003		365.6	6.09361	45.6	11.6	40.4	2.783	0.020	0.020	0.001	0.505	0.43	
385	4/19/2004	3:48:44 PM		25.247	23.044	24.86	25.845	23.315		45.191	46.738	10.408	35.621	-1.218	-6.983		49.587	0.133	14.643	0.003		366.6	6.11028	45.3	12.2	40.4	2.786	0.020	0.020	0.000	0.493	0.42	
386	4/19/2004	3:49:44 PM		25.254	23.061	24.902	25.907	23.312		45.251	47.057	10.416	35.57	-1.215	-7.001		48.903	0.137	14.643	0.003		367.6	6.12694	45.6	12.0	40.4	2.786	0.020	0.020	0.001	0.507	0.43	
387	4/19/2004	3:50:44 PM		25.256	23.057	24.914	25.873	23.484		45.373	47.122	10.414	35.683	-1.218	-6.972		51.274	0.137	14.643	0.003		368.6	6.14361	45.6	12.6	40.5	2.794	0.020	0.020	0.001	0.505	0.43	
388	4/19/2004	3:51:44 PM		25.267	23.069	24.941	25.925	23.436		45.369	47.134	10.308	35.831	-1.215	-6.969		48.108	0.138	14.643	0.004		369.6	6.16028	45.7	11.8	40.6	2.799	0.021	0.021	0.001	0.508	0.43	
389	4/19/2004	3:52:44 PM		25.279	23.076	24.952	25.961	23.392		45.215	47.026	10.273	35.636	-1.221	-6.989		50.139	0.135	14.643	0.003		370.6	6.17694	45.6	12.3	40.4	2.787	0.020	0.020	0.000	0.499	0.42	
390	4/19/2004	3:53:44 PM		25.29	23.082	24.978	25.998	23.273		45.193	47.097	10.425	35.5	-1.215	-6.983		49.063	0.137	14.643	0.003		371.6	6.19361	45.6	12.0	40.3	2.782	0.020	0.020	0.001	0.507	0.43	
391	4/19/2004	3:54:44 PM		25.296	23.083	24.959	26.004	22.963		45.201	47.064	10.528	35.488	-1.215	-6.937		48.673	0.137	14.643	0.003		372.6	6.21028	45.6	11.9	40.3	2.782	0.020	0.020	0.001	0.507	0.43	
392	4/19/2004	3:55:44 PM		25.312	23.104	24.86	25.935	22.768		45.101	47.029	10.479	35.445	-1.218	-6.998		48.803	0.135	14.643	0.003		373.6	6.22694	45.6	12.0	40.3	2.777	0.020	0.020	0.001	0.502	0.43	
393	4/19/2004	3:56:44 PM		25.317	23.104	24.865	25.935	22.698		44.911	46.689	10.482	35.191	-1.215	-6.992		49.852	0.135	14.643	0.004		374.6	6.24361	45.2	12.2	40.1	2.761	0.020	0.020	0.001	0.504	0.43	
394	4/19/2004	3:57:44 PM		25.316	23.093	24.889	25.894	22.687		45.222	47.033	10.569	35.365	-1.218	-7.004		49.201	0.134	14.643	0.003		375.6	6.26028	45.6	12.1	40.3	2.778	0.020	0.020	0.000	0.497	0.42	
395	4/19/2004	3:58:44 PM		25.305	23.087	24.908	25.883	22.556		44.931	46.581	10.442	35.324	-1.218	-6.995		49.639	0.134	14.643	0.003		376.6	6.27694	45.1	12.2	40.1	2.767	0.020	0.020	0.000	0.499	0.42	
396	4/19/2004	3:59:44 PM		25.302	23.074	24.931	25.84	22.518		45.143	46.902	10.456	35.554	-1.218	-6.998		50.348	0.134	14.643	0.003		377.9	6.29833	45.4	12.3	40.3	2.782	0.020	0.020	0.000	0.496	0.42	
397	4/19/2004	4:00:44 PM		25.306	23.063	24.944	25.804	22.461		45.06	47.064	10.497	35.312	-1.221	-6.989		46.673	0.137	14.643	0.003		378.9	6.315	45.6	11.4	40.2	2.771	0.020	0.020	0.001	0.509	0.43	
398	4/19/2004	4:01:44 PM		25.326	23.077	24.999	25.793	22.26		45.188	47.238	10.529	35.381	-1.218	-6.989		48.377	0.136	14.643	0.003		379.9	6.33167	45.8	11.9	40.3	2.777	0.020	0.020	0.001	0.503	0.43	
399	4/19/2004	4:02:44 PM		25.319	23.066	25.012	25.777	22.429		45.215	47.051	10.478	35.445	-1.218	-6.983		50.384	0.132	14.643	0.003		380.9	6.34833	45.6	12.3	40.3	2.781	0.020	0.020	0.000	0.488	0.42	
400	4/19/2004	4:03:44 PM		25.339	23.061	25.048	25.757	22.751		44.998	46.981	10.54	35.211	-1.218	-6.899		47.636	0.125	14.643	0.003		381.9	6.365	45.5	11.7	40.1	2.765	0.019	0.019	0.000	0.464	0.39	
401	4/19/2004	4:04:44 PM		25.338	23.055	25.071	25.701	22.86		45.174	47.049	10.464	35.488	-1.218	-6.94		50.265	0.134	14.643	0.003		382.9	6.38167	45.6	12.3	40.3	2.781	0.020	0.020	0.000	0.494	0.42	
402	4/19/2004	4:05:44 PM		25.359	23.06	25.092	25.781	23.061		44.852	46.776	10.401	35.225	-1.218	-6.937		52.225	0.134	14.643	0.003		383.9	6.39833	45.3	12.8	40.0	2.761	0.020	0.020	0.000	0.498	0.42	
403	4/19/2004	4:06:44 PM		25.364	23.065	25.112	25.826	23.106		44.875	47.018	10.392	35.199	-1.218	-6.928		51.262	0.133	14.643	0.003		384.9	6.415	45.5	12.6	40.0	2.760	0.020	0.020	0.000	0.494	0.42	
404	4/19/2004	4:07:28 PM		25.374	23.056	25.058	25.847	23.112		45.097	47.047	10.369	35.472	-1.221	-6.937		47.764	0.133	14.643	0.003		385.6	6.42722	45.6	11.7	40.3	2.777	0.020	0.020	0.000	0.491	0.42	
405	4/19/2004	4:08:28 PM		25.38	23.062	24.993	25.828	23.067		44.919	46.829	10.328	35.324	-1.218	-6.926		48.905	0.133	14.643	0.003		386.6	6.44389	45.4	12.0	40.1	2.766	0.020	0.020	0.000	0.494	0.42	
406	4/19/2004	4:09:28 PM		25.381	23.067	25.029	25.828	23.093		45.261	47.279	10.418	35.56	-1.218	-6.934		50.083	0.133	14.643	0.003		387.6	6.46056	45.8	12.3	40.4	2.786	0.020	0.020	0.000	0.490	0.42	
407	4/19/2004	4:10:28 PM		25.397	23.079	25.066	25.87	23.07		44.637	46.575	10.324	35.09	-1.218	-6.928		49.299	0.134	14.643	0.003		388.6	6.47722	45.1	12.1	39.9	2.748	0.020	0.020	0.001	0.500	0.43	
408	4/19/2004	4:11:28 PM		25.388	23.07	25.076	25.941	23.211		45.035	47.182	10.504	35.291	-1.218	-6.894		45.35	0.132	14.643	0.003		389.6	6.49389	45.7	11.1	40.2	2.769	0.020	0.020	0.000	0.489	0.42	
409	4/19/2004	4:12:28 PM		25.405	23.092	25.108	25.958	23.162		44.996	47.07	10.439	35.342	-1.218	-6.897		48.314	0.128	14.643	0.003		390.6	6.51056	45.6	11.8	40.2	2.770	0.019	0.019	0.000	0.474	0.40	
410	4/19/2004	4:13:28 PM		25.401	23.093	25.125	25.969	23.364		44.713	46.89	10.358	35.088	-1.218	-6.928		47.589	0.132	14.643	0.003		391.6	6.52722	45.4	11.7	39.9	2.751	0.020	0.020	0.000	0.491	0.42	
411	4/19/2004	4:14:28 PM		25.418	23.11	25.142	26.011	23.226		44.738	46.689	10.371	35.256	-1.221	-6.926		50.248	0.132	14.643	0.003		392.6	6.54389	45.2	12.3	40.0	2.758	0.020	0.020	0.000	0.490	0.42	
412	4/19/2004	4:15:28 PM		25.424	23.106	25.158	26.022	23.112		45.176	47.232	10.44	35.56	-1.215	-6.92		48.216	0.132	14.643	0.003		393.6	6.56056	45.8	11.8	40.4	2.783	0.020	0.020	0.000	0.485	0.41	
413	4/19/2004	4:16:28 PM		25.446	23.128	25.18	26.029	22.988		45.161	47.31	10.503	35.41	-1.218	-6.923		49.011	0.133	14.643	0.003		394.6	6.57722	45.8	12.0	40.3	2.778	0.020	0.020	0.000	0.490	0.42	
414	4/19/2004	4:17:28 PM		25.448	23.13	25.091	25.965	22.829		44.761	46.796	10.323	35.191	-1.221	-6.926		48.815	0.132	14.643	0.003		395.6	6.59389	45.3	12.0	40.0	2.756	0.020	0.020	0.000	0.491	0.42	
415	4/19/2004	4:18:28 PM		25.448	23.125	25.046	25.9	22.588		45.122	47.165	10.383	35.546	-1.221	-6.914		46.055	0.133	14.643	0.003		396.6	6.61056	45.7	11.3	40.3	2.781	0.020	0.020	0.000	0.491	0.42	
416	4/19/2004	4:19:28 PM		25.442	23.129	25.065	25.8	22.512		44.782	46.904	10.46	35.051	-1.215	-6.882		49.677	0.126	14.643	0.003		397.6	6.62722	45.4	12.2	39.9	2.752	0.019	0.019	0.000	0.470	0.40	
417	4/19/2004	4:20:28 PM		25.44	23.117	25.088	25.763	22.541		45.139	47.294	10.539	35.402	-1.218	-6.917		48.59	0.131	14.643	0.003		398.6	6.64389	45.8	11.9	40.3	2.777	0.020	0.019	0.000	0.484	0.41	
418	4/19/2004	4:21:28 PM		25.449	23.121	25.117	25.711	22.825		44.981	47.209	10.561	35.133	-1.218	-6.871		47.551	0.132	14.643	0.003		399.6	6.66056	45.7	11.7	40.1	2.762	0.020	0.020	0.000	0.490	0.42	
419	4/19/2004	4:22:28 PM		25.464	23.141	25.162	25.736	23.061		44.668	46.991	10.47	34.903	-1.218	-6.902		49.364	0.132	14.643	0.003		400.6	6.67722	45.5	12.1	39.8	2.743	0.020	0.020	0.000	0.492	0.42	
420	4/19/2004	4:23:28 PM		25.469	23.136	25.177	25.761	23.171		44.848	47.082	10.468	35.012	-1.218	-6.882		48.554	0.131	14.643	0.003		401.6	6.69389	45.6	11.9	39.9	2.753	0.020	0.019	0.000	0.487	0.41	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	4/19/2004	4:24:28 PM		25.47	23.142	25.188	25.793	23.368		44.884	47.149	10.448	35.197	-1.221	-6.873		49.357	0.125	14.643	0.003		402.6	6.71056	45.7	12.1	40.0	2.761	0.019	0.019	0.000	0.463	0.39	
422	4/19/2004	4:25:28 PM		25.481	23.169	25.24	25.914	23.49		44.877	47.018	10.552	35.024	-1.215	-6.899		49.898	0.132	14.643	0.003		403.6	6.72722	45.5	12.2	40.0	2.754	0.020	0.020	0.000	0.489	0.42	
423	4/19/2004	4:26:28 PM		25.478	23.165	25.226	25.97	23.511		44.919	47.3	10.436	35.246	-1.218	-6.885		49.301	0.123	14.643	0.003		404.6	6.74389	45.8	12.1	40.1	2.764	0.018	0.018	0.000	0.455	0.39	
424	4/19/2004	4:27:28 PM		25.51	23.203	25.249	26.053	23.684		44.767	47.047	10.522	34.95	-1.218	-6.839		48.994	0.129	14.643	0.003		405.6	6.76056	45.6	12.0	39.9	2.748	0.019	0.019	0.000	0.479	0.41	
425	4/19/2004	4:28:28 PM		25.503	23.21	25.146	26.131	23.892		44.796	47.051	10.519	34.938	-1.221	-6.902		50.782	0.131	14.643	0.003		406.6	6.77722	45.6	12.4	39.9	2.749	0.020	0.019	0.000	0.488	0.42	
426	4/19/2004	4:29:28 PM		25.517	23.234	25.17	26.26	24.026		45.112	47.443	10.52	35.279	-1.218	-6.902		49.695	0.131	14.643	0.003		407.6	6.79389	46.0	12.2	40.2	2.771	0.020	0.019	0.000	0.484	0.41	
427	4/19/2004	4:30:28 PM		25.525	23.258	25.189	26.333	23.985		44.969	47.188	10.397	35.357	-1.218	-6.833		48.786	0.117	14.643	0.003		408.6	6.81056	45.7	12.0	40.2	2.769	0.017	0.017	0.000	0.432	0.37	
428	4/19/2004	4:31:28 PM		25.518	23.271	25.182	26.356	24.047		44.993	47.25	10.396	35.375	-1.221	-6.879		50.233	0.129	14.643	0.003		409.6	6.82722	45.8	12.3	40.2	2.771	0.019	0.019	0.000	0.476	0.41	
429	4/19/2004	4:32:28 PM		25.547	23.31	25.245	26.445	24.141		44.929	47.242	10.353	35.322	-1.218	-6.882		47.935	0.129	14.643	0.003		410.6	6.84389	45.8	11.7	40.1	2.767	0.019	0.019	0.000	0.476	0.41	
430	4/19/2004	4:33:28 PM		25.55	23.323	25.254	26.458	24.15		44.944	47.397	10.441	35.18	-1.218	-6.845		49.416	0.129	14.643	0.003		411.6	6.86056	45.9	12.1	40.1	2.762	0.019	0.019	0.000	0.477	0.41	
431	4/19/2004	4:34:28 PM		25.568	23.361	25.276	26.506	24.147		44.985	47.58	10.456	35.188	-1.215	-6.836		47.952	0.13	14.643	0.003		412.6	6.87722	46.1	11.8	40.1	2.764	0.019	0.019	0.000	0.480	0.41	
432	4/19/2004	4:35:28 PM		25.592	23.39	25.305	26.565	24.206		44.854	47.114	10.39	35.26	-1.218	-6.833		47.695	0.13	14.643	0.003		413.6	6.89389	45.6	11.7	40.1	2.762	0.019	0.019	0.000	0.480	0.41	
433	4/19/2004	4:36:28 PM		25.604	23.413	25.283	26.617	24.214		45.037	47.464	10.414	35.371	-1.218	-6.871		46.913	0.131	14.643	0.003		414.6	6.91056	46.0	11.5	40.2	2.772	0.020	0.019	0.000	0.482	0.41	
434	4/19/2004	4:37:28 PM		25.612	23.435	25.23	26.665	24.281		44.687	46.989	10.478	34.934	-1.212	-6.871		49.608	0.126	14.643	0.003		415.6	6.92722	45.5	12.2	39.8	2.745	0.019	0.019	0.000	0.469	0.40	
435	4/19/2004	4:38:28 PM		25.609	23.458	25.228	26.697	24.894		44.57	46.935	10.345	34.932	-1.221	-6.859		50.402	0.129	14.643	0.003		416.6	6.94389	45.5	12.4	39.8	2.741	0.019	0.019	0.000	0.481	0.41	
436	4/19/2004	4:39:28 PM		25.63	23.499	25.263	26.898	24.82		44.85	47.221	10.456	35.119	-1.215	-6.856		49.524	0.129	14.643	0.004		417.6	6.96056	45.7	12.1	40.0	2.757	0.019	0.019	0.000	0.477	0.41	
437	4/19/2004	4:40:28 PM		25.639	23.523	25.283	27.037	24.669		44.896	47.302	10.508	35.166	-1.218	-6.873		49.944	0.129	14.643	0.003		418.6	6.97722	45.8	12.2	40.0	2.760	0.019	0.019	0.000	0.477	0.41	
438	4/19/2004	4:41:28 PM		25.648	23.547	25.302	27.051	24.553		44.815	47.399	10.452	35.049	-1.218	-6.873		49.447	0.129	14.643	0.003		419.6	6.99389	45.9	12.1	39.9	2.753	0.019	0.019	0.000	0.478	0.41	
439	4/19/2004	4:42:28 PM		25.667	23.571	25.326	27.05	24.587		44.83	47.142	10.414	35.264	-1.221	-6.839		48.054	0.126	14.643	0.003		420.6	7.01056	45.7	11.8	40.0	2.761	0.019	0.019	0.000	0.465	0.40	
440	4/19/2004	4:43:28 PM		25.691	23.616	25.365	27.029	24.946		44.608	46.958	10.405	35.03	-1.218	-6.804		50.486	0.133	14.643	0.004		421.6	7.02722	45.5	12.4	39.8	2.745	0.020	0.020	0.000	0.493	0.42	
441	4/19/2004	4:44:28 PM		25.71	23.635	25.389	27.138	25.025		44.699	47.256	10.447	35.01	-1.218	-6.847		50.185	0.125	14.643	0.003		422.6	7.04389	45.8	12.3	39.9	2.748	0.019	0.018	0.000	0.463	0.39	
442	4/19/2004	4:45:28 PM		25.724	23.664	25.408	27.312	24.929		44.871	47.294	10.532	35.043	-1.221	-6.911		47.618	0.131	14.643	0.003		423.6	7.06056	45.8	11.7	40.0	2.755	0.020	0.019	0.000	0.483	0.41	
443	4/19/2004	4:46:28 PM		25.749	23.694	25.423	27.326	24.934		44.763	47.196	10.418	35.211	-1.218	-6.879		49.272	0.125	14.643	0.003		424.6	7.07722	45.7	12.1	40.0	2.757	0.019	0.018	0.000	0.461	0.39	
444	4/19/2004	4:47:28 PM		25.773	23.723	25.307	27.301	24.843		44.96	47.426	10.516	35.17	-1.221	-6.891		50.555	0.127	14.643	0.003		425.6	7.09389	46.0	12.4	40.1	2.762	0.019	0.019	0.000	0.469	0.40	
445	4/19/2004	4:48:28 PM		25.796	23.761	25.265	27.219	24.581		44.68	47.151	10.448	34.913	-1.215	-6.911		50.125	0.126	14.643	0.003		426.6	7.11056	45.7	12.3	39.8	2.744	0.019	0.019	0.000	0.469	0.40	
446	4/19/2004	4:49:28 PM		25.783	23.773	25.257	27.056	24.443		44.917	47.455	10.488	35.115	-1.221	-6.914		48.037	0.127	14.643	0.003		427.6	7.12722	46.0	11.8	40.0	2.759	0.019	0.019	0.000	0.470	0.40	
447	4/19/2004	4:50:28 PM		25.795	23.801	25.299	26.933	24.215		44.83	47.331	10.497	35.026	-1.218	-6.891		47.83	0.124	14.643	0.003		428.6	7.14389	45.9	11.7	39.9	2.753	0.018	0.018	0.000	0.459	0.39	
448	4/19/2004	4:51:28 PM		25.792	23.817	25.321	26.77	24.066		44.894	47.393	10.409	35.268	-1.218	-6.914		49.199	0.127	14.643	0.003		429.6	7.16056	45.9	12.1	40.1	2.763	0.019	0.019	0.000	0.468	0.40	
449	4/19/2004	4:52:28 PM		25.787	23.827	25.321	26.62	24.051		44.633	47.161	10.458	34.922	-1.218	-6.879		50.413	0.126	14.643	0.003		430.6	7.17722	45.7	12.4	39.8	2.743	0.019	0.019	0.000	0.468	0.40	
450	4/19/2004	4:53:28 PM		25.802	23.852	25.351	26.585	24.096		44.709	47.362	10.473	34.911	-1.218	-6.879		49.372	0.127	14.643	0.003		431.6	7.19389	45.9	12.1	39.8	2.745	0.019	0.019	0.000	0.471	0.40	
451	4/19/2004	4:54:28 PM		25.797	23.872	25.351	26.615	24.091		44.684	47.327	10.444	34.932	-1.221	-6.908		47.075	0.129	14.643	0.003		432.6	7.21056	45.9	11.5	39.8	2.745	0.019	0.019	0.000	0.478	0.41	
452	4/19/2004	4:55:28 PM		25.797	23.887	25.376	26.615	24.111		44.79	47.449	10.503	35.004	-1.221	-6.902		48.729	0.127	14.643	0.003		433.6	7.22722	46.0	11.9	39.9	2.751	0.019	0.019	0.000	0.470	0.40	
453	4/19/2004	4:56:28 PM		25.822	23.917	25.401	26.63	24.156		44.61	47.018	10.386	34.961	-1.218	-6.839		48.707	0.133	14.643	0.003		434.6	7.24389	45.5	11.9	39.8	2.743	0.020	0.020	0.000	0.493	0.42	
454	4/19/2004	4:57:28 PM		25.823	23.944	25.407	26.686	24.408		44.545	46.943	10.433	34.922	-1.221	-6.865		49.491	0.139	14.643	0.003		435.6	7.26056	45.5	12.1	39.7	2.739	0.021	0.020	0.001	0.516	0.44	
455	4/19/2004	4:58:28 PM		25.834	23.96	25.423	26.687	24.369		44.68	47.294	10.438	34.996	-1.221	-6.891		48.619	0.128	14.643	0.003		436.6	7.27722	45.8	11.9	39.8	2.747	0.019	0.019	0.000	0.473	0.40	
456	4/19/2004	4:59:28 PM		25.845	23.981	25.434	26.698	24.375		44.637	47.259	10.527	34.796	-1.224	-6.813		52.507	0.12	14.643	0.003		437.6	7.29389	45.8	12.9	39.7	2.738	0.018	0.018	0.000	0.445	0.38	
457	4/19/2004	5:00:28 PM		25.856	24.002	25.471	26.709	24.236		44.722	47.352	10.601	34.805	-1.218	-6.868		50.699	0.124	14.643	0.003		438.6	7.31056	45.9	12.4	39.8	2.742	0.018	0.018	0.000	0.459	0.39	
458	4/19/2004	5:01:28 PM		25.867	24.013	25.471	26.695	24.262		44.919	47.424	10.525	35.1	-1.218	-6.871		48.087	0.126	14.643	0.003		439.6	7.32722	46.0	11.8	40.0	2.759	0.019	0.019	0.000	0.463	0.39	
459	4/19/2004	5:02:28 PM		25.872	24.028	25.506	26.65	24.522		44.649	47.265	10.48	34.932	-1.212	-6.859		49.599	0.127	14.643	0.004		440.6	7.34389	45.8	12.2	39.8	2.743	0.019	0.019	0.000	0.469	0.40	
460	4/19/2004	5:03:28 PM		25.868	24.034	25.497	26.626	24.328		44.657	47.406	10.538	34.807	-1.221	-6.862		47.342	0.125	14.643	0.003		441.6	7.36056	45.9	11.6	39.7	2.739	0.019	0.018	0.000	0.463	0.39	
461	4/19/2004	5:04:28 PM		25.888	24.055	25.518	26.607	24.343		44.867	47.455	10.511	35.195	-1.218	-6.845		47.359	0.119	14.643	0.003		442.6	7.37722	46.0	11.6	40.0	2.760	0.018	0.017	0.000	0.437	0.37	
462	4/19/2004	5:05:28 PM		25.909	24.075	25.553	26.662	24.479		44.054	46.883	10.468	34.363	-1.212	-6.246		52.081	0.118	14.643	0.004		443.6	7.39389	45.4	12.8	39.2	2.703	0.018	0.017	0.000	0.442	0.38	
463	4/19/2004	5:06:28 PM		25.905	24.076	25.549	26.703	24.365		44.236	47.14	10.495	34.423	-1.221	-6.258		50.075	0.118	14.643	0.003		444.6	7.41056	45.7	12.3	39.3	2.712	0.018	0.017	0.000	0.440	0.37	
464	4/19/2004	5:07:28 PM		25.92	24.102	25.58	26.749	24.26		44.492	47.261	10.534	34.76	-1.218	-6.347		47.91	0.123	14.643	0.003		445.6	7.42722	45.8	11.7	39.6	2.732	0.018	0.018	0.000	0.455	0.39	
465	4/19/2004	5:08:28 PM		25.93	24.106	25.579	26.678	24.164		44.5	47.503	10.568	34.677	-1.218	-6.168		47.964	0.123	14.643	0.003		446.6	7.44389	46.0	11.8	39.6	2.729	0.018	0.018	0.000	0.456	0.39	
466	4/19/2004	5:09:28 PM		25.928	24.109	25.567	26.551	24.363		44.556	47.762	10.672	34.485	-1.221	-6.171		48.175	0.124	14.643	0.003		447.6	7.46056	46.3	11.8	39.5	2.725	0.018	0.018	0.000	0.460	0.39	
467	4/19/2004	5:10:28 PM		26.195	24.117	25.525	26.529	24.07		44.467	47.188	10.588	34.591	-1.224	-6.891		50.913	0.135	14.643	0.003		448.6	7.47722	45.7	12.5	39.5	2.725	0.020	0.020	0.001	0.502	0.43	
468	4/19/2004	5:11:28 PM		26.154	24.156	25.393	26.532	23.929		44.548	47.074	10.497	34.782	-1.218	-7.46		48.602	0.125	14.643	0.003		449.6	7.49389	45.6	11.9	39.7	2.735	0.019	0.018	0.000	0.465	0.40	
469	4/19/2004	5:12:28 PM		26.073	24.155	25.372	26.536	23.927		44.599	47.022	10.493	34.864	-1.221	-7.469		49.91	0.122	14.643	0.003		450.6	7.51056	45.5	12.2	39.7	2.739	0.018	0.018	0.000	0.453	0.39	
470	4/19/2004	5:13:28 PM		25.991	24.158	25.38	26.499	23.89		44.948	47.555	10.583	34.996	-1.221	-7.498		51.105	0.123	14.643	0.003		451.6	7.52722	46.1	12.5	40.0	2.756	0.018	0.018	0.000	0.454	0.39	
471	4/19/2004	5:14:28 PM		25.935	24.182	25.414	26.568	23.895		45.211	47.64	10.601	35.431	-1.218	-7.495		48.477	0.123	14.643	0.003		452.6	7.54389	46.2	11.9	40.3	2.780	0.018	0.018	0.000	0.450	0.38	
472	4/19/2004	5:15:28 PM		25.899	24.201	25.444	26.623	24.034		44.622	47.116	10.518	34.872	-1.221	-7.481		51.17	0.122	14.643	0.003		453.6	7.56056	45.6	12.5	39.7	2.740	0.018	0.018	0.000	0.452	0.38	
473	4/19/2004	5:16:28 PM		25.884	24.211	25.469	26.668	24.059		44.788	47.495	10.602	34.831	-1.218	-7.486		49.128	0.124	14.643	0.003		454.6	7.57722	46.0	12.0	39.8	2.745	0.018	0.018	0.000	0.458	0.39	
474	4/19/2004	5:17:28 PM		25.84	24.221	25.479	26.693	24.159		44.411	46.904	10.487	34.745	-1.221	-7.501		51.285	0.122	14.643	0.003		455.6	7.59389	45.4	12.6	39.6	2.729	0.018	0.018	0.000	0.453	0.39	
475	4/19/2004	5:18:28 PM		25.845	24.231	25.494	26.768	24.259		44.757	47.613	10.615	34.823	-1.218	-7.498		48.262	0.122	14.643	0.003		456.6	7.61056	46.1	11.8	39.8	2.743	0.018	0.018	0.000	0.451	0.38	
476	4/19/2004	5:19:28 PM		25.866	24.243	25.52	26.824	24.331		44.684	47.414	10.57	34.77	-1.221	-7.498		48.759	0.123	14.643	0.003		457.6	7.62722	45.9	11.9	39.7	2.739	0.018	0.018	0.000	0.455	0.39	
477	4/19/2004	5:20:28 PM		25.872	24.259	25.531	26.845	24.396		44.732	47.451	10.616	34.778	-1.221	-7.495		49.401	0.123	14.643	0.003		458.6	7.64389	46.0	12.1	39.8	2.741	0.018	0.018	0.000	0.454	0.39	
478	4/19/2004	5:21:28 PM		25.882	24.274	25.551	26.895	24.442		45.157	47.789	10.594	35.318	-1.218	-7.495		48.709	0.122	14.643	0.003		459.6	7.66056	46.3	11.9	40.2	2.774	0.018	0.018	0.000	0.445	0.38	
479	4/19/2004	5:22:28 PM		25.883	24.285	25.552	26.941	24.423		44.782	47.389	10.611	34.913	-1.218	-7.498		49.572	0.121	14.643	0.003		460.6	7.67722	45.9	12.1	39.8	2.747	0.018	0.018	0.000	0.446	0.38	
480	4/19/2004	5:23:28 PM		25.909	24.306	25.564	26.952	24.439		44.624	47.157	10.41	34.948	-1.218	-7.472		50.352	0.124	14.643	0.003		461.6	7.69389	45.7	12.3	39.8	2.743	0.018	0.018	0.000	0.457	0.39	
481	4/19/2004	5:24:28 PM		25.925	24.322	25.579	27.028	24.46		44.492	47.002	10.441	34.85	-1.221	-7.475		45.342	0.122	14.643	0.003		462.6	7.71056	45.5	11.1	39.7	2.735	0.018	0.018	0.000	0.451	0.38	
482	4/19/2004	5:25:28 PM		25.946	24.344	25.591	27.034	24.496		44.763	47.528	10.548	34.903	-1.218	-7.417		48.661	0.124	14.643	0.003		463.6	7.72722	46.1	11.9	39.8	2.746	0.018	0.018	0.000	0.456	0.39	
483	4/19/2004	5:26:28 PM		25.953	24.361	25.593	27.041	24.613		45.135	47.781	10.627	35.164	-1.224	-7.481		49.493	0.122	14.643	0.003		464.6	7.74389	46.3	12.1	40.1	2.768	0.018	0.018	0.000	0.446	0.38	
484	4/19/2004	5:27:28 PM		25.965	24.362	25.604	27.003	24.58		44.684	47.513	10.458	34.866	-1.224	-7.472		49.606	0.123	14.643	0.003		465.6	7.76056	46.0	12.2	39.8	2.742	0.018	0.018	0.000	0.453	0.39	
485	4/19/2004	5:28:28 PM		25.99	24.393	25.64	27.058	24.645		44.811	47.431	10.494	35.094	-1.215	-7.466		47.77	0.122	14.643	0.004		466.6	7.77722	46.0	11.7	40.0	2.755	0.018	0.018	0.000	0.447	0.38	
486	4/19/2004	5:29:28 PM		26.012	24.42	25.647	27.105	24.628		44.898	47.659	10.432	35.158	-1.221	-7.449		52.313	0.122	14.643	0.003		467.6	7.79389	46.2	12.8	40.0	2.760	0.018	0.018	0.000	0.446	0.38	
487	4/19/2004	5:30:28 PM		26.014	24.442	25.654	27.127	24.635		45.13	47.911	10.347	35.533	-1.221	-7.466		48.744	0.123	14.643	0.003		468.6	7.81056	46.4	11.9	40.3	2.781	0.018	0.018	0.000	0.446	0.38	
488	4/19/2004	5:31:28 PM		26.041	24.459	25.666	27.139	24.642		45.056	47.717	10.341	35.599	-1.221	-7.475		48.262	0.122	14.643	0.003		469.6	7.82722	46.2	11.8	40.3	2.780	0.018	0.018	0.000	0.443	0.38	
489	4/19/2004	5:32:28 PM		26.053	24.481	25.588	27.131	24.639		45.141	47.833	10.406	35.548	-1.221	-7.449		49.117	0.118	14.643	0.003		470.6	7.84389	46.4	12.0	40.3	2.782	0.018	0.017	0.000	0.429	0.37	
490	4/19/2004	5:33:28 PM		26.05	24.498	25.324	27.188	24.63		45.052	47.845	10.275	35.554	-1.224	-7.489		47.774	0.12	14.643	0.003		471.6	7.86056	46.4	11.7	40.3	2.779	0.018	0.018	0.000	0.440	0.37	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	4/19/2004	5:34:28 PM		26.056	24.534	25.33	27.169	24.521		44.883	47.669	10.293	35.285	-1.221	-7.501		48.173	0.119	14.643	0.003		472.6	7.87722	46.2	11.8	40.1	2.764	0.018	0.018	0.000	0.439	0.37	
492	4/19/2004	5:35:28 PM		26.047	24.555	25.351	27.11	24.397		45.072	47.663	10.363	35.447	-1.218	-7.492		49.257	0.12	14.643	0.003		473.6	7.89389	46.2	12.1	40.3	2.776	0.018	0.018	0.000	0.440	0.37	
493	4/19/2004	5:36:28 PM		26.022	24.555	25.366	27.085	24.227		45.139	48.1	10.27	35.509	-1.218	-7.449		48.504	0.118	14.643	0.003		474.6	7.91056	46.6	11.9	40.3	2.780	0.018	0.017	0.000	0.432	0.37	
494	4/19/2004	5:37:28 PM		26.018	24.571	25.393	26.966	24.038		45.11	47.851	10.19	35.769	-1.218	-7.483		47.465	0.118	14.643	0.004		475.6	7.92722	46.4	11.6	40.4	2.788	0.018	0.017	0.000	0.430	0.37	
495	4/19/2004	5:38:28 PM		26.003	24.586	25.413	26.931	23.898		45.197	47.909	10.172	35.714	-1.215	-7.466		46.366	0.116	14.643	0.004		476.6	7.94389	46.4	11.4	40.5	2.789	0.017	0.017	0.000	0.423	0.36	
496	4/19/2004	5:39:28 PM		25.989	24.572	25.418	26.857	23.984		44.483	47.275	10.827	34.339	-1.224	-7.515		49.624	0.12	14.643	0.003		477.6	7.96056	45.8	12.2	39.4	2.717	0.018	0.018	0.000	0.449	0.38	
497	4/19/2004	5:40:28 PM		25.975	24.583	25.439	26.833	24.044		44.485	47.364	10.827	34.355	-1.221	-7.521		48.206	0.116	14.643	0.003		478.6	7.97722	45.9	11.8	39.4	2.718	0.017	0.017	0.000	0.433	0.37	
498	4/19/2004	5:41:28 PM		25.985	24.598	25.485	26.879	24.085		44.653	47.58	10.758	34.651	-1.218	-7.521		49.622	0.117	14.643	0.004		479.6	7.99389	46.1	12.2	39.7	2.734	0.017	0.017	0.000	0.434	0.37	
499	4/19/2004	5:42:28 PM		25.987	24.601	25.507	26.891	24.207		44.51	47.507	10.778	34.409	-1.221	-7.475		48.392	0.117	14.643	0.003		480.6	8.01056	46.0	11.9	39.5	2.721	0.017	0.017	0.000	0.436	0.37	
500	4/19/2004	5:43:28 PM		25.989	24.623	25.534	26.968	24.324		44.463	47.267	10.74	34.495	-1.218	-7.509		49.799	0.118	14.643	0.003		481.6	8.02722	45.8	12.2	39.5	2.722	0.018	0.017	0.000	0.439	0.37	
501	4/19/2004	5:44:28 PM		25.987	24.62	25.531	26.985	24.362		44.504	47.501	10.725	34.515	-1.221	-7.518		48.636	0.116	14.643	0.003		482.6	8.04389	46.0	11.9	39.5	2.724	0.017	0.017	0.000	0.431	0.37	
502	4/19/2004	5:45:28 PM		25.997	24.63	25.542	27.02	24.292		44.61	47.65	10.757	34.513	-1.221	-7.521		49.045	0.116	14.643	0.003		483.6	8.06056	46.2	12.0	39.6	2.728	0.017	0.017	0.000	0.431	0.37	
503	4/19/2004	5:46:28 PM		26.024	24.653	25.574	27.057	24.379		44.635	47.472	10.644	34.712	-1.218	-7.518		47.176	0.116	14.643	0.003		484.6	8.07722	46.0	11.6	39.7	2.735	0.017	0.017	0.000	0.429	0.37	
504	4/19/2004	5:47:28 PM		26.031	24.659	25.585	27.109	24.551		44.624	47.688	10.745	34.513	-1.221	-7.489		50.486	0.116	14.643	0.003		485.6	8.09389	46.2	12.4	39.6	2.728	0.017	0.017	0.000	0.430	0.37	
505	4/19/2004	5:48:28 PM		26.032	24.67	25.597	27.12	24.587		44.689	47.451	10.647	34.868	-1.221	-7.524		47.985	0.114	14.643	0.003		486.6	8.11056	46.0	11.8	39.8	2.743	0.017	0.017	0.000	0.420	0.36	
506	4/19/2004	5:49:28 PM		26.048	24.682	25.618	27.191	24.649		44.369	47.298	10.588	34.548	-1.221	-7.512		48.4	0.116	14.643	0.003		487.6	8.12722	45.8	11.9	39.5	2.721	0.017	0.017	0.000	0.431	0.37	
507	4/19/2004	5:50:28 PM		26.05	24.678	25.609	27.178	24.69		44.633	47.737	10.652	34.63	-1.221	-7.527		48.969	0.114	14.643	0.003		488.6	8.14389	46.3	12.0	39.6	2.732	0.017	0.017	0.000	0.422	0.36	
508	4/19/2004	5:51:28 PM		26.07	24.718	25.649	27.198	24.635		45.022	48.027	10.651	35.082	-1.218	-7.509		49.914	0.117	14.643	0.003		489.6	8.16056	46.6	12.2	40.1	2.761	0.017	0.017	0.000	0.428	0.36	
509	4/19/2004	5:52:28 PM		26.081	24.735	25.661	27.224	24.646		44.597	47.569	10.716	34.563	-1.221	-7.518		49.368	0.117	14.643	0.003		490.6	8.17722	46.1	12.1	39.6	2.729	0.017	0.017	0.000	0.433	0.37	
510	4/19/2004	5:53:28 PM		26.092	24.746	25.682	27.231	24.608		44.467	47.665	10.826	34.247	-1.221	-7.518		50.705	0.118	14.643	0.003		491.6	8.19389	46.2	12.4	39.4	2.714	0.018	0.017	0.000	0.439	0.37	
511	4/19/2004	5:54:28 PM		26.11	24.768	25.694	27.253	24.665		44.45	47.559	10.669	34.509	-1.221	-7.521		51.402	0.115	14.643	0.003		492.6	8.21056	46.1	12.6	39.5	2.722	0.017	0.017	0.000	0.426	0.36	
512	4/19/2004	5:55:28 PM		26.131	24.795	25.726	27.304	24.626		44.579	47.694	10.728	34.54	-1.218	-7.509		48.074	0.116	14.643	0.003		493.6	8.22722	46.2	11.8	39.6	2.727	0.017	0.017	0.000	0.428	0.36	
513	4/19/2004	5:56:28 PM		26.127	24.791	25.522	27.245	24.658		44.546	47.706	10.694	34.521	-1.218	-7.478		48.982	0.116	14.643	0.004		494.6	8.24389	46.2	12.0	39.5	2.726	0.017	0.017	0.000	0.431	0.37	
514	4/19/2004	5:57:28 PM		26.123	24.812	25.523	27.266	24.613		44.518	47.509	10.497	34.821	-1.224	-7.53		49.28	0.116	14.643	0.003		495.6	8.26056	46.0	12.1	39.7	2.735	0.017	0.017	0.000	0.430	0.37	
515	4/19/2004	5:58:28 PM		26.13	24.834	25.55	27.268	24.661		44.593	47.893	10.516	34.645	-1.221	-7.527		50.106	0.117	14.643	0.003		496.6	8.27722	46.4	12.3	39.6	2.732	0.017	0.017	0.000	0.434	0.37	
516	4/19/2004	5:59:28 PM		26.122	24.851	25.567	27.275	24.628		44.514	47.596	10.582	34.634	-1.221	-7.533		50.736	0.115	14.643	0.003		497.6	8.29389	46.1	12.4	39.6	2.728	0.017	0.017	0.000	0.426	0.36	
517	4/19/2004	6:00:28 PM		26.135	24.884	25.61	27.293	24.68		44.954	48.21	10.59	35.076	-1.215	-7.524		48.996	0.117	14.643	0.004		498.6	8.31056	46.7	12.0	40.0	2.759	0.017	0.017	0.000	0.429	0.36	
518	4/19/2004	6:01:28 PM		26.106	24.87	25.596	27.294	24.712		44.444	47.59	10.565	34.599	-1.218	-7.53		47.947	0.117	14.643	0.003		499.6	8.32722	46.1	11.8	39.5	2.725	0.017	0.017	0.000	0.434	0.37	
519	4/19/2004	6:02:28 PM		26.124	24.893	25.629	27.312	24.615		44.396	47.596	10.661	34.349	-1.218	-7.472		48.135	0.113	14.643	0.003		500.6	8.34389	46.1	11.8	39.4	2.715	0.017	0.017	0.000	0.420	0.36	
520	4/19/2004	6:03:28 PM		26.135	24.914	25.64	27.263	24.4		44.477	47.654	10.611	34.532	-1.221	-7.538		46.448	0.115	14.643	0.004		501.6	8.36056	46.2	11.4	39.5	2.724	0.017	0.017	0.000	0.426	0.36	
521	4/19/2004	6:03:39 PM		26.13	24.909	25.63	27.218	24.44		44.713	47.856	10.654	34.817	-1.221	-7.533		47.38	0.115	14.643	0.003		501.8	8.36361	46.4	11.6	39.8	2.742	0.017	0.017	0.000	0.424	0.36	
522	4/19/2004	6:04:39 PM		26.135	24.909	25.64	27.153	24.37		44.674	47.719	10.525	34.87	-1.218	-7.518		48.487	0.118	14.643	0.003		502.8	8.38028	46.2	11.9	39.8	2.742	0.018	0.017	0.000	0.434	0.37	
523	4/19/2004	6:05:39 PM		26.139	24.923	25.649	27.092	24.209		44.57	47.81	10.695	34.544	-1.218	-7.527		48.727	0.12	14.643	0.003		503.8	8.39694	46.3	11.9	39.6	2.727	0.018	0.018	0.000	0.444	0.38	
524	4/19/2004	6:06:39 PM		26.153	24.938	25.663	26.972	24.064		44.62	47.845	10.442	34.942	-1.218	-7.535		49.099	0.115	14.643	0.003		504.8	8.41361	46.4	12.0	39.8	2.743	0.017	0.017	0.000	0.423	0.36	
525	4/19/2004	6:07:39 PM		26.157	24.931	25.672	26.86	23.977		44.622	47.86	10.537	34.743	-1.221	-7.53		47.962	0.116	14.643	0.003		505.8	8.43028	46.4	11.8	39.7	2.736	0.017	0.017	0.000	0.428	0.36	
526	4/19/2004	6:08:39 PM		26.161	24.94	25.68	26.839	24.016		44.649	47.99	10.568	34.671	-1.221	-7.515		47.253	0.117	14.643	0.003		506.8	8.44694	46.5	11.6	39.7	2.734	0.017	0.017	0.000	0.432	0.37	
527	4/19/2004	6:09:39 PM		26.171	24.955	25.665	26.849	24.041		44.722	48.042	10.549	34.827	-1.221	-7.53		48.118	0.117	14.643	0.003		507.8	8.46361	46.6	11.8	39.8	2.742	0.017	0.017	0.000	0.430	0.37	
528	4/19/2004	6:10:39 PM		26.17	24.949	25.665	26.868	24.135		44.618	47.914	10.533	34.718	-1.218	-7.521		50.39	0.117	14.643	0.003		508.8	8.48028	46.4	12.3	39.7	2.735	0.017	0.017	0.000	0.432	0.37	
529	4/19/2004	6:11:39 PM		26.169	24.959	25.659	26.858	24.254		44.651	47.936	10.634	34.714	-1.218	-7.501		48.517	0.114	14.643	0.003		509.8	8.49694	46.5	11.9	39.7	2.736	0.017	0.017	0.000	0.420	0.36	
530	4/19/2004	6:12:39 PM		26.164	24.959	25.654	26.868	24.305		44.686	47.887	10.644	34.77	-1.221	-7.527		48.884	0.115	14.643	0.003		510.8	8.51361	46.4	12.0	39.7	2.739	0.017	0.017	0.000	0.424	0.36	
531	4/19/2004	6:13:39 PM		26.169	24.959	25.634	26.943	24.45		44.803	48.027	10.606	34.93	-1.218	-7.535		48.469	0.116	14.643	0.003		511.8	8.53028	46.6	11.9	39.9	2.749	0.017	0.017	0.000	0.426	0.36	
532	4/19/2004	6:14:39 PM		26.164	24.959	25.484	26.993	24.495		44.662	47.972	10.605	34.694	-1.221	-7.463		49.676	0.113	14.643	0.003		512.8	8.54694	46.5	12.2	39.7	2.736	0.017	0.017	0.000	0.419	0.36	
533	4/19/2004	6:15:39 PM		26.159	24.973	25.443	27.077	24.439		44.574	47.777	10.586	34.7	-1.221	-7.544		46.489	0.114	14.643	0.003		513.8	8.56361	46.3	11.4	39.6	2.733	0.017	0.017	0.000	0.423	0.36	
534	4/19/2004	6:16:39 PM		26.149	24.974	25.449	27.073	24.395		44.838	48.042	10.601	34.938	-1.221	-7.515		48.663	0.111	14.643	0.003		514.8	8.58028	46.6	11.9	39.9	2.750	0.017	0.016	0.000	0.410	0.35	
535	4/19/2004	6:17:39 PM		26.134	24.969	25.454	27.103	24.47		44.377	47.509	10.468	34.657	-1.221	-7.535		49.126	0.112	14.643	0.003		515.8	8.59694	46.0	12.0	39.5	2.725	0.017	0.016	0.000	0.417	0.36	
536	4/19/2004	6:18:39 PM		26.141	25	25.5	27.149	24.436		44.614	47.843	10.509	34.829	-1.218	-7.495		49.157	0.114	14.643	0.003		516.8	8.61361	46.4	12.0	39.7	2.739	0.017	0.017	0.000	0.422	0.36	
537	4/19/2004	6:19:39 PM		26.116	24.991	25.466	27.12	24.467		44.5	47.835	10.517	34.657	-1.221	-7.538		47.951	0.114	14.643	0.003		517.8	8.63028	46.4	11.8	39.6	2.729	0.017	0.017	0.000	0.424	0.36	
538	4/19/2004	6:20:39 PM		26.112	24.996	25.472	27.12	24.533		44.745	48.086	10.542	34.92	-1.218	-7.527		49.14	0.114	14.643	0.003		518.8	8.64694	46.6	12.0	39.8	2.746	0.017	0.017	0.000	0.421	0.36	
539	4/19/2004	6:21:39 PM		26.104	24.998	25.473	27.142	24.624		44.396	47.65	10.474	34.647	-1.221	-7.515		49.03	0.118	14.643	0.003		519.8	8.66361	46.2	12.0	39.5	2.725	0.018	0.017	0.000	0.439	0.37	
540	4/19/2004	6:22:39 PM		26.1	25.014	25.475	27.183	24.64		44.699	48.063	10.598	34.801	-1.218	-7.472		44.426	0.114	14.643	0.003		520.8	8.68028	46.6	10.9	39.8	2.741	0.017	0.017	0.000	0.422	0.36	
541	4/19/2004	6:23:39 PM		26.096	25.02	25.475	27.189	24.601		45.446	48.693	10.643	35.492	-1.221	-7.483		49.261	0.116	14.643	0.003		521.8	8.69694	47.2	12.1	40.5	2.790	0.017	0.017	0.000	0.422	0.36	
542	4/19/2004	6:24:39 PM		26.101	25.025	25.505	27.159	24.486		44.711	48.09	11.061	34.351	-1.221	-7.483		49.086	0.113	14.643	0.003		522.8	8.71361	46.6	12.0	39.5	2.726	0.017	0.017	0.000	0.420	0.36	
543	4/19/2004	6:25:39 PM		26.096	25.03	25.53	27.129	24.571		44.699	48.025	11.096	34.363	-1.218	-7.547		52.826	0.114	14.643	0.004		523.8	8.73028	46.6	12.9	39.5	2.726	0.017	0.017	0.000	0.424	0.36	
544	4/19/2004	6:26:39 PM		26.106	25.046	25.551	27.12	24.572		44.697	48.034	11.089	34.283	-1.221	-7.515		49.939	0.113	14.643	0.003		524.8	8.74694	46.6	12.2	39.5	2.723	0.017	0.017	0.000	0.420	0.36	
545	4/19/2004	6:27:39 PM		26.106	25.046	25.546	27.13	24.572		45.004	48.357	11.107	34.659	-1.221	-7.55		52.599	0.114	14.643	0.003		525.8	8.76361	46.9	12.9	39.8	2.746	0.017	0.017	0.000	0.420	0.36	
546	4/19/2004	6:28:39 PM		26.118	25.062	25.572	27.156	24.573		44.722	47.909	11.057	34.392	-1.221	-7.486		52.159	0.114	14.643	0.003		526.8	8.78028	46.4	12.8	39.6	2.727	0.017	0.017	0.000	0.423	0.36	
547	4/19/2004	6:29:39 PM		26.123	25.078	25.603	27.162	24.599		44.736	48.027	10.899	34.579	-1.221	-7.512		49.729	0.115	14.643	0.003		527.8	8.79694	46.6	12.2	39.7	2.734	0.017	0.017	0.000	0.425	0.36	
548	4/19/2004	6:30:39 PM		26.129	25.089	25.524	27.102	24.65		44.807	48.094	10.955	34.552	-1.221	-7.504		48.421	0.109	14.643	0.003		528.8	8.81361	46.6	11.9	39.7	2.736	0.016	0.016	0.000	0.404	0.34	
549	4/19/2004	6:31:39 PM		26.128	25.083	25.483	27.152	24.614		44.902	48.357	10.957	34.649	-1.221	-7.501		50.413	0.114	14.643	0.003		529.8	8.83028	46.9	12.4	39.8	2.742	0.017	0.017	0.000	0.422	0.36	
550	4/19/2004	6:32:39 PM		26.129	25.109	25.504	27.137	24.7		44.908	48.268	10.834	34.797	-1.221	-7.541		50.127	0.113	14.643	0.003		530.8	8.84694	46.8	12.3	39.9	2.748	0.017	0.017	0.000	0.417	0.35	
551	4/19/2004	6:33:39 PM		26.129	25.124	25.529	27.137	24.655		44.913	48.301	10.929	34.762	-1.221	-7.492		49.971	0.11	14.643	0.003		531.8	8.86361	46.8	12.2	39.8	2.747	0.016	0.016	0.000	0.406	0.35	
552	4/19/2004	6:34:39 PM		26.129	25.119	25.524	27.142	24.655		44.906	48.353	10.95	34.706	-1.221	-7.509		48.49	0.11	14.643	0.003		532.8	8.88028	46.9	11.9	39.8	2.744	0.016	0.016	0.000	0.406	0.35	
553	4/19/2004	6:35:39 PM		26.119	25.124	25.544	27.182	24.7		44.736	48.1	10.877	34.55	-1.221	-7.527		47.034	0.114	14.643	0.003		533.8	8.89694	46.6	11.5	39.6	2.733	0.017	0.017	0.000	0.422	0.36	
554	4/19/2004	6:36:39 PM		26.141	25.16	25.59	27.194	24.636		44.649	48.069	10.831	34.513	-1.218	-7.457		49.007	0.112	14.643	0.003		534.8	8.91361	46.6	12.0	39.6	2.729	0.017	0.016	0.000	0.415	0.35	
555	4/19/2004	6:37:39 PM		26.136	25.176	25.596	27.174	24.702		45.151	48.654	10.93	34.915	-1.221	-7.547		48.932	0.114	14.643	0.003		535.8	8.93028	47.2	12.0	40.0	2.760	0.017	0.017	0.000	0.418	0.36	
556	4/19/2004	6:38:39 PM		26.132	25.172	25.602	27.17	24.617		44.811	48.264	10.896	34.675	-1.221	-7.518		53.041	0.115	14.643	0.003		536.8	8.94694	46.8	13.0	39.7	2.740	0.017	0.017	0.000	0.424	0.36	
557	4/19/2004	6:39:39 PM		26.138	25.193	25.623	27.192	24.589		44.881	48.537	10.904	34.601	-1.218	-7.55		48.632	0.112	14.643	0.003		537.8	8.96361	47.1	11.9	39.7	2.740	0.017	0.016	0.000	0.413	0.35	
558	4/19/2004	6:40:39 PM		26.139	25.184	25.619	27.172	24.555		45.155	48.589	10.927	34.965	-1.221	-7.553		48.778	0.112	14.643	0.003		538.8	8.98028	47.1	12.0	40.1	2.762	0.017	0.016	0.000	0.410	0.35	
559	4/19/2004	6:41:39 PM		26.15	25.21	25.635	27.188	24.6		45.276	48.685	10.97	35.043	-1.218	-7.469		47.599	0.115	14.643	0.004		539.8	8.99694	47.2	11.7	40.2	2.769	0.017	0.017	0.000	0.419	0.36	
560	4/19/2004	6:42:39 PM		26.156	25.216	25.661	27.184	24.607		44.981	48.743	10.869	34.723	-1.221	-7.481		48.9	0.114	14.643	0.003		540.8	9.01361	47.3	12.0	39.9	2.748	0.017	0.017	0.000	0.419	0.36	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	4/19/2004	6:43:39 PM		26.166	25.226	25.681	27.179	24.642		44.977	48.49	10.949	34.739	-1.221	-7.518		48.673	0.112	14.643	0.003		541.8	9.03028	47.0	11.9	39.9	2.748	0.017	0.016	0.000	0.411	0.35	
562	4/19/2004	6:44:39 PM		26.171	25.231	25.696	27.169	24.582		45.114	48.678	10.935	34.87	-1.221	-7.521		50.455	0.114	14.643	0.003		542.8	9.04694	47.2	12.4	40.0	2.757	0.017	0.017	0.000	0.417	0.35	
563	4/19/2004	6:45:39 PM		26.186	25.241	25.656	27.224	24.632		45.097	48.471	10.957	34.928	-1.221	-7.562		51.051	0.112	14.643	0.003		543.8	9.06361	47.0	12.5	40.0	2.759	0.017	0.016	0.000	0.410	0.35	
564	4/19/2004	6:46:39 PM		26.196	25.241	25.541	27.204	24.662		44.931	48.562	10.963	34.612	-1.218	-7.567		52.215	0.108	14.643	0.003		544.8	9.08028	47.1	12.8	39.8	2.742	0.016	0.016	0.000	0.399	0.34	
565	4/19/2004	6:47:39 PM		26.206	25.256	25.561	27.254	24.692		44.832	48.357	10.933	34.528	-1.221	-7.53		50.169	0.11	14.643	0.003		545.8	9.09694	46.9	12.3	39.7	2.736	0.016	0.016	0.000	0.407	0.35	
566	4/19/2004	6:48:39 PM		26.196	25.261	25.571	27.214	24.647		44.873	48.312	10.855	34.712	-1.224	-7.541		48.936	0.111	14.643	0.003		546.8	9.11361	46.8	12.0	39.8	2.744	0.017	0.016	0.000	0.409	0.35	
567	4/19/2004	6:49:39 PM		26.191	25.256	25.586	27.189	24.682		44.877	48.272	10.795	34.811	-1.224	-7.553		49.689	0.112	14.643	0.003		547.8	9.13028	46.8	12.2	39.8	2.747	0.017	0.016	0.000	0.412	0.35	
568	4/19/2004	6:50:39 PM		26.181	25.251	25.586	27.124	24.682		44.83	48.386	10.884	34.601	-1.224	-7.501		48.243	0.108	14.643	0.003		548.8	9.14694	46.9	11.8	39.7	2.738	0.016	0.016	0.000	0.399	0.34	
569	4/19/2004	6:51:39 PM		26.196	25.271	25.626	27.149	24.572		44.786	48.227	10.783	34.723	-1.221	-7.556		48.784	0.111	14.643	0.003		549.8	9.16361	46.8	12.0	39.8	2.741	0.017	0.016	0.000	0.409	0.35	
570	4/19/2004	6:52:39 PM		26.196	25.281	25.631	27.169	24.532		45.408	48.991	10.836	35.312	-1.218	-7.483		48.83	0.111	14.643	0.003		550.8	9.18028	47.5	12.0	40.4	2.783	0.017	0.016	0.000	0.403	0.34	
571	4/19/2004	6:53:39 PM		26.201	25.286	25.641	27.184	24.682		44.718	48.173	10.784	34.694	-1.218	-7.483		49.034	0.111	14.643	0.003		551.8	9.19694	46.7	12.0	39.7	2.738	0.017	0.016	0.000	0.409	0.35	
572	4/19/2004	6:54:39 PM		26.201	25.286	25.666	27.134	24.652		45.018	48.772	10.857	34.831	-1.218	-7.547		48.972	0.113	14.643	0.003		552.8	9.21361	47.3	12.0	39.9	2.753	0.017	0.017	0.000	0.414	0.35	
573	4/19/2004	6:55:39 PM		26.186	25.286	25.646	27.114	24.562		44.848	48.436	10.867	34.671	-1.224	-7.55		44.374	0.111	14.643	0.003		553.8	9.23028	47.0	10.9	39.8	2.741	0.017	0.016	0.000	0.409	0.35	
574	4/19/2004	6:56:39 PM		26.218	25.323	25.697	27.171	24.593		44.799	48.465	10.855	34.56	-1.221	-7.535		47.499	0.115	14.643	0.003		554.8	9.24694	47.0	11.6	39.7	2.736	0.017	0.017	0.000	0.424	0.36	
575	4/19/2004	6:57:39 PM		26.219	25.329	25.714	27.202	24.61		45.043	48.622	10.899	34.852	-1.221	-7.541		48.876	0.112	14.643	0.003		555.8	9.26361	47.1	12.0	39.9	2.754	0.017	0.016	0.000	0.410	0.35	
576	4/19/2004	6:58:39 PM		26.215	25.335	25.71	27.233	24.64		45.153	48.794	10.919	34.887	-1.221	-7.533		49.405	0.112	14.643	0.003		556.8	9.28028	47.3	12.1	40.0	2.759	0.017	0.016	0.000	0.409	0.35	
577	4/19/2004	6:59:39 PM		26.227	25.342	25.727	27.24	24.682		45.072	48.519	10.781	35.172	-1.221	-7.521		50.991	0.105	14.643	0.003		557.8	9.29694	47.0	12.5	40.1	2.766	0.016	0.015	0.000	0.382	0.33	
578	4/19/2004	7:00:39 PM		26.232	25.358	25.742	27.206	24.663		44.749	48.311	10.809	34.723	-1.221	-7.553		50.075	0.11	14.643	0.003		558.8	9.31361	46.8	12.3	39.7	2.740	0.016	0.016	0.000	0.404	0.34	
579	4/19/2004	7:01:39 PM		26.254	25.379	25.789	27.257	24.625		44.863	48.49	10.869	34.721	-1.218	-7.452		46.502	0.112	14.643	0.003		559.8	9.33028	47.0	11.4	39.8	2.744	0.017	0.016	0.000	0.410	0.35	
580	4/19/2004	7:02:39 PM		26.25	25.376	25.77	27.274	24.596		44.861	48.664	10.861	34.587	-1.218	-7.535		48.577	0.11	14.643	0.003		560.8	9.34694	47.2	11.9	39.7	2.739	0.016	0.016	0.000	0.404	0.34	
581	4/19/2004	7:03:39 PM		26.251	25.376	25.726	27.229	24.572		44.821	48.589	10.908	34.567	-1.221	-7.53		45.503	0.11	14.643	0.003		561.8	9.36361	47.1	11.2	39.7	2.737	0.016	0.016	0.000	0.405	0.34	
582	4/19/2004	7:04:39 PM		26.272	25.397	25.612	27.275	24.697		44.707	48.44	10.89	34.404	-1.215	-7.518		51.247	0.107	14.643	0.004		562.8	9.38028	47.0	12.6	39.6	2.727	0.016	0.016	0.000	0.396	0.34	
583	4/19/2004	7:05:39 PM		26.262	25.402	25.602	27.19	24.652		45.201	48.925	10.925	35.012	-1.221	-7.556		48.444	0.11	14.643	0.003		563.8	9.39694	47.5	11.9	40.1	2.765	0.016	0.016	0.000	0.402	0.34	
584	4/19/2004	7:06:39 PM		26.262	25.417	25.637	27.23	24.657		44.958	48.535	10.825	34.821	-1.218	-7.547		48.11	0.111	14.643	0.003		564.8	9.41361	47.1	11.8	39.9	2.750	0.017	0.016	0.000	0.408	0.35	
585	4/19/2004	7:07:39 PM		26.251	25.406	25.646	27.164	24.612		44.828	48.506	10.855	34.688	-1.221	-7.562		49.531	0.108	14.643	0.003		565.8	9.43028	47.0	12.1	39.8	2.741	0.016	0.016	0.000	0.398	0.34	
586	4/19/2004	7:08:39 PM		26.266	25.431	25.676	27.194	24.552		45.079	48.734	10.892	34.895	-1.218	-7.55		48.148	0.107	14.643	0.003		566.8	9.44694	47.3	11.8	40.0	2.757	0.016	0.016	0.000	0.391	0.33	
587	4/19/2004	7:09:39 PM		26.257	25.443	25.687	27.256	24.523		45.13	48.819	10.977	34.825	-1.221	-7.509		53.112	0.111	14.643	0.003		567.8	9.46361	47.3	13.0	40.0	2.756	0.017	0.016	0.000	0.406	0.35	
588	4/19/2004	7:10:39 PM		26.247	25.443	25.687	27.236	24.488		45.012	48.711	10.9	34.854	-1.218	-7.521		48.7	0.108	14.643	0.003		568.8	9.48028	47.2	11.9	39.9	2.753	0.016	0.016	0.000	0.396	0.34	
589	4/19/2004	7:11:39 PM		26.253	25.443	25.703	27.216	24.619		45.172	49.112	10.97	34.758	-1.224	-7.538		49.224	0.106	14.643	0.003		569.8	9.49694	47.6	12.1	40.0	2.755	0.016	0.015	0.000	0.388	0.33	
590	4/19/2004	7:12:39 PM		26.259	25.444	25.734	27.232	24.685		44.84	48.591	10.957	34.515	-1.218	-7.544		48.344	0.113	14.643	0.003		570.8	9.51361	47.1	11.8	39.7	2.736	0.017	0.017	0.000	0.416	0.35	
591	4/19/2004	7:13:39 PM		26.265	25.461	25.75	27.199	24.686		44.678	48.452	10.856	34.556	-1.221	-7.504		47.954	0.108	14.643	0.003		571.8	9.53028	47.0	11.8	39.6	2.731	0.016	0.016	0.000	0.398	0.34	
592	4/19/2004	7:14:39 PM		26.271	25.461	25.761	27.219	24.687		44.819	48.683	10.908	34.651	-1.221	-7.478		48.984	0.11	14.643	0.003		572.8	9.54694	47.2	12.0	39.7	2.740	0.016	0.016	0.000	0.404	0.34	
593	4/19/2004	7:15:39 PM		26.262	25.462	25.737	27.165	24.682		45.132	48.77	10.991	34.835	-1.224	-7.553		49.251	0.109	14.643	0.003		573.8	9.56361	47.3	12.1	40.0	2.757	0.016	0.016	0.000	0.398	0.34	
594	4/19/2004	7:16:39 PM		26.277	25.477	25.767	27.175	24.647		44.879	48.68	10.857	34.682	-1.218	-7.556		47.063	0.109	14.643	0.003		574.8	9.58028	47.2	11.5	39.8	2.743	0.016	0.016	0.000	0.400	0.34	
595	4/19/2004	7:17:39 PM		26.287	25.477	25.802	27.19	24.637		45.147	49.051	11.023	34.776	-1.218	-7.507		49.556	0.109	14.643	0.004		575.8	9.59694	47.6	12.1	40.0	2.755	0.016	0.016	0.000	0.398	0.34	
596	4/19/2004	7:18:39 PM		26.287	25.483	25.803	27.201	24.573		44.794	48.707	10.969	34.448	-1.221	-7.559		47.924	0.108	14.643	0.003		576.8	9.61361	47.2	11.7	39.6	2.732	0.016	0.016	0.000	0.397	0.34	
597	4/19/2004	7:19:39 PM		26.277	25.473	25.793	27.181	24.533		45.083	48.886	10.976	34.782	-1.221	-7.547		46.76	0.11	14.643	0.003		577.8	9.63028	47.4	11.5	39.9	2.753	0.016	0.016	0.000	0.402	0.34	
598	4/19/2004	7:20:39 PM		26.297	25.483	25.798	27.166	24.493		44.828	48.479	10.923	34.645	-1.221	-7.481		47.872	0.109	14.643	0.003		578.8	9.64694	47.0	11.7	39.7	2.740	0.016	0.016	0.000	0.400	0.34	
599	4/19/2004	7:21:39 PM		26.302	25.497	25.697	27.165	24.532		46.109	48.616	10.817	36.073	-1.218	-6.411		48.673	0.096	14.643	0.003		579.8	9.66361	47.1	11.9	41.1	2.833	0.014	0.014	0.000	0.342	0.29	
600	4/19/2004	7:22:39 PM		26.31	25.476	25.67	27.134	24.516		43.988	48.724	10.773	33.826	-1.224	-2.965		47.895	0.136	14.643	0.003		580.8	9.68028	47.3	11.7	38.9	2.683	0.020	0.020	0.001	0.511	0.44	
601	4/19/2004	7:23:39 PM		26.299	25.494	25.699	27.137	24.715		46.07	48.763	10.792	35.972	-1.218	-7.171		50.092	0.109	14.643	0.003		581.8	9.69694	47.3	12.3	41.0	2.828	0.016	0.016	0.000	0.388	0.33	
602	4/19/2004	7:24:39 PM		26.307	25.503	25.707	27.061	24.743		46.18	49.126	10.862	35.954	-1.221	-6.804		50.089	0.117	14.643	0.003		582.8	9.71361	47.7	12.3	41.1	2.831	0.017	0.017	0.000	0.416	0.35	
603	4/19/2004	7:25:39 PM		26.301	25.491	25.726	27.069	24.822		46.167	48.861	10.872	36.028	-1.221	-7.411		49.549	0.112	14.643	0.003		583.8	9.73028	47.4	12.1	41.1	2.834	0.017	0.016	0.000	0.398	0.34	
604	4/19/2004	7:26:39 PM		26.499	25.5	25.73	27.113	24.655		45.79	48.517	11.113	35.33	-1.221	-7.434		49.432	0.113	14.643	0.003		584.8	9.74694	47.0	12.1	40.6	2.796	0.017	0.017	0.000	0.407	0.35	
605	4/19/2004	7:27:39 PM		26.498	25.504	25.758	27.132	24.589		45.923	48.519	11.195	35.48	-1.221	-7.515		51.706	0.109	14.643	0.003		585.8	9.76361	47.0	12.7	40.7	2.806	0.016	0.016	0.000	0.391	0.33	
606	4/19/2004	7:28:39 PM		26.431	25.502	25.762	27.07	24.537		45.603	48.282	11.184	35.203	-1.218	-7.512		50.175	0.11	14.643	0.003		586.8	9.78028	46.8	12.3	40.4	2.786	0.016	0.016	0.000	0.397	0.34	
607	4/19/2004	7:29:39 PM		26.395	25.511	25.73	27.089	24.631		45.522	48.417	11.146	35.115	-1.218	-7.507		49.802	0.107	14.643	0.003		587.8	9.79694	46.9	12.2	40.3	2.780	0.016	0.016	0.000	0.388	0.33	
608	4/19/2004	7:30:39 PM		26.354	25.505	25.685	27.098	24.56		45.643	48.465	11.182	35.149	-1.218	-7.533		49.61	0.107	14.643	0.003		588.8	9.81361	47.0	12.2	40.4	2.785	0.016	0.016	0.000	0.387	0.33	
609	4/19/2004	7:31:39 PM		26.32	25.515	25.68	27.123	24.46		46.041	48.896	11.256	35.408	-1.218	-7.538		47.68	0.107	14.643	0.003		589.8	9.83028	47.4	11.7	40.7	2.808	0.016	0.016	0.000	0.384	0.33	
610	4/19/2004	7:32:39 PM		26.27	25.521	25.64	27.109	24.456		45.506	48.255	11.17	35.01	-1.218	-7.521		48.171	0.108	14.643	0.003		590.8	9.84694	46.8	11.8	40.3	2.776	0.016	0.016	0.000	0.393	0.33	
611	4/19/2004	7:33:39 PM		26.225	25.5	25.595	27.078	24.56		45.56	48.324	11.243	35.088	-1.221	-7.535		52.592	0.107	14.643	0.003		591.8	9.86361	46.9	12.9	40.3	2.780	0.016	0.016	0.000	0.389	0.33	
612	4/19/2004	7:34:39 PM		26.215	25.501	25.48	27.034	24.591		45.697	48.537	11.281	35.18	-1.221	-7.533		48.665	0.105	14.643	0.003		592.8	9.88028	47.1	11.9	40.4	2.788	0.016	0.015	0.000	0.382	0.33	
613	4/19/2004	7:35:39 PM		26.195	25.505	25.409	27.068	24.53		45.562	48.363	11.24	35.02	-1.221	-7.544		49.641	0.106	14.643	0.003		593.8	9.89694	46.9	12.2	40.3	2.778	0.016	0.016	0.000	0.388	0.33	
614	4/19/2004	7:36:39 PM		26.165	25.51	25.404	27.053	24.48		45.348	48.204	11.292	34.721	-1.221	-7.544		49.847	0.107	14.643	0.003		594.8	9.91361	46.7	12.2	40.0	2.760	0.016	0.016	0.000	0.394	0.34	
615	4/19/2004	7:37:39 PM		26.134	25.494	25.389	26.997	24.454		45.728	48.662	11.287	35.129	-1.221	-7.538		51.596	0.106	14.643	0.003		595.8	9.93028	47.2	12.6	40.4	2.787	0.016	0.016	0.000	0.387	0.33	
616	4/19/2004	7:38:39 PM		26.115	25.49	25.369	26.998	24.44		45.794	48.689	11.342	35.082	-1.221	-7.541		51.187	0.105	14.643	0.003		596.8	9.94694	47.2	12.5	40.4	2.788	0.016	0.015	0.000	0.383	0.33	
617	4/19/2004	7:39:39 PM		26.11	25.485	25.369	27.008	24.49		45.597	48.301	11.261	35.174	-1.221	-7.518		47.465	0.105	14.643	0.003		597.8	9.96361	46.8	11.6	40.4	2.784	0.016	0.015	0.000	0.384	0.33	
618	4/19/2004	7:40:39 PM		26.115	25.5	25.369	26.988	24.5		45.533	48.1	11.249	35.067	-1.215	-7.527		47.078	0.104	14.643	0.003		598.8	9.98028	46.6	11.5	40.3	2.779	0.016	0.015	0.000	0.381	0.32	
619	4/19/2004	7:41:39 PM		26.086	25.476	25.335	26.934	24.346		46.07	48.517	11.165	35.605	-1.227	-6.243		48.949	0.072	14.643	0.003		599.8	9.99694	47.0	12.0	40.8	2.816	0.011	0.011	0.000	0.260	0.22	
620	4/19/2004	7:42:39 PM		26.08	25.485	25.314	26.938	24.35		45.682	48.094	11.219	35.184	-1.218	-6.342		47.503	0.106	14.643	0.003		600.8	10.0136	46.6	11.6	40.4	2.788	0.016	0.016	0.000	0.387	0.33	
621	4/19/2004	7:43:39 PM		26.076	25.486	25.326	26.935	24.321		46.252	48.407	11.205	35.884	-1.218	-7.368		48.757	0.108	14.643	0.003		601.8	10.0303	46.9	11.9	41.1	2.831	0.016	0.016	0.000	0.389	0.33	
622	4/19/2004	7:44:39 PM		26.067	25.492	25.332	26.935	24.352		46.035	48.324	11.214	35.533	-1.224	-7.397		49.566	0.108	14.643	0.003		602.8	10.0469	46.9	12.1	40.8	2.812	0.016	0.016	0.000	0.391	0.33	
623	4/19/2004	7:45:39 PM		26.051	25.486	25.295	26.889	24.366		46.286	48.67	11.206	35.736	-1.218	-7.411		50.283	0.104	14.643	0.004		603.8	10.0636	47.2	12.3	41.0	2.828	0.016	0.015	0.000	0.375	0.32	
624	4/19/2004	7:46:39 PM		26.046	25.501	25.286	26.93	24.387		46.229	48.678	11.155	35.745	-1.218	-7.423		49.376	0.107	14.643	0.003		604.8	10.0803	47.2	12.1	41.0	2.826	0.016	0.016	0.000	0.386	0.33	
625	4/19/2004	7:47:39 PM		26.046	25.496	25.286	26.935	24.447		46.493	48.78	11.232	36.007	-1.218	-7.483		48.531	0.106	14.643	0.003		605.8	10.0969	47.3	11.9	41.3	2.844	0.016	0.016	0.000	0.380	0.32	
626	4/19/2004	7:48:39 PM		26.025	25.495	25.269	26.863	24.38		46.474	48.879	11.249	35.903	-1.218	-7.478		49.339	0.105	14.643	0.003		606.8	10.1136	47.4	12.1	41.2	2.840	0.016	0.016	0.000	0.377	0.32	
627	4/19/2004	7:49:39 PM		26.018	25.499	25.123	26.857	24.349		46.354	48.683	11.174	35.88	-1.221	-7.455		48.579	0.106	14.643	0.003		607.8	10.1303	47.2	11.9	41.1	2.835	0.016	0.016	0.000	0.383	0.33	
628	4/19/2004	7:50:39 PM		26.007	25.502	25.121	26.785	24.352		46.534	48.923	11.139	36.03	-1.218	-7.492		47.307	0.107	14.643	0.003		608.8	10.1469	47.5	11.6	41.3	2.846	0.016	0.016	0.000	0.385	0.33	
629	4/19/2004	7:51:39 PM		26	25.505	25.149	26.808	24.335		46.107	48.322	10.957	35.948	-1.218	-7.481		49.049	0.105	14.643	0.003		609.8	10.1636	46.8	12.0	41.0	2.829	0.016	0.016	0.000	0.380	0.32	
630	4/19/2004	7:52:39 PM		25.983	25.508	25.122	26.811	24.363		45.997	48.297	11.131	35.611	-1.218	-7.498		49.731	0.105	14.643	0.003		610.8	10.1803	46.8	12.2	40.8	2.813	0.016	0.016	0.000	0.382	0.33	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	4/19/2004	7:53:39 PM		25.961	25.497	25.126	26.82	24.261		46.342	48.678	11.094	36.05	-1.221	-7.483		49.339	0.105	14.643	0.003		611.8	10.1969	47.2	12.1	41.2	2.840	0.016	0.016	0.000	0.379	0.32	
632	4/19/2004	7:54:39 PM		25.94	25.48	25.114	26.768	24.19		46.342	48.736	11.09	36.022	-1.221	-7.492		47.426	0.105	14.643	0.003		612.8	10.2136	47.3	11.6	41.2	2.839	0.016	0.016	0.000	0.379	0.32	
633	4/19/2004	7:55:39 PM		25.925	25.48	25.124	26.733	24.135		46.449	48.703	11.072	36.186	-1.218	-7.492		48.682	0.105	14.643	0.003		613.8	10.2303	47.2	11.9	41.3	2.849	0.016	0.016	0.000	0.378	0.32	
634	4/19/2004	7:56:39 PM		25.909	25.469	25.109	26.713	24.099		46.37	48.886	11.016	36.102	-1.218	-7.481		49.53	0.105	14.643	0.003		614.8	10.2469	47.4	12.1	41.2	2.843	0.016	0.016	0.000	0.378	0.32	
635	4/19/2004	7:57:39 PM		25.899	25.464	25.113	26.652	24.134		46.217	48.612	11.112	35.868	-1.218	-7.457		50.953	0.105	14.643	0.003		615.8	10.2636	47.1	12.5	41.0	2.830	0.016	0.016	0.000	0.380	0.32	
636	4/19/2004	7:58:39 PM		25.898	25.453	25.132	26.596	24.203		46.512	49.002	11.117	36.048	-1.218	-7.492		47.985	0.105	14.643	0.003		616.8	10.2803	47.5	11.8	41.3	2.846	0.016	0.016	0.000	0.378	0.32	
637	4/19/2004	7:59:39 PM		25.887	25.452	25.101	26.63	24.377		46.456	48.939	11.107	36.118	-1.221	-7.46		49.971	0.104	14.643	0.003		617.8	10.2969	47.5	12.2	41.3	2.847	0.016	0.015	0.000	0.374	0.32	
638	4/19/2004	7:59:43 PM		25.892	25.452	25.106	26.635	24.362		46.424	48.942	11.164	35.929	-1.221	-7.466		50.031	0.104	14.643	0.003		617.9	10.2981	47.5	12.3	41.2	2.839	0.016	0.015	0.000	0.375	0.32	
639	4/19/2004	8:00:43 PM		25.881	25.436	25.105	26.624	24.316		46.271	48.873	11.099	35.874	-1.218	-7.486		48.112	0.104	14.643	0.003		618.9	10.3147	47.4	11.8	41.1	2.832	0.016	0.015	0.000	0.376	0.32	
640	4/19/2004	8:01:43 PM		25.875	25.43	25.134	26.613	24.42		46.553	48.927	11.194	36.091	-1.221	-7.469		49.14	0.102	14.643	0.003		619.9	10.3314	47.5	12.0	41.3	2.849	0.015	0.015	0.000	0.367	0.31	
641	4/19/2004	8:02:43 PM		25.859	25.419	25.104	26.668	24.495		46.312	48.728	11.166	35.905	-1.218	-7.481		49.553	0.104	14.643	0.004		620.9	10.3481	47.3	12.1	41.1	2.834	0.016	0.015	0.000	0.376	0.32	
642	4/19/2004	8:03:43 PM		25.865	25.44	25.139	26.708	24.7		46.055	48.548	11.125	35.665	-1.218	-7.486		47.626	0.102	14.643	0.003		621.9	10.3647	47.1	11.7	40.9	2.817	0.015	0.015	0.000	0.371	0.32	
643	4/19/2004	8:04:43 PM		25.852	25.432	25.146	26.82	24.802		46.545	49.248	11.288	35.886	-1.218	-7.481		48.558	0.103	14.643	0.003		622.9	10.3814	47.8	11.9	41.2	2.842	0.015	0.015	0.000	0.371	0.32	
644	4/19/2004	8:05:43 PM		25.833	25.413	25.102	26.871	24.998		46.416	49.006	11.14	36.042	-1.224	-7.486		50.26	0.103	14.643	0.003		623.9	10.3981	47.5	12.3	41.2	2.843	0.015	0.015	0.000	0.371	0.32	
645	4/19/2004	8:06:43 PM		25.844	25.434	25.053	26.937	24.945		46.449	48.962	11.188	35.948	-1.221	-7.481		49.568	0.104	14.643	0.003		624.9	10.4147	47.5	12.1	41.2	2.840	0.016	0.015	0.000	0.376	0.32	
646	4/19/2004	8:07:43 PM		25.824	25.429	24.983	26.903	24.81		46.331	49.004	11.252	35.716	-1.221	-7.475		49.46	0.104	14.643	0.003		625.9	10.4314	47.5	12.1	41.0	2.828	0.016	0.016	0.000	0.378	0.32	
647	4/19/2004	8:08:43 PM		25.826	25.446	25.015	26.914	24.686		46.308	48.989	11.234	35.73	-1.221	-7.483		49.339	0.102	14.643	0.003		626.9	10.4481	47.5	12.1	41.0	2.828	0.015	0.015	0.000	0.371	0.32	
648	4/19/2004	8:09:43 PM		25.822	25.461	25.001	26.935	24.637		46.483	49.054	11.184	35.981	-1.221	-7.481		48.575	0.102	14.643	0.003		627.9	10.4647	47.6	11.9	41.2	2.843	0.015	0.015	0.000	0.369	0.31	
649	4/19/2004	8:10:43 PM		25.812	25.457	25.016	26.83	24.457		45.902	48.386	11.149	35.468	-1.218	-7.478		49.904	0.103	14.643	0.003		628.9	10.4814	46.9	12.2	40.7	2.805	0.015	0.015	0.000	0.377	0.32	
650	4/19/2004	8:11:43 PM		25.818	25.483	25.052	26.811	24.413		46.483	49.122	11.195	36.03	-1.218	-7.431		50.651	0.1	14.643	0.003		629.9	10.4981	47.6	12.4	41.3	2.844	0.015	0.015	0.000	0.361	0.31	
651	4/19/2004	8:12:43 PM		25.809	25.484	25.028	26.817	24.369		46.19	48.842	11.199	35.755	-1.221	-7.472		49.483	0.102	14.643	0.003		630.9	10.5147	47.4	12.1	41.0	2.825	0.015	0.015	0.000	0.371	0.32	
652	4/19/2004	8:13:43 PM		25.789	25.484	25.043	26.773	24.344		46.099	48.674	11.209	35.554	-1.218	-7.475		48.114	0.102	14.643	0.004		631.9	10.5314	47.2	11.8	40.8	2.815	0.015	0.015	0.000	0.372	0.32	
653	4/19/2004	8:14:43 PM		25.79	25.49	25.059	26.723	24.24		46.047	48.78	11.177	35.574	-1.221	-7.478		48.871	0.101	14.643	0.003		632.9	10.5481	47.3	12.0	40.8	2.814	0.015	0.015	0.000	0.368	0.31	
654	4/19/2004	8:15:43 PM		25.775	25.475	25.049	26.673	24.275		45.972	48.546	11.148	35.57	-1.221	-7.475		49.656	0.101	14.643	0.003		633.9	10.5647	47.1	12.2	40.8	2.811	0.015	0.015	0.000	0.369	0.31	
655	4/19/2004	8:16:43 PM		25.759	25.464	25.058	26.643	24.234		46.155	48.946	11.233	35.613	-1.221	-7.469		49.339	0.102	14.643	0.003		634.9	10.5814	47.5	12.1	40.9	2.819	0.015	0.015	0.000	0.371	0.32	
656	4/19/2004	8:17:43 PM		25.759	25.459	25.063	26.608	24.124		46.211	48.913	11.248	35.642	-1.218	-7.469		49.076	0.103	14.643	0.003		635.9	10.5981	47.4	12.0	40.9	2.822	0.015	0.015	0.000	0.375	0.32	
657	4/19/2004	8:18:43 PM		25.743	25.458	25.047	26.576	24.118		46.018	48.805	11.214	35.49	-1.224	-7.429		51.616	0.1	14.643	0.003		636.9	10.6147	47.3	12.6	40.8	2.810	0.015	0.015	0.000	0.365	0.31	
658	4/19/2004	8:19:43 PM		25.747	25.457	25.071	26.59	24.042		46.157	48.738	11.296	35.611	-1.215	-7.46		48.085	0.1	14.643	0.003		637.9	10.6314	47.3	11.8	40.9	2.819	0.015	0.015	0.000	0.364	0.31	
659	4/19/2004	8:20:43 PM		25.736	25.431	25.055	26.514	24.066		45.949	48.66	11.166	35.513	-1.221	-7.469		48.681	0.1	14.643	0.003		638.9	10.6481	47.2	11.9	40.7	2.808	0.015	0.015	0.000	0.365	0.31	
660	4/19/2004	8:21:43 PM		25.756	25.456	25.08	26.504	24.096		46.111	48.977	11.222	35.622	-1.221	-7.423		52.323	0.099	14.643	0.003		639.9	10.6647	47.5	12.8	40.9	2.818	0.015	0.015	0.000	0.360	0.31	
661	4/19/2004	8:22:43 PM		25.744	25.429	25.073	26.502	23.988		46.057	49.018	11.299	35.404	-1.218	-7.457		48.915	0.099	14.643	0.004		640.9	10.6814	47.5	12.0	40.7	2.808	0.015	0.015	0.000	0.362	0.31	
662	4/19/2004	8:23:43 PM		25.748	25.423	25.087	26.456	24.053		46.207	49.101	11.36	35.42	-1.218	-7.46		49.46	0.1	14.643	0.003		641.9	10.6981	47.6	12.1	40.8	2.814	0.015	0.015	0.000	0.364	0.31	
663	4/19/2004	8:24:43 PM		25.742	25.421	25.081	26.405	24.031		46.142	48.79	11.264	35.644	-1.218	-7.463		47.651	0.1	14.643	0.003		642.9	10.7147	47.3	11.7	40.9	2.819	0.015	0.015	0.000	0.364	0.31	
664	4/19/2004	8:25:43 PM		25.73	25.395	24.959	26.423	23.98		46.064	48.819	11.408	35.39	-1.224	-7.46		49.364	0.1	14.643	0.003		643.9	10.7314	47.3	12.1	40.7	2.808	0.015	0.015	0.000	0.366	0.31	
665	4/19/2004	8:26:43 PM		25.729	25.389	24.963	26.422	24.134		45.954	48.79	11.332	35.266	-1.221	-7.463		49.057	0.1	14.643	0.003		644.9	10.7481	47.3	12.0	40.6	2.800	0.015	0.015	0.000	0.368	0.31	
666	4/19/2004	8:27:43 PM		25.723	25.393	24.992	26.456	24.353		46.066	48.96	11.242	35.5	-1.221	-7.452		48.131	0.098	14.643	0.003		645.9	10.7647	47.5	11.8	40.8	2.812	0.015	0.015	0.000	0.358	0.30	
667	4/19/2004	8:28:43 PM		25.713	25.388	24.982	26.551	24.553		45.931	48.774	11.306	35.365	-1.218	-7.452		49.96	0.097	14.643	0.003		646.9	10.7814	47.3	12.2	40.6	2.803	0.014	0.014	0.000	0.356	0.30	
668	4/19/2004	8:29:43 PM		25.715	25.389	25.003	26.588	24.675		45.943	48.743	11.333	35.365	-1.221	-7.449		48.884	0.099	14.643	0.003		647.9	10.7981	47.3	12.0	40.7	2.803	0.015	0.015	0.000	0.363	0.31	
669	4/19/2004	8:30:43 PM		25.712	25.397	25.036	26.68	24.848		45.921	48.821	11.227	35.437	-1.218	-7.437		47.949	0.1	14.643	0.003		648.9	10.8147	47.3	11.8	40.7	2.805	0.015	0.015	0.000	0.366	0.31	
670	4/19/2004	8:31:43 PM		25.704	25.384	25.023	26.737	24.949		45.881	48.776	11.229	35.371	-1.224	-7.44		48.239	0.099	14.643	0.003		649.9	10.8314	47.3	11.8	40.6	2.801	0.015	0.015	0.000	0.363	0.31	
671	4/19/2004	8:32:43 PM		25.701	25.381	25.04	26.754	24.806		46.201	49.23	11.347	35.496	-1.224	-7.394		48.268	0.097	14.643	0.003		650.9	10.8481	47.8	11.8	40.8	2.816	0.014	0.014	0.000	0.354	0.30	
672	4/19/2004	8:33:43 PM		25.702	25.386	25.041	26.75	24.592		45.885	48.898	11.305	35.219	-1.221	-7.429		49.23	0.098	14.643	0.003		651.9	10.8647	47.4	12.1	40.6	2.796	0.015	0.015	0.000	0.360	0.31	
673	4/19/2004	8:34:43 PM		25.702	25.407	25.051	26.655	24.492		46.279	49.153	11.349	35.706	-1.224	-7.429		49.702	0.098	14.643	0.003		652.9	10.8814	47.7	12.2	41.0	2.826	0.015	0.015	0.000	0.356	0.30	
674	4/19/2004	8:35:43 PM		25.697	25.397	25.036	26.6	24.367		46.016	48.879	11.251	35.55	-1.221	-7.431		49.599	0.098	14.643	0.003		653.9	10.8981	47.4	12.2	40.8	2.812	0.015	0.015	0.000	0.358	0.30	
675	4/19/2004	8:36:43 PM		25.696	25.411	25.035	26.519	24.346		45.703	48.649	11.297	35.133	-1.221	-7.382		49.77	0.097	14.643	0.003		654.9	10.9147	47.2	12.2	40.4	2.787	0.014	0.014	0.000	0.357	0.30	
676	4/19/2004	8:37:43 PM		25.705	25.425	25.079	26.543	24.35		46.217	49.246	11.417	35.498	-1.215	-7.42		51.904	0.098	14.643	0.004		655.9	10.9314	47.8	12.7	40.9	2.817	0.015	0.015	0.000	0.357	0.30	
677	4/19/2004	8:38:43 PM		25.704	25.429	24.978	26.562	24.264		46.043	48.942	11.337	35.406	-1.218	-7.414		49.147	0.102	14.643	0.003		656.9	10.9481	47.5	12.0	40.7	2.808	0.015	0.015	0.000	0.374	0.32	
678	4/19/2004	8:39:43 PM		25.697	25.432	24.976	26.555	24.192		46.068	49.145	11.371	35.373	-1.218	-7.423		50.231	0.096	14.643	0.003		657.9	10.9647	47.7	12.3	40.7	2.808	0.014	0.014	0.000	0.352	0.30	
679	4/19/2004	8:40:43 PM		25.697	25.447	25.011	26.54	24.101		45.809	48.902	11.258	35.223	-1.215	-7.426		49.743	0.094	14.643	0.004		658.9	10.9814	47.4	12.2	40.5	2.793	0.014	0.014	0.000	0.346	0.29	
680	4/19/2004	8:41:43 PM		25.696	25.441	25.015	26.454	24.026		45.761	48.902	11.259	35.084	-1.221	-7.423		48.193	0.098	14.643	0.003		659.9	10.9981	47.4	11.8	40.4	2.787	0.015	0.015	0.000	0.361	0.31	
681	4/19/2004	8:42:43 PM		25.685	25.424	24.998	26.428	24.029		45.954	48.995	11.367	35.236	-1.224	-7.4		51.051	0.094	14.643	0.003		660.9	11.0147	47.5	12.5	40.6	2.799	0.014	0.014	0.000	0.345	0.29	
682	4/19/2004	8:43:43 PM		25.678	25.418	25.017	26.401	24.063		45.707	48.857	11.378	34.967	-1.221	-7.426		49.366	0.097	14.643	0.003		661.9	11.0314	47.4	12.1	40.3	2.781	0.014	0.014	0.000	0.358	0.30	
683	4/19/2004	8:44:43 PM		25.677	25.427	25.036	26.405	24.081		46.088	49.145	11.321	35.519	-1.218	-7.434		48.999	0.097	14.643	0.003		662.9	11.0481	47.7	12.0	40.8	2.813	0.014	0.014	0.000	0.354	0.30	
684	4/19/2004	8:45:43 PM		25.675	25.414	25.044	26.373	24.029		45.943	48.977	11.25	35.435	-1.218	-7.434		48.333	0.099	14.643	0.003		663.9	11.0647	47.5	11.8	40.7	2.805	0.015	0.015	0.000	0.362	0.31	
685	4/19/2004	8:46:43 PM		25.683	25.408	25.052	26.351	24.013		45.813	49.045	11.328	35.16	-1.218	-7.431		48.266	0.096	14.643	0.003		664.9	11.0814	47.6	11.8	40.5	2.791	0.014	0.014	0.000	0.353	0.30	
686	4/19/2004	8:47:43 PM		25.677	25.402	25.056	26.315	24.031		45.871	48.917	11.278	35.269	-1.218	-7.426		48.317	0.098	14.643	0.003		665.9	11.0981	47.4	11.8	40.6	2.797	0.015	0.015	0.000	0.360	0.31	
687	4/19/2004	8:48:43 PM		25.665	25.39	25.054	26.283	24.034		46.041	49.103	11.371	35.316	-1.221	-7.429		47.367	0.097	14.643	0.003		666.9	11.1147	47.6	11.6	40.7	2.805	0.014	0.014	0.000	0.355	0.30	
688	4/19/2004	8:49:43 PM		25.669	25.389	25.088	26.347	24.229		46.047	49.018	11.295	35.566	-1.218	-7.423		47.557	0.097	14.643	0.003		667.9	11.1314	47.5	11.7	40.8	2.813	0.014	0.014	0.000	0.354	0.30	
689	4/19/2004	8:50:43 PM		25.674	25.394	25.078	26.437	24.424		45.916	49.035	11.302	35.301	-1.221	-7.408		48.64	0.096	14.643	0.003		668.9	11.1481	47.6	11.9	40.6	2.800	0.014	0.014	0.000	0.352	0.30	
690	4/19/2004	8:51:43 PM		25.653	25.368	25.077	26.496	24.608		45.692	48.966	11.374	34.907	-1.218	-7.403		48.049	0.097	14.643	0.003		669.9	11.1647	47.5	11.8	40.3	2.779	0.014	0.014	0.000	0.358	0.30	
691	4/19/2004	8:52:43 PM		25.675	25.39	25.119	26.548	24.715		45.941	49.172	11.352	35.269	-1.218	-7.405		52.059	0.095	14.643	0.003		670.9	11.1814	47.7	12.8	40.6	2.800	0.014	0.014	0.000	0.348	0.30	
692	4/19/2004	8:53:43 PM		25.676	25.381	25.105	26.659	24.806		45.883	49.047	11.259	35.33	-1.218	-7.371		47.962	0.096	14.643	0.004		671.9	11.1981	47.6	11.8	40.6	2.800	0.014	0.014	0.000	0.351	0.30	
693	4/19/2004	8:54:43 PM		25.672	25.387	25.111	26.705	24.792		45.765	48.884	11.28	35.244	-1.218	-7.391		48.554	0.095	14.643	0.003		672.9	11.2147	47.4	11.9	40.5	2.793	0.014	0.014	0.000	0.349	0.30	
694	4/19/2004	8:55:43 PM		25.688	25.382	25.112	26.756	24.788		45.966	49.109	11.304	35.365	-1.215	-7.385		48.684	0.096	14.643	0.004		673.9	11.2314	47.6	11.9	40.7	2.804	0.014	0.014	0.000	0.351	0.30	
695	4/19/2004	8:56:43 PM		25.694	25.389	25.028	26.722	24.584		45.52	48.682	11.219	35.002	-1.221	-7.388		49.238	0.096	14.643	0.003		674.9	11.2481	47.2	12.1	40.3	2.776	0.014	0.014	0.000	0.355	0.30	
696	4/19/2004	8:57:43 PM		25.673	25.378	24.962	26.641	24.503		45.923	49.176	11.239	35.31	-1.224	-7.391		47.914	0.095	14.643	0.003		675.9	11.2647	47.7	11.7	40.6	2.800	0.014	0.014	0.000	0.349	0.30	
697	4/19/2004	8:58:43 PM		25.683	25.383	24.982	26.611	24.458		45.495	48.608	11.213	34.938	-1.218	-7.376		50.162	0.095	14.643	0.004		676.9	11.2814	47.1	12.3	40.2	2.773	0.014	0.014	0.000	0.352	0.30	
698	4/19/2004	8:59:43 PM		25.668	25.378	24.992	26.591	24.403		45.935	49.197	11.276	35.24	-1.221	-7.365		47.219	0.095	14.643	0.003		677.9	11.2981	47.7	11.6	40.6	2.798	0.014	0.014	0.000	0.349	0.30	
699	4/19/2004	9:00:43 PM		25.667	25.367	24.986	26.58	24.292		45.939	49.068	11.271	35.455	-1.221	-7.391		47.155	0.095	14.643	0.003		678.9	11.3147	47.6	11.6	40.7	2.806	0.014	0.014	0.000	0.348	0.30	
700	4/19/2004	9:01:43 PM		25.676	25.391	25.01	26.509	24.246		45.777	49.06	11.202	35.277	-1.221	-7.397		46.302	0.095	14.643	0.003		679.9	11.3314	47.6	11.3	40.5	2.794	0.014	0.014	0.000	0.349	0.30	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
701	4/19/2004	9:02:43 PM		25.67	25.38	25.034	26.444	24.165		45.545	48.682	11.15	35.106	-1.218	-7.397		45.903	0.095	14.643	0.003		680.9	11.3481	47.2	11.2	40.3	2.780	0.014	0.014	0.000	0.351	0.30	
702	4/19/2004	9:03:43 PM		25.664	25.379	25.023	26.392	24.124		45.804	49.012	11.193	35.271	-1.218	-7.376		49.731	0.096	14.643	0.003		681.9	11.3647	47.5	12.2	40.5	2.795	0.014	0.014	0.000	0.353	0.30	
703	4/19/2004	9:04:43 PM		25.663	25.367	25.027	26.366	24.127		45.732	48.944	11.221	35.269	-1.221	-7.359		48.219	0.093	14.643	0.003		682.9	11.3814	47.5	11.8	40.5	2.792	0.014	0.014	0.000	0.342	0.29	
704	4/19/2004	9:05:43 PM		25.661	25.366	25.045	26.379	24.136		45.862	49.087	11.288	35.285	-1.218	-7.391		48.923	0.094	14.643	0.003		683.9	11.3981	47.6	12.0	40.6	2.797	0.014	0.014	0.000	0.345	0.29	
705	4/19/2004	9:06:43 PM		25.66	25.355	25.034	26.363	24.13		46.062	49.393	11.299	35.443	-1.221	-7.394		48.84	0.092	14.643	0.003		684.9	11.4147	47.9	12.0	40.8	2.810	0.014	0.014	0.000	0.336	0.29	
706	4/19/2004	9:07:43 PM		25.658	25.342	25.042	26.376	24.012		45.962	49.253	11.254	35.408	-1.221	-7.391		46.988	0.094	14.643	0.003		685.9	11.4314	47.8	11.5	40.7	2.805	0.014	0.014	0.000	0.344	0.29	
707	4/19/2004	9:08:43 PM		25.656	25.33	25.05	26.349	23.98		46.103	49.223	11.27	35.671	-1.224	-7.4		50.482	0.092	14.643	0.003		686.9	11.4481	47.8	12.4	40.9	2.819	0.014	0.014	0.000	0.335	0.29	
708	4/19/2004	9:09:43 PM		25.653	25.318	25.057	26.321	24.007		45.862	49.178	11.241	35.297	-1.218	-7.385		50.989	0.094	14.643	0.003		687.9	11.4647	47.7	12.5	40.6	2.798	0.014	0.014	0.000	0.345	0.29	
709	4/19/2004	9:10:43 PM		25.667	25.327	25.096	26.335	24.072		45.616	48.995	11.25	35.123	-1.215	-7.376		49.126	0.093	14.643	0.004		688.9	11.4814	47.5	12.0	40.4	2.783	0.014	0.014	0.000	0.343	0.29	
710	4/19/2004	9:11:43 PM		25.655	25.3	25.074	26.253	24.165		45.64	49.149	11.225	35.002	-1.224	-7.391		47.345	0.093	14.643	0.003		689.9	11.4981	47.7	11.6	40.3	2.780	0.014	0.014	0.000	0.343	0.29	
711	4/19/2004	9:12:43 PM		25.66	25.305	25.074	26.233	24.375		46.026	49.398	11.361	35.307	-1.224	-7.382		48.246	0.092	14.643	0.003		690.9	11.5147	47.9	11.8	40.7	2.804	0.014	0.014	0.000	0.337	0.29	
712	4/19/2004	9:13:43 PM		25.65	25.289	24.998	26.318	24.509		45.875	49.393	11.276	35.219	-1.221	-7.382		47.063	0.094	14.643	0.003		691.9	11.5314	47.9	11.5	40.5	2.796	0.014	0.014	0.000	0.346	0.29	
713	4/19/2004	9:14:43 PM		25.655	25.295	25.004	26.373	24.57		45.781	49.132	11.205	35.305	-1.218	-7.374		48.221	0.094	14.643	0.003		692.9	11.5481	47.7	11.8	40.5	2.795	0.014	0.014	0.000	0.346	0.29	
714	4/19/2004	9:15:43 PM		25.656	25.29	25.035	26.434	24.716		45.842	49.304	11.282	35.246	-1.221	-7.293		49.274	0.092	14.643	0.003		693.9	11.5647	47.8	12.1	40.5	2.795	0.014	0.014	0.000	0.338	0.29	
715	4/19/2004	9:16:43 PM		25.657	25.297	25.036	26.555	24.932		45.713	49.17	11.288	34.993	-1.215	-7.353		48.771	0.093	14.643	0.004		694.9	11.5814	47.7	12.0	40.4	2.782	0.014	0.014	0.000	0.343	0.29	
716	4/19/2004	9:17:43 PM		25.689	25.283	25.037	26.617	24.884		44.069	49.36	11.228	33.53	-0.65	-0.566		47.824	0.003	14.643	0.003		695.9	11.5981	47.9	11.7	38.8	2.675	0.000	0.000	0.000	0.012	0.01	
717	4/19/2004	9:18:43 PM		25.534	25.294	25.068	26.612	24.709		33.958	49.004	11.223	23.21	9.274	19.471		46.785	0.004	14.643	0.003		696.9	11.6147	47.5	11.5	28.6	1.971	0.001	0.001	0.000	0.021	0.02	
718	4/19/2004	9:19:43 PM		25.55	25.29	25.049	26.628	24.675		17.605	49.188	11.256	6.925	26.071	19.251		46.656	0.003	14.643	0.003		697.9	11.6314	47.7	11.4	12.3	0.846	0.000	0.000	0.000	0.036	0.03	
719	4/19/2004	9:20:43 PM		25.57	25.295	25.064	26.598	24.655		8.175	48.745	11.149	-2.412	35.19	90.589		50.177	0.003	14.643	0.004		698.9	11.6481	47.3	12.3	2.9	0.199	0.000	0.000	0.000	0.155	0.13	
720	4/19/2004	9:21:43 PM		25.549	25.279	25.058	26.517	24.534		6.937	48.865	10.008	-2.538	36.412	25.819		46.283	0.003	14.643	0.004		699.9	11.6647	47.4	11.3	2.2	0.152	0.000	0.000	0.000	0.203	0.17	
721	4/19/2004	9:22:43 PM		25.534	25.299	25.063	26.507	24.494		41.233	48.465	10.841	31.074	1.648	0.4		48.83	0.367	14.643	0.003		700.9	11.6814	47.0	12.0	36.2	2.493	0.055	0.055	0.002	1.511	1.29	
722	4/19/2004	9:23:43 PM		25.532	25.282	25.051	26.46	24.332		42.376	49.443	12.011	30.858	1.098	0.923		46.354	0.153	14.643	0.003		701.9	11.6981	48.0	11.4	36.6	2.525	0.023	0.023	0.001	0.622	0.53	
723	4/19/2004	9:24:43 PM		25.531	25.295	25.055	26.399	24.236		42.629	49.684	12.291	30.862	1.046	1.021		45.809	0.122	14.643	0.004		702.9	11.7147	48.2	11.2	36.7	2.533	0.018	0.018	0.000	0.494	0.42	
724	4/19/2004	9:25:43 PM		25.534	25.288	25.063	26.347	24.083		42.494	49.342	12.338	30.776	1.049	1.073		47.987	0.118	14.643	0.003		703.9	11.7314	47.9	11.8	36.6	2.526	0.018	0.018	0.000	0.479	0.41	
725	4/19/2004	9:26:43 PM		25.542	25.292	25.056	26.34	24.127		42.187	49.068	12.323	30.571	1.116	1.094		48.283	0.11	14.643	0.004		704.9	11.7481	47.6	11.8	36.4	2.508	0.016	0.016	0.000	0.450	0.38	
726	4/19/2004	9:27:43 PM		25.541	25.276	25.055	26.269	24.121		42.119	49.234	12.351	30.347	1.113	1.192		48.112	0.09	14.643	0.003		705.9	11.7647	47.8	11.8	36.2	2.498	0.013	0.013	0.000	0.370	0.31	
727	4/19/2004	9:28:43 PM		25.625	25.274	25.084	26.243	23.969		48.525	49.539	12.483	36.652	-1.218	-6.48		46.389	0.126	14.643	0.003		706.9	11.7814	48.1	11.4	42.6	2.936	0.019	0.019	0.000	0.440	0.37	
728	4/19/2004	9:29:43 PM		25.618	25.272	25.066	26.231	24.127		48.673	49.393	12.54	36.888	-1.221	-7.073		49.758	0.113	14.643	0.003		707.9	11.7981	47.9	12.2	42.8	2.950	0.017	0.017	0.000	0.393	0.33	
729	4/19/2004	9:30:43 PM		25.59	25.249	25.064	26.218	24.019		48.671	49.298	12.646	36.744	-1.221	-7.099		48.204	0.109	14.643	0.003		708.9	11.8147	47.8	11.8	42.7	2.945	0.016	0.016	0.000	0.380	0.32	
730	4/19/2004	9:31:43 PM		25.594	25.263	25.132	26.221	24.113		46.292	46.906	13.813	33.278	-1.221	-7.206		51.789	0.101	14.643	0.003		709.9	11.8314	45.4	12.7	39.8	2.743	0.015	0.015	0.000	0.377	0.32	
731	4/19/2004	9:32:43 PM		25.586	25.256	25.115	26.194	24.071		46.368	46.972	13.753	33.3	-1.221	-7.278		51.497	0.1	14.643	0.003		710.9	11.8481	45.5	12.6	39.8	2.746	0.015	0.015	0.000	0.373	0.32	
732	4/19/2004	9:33:43 PM		25.596	25.251	25.15	26.224	24.141		46.626	47.356	13.668	33.602	-1.218	-7.304		50.359	0.098	14.643	0.003		711.9	11.8647	45.9	12.3	40.1	2.766	0.015	0.015	0.000	0.363	0.31	
733	4/19/2004	9:34:43 PM		25.597	25.242	25.161	26.26	24.297		46.526	47.3	13.714	33.413	-1.218	-7.293		51.005	0.098	14.643	0.003		712.9	11.8814	45.8	12.5	40.0	2.756	0.015	0.015	0.000	0.364	0.31	
734	4/19/2004	9:35:43 PM		25.608	25.242	25.182	26.311	24.478		46.441	47.099	13.643	33.526	-1.218	-7.298		49.962	0.098	14.643	0.004		713.9	11.8981	45.6	12.2	40.0	2.757	0.015	0.015	0.000	0.364	0.31	
735	4/19/2004	9:36:43 PM		25.609	25.229	25.178	26.377	24.604		46.684	47.275	13.521	33.898	-1.221	-7.301		49.255	0.098	14.643	0.003		714.9	11.9147	45.8	12.1	40.3	2.778	0.015	0.015	0.000	0.361	0.31	
736	4/19/2004	9:37:43 PM		25.616	25.235	25.159	26.444	24.756		46.595	47.433	13.385	33.887	-1.224	-7.298		50.473	0.098	14.643	0.003		715.9	11.9314	46.0	12.4	40.2	2.774	0.015	0.015	0.000	0.361	0.31	
737	4/19/2004	9:38:43 PM		25.633	25.233	25.097	26.526	24.848		46.619	47.456	13.341	34.017	-1.221	-7.298		50.938	0.098	14.643	0.004		716.9	11.9481	46.0	12.5	40.3	2.780	0.015	0.015	0.000	0.361	0.31	
738	4/19/2004	9:39:43 PM		25.625	25.229	25.094	26.538	24.775		46.607	47.501	13.391	33.885	-1.221	-7.301		49.612	0.097	14.643	0.003		717.9	11.9647	46.0	12.2	40.2	2.775	0.014	0.014	0.000	0.358	0.30	
739	4/19/2004	9:40:43 PM		25.635	25.235	25.089	26.563	24.615		46.501	47.292	13.274	34.017	-1.224	-7.301		52.106	0.097	14.643	0.003		718.9	11.9814	45.8	12.8	40.3	2.776	0.014	0.014	0.000	0.358	0.30	
740	4/19/2004	9:41:43 PM		25.646	25.251	25.105	26.534	24.401		46.638	47.333	13.04	34.456	-1.218	-7.298		49.412	0.097	14.643	0.003		719.9	11.9981	45.9	12.1	40.5	2.796	0.014	0.014	0.000	0.356	0.30	
741	4/19/2004	9:42:43 PM		25.63	25.235	25.099	26.453	24.34		46.779	47.71	13.065	34.505	-1.218	-7.298		49.572	0.098	14.643	0.003		720.9	12.0147	46.2	12.1	40.6	2.802	0.015	0.015	0.000	0.359	0.31	
742	4/19/2004	9:43:43 PM		25.64	25.245	25.129	26.443	24.245		46.595	47.656	13.07	34.14	-1.218	-7.278		48.9	0.095	14.643	0.003		721.9	12.0314	46.2	12.0	40.4	2.783	0.014	0.014	0.000	0.350	0.30	
743	4/19/2004	9:44:43 PM		25.64	25.239	25.089	26.378	24.174		46.673	47.588	13.002	34.415	-1.227	-7.296		48.024	0.098	14.643	0.003		722.9	12.0481	46.1	11.8	40.5	2.795	0.015	0.015	0.000	0.359	0.31	
744	4/19/2004	9:45:43 PM		25.638	25.238	25.112	26.286	24.093		46.603	47.453	13.073	34.263	-1.221	-7.301		49.349	0.097	14.643	0.003		723.9	12.0647	46.0	12.1	40.4	2.788	0.014	0.014	0.000	0.357	0.30	
745	4/19/2004	9:46:43 PM		25.643	25.247	25.137	26.276	24.077		46.791	47.762	13.12	34.45	-1.221	-7.293		46.975	0.096	14.643	0.003		724.9	12.0814	46.3	11.5	40.6	2.801	0.014	0.014	0.000	0.351	0.30	
746	4/19/2004	9:47:43 PM		25.651	25.245	25.139	26.254	24.055		46.733	47.932	13.063	34.345	-1.215	-7.296		47.793	0.096	14.643	0.004		725.9	12.0981	46.5	11.7	40.5	2.795	0.014	0.014	0.000	0.352	0.30	
747	4/19/2004	9:48:43 PM		25.648	25.238	25.132	26.236	23.978		46.37	47.495	13.007	34.035	-1.218	-7.296		50.807	0.097	14.643	0.003		726.9	12.1147	46.0	12.5	40.2	2.772	0.014	0.014	0.000	0.358	0.30	
748	4/19/2004	9:49:43 PM		25.646	25.231	25.14	26.204	24.041		46.543	47.656	13.026	34.177	-1.218	-7.296		48.358	0.096	14.643	0.003		727.9	12.1314	46.2	11.9	40.4	2.783	0.014	0.014	0.000	0.353	0.30	
749	4/19/2004	9:50:43 PM		25.655	25.225	25.089	26.153	23.939		46.721	47.694	12.927	34.589	-1.221	-7.301		46.422	0.096	14.643	0.003		728.9	12.1481	46.2	11.4	40.7	2.803	0.014	0.014	0.000	0.351	0.30	
750	4/19/2004	9:51:43 PM		25.647	25.222	25.071	26.155	23.877		46.916	47.845	13.095	34.524	-1.218	-7.301		49.266	0.096	14.643	0.003		729.9	12.1647	46.4	12.1	40.7	2.808	0.014	0.014	0.000	0.351	0.30	
751	4/19/2004	9:52:43 PM		25.642	25.226	25.075	26.14	24.121		46.816	47.922	12.912	34.601	-1.218	-7.246		48.646	0.097	14.643	0.003		730.9	12.1814	46.4	11.9	40.7	2.807	0.014	0.014	0.000	0.355	0.30	
752	4/19/2004	9:53:43 PM		25.631	25.21	25.09	26.154	24.246		46.895	48.09	12.92	34.7	-1.221	-7.287		51.149	0.096	14.643	0.003		731.9	12.1981	46.6	12.5	40.8	2.813	0.014	0.014	0.000	0.350	0.30	
753	4/19/2004	9:54:43 PM		25.641	25.22	25.135	26.184	24.446		46.808	48.001	12.889	34.651	-1.215	-7.287		48.488	0.096	14.643	0.004		732.9	12.2147	46.5	11.9	40.7	2.808	0.014	0.014	0.000	0.350	0.30	
754	4/19/2004	9:55:43 PM		25.637	25.211	25.1	26.3	24.712		46.277	47.536	12.8	34.152	-1.218	-7.296		49.416	0.095	14.643	0.003		733.9	12.2314	46.1	12.1	40.2	2.773	0.014	0.014	0.000	0.351	0.30	
755	4/19/2004	9:56:43 PM		25.647	25.212	25.131	26.34	24.697		46.603	47.82	12.907	34.31	-1.221	-7.293		48.125	0.096	14.643	0.003		734.9	12.2481	46.3	11.8	40.5	2.789	0.014	0.014	0.000	0.352	0.30	
756	4/19/2004	9:57:43 PM		25.634	25.218	25.133	26.427	24.779		46.717	48.084	12.99	34.263	-1.221	-7.298		51.758	0.095	14.643	0.003		735.9	12.2647	46.6	12.7	40.5	2.792	0.014	0.014	0.000	0.348	0.30	
757	4/19/2004	9:58:43 PM		25.635	25.214	25.124	26.493	24.825		46.568	47.928	12.945	34.308	-1.224	-7.267		47.803	0.095	14.643	0.003		736.9	12.2814	46.5	11.7	40.4	2.788	0.014	0.014	0.000	0.349	0.30	
758	4/19/2004	9:59:43 PM		25.647	25.232	25.166	26.52	24.707		46.935	48.011	12.995	34.784	-1.218	-7.293		48.177	0.095	14.643	0.003		737.9	12.2981	46.5	11.8	40.9	2.817	0.014	0.014	0.000	0.345	0.29	
759	4/19/2004	10:00:43 PM		25.638	25.227	25.152	26.486	24.588		46.738	47.978	12.971	34.405	-1.221	-7.296		49.937	0.094	14.643	0.003		738.9	12.3147	46.5	12.2	40.6	2.797	0.014	0.014	0.000	0.344	0.29	
760	4/19/2004	10:01:43 PM		25.659	25.229	25.168	26.462	24.449		46.607	47.92	12.931	34.343	-1.218	-7.296		48.629	0.095	14.643	0.003		739.9	12.3314	46.4	11.9	40.5	2.791	0.014	0.014	0.000	0.348	0.30	
761	4/19/2004	10:02:43 PM		25.649	25.224	25.153	26.402	24.504		46.736	48.005	12.981	34.46	-1.221	-7.296		49.898	0.095	14.643	0.003		740.9	12.3481	46.5	12.2	40.6	2.799	0.014	0.014	0.000	0.347	0.30	
762	4/19/2004	10:03:43 PM		25.639	25.219	25.128	26.357	24.319		46.601	47.926	12.966	34.374	-1.221	-7.298		48.271	0.095	14.643	0.003		741.9	12.3647	46.5	11.8	40.5	2.791	0.014	0.014	0.000	0.349	0.30	
763	4/19/2004	10:04:43 PM		25.654	25.224	25.148	26.322	24.154		46.738	47.856	12.98	34.538	-1.221	-7.272		49.03	0.095	14.643	0.003		742.9	12.3814	46.4	12.0	40.6	2.802	0.014	0.014	0.000	0.347	0.30	
764	4/19/2004	10:05:43 PM		25.658	25.223	25.167	26.281	24.093		46.408	47.704	12.899	34.216	-1.218	-7.293		49.495	0.094	14.643	0.003		743.9	12.3981	46.2	12.1	40.3	2.779	0.014	0.014	0.000	0.346	0.29	
765	4/19/2004	10:06:43 PM		25.658	25.217	25.112	26.251	24.047		46.24	47.389	12.856	34.183	-1.221	-7.298		48.317	0.094	14.643	0.003		744.9	12.4147	45.9	11.8	40.2	2.772	0.014	0.014	0.000	0.347	0.30	
766	4/19/2004	10:07:43 PM		25.641	25.206	25.05	26.199	24.091		46.52	47.76	12.891	34.515	-1.221	-7.298		49.545	0.094	14.643	0.003		745.9	12.4314	46.3	12.1	40.5	2.794	0.014	0.014	0.000	0.345	0.29	
767	4/19/2004	10:08:43 PM		25.636	25.2	25.05	26.154	23.995		46.729	48.061	12.999	34.441	-1.218	-7.293		47.749	0.093	14.643	0.003		746.9	12.4481	46.6	11.7	40.6	2.798	0.014	0.014	0.000	0.341	0.29	
768	4/19/2004	10:09:43 PM		25.635	25.199	25.084	26.098	23.964		46.474	47.988	12.971	34.173	-1.218	-7.29		48.415	0.094	14.643	0.003		747.9	12.4647	46.5	11.9	40.3	2.780	0.014	0.014	0.000	0.347	0.30	
769	4/19/2004	10:10:43 PM		25.628	25.182	25.077	26.061	23.892		46.215	47.368	12.839	34.205	-1.221	-7.293		49.32	0.093	14.643	0.003		748.9	12.4814	45.9	12.1	40.2	2.772	0.014	0.014	0.000	0.344	0.29	
770	4/19/2004	10:11:43 PM		25.636	25.19	25.115	26.049	23.915		46.549	48.131	12.97	34.222	-1.218	-7.29		47.78	0.094	14.643	0.003		749.9	12.4981	46.7	11.7	40.4	2.784	0.014	0.014	0.000	0.346	0.29	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
771	4/19/2004	10:12:43 PM		25.635	25.195	25.119	26.078	23.98		46.13	47.592	12.88	33.971	-1.215	-7.29		48.584	0.093	14.643	0.004		750.9	12.5147	46.1	11.9	40.1	2.761	0.014	0.014	0.000	0.345	0.29	
772	4/19/2004	10:13:22 PM		25.625	25.18	25.119	26.073	24.13		46.29	47.818	12.927	34.152	-1.218	-7.293		51.445	0.093	14.643	0.003		751.5	12.5256	46.3	12.6	40.2	2.773	0.014	0.014	0.000	0.344	0.29	
773	4/19/2004	10:14:22 PM		25.619	25.168	25.113	26.127	24.204		46.638	48.166	13.006	34.347	-1.218	-7.287		50.68	0.093	14.643	0.003		752.5	12.5422	46.7	12.4	40.5	2.792	0.014	0.014	0.000	0.341	0.29	
774	4/19/2004	10:15:22 PM		25.625	25.164	25.118	26.188	24.484		46.157	47.64	12.872	34.084	-1.221	-7.287		49.407	0.093	14.643	0.003		753.5	12.5589	46.2	12.1	40.1	2.766	0.014	0.014	0.000	0.344	0.29	
775	4/19/2004	10:16:22 PM		25.631	25.17	25.14	26.289	24.626		46.594	48.229	13.133	34.138	-1.218	-7.29		50.275	0.092	14.643	0.004		754.5	12.5756	46.8	12.3	40.4	2.783	0.014	0.014	0.000	0.338	0.29	
776	4/19/2004	10:17:22 PM		25.622	25.161	25.13	26.35	24.862		46.238	47.947	13.084	33.795	-1.221	-7.252		49.076	0.09	14.643	0.003		755.5	12.5922	46.5	12.0	40.0	2.759	0.013	0.013	0.000	0.334	0.28	
777	4/19/2004	10:18:22 PM		25.634	25.173	25.163	26.437	25.029		46.344	48.164	13.06	33.969	-1.218	-7.278		47.428	0.092	14.643	0.003		756.5	12.6089	46.7	11.6	40.2	2.769	0.014	0.014	0.000	0.340	0.29	
778	4/19/2004	10:19:22 PM		25.641	25.175	25.115	26.474	24.936		46.319	47.866	13.042	33.963	-1.221	-7.272		49.528	0.092	14.643	0.003		757.5	12.6256	46.4	12.1	40.1	2.768	0.014	0.014	0.000	0.341	0.29	
779	4/19/2004	10:20:22 PM		25.643	25.182	25.072	26.491	24.813		46.223	47.735	12.988	33.947	-1.218	-7.272		47.976	0.092	14.643	0.004		758.5	12.6422	46.3	11.8	40.1	2.764	0.014	0.014	0.000	0.341	0.29	
780	4/19/2004	10:21:22 PM		25.628	25.177	25.072	26.446	24.593		46.2	47.86	12.952	33.943	-1.221	-7.278		50.354	0.092	14.643	0.003		759.5	12.6589	46.4	12.3	40.1	2.763	0.014	0.014	0.000	0.342	0.29	
781	4/19/2004	10:22:22 PM		25.63	25.184	25.054	26.438	24.48		46.188	47.903	13.007	33.846	-1.221	-7.275		51.064	0.092	14.643	0.003		760.5	12.6756	46.4	12.5	40.0	2.759	0.014	0.014	0.000	0.342	0.29	
782	4/19/2004	10:23:22 PM		25.625	25.184	25.069	26.358	24.34		45.92	47.723	12.921	33.639	-1.221	-7.278		49.428	0.092	14.643	0.003		761.5	12.6922	46.3	12.1	39.8	2.743	0.014	0.014	0.000	0.344	0.29	
783	4/19/2004	10:24:22 PM		25.609	25.169	25.073	26.307	24.199		46.323	47.812	13.003	34.076	-1.218	-7.275		50.421	0.092	14.643	0.003		762.5	12.7089	46.3	12.4	40.2	2.772	0.014	0.014	0.000	0.341	0.29	
784	4/19/2004	10:25:22 PM		25.623	25.183	25.092	26.307	24.088		46.271	47.951	13.009	33.988	-1.218	-7.272		51.256	0.092	14.643	0.004		763.5	12.7256	46.5	12.6	40.1	2.767	0.014	0.014	0.000	0.341	0.29	
785	4/19/2004	10:26:22 PM		25.606	25.176	25.075	26.269	23.961		46.105	47.781	12.958	33.805	-1.221	-7.272		50.131	0.091	14.643	0.003		764.5	12.7422	46.3	12.3	40.0	2.755	0.014	0.014	0.000	0.339	0.29	
786	4/19/2004	10:27:22 PM		25.596	25.17	25.075	26.179	23.895		46.439	48.289	13.032	34.082	-1.221	-7.275		49.973	0.091	14.643	0.003		765.5	12.7589	46.8	12.2	40.3	2.776	0.014	0.014	0.000	0.336	0.29	
787	4/19/2004	10:28:22 PM		25.619	25.169	25.118	26.137	23.839		46.341	48.098	13.063	34.027	-1.221	-7.272		47.931	0.091	14.643	0.003		766.5	12.7756	46.6	11.7	40.2	2.771	0.014	0.014	0.000	0.337	0.29	
788	4/19/2004	10:29:22 PM		25.612	25.162	25.121	26.075	23.877		46.026	47.808	12.975	33.748	-1.218	-7.272		50.534	0.091	14.643	0.003		767.5	12.7922	46.3	12.4	39.9	2.750	0.014	0.014	0.000	0.339	0.29	
789	4/19/2004	10:30:22 PM		25.62	25.17	25.124	26.053	23.809		46.248	47.926	12.905	34.099	-1.215	-7.264		49.17	0.092	14.643	0.004		768.5	12.8089	46.5	12.0	40.2	2.770	0.014	0.014	0.000	0.340	0.29	
790	4/19/2004	10:31:22 PM		25.609	25.148	25.118	26.027	23.808		46.117	47.93	12.82	34.086	-1.221	-7.27		50.763	0.091	14.643	0.003		769.5	12.8256	46.5	12.4	40.1	2.765	0.014	0.014	0.000	0.337	0.29	
791	4/19/2004	10:32:22 PM		25.613	25.147	25.136	26.005	23.937		46.302	48.081	12.944	34.066	-1.221	-7.223		49.624	0.091	14.643	0.003		770.5	12.8422	46.6	12.2	40.2	2.771	0.014	0.014	0.000	0.336	0.29	
792	4/19/2004	10:33:22 PM		25.603	25.132	25.126	26.01	24.177		46.474	48.106	12.954	34.247	-1.221	-7.267		47.97	0.091	14.643	0.003		771.5	12.8589	46.6	11.8	40.4	2.783	0.014	0.014	0.000	0.335	0.29	
793	4/19/2004	10:34:22 PM		25.618	25.137	25.161	26.075	24.247		45.985	47.65	12.92	33.789	-1.218	-7.258		48.957	0.091	14.643	0.003		772.5	12.8756	46.2	12.0	39.9	2.750	0.014	0.014	0.000	0.339	0.29	
794	4/19/2004	10:35:22 PM		25.619	25.138	25.168	26.107	24.289		46.008	48.077	12.826	33.893	-1.224	-7.258		47.447	0.091	14.643	0.003		773.5	12.8922	46.6	11.6	40.0	2.754	0.014	0.014	0.000	0.338	0.29	
795	4/19/2004	10:36:22 PM		25.615	25.129	25.178	26.163	24.404		46.144	48.108	12.884	33.914	-1.218	-7.255		47.899	0.091	14.643	0.003		774.5	12.9089	46.6	11.7	40.0	2.760	0.014	0.013	0.000	0.337	0.29	
796	4/19/2004	10:37:22 PM		25.631	25.135	25.13	26.274	24.526		45.918	47.667	12.849	33.779	-1.218	-7.258		46.869	0.091	14.643	0.003		775.5	12.9256	46.2	11.5	39.8	2.747	0.014	0.014	0.000	0.339	0.29	
797	4/19/2004	10:38:22 PM		25.624	25.138	25.123	26.322	24.549		46.138	48.055	12.862	33.971	-1.218	-7.249		48.421	0.091	14.643	0.004		776.5	12.9422	46.6	11.9	40.1	2.762	0.014	0.014	0.000	0.338	0.29	
798	4/19/2004	10:39:22 PM		25.615	25.129	25.129	26.408	24.59		46.122	48.067	12.852	33.988	-1.221	-7.255		49.948	0.091	14.643	0.003		777.5	12.9589	46.6	12.2	40.1	2.762	0.014	0.014	0.000	0.337	0.29	
799	4/19/2004	10:40:22 PM		25.616	25.136	25.125	26.414	24.581		46.088	47.847	12.816	34.125	-1.221	-7.252		48.988	0.09	14.643	0.003		778.5	12.9756	46.4	12.0	40.1	2.765	0.013	0.013	0.000	0.333	0.28	
800	4/19/2004	10:41:22 PM		25.618	25.147	25.142	26.266	24.438		45.893	47.742	12.868	33.809	-1.218	-7.252		50.331	0.09	14.643	0.003		779.5	12.9922	46.3	12.3	39.9	2.748	0.013	0.013	0.000	0.335	0.29	
801	4/19/2004	10:42:22 PM		25.623	25.162	25.142	26.226	24.253		45.831	47.932	12.978	33.524	-1.221	-7.249		48.281	0.09	14.643	0.003		780.5	13.0089	46.5	11.8	39.7	2.736	0.013	0.013	0.000	0.337	0.29	
802	4/19/2004	10:43:22 PM		25.628	25.157	25.142	26.206	24.162		46.03	47.924	13.028	33.783	-1.218	-7.258		48.221	0.089	14.643	0.003		781.5	13.0256	46.5	11.8	39.9	2.751	0.013	0.013	0.000	0.331	0.28	
803	4/19/2004	10:44:22 PM		25.616	25.166	25.14	26.099	23.986		45.916	47.679	13.042	33.639	-1.218	-7.255		49.555	0.09	14.643	0.003		782.5	13.0422	46.2	12.1	39.8	2.743	0.013	0.013	0.000	0.336	0.29	
804	4/19/2004	10:45:22 PM		25.609	25.174	25.158	26.082	23.904		45.862	47.882	12.944	33.647	-1.218	-7.258		49.255	0.089	14.643	0.003		783.5	13.0589	46.4	12.1	39.8	2.741	0.013	0.013	0.000	0.332	0.28	
805	4/19/2004	10:46:22 PM		25.623	25.182	25.182	26.036	23.827		45.877	48.075	12.987	33.594	-1.221	-7.255		48.346	0.09	14.643	0.003		784.5	13.0756	46.6	11.8	39.7	2.740	0.013	0.013	0.000	0.336	0.29	
806	4/19/2004	10:47:22 PM		25.617	25.181	25.166	25.964	23.851		46.147	48.061	13.046	33.883	-1.221	-7.255		49.854	0.09	14.643	0.003		785.5	13.0922	46.6	12.2	40.0	2.759	0.013	0.013	0.000	0.334	0.28	
807	4/19/2004	10:48:22 PM		25.62	25.174	25.183	25.937	23.744		45.829	48.052	13.04	33.395	-1.221	-7.261		47.822	0.089	14.643	0.003		786.5	13.1089	46.6	11.7	39.6	2.731	0.013	0.013	0.000	0.333	0.28	
808	4/19/2004	10:49:22 PM		25.618	25.177	25.196	25.905	23.711		45.829	48.048	12.997	33.579	-1.218	-7.255		49.057	0.089	14.643	0.003		787.5	13.1256	46.6	12.0	39.7	2.737	0.013	0.013	0.000	0.332	0.28	
809	4/19/2004	10:50:22 PM		25.626	25.171	25.145	25.854	23.715		45.999	47.876	13.099	33.709	-1.218	-7.261		48.022	0.089	14.643	0.004		788.5	13.1422	46.4	11.8	39.9	2.748	0.013	0.013	0.000	0.332	0.28	
810	4/19/2004	10:51:22 PM		25.626	25.16	25.104	25.863	23.82		46.082	48.129	13.071	33.645	-1.224	-7.264		50.173	0.088	14.643	0.003		789.5	13.1589	46.7	12.3	39.9	2.748	0.013	0.013	0.000	0.328	0.28	
811	4/19/2004	10:52:22 PM		25.626	25.17	25.134	25.928	24.05		45.46	47.412	12.923	33.284	-1.218	-7.264		47.814	0.088	14.643	0.003		790.5	13.1756	45.9	11.7	39.4	2.715	0.013	0.013	0.000	0.332	0.28	
812	4/19/2004	10:53:22 PM		25.606	25.145	25.144	25.928	24.21		45.553	47.557	12.919	33.432	-1.218	-7.261		48.892	0.088	14.643	0.003		791.5	13.1922	46.1	12.0	39.5	2.723	0.013	0.013	0.000	0.331	0.28	
813	4/19/2004	10:54:22 PM		25.612	25.146	25.141	26.04	24.322		45.767	47.679	12.941	33.647	-1.218	-7.249		48.823	0.089	14.643	0.003		792.5	13.2089	46.2	12.0	39.7	2.738	0.013	0.013	0.000	0.333	0.28	
814	4/19/2004	10:55:22 PM		25.598	25.147	25.141	26.045	24.587		45.827	47.92	13.01	33.471	-1.224	-7.206		49.238	0.089	14.643	0.003		793.5	13.2256	46.4	12.1	39.6	2.734	0.013	0.013	0.000	0.333	0.28	
815	4/19/2004	10:56:22 PM		25.604	25.158	25.178	26.102	24.689		45.543	47.7	12.949	33.467	-1.221	-7.226		50.528	0.089	14.643	0.003		794.5	13.2422	46.2	12.4	39.5	2.724	0.013	0.013	0.000	0.334	0.28	
816	4/19/2004	10:57:22 PM		25.615	25.18	25.179	26.243	24.78		45.636	47.723	12.99	33.434	-1.218	-7.223		49.472	0.089	14.643	0.004		795.5	13.2589	46.3	12.1	39.5	2.726	0.013	0.013	0.000	0.334	0.28	
817	4/19/2004	10:58:22 PM		25.608	25.187	25.182	26.261	24.763		45.869	48.034	13.022	33.598	-1.221	-7.229		48.921	0.089	14.643	0.003		796.5	13.2756	46.6	12.0	39.7	2.739	0.013	0.013	0.000	0.332	0.28	
818	4/19/2004	10:59:22 PM		25.609	25.184	25.198	26.277	24.664		45.699	47.965	13.065	33.265	-1.218	-7.226		49.702	0.088	14.643	0.003		797.5	13.2922	46.5	12.2	39.5	2.722	0.013	0.013	0.000	0.330	0.28	
819	4/19/2004	11:00:22 PM		25.621	25.195	25.185	26.269	24.396		45.47	47.696	12.958	33.319	-1.218	-7.223		51.883	0.088	14.643	0.003		798.5	13.3089	46.2	12.7	39.4	2.716	0.013	0.013	0.000	0.331	0.28	
820	4/19/2004	11:01:22 PM		25.615	25.194	25.194	26.218	24.385		45.416	47.501	12.923	33.3	-1.221	-7.226		47.705	0.088	14.643	0.003		799.5	13.3256	46.0	11.7	39.4	2.714	0.013	0.013	0.000	0.332	0.28	
821	4/19/2004	11:02:22 PM		25.63	25.209	25.219	26.108	24.23		46.047	48.399	13.187	33.428	-1.218	-7.223		51.862	0.089	14.643	0.003		800.5	13.3422	46.9	12.7	39.7	2.740	0.013	0.013	0.000	0.332	0.28	
822	4/19/2004	11:03:22 PM		25.614	25.218	25.198	25.977	24.188		45.62	47.963	13.079	33.225	-1.218	-7.229		50.865	0.087	14.643	0.003		801.5	13.3589	46.5	12.5	39.4	2.718	0.013	0.013	0.000	0.327	0.28	
823	4/19/2004	11:04:22 PM		25.609	25.233	25.188	25.936	24.038		45.993	48.195	13.171	33.549	-1.224	-7.232		49.927	0.088	14.643	0.003		802.5	13.3756	46.7	12.2	39.8	2.742	0.013	0.013	0.000	0.328	0.28	
824	4/19/2004	11:05:22 PM		25.619	25.263	25.213	25.901	24.018		45.879	48.108	13.026	33.586	-1.224	-7.238		48.035	0.087	14.643	0.003		803.5	13.3922	46.6	11.8	39.7	2.739	0.013	0.013	0.000	0.325	0.28	
825	4/19/2004	11:06:22 PM		25.618	25.283	25.167	25.836	24.012		45.682	48.003	12.975	33.417	-1.221	-7.232		49.07	0.088	14.643	0.003		804.5	13.4089	46.5	12.0	39.5	2.727	0.013	0.013	0.000	0.330	0.28	
826	4/19/2004	11:07:22 PM		25.622	25.317	25.091	25.8	23.806		45.657	47.826	12.948	33.424	-1.218	-7.226		49.868	0.089	14.643	0.003		805.5	13.4256	46.4	12.2	39.5	2.726	0.013	0.013	0.000	0.335	0.28	
827	4/19/2004	11:08:22 PM		25.623	25.358	25.107	25.756	23.732		45.591	47.889	12.964	33.337	-1.218	-7.232		48.15	0.087	14.643	0.003		806.5	13.4422	46.4	11.8	39.5	2.721	0.013	0.013	0.000	0.328	0.28	
828	4/19/2004	11:09:22 PM		25.602	25.367	25.121	25.7	23.706		46.032	48.409	12.959	33.848	-1.221	-7.232		49.833	0.088	14.643	0.003		807.5	13.4589	46.9	12.2	39.9	2.754	0.013	0.013	0.000	0.327	0.28	
829	4/19/2004	11:10:22 PM		25.597	25.367	25.111	25.67	23.781		45.653	47.982	12.885	33.579	-1.218	-7.232		47.071	0.087	14.643	0.003		808.5	13.4756	46.5	11.5	39.6	2.731	0.013	0.013	0.000	0.326	0.28	
830	4/19/2004	11:11:22 PM		25.592	25.376	25.12	25.659	23.876		45.808	47.967	12.967	33.658	-1.221	-7.229		49.428	0.088	14.643	0.003		809.5	13.4922	46.5	12.1	39.7	2.739	0.013	0.013	0.000	0.329	0.28	
831	4/19/2004	11:12:22 PM		25.592	25.392	25.141	25.705	24.047		45.533	48.025	12.893	33.245	-1.218	-7.229		48.588	0.087	14.643	0.003		810.5	13.5089	46.6	11.9	39.4	2.716	0.013	0.013	0.000	0.328	0.28	
832	4/19/2004	11:13:22 PM		25.587	25.387	25.156	25.77	24.197		45.361	47.802	12.911	33.188	-1.218	-7.226		48.861	0.088	14.643	0.003		811.5	13.5256	46.3	12.0	39.3	2.708	0.013	0.013	0.000	0.333	0.28	
833	4/19/2004	11:14:22 PM		25.584	25.378	25.153	25.851	24.409		45.779	48.278	13.016	33.335	-1.218	-7.22		49.505	0.088	14.643	0.004		812.5	13.5422	46.8	12.1	39.6	2.727	0.013	0.013	0.000	0.330	0.28	
834	4/19/2004	11:15:22 PM		25.58	25.385	25.159	25.943	24.59		45.587	48.09	13.039	33.105	-1.221	-7.226		49.643	0.086	14.643	0.003		813.5	13.5589	46.6	12.2	39.3	2.713	0.013	0.013	0.000	0.324	0.28	
835	4/19/2004	11:16:22 PM		25.589	25.404	25.193	26.012	24.744		46.18	48.67	13.109	33.803	-1.218	-7.223		49.539	0.087	14.643	0.003		814.5	13.5756	47.2	12.1	40.0	2.757	0.013	0.013	0.000	0.323	0.27	
836	4/19/2004	11:17:22 PM		25.582	25.407	25.191	26.045	24.707		45.69	48.065	12.934	33.541	-1.221	-7.215		49.643	0.087	14.643	0.003		815.5	13.5922	46.6	12.2	39.6	2.731	0.013	0.013	0.000	0.326	0.28	
837	4/19/2004	11:18:22 PM		25.585	25.399	25.174	26.083	24.665		45.491	47.833	12.933	33.383	-1.221	-7.209		49.535	0.088	14.643	0.003		816.5	13.6089	46.4	12.1	39.4	2.719	0.013	0.013	0.000	0.331	0.28	
838	4/19/2004	11:19:22 PM		25.571	25.381	25.16	26.014	24.516		45.709	48.316	13.026	33.372	-1.221	-7.212		48.632	0.087	14.643	0.003		817.5	13.6256	46.8	11.9	39.5	2.726	0.013	0.013	0.000	0.327	0.28	
839	4/19/2004	11:20:22 PM		25.587	25.392	25.166	26.015	24.412		45.427	48.032	12.888	33.247	-1.221	-7.209		48.792	0.087	14.643	0.003		818.5	13.6422	46.6	12.0	39.3	2.712	0.013	0.013	0.000	0.328	0.28	
840	4/19/2004	11:21:22 PM		25.584	25.384	25.188	25.972	24.163		45.846	48.227	13.015	33.625	-1.221	-7.209		48.936	0.087	14.643	0.003		819.5	13.6589	46.8	12.0	39.7	2.740	0.013	0.013	0.000	0.325	0.28	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
841	4/19/2004	11:22:22 PM		25.595	25.389	25.209	25.897	24.079		45.636	48.369	13.049	33.107	-1.218	-7.215		51.612	0.087	14.643	0.003		820.5	13.6756	46.9	12.6	39.4	2.715	0.013	0.013	0.000	0.328	0.28	
842	4/19/2004	11:23:22 PM		25.588	25.368	25.187	25.826	23.948		45.529	48.03	13.062	33.212	-1.221	-7.217		48.365	0.087	14.643	0.003		821.5	13.6922	46.6	11.9	39.4	2.714	0.013	0.013	0.000	0.328	0.28	
843	4/19/2004	11:24:22 PM		25.593	25.363	25.197	25.796	23.847		45.717	48.285	13.021	33.397	-1.221	-7.217		48.748	0.087	14.643	0.003		822.5	13.7089	46.8	11.9	39.6	2.727	0.013	0.013	0.000	0.326	0.28	
844	4/19/2004	11:25:22 PM		25.592	25.356	25.216	25.774	23.736		45.323	47.866	12.952	33.023	-1.215	-7.215		51.283	0.087	14.643	0.004		823.5	13.7256	46.4	12.6	39.2	2.701	0.013	0.013	0.000	0.329	0.28	
845	4/19/2004	11:26:22 PM		25.585	25.34	25.219	25.708	23.714		45.609	48.144	13	33.304	-1.221	-7.223		52.033	0.086	14.643	0.003		824.5	13.7422	46.7	12.8	39.5	2.720	0.013	0.013	0.000	0.323	0.27	
846	4/19/2004	11:27:22 PM		25.595	25.334	25.204	25.682	23.639		45.761	48.324	13.071	33.393	-1.218	-7.217		49.263	0.086	14.643	0.003		825.5	13.7589	46.9	12.1	39.6	2.729	0.013	0.013	0.000	0.322	0.27	
847	4/19/2004	11:28:22 PM		25.578	25.327	25.147	25.615	23.747		45.551	48.226	13.006	33.222	-1.218	-7.215		48.475	0.087	14.643	0.003		826.5	13.7756	46.8	11.9	39.4	2.716	0.013	0.013	0.000	0.328	0.28	
848	4/19/2004	11:29:22 PM		25.583	25.317	25.111	25.64	23.842		45.275	47.773	12.932	33.155	-1.218	-7.217		49.941	0.086	14.643	0.003		827.5	13.7922	46.3	12.2	39.2	2.704	0.013	0.013	0.000	0.326	0.28	
849	4/19/2004	11:30:22 PM		25.577	25.317	25.126	25.709	24.056		45.446	47.965	12.923	33.255	-1.218	-7.209		49.578	0.086	14.643	0.003		828.5	13.8089	46.5	12.1	39.4	2.713	0.013	0.013	0.000	0.325	0.28	
850	4/19/2004	11:31:22 PM		25.563	25.292	25.106	25.745	24.232		45.161	47.741	12.865	33.077	-1.218	-7.212		47.566	0.086	14.643	0.003		829.5	13.8256	46.3	11.7	39.1	2.697	0.013	0.013	0.000	0.327	0.28	
851	4/19/2004	11:32:22 PM		25.559	25.294	25.128	25.817	24.244		45.448	48.158	12.968	33.224	-1.218	-7.217		50.217	0.086	14.643	0.003		830.5	13.8422	46.7	12.3	39.3	2.712	0.013	0.013	0.000	0.325	0.28	
852	4/19/2004	11:33:22 PM		25.555	25.3	25.159	25.858	24.31		45.176	47.677	12.972	33.025	-1.212	-7.212		50.281	0.083	14.643	0.004		831.5	13.8589	46.2	12.3	39.1	2.696	0.012	0.012	0.000	0.315	0.27	
853	4/19/2004	11:34:22 PM		25.547	25.281	25.121	25.879	24.417		45.649	48.175	13.054	33.276	-1.221	-7.215		49.925	0.086	14.643	0.003		832.5	13.8756	46.7	12.2	39.5	2.721	0.013	0.013	0.000	0.324	0.28	
854	4/19/2004	11:35:22 PM		25.548	25.298	25.162	25.931	24.458		45.607	48.394	13.056	33.206	-1.218	-7.215		48.097	0.085	14.643	0.003		833.5	13.8922	46.9	11.8	39.4	2.717	0.013	0.013	0.000	0.320	0.27	
855	4/19/2004	11:36:22 PM		25.55	25.3	25.164	25.973	24.53		45.072	47.594	12.847	33.044	-1.224	-7.203		50.377	0.086	14.643	0.003		834.5	13.9089	46.1	12.3	39.1	2.693	0.013	0.013	0.000	0.327	0.28	
856	4/19/2004	11:37:22 PM		25.552	25.301	25.171	25.999	24.462		45.336	48.027	12.944	33.089	-1.218	-7.191		49.042	0.086	14.643	0.003		835.5	13.9256	46.6	12.0	39.2	2.704	0.013	0.013	0.000	0.325	0.28	
857	4/19/2004	11:38:22 PM		25.553	25.308	25.157	26.016	24.258		45.446	48.222	13.026	33.103	-1.221	-7.203		51.072	0.085	14.643	0.003		836.5	13.9422	46.7	12.5	39.3	2.708	0.013	0.013	0.000	0.321	0.27	
858	4/19/2004	11:39:22 PM		25.554	25.319	25.178	25.962	24.104		45.421	48.208	12.982	33.163	-1.221	-7.194		49.622	0.086	14.643	0.003		837.5	13.9589	46.7	12.2	39.3	2.709	0.013	0.013	0.000	0.325	0.28	
859	4/19/2004	11:40:22 PM		25.56	25.32	25.209	25.943	24.035		45.151	47.94	12.938	32.874	-1.218	-7.191		49.981	0.086	14.643	0.003		838.5	13.9756	46.5	12.2	39.0	2.690	0.013	0.013	0.000	0.327	0.28	
860	4/19/2004	11:41:22 PM		25.556	25.305	25.18	25.853	23.94		45.674	48.45	13.011	33.311	-1.224	-7.197		48.767	0.086	14.643	0.003		839.5	13.9922	47.0	12.0	39.5	2.723	0.013	0.013	0.000	0.323	0.27	
861	4/19/2004	11:42:22 PM		25.56	25.305	25.194	25.803	23.894		45.164	47.984	12.886	33.003	-1.218	-7.197		48.558	0.086	14.643	0.003		840.5	14.0089	46.5	11.9	39.1	2.695	0.013	0.013	0.000	0.326	0.28	
862	4/19/2004	11:43:22 PM		25.564	25.309	25.203	25.747	23.829		45.508	48.121	12.957	33.317	-1.218	-7.209		48.884	0.086	14.643	0.003		841.5	14.0256	46.6	12.0	39.4	2.717	0.013	0.013	0.000	0.323	0.28	
863	4/19/2004	11:44:22 PM		25.574	25.313	25.243	25.716	23.793		45.555	48.479	12.955	33.305	-1.218	-7.197		48.496	0.086	14.643	0.003		842.5	14.0422	47.0	11.9	39.4	2.719	0.013	0.013	0.000	0.323	0.27	
864	4/19/2004	11:45:22 PM		25.568	25.293	25.217	25.67	23.807		45.329	48.115	12.927	33.153	-1.218	-7.212		49.253	0.085	14.643	0.003		843.5	14.0589	46.6	12.1	39.2	2.706	0.013	0.013	0.000	0.321	0.27	
865	4/19/2004	11:46:22 PM		25.561	25.275	25.225	25.618	23.655		45.5	48.208	12.902	33.376	-1.218	-7.22		48.41	0.086	14.643	0.003		844.5	14.0756	46.7	11.9	39.4	2.719	0.013	0.013	0.000	0.323	0.27	
866	4/19/2004	11:47:22 PM		25.57	25.279	25.214	25.582	23.749		45.784	48.759	13.042	33.339	-1.218	-7.226		49.134	0.085	14.643	0.003		845.5	14.0922	47.3	12.0	39.6	2.728	0.013	0.013	0.000	0.318	0.27	
867	4/19/2004	11:48:22 PM		25.565	25.269	25.138	25.642	23.979		45.157	47.963	12.869	33.052	-1.221	-7.229		48.934	0.085	14.643	0.003		846.5	14.1089	46.5	12.0	39.1	2.696	0.013	0.013	0.000	0.323	0.27	
868	4/19/2004	11:49:22 PM		25.554	25.263	25.103	25.701	24.133		45.618	48.345	12.881	33.46	-1.218	-7.215		48.727	0.086	14.643	0.003		847.5	14.1256	46.9	11.9	39.5	2.726	0.013	0.013	0.000	0.323	0.28	
869	4/19/2004	11:50:22 PM		25.555	25.264	25.113	25.717	24.229		45.667	48.629	12.859	33.499	-1.218	-7.22		48.55	0.085	14.643	0.003		848.5	14.1422	47.2	11.9	39.6	2.729	0.013	0.013	0.000	0.319	0.27	
870	4/19/2004	11:51:22 PM		25.545	25.265	25.134	25.753	24.33		45.331	48.374	12.853	33.196	-1.221	-7.215		46.201	0.085	14.643	0.003		849.5	14.1589	46.9	11.3	39.3	2.707	0.013	0.013	0.000	0.322	0.27	
871	4/19/2004	11:52:22 PM		25.546	25.26	25.125	25.849	24.481		45.188	48.253	12.861	32.952	-1.218	-7.215		48.671	0.086	14.643	0.003		850.5	14.1756	46.8	11.9	39.1	2.694	0.013	0.013	0.000	0.327	0.28	
872	4/19/2004	11:53:22 PM		25.547	25.271	25.146	25.869	24.527		45.63	48.56	12.95	33.276	-1.221	-7.215		46.266	0.085	14.643	0.003		851.5	14.1922	47.1	11.3	39.5	2.720	0.013	0.013	0.000	0.320	0.27	
873	4/19/2004	11:54:22 PM		25.553	25.283	25.162	25.901	24.598		45.315	48.455	12.856	33.085	-1.221	-7.217		50.279	0.085	14.643	0.003		852.5	14.2089	47.0	12.3	39.2	2.703	0.013	0.013	0.000	0.322	0.27	
874	4/19/2004	11:55:22 PM		25.544	25.284	25.148	25.962	24.579		45.352	48.177	12.867	33.222	-1.221	-7.209		48.698	0.085	14.643	0.003		853.5	14.2256	46.7	11.9	39.3	2.709	0.013	0.013	0.000	0.321	0.27	
875	4/19/2004	11:56:22 PM		25.541	25.285	25.14	25.979	24.601		45.773	48.776	13.011	33.339	-1.221	-7.212		49.24	0.084	14.643	0.003		854.5	14.2422	47.3	12.1	39.6	2.727	0.013	0.012	0.000	0.315	0.27	
876	4/19/2004	11:57:22 PM		25.557	25.292	25.171	25.965	24.367		45.182	48.104	12.825	33.169	-1.215	-7.206		48.448	0.085	14.643	0.003		855.5	14.2589	46.6	11.9	39.2	2.701	0.013	0.013	0.000	0.322	0.27	
877	4/19/2004	11:58:22 PM		25.547	25.292	25.146	25.93	24.152		45.541	48.763	12.989	33.227	-1.218	-7.154		49.072	0.084	14.643	0.003		856.5	14.2756	47.3	12.0	39.4	2.715	0.013	0.012	0.000	0.317	0.27	
878	4/19/2004	11:59:22 PM		25.553	25.292	25.177	25.881	24.097		45.234	48.243	12.896	32.968	-1.218	-7.194		45.932	0.085	14.643	0.003		857.5	14.2922	46.8	11.3	39.1	2.696	0.013	0.013	0.000	0.322	0.27	
879	4/20/2004	12:00:22 AM		25.563	25.297	25.197	25.821	23.947		45.282	48.345	12.898	33.161	-1.218	-7.197		50.471	0.084	14.643	0.004		858.5	14.3089	46.9	12.4	39.2	2.704	0.013	0.012	0.000	0.318	0.27	
880	4/20/2004	12:00:26 AM		25.552	25.297	25.181	25.8	23.947		45.396	48.413	12.867	33.261	-1.221	-7.191		47.901	0.085	14.643	0.003		858.6	14.31	46.9	11.7	39.3	2.712	0.013	0.013	0.000	0.321	0.27	
881	4/20/2004	12:01:26 AM		25.568	25.302	25.197	25.795	23.842		45.419	48.548	12.903	33.188	-1.215	-7.197		49.996	0.084	14.643	0.003		859.6	14.3267	47.1	12.3	39.3	2.710	0.013	0.012	0.000	0.317	0.27	
882	4/20/2004	12:02:26 AM		25.561	25.295	25.195	25.743	23.82		45.124	48.137	12.912	32.97	-1.218	-7.203		48.888	0.084	14.643	0.003		860.6	14.3433	46.7	12.0	39.0	2.692	0.013	0.012	0.000	0.319	0.27	
883	4/20/2004	12:03:26 AM		25.565	25.295	25.189	25.698	23.804		45.24	48.216	12.89	33.132	-1.218	-7.197		49.816	0.084	14.643	0.003		861.6	14.36	46.7	12.2	39.2	2.702	0.013	0.012	0.000	0.318	0.27	
884	4/20/2004	12:04:26 AM		25.563	25.288	25.217	25.665	23.787		45.122	48.425	12.879	32.849	-1.215	-7.197		48.757	0.083	14.643	0.004		862.6	14.3767	47.0	11.9	39.0	2.688	0.012	0.012	0.000	0.315	0.27	
885	4/20/2004	12:05:26 AM		25.577	25.292	25.211	25.64	23.831		45.153	48.245	12.94	32.869	-1.218	-7.197		47.09	0.083	14.643	0.004		863.6	14.3933	46.8	11.5	39.0	2.690	0.012	0.012	0.000	0.315	0.27	
886	4/20/2004	12:06:26 AM		25.565	25.285	25.224	25.583	23.779		45.431	48.672	13.013	32.937	-1.218	-7.186		48.813	0.084	14.643	0.003		864.6	14.41	47.2	12.0	39.2	2.702	0.013	0.012	0.000	0.318	0.27	
887	4/20/2004	12:07:26 AM		25.57	25.28	25.189	25.578	23.945		45.443	48.56	12.994	33.083	-1.218	-7.194		48.2	0.084	14.643	0.003		865.6	14.4267	47.1	11.8	39.3	2.707	0.013	0.012	0.000	0.317	0.27	
888	4/20/2004	12:08:26 AM		25.571	25.285	25.14	25.653	24.095		44.944	47.681	12.817	32.986	-1.218	-7.191		49.455	0.083	14.643	0.003		866.6	14.4433	46.2	12.1	39.0	2.687	0.012	0.012	0.000	0.316	0.27	
889	4/20/2004	12:09:26 AM		25.541	25.255	25.115	25.698	24.231		45.112	48.11	12.854	33.003	-1.221	-7.189		50.15	0.083	14.643	0.003		867.6	14.46	46.6	12.3	39.1	2.693	0.012	0.012	0.000	0.316	0.27	
890	4/20/2004	12:10:26 AM		25.543	25.272	25.127	25.741	24.258		45.369	48.44	12.876	33.122	-1.218	-7.197		47.703	0.082	14.643	0.003		868.6	14.4767	47.0	11.7	39.2	2.706	0.012	0.012	0.000	0.310	0.26	
891	4/20/2004	12:11:26 AM		25.544	25.279	25.163	25.822	24.339		44.935	48.011	12.904	32.728	-1.218	-7.186		48.867	0.083	14.643	0.003		869.6	14.4933	46.5	12.0	38.8	2.677	0.012	0.012	0.000	0.317	0.27	
892	4/20/2004	12:12:26 AM		25.546	25.28	25.165	25.893	24.541		45.315	48.513	12.904	33.091	-1.218	-7.186		48.275	0.082	14.643	0.003		870.6	14.51	47.0	11.8	39.2	2.703	0.012	0.012	0.000	0.310	0.26	
893	4/20/2004	12:13:26 AM		25.527	25.282	25.161	25.91	24.612		45.259	48.357	12.921	33.005	-1.218	-7.18		47.799	0.083	14.643	0.003		871.6	14.5267	46.9	11.7	39.1	2.698	0.012	0.012	0.000	0.315	0.27	
894	4/20/2004	12:14:26 AM		25.524	25.274	25.138	25.962	24.614		44.83	47.955	12.763	32.894	-1.221	-7.183		47.843	0.083	14.643	0.003		872.6	14.5433	46.5	11.7	38.9	2.679	0.012	0.012	0.000	0.317	0.27	
895	4/20/2004	12:15:26 AM		25.536	25.295	25.165	25.973	24.531		45.203	48.235	12.908	33.025	-1.218	-7.183		48.185	0.084	14.643	0.003		873.6	14.56	46.8	11.8	39.1	2.697	0.013	0.012	0.000	0.319	0.27	
896	4/20/2004	12:16:26 AM		25.536	25.296	25.16	25.969	24.366		44.985	48.224	12.911	32.75	-1.218	-7.174		49.105	0.084	14.643	0.003		874.6	14.5767	46.8	12.0	38.9	2.680	0.013	0.012	0.000	0.321	0.27	
897	4/20/2004	12:17:26 AM		25.541	25.296	25.17	25.909	24.221		45.145	48.488	12.896	32.888	-1.218	-7.183		46.986	0.082	14.643	0.003		875.6	14.5933	47.0	11.5	39.0	2.690	0.012	0.012	0.000	0.312	0.27	
898	4/20/2004	12:18:26 AM		25.541	25.306	25.17	25.849	24.151		45.068	48.276	12.957	32.818	-1.221	-7.177		48.744	0.083	14.643	0.003		876.6	14.61	46.8	11.9	38.9	2.685	0.012	0.012	0.000	0.316	0.27	
899	4/20/2004	12:19:26 AM		25.551	25.31	25.195	25.783	24.02		44.863	48.009	12.903	32.638	-1.221	-7.174		50.588	0.082	14.643	0.003		877.6	14.6267	46.5	12.4	38.8	2.672	0.012	0.012	0.000	0.314	0.27	
900	4/20/2004	12:20:26 AM		25.55	25.31	25.179	25.732	23.944		44.79	48.179	12.857	32.615	-1.221	-7.099		47.102	0.084	14.643	0.003		878.6	14.6433	46.7	11.5	38.7	2.668	0.013	0.012	0.000	0.322	0.27	
901	4/20/2004	12:21:26 AM		25.549	25.323	25.208	25.701	23.863		44.981	48.104	12.915	32.835	-1.218	-7.165		47.069	0.084	14.643	0.003		879.6	14.66	46.6	11.5	38.9	2.683	0.013	0.012	0.000	0.320	0.27	
902	4/20/2004	12:22:26 AM		25.546	25.311	25.225	25.634	23.746		45.079	48.268	13.021	32.685	-1.215	-7.165		46.387	0.084	14.643	0.004		880.6	14.6767	46.8	11.4	38.9	2.681	0.013	0.012	0.000	0.320	0.27	
903	4/20/2004	12:23:26 AM		25.544	25.309	25.228	25.577	23.743		46.068	49.416	13.182	33.547	-1.218	-7.16		49.176	0.084	14.643	0.003		881.6	14.6933	47.9	12.1	39.8	2.745	0.013	0.012	0.000	0.313	0.27	
904	4/20/2004	12:24:26 AM		25.564	25.328	25.273	25.576	23.803		45.85	49.226	13.173	33.339	-1.215	-7.145		46.433	0.085	14.643	0.003		882.6	14.71	47.8	11.4	39.6	2.730	0.013	0.013	0.000	0.318	0.27	
905	4/20/2004	12:25:26 AM		25.563	25.318	25.297	25.59	23.927		45.987	49.373	13.204	33.385	-1.212	-7.16		50.732	0.083	14.643	0.003		883.6	14.7267	47.9	12.4	39.7	2.736	0.012	0.012	0.000	0.309	0.26	
906	4/20/2004	12:26:26 AM		25.563	25.303	25.312	25.61	24.093		45.593	48.865	13.094	33.218	-1.221	-7.157		47.747	0.084	14.643	0.003		884.6	14.7433	47.4	11.7	39.4	2.717	0.013	0.012	0.000	0.315	0.27	
907	4/20/2004	12:27:26 AM		25.558	25.298	25.252	25.68	24.238		45.786	49.068	13.067	33.442	-1.221	-7.154		50.023	0.084	14.643	0.003		885.6	14.76	47.6	12.3	39.6	2.731	0.013	0.012	0.000	0.314	0.27	
908	4/20/2004	12:28:26 AM		25.559	25.298	25.218	25.756	24.288		45.462	48.854	13.073	32.997	-1.221	-7.163		49.82	0.082	14.643	0.003		886.6	14.7767	47.4	12.2	39.2	2.705	0.012	0.012	0.000	0.310	0.26	
909	4/20/2004	12:29:26 AM		25.55	25.29	25.189	25.763	24.355		45.916	49.053	13.018	33.729	-1.224	-7.151		49.213	0.084	14.643	0.003		887.6	14.7933	47.6	12.1	39.8	2.746	0.013	0.012	0.000	0.313	0.27	
910	4/20/2004	12:30:26 AM		25.567	25.312	25.251	25.86	24.512		45.782	49.221	13.11	33.356	-1.218	-7.145		50.519	0.084	14.643	0.003		888.6	14.81	47.7	12.4	39.6	2.728	0.013	0.012	0.000	0.314	0.27	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
911	4/20/2004	12:31:26 AM		25.559	25.309	25.243	25.922	24.489		46.016	49.425	13.163	33.465	-1.218	-7.151		48.21	0.083	14.643	0.003		889.6	14.8267	48.0	11.8	39.7	2.740	0.012	0.012	0.000	0.309	0.26	
912	4/20/2004	12:32:26 AM		25.556	25.295	25.24	25.943	24.476		45.713	49.12	13.071	33.348	-1.221	-7.151		45.578	0.084	14.643	0.003		890.6	14.8433	47.6	11.2	39.5	2.725	0.013	0.012	0.000	0.315	0.27	
913	4/20/2004	12:33:26 AM		25.563	25.302	25.267	25.951	24.448		45.674	49.037	13.112	33.307	-1.218	-7.139		49.314	0.084	14.643	0.003		891.6	14.86	47.6	12.1	39.5	2.723	0.013	0.012	0.000	0.315	0.27	
914	4/20/2004	12:34:26 AM		25.564	25.294	25.253	25.912	24.309		45.707	49.199	13.102	33.208	-1.221	-7.139		49.86	0.083	14.643	0.003		892.6	14.8767	47.7	12.2	39.5	2.720	0.012	0.012	0.000	0.311	0.27	
915	4/20/2004	12:35:26 AM		25.591	25.31	25.31	25.873	24.2		45.73	49.308	13.151	33.11	-1.218	-7.145		49.172	0.083	14.643	0.003		893.6	14.8933	47.8	12.1	39.4	2.718	0.012	0.012	0.000	0.311	0.26	
916	4/20/2004	12:36:26 AM		25.581	25.31	25.325	25.768	24.16		45.699	48.989	13.119	33.323	-1.221	-7.134		51.821	0.084	14.643	0.003		894.6	14.91	47.5	12.7	39.5	2.724	0.013	0.012	0.000	0.314	0.27	
917	4/20/2004	12:37:26 AM		25.58	25.304	25.309	25.717	24.054		45.628	48.91	13.148	33.227	-1.218	-7.145		47.828	0.082	14.643	0.003		895.6	14.9267	47.4	11.7	39.4	2.718	0.012	0.012	0.000	0.307	0.26	
918	4/20/2004	12:38:26 AM		25.594	25.314	25.338	25.677	23.893		45.914	49.284	13.183	33.442	-1.218	-7.134		51.278	0.084	14.643	0.003		896.6	14.9433	47.8	12.6	39.7	2.736	0.013	0.012	0.000	0.313	0.27	
919	4/20/2004	12:39:26 AM		25.592	25.302	25.336	25.629	23.871		46.117	49.688	13.135	33.569	-1.218	-7.128		48.93	0.084	14.643	0.003		897.6	14.96	48.2	12.0	39.8	2.747	0.013	0.012	0.000	0.311	0.26	
920	4/20/2004	12:40:26 AM		25.6	25.294	25.364	25.562	23.814		45.809	49.468	13.088	33.276	-1.218	-7.139		48.606	0.082	14.643	0.003		898.6	14.9767	48.0	11.9	39.5	2.726	0.012	0.012	0.000	0.306	0.26	
921	4/20/2004	12:41:26 AM		25.609	25.304	25.368	25.532	23.748		45.638	49.141	13.001	33.302	-1.218	-7.128		49.764	0.083	14.643	0.003		899.6	14.9933	47.7	12.2	39.5	2.721	0.012	0.012	0.000	0.310	0.26	
922	4/20/2004	12:42:26 AM		25.602	25.282	25.386	25.489	23.756		45.464	49.101	13.007	33.099	-1.218	-7.093		49.42	0.084	14.643	0.003		900.6	15.01	47.6	12.1	39.3	2.708	0.013	0.012	0.000	0.315	0.27	
923	4/20/2004	12:43:26 AM		25.592	25.267	25.381	25.474	23.982		45.798	49.197	13.076	33.442	-1.224	-7.125		49.001	0.082	14.643	0.003		901.6	15.0267	47.7	12.0	39.6	2.732	0.012	0.012	0.000	0.305	0.26	
924	4/20/2004	12:44:26 AM		25.613	25.272	25.412	25.575	24.127		45.891	49.308	13.087	33.481	-1.218	-7.113		48.711	0.083	14.643	0.003		902.6	15.0433	47.8	11.9	39.7	2.736	0.012	0.012	0.000	0.308	0.26	
925	4/20/2004	12:45:26 AM		25.614	25.263	25.398	25.666	24.223		45.67	49.215	13.028	33.374	-1.221	-7.113		49.843	0.082	14.643	0.003		903.6	15.06	47.7	12.2	39.5	2.725	0.012	0.012	0.000	0.306	0.26	
926	4/20/2004	12:46:26 AM		25.614	25.259	25.428	25.692	24.239		45.761	49.288	13.042	33.434	-1.218	-7.122		48.567	0.083	14.643	0.003		904.6	15.0767	47.8	11.9	39.6	2.730	0.012	0.012	0.000	0.309	0.26	
927	4/20/2004	12:47:26 AM		25.625	25.254	25.409	25.753	24.455		45.645	49.161	13.044	33.409	-1.218	-7.122		49.261	0.082	14.643	0.003		905.6	15.0933	47.7	12.1	39.5	2.725	0.012	0.012	0.000	0.306	0.26	
928	4/20/2004	12:48:26 AM		25.636	25.266	25.386	25.829	24.546		46.134	49.702	13.161	33.606	-1.218	-7.116		50.171	0.084	14.643	0.003		906.6	15.11	48.2	12.3	39.9	2.749	0.013	0.012	0.000	0.311	0.26	
929	4/20/2004	12:49:26 AM		25.628	25.243	25.298	25.871	24.518		45.759	49.344	13.058	33.337	-1.224	-7.116		47.353	0.082	14.643	0.003		907.6	15.1267	47.9	11.6	39.5	2.727	0.012	0.012	0.000	0.307	0.26	
930	4/20/2004	12:50:26 AM		25.636	25.266	25.295	25.969	24.486		45.75	49.078	13.02	33.516	-1.218	-7.111		46.725	0.083	14.643	0.003		908.6	15.1433	47.6	11.5	39.6	2.733	0.012	0.012	0.000	0.310	0.26	
931	4/20/2004	12:51:26 AM		25.633	25.262	25.297	25.935	24.367		45.682	49.325	13.021	33.329	-1.218	-7.111		48.567	0.083	14.643	0.003		909.6	15.16	47.9	11.9	39.5	2.724	0.012	0.012	0.000	0.311	0.26	
932	4/20/2004	12:52:26 AM		25.629	25.258	25.298	25.917	24.219		45.416	49.064	12.989	33.071	-1.221	-7.113		49.243	0.082	14.643	0.003		910.6	15.1767	47.6	12.1	39.2	2.706	0.012	0.012	0.000	0.309	0.26	
933	4/20/2004	12:53:26 AM		25.635	25.269	25.309	25.862	24.154		45.641	49.412	13.029	33.305	-1.221	-7.111		48.842	0.082	14.643	0.003		911.6	15.1933	47.9	12.0	39.5	2.722	0.012	0.012	0.000	0.307	0.26	
934	4/20/2004	12:54:26 AM		25.635	25.264	25.309	25.822	24.044		45.458	49.014	13.004	33.183	-1.218	-7.108		50.819	0.084	14.643	0.003		912.6	15.21	47.5	12.5	39.3	2.711	0.013	0.012	0.000	0.316	0.27	
935	4/20/2004	12:55:26 AM		25.63	25.264	25.324	25.737	23.984		45.678	49.574	13.077	33.21	-1.218	-7.113		47.887	0.08	14.643	0.003		913.6	15.2267	48.1	11.7	39.4	2.720	0.012	0.012	0.000	0.300	0.26	
936	4/20/2004	12:56:26 AM		25.618	25.253	25.312	25.696	23.853		45.56	49.196	13.029	33.265	-1.218	-7.108		49.278	0.082	14.643	0.003		914.6	15.2433	47.7	12.1	39.4	2.717	0.012	0.012	0.000	0.307	0.26	
937	4/20/2004	12:57:26 AM		25.612	25.251	25.321	25.574	23.771		45.838	49.526	13.133	33.434	-1.218	-7.102		49.718	0.083	14.643	0.003		915.6	15.26	48.1	12.2	39.6	2.733	0.012	0.012	0.000	0.309	0.26	
938	4/20/2004	12:58:26 AM		25.626	25.27	25.37	25.548	23.73		45.916	49.628	13.154	33.411	-1.218	-7.108		50.173	0.082	14.643	0.004		916.6	15.2767	48.2	12.3	39.7	2.735	0.012	0.012	0.000	0.305	0.26	
939	4/20/2004	12:59:26 AM		25.623	25.257	25.357	25.51	23.667		45.838	49.702	13.079	33.331	-1.218	-7.111		48.319	0.083	14.643	0.003		917.6	15.2933	48.2	11.8	39.6	2.729	0.012	0.012	0.000	0.309	0.26	
940	4/20/2004	1:00:26 AM		25.626	25.271	25.365	25.489	23.745		45.539	49.167	13.101	33.103	-1.221	-7.116		48.867	0.081	14.643	0.003		918.6	15.31	47.7	12.0	39.3	2.711	0.012	0.012	0.000	0.304	0.26	
941	4/20/2004	1:01:26 AM		25.631	25.27	25.39	25.473	23.935		45.75	49.447	13.115	33.294	-1.218	-7.111		47.728	0.083	14.643	0.003		919.6	15.3267	48.0	11.7	39.5	2.725	0.012	0.012	0.000	0.310	0.26	
942	4/20/2004	1:02:26 AM		25.63	25.274	25.419	25.522	24.034		45.668	49.348	13.092	33.305	-1.221	-7.099		49.155	0.083	14.643	0.003		920.6	15.3433	47.9	12.0	39.5	2.722	0.012	0.012	0.000	0.310	0.26	
943	4/20/2004	1:03:26 AM		25.634	25.269	25.403	25.607	24.164		45.427	49.277	13.049	33.036	-1.218	-7.105		48.531	0.082	14.643	0.003		921.6	15.36	47.8	11.9	39.2	2.705	0.012	0.012	0.000	0.308	0.26	
944	4/20/2004	1:04:26 AM		25.644	25.273	25.438	25.651	24.418		45.541	49.257	13.056	33.146	-1.218	-7.108		48.755	0.081	14.643	0.003		922.6	15.3767	47.8	11.9	39.3	2.713	0.012	0.012	0.000	0.303	0.26	
945	4/20/2004	1:05:26 AM		25.644	25.273	25.433	25.716	24.343		45.753	49.713	13.063	33.259	-1.221	-7.073		48.54	0.079	14.643	0.003		923.6	15.3933	48.2	11.9	39.5	2.724	0.012	0.012	0.000	0.295	0.25	
946	4/20/2004	1:06:26 AM		25.649	25.274	25.443	25.757	24.484		45.665	49.439	13.066	33.259	-1.221	-7.093		49.22	0.082	14.643	0.003		924.6	15.41	48.0	12.1	39.5	2.721	0.012	0.012	0.000	0.306	0.26	
947	4/20/2004	1:07:26 AM		25.651	25.275	25.445	25.833	24.561		45.497	49.17	12.952	33.309	-1.221	-7.093		48.788	0.081	14.643	0.003		925.6	15.4267	47.7	12.0	39.4	2.717	0.012	0.012	0.000	0.303	0.26	
948	4/20/2004	1:08:26 AM		25.653	25.282	25.442	25.92	24.603		45.896	49.738	13.074	33.495	-1.218	-7.087		48.632	0.082	14.643	0.003		926.6	15.4433	48.3	11.9	39.7	2.737	0.012	0.012	0.000	0.304	0.26	
949	4/20/2004	1:09:26 AM		25.658	25.278	25.448	25.901	24.448		45.782	49.8	13.049	33.315	-1.221	-7.082		47.97	0.082	14.643	0.003		927.6	15.46	48.3	11.8	39.5	2.727	0.012	0.012	0.000	0.305	0.26	
950	4/20/2004	1:10:26 AM		25.664	25.289	25.443	25.892	24.549		45.663	49.663	13.021	33.35	-1.218	-7.079		50.292	0.082	14.643	0.003		928.6	15.4767	48.2	12.3	39.5	2.724	0.012	0.012	0.000	0.306	0.26	
951	4/20/2004	1:11:26 AM		25.68	25.309	25.469	25.822	24.275		45.69	49.617	13.005	33.294	-1.218	-7.082		47.415	0.081	14.643	0.003		929.6	15.4933	48.1	11.6	39.5	2.723	0.012	0.012	0.000	0.302	0.26	
952	4/20/2004	1:12:26 AM		25.664	25.299	25.403	25.782	24.024		45.39	49.066	12.882	33.265	-1.218	-7.093		49.568	0.08	14.643	0.003		930.6	15.51	47.6	12.1	39.3	2.711	0.012	0.012	0.000	0.300	0.26	
953	4/20/2004	1:13:26 AM		25.664	25.299	25.418	25.727	23.838		45.701	49.634	13.005	33.343	-1.218	-7.085		47.557	0.08	14.643	0.003		931.6	15.5267	48.2	11.7	39.5	2.725	0.012	0.012	0.000	0.298	0.25	
954	4/20/2004	1:14:26 AM		25.663	25.303	25.423	25.651	23.783		45.811	49.725	13.114	33.257	-1.221	-7.076		50.054	0.082	14.643	0.003		932.6	15.5433	48.3	12.3	39.5	2.726	0.012	0.012	0.000	0.306	0.26	
955	4/20/2004	1:15:26 AM		25.666	25.306	25.436	25.584	23.645		45.472	49.275	13.058	33.066	-1.221	-7.087		47.651	0.081	14.643	0.003		933.6	15.56	47.8	11.7	39.3	2.707	0.012	0.012	0.000	0.304	0.26	
956	4/20/2004	1:16:26 AM		25.669	25.309	25.468	25.496	23.728		45.246	49.389	13.022	32.865	-1.221	-6.555		47.899	0.082	14.643	0.003		934.6	15.5767	47.9	11.7	39.1	2.693	0.012	0.012	0.000	0.309	0.26	
957	4/20/2004	1:17:26 AM		25.671	25.311	25.481	25.429	23.62		45.178	49.456	13.083	32.668	-1.221	-6.561		49.858	0.08	14.643	0.003		935.6	15.5933	48.0	12.2	38.9	2.684	0.012	0.012	0.000	0.302	0.26	
958	4/20/2004	1:18:26 AM		25.664	25.309	25.479	25.396	23.728		45.24	49.443	13.044	32.793	-1.224	-6.576		49.193	0.081	14.643	0.003		936.6	15.61	48.0	12.1	39.0	2.690	0.012	0.012	0.000	0.305	0.26	
959	4/20/2004	1:19:26 AM		25.668	25.308	25.507	25.46	23.872		45.464	49.487	13.102	33.089	-1.218	-6.576		49.758	0.081	14.643	0.003		937.6	15.6267	48.0	12.2	39.3	2.708	0.012	0.012	0.000	0.303	0.26	
960	4/20/2004	1:20:26 AM		25.678	25.313	25.527	25.5	24.027		45.251	49.624	13.093	32.794	-1.221	-6.324		48.949	0.079	14.643	0.003		938.6	15.6433	48.2	12.0	39.0	2.690	0.012	0.012	0.000	0.297	0.25	
961	4/20/2004	1:21:26 AM		25.679	25.308	25.548	25.561	24.178		45.307	49.549	13.104	32.812	-1.221	-6.327		48.946	0.08	14.643	0.003		939.6	15.66	48.1	12.0	39.1	2.693	0.012	0.012	0.000	0.301	0.26	
962	4/20/2004	1:22:26 AM		25.694	25.324	25.544	25.587	24.439		-5.637	-0.958	1.227	-6.078	-1.218	-6.628		-0.071	0.003	14.643	0.003		940.6	15.6767	-2.4	0.0	-5.9	-0.404	0.000	0.000	0.000	-0.075	-0.06	
963	4/20/2004	1:23:26 AM		25.989	25.319	25.519	25.642	24.289		-4.59	-0.929	1.24	-5.072	-1.212	-6.619		-0.067	0.003	14.643	0.003		941.6	15.6933	-2.4	0.0	-4.8	-0.333	0.000	0.000	0.000	-0.091	-0.08	
964	4/20/2004	1:24:26 AM		25.881	25.31	25.48	25.493	25.121		-3.6	-0.935	1.23	-4.101	-1.218	-6.625		-0.075	0.003	14.643	0.003		942.6	15.71	-2.4	0.0	-3.9	-0.265	0.000	0.000	0.000	-0.115	-0.10	
965	4/20/2004	1:25:26 AM		25.703	25.312	25.452	25.28	24.803		-2.885	-0.948	1.214	-3.404	-1.218	-6.625		-0.077	0.003	14.643	0.003		943.6	15.7267	-2.4	0.0	-3.1	-0.217	0.000	0.000	0.000	-0.140	-0.12	
966	4/20/2004	1:26:26 AM		25.669	25.299	25.413	25.091	24.369		-2.366	-0.956	1.197	-2.897	-1.218	-6.625		-0.079	0.003	14.643	0.006		944.6	15.7433	-2.4	0.0	-2.6	-0.181	0.000	0.000	0.000	-0.168	-0.14	
967	4/20/2004	1:27:26 AM		25.59	25.299	25.379	25.021	24.014		-1.96	-0.94	1.185	-2.501	-1.221	-6.622		-0.077	0.003	14.643	0.005		945.6	15.76	-2.4	0.0	-2.2	-0.154	0.000	0.000	0.000	-0.198	-0.17	
968	4/20/2004	1:28:26 AM		25.575	25.299	25.339	24.836	23.859		-1.647	-0.935	1.172	-2.193	-1.218	-6.625		-0.077	0.003	14.643	0.005		946.6	15.7767	-2.4	0.0	-1.9	-0.132	0.000	0.000	0.000	-0.231	-0.20	
969	4/20/2004	1:29:26 AM		25.639	25.288	25.308	24.729	23.813		-1.381	-0.906	1.158	-1.926	-1.218	-6.622		-0.077	0.003	14.643	0.006		947.6	15.7933	-2.4	0.0	-1.7	-0.114	0.000	0.000	0.000	-0.268	-0.23	
970	4/20/2004	1:16:10 PM		22.862	23.069	23.717	23.865	23.175		13.619	14.446	3.785	10.186	-1.215	-6.266		12.671	0.003	14.643	0.006		1654.3	27.5722	13.0	3.1	11.9	0.821	0.000	0.000	0.000	0.039	0.03	
971	4/20/2004	1:17:10 PM		22.918	23.09	24.184	23.84	23.05		47.885	51.163	18.503	29.787	-1.218	-6.498		46.12	0.033	14.643	0.005		1655.3	27.5889	49.7	11.3	38.8	2.678	0.005	0.005	0.000	0.130	0.11	
972	4/20/2004	1:18:10 PM		22.757	23.095	24.655	23.915	22.929		47.065	51.108	18.343	29.192	-1.218	-7.194		46.815	0.096	14.643	0.003		1656.3	27.6056	49.6	11.5	38.1	2.629	0.014	0.014	0.000	0.379	0.32	
973	4/20/2004	1:19:10 PM		22.993	23.11	24.961	24.126	22.909		47.372	51.406	18.265	29.52	-1.218	-7.423		47.378	0.082	14.643	0.003		1657.3	27.6222	49.9	11.6	38.4	2.651	0.012	0.012	0.000	0.318	0.27	
974	4/20/2004	1:20:10 PM		23.205	23.12	25.187	24.408	23.071		48.764	52.77	18.552	30.571	-1.218	-7.457		47.766	0.081	14.643	0.003		1658.3	27.6389	51.3	11.7	39.7	2.735	0.012	0.012	0.000	0.303	0.26	
975	4/20/2004	1:21:10 PM		23.406	23.136	25.352	24.724	23.106		48.778	52.762	18.334	30.858	-1.215	-7.42		48.951	0.079	14.643	0.004		1659.3	27.6556	51.3	12.0	39.8	2.745	0.012	0.012	0.000	0.293	0.25	
976	4/20/2004	1:22:10 PM		23.592	23.152	25.443	24.911	23.277		49.316	53.367	18.5	31.207	-1.215	-7.486		48.002	0.079	14.643	0.003		1660.3	27.6722	51.9	11.8	40.3	2.776	0.012	0.012	0.000	0.289	0.25	
977	4/20/2004	1:23:10 PM		23.744	23.163	25.5	25.072	23.359		49.521	53.69	18.466	31.404	-1.212	-7.559		46.531	0.081	14.643	0.004		1661.3	27.6889	52.2	11.4	40.5	2.790	0.012	0.012	0.000	0.294	0.25	
978	4/20/2004	1:24:10 PM		23.855	23.159	25.516	25.189	23.43		49.448	53.454	18.431	31.341	-1.221	-7.524		49.201	0.079	14.643	0.003		1662.3	27.7056	52.0	12.1	40.4	2.785	0.012	0.012	0.000	0.287	0.24	
979	4/20/2004	1:25:10 PM		23.973	23.176	25.538	25.341	23.487		49.315	53.356	18.325	31.343	-1.218	-7.567		46.028	0.078	14.643	0.003		1663.3	27.7222	51.9	11.3	40.3	2.781	0.012	0.011	0.000	0.284	0.24	
980	4/20/2004	1:26:10 PM		24.065	23.173	25.535	25.408	23.584		49.262	53.298	18.276	31.328	-1.221	-7.573		49.168	0.078	14.643	0.003		1664.3	27.7389	51.8	12.0	40.3	2.778	0.012	0.011	0.000	0.284	0.24	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
981	4/20/2004	1:27:10 PM		24.162	23.186	25.537	25.456	23.647		49.048	52.853	18.153	31.363	-1.218	-7.585		49.113	0.076	14.643	0.003		1665.3	27.7556	51.4	12.0	40.2	2.772	0.011	0.011	0.000	0.278	0.24	
982	4/20/2004	1:28:10 PM		24.26	23.209	25.58	25.443	23.63		49.467	53.456	18.163	31.646	-1.218	-7.579		47.011	0.076	14.643	0.003		1666.3	27.7722	52.0	11.5	40.6	2.796	0.011	0.011	0.000	0.275	0.23	
983	4/20/2004	1:29:10 PM		24.374	23.223	25.579	25.482	23.689		49.162	52.938	18.084	31.607	-1.221	-7.588		48.704	0.077	14.643	0.003		1667.3	27.7889	51.5	11.9	40.4	2.784	0.011	0.011	0.000	0.280	0.24	
984	4/20/2004	1:30:10 PM		24.483	23.246	25.622	25.52	23.752		49.121	53.045	18.089	31.488	-1.221	-7.59		47.684	0.076	14.643	0.003		1668.3	27.8056	51.6	11.7	40.3	2.779	0.011	0.011	0.000	0.276	0.24	
985	4/20/2004	1:31:10 PM		24.586	23.259	25.645	25.524	23.81		49.597	53.485	18.159	31.852	-1.218	-7.582		49.261	0.076	14.643	0.003		1669.3	27.8222	52.0	12.1	40.7	2.808	0.011	0.011	0.000	0.273	0.23	
986	4/20/2004	1:32:10 PM		24.668	23.271	25.642	25.576	23.857		49.262	53.338	18.113	31.503	-1.218	-7.588		48.661	0.075	14.643	0.003		1670.3	27.8389	51.9	11.9	40.4	2.784	0.011	0.011	0.000	0.272	0.23	
987	4/20/2004	1:33:10 PM		24.757	23.285	25.671	25.66	23.931		49.465	53.524	18.194	31.622	-1.224	-7.596		48.106	0.074	14.643	0.003		1671.3	27.8556	52.1	11.8	40.5	2.795	0.011	0.011	0.000	0.267	0.23	
988	4/20/2004	1:34:10 PM		24.855	23.313	25.704	25.697	23.894		49.313	53.269	18.021	31.73	-1.218	-7.59		48.523	0.074	14.643	0.003		1672.3	27.8722	51.8	11.9	40.5	2.794	0.011	0.011	0.000	0.267	0.23	
989	4/20/2004	1:35:10 PM		24.932	23.321	25.696	25.71	23.927		48.977	52.834	17.868	31.529	-1.221	-7.588		47.774	0.076	14.643	0.003		1673.3	27.8889	51.4	11.7	40.3	2.775	0.011	0.011	0.000	0.276	0.23	
990	4/20/2004	1:36:10 PM		25.016	23.339	25.745	25.753	23.98		49.315	53.193	17.976	31.79	-1.218	-7.588		48.857	0.074	14.643	0.003		1674.3	27.9056	51.7	12.0	40.6	2.796	0.011	0.011	0.000	0.266	0.23	
991	4/20/2004	1:37:10 PM		25.089	23.357	25.758	25.717	24.023		49.33	53.348	17.915	31.776	-1.218	-7.588		48.035	0.075	14.643	0.003		1675.3	27.9222	51.9	11.8	40.6	2.796	0.011	0.011	0.000	0.270	0.23	
992	4/20/2004	1:38:10 PM		25.152	23.371	25.721	25.72	24.002		49.025	52.985	17.877	31.49	-1.218	-7.585		48.546	0.076	14.643	0.003		1676.3	27.9389	51.5	11.9	40.3	2.776	0.011	0.011	0.000	0.276	0.23	
993	4/20/2004	1:39:10 PM		25.221	23.395	25.745	25.694	24.016		48.98	52.989	17.855	31.48	-1.218	-7.585		46.859	0.074	14.643	0.003		1677.3	27.9556	51.5	11.5	40.2	2.774	0.011	0.011	0.000	0.269	0.23	
994	4/20/2004	1:40:10 PM		25.29	23.424	25.764	25.758	24.05		48.998	52.979	17.847	31.509	-1.218	-7.593		48.081	0.074	14.643	0.003		1678.3	27.9722	51.5	11.8	40.3	2.775	0.011	0.011	0.000	0.268	0.23	
995	4/20/2004	1:41:10 PM		25.322	23.43	25.756	25.849	24.021		49.166	53.046	17.875	31.665	-1.221	-7.59		45.78	0.074	14.643	0.003		1679.3	27.9889	51.6	11.2	40.4	2.787	0.011	0.011	0.000	0.267	0.23	
996	4/20/2004	1:42:10 PM		25.355	23.433	25.754	25.917	24.034		49.139	52.956	17.768	31.759	-1.221	-7.593		47.609	0.075	14.643	0.003		1680.3	28.0056	51.5	11.7	40.4	2.789	0.011	0.011	0.000	0.271	0.23	
997	4/20/2004	1:43:10 PM		25.381	23.44	25.74	25.964	24.096		49.009	52.871	17.766	31.638	-1.218	-7.585		47.296	0.075	14.643	0.003		1681.3	28.0222	51.4	11.6	40.3	2.780	0.011	0.011	0.000	0.272	0.23	
998	4/20/2004	1:44:10 PM		25.429	23.472	25.768	26.021	24.123		49.423	53.334	17.899	31.923	-1.218	-7.585		48.604	0.075	14.643	0.003		1682.3	28.0389	51.9	11.9	40.7	2.804	0.011	0.011	0.000	0.269	0.23	
999	4/20/2004	1:45:10 PM		25.466	23.495	25.78	26.079	24.155		49.326	53.174	17.834	31.934	-1.221	-7.588		46.285	0.074	14.643	0.003		1683.3	28.0556	51.7	11.3	40.6	2.801	0.011	0.011	0.000	0.266	0.23	
1000	4/20/2004	1:46:10 PM		25.509	23.533	25.788	26.177	23.993		49.353	53.209	17.599	32.143	-1.218	-7.59		48.542	0.074	14.643	0.003		1684.3	28.0722	51.7	11.9	40.7	2.809	0.011	0.011	0.000	0.265	0.23	
1001	4/20/2004	1:47:10 PM		25.551	23.566	25.79	26.149	23.835		48.758	52.706	17.495	31.735	-1.215	-7.588		47.344	0.075	14.643	0.004		1685.3	28.0889	51.2	11.6	40.2	2.775	0.011	0.011	0.000	0.272	0.23	
1002	4/20/2004	1:48:10 PM		25.566	23.56	25.789	26.038	23.734		49.094	53.027	17.461	32.096	-1.218	-7.59		48.719	0.074	14.643	0.003		1686.3	28.1056	51.6	11.9	40.6	2.799	0.011	0.011	0.000	0.266	0.23	
1003	4/20/2004	1:49:10 PM		25.6	23.584	25.789	26.017	23.698		48.921	52.846	17.414	31.905	-1.221	-7.593		48.438	0.075	14.643	0.003		1687.3	28.1222	51.4	11.9	40.4	2.786	0.011	0.011	0.000	0.271	0.23	
1004	4/20/2004	1:50:10 PM		25.623	23.603	25.782	26.021	23.672		49.021	52.948	17.762	31.63	-1.218	-7.602		47.417	0.073	14.643	0.003		1688.3	28.1389	51.5	11.6	40.3	2.780	0.011	0.011	0.000	0.264	0.22	
1005	4/20/2004	1:51:10 PM		25.657	23.622	25.811	26.015	23.641		48.814	52.803	17.734	31.494	-1.218	-7.605		49.13	0.072	14.643	0.003		1689.3	28.1556	51.3	12.0	40.2	2.768	0.011	0.010	0.000	0.261	0.22	
1006	4/20/2004	1:52:10 PM		25.667	23.621	25.815	25.994	23.685		49.224	53.309	17.739	31.802	-1.218	-7.605		50.169	0.074	14.643	0.003		1690.3	28.1722	51.8	12.3	40.5	2.793	0.011	0.011	0.000	0.266	0.23	
1007	4/20/2004	1:53:10 PM		25.702	23.642	25.796	26.025	23.666		48.967	52.78	17.575	31.737	-1.218	-7.602		48.969	0.073	14.643	0.003		1691.3	28.1889	51.3	12.0	40.4	2.782	0.011	0.011	0.000	0.264	0.22	
1008	4/20/2004	1:54:10 PM		25.733	23.658	25.777	26.051	23.707		49.091	52.946	17.54	31.999	-1.218	-7.541		47.758	0.076	14.643	0.003		1692.3	28.2056	51.5	11.7	40.5	2.795	0.011	0.011	0.000	0.273	0.23	
1009	4/20/2004	1:55:10 PM		25.735	23.645	25.774	25.963	23.689		48.924	52.875	17.535	31.854	-1.221	-7.573		48.525	0.072	14.643	0.003		1693.3	28.2222	51.4	11.9	40.4	2.785	0.011	0.011	0.000	0.260	0.22	
1010	4/20/2004	1:56:10 PM		25.768	23.673	25.797	26.001	23.737		48.99	52.865	17.429	32.047	-1.221	-7.57		48.69	0.073	14.643	0.003		1694.3	28.2389	51.4	11.9	40.5	2.794	0.011	0.011	0.000	0.263	0.22	
1011	4/20/2004	1:57:10 PM		25.775	23.665	25.799	26.063	23.754		49.033	52.946	17.449	31.969	-1.218	-7.582		48.462	0.074	14.643	0.004		1695.3	28.2556	51.5	11.9	40.5	2.792	0.011	0.011	0.000	0.266	0.23	
1012	4/20/2004	1:58:10 PM		25.804	23.694	25.807	26.092	23.773		49.133	53.068	17.558	32.001	-1.218	-7.544		48.748	0.073	14.643	0.003		1696.3	28.2722	51.6	11.9	40.6	2.797	0.011	0.011	0.000	0.262	0.22	
1013	4/20/2004	1:59:10 PM		25.796	23.676	25.79	26.074	23.76		49.243	53.288	17.503	32.059	-1.221	-7.579		48.707	0.073	14.643	0.003		1697.3	28.2889	51.8	11.9	40.7	2.803	0.011	0.011	0.000	0.262	0.22	
1014	4/20/2004	2:00:10 PM		25.819	23.684	25.803	26.127	23.753		49.371	53.247	17.486	32.258	-1.221	-7.582		47.057	0.074	14.643	0.003		1698.3	28.3056	51.8	11.5	40.8	2.814	0.011	0.011	0.000	0.264	0.22	
1015	4/20/2004	2:01:10 PM		25.837	23.702	25.816	26.155	23.791		48.95	52.786	17.416	31.897	-1.218	-7.582		47.434	0.072	14.643	0.003		1699.3	28.3222	51.3	11.6	40.4	2.787	0.011	0.010	0.000	0.260	0.22	
1016	4/20/2004	2:02:10 PM		25.862	23.722	25.825	26.21	23.841		49.123	53.164	17.588	31.938	-1.218	-7.576		49.921	0.075	14.643	0.003		1700.3	28.3389	51.7	12.2	40.5	2.794	0.011	0.011	0.000	0.270	0.23	
1017	4/20/2004	2:03:10 PM		25.971	23.732	25.84	26.255	23.961		45.087	52.672	17.361	28.197	1.796	0.224		51.731	0.003	14.643	0.003		1701.3	28.3556	51.2	12.7	36.6	2.526	0.000	0.000	0.000	0.012	0.01	
1018	4/20/2004	2:04:10 PM		25.893	23.744	25.872	26.257	24.023		48.223	52.699	17.501	31.059	-0.969	-6.532		47.833	0.097	14.643	0.003		1702.3	28.3722	51.2	11.7	39.6	2.733	0.014	0.014	0.000	0.356	0.30	
1019	4/20/2004	2:05:10 PM		25.889	23.744	25.868	26.272	23.973		48.565	52.666	17.345	31.517	-1.218	-7.44		48.004	0.074	14.643	0.003		1703.3	28.3889	51.2	11.8	40.0	2.761	0.011	0.011	0.000	0.269	0.23	
1020	4/20/2004	2:06:10 PM		25.903	23.739	25.852	26.262	23.928		49.019	52.992	17.373	31.95	-1.218	-7.498		47.153	0.073	14.643	0.003		1704.3	28.4056	51.5	11.6	40.5	2.791	0.011	0.011	0.000	0.262	0.22	
1021	4/20/2004	2:07:10 PM		25.914	23.764	25.838	26.322	23.813		48.971	52.977	17.389	31.944	-1.218	-7.475		48.498	0.071	14.643	0.004		1705.3	28.4222	51.5	11.9	40.5	2.789	0.011	0.010	0.000	0.256	0.22	
1022	4/20/2004	2:08:10 PM		25.923	23.754	25.792	26.282	23.687		49.16	53.108	17.335	32.194	-1.218	-7.535		46.967	0.075	14.643	0.003		1706.3	28.4389	51.6	11.5	40.7	2.805	0.011	0.011	0.000	0.269	0.23	
1023	4/20/2004	2:09:10 PM		25.923	23.748	25.737	26.226	23.596		48.867	52.851	17.308	31.899	-1.218	-7.553		48.446	0.073	14.643	0.003		1707.3	28.4556	51.4	11.9	40.4	2.784	0.011	0.011	0.000	0.264	0.22	
1024	4/20/2004	2:10:10 PM		25.927	23.752	25.706	26.115	23.486		49.187	53.255	17.377	32.137	-1.221	-7.553		49.309	0.072	14.643	0.003		1708.3	28.4722	51.8	12.1	40.7	2.804	0.011	0.011	0.000	0.259	0.22	
1025	4/20/2004	2:11:10 PM		25.932	23.757	25.69	26.095	23.41		48.971	53.004	17.359	31.921	-1.215	-7.553		45.642	0.073	14.643	0.003		1709.3	28.4889	51.5	11.2	40.4	2.789	0.011	0.011	0.000	0.264	0.22	
1026	4/20/2004	2:12:10 PM		25.935	23.751	25.669	26.033	23.489		48.778	52.851	17.436	31.601	-1.218	-7.556		48.279	0.071	14.643	0.003		1710.3	28.5056	51.4	11.8	40.2	2.771	0.011	0.010	0.000	0.258	0.22	
1027	4/20/2004	2:13:10 PM		25.918	23.743	25.632	26.026	23.536		48.731	52.811	17.281	31.769	-1.218	-7.521		47.215	0.071	14.643	0.003		1711.3	28.5222	51.3	11.6	40.3	2.775	0.011	0.010	0.000	0.258	0.22	
1028	4/20/2004	2:14:10 PM		25.926	23.747	25.625	26.07	23.575		49.239	53.18	17.346	32.213	-1.221	-7.547		47.18	0.072	14.643	0.003		1712.3	28.5389	51.7	11.6	40.7	2.808	0.011	0.011	0.000	0.259	0.22	
1029	4/20/2004	2:15:10 PM		25.925	23.745	25.614	26.143	23.654		48.971	53.045	17.321	32.046	-1.218	-7.538		47.34	0.074	14.643	0.003		1713.3	28.5556	51.6	11.6	40.5	2.793	0.011	0.011	0.000	0.268	0.23	
1030	4/20/2004	2:16:10 PM		25.913	23.739	25.587	26.156	23.752		48.959	52.981	17.275	32.049	-1.218	-7.547		48.59	0.072	14.643	0.003		1714.3	28.5722	51.5	11.9	40.5	2.793	0.011	0.011	0.000	0.261	0.22	
1031	4/20/2004	2:17:10 PM		25.918	23.743	25.582	26.241	23.792		48.861	52.789	17.298	31.983	-1.221	-7.535		48.696	0.069	14.643	0.003		1715.3	28.5889	51.3	11.9	40.4	2.787	0.010	0.010	0.000	0.250	0.21	
1032	4/20/2004	2:18:10 PM		25.923	23.749	25.567	26.277	23.777		49.158	53.201	17.287	32.202	-1.218	-7.521		48.74	0.072	14.643	0.003		1716.3	28.6056	51.7	11.9	40.7	2.805	0.011	0.011	0.000	0.260	0.22	
1033	4/20/2004	2:19:10 PM		25.908	23.749	25.547	26.237	23.842		49.096	53.157	17.339	32.088	-1.221	-7.55		47.465	0.072	14.643	0.003		1717.3	28.6222	51.7	11.6	40.6	2.799	0.011	0.011	0.000	0.260	0.22	
1034	4/20/2004	2:20:10 PM		25.898	23.753	25.492	26.261	23.872		48.627	52.507	17.26	31.696	-1.221	-7.452		49.291	0.063	14.643	0.003		1718.3	28.6389	51.0	12.1	40.2	2.769	0.009	0.009	0.000	0.231	0.20	
1035	4/20/2004	2:21:10 PM		25.888	23.748	25.466	26.271	23.842		48.778	52.764	17.246	31.808	-1.224	-7.498		49.234	0.072	14.643	0.003		1719.3	28.6556	51.3	12.1	40.3	2.778	0.011	0.011	0.000	0.263	0.22	
1036	4/20/2004	2:22:10 PM		25.903	23.769	25.482	26.332	23.878		49.15	53.135	17.077	32.438	-1.218	-7.53		46.687	0.073	14.643	0.003		1720.3	28.6722	51.7	11.4	40.8	2.813	0.011	0.011	0.000	0.263	0.22	
1037	4/20/2004	2:23:10 PM		25.898	23.778	25.471	26.356	23.867		48.812	52.9	17.011	32.161	-1.218	-7.145		47.042	0.076	14.643	0.003		1721.3	28.6889	51.4	11.5	40.5	2.791	0.011	0.011	0.000	0.276	0.24	
1038	4/20/2004	2:24:10 PM		25.888	23.783	25.461	26.381	23.892		48.998	53.074	16.959	32.397	-1.215	-7.33		47.904	0.073	14.643	0.003		1722.3	28.7056	51.6	11.7	40.7	2.806	0.011	0.011	0.000	0.264	0.22	
1039	4/20/2004	2:25:10 PM		25.883	23.778	25.431	26.381	23.932		49	52.971	16.986	32.399	-1.221	-7.385		48.231	0.073	14.643	0.003		1723.3	28.7222	51.5	11.8	40.7	2.806	0.011	0.011	0.000	0.264	0.22	
1040	4/20/2004	2:26:10 PM		25.883	23.794	25.442	26.372	24.073		48.548	52.668	17.405	31.443	-1.218	-7.426		48.402	0.072	14.643	0.003		1724.3	28.7389	51.2	11.9	40.0	2.758	0.011	0.011	0.000	0.265	0.23	
1041	4/20/2004	2:27:10 PM		25.874	23.804	25.433	26.397	24.058		48.737	52.757	17.443	31.659	-1.218	-7.327		48.348	0.069	14.643	0.003		1725.3	28.7556	51.3	11.8	40.2	2.772	0.010	0.010	0.000	0.253	0.22	
1042	4/20/2004	2:28:10 PM		25.876	23.821	25.44	26.484	24.095		48.855	52.743	17.418	31.8	-1.215	-7.547		48.707	0.071	14.643	0.003		1726.3	28.7722	51.3	11.9	40.3	2.780	0.011	0.010	0.000	0.259	0.22	
1043	4/20/2004	2:29:10 PM		25.883	23.848	25.457	26.536	24.097		48.913	52.89	17.188	32.046	-1.212	-7.538		48.027	0.073	14.643	0.003		1727.3	28.7889	51.4	11.8	40.5	2.791	0.011	0.011	0.000	0.265	0.23	
1044	4/20/2004	2:30:10 PM		25.874	23.845	25.428	26.537	24.098		49.079	52.996	17.277	32.17	-1.221	-7.55		49.689	0.072	14.643	0.003		1728.3	28.8056	51.5	12.2	40.6	2.801	0.011	0.011	0.000	0.261	0.22	
1045	4/20/2004	2:31:10 PM		25.87	23.851	25.384	26.559	23.96		48.847	52.77	17.193	32.049	-1.218	-7.547		45.355	0.073	14.643	0.003		1729.3	28.8222	51.3	11.1	40.4	2.789	0.011	0.011	0.000	0.266	0.23	
1046	4/20/2004	2:32:10 PM		25.867	23.858	25.356	26.585	23.841		48.675	52.693	17.005	32.075	-1.218	-7.55		48.268	0.072	14.643	0.003		1730.3	28.8389	51.2	11.8	40.4	2.784	0.011	0.011	0.000	0.263	0.22	
1047	4/20/2004	2:33:10 PM		25.878	23.869	25.362	26.541	23.642		48.814	52.809	17.008	32.182	-1.215	-7.547		46.742	0.072	14.643	0.003		1731.3	28.8556	51.3	11.5	40.5	2.792	0.011	0.011	0.000	0.262	0.22	
1048	4/20/2004	2:34:10 PM		25.863	23.869	25.337	26.491	23.581		48.894	52.903	16.98	32.326	-1.218	-7.556		47.163	0.071	14.643	0.003		1732.3	28.8722	51.4	11.6	40.6	2.800	0.011	0.010	0.000	0.258	0.22	
1049	4/20/2004	2:35:10 PM		25.862	23.857	25.315	26.395	23.47		49.241	53.294	17.016	32.553	-1.218	-7.547		50.194	0.07	14.643	0.003		1733.3	28.8889	51.8	12.3	40.9	2.820	0.010	0.010	0.000	0.253	0.22	
1050	4/20/2004	2:36:10 PM		25.855	23.851	25.309	26.343	23.569		49.1	53.079	17.751	31.708	-1.221	-7.457		50.284	0.073	14.643	0.003		1734.3	28.9056	51.6	12.3	40.4	2.786	0.011	0.011	0.000	0.267	0.23	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1051	4/20/2004	2:37:10 PM		25.858	23.859	25.322	26.307	23.602		48.308	52.33	17.71	30.955	-1.215	-7.426		45.667	0.071	14.643	0.004		1735.3	28.9222	50.9	11.2	39.6	2.732	0.011	0.010	0.000	0.265	0.23	
1052	4/20/2004	2:38:10 PM		25.842	23.847	25.3	26.28	23.665		48.836	52.747	17.538	31.595	-1.221	-7.55		48.913	0.072	14.643	0.003		1736.3	28.9389	51.3	12.0	40.2	2.773	0.011	0.011	0.000	0.265	0.23	
1053	4/20/2004	2:39:10 PM		25.841	23.852	25.3	26.309	23.77		48.585	52.743	17.549	31.361	-1.221	-7.246		45.887	0.067	14.643	0.003		1737.3	28.9556	51.3	11.2	40.0	2.756	0.010	0.010	0.000	0.248	0.21	
1054	4/20/2004	2:40:10 PM		25.84	23.851	25.304	26.393	23.824		48.699	52.658	17.521	31.54	-1.218	-7.492		51.522	0.072	14.643	0.003		1738.3	28.9722	51.2	12.6	40.1	2.766	0.011	0.011	0.000	0.265	0.23	
1055	4/20/2004	2:41:10 PM		25.82	23.845	25.298	26.383	23.869		48.911	52.88	17.499	31.751	-1.221	-7.614		48.857	0.07	14.643	0.003		1739.3	28.9889	51.4	12.0	40.3	2.781	0.010	0.010	0.000	0.257	0.22	
1056	4/20/2004	2:42:10 PM		25.841	23.857	25.3	26.469	23.91		48.691	52.71	17.048	32.09	-1.218	-7.44		49.253	0.068	14.643	0.003		1740.3	29.0056	51.2	12.1	40.4	2.785	0.010	0.010	0.000	0.249	0.21	
1057	4/20/2004	2:43:10 PM		25.832	23.847	25.26	26.505	23.936		48.214	52.303	17.6	30.889	-1.218	-7.518		48.569	0.069	14.643	0.003		1741.3	29.0222	50.8	11.9	39.6	2.727	0.010	0.010	0.000	0.258	0.22	
1058	4/20/2004	2:44:10 PM		25.828	23.858	25.246	26.541	23.977		48.587	52.573	17.499	31.484	-1.218	-7.588		50.171	0.07	14.643	0.003		1742.3	29.0389	51.1	12.3	40.0	2.760	0.010	0.010	0.000	0.259	0.22	
1059	4/20/2004	2:45:10 PM		25.833	23.859	25.252	26.552	24.043		48.167	52.173	17.468	31.049	-1.218	-7.446		48.052	0.071	14.643	0.003		1743.3	29.0556	50.7	11.8	39.6	2.731	0.011	0.011	0.000	0.265	0.23	
1060	4/20/2004	2:46:10 PM		25.825	23.865	25.253	26.618	24.054		48.447	52.494	17.456	31.287	-1.218	-7.556		48.145	0.069	14.643	0.003		1744.3	29.0722	51.0	11.8	39.9	2.749	0.010	0.010	0.000	0.256	0.22	
1061	4/20/2004	2:47:10 PM		25.832	23.877	25.25	26.62	24.086		48.42	52.434	17.365	31.439	-1.218	-7.602		50.559	0.07	14.643	0.003		1745.3	29.0889	51.0	12.4	39.9	2.753	0.010	0.010	0.000	0.260	0.22	
1062	4/20/2004	2:48:10 PM		25.817	23.873	25.236	26.67	24.037		48.254	52.113	17.36	31.25	-1.218	-7.478		47.476	0.065	14.643	0.003		1746.3	29.1056	50.6	11.6	39.8	2.741	0.010	0.010	0.000	0.242	0.21	
1063	4/20/2004	2:49:10 PM		25.804	23.879	25.217	26.662	24.063		48.932	52.888	17.509	31.835	-1.224	-7.527		48.538	0.068	14.643	0.003		1747.3	29.1222	51.4	11.9	40.4	2.784	0.010	0.010	0.000	0.250	0.21	
1064	4/20/2004	2:50:10 PM		25.825	23.891	25.243	26.698	24.099		48.868	52.799	17.526	31.718	-1.218	-7.599		47.175	0.069	14.643	0.003		1748.3	29.1389	51.3	11.6	40.3	2.778	0.010	0.010	0.000	0.254	0.22	
1065	4/20/2004	2:51:10 PM		25.82	23.901	25.239	26.719	23.965		48.758	52.789	17.475	31.599	-1.221	-7.599		49.349	0.07	14.643	0.003		1749.3	29.1556	51.3	12.1	40.2	2.770	0.010	0.010	0.000	0.258	0.22	
1066	4/20/2004	2:52:10 PM		25.827	23.918	25.255	26.705	23.896		49.245	53.149	17.591	31.977	-1.215	-7.538		47.668	0.072	14.643	0.004		1750.3	29.1722	51.7	11.7	40.6	2.800	0.011	0.011	0.000	0.262	0.22	
1067	4/20/2004	2:53:10 PM		25.943	23.929	25.277	26.757	24.083		48.403	52.482	17.394	31.377	-1.215	-7.128		49.581	0.061	14.643	0.004		1751.3	29.1889	51.0	12.2	39.9	2.750	0.009	0.009	0.000	0.226	0.19	
1068	4/20/2004	2:54:10 PM		25.953	23.954	25.277	26.736	24.308		48.565	52.728	17.398	31.48	-1.218	-7.437		46.375	0.071	14.643	0.003		1752.3	29.2056	51.3	11.4	40.0	2.759	0.011	0.011	0.000	0.262	0.22	
1069	4/20/2004	2:55:10 PM		25.902	23.969	25.296	26.846	24.287		48.563	52.486	17.382	31.622	-1.218	-7.501		49.447	0.073	14.643	0.003		1753.3	29.2222	51.0	12.1	40.1	2.764	0.011	0.011	0.000	0.269	0.23	
1070	4/20/2004	2:56:10 PM		25.832	23.973	25.281	26.825	24.232		48.619	52.569	17.512	31.416	-1.221	-7.625		50.24	0.069	14.643	0.003		1754.3	29.2389	51.1	12.3	40.0	2.759	0.010	0.010	0.000	0.255	0.22	
1071	4/20/2004	2:57:10 PM		25.776	23.967	25.259	26.799	24.361		48.629	52.519	17.415	31.503	-1.224	-7.614		47.883	0.069	14.643	0.003		1755.3	29.2556	51.0	11.7	40.1	2.762	0.010	0.010	0.000	0.255	0.22	
1072	4/20/2004	2:58:10 PM		25.75	23.996	25.284	26.878	24.415		48.693	52.652	17.417	31.607	-1.218	-7.608		51.057	0.069	14.643	0.003		1756.3	29.2722	51.2	12.5	40.2	2.768	0.010	0.010	0.000	0.254	0.22	
1073	4/20/2004	2:59:10 PM		25.725	24.021	25.299	26.918	24.465		48.679	52.662	17.339	31.737	-1.218	-7.611		47.317	0.069	14.643	0.003		1757.3	29.2889	51.2	11.6	40.2	2.772	0.010	0.010	0.000	0.254	0.22	
1074	4/20/2004	3:00:10 PM		25.683	24.034	25.297	26.891	24.583		48.643	52.614	17.428	31.579	-1.218	-7.608		47.855	0.069	14.643	0.003		1758.3	29.3056	51.1	11.7	40.1	2.766	0.010	0.010	0.000	0.254	0.22	
1075	4/20/2004	3:01:10 PM		25.678	24.059	25.311	26.861	24.633		48.434	52.486	17.368	31.384	-1.218	-7.605		48.487	0.069	14.643	0.003		1759.3	29.3222	51.0	11.9	39.9	2.752	0.010	0.010	0.000	0.256	0.22	
1076	4/20/2004	3:02:10 PM		25.662	24.068	25.31	26.96	24.726		48.641	52.467	17.413	31.554	-1.221	-7.605		49.802	0.07	14.643	0.003		1760.3	29.3389	51.0	12.2	40.1	2.765	0.010	0.010	0.000	0.258	0.22	
1077	4/20/2004	3:03:10 PM		25.656	24.098	25.3	27.019	24.756		48.455	52.494	17.34	31.349	-1.218	-7.608		48.271	0.069	14.643	0.003		1761.3	29.3556	51.0	11.8	39.9	2.751	0.010	0.010	0.000	0.256	0.22	
1078	4/20/2004	3:04:10 PM		25.651	24.127	25.244	27.084	24.836		48.702	52.679	17.361	31.655	-1.221	-7.602		49.403	0.07	14.643	0.003		1762.3	29.3722	51.2	12.1	40.2	2.770	0.010	0.010	0.000	0.258	0.22	
1079	4/20/2004	3:05:10 PM		25.64	24.141	25.258	27.132	24.86		48.617	52.695	17.324	31.579	-1.221	-7.356		46.347	0.071	14.643	0.003		1763.3	29.3889	51.2	11.4	40.1	2.765	0.011	0.011	0.000	0.262	0.22	
1080	4/20/2004	3:06:10 PM		25.64	24.172	25.259	27.188	24.855		48.627	52.645	17.339	31.636	-1.221	-7.483		49.854	0.072	14.643	0.003		1764.3	29.4056	51.2	12.2	40.1	2.767	0.011	0.011	0.000	0.266	0.23	
1081	4/20/2004	3:07:10 PM		25.64	24.196	25.268	27.217	24.879		48.38	52.359	17.326	31.384	-1.221	-7.57		50.137	0.069	14.643	0.003		1765.3	29.4222	50.9	12.3	39.9	2.750	0.010	0.010	0.000	0.256	0.22	
1082	4/20/2004	3:08:10 PM		25.634	24.225	25.277	27.276	24.918		48.706	52.793	17.354	31.673	-1.221	-7.481		50.3	0.072	14.643	0.003		1766.3	29.4389	51.3	12.3	40.2	2.771	0.011	0.011	0.000	0.265	0.23	
1083	4/20/2004	3:09:10 PM		25.643	24.245	25.287	27.306	24.973		48.702	52.641	17.073	32.016	-1.221	-7.588		49.036	0.07	14.643	0.003		1767.3	29.4556	51.2	12.0	40.4	2.783	0.010	0.010	0.000	0.257	0.22	
1084	4/20/2004	3:10:10 PM		25.648	24.275	25.302	27.33	24.978		48.782	52.834	17.181	31.989	-1.221	-7.434		49.128	0.071	14.643	0.003		1768.3	29.4722	51.4	12.0	40.4	2.784	0.011	0.010	0.000	0.260	0.22	
1085	4/20/2004	3:11:10 PM		25.648	24.31	25.307	27.331	25.023		48.793	52.778	17.293	31.88	-1.221	-7.538		46.516	0.072	14.643	0.003		1769.3	29.4889	51.3	11.4	40.3	2.781	0.011	0.011	0.000	0.264	0.22	
1086	4/20/2004	3:12:10 PM		25.647	24.334	25.331	27.32	24.992		48.556	52.623	17.171	31.722	-1.218	-7.544		46.402	0.07	14.643	0.003		1770.3	29.5056	51.2	11.4	40.1	2.767	0.010	0.010	0.000	0.258	0.22	
1087	4/20/2004	3:13:10 PM		25.641	24.354	25.325	27.314	25.011		48.689	52.679	17.133	31.876	-1.221	-7.567		47.86	0.074	14.643	0.003		1771.3	29.5222	51.2	11.7	40.3	2.777	0.011	0.011	0.000	0.271	0.23	
1088	4/20/2004	3:14:10 PM		25.645	24.378	25.339	27.313	25.01		48.65	52.811	17.173	31.841	-1.221	-7.249		49.339	0.056	14.643	0.003		1772.3	29.5389	51.3	12.1	40.2	2.775	0.008	0.008	0.000	0.205	0.17	
1089	4/20/2004	3:15:10 PM		25.634	24.397	25.323	27.302	25.029		48.459	52.579	17.296	31.513	-1.224	-7.27		48.354	0.07	14.643	0.003		1773.3	29.5556	51.1	11.8	40.0	2.757	0.010	0.010	0.000	0.259	0.22	
1090	4/20/2004	3:16:10 PM		25.659	24.437	25.368	27.407	25.029		48.693	52.679	17.2	31.831	-1.221	-7.576		48.598	0.073	14.643	0.003		1774.3	29.5722	51.2	11.9	40.3	2.776	0.011	0.011	0.000	0.268	0.23	
1091	4/20/2004	3:17:10 PM		25.661	24.454	25.375	27.459	24.936		48.687	52.619	17.261	31.792	-1.218	-7.616		53.239	0.07	14.643	0.003		1775.3	29.5889	51.1	13.0	40.2	2.774	0.010	0.010	0.000	0.257	0.22	
1092	4/20/2004	3:18:10 PM		25.659	24.471	25.368	27.411	24.839		48.772	52.691	17.289	31.862	-1.221	-7.642		46.867	0.069	14.643	0.003		1776.3	29.6056	51.2	11.5	40.3	2.780	0.010	0.010	0.000	0.253	0.21	
1093	4/20/2004	3:19:10 PM		25.671	24.484	25.38	27.363	24.696		48.818	52.903	17.349	31.8	-1.221	-7.501		48.408	0.068	14.643	0.003		1777.3	29.6222	51.4	11.9	40.3	2.779	0.010	0.010	0.000	0.249	0.21	
1094	4/20/2004	3:20:10 PM		25.683	24.511	25.387	27.306	24.613		48.287	52.341	17.288	31.338	-1.221	-7.628		48.548	0.069	14.643	0.003		1778.3	29.6389	50.9	11.9	39.8	2.745	0.010	0.010	0.000	0.256	0.22	
1095	4/20/2004	3:21:10 PM		25.694	24.532	25.418	27.247	24.624		48.836	52.782	17.401	31.772	-1.221	-7.631		50.865	0.072	14.643	0.003		1779.3	29.6556	51.3	12.5	40.3	2.779	0.011	0.011	0.000	0.263	0.22	
1096	4/20/2004	3:22:10 PM		25.674	24.522	25.393	27.192	24.664		48.644	52.585	17.313	31.751	-1.221	-7.46		48.043	0.066	14.643	0.003		1780.3	29.6722	51.1	11.8	40.2	2.771	0.010	0.010	0.000	0.242	0.21	
1097	4/20/2004	3:23:10 PM		25.67	24.528	25.389	27.173	24.78		48.662	52.73	17.201	31.852	-1.224	-7.515		49.347	0.073	14.643	0.003		1781.3	29.6889	51.3	12.1	40.3	2.776	0.011	0.011	0.000	0.267	0.23	
1098	4/20/2004	3:24:10 PM		25.696	24.574	25.456	27.244	24.821		48.668	52.6	17.299	31.694	-1.218	-7.605		49.535	0.07	14.643	0.003		1782.3	29.7056	51.1	12.1	40.2	2.770	0.010	0.010	0.000	0.256	0.22	
1099	4/20/2004	3:25:10 PM		25.683	24.576	25.417	27.166	24.943		48.625	52.6	17.273	31.663	-1.224	-7.683		48.924	0.073	14.643	0.003		1783.3	29.7222	51.1	12.0	40.1	2.768	0.011	0.011	0.000	0.268	0.23	
1100	4/20/2004	3:26:10 PM		25.7	24.598	25.449	27.258	24.92		48.764	52.587	17.17	32.032	-1.221	-7.429		47.703	0.07	14.643	0.003		1784.3	29.7389	51.1	11.7	40.4	2.785	0.010	0.010	0.000	0.255	0.22	
1101	4/20/2004	3:27:10 PM		25.702	24.605	25.376	27.33	25.107		48.581	52.625	17.23	31.73	-1.224	-7.35		49.48	0.072	14.643	0.003		1785.3	29.7556	51.2	12.1	40.2	2.769	0.011	0.011	0.000	0.265	0.23	
1102	4/20/2004	3:28:10 PM		25.709	24.622	25.373	27.347	25.144		48.615	52.471	17.257	31.675	-1.221	-7.57		50.684	0.076	14.643	0.003		1786.3	29.7722	51.0	12.4	40.1	2.768	0.011	0.011	0.000	0.279	0.24	
1103	4/20/2004	3:29:10 PM		25.706	24.649	25.38	27.339	25.171		48.61	52.575	17.178	31.823	-1.221	-7.582		50.215	0.067	14.643	0.003		1787.3	29.7889	51.1	12.3	40.2	2.773	0.010	0.010	0.000	0.246	0.21	
1104	4/20/2004	3:30:10 PM		25.714	24.663	25.399	27.417	25.18		48.664	52.699	17.159	31.821	-1.221	-7.622		48.598	0.071	14.643	0.003		1788.3	29.8056	51.2	11.9	40.2	2.775	0.011	0.010	0.000	0.260	0.22	
1105	4/20/2004	3:31:10 PM		25.712	24.68	25.426	27.489	25.222		48.783	52.623	17.143	31.989	-1.215	-7.64		49.512	0.07	14.643	0.003		1789.3	29.8222	51.2	12.1	40.4	2.784	0.010	0.010	0.000	0.255	0.22	
1106	4/20/2004	3:32:10 PM		25.72	24.698	25.414	27.492	25.245		48.691	52.739	17.071	31.905	-1.218	-7.64		50.644	0.071	14.643	0.003		1790.3	29.8389	51.3	12.4	40.3	2.778	0.011	0.010	0.000	0.260	0.22	
1107	4/20/2004	3:33:10 PM		25.708	24.696	25.397	27.51	25.218		48.697	52.782	17.21	31.771	-1.224	-7.651		47.092	0.068	14.643	0.003		1791.3	29.8556	51.3	11.5	40.2	2.774	0.010	0.010	0.000	0.249	0.21	
1108	4/20/2004	3:34:10 PM		25.731	24.739	25.435	27.523	25.281		48.482	52.335	17.07	31.845	-1.221	-7.637		49.103	0.07	14.643	0.003		1792.3	29.8722	50.9	12.0	40.2	2.769	0.010	0.010	0.000	0.257	0.22	
1109	4/20/2004	3:35:10 PM		25.739	24.757	25.453	27.566	25.229		48.511	52.544	17.058	31.751	-1.218	-7.486		47.672	0.066	14.643	0.003		1793.3	29.8889	51.1	11.7	40.1	2.767	0.010	0.010	0.000	0.242	0.21	
1110	4/20/2004	3:36:10 PM		25.736	24.775	25.455	27.583	25.321		48.793	52.747	17.115	32.02	-1.218	-7.538		48.177	0.072	14.643	0.003		1794.3	29.9056	51.3	11.8	40.4	2.786	0.011	0.011	0.000	0.262	0.22	
1111	4/20/2004	3:37:10 PM		25.748	24.797	25.473	27.581	25.288		48.648	52.598	16.976	32.022	-1.221	-7.622		48.617	0.072	14.643	0.003		1795.3	29.9222	51.1	11.9	40.3	2.781	0.011	0.011	0.000	0.263	0.22	
1112	4/20/2004	3:38:10 PM		25.756	24.815	25.475	27.628	25.106		48.897	52.876	16.968	32.184	-1.221	-7.625		46.527	0.066	14.643	0.003		1796.3	29.9389	51.4	11.4	40.5	2.795	0.010	0.010	0.000	0.240	0.20	
1113	4/20/2004	3:39:10 PM		25.763	24.827	25.478	27.6	24.963		48.594	52.664	17.017	31.966	-1.221	-7.278		46.723	0.072	14.643	0.003		1797.3	29.9556	51.2	11.5	40.3	2.777	0.011	0.011	0.000	0.263	0.22	
1114	4/20/2004	3:40:10 PM		25.764	24.847	25.493	27.551	24.934		48.894	52.875	17.023	32.213	-1.224	-7.42		50.897	0.069	14.643	0.003		1798.3	29.9722	51.4	12.5	40.6	2.796	0.010	0.010	0.000	0.250	0.21	
1115	4/20/2004	3:41:10 PM		25.76	24.848	25.479	27.437	24.785		49.1	53.174	16.828	32.539	-1.224	-7.535		48.018	0.071	14.643	0.003		1799.3	29.9889	51.7	11.8	40.8	2.814	0.011	0.010	0.000	0.256	0.22	
1116	4/20/2004	3:42:10 PM		25.77	24.873	25.509	27.467	24.71		49.054	53.108	16.838	32.531	-1.218	-7.616		46.45	0.071	14.643	0.003		1800.3	30.0056	51.6	11.4	40.8	2.813	0.011	0.010	0.000	0.256	0.22	
1117	4/20/2004	3:43:10 PM		25.77	24.868	25.509	27.422	24.755		49.048	53.01	16.867	32.44	-1.221	-7.625		47.426	0.073	14.643	0.003		1801.3	30.0222	51.5	11.6	40.7	2.809	0.011	0.011	0.000	0.263	0.22	
1118	4/20/2004	3:44:10 PM		25.754	24.858	25.493	27.381	24.864		48.917	52.757	16.852	32.42	-1.224	-7.57		49.361	0.073	14.643	0.003		1802.3	30.0389	51.3	12.1	40.7	2.804	0.011	0.011	0.000	0.264	0.22	
1119	4/20/2004	3:45:10 PM		25.755	24.878	25.509	27.392	24.965		49.056	53.033	16.867	32.502	-1.218	-7.556		50.125	0.07	14.643	0.003		1803.3	30.0556	51.6	12.3	40.8	2.812	0.010	0.010	0.000	0.252	0.21	
1120	4/20/2004	3:46:10 PM		25.765	24.884	25.475	27.373	25.04		48.994	53.046	16.855	32.512	-1.218	-7.582		46.218	0.071	14.643	0.003		1804.3	30.0722	51.6	11.3	40.8	2.810	0.011	0.010	0.000	0.256	0.22	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1121	4/20/2004	3:47:10 PM		25.772	24.905	25.446	27.459	24.972		48.571	52.614	16.742	32.155	-1.218	-7.588		48.325	0.071	14.643	0.003		1805.3	30.0889	51.1	11.8	40.4	2.783	0.011	0.010	0.000	0.259	0.22	
1122	4/20/2004	3:47:13 PM		25.757	24.88	25.416	27.424	24.992		48.575	52.633	16.813	31.969	-1.224	-7.59		47.505	0.069	14.643	0.003		1805.4	30.0897	51.2	11.6	40.3	2.777	0.010	0.010	0.000	0.252	0.21	
1123	4/20/2004	3:48:13 PM		25.768	24.897	25.447	27.366	25.123		48.588	52.589	16.808	32.088	-1.221	-7.605		47.918	0.069	14.643	0.003		1806.4	30.1064	51.1	11.7	40.3	2.781	0.010	0.010	0.000	0.252	0.21	
1124	4/20/2004	3:49:13 PM		25.759	24.913	25.449	27.392	25.17		48.811	52.805	16.905	32.256	-1.224	-7.596		50.34	0.069	14.643	0.003		1807.4	30.1231	51.3	12.3	40.5	2.795	0.010	0.010	0.000	0.251	0.21	
1125	4/20/2004	3:50:13 PM		25.777	24.93	25.466	27.469	25.237		48.868	52.855	16.843	32.381	-1.221	-7.472		46.033	0.071	14.643	0.003		1808.4	30.1397	51.4	11.3	40.6	2.801	0.011	0.010	0.000	0.257	0.22	
1126	4/20/2004	3:51:13 PM		25.774	24.943	25.483	27.531	25.309		48.98	53.085	16.629	32.679	-1.215	-7.619		48.452	0.073	14.643	0.004		1809.4	30.1564	51.6	11.9	40.8	2.815	0.011	0.011	0.000	0.263	0.22	
1127	4/20/2004	3:52:13 PM		25.782	24.96	25.486	27.594	25.332		48.789	52.805	16.739	32.42	-1.221	-7.446		48.98	0.072	14.643	0.003		1810.4	30.1731	51.3	12.0	40.6	2.800	0.011	0.011	0.000	0.261	0.22	
1128	4/20/2004	3:53:13 PM		25.779	24.958	25.469	27.602	25.284		48.826	52.865	16.619	32.543	-1.224	-7.437		48.83	0.072	14.643	0.003		1811.4	30.1897	51.4	12.0	40.7	2.805	0.011	0.011	0.000	0.260	0.22	
1129	4/20/2004	3:54:13 PM		25.787	24.986	25.507	27.565	25.357		49.089	53.168	16.699	32.666	-1.218	-7.625		46.544	0.072	14.643	0.003		1812.4	30.2064	51.7	11.4	40.9	2.818	0.011	0.011	0.000	0.259	0.22	
1130	4/20/2004	3:55:13 PM		25.795	24.999	25.515	27.602	25.41		48.87	52.768	16.6	32.531	-1.221	-7.492		47.301	0.072	14.643	0.003		1813.4	30.2231	51.3	11.6	40.7	2.806	0.011	0.011	0.000	0.260	0.22	
1131	4/20/2004	3:56:13 PM		25.958	25.017	25.502	27.605	25.478		49.077	53.267	16.724	32.679	-1.224	-7.168		49.535	0.076	14.643	0.003		1814.4	30.2397	51.8	12.1	40.9	2.818	0.011	0.011	0.000	0.273	0.23	
1132	4/20/2004	3:57:13 PM		25.921	25.025	25.515	27.698	25.541		48.965	52.88	16.591	32.627	-1.221	-7.562		47.774	0.065	14.643	0.003		1815.4	30.2564	51.4	11.7	40.8	2.813	0.010	0.010	0.000	0.234	0.20	
1133	4/20/2004	3:58:13 PM		25.904	25.048	25.533	27.796	25.459		49.006	52.824	16.725	32.605	-1.221	-7.77		48.371	0.074	14.643	0.003		1816.4	30.2731	51.4	11.9	40.8	2.813	0.011	0.011	0.000	0.266	0.23	
1134	4/20/2004	3:59:13 PM		26.115	25.065	25.545	27.808	25.366		49.425	53.344	16.656	33.163	-1.221	-7.137		45.265	0.057	14.643	0.003		1817.4	30.2897	51.9	11.1	41.3	2.847	0.008	0.008	0.000	0.203	0.17	
1135	4/20/2004	4:00:13 PM		26.098	25.092	25.563	27.69	25.238		48.863	52.931	16.661	32.502	-1.218	-7.203		50.308	0.104	14.643	0.004		1818.4	30.3064	51.5	12.3	40.7	2.805	0.016	0.015	0.000	0.375	0.32	
1136	4/20/2004	4:01:13 PM		26.023	25.097	25.553	27.705	25.143		48.951	52.788	16.674	32.656	-1.221	-7.443		48.168	0.073	14.643	0.003		1819.4	30.3231	51.3	11.8	40.8	2.813	0.011	0.011	0.000	0.263	0.22	
1137	4/20/2004	4:02:13 PM		25.989	25.104	25.554	27.662	25.11		48.971	52.84	16.705	32.547	-1.218	-7.492		48.148	0.071	14.643	0.003		1820.4	30.3397	51.4	11.8	40.8	2.810	0.011	0.010	0.000	0.256	0.22	
1138	4/20/2004	4:03:13 PM		25.949	25.114	25.554	27.592	25.085		49.249	53.122	16.576	32.99	-1.221	-7.553		46.992	0.072	14.643	0.003		1821.4	30.3564	51.6	11.5	41.1	2.835	0.011	0.011	0.000	0.257	0.22	
1139	4/20/2004	4:04:13 PM		25.924	25.114	25.554	27.592	25.185		49.411	53.332	16.589	33.151	-1.221	-7.562		49.889	0.072	14.643	0.003		1822.4	30.3731	51.9	12.2	41.3	2.846	0.011	0.011	0.000	0.256	0.22	
1140	4/20/2004	4:05:13 PM		25.916	25.135	25.49	27.638	25.326		49.394	53.249	16.493	33.202	-1.221	-7.559		47.922	0.072	14.643	0.003		1823.4	30.3897	51.8	11.7	41.3	2.847	0.011	0.011	0.000	0.256	0.22	
1141	4/20/2004	4:06:13 PM		25.897	25.162	25.512	27.679	25.417		48.623	52.418	17.191	31.802	-1.218	-7.57		48.435	0.069	14.643	0.003		1824.4	30.4064	50.9	11.9	40.2	2.773	0.010	0.010	0.000	0.252	0.21	
1142	4/20/2004	4:07:13 PM		25.88	25.17	25.52	27.772	25.375		48.679	52.558	17.219	31.862	-1.224	-7.512		47.818	0.069	14.643	0.003		1825.4	30.4231	51.1	11.7	40.3	2.777	0.010	0.010	0.000	0.252	0.21	
1143	4/20/2004	4:08:13 PM		25.842	25.176	25.531	27.779	25.332		48.868	52.78	17.35	31.876	-1.221	-7.567		49.518	0.068	14.643	0.003		1826.4	30.4397	51.3	12.1	40.4	2.784	0.010	0.010	0.000	0.247	0.21	
1144	4/20/2004	4:09:13 PM		25.814	25.188	25.543	27.776	25.384		48.403	52.312	17.13	31.572	-1.221	-7.564		53.193	0.069	14.643	0.003		1827.4	30.4564	50.8	13.0	40.0	2.757	0.010	0.010	0.000	0.253	0.22	
1145	4/20/2004	4:10:13 PM		25.785	25.21	25.565	27.727	25.48		48.633	52.515	17.124	31.852	-1.221	-7.556		51.479	0.07	14.643	0.003		1828.4	30.4731	51.0	12.6	40.2	2.775	0.010	0.010	0.000	0.255	0.22	
1146	4/20/2004	4:11:13 PM		25.742	25.212	25.562	27.769	25.497		48.735	52.764	17.226	31.821	-1.224	-7.564		49.662	0.069	14.643	0.003		1829.4	30.4897	51.3	12.2	40.3	2.777	0.010	0.010	0.000	0.251	0.21	
1147	4/20/2004	4:12:13 PM		25.75	25.239	25.599	27.891	25.585		48.764	52.699	17.141	31.993	-1.218	-7.556		47.347	0.07	14.643	0.003		1830.4	30.5064	51.2	11.6	40.4	2.784	0.010	0.010	0.000	0.254	0.22	
1148	4/20/2004	4:13:13 PM		25.767	25.241	25.581	27.834	25.597		48.895	52.96	17.166	32.016	-1.221	-7.567		51.746	0.069	14.643	0.003		1831.4	30.5231	51.5	12.7	40.5	2.789	0.010	0.010	0.000	0.250	0.21	
1149	4/20/2004	4:14:13 PM		25.81	25.274	25.609	27.926	25.65		48.418	52.262	17.025	31.706	-1.221	-7.562		48.6	0.07	14.643	0.003		1832.4	30.5397	50.8	11.9	40.1	2.762	0.010	0.010	0.000	0.256	0.22	
1150	4/20/2004	4:15:13 PM		25.862	25.286	25.637	27.963	25.652		48.671	52.563	17.077	31.905	-1.218	-7.562		48.381	0.069	14.643	0.004		1833.4	30.5564	51.1	11.9	40.3	2.778	0.010	0.010	0.000	0.251	0.21	
1151	4/20/2004	4:16:13 PM		25.879	25.294	25.624	27.896	25.619		48.604	52.54	16.981	32.014	-1.221	-7.562		49.918	0.07	14.643	0.003		1834.4	30.5731	51.1	12.2	40.3	2.779	0.010	0.010	0.000	0.254	0.22	
1152	4/20/2004	4:17:13 PM		25.898	25.288	25.603	27.94	25.498		48.747	52.66	16.877	32.319	-1.224	-7.559		48.581	0.07	14.643	0.003		1835.4	30.5897	51.2	11.9	40.5	2.795	0.010	0.010	0.000	0.253	0.22	
1153	4/20/2004	4:18:13 PM		25.934	25.324	25.564	28.006	25.404		48.72	52.753	16.88	32.239	-1.218	-7.559		48.237	0.069	14.643	0.003		1836.4	30.6064	51.3	11.8	40.5	2.791	0.010	0.010	0.000	0.250	0.21	
1154	4/20/2004	4:19:13 PM		25.954	25.329	25.574	27.946	25.244		48.783	52.851	16.917	32.28	-1.221	-7.492		50.169	0.071	14.643	0.003		1837.4	30.6231	51.4	12.3	40.5	2.795	0.011	0.010	0.000	0.257	0.22	
1155	4/20/2004	4:20:13 PM		25.953	25.338	25.573	27.905	25.209		48.646	52.648	16.905	32.092	-1.221	-7.547		46.118	0.069	14.643	0.003		1838.4	30.6397	51.2	11.3	40.4	2.783	0.010	0.010	0.000	0.251	0.21	
1156	4/20/2004	4:21:13 PM		25.967	25.342	25.577	27.854	24.982		48.627	52.544	16.823	32.268	-1.221	-7.553		47.914	0.07	14.643	0.003		1839.4	30.6564	51.1	11.7	40.4	2.789	0.010	0.010	0.000	0.254	0.22	
1157	4/20/2004	4:22:13 PM		25.966	25.341	25.576	27.778	24.886		48.982	53.164	16.95	32.377	-1.221	-7.544		53.977	0.07	14.643	0.003		1840.4	30.6731	51.7	13.2	40.7	2.805	0.010	0.010	0.000	0.252	0.21	
1158	4/20/2004	4:23:13 PM		25.96	25.345	25.58	27.712	24.931		48.756	52.733	16.756	32.389	-1.221	-7.538		46.064	0.071	14.643	0.003		1841.4	30.6897	51.3	11.3	40.6	2.797	0.011	0.010	0.000	0.257	0.22	
1159	4/20/2004	4:24:13 PM		25.959	25.339	25.589	27.666	25.029		48.708	52.732	16.895	32.231	-1.221	-7.544		49.138	0.071	14.643	0.003		1842.4	30.7064	51.3	12.0	40.5	2.790	0.011	0.010	0.000	0.257	0.22	
1160	4/20/2004	4:25:13 PM		25.949	25.349	25.594	27.696	25.139		48.677	52.805	16.878	32.176	-1.224	-7.547		47.491	0.069	14.643	0.003		1843.4	30.7231	51.3	11.6	40.4	2.787	0.010	0.010	0.000	0.250	0.21	
1161	4/20/2004	4:26:13 PM		25.948	25.338	25.593	27.73	25.223		48.783	52.826	16.852	32.307	-1.224	-7.547		48.773	0.07	14.643	0.003		1844.4	30.7397	51.4	12.0	40.5	2.795	0.010	0.010	0.000	0.253	0.22	
1162	4/20/2004	4:27:13 PM		25.958	25.338	25.613	27.795	25.303		48.733	52.892	16.875	32.227	-1.221	-7.538		48.456	0.069	14.643	0.003		1845.4	30.7564	51.4	11.9	40.5	2.791	0.010	0.010	0.000	0.250	0.21	
1163	4/20/2004	4:28:13 PM		25.949	25.344	25.609	27.816	25.324		48.675	52.801	16.808	32.254	-1.221	-7.533		46.923	0.07	14.643	0.003		1846.4	30.7731	51.3	11.5	40.5	2.790	0.010	0.010	0.000	0.254	0.22	
1164	4/20/2004	4:29:13 PM		25.96	25.35	25.625	27.907	25.401		48.737	52.844	16.892	32.272	-1.221	-7.533		48.146	0.07	14.643	0.003		1847.4	30.7897	51.4	11.8	40.5	2.793	0.010	0.010	0.000	0.253	0.22	
1165	4/20/2004	4:30:13 PM		25.967	25.362	25.632	27.884	25.442		48.77	53.012	16.972	32.083	-1.221	-7.538		47.778	0.067	14.643	0.003		1848.4	30.8064	51.5	11.7	40.4	2.787	0.010	0.010	0.000	0.243	0.21	
1166	4/20/2004	4:31:13 PM		25.968	25.358	25.623	27.915	25.483		48.654	52.753	16.834	32.188	-1.221	-7.538		47.891	0.07	14.643	0.003		1849.4	30.8231	51.3	11.7	40.4	2.787	0.010	0.010	0.000	0.254	0.22	
1167	4/20/2004	4:32:13 PM		25.98	25.375	25.58	27.887	25.501		48.805	52.82	16.745	32.492	-1.221	-7.538		48.563	0.068	14.643	0.003		1850.4	30.8397	51.3	11.9	40.6	2.803	0.010	0.010	0.000	0.245	0.21	
1168	4/20/2004	4:33:13 PM		25.987	25.377	25.582	27.939	25.492		48.471	52.71	16.787	32.022	-1.218	-7.44		47.889	0.07	14.643	0.003		1851.4	30.8564	51.2	11.7	40.2	2.775	0.010	0.010	0.000	0.255	0.22	
1169	4/20/2004	4:34:13 PM		25.984	25.384	25.594	27.941	25.499		48.903	53.075	16.887	32.379	-1.221	-7.527		50.575	0.07	14.643	0.003		1852.4	30.8731	51.6	12.4	40.6	2.802	0.010	0.010	0.000	0.253	0.21	
1170	4/20/2004	4:35:13 PM		25.996	25.406	25.606	27.998	25.546		48.507	52.658	16.744	32.108	-1.221	-7.342		48.298	0.072	14.643	0.003		1853.4	30.8897	51.2	11.8	40.3	2.779	0.011	0.011	0.000	0.262	0.22	
1171	4/20/2004	4:36:13 PM		25.993	25.398	25.613	28.014	25.528		48.673	52.826	16.724	32.363	-1.221	-7.186		48.544	0.069	14.643	0.003		1854.4	30.9064	51.4	11.9	40.5	2.794	0.010	0.010	0.000	0.250	0.21	
1172	4/20/2004	4:37:13 PM		25.978	25.393	25.598	28.01	25.329		48.758	52.888	16.714	32.424	-1.221	-7.348		48.414	0.073	14.643	0.003		1855.4	30.9231	51.4	11.9	40.6	2.799	0.011	0.011	0.000	0.264	0.22	
1173	4/20/2004	4:38:13 PM		25.989	25.404	25.609	27.876	25.23		48.95	52.979	16.595	32.804	-1.224	-7.509		49.51	0.066	14.643	0.003		1856.4	30.9397	51.5	12.1	40.9	2.818	0.010	0.010	0.000	0.237	0.20	
1174	4/20/2004	4:39:13 PM		25.99	25.42	25.625	27.837	25.085		48.766	53.01	16.704	32.428	-1.221	-7.215		48.715	0.071	14.643	0.003		1857.4	30.9564	51.5	11.9	40.6	2.799	0.011	0.010	0.000	0.256	0.22	
1175	4/20/2004	4:40:13 PM		25.98	25.415	25.62	27.757	24.955		48.824	52.847	16.774	32.434	-1.221	-7.478		49.958	0.074	14.643	0.003		1858.4	30.9731	51.4	12.2	40.6	2.801	0.011	0.011	0.000	0.267	0.23	
1176	4/20/2004	4:41:13 PM		25.973	25.413	25.623	27.641	24.864		48.992	53.014	16.788	32.58	-1.221	-7.608		49.172	0.069	14.643	0.003		1859.4	30.9897	51.5	12.1	40.8	2.812	0.010	0.010	0.000	0.248	0.21	
1177	4/20/2004	4:42:13 PM		25.946	25.39	25.6	27.543	24.881		48.938	52.96	16.831	32.471	-1.221	-7.452		49.52	0.07	14.643	0.003		1860.4	31.0064	51.5	12.1	40.7	2.806	0.010	0.010	0.000	0.252	0.21	
1178	4/20/2004	4:43:13 PM		25.948	25.388	25.608	27.476	24.934		48.938	52.855	16.669	32.658	-1.221	-7.602		46.642	0.07	14.643	0.003		1861.4	31.0231	51.4	11.4	40.8	2.813	0.010	0.010	0.000	0.251	0.21	
1179	4/20/2004	4:44:13 PM		25.967	25.407	25.647	27.459	25.042		48.953	52.973	16.838	32.461	-1.218	-7.533		46.462	0.071	14.643	0.003		1862.4	31.0397	51.5	11.4	40.7	2.807	0.011	0.010	0.000	0.255	0.22	
1180	4/20/2004	4:45:13 PM		25.957	25.402	25.637	27.489	25.132		48.996	52.989	16.784	32.539	-1.224	-7.596		47.989	0.07	14.643	0.003		1863.4	31.0564	51.5	11.8	40.8	2.811	0.010	0.010	0.000	0.251	0.21	
1181	4/20/2004	4:46:13 PM		25.956	25.406	25.646	27.554	25.241		48.733	52.679	16.758	32.356	-1.221	-7.616		49.612	0.069	14.643	0.003		1864.4	31.0731	51.2	12.2	40.5	2.795	0.010	0.010	0.000	0.249	0.21	
1182	4/20/2004	4:47:13 PM		25.951	25.401	25.646	27.584	25.246		48.865	52.963	16.789	32.428	-1.224	-7.388		48.565	0.07	14.643	0.003		1865.4	31.0897	51.5	11.9	40.6	2.802	0.010	0.010	0.000	0.252	0.21	
1183	4/20/2004	4:48:13 PM		25.94	25.395	25.575	27.643	25.321		48.739	52.766	16.707	32.42	-1.224	-7.559		49.216	0.072	14.643	0.003		1866.4	31.1064	51.3	12.1	40.6	2.798	0.011	0.011	0.000	0.260	0.22	
1184	4/20/2004	4:49:13 PM		25.946	25.391	25.586	27.673	25.426		48.644	52.724	16.602	32.282	-1.221	-7.562		47.914	0.07	14.643	0.003		1867.4	31.1231	51.3	11.7	40.5	2.790	0.010	0.010	0.000	0.254	0.22	
1185	4/20/2004	4:50:13 PM		25.953	25.402	25.592	27.69	25.398		48.88	52.853	16.499	32.771	-1.224	-7.576		48.494	0.07	14.643	0.003		1868.4	31.1397	51.4	11.9	40.8	2.815	0.010	0.010	0.000	0.251	0.21	
1186	4/20/2004	4:51:13 PM		25.958	25.393	25.598	27.711	25.424		49.125	53.126	16.752	32.777	-1.221	-7.573		47.914	0.069	14.643	0.003		1869.4	31.1564	51.7	11.7	41.0	2.823	0.010	0.010	0.000	0.247	0.21	
1187	4/20/2004	4:52:13 PM		25.964	25.404	25.614	27.751	25.429		49.164	53.286	16.592	32.904	-1.221	-7.446		49.311	0.069	14.643	0.003		1870.4	31.1731	51.8	12.1	41.0	2.829	0.010	0.010	0.000	0.246	0.21	
1188	4/20/2004	4:53:13 PM		25.96	25.415	25.605	27.782	25.465		48.984	52.979	16.658	32.707	-1.221	-7.538		50.68	0.071	14.643	0.003		1871.4	31.1897	51.5	12.4	40.8	2.816	0.011	0.010	0.000	0.255	0.22	
1189	4/20/2004	4:54:13 PM		25.951	25.41	25.61	27.778	25.451		47.7	51.765	17.828	30.239	-1.224	-7.544		51.977	0.07	14.643	0.003		1872.4	31.2064	50.3	12.7	39.0	2.687	0.010	0.010	0.000	0.263	0.22	
1190	4/20/2004	4:55:13 PM		25.967	25.432	25.652	27.819	25.457		47.692	51.767	17.832	30.255	-1.221	-7.556		49.71	0.068	14.643	0.003		1873.4	31.2231	50.3	12.2	39.0	2.687	0.010	0.010	0.000	0.255	0.22	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1191	4/20/2004	4:56:13 PM		25.979	25.439	25.684	27.731	25.449		48.061	52.152	17.815	30.518	-1.221	-7.562		49.662	0.068	14.643	0.003		1874.4	31.2397	50.7	12.2	39.3	2.709	0.010	0.010	0.000	0.253	0.22	
1192	4/20/2004	4:57:13 PM		25.97	25.445	25.695	27.752	25.425		47.64	51.8	17.591	30.294	-1.221	-7.446		49.647	0.066	14.643	0.003		1875.4	31.2564	50.3	12.2	39.0	2.687	0.010	0.010	0.000	0.248	0.21	
1193	4/20/2004	4:58:13 PM		25.976	25.451	25.721	27.783	25.482		48.042	52.14	17.691	30.682	-1.221	-7.527		55.402	0.071	14.643	0.003		1876.4	31.2731	50.7	13.6	39.4	2.714	0.011	0.010	0.000	0.264	0.22	
1194	4/20/2004	4:59:13 PM		25.978	25.448	25.723	27.75	25.458		48.053	52.049	17.663	30.752	-1.221	-7.544		52.618	0.069	14.643	0.003		1877.4	31.2897	50.6	12.9	39.4	2.717	0.010	0.010	0.000	0.256	0.22	
1195	4/20/2004	5:00:13 PM		25.984	25.454	25.734	27.796	25.535		48.154	52.245	17.616	30.899	-1.227	-7.541		50.93	0.068	14.643	0.003		1878.4	31.3064	50.8	12.5	39.5	2.725	0.010	0.010	0.000	0.251	0.21	
1196	4/20/2004	5:01:13 PM		25.991	25.461	25.756	27.808	25.531		48.071	52.258	17.595	30.754	-1.221	-7.434		51.105	0.064	14.643	0.003		1879.4	31.3231	50.8	12.5	39.4	2.717	0.010	0.009	0.000	0.237	0.20	
1197	4/20/2004	5:02:13 PM		25.992	25.472	25.767	27.844	25.353		48.181	52.196	17.478	31.16	-1.221	-7.486		51.183	0.067	14.643	0.003		1880.4	31.3397	50.7	12.5	39.7	2.735	0.010	0.010	0.000	0.246	0.21	
1198	4/20/2004	5:03:13 PM		26.002	25.477	25.787	27.829	25.263		47.901	52.038	17.505	30.749	-1.221	-7.504		53.124	0.067	14.643	0.003		1881.4	31.3564	50.6	13.0	39.3	2.711	0.010	0.010	0.000	0.248	0.21	
1199	4/20/2004	5:04:13 PM		26.002	25.487	25.752	27.759	25.053		48.339	52.488	17.524	31.144	-1.218	-7.492		49.049	0.069	14.643	0.003		1882.4	31.3731	51.0	12.0	39.7	2.740	0.010	0.010	0.000	0.253	0.22	
1200	4/20/2004	5:05:13 PM		25.996	25.481	25.746	27.678	24.976		48.364	52.509	17.48	31.289	-1.221	-7.483		51.992	0.068	14.643	0.003		1883.4	31.3897	51.0	12.7	39.8	2.746	0.010	0.010	0.000	0.249	0.21	
1201	4/20/2004	5:06:13 PM		25.99	25.47	25.74	27.553	24.906		48.104	52.219	17.599	30.881	-1.224	-7.478		50.092	0.068	14.643	0.003		1884.4	31.4064	50.7	12.3	39.5	2.723	0.010	0.010	0.000	0.251	0.21	
1202	4/20/2004	5:07:13 PM		25.989	25.464	25.759	27.521	24.964		47.901	52.042	17.465	30.752	-1.218	-7.481		50.067	0.068	14.643	0.003		1885.4	31.4231	50.6	12.3	39.3	2.711	0.010	0.010	0.000	0.252	0.21	
1203	4/20/2004	5:08:13 PM		25.992	25.462	25.767	27.5	25.063		48.137	52.391	17.535	30.971	-1.215	-7.434		50.857	0.068	14.643	0.003		1886.4	31.4397	50.9	12.5	39.6	2.727	0.010	0.010	0.000	0.251	0.21	
1204	4/20/2004	5:09:13 PM		25.992	25.462	25.762	27.49	25.203		48.03	52.218	17.468	30.877	-1.224	-7.443		51.226	0.064	14.643	0.003		1887.4	31.4564	50.7	12.6	39.5	2.720	0.010	0.009	0.000	0.237	0.20	
1205	4/20/2004	5:10:13 PM		25.991	25.446	25.776	27.559	25.162		48.023	52.158	17.416	30.947	-1.218	-7.405		49.825	0.065	14.643	0.003		1888.4	31.4731	50.7	12.2	39.5	2.722	0.010	0.009	0.000	0.240	0.20	
1206	4/20/2004	5:11:13 PM		25.975	25.43	25.75	27.597	25.225		47.882	52.019	17.457	30.805	-1.224	-7.512		52.081	0.072	14.643	0.003		1889.4	31.4897	50.5	12.8	39.3	2.713	0.011	0.011	0.000	0.267	0.23	
1207	4/20/2004	5:12:13 PM		25.995	25.44	25.785	27.632	25.315		48.308	52.357	17.48	31.201	-1.224	-7.353		47.76	0.071	14.643	0.003		1890.4	31.5064	50.9	11.7	39.8	2.741	0.011	0.010	0.000	0.260	0.22	
1208	4/20/2004	5:13:13 PM		25.999	25.439	25.794	27.716	25.389		48.262	52.536	17.545	31.072	-1.224	-7.18		51.919	0.069	14.643	0.003		1891.4	31.5231	51.1	12.7	39.7	2.735	0.010	0.010	0.000	0.254	0.22	
1209	4/20/2004	5:14:13 PM		26.001	25.441	25.786	27.694	25.427		47.951	52.229	17.482	30.811	-1.224	-7.307		50.861	0.068	14.643	0.003		1892.4	31.5397	50.8	12.5	39.4	2.715	0.010	0.010	0.000	0.252	0.21	
1210	4/20/2004	5:15:13 PM		26.012	25.452	25.822	27.754	25.407		47.996	52.156	17.522	30.784	-1.221	-7.44		53.143	0.068	14.643	0.003		1893.4	31.5564	50.7	13.0	39.4	2.716	0.010	0.010	0.000	0.252	0.21	
1211	4/20/2004	5:16:13 PM		26.029	25.469	25.849	27.846	25.439		47.93	52.063	17.431	30.893	-1.218	-7.512		50.014	0.068	14.643	0.003		1894.4	31.5731	50.6	12.3	39.4	2.717	0.010	0.010	0.000	0.251	0.21	
1212	4/20/2004	5:17:13 PM		26.014	25.454	25.834	27.816	25.479		48.001	52.14	17.489	30.85	-1.221	-7.498		51.84	0.068	14.643	0.003		1895.4	31.5897	50.7	12.7	39.4	2.718	0.010	0.010	0.000	0.251	0.21	
1213	4/20/2004	5:18:13 PM		26.031	25.456	25.841	27.813	25.521		48.25	52.393	17.567	31.006	-1.221	-7.507		50.938	0.069	14.643	0.003		1896.4	31.6064	50.9	12.5	39.6	2.732	0.010	0.010	0.000	0.254	0.22	
1214	4/20/2004	5:19:13 PM		26.042	25.477	25.867	27.904	25.602		48.306	52.548	17.584	31.041	-1.221	-7.426		51.21	0.066	14.643	0.003		1897.4	31.6231	51.1	12.5	39.7	2.735	0.010	0.010	0.000	0.242	0.21	
1215	4/20/2004	5:20:13 PM		26.064	25.479	25.809	27.926	25.684		48.289	52.418	17.568	31.063	-1.221	-7.512		50.851	0.068	14.643	0.003		1898.4	31.6397	50.9	12.5	39.7	2.736	0.010	0.010	0.000	0.250	0.21	
1216	4/20/2004	5:21:13 PM		26.076	25.491	25.801	27.963	25.661		48.081	52.167	17.453	30.977	-1.221	-7.521		50.488	0.065	14.643	0.003		1899.4	31.6564	50.7	12.4	39.5	2.725	0.010	0.009	0.000	0.240	0.20	
1217	4/20/2004	5:22:13 PM		26.087	25.508	25.812	27.979	25.593		47.897	51.986	17.467	30.729	-1.221	-7.394		52.409	0.069	14.643	0.003		1900.4	31.6731	50.5	12.8	39.3	2.710	0.010	0.010	0.000	0.256	0.22	
1218	4/20/2004	5:23:13 PM		26.105	25.525	25.835	28.041	25.53		47.893	52.113	17.479	30.723	-1.218	-7.431		49.996	0.068	14.643	0.003		1901.4	31.6897	50.6	12.3	39.3	2.710	0.010	0.010	0.000	0.252	0.21	
1219	4/20/2004	5:24:13 PM		26.105	25.526	25.84	27.897	25.296		48.154	52.301	17.455	31.033	-1.221	-7.457		48.354	0.068	14.643	0.003		1902.4	31.7064	50.8	11.8	39.6	2.730	0.010	0.010	0.000	0.250	0.21	
1220	4/20/2004	5:25:13 PM		26.1	25.515	25.825	27.763	25.096		48.25	52.438	17.492	31.072	-1.224	-7.46		51.614	0.067	14.643	0.003		1903.4	31.7231	51.0	12.6	39.7	2.734	0.010	0.010	0.000	0.246	0.21	
1221	4/20/2004	5:26:13 PM		26.114	25.524	25.829	27.626	24.864		47.561	51.717	17.364	30.583	-1.221	-7.46		49.927	0.068	14.643	0.003		1904.4	31.7397	50.2	12.2	39.1	2.694	0.010	0.010	0.000	0.254	0.22	
1222	4/20/2004	5:27:13 PM		26.117	25.502	25.832	27.514	24.797		48.071	52.293	17.458	30.947	-1.218	-7.457		51.339	0.066	14.643	0.003		1905.4	31.7564	50.8	12.6	39.5	2.724	0.010	0.010	0.000	0.243	0.21	
1223	4/20/2004	5:28:13 PM		26.124	25.5	25.834	27.467	24.91		47.982	52.057	17.46	30.881	-1.218	-7.455		52.073	0.069	14.643	0.004		1906.4	31.7731	50.6	12.8	39.4	2.719	0.010	0.010	0.000	0.255	0.22	
1224	4/20/2004	5:29:13 PM		26.133	25.488	25.823	27.471	25.039		48.324	52.502	17.405	31.244	-1.221	-7.324		50.469	0.064	14.643	0.003		1907.4	31.7897	51.0	12.4	39.8	2.743	0.010	0.009	0.000	0.234	0.20	
1225	4/20/2004	5:30:13 PM		26.131	25.482	25.816	27.489	25.077		47.839	52.129	17.348	30.743	-1.224	-7.255		48.202	0.07	14.643	0.003		1908.4	31.8064	50.7	11.8	39.3	2.709	0.010	0.010	0.000	0.260	0.22	
1226	4/20/2004	5:31:13 PM		26.146	25.487	25.836	27.464	25.192		48.198	52.295	17.326	31.222	-1.221	-7.515		51.281	0.061	14.643	0.003		1909.4	31.8231	50.8	12.6	39.7	2.738	0.009	0.009	0.000	0.224	0.19	
1227	4/20/2004	5:32:13 PM		26.15	25.485	25.85	27.453	25.27		48.194	52.395	17.395	31.111	-1.221	-7.203		50.208	0.07	14.643	0.003		1910.4	31.8397	50.9	12.3	39.7	2.734	0.010	0.010	0.000	0.257	0.22	
1228	4/20/2004	5:33:13 PM		26.15	25.475	25.825	27.453	25.275		48.189	52.478	17.334	31.15	-1.218	-7.339		47.292	0.067	14.643	0.003		1911.4	31.8564	51.0	11.6	39.7	2.735	0.010	0.010	0.000	0.246	0.21	
1229	4/20/2004	5:34:13 PM		26.161	25.481	25.796	27.463	25.281		48.013	52.167	17.318	31.055	-1.221	-7.495		50.286	0.073	14.643	0.003		1912.4	31.8731	50.7	12.3	39.5	2.726	0.011	0.011	0.000	0.269	0.23	
1230	4/20/2004	5:35:13 PM		26.15	25.455	25.77	27.503	25.345		48.146	52.362	17.195	31.265	-1.224	-7.478		50.09	0.067	14.643	0.003		1913.4	31.8897	50.9	12.3	39.7	2.738	0.010	0.010	0.000	0.246	0.21	
1231	4/20/2004	5:36:13 PM		26.16	25.47	25.795	27.583	25.385		48.227	52.301	17.191	31.369	-1.221	-7.521		47.806	0.068	14.643	0.003		1914.4	31.9064	50.8	11.7	39.8	2.744	0.010	0.010	0.000	0.249	0.21	
1232	4/20/2004	5:37:13 PM		26.166	25.477	25.791	27.689	25.367		48.216	52.295	17.236	31.365	-1.224	-7.535		49.95	0.069	14.643	0.003		1915.4	31.9231	50.8	12.2	39.8	2.743	0.010	0.010	0.000	0.253	0.22	
1233	4/20/2004	5:38:13 PM		26.172	25.472	25.792	27.734	25.473		48.368	52.504	17.282	31.341	-1.221	-7.44		49.453	0.061	14.643	0.003		1916.4	31.9397	51.0	12.1	39.9	2.748	0.009	0.009	0.000	0.223	0.19	
1234	4/20/2004	5:39:13 PM		26.173	25.478	25.803	27.76	25.438		48.276	52.447	17.286	31.34	-1.218	-7.382		51.232	0.068	14.643	0.003		1917.4	31.9564	51.0	12.6	39.8	2.745	0.010	0.010	0.000	0.249	0.21	
1235	4/20/2004	5:40:13 PM		26.169	25.474	25.779	27.716	25.484		48.279	52.44	17.357	31.207	-1.221	-7.486		50.54	0.068	14.643	0.003		1918.4	31.9731	51.0	12.4	39.7	2.740	0.010	0.010	0.000	0.250	0.21	
1236	4/20/2004	5:41:13 PM		26.174	25.48	25.784	27.732	25.455		48.208	52.424	17.302	31.254	-1.224	-7.486		51.833	0.067	14.643	0.003		1919.4	31.9897	51.0	12.7	39.7	2.739	0.010	0.010	0.000	0.246	0.21	
1237	4/20/2004	5:42:13 PM		26.18	25.495	25.81	27.772	25.49		48.187	52.359	17.275	31.213	-1.224	-7.414		47.078	0.069	14.643	0.003		1920.4	32.0064	50.9	11.5	39.7	2.737	0.010	0.010	0.000	0.253	0.22	
1238	4/20/2004	5:43:13 PM		26.201	25.507	25.817	27.819	25.552		48.063	52.235	17.342	31.027	-1.218	-7.411		50.198	0.064	14.643	0.003		1921.4	32.0231	50.8	12.3	39.5	2.726	0.010	0.009	0.000	0.236	0.20	
1239	4/20/2004	5:44:13 PM		26.197	25.492	25.797	27.785	25.523		48.053	52.173	17.3	31.141	-1.224	-7.443		48.246	0.068	14.643	0.003		1922.4	32.0397	50.7	11.8	39.6	2.730	0.010	0.010	0.000	0.250	0.21	
1240	4/20/2004	5:45:13 PM		26.219	25.514	25.829	27.851	25.564		48.274	52.476	17.276	31.343	-1.221	-7.452		51.132	0.075	14.643	0.003		1923.4	32.0564	51.0	12.5	39.8	2.745	0.011	0.011	0.000	0.274	0.23	
1241	4/20/2004	5:46:13 PM		26.219	25.524	25.834	27.881	25.554		48.135	52.295	17.337	31.158	-1.221	-7.446		50.507	0.069	14.643	0.003		1924.4	32.0731	50.8	12.4	39.6	2.733	0.010	0.010	0.000	0.253	0.22	
1242	4/20/2004	5:46:19 PM		26.219	25.524	25.829	27.881	25.554		48.146	52.386	17.406	31.02	-1.224	-7.455		51.333	0.068	14.643	0.003		1924.5	32.0747	50.9	12.6	39.6	2.729	0.010	0.010	0.000	0.250	0.21	
1243	4/20/2004	5:47:19 PM		26.24	25.536	25.84	27.882	25.376		48.486	52.701	17.394	31.314	-1.221	-7.449		46.869	0.068	14.643	0.003		1925.5	32.0914	51.2	11.5	39.9	2.751	0.010	0.010	0.000	0.248	0.21	
1244	4/20/2004	5:48:19 PM		26.24	25.526	25.835	27.788	25.231		48.09	52.297	17.394	31.051	-1.221	-7.446		50.114	0.068	14.643	0.003		1926.5	32.1081	50.8	12.3	39.6	2.728	0.010	0.010	0.000	0.250	0.21	
1245	4/20/2004	5:49:19 PM		26.245	25.526	25.77	27.743	25.056		48.034	52.264	17.193	31.207	-1.224	-7.449		50.709	0.067	14.643	0.003		1927.5	32.1247	50.8	12.4	39.6	2.732	0.010	0.010	0.000	0.247	0.21	
1246	4/20/2004	5:50:19 PM		26.249	25.529	25.764	27.681	24.939		48.142	52.306	17.174	31.287	-1.221	-7.452		51.047	0.067	14.643	0.003		1928.5	32.1414	50.8	12.5	39.7	2.738	0.010	0.010	0.000	0.246	0.21	
1247	4/20/2004	5:51:19 PM		26.242	25.518	25.757	27.65	24.973		48.154	52.372	17.347	31.09	-1.224	-7.449		49.635	0.067	14.643	0.003		1929.5	32.1581	50.9	12.2	39.6	2.732	0.010	0.010	0.000	0.247	0.21	
1248	4/20/2004	5:52:19 PM		26.22	25.51	25.755	27.628	25.046		48.117	52.407	17.31	31.135	-1.221	-7.348		49.82	0.069	14.643	0.003		1930.5	32.1747	50.9	12.2	39.6	2.732	0.010	0.010	0.000	0.254	0.22	
1249	4/20/2004	5:53:19 PM		26.234	25.52	25.779	27.652	25.12		47.98	52.152	17.271	31.1	-1.218	-7.356		50.897	0.068	14.643	0.003		1931.5	32.1914	50.7	12.5	39.5	2.726	0.010	0.010	0.000	0.251	0.21	
1250	4/20/2004	5:54:19 PM		26.213	25.508	25.768	27.62	25.158		47.895	51.984	17.26	31.096	-1.221	-7.426		49.555	0.066	14.643	0.003		1932.5	32.2081	50.5	12.1	39.5	2.723	0.010	0.010	0.000	0.244	0.21	
1251	4/20/2004	5:55:19 PM		26.211	25.497	25.766	27.699	25.262		47.258	51.474	18.242	29.377	-1.218	-7.403		50.817	0.069	14.643	0.003		1933.5	32.2247	50.0	12.5	38.3	2.642	0.010	0.010	0.000	0.263	0.22	
1252	4/20/2004	5:56:19 PM		26.216	25.496	25.766	27.703	25.241		48.65	52.768	16.916	32.139	-1.221	-7.31		49.689	0.069	14.643	0.003		1934.5	32.2414	51.3	12.2	40.4	2.785	0.010	0.010	0.000	0.249	0.21	
1253	4/20/2004	5:57:19 PM		26.226	25.497	25.771	27.754	25.272		48.664	52.911	16.661	32.365	-1.221	-7.342		49.113	0.071	14.643	0.003		1935.5	32.2581	51.4	12.0	40.5	2.793	0.011	0.010	0.000	0.256	0.22	
1254	4/20/2004	5:58:19 PM		26.22	25.49	25.755	27.802	25.335		49.011	53.352	16.636	32.701	-1.221	-7.391		50.454	0.07	14.643	0.003		1936.5	32.2747	51.9	12.4	40.9	2.817	0.010	0.010	0.000	0.250	0.21	
1255	4/20/2004	5:59:19 PM		26.22	25.495	25.76	27.792	25.355		49.029	53.046	16.404	32.982	-1.221	-7.249		47.883	0.056	14.643	0.003		1937.5	32.2914	51.6	11.7	41.0	2.827	0.008	0.008	0.000	0.199	0.17	
1256	4/20/2004	6:00:19 PM		26.225	25.49	25.75	27.792	25.365		48.27	53.103	16.424	32.204	-0.815	-6.081		48.079	0.073	14.643	0.003		1938.5	32.3081	51.6	11.8	40.2	2.774	0.011	0.011	0.000	0.265	0.23	
1257	4/20/2004	6:01:19 PM		26.199	25.474	25.724	27.766	25.37		49.064	53.305	16.428	32.97	-1.224	-7.021		51.785	0.072	14.643	0.003		1939.5	32.3247	51.8	12.7	41.0	2.828	0.011	0.011	0.000	0.256	0.22	
1258	4/20/2004	6:02:19 PM		26.214	25.484	25.734	27.796	25.36		49.382	53.622	15.984	33.74	-1.221	-7.053		46.078	0.072	14.643	0.003		1940.5	32.3414	52.1	11.3	41.6	2.865	0.011	0.011	0.000	0.253	0.22	
1259	4/20/2004	6:03:19 PM		26.22	25.5	25.675	27.812	25.415		49.322	53.539	15.906	33.651	-1.221	-7.261		50.84	0.076	14.643	0.003		1941.5	32.3581	52.1	12.5	41.5	2.860	0.011	0.011	0.000	0.268	0.23	
1260	4/20/2004	6:04:19 PM		26.226	25.506	25.666	27.818	25.441		49.583	53.734	15.627	34.265	-1.218	-7.371		47.307	0.072	14.643	0.003		1942.5	32.3747	52.3	11.6	41.9	2.891	0.011	0.011	0.000	0.251	0.21	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1261	4/20/2004	6:05:19 PM		26.216	25.501	25.646	27.728	25.381		49.961	54.173	15.726	34.561	-1.221	-7.371		47.716	0.073	14.643	0.003		1943.5	32.3914	52.7	11.7	42.3	2.914	0.011	0.011	0.000	0.253	0.22	
1262	4/20/2004	6:06:19 PM		26.216	25.507	25.646	27.714	25.387		49.712	53.887	15.655	34.396	-1.221	-7.371		46.412	0.07	14.643	0.003		1944.5	32.4081	52.4	11.4	42.1	2.899	0.010	0.010	0.000	0.244	0.21	
1263	4/20/2004	6:07:19 PM		26.201	25.497	25.636	27.634	25.327		49.021	53.143	16.675	32.666	-1.224	-7.327		50.152	0.069	14.643	0.003		1945.5	32.4247	51.7	12.3	40.8	2.816	0.010	0.010	0.000	0.247	0.21	
1264	4/20/2004	6:08:19 PM		26.207	25.512	25.652	27.605	25.373		48.967	52.99	16.133	33.22	-1.221	-7.371		47.207	0.07	14.643	0.003		1946.5	32.4414	51.5	11.6	41.1	2.833	0.010	0.010	0.000	0.249	0.21	
1265	4/20/2004	6:09:19 PM		26.202	25.507	25.647	27.6	25.368		49.195	53.369	16.123	33.376	-1.224	-7.365		48.375	0.07	14.643	0.003		1947.5	32.4581	51.9	11.9	41.3	2.846	0.010	0.010	0.000	0.248	0.21	
1266	4/20/2004	6:10:19 PM		26.203	25.513	25.658	27.571	25.448		49.386	53.674	16.108	33.606	-1.224	-7.362		47.388	0.07	14.643	0.003		1948.5	32.4747	52.2	11.6	41.5	2.861	0.010	0.010	0.000	0.247	0.21	
1267	4/20/2004	6:11:19 PM		26.193	25.523	25.663	27.536	25.373		49.311	53.452	16.161	33.506	-1.221	-7.353		48.982	0.071	14.643	0.003		1949.5	32.4914	52.0	12.0	41.4	2.855	0.011	0.010	0.000	0.251	0.21	
1268	4/20/2004	6:12:19 PM		26.184	25.514	25.649	27.516	25.409		49.473	53.775	16.24	33.504	-1.224	-7.359		49.086	0.069	14.643	0.003		1950.5	32.5081	52.3	12.0	41.5	2.860	0.010	0.010	0.000	0.243	0.21	
1269	4/20/2004	6:13:19 PM		26.179	25.519	25.669	27.521	25.344		48.521	52.789	16.901	31.901	-1.221	-7.356		48.17	0.069	14.643	0.003		1951.5	32.5247	51.3	11.8	40.2	2.772	0.010	0.010	0.000	0.251	0.21	
1270	4/20/2004	6:14:19 PM		26.164	25.525	25.669	27.472	25.34		49.007	53.201	16.555	32.82	-1.221	-7.362		47.695	0.07	14.643	0.003		1952.5	32.5414	51.7	11.7	40.9	2.821	0.010	0.010	0.000	0.250	0.21	
1271	4/20/2004	6:15:19 PM		26.17	25.53	25.685	27.528	25.376		49.062	53.112	16.253	33.186	-1.215	-7.348		46.594	0.071	14.643	0.003		1953.5	32.5581	51.6	11.4	41.1	2.835	0.011	0.010	0.000	0.252	0.21	
1272	4/20/2004	6:16:19 PM		26.35	25.53	25.68	27.493	25.326		49.036	53.242	16.344	33.034	-1.224	-7.362		48.792	0.069	14.643	0.003		1954.5	32.5747	51.8	12.0	41.0	2.829	0.010	0.010	0.000	0.246	0.21	
1273	4/20/2004	6:17:19 PM		26.315	25.52	25.675	27.468	25.346		49.289	53.491	16.258	33.413	-1.224	-7.359		48.846	0.07	14.643	0.003		1955.5	32.5914	52.0	12.0	41.4	2.851	0.010	0.010	0.000	0.248	0.21	
1274	4/20/2004	6:18:19 PM		26.301	25.531	25.701	27.519	25.376		49.222	53.431	16.091	33.458	-1.221	-7.353		50.242	0.071	14.643	0.003		1956.5	32.6081	52.0	12.3	41.3	2.850	0.011	0.010	0.000	0.251	0.21	
1275	4/20/2004	6:19:19 PM		26.281	25.536	25.701	27.553	25.426		48.853	53.039	16.738	32.519	-1.221	-7.365		48.525	0.069	14.643	0.003		1957.5	32.6247	51.6	11.9	40.7	2.805	0.010	0.010	0.000	0.248	0.21	
1276	4/20/2004	6:20:19 PM		26.249	25.525	25.699	27.547	25.39		48.785	52.992	16.387	32.75	-1.221	-7.348		48.045	0.07	14.643	0.004		1958.5	32.6414	51.5	11.8	40.8	2.811	0.010	0.010	0.000	0.251	0.21	
1277	4/20/2004	6:21:19 PM		26.225	25.53	25.705	27.498	25.356		48.926	53.101	16.326	32.927	-1.224	-7.356		49.343	0.069	14.643	0.003		1959.5	32.6581	51.6	12.1	40.9	2.822	0.010	0.010	0.000	0.246	0.21	
1278	4/20/2004	6:22:19 PM		26.205	25.545	25.71	27.548	25.336		49.226	53.533	16.147	33.444	-1.221	-7.35		47.378	0.07	14.643	0.003		1960.5	32.6747	52.1	11.6	41.3	2.850	0.010	0.010	0.000	0.247	0.21	
1279	4/20/2004	6:23:19 PM		26.184	25.535	25.719	27.472	25.305		49.369	53.659	16.34	33.382	-1.215	-7.336		50.092	0.07	14.643	0.004		1961.5	32.6914	52.2	12.3	41.4	2.853	0.010	0.010	0.000	0.247	0.21	
1280	4/20/2004	6:24:19 PM		26.155	25.535	25.705	27.428	25.316		49.286	53.553	16.299	33.385	-1.224	-7.29		48.419	0.069	14.643	0.003		1962.5	32.7081	52.1	11.9	41.3	2.850	0.010	0.010	0.000	0.244	0.21	
1281	4/20/2004	6:25:19 PM		26.144	25.545	25.739	27.462	25.325		49.384	53.729	16.222	33.512	-1.218	-7.336		46.335	0.069	14.643	0.003		1963.5	32.7247	52.3	11.4	41.4	2.858	0.010	0.010	0.000	0.243	0.21	
1282	4/20/2004	6:26:19 PM		26.095	25.52	25.7	27.413	25.356		49.398	53.709	16.177	33.551	-1.224	-7.339		48.727	0.069	14.643	0.003		1964.5	32.7414	52.2	11.9	41.5	2.860	0.010	0.010	0.000	0.243	0.21	
1283	4/20/2004	6:27:19 PM		26.064	25.525	25.694	27.377	25.33		49.114	53.363	15.939	33.504	-1.224	-7.333		46.571	0.069	14.643	0.003		1965.5	32.7581	51.9	11.4	41.3	2.848	0.010	0.010	0.000	0.244	0.21	
1284	4/20/2004	6:28:19 PM		26.066	25.546	25.741	27.424	25.351		48.716	53.104	16.599	32.324	-1.221	-7.339		49.896	0.067	14.643	0.003		1966.5	32.7747	51.6	12.2	40.5	2.794	0.010	0.010	0.000	0.241	0.21	
1285	4/20/2004	6:29:19 PM		26.026	25.531	25.741	27.414	25.396		48.886	53.247	16.664	32.623	-1.224	-7.333		50	0.069	14.643	0.003		1967.5	32.7914	51.8	12.3	40.8	2.810	0.010	0.010	0.000	0.247	0.21	
1286	4/20/2004	6:30:19 PM		26.016	25.536	25.751	27.449	25.401		48.882	53.197	16.498	32.683	-1.221	-7.333		47.37	0.067	14.643	0.003		1968.5	32.8081	51.7	11.6	40.8	2.812	0.010	0.010	0.000	0.240	0.20	
1287	4/20/2004	6:31:19 PM		26.025	25.525	25.745	27.483	25.396		48.119	52.438	17.186	31.336	-1.224	-7.336		53.721	0.067	14.643	0.003		1969.5	32.8247	51.0	13.2	39.7	2.739	0.010	0.010	0.000	0.246	0.21	
1288	4/20/2004	6:32:19 PM		26.055	25.545	25.68	27.443	25.406		48.239	52.679	17.27	31.25	-1.221	-7.238		51.848	0.068	14.643	0.003		1970.5	32.8414	51.2	12.7	39.7	2.740	0.010	0.010	0.000	0.250	0.21	
1289	4/20/2004	6:33:19 PM		26.081	25.551	25.586	27.444	25.381		48.563	52.784	17.102	31.847	-1.221	-7.287		49.528	0.067	14.643	0.003		1971.5	32.8581	51.3	12.1	40.2	2.772	0.010	0.010	0.000	0.244	0.21	
1290	4/20/2004	6:34:19 PM		26.086	25.531	25.581	27.429	25.376		48.503	52.625	16.722	32.096	-1.224	-7.076		50.327	0.068	14.643	0.003		1972.5	32.8747	51.2	12.3	40.3	2.779	0.010	0.010	0.000	0.247	0.21	
1291	4/20/2004	6:35:19 PM		26.097	25.537	25.592	27.464	25.297		48.326	52.871	16.709	31.987	-0.888	-6.506		51.199	0.073	14.643	0.003		1973.5	32.8914	51.4	12.5	40.2	2.769	0.011	0.011	0.000	0.267	0.23	
1292	4/20/2004	6:36:19 PM		26.087	25.527	25.572	27.489	25.357		48.699	52.925	16.586	32.523	-1.224	-7.116		50.396	0.075	14.643	0.003		1974.5	32.9081	51.5	12.4	40.6	2.800	0.011	0.011	0.000	0.271	0.23	
1293	4/20/2004	6:37:19 PM		26.092	25.532	25.592	27.544	25.387		48.515	52.726	16.583	32.301	-1.221	-7.29		47.303	0.071	14.643	0.003		1975.5	32.9247	51.3	11.6	40.4	2.786	0.011	0.010	0.000	0.258	0.22	
1294	4/20/2004	6:38:19 PM		26.107	25.543	25.612	27.57	25.408		48.724	52.834	16.523	32.558	-1.221	-7.411		48.742	0.074	14.643	0.003		1976.5	32.9414	51.4	11.9	40.6	2.802	0.011	0.011	0.000	0.267	0.23	
1295	4/20/2004	6:39:19 PM		26.107	25.548	25.607	27.53	25.373		48.747	52.948	16.511	32.609	-1.224	-7.394		49.889	0.068	14.643	0.003		1977.5	32.9581	51.5	12.2	40.7	2.805	0.010	0.010	0.000	0.245	0.21	
1296	4/20/2004	6:40:19 PM		26.102	25.537	25.602	27.519	25.347		48.944	53.131	16.515	32.754	-1.224	-7.403		46.94	0.068	14.643	0.003		1978.5	32.9747	51.7	11.5	40.8	2.816	0.010	0.010	0.000	0.244	0.21	
1297	4/20/2004	6:41:19 PM		26.117	25.543	25.622	27.495	25.388		49.056	53.282	16.492	32.904	-1.221	-7.394		48.281	0.069	14.643	0.003		1979.5	32.9914	51.8	11.8	41.0	2.825	0.010	0.010	0.000	0.247	0.21	
1298	4/20/2004	6:42:19 PM		26.107	25.538	25.617	27.49	25.393		48.78	53.06	16.485	32.605	-1.224	-7.403		47.96	0.067	14.643	0.003		1980.5	33.0081	51.6	11.8	40.7	2.806	0.010	0.010	0.000	0.241	0.21	
1299	4/20/2004	6:43:19 PM		26.122	25.553	25.627	27.51	25.358		48.903	53.054	16.389	32.951	-1.218	-7.388		48.606	0.068	14.643	0.003		1981.5	33.0247	51.6	11.9	40.9	2.822	0.010	0.010	0.000	0.243	0.21	
1300	4/20/2004	6:44:19 PM		26.122	25.548	25.632	27.525	25.363		48.971	53.332	16.536	32.82	-1.221	-7.394		48.158	0.068	14.643	0.003		1982.5	33.0414	51.9	11.8	40.9	2.820	0.010	0.010	0.000	0.244	0.21	
1301	4/20/2004	6:45:19 PM		26.103	25.538	25.618	27.496	25.349		48.747	53.11	16.455	32.607	-1.224	-7.394		49.184	0.066	14.643	0.003		1983.5	33.0581	51.6	12.1	40.7	2.805	0.010	0.010	0.000	0.238	0.20	
1302	4/20/2004	6:46:19 PM		26.117	25.553	25.637	27.56	25.393		48.478	52.828	16.365	32.44	-1.221	-7.391		48.775	0.069	14.643	0.003		1984.5	33.0747	51.4	12.0	40.5	2.790	0.010	0.010	0.000	0.250	0.21	
1303	4/20/2004	6:47:19 PM		26.129	25.549	25.639	27.536	25.344		48.602	52.89	16.386	32.558	-1.221	-7.376		46.652	0.069	14.643	0.003		1985.5	33.0914	51.4	11.4	40.6	2.798	0.010	0.010	0.000	0.249	0.21	
1304	4/20/2004	6:48:19 PM		26.108	25.548	25.628	27.496	25.329		48.89	53.259	16.338	32.878	-1.221	-7.382		48.656	0.068	14.643	0.003		1986.5	33.1081	51.8	11.9	40.9	2.819	0.010	0.010	0.000	0.244	0.21	
1305	4/20/2004	6:49:19 PM		26.128	25.563	25.648	27.456	25.349		48.755	53.157	16.329	32.709	-1.221	-7.376		52.044	0.066	14.643	0.003		1987.5	33.1247	51.7	12.8	40.7	2.808	0.010	0.010	0.000	0.237	0.20	
1306	4/20/2004	6:50:19 PM		26.114	25.554	25.624	27.422	25.384		48.652	52.931	16.351	32.629	-1.224	-7.226		48.6	0.064	14.643	0.003		1988.5	33.1414	51.5	11.9	40.6	2.802	0.010	0.009	0.000	0.231	0.20	
1307	4/20/2004	6:51:19 PM		26.124	25.549	25.629	27.462	25.384		48.561	53.016	16.154	32.707	-1.218	-7.246		48.85	0.068	14.643	0.003		1989.5	33.1581	51.5	12.0	40.6	2.802	0.010	0.010	0.000	0.245	0.21	
1308	4/20/2004	6:52:19 PM		26.129	25.549	25.624	27.457	25.344		48.521	52.672	16.167	32.767	-1.224	-7.31		46.448	0.068	14.643	0.003		1990.5	33.1747	51.2	11.4	40.6	2.802	0.010	0.010	0.000	0.245	0.21	
1309	4/20/2004	6:53:19 PM		26.13	25.55	25.63	27.472	25.415		48.691	52.963	16.427	32.625	-1.221	-7.33		47.612	0.068	14.643	0.003		1991.5	33.1914	51.5	11.7	40.7	2.803	0.010	0.010	0.000	0.245	0.21	
1310	4/20/2004	6:54:19 PM		26.129	25.544	25.619	27.437	25.369		48.573	52.946	16.414	32.445	-1.221	-7.087		49.712	0.069	14.643	0.003		1992.5	33.2081	51.5	12.2	40.5	2.793	0.010	0.010	0.000	0.250	0.21	
1311	4/20/2004	6:55:19 PM		26.135	25.555	25.635	27.467	25.41		48.525	52.836	16.436	32.482	-1.221	-7.186		45.088	0.068	14.643	0.003		1993.5	33.2247	51.4	11.0	40.5	2.793	0.010	0.010	0.000	0.246	0.21	
1312	4/20/2004	6:56:19 PM		26.135	25.555	25.64	27.522	25.43		48.544	52.82	16.395	32.475	-1.221	-7.281		48.623	0.069	14.643	0.003		1994.5	33.2414	51.3	11.9	40.5	2.793	0.010	0.010	0.000	0.249	0.21	
1313	4/20/2004	6:57:19 PM		26.135	25.54	25.64	27.477	25.4		48.301	52.478	16.351	32.285	-1.221	-7.353		47.785	0.067	14.643	0.003		1995.5	33.2581	51.0	11.7	40.3	2.778	0.010	0.010	0.000	0.243	0.21	
1314	4/20/2004	6:58:19 PM		26.127	25.552	25.617	27.45	25.417		48.984	53.209	16.452	32.88	-1.224	-7.342		47.274	0.069	14.643	0.003		1996.5	33.2747	51.7	11.6	40.9	2.822	0.010	0.010	0.000	0.247	0.21	
1315	4/20/2004	6:59:19 PM		26.131	25.546	25.571	27.519	25.402		48.567	52.923	16.321	32.488	-1.221	-7.342		46.906	0.069	14.643	0.003		1997.5	33.2914	51.5	11.5	40.5	2.794	0.010	0.010	0.000	0.250	0.21	
1316	4/20/2004	7:00:19 PM		26.136	25.546	25.571	27.499	25.397		48.623	52.998	16.481	32.408	-1.221	-7.348		49.618	0.067	14.643	0.003		1998.5	33.3081	51.5	12.2	40.5	2.793	0.010	0.010	0.000	0.243	0.21	
1317	4/20/2004	7:01:19 PM		26.135	25.561	25.57	27.528	25.396		48.791	53.18	16.48	32.619	-1.221	-7.365		47.378	0.068	14.643	0.003		1999.5	33.3247	51.7	11.6	40.7	2.806	0.010	0.010	0.000	0.245	0.21	
1318	4/20/2004	7:02:19 PM		26.135	25.555	25.58	27.512	25.405		48.851	53.11	16.411	32.837	-1.218	-7.368		46.869	0.069	14.643	0.003		2000.5	33.3414	51.6	11.5	40.8	2.816	0.010	0.010	0.000	0.248	0.21	
1319	4/20/2004	7:03:19 PM		26.145	25.555	25.595	27.492	25.345		48.558	52.913	16.458	32.406	-1.221	-7.333		48.116	0.07	14.643	0.003		2001.5	33.3581	51.4	11.8	40.5	2.791	0.010	0.010	0.000	0.254	0.22	
1320	4/20/2004	7:04:19 PM		26.128	25.553	25.583	27.471	25.399		48.737	53.131	16.482	32.576	-1.221	-7.374		49.384	0.067	14.643	0.003		2002.5	33.3747	51.7	12.1	40.7	2.803	0.010	0.010	0.000	0.242	0.21	
1321	4/20/2004	7:05:19 PM		26.129	25.569	25.594	27.442	25.329		48.457	52.822	16.467	32.309	-1.221	-7.151		48.692	0.063	14.643	0.003		2003.5	33.3914	51.3	11.9	40.4	2.784	0.009	0.009	0.000	0.229	0.19	
1322	4/20/2004	7:06:19 PM		26.118	25.563	25.593	27.361	25.299		48.521	52.84	16.423	32.449	-1.221	-7.267		49.109	0.067	14.643	0.003		2004.5	33.4081	51.4	12.0	40.5	2.791	0.010	0.010	0.000	0.243	0.21	
1323	4/20/2004	7:07:19 PM		26.112	25.548	25.587	27.325	25.313		48.527	52.805	16.352	32.492	-1.221	-7.31		46.589	0.07	14.643	0.003		2005.5	33.4247	51.3	11.4	40.5	2.793	0.010	0.010	0.000	0.253	0.22	
1324	4/20/2004	7:08:19 PM		26.107	25.562	25.592	27.364	25.327		48.673	53.112	16.332	32.562	-1.221	-7.316		47.232	0.066	14.643	0.003		2006.5	33.4414	51.6	11.6	40.6	2.800	0.010	0.010	0.000	0.238	0.20	
1325	4/20/2004	7:09:19 PM		26.091	25.551	25.591	27.359	25.291		48.826	53.311	16.457	32.672	-1.221	-7.307		46.454	0.067	14.643	0.003		2007.5	33.4581	51.8	11.4	40.7	2.810	0.010	0.010	0.000	0.241	0.21	
1326	4/20/2004	7:10:19 PM		26.081	25.551	25.591	27.329	25.276		48.588	52.786	16.459	32.523	-1.224	-7.307		49.57	0.067	14.643	0.003		2008.5	33.4747	51.3	12.1	40.6	2.796	0.010	0.010	0.000	0.242	0.21	
1327	4/20/2004	7:11:19 PM		26.069	25.535	25.589	27.272	25.265		48.546	52.884	16.403	32.5	-1.221	-7.31		48.358	0.067	14.643	0.003		2009.5	33.4914	51.4	11.9	40.5	2.794	0.010	0.010	0.000	0.242	0.21	
1328	4/20/2004	7:12:19 PM		26.069	25.544	25.599	27.267	25.264		48.37	52.855	16.449	32.2	-1.221	-7.313		48.721	0.066	14.643	0.003		2010.5	33.5081	51.4	11.9	40.3	2.778	0.010	0.010	0.000	0.240	0.20	
1329	4/20/2004	7:13:19 PM		26.074	25.55	25.604	27.312	25.27		48.417	52.791	16.463	32.268	-1.218	-7.298		49.439	0.067	14.643	0.003		2011.5	33.5247	51.3	12.1	40.3	2.781	0.010	0.010	0.000	0.243	0.21	
1330	4/20/2004	7:14:19 PM		26.049	25.52	25.584	27.327	25.29		48.623	52.915	16.504	32.486	-1.218	-7.301		48.2	0.065	14.643	0.003		2012.5	33.5414	51.4	11.8	40.6	2.796	0.010	0.010	0.000	0.235	0.20	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1331	4/20/2004	7:15:19 PM		26.049	25.534	25.549	27.342	25.279		48.656	52.973	16.429	32.553	-1.221	-7.298		48.948	0.068	14.643	0.003		2013.5	33.5581	51.5	12.0	40.6	2.800	0.010	0.010	0.000	0.246	0.21	
1332	4/20/2004	7:16:19 PM		26.064	25.54	25.554	27.347	25.265		48.517	52.892	16.388	32.516	-1.154	-7.209		47.161	0.062	14.643	0.003		2014.5	33.5747	51.4	11.6	40.5	2.793	0.009	0.009	0.000	0.225	0.19	
1333	4/20/2004	7:17:19 PM		26.048	25.528	25.553	27.356	25.198		48.426	52.795	16.442	32.285	-1.154	-7.171		49.86	0.067	14.643	0.003		2015.5	33.5914	51.3	12.2	40.4	2.782	0.010	0.010	0.000	0.244	0.21	
1334	4/20/2004	7:18:19 PM		26.043	25.528	25.553	27.341	25.193		48.751	53.157	16.181	32.923	-1.154	-7.258		50.515	0.072	14.643	0.003		2016.5	33.6081	51.7	12.4	40.8	2.816	0.011	0.011	0.000	0.259	0.22	
1335	4/20/2004	7:19:19 PM		26.037	25.522	25.562	27.31	25.198		48.867	53.128	16.258	32.935	-1.221	-7.209		49.501	0.062	14.643	0.004		2017.5	33.6247	51.7	12.1	40.9	2.820	0.009	0.009	0.000	0.222	0.19	
1336	4/20/2004	7:20:19 PM		26.031	25.522	25.551	27.294	25.182		48.529	53.052	16.072	32.833	-1.03	-6.845		48.204	0.069	14.643	0.003		2018.5	33.6414	51.6	11.8	40.7	2.805	0.010	0.010	0.000	0.249	0.21	
1337	4/20/2004	7:21:19 PM		26.017	25.517	25.551	27.314	25.217		48.727	53.05	16.041	33.056	-1.157	-7.168		47.707	0.073	14.643	0.003		2019.5	33.6581	51.6	11.7	40.9	2.819	0.011	0.011	0.000	0.262	0.22	
1338	4/20/2004	7:22:19 PM		26.015	25.505	25.545	27.288	25.185		48.812	53.22	16.107	33.027	-1.221	-7.275		49.161	0.076	14.643	0.003		2020.5	33.6747	51.7	12.0	40.9	2.821	0.011	0.011	0.000	0.273	0.23	
1339	4/20/2004	7:23:19 PM		26.015	25.51	25.55	27.283	25.185		49.129	53.388	16.048	33.409	-1.221	-7.333		45.972	0.067	14.643	0.003		2021.5	33.6914	51.9	11.3	41.3	2.845	0.010	0.010	0.000	0.238	0.20	
1340	4/20/2004	7:24:19 PM		26.004	25.489	25.538	27.251	25.184		49.073	53.392	15.978	33.389	-1.221	-7.327		48.448	0.069	14.643	0.003		2022.5	33.7081	51.9	11.9	41.2	2.843	0.010	0.010	0.000	0.246	0.21	
1341	4/20/2004	7:25:19 PM		26.013	25.503	25.548	27.261	25.178		49.007	53.468	16.003	33.317	-1.221	-7.33		47.622	0.068	14.643	0.003		2023.5	33.7247	52.0	11.7	41.2	2.838	0.010	0.010	0.000	0.243	0.21	
1342	4/20/2004	7:26:19 PM		26.011	25.496	25.571	27.259	25.201		48.729	52.936	16.017	33.038	-1.218	-7.241		46.642	0.062	14.643	0.003		2024.5	33.7414	51.5	11.4	40.9	2.819	0.009	0.009	0.000	0.222	0.19	
1343	4/20/2004	7:27:19 PM		26.001	25.481	25.535	27.229	25.156		48.65	53.06	15.965	33.007	-1.16	-7.174		45.67	0.069	14.643	0.003		2025.5	33.7581	51.6	11.2	40.8	2.815	0.010	0.010	0.000	0.248	0.21	
1344	4/20/2004	7:28:19 PM		26.011	25.486	25.481	27.214	25.157		48.785	53.124	15.938	33.13	-1.203	-7.261		49.672	0.067	14.643	0.003		2026.5	33.7747	51.7	12.2	41.0	2.824	0.010	0.010	0.000	0.241	0.20	
1345	4/20/2004	7:29:19 PM		26.005	25.475	25.475	27.163	25.145		48.948	53.342	15.988	33.235	-1.224	-7.31		47.077	0.068	14.643	0.003		2027.5	33.7914	51.9	11.5	41.1	2.833	0.010	0.010	0.000	0.243	0.21	
1346	4/20/2004	7:30:19 PM		26.009	25.459	25.469	27.172	25.19		49.009	53.298	15.957	33.395	-1.224	-7.203		49.168	0.064	14.643	0.003		2028.5	33.8081	51.8	12.0	41.2	2.841	0.010	0.009	0.000	0.229	0.19	
1347	4/20/2004	7:31:19 PM		26.003	25.458	25.478	27.151	25.159		48.561	52.905	15.957	32.89	-1.154	-7.113		46.012	0.069	14.643	0.003		2029.5	33.8247	51.4	11.3	40.7	2.808	0.010	0.010	0.000	0.249	0.21	
1348	4/20/2004	7:32:19 PM		25.993	25.463	25.478	27.186	25.184		48.809	53.151	15.932	33.196	-1.183	-7.226		47.92	0.068	14.643	0.003		2030.5	33.8414	51.7	11.7	41.0	2.827	0.010	0.010	0.000	0.244	0.21	
1349	4/20/2004	7:33:19 PM		25.978	25.458	25.467	27.151	25.178		48.654	53.081	15.901	33.044	-1.221	-7.29		48.652	0.066	14.643	0.003		2031.5	33.8581	51.6	11.9	40.8	2.816	0.010	0.010	0.000	0.238	0.20	
1350	4/20/2004	7:34:19 PM		25.983	25.448	25.483	27.146	25.144		48.836	53.139	15.941	33.237	-1.177	-7.183		49.076	0.063	14.643	0.003		2032.5	33.8747	51.7	12.0	41.0	2.829	0.009	0.009	0.000	0.226	0.19	
1351	4/20/2004	7:35:19 PM		25.959	25.439	25.469	27.147	25.17		48.938	53.276	16.037	33.202	-1.154	-7.217		47.111	0.067	14.643	0.003		2033.5	33.8914	51.8	11.5	41.1	2.832	0.010	0.010	0.000	0.240	0.20	
1352	4/20/2004	7:36:19 PM		25.963	25.438	25.498	27.201	25.164		48.953	53.352	15.989	33.224	-1.154	-7.238		48.867	0.067	14.643	0.003		2034.5	33.9081	51.9	12.0	41.1	2.833	0.010	0.010	0.000	0.240	0.20	
1353	4/20/2004	7:37:19 PM		25.938	25.438	25.483	27.191	25.179		49.204	53.603	15.916	33.701	-1.177	-7.275		47.618	0.068	14.643	0.003		2035.5	33.9247	52.1	11.7	41.5	2.858	0.010	0.010	0.000	0.241	0.21	
1354	4/20/2004	7:38:19 PM		25.938	25.423	25.478	27.186	25.169		48.841	53.058	15.907	33.327	-1.163	-7.272		46.502	0.069	14.643	0.003		2036.5	33.9414	51.6	11.4	41.1	2.833	0.010	0.010	0.000	0.247	0.21	
1355	4/20/2004	7:39:19 PM		25.928	25.423	25.488	27.181	25.124		49.12	53.545	15.989	33.424	-1.163	-7.246		47.549	0.066	14.643	0.003		2037.5	33.9581	52.1	11.7	41.3	2.846	0.010	0.010	0.000	0.235	0.20	
1356	4/20/2004	7:40:19 PM		25.927	25.427	25.492	27.145	25.052		48.868	53.346	15.988	33.185	-1.137	-7.128		48.442	0.067	14.643	0.003		2038.5	33.9747	51.9	11.9	41.0	2.829	0.010	0.010	0.000	0.240	0.20	
1357	4/20/2004	7:41:19 PM		25.911	25.405	25.495	27.059	25.081		49.129	53.39	15.833	33.699	-1.16	-7.252		45.181	0.065	14.643	0.003		2039.5	33.9914	51.9	11.1	41.4	2.855	0.010	0.010	0.000	0.231	0.20	
1358	4/20/2004	7:42:19 PM		25.916	25.415	25.5	27.089	25.071		49.148	53.456	15.803	33.736	-1.154	-7.252		48.02	0.066	14.643	0.003		2040.5	34.0081	52.0	11.8	41.4	2.857	0.010	0.010	0.000	0.234	0.20	
1359	4/20/2004	7:43:19 PM		25.91	25.4	25.47	27.003	25.155		49.143	53.553	15.678	33.822	-1.154	-7.235		49.017	0.066	14.643	0.003		2041.5	34.0247	52.1	12.0	41.5	2.860	0.010	0.010	0.000	0.234	0.20	
1360	4/20/2004	7:44:19 PM		25.915	25.405	25.445	27.033	25.295		49.326	53.835	15.809	33.865	-1.154	-7.229		47.401	0.069	14.643	0.003		2042.5	34.0414	52.4	11.6	41.6	2.868	0.010	0.010	0.000	0.244	0.21	
1361	4/20/2004	7:45:19 PM		25.91	25.4	25.45	27.063	25.435		48.374	52.815	16.398	32.33	-1.099	-7.111		48.158	0.062	14.643	0.003		2043.5	34.0581	51.3	11.8	40.4	2.782	0.009	0.009	0.000	0.226	0.19	
1362	4/20/2004	7:46:19 PM		25.916	25.405	25.455	27.173	25.591		48.656	53.081	16.125	32.915	-1.154	-7.16		46.362	0.066	14.643	0.003		2044.5	34.0747	51.6	11.4	40.8	2.812	0.010	0.010	0.000	0.238	0.20	
1363	4/20/2004	7:47:19 PM		25.902	25.397	25.452	27.205	25.622		48.689	53.017	16.115	32.945	-1.186	-7.238		45.924	0.076	14.643	0.003		2045.5	34.0914	51.5	11.3	40.8	2.814	0.011	0.011	0.000	0.274	0.23	
1364	4/20/2004	7:47:23 PM		25.907	25.407	25.457	27.205	25.627		48.811	53.236	16.196	32.925	-1.195	-7.249		48.702	0.067	14.643	0.003		2045.6	34.0925	51.8	11.9	40.9	2.818	0.010	0.010	0.000	0.241	0.21	
1365	4/20/2004	7:48:23 PM		25.908	25.423	25.478	27.331	25.604		48.735	53.195	16.063	33.036	-1.154	-7.108		45.154	0.062	14.643	0.003		2046.6	34.1092	51.7	11.1	40.9	2.819	0.009	0.009	0.000	0.223	0.19	
1366	4/20/2004	7:49:23 PM		25.932	25.442	25.492	27.42	25.587		48.899	53.406	15.982	33.175	-1.157	-7.246		48.615	0.065	14.643	0.003		2047.6	34.1258	51.9	11.9	41.0	2.829	0.010	0.010	0.000	0.233	0.20	
1367	4/20/2004	7:50:23 PM		25.918	25.443	25.488	27.401	25.483		48.71	53.195	16.04	32.896	-1.221	-7.29		47.755	0.07	14.643	0.003		2048.6	34.1425	51.7	11.7	40.8	2.813	0.010	0.010	0.000	0.252	0.21	
1368	4/20/2004	7:51:23 PM		25.915	25.435	25.47	27.323	25.435		48.7	53.209	15.959	33.075	-1.099	-7.018		49.733	0.069	14.643	0.003		2049.6	34.1592	51.7	12.2	40.9	2.819	0.010	0.010	0.000	0.248	0.21	
1369	4/20/2004	7:52:23 PM		25.916	25.446	25.496	27.324	25.391		48.643	53.103	15.93	33.044	-1.172	-7.2		47.007	0.067	14.643	0.003		2050.6	34.1758	51.6	11.5	40.8	2.816	0.010	0.010	0.000	0.241	0.21	
1370	4/20/2004	7:53:23 PM		25.931	25.446	25.506	27.269	25.341		48.94	53.251	16.035	33.214	-1.221	-7.281		45.083	0.068	14.643	0.003		2051.6	34.1925	51.8	11.0	41.1	2.832	0.010	0.010	0.000	0.243	0.21	
1371	4/20/2004	7:54:23 PM		25.915	25.44	25.49	27.188	25.26		48.059	52.465	16.742	31.63	-1.221	-7.284		46.306	0.064	14.643	0.003		2052.6	34.2092	51.0	11.3	39.8	2.747	0.010	0.009	0.000	0.236	0.20	
1372	4/20/2004	7:55:23 PM		25.919	25.444	25.509	27.127	25.19		48.299	52.672	16.666	31.938	-1.218	-7.29		49.32	0.066	14.643	0.003		2053.6	34.2258	51.2	12.1	40.1	2.766	0.010	0.010	0.000	0.242	0.21	
1373	4/20/2004	7:56:23 PM		25.919	25.449	25.529	27.087	25.19		48.198	52.618	16.573	31.942	-1.189	-7.29		48.156	0.062	14.643	0.003		2054.6	34.2425	51.1	11.8	40.1	2.763	0.009	0.009	0.000	0.227	0.19	
1374	4/20/2004	7:57:23 PM		25.924	25.459	25.539	27.077	25.185		48.295	52.639	16.671	31.948	-1.157	-7.284		49.301	0.064	14.643	0.003		2055.6	34.2592	51.2	12.1	40.1	2.766	0.010	0.009	0.000	0.234	0.20	
1375	4/20/2004	7:58:23 PM		25.928	25.443	25.513	27.061	25.178		47.996	52.252	16.543	31.78	-1.151	-7.139		49.877	0.061	14.643	0.003		2056.6	34.2758	50.8	12.2	39.9	2.750	0.009	0.009	0.000	0.225	0.19	
1376	4/20/2004	7:59:23 PM		25.922	25.442	25.492	26.995	25.143		48.438	52.83	16.362	32.424	-1.16	-7.191		50.375	0.066	14.643	0.003		2057.6	34.2925	51.4	12.3	40.4	2.788	0.010	0.010	0.000	0.240	0.20	
1377	4/20/2004	8:00:23 PM		25.916	25.441	25.51	26.999	25.141		48.492	52.853	16.328	32.578	-1.16	-7.261		47.08	0.069	14.643	0.003		2058.6	34.3092	51.4	11.5	40.5	2.795	0.010	0.010	0.000	0.250	0.21	
1378	4/20/2004	8:01:23 PM		25.915	25.44	25.495	26.968	25.075		48.455	52.704	16.249	32.601	-1.221	-7.244		49.241	0.062	14.643	0.003		2059.6	34.3258	51.2	12.1	40.5	2.794	0.009	0.009	0.000	0.225	0.19	
1379	4/20/2004	8:02:23 PM		25.914	25.434	25.514	26.967	25.07		48.639	53.218	16.492	32.477	-1.099	-6.966		47.044	0.062	14.643	0.003		2060.6	34.3425	51.7	11.5	40.6	2.796	0.009	0.009	0.000	0.225	0.19	
1380	4/20/2004	8:03:23 PM		25.915	25.43	25.52	26.948	25.075		48.312	52.722	16.395	32.215	-1.18	-7.22		47.338	0.063	14.643	0.003		2061.6	34.3592	51.2	11.6	40.3	2.776	0.009	0.009	0.000	0.230	0.20	
1381	4/20/2004	8:04:23 PM		25.909	25.434	25.529	26.992	25.04		48.407	52.737	16.324	32.449	-1.221	-7.304		48.244	0.069	14.643	0.003		2062.6	34.3758	51.3	11.8	40.4	2.787	0.010	0.010	0.000	0.251	0.21	
1382	4/20/2004	8:05:23 PM		25.894	25.408	25.518	26.997	25.024		48.78	53.207	16.381	32.759	-1.224	-7.223		50.688	0.071	14.643	0.003		2063.6	34.3925	51.7	12.4	40.8	2.811	0.011	0.010	0.000	0.256	0.22	
1383	4/20/2004	8:06:23 PM		25.898	25.408	25.543	26.991	25.048		48.565	52.813	16.47	32.365	-1.218	-7.287		49.028	0.066	14.643	0.003		2064.6	34.4092	51.3	12.0	40.5	2.790	0.010	0.010	0.000	0.239	0.20	
1384	4/20/2004	8:07:23 PM		25.896	25.39	25.535	26.959	24.986		48.791	53.131	16.26	32.867	-1.218	-7.353		47.618	0.066	14.643	0.004		2065.6	34.4258	51.7	11.7	40.8	2.815	0.010	0.010	0.000	0.237	0.20	
1385	4/20/2004	8:08:23 PM		25.888	25.383	25.523	26.896	24.974		48.751	53.106	16.25	32.82	-1.183	-7.142		48.967	0.058	14.643	0.003		2066.6	34.4425	51.6	12.0	40.8	2.812	0.009	0.009	0.000	0.209	0.18	
1386	4/20/2004	8:09:23 PM		25.87	25.36	25.51	26.829	24.941		48.836	53.17	16.211	32.97	-1.224	-7.304		48.932	0.065	14.643	0.003		2067.6	34.4592	51.7	12.0	40.9	2.820	0.010	0.010	0.000	0.234	0.20	
1387	4/20/2004	8:10:23 PM		25.883	25.368	25.528	26.831	25.014		48.733	52.998	16.268	32.814	-1.221	-7.284		49.385	0.067	14.643	0.003		2068.6	34.4758	51.5	12.1	40.8	2.811	0.010	0.010	0.000	0.241	0.21	
1388	4/20/2004	8:11:23 PM		25.877	25.357	25.516	26.855	25.047		48.737	53.016	16.204	32.927	-1.221	-7.203		49.357	0.06	14.643	0.003		2069.6	34.4925	51.5	12.1	40.8	2.815	0.009	0.009	0.000	0.216	0.18	
1389	4/20/2004	8:12:23 PM		25.88	25.355	25.54	26.863	25.256		48.621	53.068	16.382	32.547	-1.221	-7.267		48.74	0.066	14.643	0.003		2070.6	34.5092	51.6	11.9	40.6	2.798	0.010	0.010	0.000	0.239	0.20	
1390	4/20/2004	8:13:23 PM		25.885	25.359	25.549	26.933	25.395		48.758	53.118	16.405	32.648	-1.218	-7.281		47.566	0.064	14.643	0.003		2071.6	34.5258	51.6	11.7	40.7	2.806	0.010	0.009	0.000	0.231	0.20	
1391	4/20/2004	8:14:23 PM		25.876	25.351	25.486	26.974	25.466		48.685	53.033	16.312	32.691	-1.183	-7.278		48.047	0.065	14.643	0.003		2072.6	34.5425	51.6	11.8	40.7	2.805	0.010	0.010	0.000	0.235	0.20	
1392	4/20/2004	8:15:23 PM		25.888	25.367	25.502	27.066	25.568		48.563	52.902	16.25	32.586	-1.195	-7.267		46.224	0.067	14.643	0.003		2073.6	34.5592	51.4	11.3	40.6	2.797	0.010	0.010	0.000	0.243	0.21	
1393	4/20/2004	8:16:23 PM		25.884	25.369	25.509	27.057	25.609		48.451	52.807	16.254	32.547	-1.16	-7.278		50.06	0.065	14.643	0.003		2074.6	34.5758	51.3	12.3	40.5	2.792	0.010	0.010	0.000	0.236	0.20	
1394	4/20/2004	8:17:23 PM		25.892	25.387	25.522	27.1	25.507		48.59	52.894	16.223	32.791	-1.157	-7.197		48.911	0.065	14.643	0.003		2075.6	34.5925	51.4	12.0	40.7	2.805	0.010	0.010	0.000	0.235	0.20	
1395	4/20/2004	8:18:23 PM		25.888	25.387	25.517	27.161	25.413		48.451	52.913	16.158	32.709	-1.157	-7.203		48.421	0.065	14.643	0.003		2076.6	34.6092	51.4	11.9	40.6	2.798	0.010	0.010	0.000	0.235	0.20	
1396	4/20/2004	8:19:23 PM		25.878	25.383	25.528	27.086	25.339		48.675	53.075	16.249	32.732	-1.154	-7.238		48.365	0.065	14.643	0.003		2077.6	34.6258	51.6	11.9	40.7	2.806	0.010	0.010	0.000	0.235	0.20	
1397	4/20/2004	8:20:23 PM		25.88	25.39	25.535	27.083	25.34		48.735	53.191	16.334	32.715	-1.157	-7.226		46.806	0.065	14.643	0.003		2078.6	34.6425	51.7	11.5	40.7	2.808	0.010	0.010	0.000	0.234	0.20	
1398	4/20/2004	8:21:23 PM		25.871	25.395	25.54	26.969	25.221		48.71	53.097	16.352	32.664	-1.134	-7.235		48.354	0.064	14.643	0.003		2079.6	34.6592	51.6	11.8	40.7	2.805	0.010	0.009	0.000	0.231	0.20	
1399	4/20/2004	8:22:23 PM		25.871	25.391	25.546	26.904	25.227		48.544	52.965	16.287	32.537	-1.096	-7.168		48.12	0.064	14.643	0.003		2080.6	34.6758	51.5	11.8	40.5	2.795	0.010	0.009	0.000	0.232	0.20	
1400	4/20/2004	8:23:23 PM		25.876	25.4	25.565	26.969	25.161		48.683	53.091	16.32	32.709	-1.151	-7.246		46.917	0.068	14.643	0.003		2081.6	34.6925	51.6	11.5	40.7	2.806	0.010	0.010	0.000	0.245	0.21	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1401	4/20/2004	8:24:23 PM		25.864	25.389	25.549	26.917	25.069		48.783	53.199	16.267	32.867	-1.221	-6.995		48.863	0.057	14.643	0.003		2082.6	34.7092	51.7	12.0	40.8	2.815	0.008	0.008	0.000	0.205	0.17	
1402	4/20/2004	8:25:23 PM		25.874	25.389	25.574	26.937	25.119		48.598	53.122	16.229	32.709	-1.099	-6.954		46.656	0.066	14.643	0.003		2083.6	34.7258	51.6	11.4	40.7	2.803	0.010	0.010	0.000	0.238	0.20	
1403	4/20/2004	8:26:23 PM		25.863	25.377	25.567	26.891	25.098		48.6	53.025	16.279	32.572	-1.154	-7.093		47.344	0.07	14.643	0.003		2084.6	34.7425	51.6	11.6	40.6	2.798	0.010	0.010	0.000	0.253	0.22	
1404	4/20/2004	8:27:23 PM		25.861	25.371	25.566	26.834	25.062		48.513	52.907	16.273	32.498	-1.157	-7.122		47.401	0.068	14.643	0.003		2085.6	34.7592	51.4	11.6	40.5	2.793	0.010	0.010	0.000	0.246	0.21	
1405	4/20/2004	8:28:23 PM		25.871	25.381	25.556	26.879	25.077		48.511	52.805	16.316	32.523	-1.18	-7.206		46.965	0.067	14.643	0.003		2086.6	34.7758	51.3	11.5	40.5	2.794	0.010	0.010	0.000	0.243	0.21	
1406	4/20/2004	8:29:23 PM		25.859	25.364	25.524	26.837	25.019		48.635	52.967	16.192	32.757	-1.154	-7.206		48.915	0.068	14.643	0.003		2087.6	34.7925	51.5	12.0	40.7	2.806	0.010	0.010	0.000	0.245	0.21	
1407	4/20/2004	8:30:23 PM		25.848	25.347	25.517	26.801	24.938		48.561	52.894	16.192	32.783	-1.157	-7.209		47.778	0.074	14.643	0.003		2088.6	34.8092	51.4	11.7	40.7	2.804	0.011	0.011	0.000	0.267	0.23	
1408	4/20/2004	8:31:23 PM		25.851	25.361	25.521	26.739	24.936		48.82	53.197	16.07	33.087	-1.157	-7.203		49.172	0.067	14.643	0.003		2089.6	34.8258	51.7	12.1	41.0	2.824	0.010	0.010	0.000	0.240	0.20	
1409	4/20/2004	8:32:23 PM		25.855	25.349	25.529	26.723	24.915		48.766	53.191	15.964	33.198	-1.154	-7.203		46.986	0.066	14.643	0.003		2090.6	34.8425	51.7	11.5	41.0	2.826	0.010	0.010	0.000	0.237	0.20	
1410	4/20/2004	8:33:23 PM		25.848	25.343	25.533	26.696	24.924		48.851	53.288	16.183	32.941	-1.151	-7.2		48.742	0.066	14.643	0.003		2091.6	34.8592	51.8	11.9	40.9	2.820	0.010	0.010	0.000	0.237	0.20	
1411	4/20/2004	8:34:23 PM		25.841	25.341	25.526	26.679	24.936		48.845	53.174	16.101	33.058	-1.154	-7.2		48.408	0.066	14.643	0.003		2092.6	34.8758	51.7	11.9	41.0	2.823	0.010	0.010	0.000	0.237	0.20	
1412	4/20/2004	8:35:23 PM		25.84	25.334	25.539	26.653	24.935		48.704	53.234	16.038	32.958	-1.108	-7.206		48.179	0.065	14.643	0.003		2093.6	34.8925	51.8	11.8	40.8	2.815	0.010	0.010	0.000	0.234	0.20	
1413	4/20/2004	8:36:23 PM		25.829	25.323	25.538	26.667	25.119		48.689	53.141	16.124	32.892	-1.105	-7.197		50.448	0.066	14.643	0.003		2094.6	34.9092	51.7	12.4	40.8	2.812	0.010	0.010	0.000	0.238	0.20	
1414	4/20/2004	8:37:23 PM		25.824	25.318	25.538	26.717	25.264		48.542	52.896	15.961	32.876	-1.099	-7.197		50.031	0.067	14.643	0.003		2095.6	34.9258	51.4	12.3	40.7	2.807	0.010	0.010	0.000	0.242	0.21	
1415	4/20/2004	8:38:23 PM		25.824	25.318	25.543	26.792	25.384		48.863	53.323	16.101	33.128	-1.099	-7.174		48.41	0.07	14.643	0.003		2096.6	34.9425	51.9	11.9	41.0	2.826	0.010	0.010	0.000	0.251	0.21	
1416	4/20/2004	8:39:23 PM		25.82	25.3	25.535	26.878	25.45		48.706	53.188	16.189	32.83	-1.033	-7.032		45.803	0.069	14.643	0.003		2097.6	34.9592	51.7	11.2	40.8	2.811	0.010	0.010	0.000	0.249	0.21	
1417	4/20/2004	8:40:23 PM		25.842	25.336	25.576	27.04	25.532		48.98	53.437	15.961	33.341	-1.096	-7.209		47.374	0.064	14.643	0.003		2098.6	34.9758	52.0	11.6	41.2	2.838	0.010	0.009	0.000	0.228	0.19	
1418	4/20/2004	8:41:23 PM		25.838	25.333	25.573	27.076	25.443		48.67	53.029	16.184	32.911	-1.096	-7.122		48.266	0.065	14.643	0.003		2099.6	34.9925	51.6	11.8	40.8	2.812	0.010	0.010	0.000	0.234	0.20	
1419	4/20/2004	8:42:23 PM		25.835	25.334	25.564	27.023	25.37		48.838	53.323	16.123	33.038	-1.102	-7.131		48.36	0.066	14.643	0.003		2100.6	35.0092	51.9	11.9	40.9	2.823	0.010	0.010	0.000	0.237	0.20	
1420	4/20/2004	8:43:23 PM		25.846	25.336	25.571	26.999	25.326		48.187	52.643	16.677	31.774	-1.093	-7.163		50.223	0.064	14.643	0.004		2101.6	35.0258	51.2	12.3	40.0	2.757	0.010	0.009	0.000	0.235	0.20	
1421	4/20/2004	8:44:23 PM		25.836	25.341	25.516	26.974	25.226		47.932	52.368	16.812	31.455	-1.096	-7.171		48.754	0.062	14.643	0.003		2102.6	35.0425	50.9	11.9	39.7	2.737	0.009	0.009	0.000	0.230	0.20	
1422	4/20/2004	8:45:23 PM		25.837	25.326	25.516	26.96	25.202		48.446	52.954	16.649	32.131	-1.096	-7.165		47.557	0.064	14.643	0.003		2103.6	35.0592	51.5	11.7	40.3	2.778	0.010	0.009	0.000	0.233	0.20	
1423	4/20/2004	8:46:23 PM		25.848	25.342	25.532	26.931	25.098		48.081	52.579	16.43	31.999	-1.099	-7.157		46.014	0.063	14.643	0.003		2104.6	35.0758	51.1	11.3	40.0	2.761	0.009	0.009	0.000	0.231	0.20	
1424	4/20/2004	8:47:23 PM		25.838	25.342	25.532	26.861	25.098		48.249	52.675	16.444	32.166	-1.143	-7.177		48.196	0.064	14.643	0.003		2105.6	35.0925	51.2	11.8	40.2	2.772	0.010	0.009	0.000	0.234	0.20	
1425	4/20/2004	8:48:23 PM		25.842	25.337	25.557	26.745	25.092		48.345	52.824	16.512	32.188	-0.995	-6.868		48.364	0.059	14.643	0.003		2106.6	35.1092	51.4	11.9	40.3	2.776	0.009	0.009	0.000	0.215	0.18	
1426	4/20/2004	8:49:23 PM		25.831	25.331	25.551	26.639	25.086		48.218	52.712	16.568	31.936	-0.975	-6.868		48.511	0.065	14.643	0.003		2107.6	35.1258	51.2	11.9	40.1	2.763	0.010	0.010	0.000	0.238	0.20	
1427	4/20/2004	8:50:23 PM		25.804	25.309	25.529	26.687	25.084		48.364	52.84	16.605	32.083	-1.03	-7.015		49.914	0.066	14.643	0.003		2108.6	35.1425	51.4	12.2	40.2	2.773	0.010	0.010	0.000	0.241	0.21	
1428	4/20/2004	8:51:23 PM		25.814	25.319	25.559	26.697	24.989		48.283	52.855	16.48	32.188	-1.007	-7.018		46.679	0.065	14.643	0.003		2109.6	35.1592	51.4	11.4	40.2	2.774	0.010	0.010	0.000	0.237	0.20	
1429	4/20/2004	8:52:23 PM		25.813	25.313	25.573	26.721	24.954		48.179	52.741	16.475	31.962	-0.998	-7.012		50.548	0.065	14.643	0.003		2110.6	35.1758	51.3	12.4	40.1	2.763	0.010	0.010	0.000	0.238	0.20	
1430	4/20/2004	8:53:23 PM		25.829	25.339	25.609	26.722	24.944		48.465	53.07	16.57	32.194	-1.021	-7.018		48.277	0.064	14.643	0.003		2111.6	35.1925	51.6	11.8	40.3	2.781	0.010	0.009	0.000	0.233	0.20	
1431	4/20/2004	8:54:23 PM		25.803	25.308	25.583	26.601	24.924		48.585	53.162	16.532	32.358	-0.998	-7.015		48.798	0.064	14.643	0.003		2112.6	35.2092	51.7	12.0	40.5	2.790	0.010	0.009	0.000	0.232	0.20	
1432	4/20/2004	8:55:23 PM		25.797	25.291	25.586	26.53	24.887		48.467	52.983	16.387	32.432	-0.966	-7.015		49.111	0.065	14.643	0.003		2113.6	35.2258	51.5	12.0	40.4	2.789	0.010	0.010	0.000	0.236	0.20	
1433	4/20/2004	8:56:23 PM		25.792	25.291	25.596	26.515	24.872		48.353	52.894	16.327	32.434	-0.992	-7.021		47.476	0.064	14.643	0.003		2114.6	35.2425	51.4	11.6	40.4	2.785	0.010	0.009	0.000	0.232	0.20	
1434	4/20/2004	8:57:23 PM		25.78	25.27	25.585	26.443	24.921		48.538	53.126	16.409	32.373	-0.995	-7.015		46.112	0.064	14.643	0.003		2115.6	35.2592	51.7	11.3	40.5	2.789	0.010	0.009	0.000	0.232	0.20	
1435	4/20/2004	8:58:23 PM		25.795	25.285	25.63	26.493	25.081		48.256	52.774	16.371	32.163	-0.992	-7.012		49.422	0.063	14.643	0.003		2116.6	35.2758	51.3	12.1	40.2	2.772	0.009	0.009	0.000	0.229	0.20	
1436	4/20/2004	8:59:23 PM		25.775	25.254	25.559	26.453	25.245		48.38	53.089	16.399	32.299	-0.94	-7.012		48.794	0.066	14.643	0.003		2117.6	35.2925	51.6	12.0	40.3	2.781	0.010	0.010	0.000	0.240	0.20	
1437	4/20/2004	9:00:23 PM		25.792	25.276	25.586	26.395	25.332		48.256	52.938	16.384	32.205	-0.937	-7.012		48.07	0.064	14.643	0.003		2118.6	35.3092	51.5	11.8	40.2	2.774	0.010	0.009	0.000	0.233	0.20	
1438	4/20/2004	9:01:23 PM		25.767	25.246	25.556	26.42	25.432		48.677	53.317	16.478	32.558	-0.937	-7.012		48.972	0.064	14.643	0.003		2119.6	35.3258	51.8	12.0	40.6	2.800	0.010	0.009	0.000	0.231	0.20	
1439	4/20/2004	9:02:23 PM		25.788	25.273	25.598	26.666	25.523		48.455	53.126	16.508	32.285	-0.934	-7.012		49.09	0.065	14.643	0.003		2120.6	35.3425	51.7	12.0	40.4	2.783	0.010	0.010	0.000	0.236	0.20	
1440	4/20/2004	9:03:23 PM		25.806	25.291	25.616	26.834	25.516		48.289	52.983	16.449	32.114	-0.937	-7.006		49.069	0.063	14.643	0.003		2121.6	35.3592	51.5	12.0	40.2	2.772	0.009	0.009	0.000	0.230	0.20	
1441	4/20/2004	9:04:23 PM		25.808	25.292	25.627	26.941	25.478		48.295	52.956	16.434	32.157	-0.937	-7.006		46.677	0.062	14.643	0.003		2122.6	35.3758	51.5	11.4	40.2	2.773	0.009	0.009	0.000	0.226	0.19	
1442	4/20/2004	9:05:23 PM		25.814	25.294	25.629	27.017	25.399		48.476	53.126	16.411	32.379	-0.937	-7.006		49.597	0.063	14.643	0.003		2123.6	35.3925	51.7	12.2	40.4	2.787	0.009	0.009	0.000	0.228	0.19	
1443	4/20/2004	9:06:23 PM		25.82	25.305	25.635	26.998	25.331		48.38	52.987	16.367	32.35	-0.894	-7.006		46.016	0.074	14.643	0.003		2124.6	35.4092	51.5	11.3	40.4	2.783	0.011	0.011	0.000	0.268	0.23	
1444	4/20/2004	9:07:23 PM		25.826	25.306	25.641	26.904	25.261		48.137	52.788	16.35	32.151	-0.928	-7.012		48.5	0.062	14.643	0.003		2125.6	35.4258	51.3	11.9	40.1	2.768	0.009	0.009	0.000	0.226	0.19	
1445	4/20/2004	9:08:23 PM		25.832	25.312	25.667	26.75	25.222		47.885	52.546	16.299	31.903	-0.882	-7.004		49.049	0.062	14.643	0.004		2126.6	35.4425	51.1	12.0	39.9	2.751	0.009	0.009	0.000	0.227	0.19	
1446	4/20/2004	9:09:23 PM		25.818	25.302	25.647	26.676	25.158		48.509	53.222	16.442	32.391	-0.885	-7.012		48.911	0.064	14.643	0.003		2127.6	35.4592	51.7	12.0	40.5	2.789	0.010	0.009	0.000	0.232	0.20	
1447	4/20/2004	9:10:23 PM		25.807	25.292	25.632	26.705	25.052		48.378	53.074	16.428	32.241	-0.902	-7.004		47.801	0.065	14.643	0.003		2128.6	35.4758	51.6	11.7	40.3	2.779	0.010	0.010	0.000	0.236	0.20	
1448	4/20/2004	9:11:23 PM		25.823	25.307	25.672	26.776	25.168		48.434	53.019	16.364	32.432	-0.934	-6.992		50.511	0.063	14.643	0.003		2129.6	35.4925	51.5	12.4	40.4	2.788	0.009	0.009	0.000	0.228	0.19	
1449	4/20/2004	9:12:23 PM		25.829	25.319	25.684	26.707	25.049		48.347	53.056	16.479	32.141	-0.888	-6.983		49.27	0.065	14.643	0.003		2130.6	35.5092	51.6	12.1	40.2	2.775	0.010	0.010	0.000	0.236	0.20	
1450	4/20/2004	9:13:23 PM		25.828	25.293	25.688	26.682	24.914		48.546	53.226	16.526	32.295	-0.995	-7.056		46.27	0.067	14.643	0.003		2131.6	35.5258	51.8	11.3	40.4	2.787	0.010	0.010	0.000	0.242	0.21	
1451	4/20/2004	9:14:23 PM		25.823	25.292	25.677	26.651	24.913		48.357	53.155	16.44	32.241	-0.937	-6.781		47.538	0.061	14.643	0.003		2132.6	35.5425	51.7	11.6	40.3	2.778	0.009	0.009	0.000	0.221	0.19	
1452	4/20/2004	9:15:23 PM		25.821	25.291	25.696	26.624	24.917		48.407	53.048	16.516	32.207	-0.937	-6.83		48.692	0.047	14.643	0.003		2133.6	35.5592	51.6	11.9	40.3	2.779	0.007	0.007	0.000	0.170	0.15	
1453	4/20/2004	9:16:23 PM		25.82	25.275	25.7	26.619	24.881		48.521	53.016	16.418	32.459	-0.995	-7.035		48.181	0.065	14.643	0.003		2134.6	35.5758	51.5	11.8	40.5	2.792	0.010	0.010	0.000	0.235	0.20	
1454	4/20/2004	9:17:23 PM		25.814	25.269	25.699	26.587	24.869		48.782	53.066	16.381	32.787	-1.172	-7.027		48.755	0.059	14.643	0.003		2135.6	35.5925	51.6	11.9	40.8	2.812	0.009	0.009	0.000	0.211	0.18	
1455	4/20/2004	9:18:23 PM		25.813	25.262	25.647	26.581	24.858		48.836	53.356	16.547	32.576	-0.995	-6.807		48.565	0.065	14.643	0.003		2136.6	35.6092	51.9	11.9	40.7	2.807	0.010	0.010	0.000	0.234	0.20	
1456	4/20/2004	9:19:23 PM		25.812	25.256	25.637	26.48	24.972		48.59	53.016	16.385	32.547	-1.099	-7.064		48.665	0.068	14.643	0.003		2137.6	35.6258	51.5	11.9	40.6	2.797	0.010	0.010	0.000	0.245	0.21	
1457	4/20/2004	9:20:23 PM		25.811	25.251	25.631	26.454	25.101		48.563	53.089	16.354	32.533	-1.154	-7.099		49.779	0.059	14.643	0.003		2138.6	35.6425	51.6	12.2	40.5	2.796	0.009	0.009	0.000	0.213	0.18	
1458	4/20/2004	9:21:23 PM		25.806	25.256	25.651	26.399	25.266		48.573	53.104	16.431	32.449	-1.134	-7.122		49.284	0.065	14.643	0.003		2139.6	35.6592	51.6	12.1	40.5	2.793	0.010	0.010	0.000	0.235	0.20	
1459	4/20/2004	9:22:23 PM		25.807	25.246	25.652	26.39	25.332		48.646	53.133	16.291	32.675	-1.137	-7.165		47.855	0.064	14.643	0.003		2140.6	35.6758	51.7	11.7	40.7	2.803	0.010	0.009	0.000	0.230	0.20	
1460	4/20/2004	9:23:23 PM		25.802	25.246	25.667	26.55	25.442		48.366	52.902	16.384	32.246	-1.151	-7.16		46.704	0.064	14.643	0.003		2141.6	35.6925	51.4	11.4	40.3	2.779	0.010	0.009	0.000	0.232	0.20	
1461	4/20/2004	9:24:23 PM		25.813	25.258	25.688	26.631	25.518		48.503	52.9	16.334	32.461	-1.093	-7.148		49.107	0.064	14.643	0.004		2142.6	35.7092	51.4	12.0	40.5	2.791	0.010	0.009	0.000	0.231	0.20	
1462	4/20/2004	9:25:23 PM		25.82	25.254	25.689	26.823	25.48		48.65	53.147	16.347	32.592	-1.096	-7.148		48.437	0.063	14.643	0.003		2143.6	35.7258	51.7	11.9	40.6	2.801	0.009	0.009	0.000	0.227	0.19	
1463	4/20/2004	9:26:23 PM		25.832	25.266	25.702	26.885	25.342		48.532	53.002	16.417	32.389	-1.099	-7.151		49.918	0.065	14.643	0.003		2144.6	35.7425	51.5	12.2	40.5	2.790	0.010	0.010	0.000	0.235	0.20	
1464	4/20/2004	9:27:23 PM		25.838	25.268	25.698	26.916	25.279		48.575	53.046	16.434	32.469	-1.099	-7.157		48.965	0.063	14.643	0.003		2145.6	35.7592	51.6	12.0	40.5	2.794	0.009	0.009	0.000	0.227	0.19	
1465	4/20/2004	9:28:23 PM		25.838	25.273	25.708	26.906	25.209		48.583	53.039	16.466	32.422	-1.093	-7.142		49.151	0.065	14.643	0.003		2146.6	35.7758	51.6	12.0	40.5	2.793	0.010	0.010	0.000	0.235	0.20	
1466	4/20/2004	9:29:23 PM		25.849	25.274	25.719	26.887	25.149		48.527	52.888	16.36	32.557	-1.059	-7.148		50.477	0.065	14.643	0.003		2147.6	35.7925	51.4	12.4	40.5	2.795	0.010	0.009	0.000	0.234	0.20	
1467	4/20/2004	9:30:23 PM		25.844	25.269	25.709	26.802	25.029		48.565	53.184	16.461	32.379	-1.059	-7.145		47.338	0.063	14.643	0.003		2148.6	35.8092	51.7	11.6	40.5	2.790	0.009	0.009	0.000	0.228	0.19	
1468	4/20/2004	9:31:23 PM		25.84	25.269	25.705	26.573	24.73		48.426	52.967	16.417	32.36	-1.035	-7.151		48.156	0.064	14.643	0.003		2149.6	35.8258	51.5	11.8	40.4	2.785	0.010	0.009	0.000	0.232	0.20	
1469	4/20/2004	9:32:23 PM		25.855	25.269	25.725	26.463	24.545		48.67	53.259	16.509	32.441	-1.096	-7.027		48.485	0.067	14.643	0.003		2150.6	35.8425	51.8	11.9	40.6	2.796	0.010	0.010	0.000	0.241	0.21	
1470	4/20/2004	9:33:23 PM		25.838	25.253	25.683	26.071	24.439		48.588	53.095	16.489	32.44	-0.995	-6.98		47.426	0.065	14.643	0.003		2151.6	35.8592	51.6	11.6	40.5	2.793	0.010	0.010	0.000	0.235	0.20	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1471	4/20/2004	9:34:23 PM		25.835	25.235	25.65	25.838	24.461		48.571	53.112	16.487	32.385	-1.09	-7.073		48.696	0.057	14.643	0.003		2152.6	35.8758	51.6	11.9	40.5	2.791	0.008	0.008	0.000	0.206	0.18	
1472	4/20/2004	9:35:23 PM		25.813	25.212	25.642	25.645	24.373		48.361	52.975	16.384	32.229	-1.033	-7.111		49.937	0.064	14.643	0.003		2153.6	35.8925	51.5	12.2	40.3	2.778	0.010	0.009	0.000	0.233	0.20	
1473	4/20/2004	9:36:23 PM		25.8	25.204	25.654	25.522	24.315		48.426	52.938	16.407	32.262	-1.096	-7.145		48.525	0.064	14.643	0.003		2154.6	35.9092	51.5	11.9	40.3	2.782	0.010	0.009	0.000	0.232	0.20	
1474	4/20/2004	9:37:23 PM		25.78	25.175	25.66	25.433	24.22		48.579	53.048	16.466	32.436	-1.044	-7.139		48.748	0.065	14.643	0.003		2155.6	35.9258	51.6	11.9	40.5	2.793	0.010	0.010	0.000	0.235	0.20	
1475	4/20/2004	9:38:23 PM		25.757	25.146	25.656	25.324	24.212		48.334	52.915	16.313	32.379	-1.082	-7.131		47.924	0.066	14.643	0.003		2156.6	35.9425	51.4	11.7	40.4	2.782	0.010	0.010	0.000	0.239	0.20	
1476	4/20/2004	9:39:23 PM		25.737	25.121	25.661	25.279	24.202		48.144	52.633	16.245	32.326	-0.983	-6.975		47.361	0.066	14.643	0.003		2157.6	35.9592	51.2	11.6	40.2	2.774	0.010	0.010	0.000	0.240	0.20	
1477	4/20/2004	9:40:23 PM		25.702	25.096	25.657	25.219	24.137		48.403	52.892	16.266	32.486	-1.018	-7.056		46.406	0.064	14.643	0.003		2158.6	35.9758	51.4	11.4	40.4	2.789	0.010	0.009	0.000	0.232	0.20	
1478	4/20/2004	9:41:23 PM		25.698	25.077	25.668	25.18	24.083		48.689	53.307	16.354	32.625	-1.027	-7.099		47.57	0.063	14.643	0.003		2159.6	35.9925	51.8	11.7	40.7	2.803	0.009	0.009	0.000	0.227	0.19	
1479	4/20/2004	9:42:23 PM		25.685	25.054	25.675	25.162	24.2		48.936	53.464	16.406	32.835	-1.027	-7.024		48.262	0.065	14.643	0.003		2160.6	36.0092	52.0	11.8	40.9	2.819	0.010	0.010	0.000	0.233	0.20	
1480	4/20/2004	9:43:23 PM		25.667	25.031	25.681	25.208	24.402		48.969	53.566	16.384	32.808	-1.038	-7.131		46.9	0.063	14.643	0.003		2161.6	36.0258	52.1	11.5	40.9	2.819	0.009	0.009	0.000	0.225	0.19	
1481	4/20/2004	9:44:23 PM		25.659	25.013	25.693	25.296	24.509		48.787	53.273	16.393	32.73	-1.099	-7.085		48.533	0.066	14.643	0.003		2162.6	36.0425	51.8	11.9	40.8	2.810	0.010	0.010	0.000	0.237	0.20	
1482	4/20/2004	9:45:23 PM		25.667	24.99	25.701	25.354	24.632		48.77	53.211	16.276	32.859	-1.027	-7.073		49.036	0.064	14.643	0.003		2163.6	36.0592	51.7	12.0	40.8	2.814	0.010	0.009	0.000	0.229	0.20	
1483	4/20/2004	9:46:23 PM		25.661	24.985	25.7	25.428	24.736		48.76	53.265	16.37	32.773	-1.099	-7.174		47.067	0.063	14.643	0.003		2164.6	36.0758	51.8	11.5	40.8	2.811	0.009	0.009	0.000	0.226	0.19	
1484	4/20/2004	9:46:43 PM		25.675	24.984	25.72	25.467	24.74		48.747	53.164	16.475	32.58	-1.125	-7.148		48.648	0.064	14.643	0.003		2164.9	36.0814	51.7	11.9	40.7	2.804	0.010	0.009	0.000	0.230	0.20	
1485	4/20/2004	9:47:43 PM		25.697	24.98	25.741	25.529	24.767		48.482	52.931	16.494	32.266	-0.975	-6.894		45.845	0.064	14.643	0.003		2165.9	36.0981	51.5	11.2	40.4	2.784	0.010	0.009	0.000	0.231	0.20	
1486	4/20/2004	9:48:43 PM		25.703	24.977	25.747	25.565	24.683		48.573	53.253	16.389	32.449	-1.096	-7.073		49.503	0.061	14.643	0.003		2166.9	36.1147	51.8	12.1	40.5	2.793	0.009	0.009	0.000	0.220	0.19	
1487	4/20/2004	9:49:43 PM		25.714	24.963	25.724	25.557	24.545		48.706	53.267	16.519	32.41	-1.03	-7.044		48.248	0.065	14.643	0.003		2167.9	36.1314	51.8	11.8	40.6	2.796	0.010	0.009	0.000	0.234	0.20	
1488	4/20/2004	9:50:43 PM		25.72	24.954	25.67	25.497	24.39		48.714	53.172	16.379	32.705	-1.062	-7.131		49.737	0.067	14.643	0.003		2168.9	36.1481	51.7	12.2	40.7	2.807	0.010	0.010	0.000	0.241	0.20	
1489	4/20/2004	9:51:43 PM		25.734	24.933	25.679	25.527	24.254		48.729	53.211	16.422	32.627	-1.09	-7.139		48.656	0.064	14.643	0.003		2169.9	36.1647	51.7	11.9	40.7	2.805	0.010	0.009	0.000	0.230	0.20	
1490	4/20/2004	9:52:43 PM		25.724	24.902	25.658	25.536	24.389		48.532	53.085	16.418	32.428	-1.053	-7.134		48.415	0.064	14.643	0.003		2170.9	36.1814	51.6	11.9	40.5	2.791	0.010	0.009	0.000	0.231	0.20	
1491	4/20/2004	9:53:43 PM		25.755	24.919	25.685	25.608	24.435		48.901	53.309	16.473	32.763	-1.067	-7.134		48.488	0.062	14.643	0.003		2171.9	36.1981	51.8	11.9	40.8	2.815	0.009	0.009	0.000	0.222	0.19	
1492	4/20/2004	9:54:43 PM		25.756	24.89	25.67	25.548	24.346		48.391	53.016	16.455	32.194	-1.09	-7.139		48.98	0.06	14.643	0.003		2172.9	36.2147	51.5	12.0	40.3	2.778	0.009	0.009	0.000	0.218	0.19	
1493	4/20/2004	9:55:43 PM		25.752	24.855	25.666	25.509	24.236		48.502	53.166	16.436	32.404	-0.998	-7.015		47.297	0.066	14.643	0.003		2173.9	36.2314	51.7	11.6	40.5	2.789	0.010	0.010	0.000	0.239	0.20	
1494	4/20/2004	9:56:43 PM		25.764	24.842	25.668	25.496	24.199		48.581	52.998	16.471	32.414	-1.024	-7.113		47.814	0.064	14.643	0.004		2174.9	36.2481	51.5	11.7	40.5	2.792	0.010	0.009	0.000	0.231	0.20	
1495	4/20/2004	9:57:43 PM		25.766	24.799	25.645	25.448	24.126		48.513	53.017	16.359	32.385	-1.024	-7.116		47.709	0.063	14.643	0.003		2175.9	36.2647	51.5	11.7	40.4	2.789	0.009	0.009	0.000	0.228	0.19	
1496	4/20/2004	9:58:43 PM		25.772	24.78	25.661	25.459	24.166		48.349	52.861	16.334	32.369	-1.099	-7.108		45.524	0.066	14.643	0.003		2176.9	36.2814	51.4	11.2	40.4	2.783	0.010	0.010	0.000	0.239	0.20	
1497	4/20/2004	9:59:43 PM		25.758	24.721	25.607	25.36	24.263		48.575	53.186	16.356	32.572	-0.937	-6.879		48.275	0.066	14.643	0.003		2177.9	36.2981	51.7	11.8	40.6	2.797	0.010	0.010	0.000	0.238	0.20	
1498	4/20/2004	10:00:43 PM		25.774	24.718	25.619	25.381	24.329		48.569	53.147	16.399	32.477	-0.978	-7.027		49.28	0.062	14.643	0.003		2178.9	36.3147	51.7	12.1	40.5	2.794	0.009	0.009	0.000	0.224	0.19	
1499	4/20/2004	10:01:43 PM		25.769	24.688	25.614	25.381	24.434		48.724	53.46	16.41	32.615	-0.992	-7.05		48.558	0.063	14.643	0.003		2179.9	36.3314	52.0	11.9	40.7	2.804	0.009	0.009	0.000	0.227	0.19	
1500	4/20/2004	10:02:43 PM		25.776	24.664	25.595	25.408	24.486		48.585	53.027	16.442	32.529	-1.009	-7.064		49.893	0.062	14.643	0.003		2180.9	36.3481	51.6	12.2	40.6	2.796	0.009	0.009	0.000	0.224	0.19	
1501	4/20/2004	10:03:43 PM		25.784	24.673	25.544	25.472	24.494		48.726	53.224	16.424	32.664	-0.998	-7.067		46.325	0.063	14.643	0.003		2181.9	36.3647	51.8	11.4	40.7	2.806	0.009	0.009	0.000	0.227	0.19	
1502	4/20/2004	10:04:43 PM		25.79	24.668	25.555	25.537	24.595		48.438	52.977	16.409	32.297	-0.995	-7.067		49.351	0.064	14.643	0.003		2182.9	36.3814	51.5	12.1	40.4	2.783	0.010	0.009	0.000	0.233	0.20	
1503	4/20/2004	10:05:43 PM		25.792	24.665	25.557	25.605	24.712		48.397	53.085	16.324	32.326	-0.972	-7.064		49.076	0.064	14.643	0.003		2183.9	36.3981	51.6	12.0	40.4	2.783	0.010	0.009	0.000	0.233	0.20	
1504	4/20/2004	10:06:43 PM		25.785	24.653	25.545	25.643	24.7		48.27	52.844	16.406	32.205	-0.995	-7.07		47.632	0.063	14.643	0.003		2184.9	36.4147	51.4	11.7	40.2	2.774	0.009	0.009	0.000	0.230	0.20	
1505	4/20/2004	10:07:43 PM		25.781	24.655	25.536	25.689	24.627		48.527	53.143	16.427	32.377	-0.96	-7.058		48.122	0.064	14.643	0.003		2185.9	36.4314	51.7	11.8	40.5	2.789	0.010	0.009	0.000	0.232	0.20	
1506	4/20/2004	10:08:43 PM		25.789	24.662	25.543	25.666	24.524		48.494	53.062	16.485	32.36	-0.937	-7.064		48.909	0.063	14.643	0.003		2186.9	36.4481	51.6	12.0	40.4	2.787	0.009	0.009	0.000	0.229	0.19	
1507	4/20/2004	10:09:43 PM		25.786	24.639	25.545	25.623	24.366		48.668	53.186	16.332	32.674	-0.937	-7.058		47.098	0.063	14.643	0.003		2187.9	36.4647	51.7	11.5	40.7	2.804	0.009	0.009	0.000	0.227	0.19	
1508	4/20/2004	10:10:43 PM		25.766	24.624	25.515	25.523	24.316		48.49	53.089	16.225	32.49	-0.937	-7.058		49.447	0.064	14.643	0.003		2188.9	36.4814	51.6	12.1	40.5	2.792	0.010	0.009	0.000	0.232	0.20	
1509	4/20/2004	10:11:43 PM		25.766	24.614	25.5	25.453	24.306		48.536	53.182	16.281	32.504	-0.94	-6.98		46.75	0.061	14.643	0.003		2189.9	36.4981	51.7	11.5	40.5	2.794	0.009	0.009	0.000	0.221	0.19	
1510	4/20/2004	10:12:43 PM		25.752	24.58	25.492	25.374	24.297		48.465	53.103	16.243	32.453	-0.957	-6.94		48.39	0.065	14.643	0.003		2190.9	36.5147	51.6	11.9	40.5	2.790	0.010	0.010	0.000	0.236	0.20	
1511	4/20/2004	10:13:43 PM		25.747	24.565	25.477	25.354	24.267		48.596	53.303	16.294	32.592	-0.902	-6.911		48.93	0.064	14.643	0.003		2191.9	36.5314	51.8	12.0	40.6	2.799	0.010	0.009	0.000	0.232	0.20	
1512	4/20/2004	10:14:43 PM		25.765	24.578	25.495	25.342	24.135		48.722	53.363	16.222	32.849	-0.972	-7.038		48.786	0.064	14.643	0.003		2192.9	36.5481	51.9	12.0	40.8	2.812	0.010	0.009	0.000	0.231	0.20	
1513	4/20/2004	10:15:43 PM		25.764	24.572	25.484	25.266	24.059		48.536	52.996	16.218	32.674	-0.989	-7.087		49.301	0.063	14.643	0.003		2193.9	36.5647	51.5	12.1	40.6	2.800	0.009	0.009	0.000	0.228	0.19	
1514	4/20/2004	10:16:43 PM		25.738	24.521	25.447	25.165	24.103		48.525	53.021	16.23	32.635	-0.998	-7.041		47.457	0.062	14.643	0.003		2194.9	36.5814	51.5	11.6	40.6	2.798	0.009	0.009	0.000	0.225	0.19	
1515	4/20/2004	10:17:43 PM		25.738	24.521	25.467	25.215	24.183		48.727	53.433	16.351	32.695	-0.934	-7.032		46.665	0.064	14.643	0.003		2195.9	36.5981	52.0	11.4	40.7	2.807	0.010	0.009	0.000	0.231	0.20	
1516	4/20/2004	10:18:43 PM		25.733	24.506	25.467	25.245	24.393		48.6	53.06	16.272	32.627	-0.998	-7.067		47.297	0.066	14.643	0.003		2196.9	36.6147	51.6	11.6	40.6	2.800	0.010	0.010	0.000	0.239	0.20	
1517	4/20/2004	10:19:43 PM		25.713	24.481	25.457	25.31	24.473		48.704	53.45	16.296	32.672	-0.937	-6.957		49.987	0.064	14.643	0.003		2197.9	36.6314	52.0	12.3	40.7	2.805	0.010	0.009	0.000	0.232	0.20	
1518	4/20/2004	10:20:43 PM		25.704	24.466	25.453	25.366	24.549		48.841	53.375	16.376	32.777	-1.007	-7.067		48.331	0.063	14.643	0.003		2198.9	36.6481	51.9	11.8	40.8	2.814	0.009	0.009	0.000	0.227	0.19	
1519	4/20/2004	10:21:43 PM		25.722	24.484	25.396	25.424	24.572		48.953	53.512	16.299	32.96	-0.98	-6.954		46.272	0.064	14.643	0.003		2199.9	36.6647	52.0	11.3	41.0	2.824	0.010	0.009	0.000	0.230	0.20	
1520	4/20/2004	10:22:43 PM		25.703	24.471	25.367	25.455	24.713		48.662	53.131	16.319	32.646	-1.001	-7.087		47.666	0.062	14.643	0.003		2200.9	36.6814	51.7	11.7	40.7	2.803	0.009	0.009	0.000	0.225	0.19	
1521	4/20/2004	10:23:43 PM		25.7	24.488	25.374	25.542	24.64		48.901	53.479	16.24	32.984	-1.027	-7.05		48.131	0.064	14.643	0.003		2201.9	36.6981	52.0	11.8	40.9	2.823	0.010	0.009	0.000	0.231	0.20	
1522	4/20/2004	10:24:43 PM		25.702	24.495	25.382	25.55	24.767		48.656	53.398	16.214	32.722	-1.012	-7.116		50.774	0.064	14.643	0.003		2202.9	36.7147	51.9	12.4	40.7	2.805	0.010	0.009	0.000	0.232	0.20	
1523	4/20/2004	10:25:43 PM		25.704	24.506	25.393	25.511	24.589		48.793	53.495	16.332	32.734	-0.96	-7.015		48.287	0.062	14.643	0.003		2203.9	36.7314	52.0	11.8	40.8	2.811	0.009	0.009	0.000	0.224	0.19	
1524	4/20/2004	10:26:43 PM		25.703	24.521	25.382	25.48	24.723		48.6	53.178	16.292	32.578	-0.954	-7.056		46.752	0.062	14.643	0.003		2204.9	36.7481	51.7	11.5	40.6	2.798	0.009	0.009	0.000	0.225	0.19	
1525	4/20/2004	10:27:43 PM		25.708	24.536	25.382	25.51	24.863		48.594	53.087	16.302	32.594	-0.952	-7.064		47.516	0.063	14.643	0.003		2205.9	36.7647	51.6	11.6	40.6	2.799	0.009	0.009	0.000	0.229	0.19	
1526	4/20/2004	10:28:43 PM		25.708	24.561	25.387	25.515	24.863		48.843	53.363	16.228	32.952	-0.966	-7.061		46.737	0.063	14.643	0.003		2206.9	36.7814	51.9	11.5	40.9	2.820	0.009	0.009	0.000	0.227	0.19	
1527	4/20/2004	10:29:43 PM		25.707	24.575	25.387	25.515	24.897		48.6	53.251	16.25	32.677	-0.946	-7.087		47.47	0.064	14.643	0.003		2207.9	36.7981	51.8	11.6	40.6	2.802	0.010	0.009	0.000	0.232	0.20	
1528	4/20/2004	10:30:43 PM		25.707	24.589	25.376	25.489	24.832		48.768	53.41	16.329	32.755	-0.995	-6.966		48.229	0.058	14.643	0.003		2208.9	36.8147	51.9	11.8	40.8	2.810	0.009	0.009	0.000	0.210	0.18	
1529	4/20/2004	10:31:43 PM		25.698	24.601	25.352	25.46	24.753		48.791	53.445	16.234	32.929	-0.92	-6.847		47.178	0.065	14.643	0.003		2209.9	36.8314	52.0	11.6	40.9	2.817	0.010	0.010	0.000	0.235	0.20	
1530	4/20/2004	10:32:43 PM		25.706	24.624	25.365	25.398	24.766		48.72	53.313	16.276	32.789	-0.937	-6.992		49.41	0.062	14.643	0.003		2210.9	36.8481	51.8	12.1	40.8	2.810	0.009	0.009	0.000	0.224	0.19	
1531	4/20/2004	10:33:43 PM		25.697	24.625	25.356	25.354	24.732		48.789	53.419	16.522	32.586	-0.937	-7.018		49.28	0.061	14.643	0.003		2211.9	36.8647	51.9	12.1	40.7	2.805	0.009	0.009	0.000	0.221	0.19	
1532	4/20/2004	10:34:43 PM		25.709	24.652	25.373	25.346	24.744		48.644	53.259	16.514	32.449	-0.946	-7.044		48.567	0.064	14.643	0.003		2212.9	36.8814	51.8	11.9	40.5	2.796	0.010	0.009	0.000	0.233	0.20	
1533	4/20/2004	10:35:43 PM		25.696	24.654	25.355	25.353	24.796		48.606	53.141	16.405	32.519	-0.957	-7.056		48.296	0.061	14.643	0.003		2213.9	36.8981	51.7	11.8	40.6	2.797	0.009	0.009	0.000	0.222	0.19	
1534	4/20/2004	10:36:43 PM		25.7	24.678	25.364	25.397	24.905		48.334	52.857	16.345	32.36	-0.946	-7.064		48.36	0.063	14.643	0.003		2214.9	36.9147	51.4	11.9	40.3	2.782	0.009	0.009	0.000	0.230	0.20	
1535	4/20/2004	10:37:43 PM		25.692	24.681	25.307	25.475	25.018		48.693	53.199	16.437	32.529	-0.937	-7.07		47.463	0.062	14.643	0.003		2215.9	36.9314	51.7	11.6	40.6	2.800	0.009	0.009	0.000	0.226	0.19	
1536	4/20/2004	10:38:43 PM		25.706	24.709	25.3	25.563	25.086		48.438	53.07	16.346	32.436	-0.966	-7.061		48.807	0.061	14.643	0.003		2216.9	36.9481	51.6	12.0	40.4	2.788	0.009	0.009	0.000	0.223	0.19	
1537	4/20/2004	10:39:43 PM		25.695	24.719	25.279	25.648	25.185		48.631	53.305	16.417	32.519	-0.94	-7.032		47.455	0.066	14.643	0.003		2217.9	36.9647	51.8	11.6	40.6	2.798	0.010	0.010	0.000	0.241	0.20	
1538	4/20/2004	10:40:43 PM		25.695	24.744	25.294	25.728	25.25		48.745	53.387	16.378	32.67	-0.937	-7.021		50.096	0.061	14.643	0.003		2218.9	36.9814	51.9	12.3	40.7	2.807	0.009	0.009	0.000	0.222	0.19	
1539	4/20/2004	10:41:43 PM		25.701	24.769	25.285	25.779	25.306		48.689	53.414	16.339	32.695	-0.937	-7.03		48.462	0.062	14.643	0.003		2219.9	36.9981	51.9	11.9	40.7	2.806	0.009	0.009	0.000	0.225	0.19	
1540	4/20/2004	10:42:43 PM		25.712	24.79	25.296	25.809	25.287		48.571	53.093	16.31	32.644	-0.937	-7.038		49.687	0.06	14.643	0.003		2220.9	37.0147	51.6	12.2	40.6	2.800	0.009	0.009	0.000	0.218	0.19	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1541	4/20/2004	10:43:43 PM		25.722	24.826	25.312	25.82	25.207		48.724	53.282	16.279	32.761	-0.931	-6.992		47.538	0.058	14.643	0.004		2221.9	37.0314	51.8	11.6	40.7	2.809	0.009	0.009	0.000	0.210	0.18	
1542	4/20/2004	10:44:43 PM		25.727	24.846	25.292	25.74	25.187		48.656	53.421	16.202	32.715	-0.839	-6.784		48.6	0.062	14.643	0.003		2222.9	37.0481	51.9	11.9	40.7	2.805	0.009	0.009	0.000	0.225	0.19	
1543	4/20/2004	10:45:43 PM		25.721	24.86	25.275	25.664	25.046		48.766	53.307	16.173	32.923	-0.882	-6.937		49.009	0.062	14.643	0.003		2223.9	37.0647	51.8	12.0	40.8	2.816	0.009	0.009	0.000	0.225	0.19	
1544	4/20/2004	10:46:43 PM		25.72	24.873	25.274	25.602	24.955		48.629	53.28	16.248	32.668	-0.934	-6.966		48.462	0.062	14.643	0.003		2224.9	37.0814	51.8	11.9	40.6	2.803	0.009	0.009	0.000	0.226	0.19	
1545	4/20/2004	10:47:43 PM		25.722	24.861	25.277	25.54	24.838		48.737	53.358	16.253	32.83	-0.882	-6.96		47.401	0.064	14.643	0.003		2225.9	37.0981	51.9	11.6	40.8	2.812	0.010	0.009	0.000	0.232	0.20	
1546	4/20/2004	10:48:43 PM		25.705	24.869	25.245	25.458	24.841		48.731	53.417	16.266	32.767	-0.888	-6.914		47.92	0.062	14.643	0.003		2226.9	37.1147	51.9	11.7	40.7	2.810	0.009	0.009	0.000	0.225	0.19	
1547	4/20/2004	10:49:43 PM		25.718	24.901	25.272	25.48	24.788		48.693	53.344	16.212	32.781	-0.885	-6.946		48.805	0.061	14.643	0.003		2227.9	37.1314	51.9	12.0	40.7	2.809	0.009	0.009	0.000	0.222	0.19	
1548	4/20/2004	10:50:43 PM		25.711	24.895	25.275	25.428	24.786		48.542	53.205	16.23	32.689	-0.882	-6.943		49.443	0.062	14.643	0.003		2228.9	37.1481	51.7	12.1	40.6	2.800	0.009	0.009	0.000	0.226	0.19	
1549	4/20/2004	10:51:43 PM		25.698	24.891	25.257	25.345	24.718		48.967	53.674	16.386	32.812	-0.882	-6.954		47.685	0.061	14.643	0.003		2229.9	37.1647	52.2	11.7	40.9	2.819	0.009	0.009	0.000	0.221	0.19	
1550	4/20/2004	10:52:43 PM		25.696	24.885	25.255	25.358	24.766		48.809	53.462	16.281	32.839	-0.885	-6.954		50.052	0.061	14.643	0.003		2230.9	37.1814	52.0	12.3	40.8	2.815	0.009	0.009	0.000	0.221	0.19	
1551	4/20/2004	10:53:43 PM		25.699	24.898	25.273	25.451	24.869		48.677	53.493	16.204	32.74	-0.885	-6.952		47.386	0.061	14.643	0.003		2231.9	37.1981	52.0	11.6	40.7	2.807	0.009	0.009	0.000	0.222	0.19	
1552	4/20/2004	10:54:43 PM		25.683	24.876	25.242	25.44	24.988		48.826	53.526	16.364	32.765	-0.879	-6.949		45.951	0.062	14.643	0.003		2232.9	37.2147	52.1	11.3	40.8	2.813	0.009	0.009	0.000	0.225	0.19	
1553	4/20/2004	10:55:43 PM		25.682	24.901	25.226	25.509	25.122		49.044	53.765	16.346	32.976	-0.882	-6.952		46.642	0.061	14.643	0.003		2233.9	37.2314	52.3	11.4	41.0	2.827	0.009	0.009	0.000	0.220	0.19	
1554	4/20/2004	10:56:43 PM		25.681	24.905	25.2	25.579	25.126		48.708	53.448	16.377	32.611	-0.818	-6.949		47.038	0.06	14.643	0.003		2234.9	37.2481	52.0	11.5	40.7	2.803	0.009	0.009	0.000	0.219	0.19	
1555	4/20/2004	10:57:43 PM		25.677	24.906	25.186	25.645	25.227		48.532	53.021	16.18	32.726	-0.818	-6.952		47.718	0.061	14.643	0.003		2235.9	37.2647	51.5	11.7	40.6	2.801	0.009	0.009	0.000	0.223	0.19	
1556	4/20/2004	10:58:43 PM		25.699	24.938	25.228	25.702	25.369		48.521	53.211	16.221	32.607	-0.815	-6.943		47.928	0.061	14.643	0.003		2236.9	37.2814	51.7	11.7	40.6	2.797	0.009	0.009	0.000	0.223	0.19	
1557	4/20/2004	10:59:43 PM		25.67	24.929	25.174	25.722	25.285		48.637	53.331	16.118	32.793	-0.839	-6.937		48.216	0.062	14.643	0.003		2237.9	37.2981	51.9	11.8	40.7	2.807	0.009	0.009	0.000	0.226	0.19	
1558	4/20/2004	11:00:43 PM		25.687	24.961	25.211	25.77	25.282		48.357	52.994	16.149	32.594	-0.804	-6.807		48.705	0.062	14.643	0.003		2238.9	37.3147	51.5	11.9	40.5	2.791	0.009	0.009	0.000	0.227	0.19	
1559	4/20/2004	11:01:43 PM		25.683	24.977	25.212	25.771	25.253		48.826	53.632	16.261	32.886	-0.815	-6.873		48.291	0.061	14.643	0.003		2239.9	37.3314	52.2	11.8	40.9	2.817	0.009	0.009	0.000	0.221	0.19	
1560	4/20/2004	11:02:43 PM		25.679	24.988	25.203	25.727	25.169		48.536	53.365	16.186	32.59	-0.818	-6.914		47.97	0.06	14.643	0.003		2240.9	37.3481	51.9	11.8	40.6	2.797	0.009	0.009	0.000	0.219	0.19	
1561	4/20/2004	11:03:43 PM		25.674	24.983	25.183	25.627	25.059		48.697	53.595	16.309	32.654	-0.821	-6.911		48.531	0.061	14.643	0.003		2241.9	37.3647	52.1	11.9	40.7	2.804	0.009	0.009	0.000	0.222	0.19	
1562	4/20/2004	11:04:43 PM		25.683	25.007	25.212	25.591	25.043		48.532	53.288	16.302	32.555	-0.815	-6.902		47.251	0.062	14.643	0.003		2242.9	37.3814	51.8	11.6	40.5	2.795	0.009	0.009	0.000	0.227	0.19	
1563	4/20/2004	11:05:43 PM		25.677	25.001	25.201	25.544	24.947		48.513	53.271	16.111	32.693	-0.784	-6.902		49.097	0.061	14.643	0.003		2243.9	37.3981	51.8	12.0	40.6	2.799	0.009	0.009	0.000	0.223	0.19	
1564	4/20/2004	11:06:43 PM		25.676	25.005	25.2	25.523	24.871		48.814	53.609	16.311	32.869	-0.778	-6.899		48.212	0.062	14.643	0.003		2244.9	37.4147	52.1	11.8	40.8	2.816	0.009	0.009	0.000	0.225	0.19	
1565	4/20/2004	11:07:43 PM		25.679	25.018	25.213	25.481	24.804		48.76	53.431	16.319	32.748	-0.792	-6.847		48.07	0.06	14.643	0.003		2245.9	37.4314	52.0	11.8	40.8	2.810	0.009	0.009	0.000	0.218	0.19	
1566	4/20/2004	11:08:43 PM		25.672	25.011	25.191	25.454	24.842		48.278	53.016	16.252	32.34	-0.772	-6.821		47.23	0.063	14.643	0.003		2246.9	37.4481	51.5	11.6	40.3	2.779	0.009	0.009	0.000	0.232	0.20	
1567	4/20/2004	11:09:43 PM		25.665	25.004	25.204	25.387	24.765		48.861	53.574	16.272	32.921	-0.818	-6.92		47.351	0.062	14.643	0.003		2247.9	37.4647	52.1	11.6	40.9	2.819	0.009	0.009	0.000	0.225	0.19	
1568	4/20/2004	11:10:43 PM		25.662	25.001	25.226	25.364	24.712		48.471	53.302	16.345	32.406	-0.766	-6.764		49.541	0.062	14.643	0.003		2248.9	37.4814	51.8	12.1	40.4	2.788	0.009	0.009	0.000	0.227	0.19	
1569	4/20/2004	11:11:43 PM		25.644	24.968	25.188	25.321	24.724		48.764	53.499	16.349	32.808	-0.781	-6.85		47.33	0.057	14.643	0.003		2249.9	37.4981	52.0	11.6	40.8	2.812	0.008	0.008	0.000	0.207	0.18	
1570	4/20/2004	11:12:43 PM		25.641	24.97	25.205	25.338	24.821		48.573	53.396	16.217	32.736	-0.772	-6.856		46.247	0.061	14.643	0.003		2250.9	37.5147	51.9	11.3	40.7	2.803	0.009	0.009	0.000	0.222	0.19	
1571	4/20/2004	11:13:43 PM		25.638	24.957	25.202	25.415	24.858		48.753	53.562	16.248	32.906	-0.772	-6.879		46.506	0.061	14.643	0.003		2251.9	37.5314	52.1	11.4	40.8	2.815	0.009	0.009	0.000	0.221	0.19	
1572	4/20/2004	11:14:43 PM		25.647	24.976	25.221	25.464	25.002		48.847	53.636	16.378	32.779	-0.772	-6.868		48.037	0.061	14.643	0.003		2252.9	37.5481	52.2	11.8	40.8	2.814	0.009	0.009	0.000	0.221	0.19	
1573	4/20/2004	11:15:43 PM		25.637	24.966	25.206	25.544	25.177		48.648	53.466	16.325	32.578	-0.772	-6.873		48.644	0.061	14.643	0.003		2253.9	37.5647	52.0	11.9	40.6	2.800	0.009	0.009	0.000	0.223	0.19	
1574	4/20/2004	11:16:43 PM		25.653	24.987	25.177	25.615	25.253		48.488	53.286	16.346	32.461	-0.769	-6.871		49.228	0.06	14.643	0.003		2254.9	37.5814	51.8	12.1	40.5	2.791	0.009	0.009	0.000	0.220	0.19	
1575	4/20/2004	11:17:43 PM		25.643	24.977	25.152	25.636	25.258		48.507	53.373	16.412	32.4	-0.769	-6.868		47.522	0.061	14.643	0.003		2255.9	37.5981	51.9	11.6	40.5	2.789	0.009	0.009	0.000	0.224	0.19	
1576	4/20/2004	11:18:43 PM		25.65	24.994	25.159	25.707	25.26		48.496	53.359	16.393	32.424	-0.717	-6.764		47.803	0.06	14.643	0.003		2256.9	37.6147	51.9	11.7	40.5	2.790	0.009	0.009	0.000	0.220	0.19	
1577	4/20/2004	11:19:43 PM		25.641	25.005	25.16	25.759	25.361		48.639	53.599	16.312	32.558	-0.772	-6.856		49.195	0.06	14.643	0.003		2257.9	37.6314	52.1	12.1	40.6	2.799	0.009	0.009	0.000	0.219	0.19	
1578	4/20/2004	11:20:43 PM		25.643	25.022	25.172	25.791	25.248		48.731	53.593	16.32	32.73	-0.772	-6.868		48.387	0.059	14.643	0.003		2258.9	37.6481	52.1	11.9	40.7	2.808	0.009	0.009	0.000	0.215	0.18	
1579	4/20/2004	11:21:43 PM		25.644	25.038	25.168	25.771	25.084		48.534	53.209	16.39	32.504	-0.769	-6.856		47.449	0.06	14.643	0.003		2259.9	37.6647	51.7	11.6	40.5	2.794	0.009	0.009	0.000	0.220	0.19	
1580	4/20/2004	11:22:43 PM		25.65	25.034	25.173	25.662	25.04		48.683	53.57	16.305	32.769	-0.731	-6.761		47.424	0.06	14.643	0.003		2260.9	37.6814	52.1	11.6	40.7	2.808	0.009	0.009	0.000	0.219	0.19	
1581	4/20/2004	11:23:43 PM		25.643	25.042	25.167	25.621	24.858		48.44	53.274	16.358	32.443	-0.705	-6.74		49.714	0.061	14.643	0.003		2261.9	37.6981	51.8	12.2	40.4	2.788	0.009	0.009	0.000	0.224	0.19	
1582	4/20/2004	11:24:43 PM		25.642	25.021	25.156	25.534	24.782		48.583	53.499	16.369	32.49	-0.705	-6.749		48.99	0.058	14.643	0.003		2262.9	37.7147	52.0	12.0	40.5	2.795	0.009	0.009	0.000	0.212	0.18	
1583	4/20/2004	11:25:43 PM		25.656	25.045	25.18	25.478	24.801		48.745	53.483	16.335	32.793	-0.772	-6.839		48.717	0.064	14.643	0.003		2263.9	37.7314	52.0	11.9	40.8	2.811	0.010	0.009	0.000	0.233	0.20	
1584	4/20/2004	11:26:43 PM		25.65	25.039	25.169	25.427	24.91		48.961	53.872	16.405	32.91	-0.708	-6.662		47.44	0.052	14.643	0.003		2264.9	37.7481	52.4	11.6	40.9	2.822	0.008	0.008	0.000	0.188	0.16	
1585	4/20/2004	11:27:43 PM		25.651	25.035	25.185	25.363	24.911		48.811	53.703	16.34	32.767	-0.766	-6.775		49.58	0.065	14.643	0.003		2265.9	37.7647	52.2	12.2	40.8	2.812	0.010	0.010	0.000	0.236	0.20	
1586	4/20/2004	11:28:43 PM		25.646	25.02	25.185	25.323	24.891		48.351	53.184	16.32	32.352	-0.865	-6.885		47.735	0.06	14.643	0.003		2266.9	37.7814	51.7	11.7	40.4	2.782	0.009	0.009	0.000	0.221	0.19	
1587	4/20/2004	11:29:43 PM		25.635	25.019	25.189	25.332	24.865		48.67	53.427	16.398	32.625	-0.772	-6.758		46.531	0.062	14.643	0.003		2267.9	37.7981	52.0	11.4	40.6	2.803	0.009	0.009	0.000	0.226	0.19	
1588	4/20/2004	11:30:43 PM		25.625	24.999	25.174	25.357	25.015		48.596	53.404	16.288	32.654	-0.778	-6.824		47.399	0.061	14.643	0.003		2268.9	37.8147	51.9	11.6	40.6	2.801	0.009	0.009	0.000	0.223	0.19	
1589	4/20/2004	11:31:43 PM		25.636	25	25.19	25.428	25.081		48.915	53.727	16.296	32.919	-0.807	-6.871		47.251	0.06	14.643	0.003		2269.9	37.8314	52.3	11.6	40.9	2.821	0.009	0.009	0.000	0.217	0.19	
1590	4/20/2004	11:32:43 PM		25.632	25.016	25.201	25.54	25.132		48.614	53.408	16.315	32.594	-0.815	-6.793		48.402	0.061	14.643	0.003		2270.9	37.8481	51.9	11.9	40.6	2.800	0.009	0.009	0.000	0.223	0.19	
1591	4/20/2004	11:33:43 PM		25.628	25.012	25.202	25.575	25.203		48.727	53.421	16.4	32.711	-0.769	-6.761		47.976	0.062	14.643	0.003		2271.9	37.8647	51.9	11.8	40.7	2.807	0.009	0.009	0.000	0.226	0.19	
1592	4/20/2004	11:34:43 PM		25.624	25.008	25.188	25.636	25.264		48.415	53.104	16.346	32.342	-0.789	-6.85		45.962	0.061	14.643	0.003		2272.9	37.8814	51.6	11.3	40.4	2.784	0.009	0.009	0.000	0.224	0.19	
1593	4/20/2004	11:35:43 PM		25.63	25.014	25.209	25.678	25.295		48.312	53.168	16.287	32.252	-0.818	-6.873		48.218	0.06	14.643	0.003		2273.9	37.8981	51.7	11.8	40.3	2.777	0.009	0.009	0.000	0.221	0.19	
1594	4/20/2004	11:36:43 PM		25.638	25.032	25.227	25.721	25.533		48.372	53.257	16.497	32.182	-0.708	-6.616		47.278	0.061	14.643	0.003		2274.9	37.9147	51.8	11.6	40.3	2.777	0.009	0.009	0.000	0.224	0.19	
1595	4/20/2004	11:37:43 PM		25.634	25.038	25.208	25.712	25.629		48.5	53.475	16.38	32.367	-0.653	-6.475		46.575	0.051	14.643	0.003		2275.9	37.9314	52.0	11.4	40.4	2.788	0.008	0.008	0.000	0.187	0.16	
1596	4/20/2004	11:38:43 PM		25.656	25.066	25.251	25.729	25.486		48.583	53.454	16.267	32.609	-0.7	-6.608		48.381	0.059	14.643	0.003		2276.9	37.9481	52.0	11.9	40.6	2.799	0.009	0.009	0.000	0.215	0.18	
1597	4/20/2004	11:39:43 PM		25.631	25.051	25.205	25.624	25.386		48.417	53.358	16.294	32.486	-0.708	-6.636		48.321	0.061	14.643	0.003		2277.9	37.9647	51.9	11.8	40.5	2.789	0.009	0.009	0.000	0.224	0.19	
1598	4/20/2004	11:40:43 PM		25.641	25.07	25.23	25.573	25.231		48.322	53.311	16.293	32.328	-0.584	-6.396		47.253	0.059	14.643	0.003		2278.9	37.9814	51.8	11.6	40.3	2.780	0.009	0.009	0.000	0.217	0.18	
1599	4/20/2004	11:41:43 PM		25.644	25.073	25.223	25.451	24.859		48.388	53.321	16.313	32.424	-0.578	-6.394		46.692	0.06	14.643	0.003		2279.9	37.9981	51.8	11.4	40.4	2.786	0.009	0.009	0.000	0.220	0.19	
1600	4/20/2004	11:42:43 PM		25.642	25.071	25.231	25.293	24.677		48.432	53.454	16.368	32.346	-0.581	-6.394		47.15	0.059	14.643	0.003		2280.9	38.0147	52.0	11.6	40.4	2.785	0.009	0.009	0.000	0.216	0.18	
1601	4/20/2004	11:43:43 PM		25.643	25.067	25.232	25.155	24.568		48.268	53.319	16.246	32.391	-0.581	-6.396		48.229	0.06	14.643	0.003		2281.9	38.0314	51.8	11.8	40.3	2.781	0.009	0.009	0.000	0.220	0.19	
1602	4/20/2004	11:44:43 PM		25.645	25.069	25.229	25.002	24.53		48.55	53.636	16.356	32.418	-0.572	-6.396		45.79	0.059	14.643	0.003		2282.9	38.0481	52.2	11.2	40.5	2.791	0.009	0.009	0.000	0.216	0.18	
1603	4/20/2004	11:45:43 PM		25.626	25.02	25.205	24.912	24.441		48.428	53.611	16.355	32.319	-0.558	-6.394		48.619	0.059	14.643	0.003		2283.9	38.0647	52.1	11.9	40.4	2.784	0.009	0.009	0.000	0.217	0.18	
1604	4/20/2004	11:46:43 PM		25.612	25.016	25.226	24.943	24.547		48.592	53.659	16.202	32.728	-0.555	-6.394		47.201	0.059	14.643	0.003		2284.9	38.0814	52.2	11.6	40.7	2.803	0.009	0.009	0.000	0.215	0.18	
1605	4/20/2004	11:47:43 PM		25.591	25	25.215	25.077	24.756		50.875	53.771	16.247	34.989	-1.224	-6.11		46.944	0.031	14.643	0.003		2285.9	38.0981	52.3	11.5	42.9	2.960	0.005	0.005	0.000	0.107	0.09	
1606	4/20/2004	11:48:01 PM		25.611	25	25.235	25.137	24.796		50.043	53.466	16.184	34.236	-1.221	-5.364		47.13	0.017	14.643	0.003		2286.2	38.1031	52.0	11.5	42.1	2.905	0.003	0.003	0.000	0.060	0.05	
1607	4/20/2004	11:49:01 PM		25.626	24.99	25.245	25.308	24.916		48.025	53.572	16.285	32.046	-0.112	-2.378		47.311	0.037	14.643	0.003		2287.2	38.1197	52.1	11.6	40.0	2.760	0.006	0.005	0.000	0.137	0.12	
1608	4/20/2004	11:50:01 PM		25.617	24.976	25.251	25.394	25.077		49.029	53.684	16.331	32.988	-0.818	-4.676		47.515	0.17	14.643	0.003		2288.2	38.1364	52.2	11.6	41.0	2.827	0.025	0.025	0.001	0.614	0.52	
1609	4/20/2004	11:51:01 PM		25.619	24.978	25.253	25.526	25.074		49.805	53.317	16.222	33.818	-1.218	-7.397		47.474	0.1	14.643	0.004		2289.2	38.1531	51.8	11.6	41.8	2.883	0.015	0.015	0.000	0.354	0.30	
1610	4/20/2004	11:52:01 PM		25.607	24.976	25.241	25.609	25.127		50.653	54.1	16.195	34.821	-1.221	-7.602		46.204	0.058	14.643	0.003		2290.2	38.1697	52.6	11.3	42.7	2.947	0.009	0.009	0.000	0.201	0.17	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1611	4/20/2004	11:53:01 PM		25.62	24.979	25.164	25.657	25.23		50.041	53.45	16.276	34.091	-1.224	-7.666		47.294	0.064	14.643	0.003		2291.2	38.1864	52.0	11.6	42.1	2.900	0.010	0.009	0.000	0.226	0.19	
1612	4/20/2004	11:54:01 PM		25.637	24.996	25.151	25.7	25.327		50.157	53.557	16.274	34.119	-1.221	-7.718		48.571	0.062	14.643	0.003		2292.2	38.2031	52.1	11.9	42.1	2.905	0.009	0.009	0.000	0.218	0.19	
1613	4/20/2004	11:55:01 PM		25.635	25.004	25.149	25.738	25.18		50.452	53.844	16.067	34.636	-1.218	-7.7		46.352	0.06	14.643	0.003		2293.2	38.2197	52.4	11.4	42.5	2.933	0.009	0.009	0.000	0.209	0.18	
1614	4/20/2004	11:56:01 PM		25.632	25.001	25.141	25.675	25.102		50.278	53.543	16.325	34.29	-1.221	-7.732		47.62	0.06	14.643	0.003		2294.2	38.2364	52.1	11.7	42.3	2.915	0.009	0.009	0.000	0.211	0.18	
1615	4/20/2004	11:57:01 PM		25.644	24.998	25.168	25.612	25.049		49.201	52.484	17.265	32.233	-1.218	-7.738		50.828	0.059	14.643	0.003		2295.2	38.2531	51.0	12.5	40.7	2.807	0.009	0.009	0.000	0.215	0.18	
1616	4/20/2004	11:58:01 PM		25.636	25	25.17	25.553	24.951		49.521	52.865	17.443	32.41	-1.224	-7.747		47.831	0.059	14.643	0.003		2296.2	38.2697	51.4	11.7	41.0	2.824	0.009	0.009	0.000	0.214	0.18	
1617	4/20/2004	11:59:01 PM		25.636	25.005	25.185	25.484	24.907		49.259	52.59	17.207	32.36	-1.221	-7.747		49.109	0.058	14.643	0.003		2297.2	38.2864	51.1	12.0	40.8	2.814	0.009	0.009	0.000	0.211	0.18	
1618	4/21/2004	12:00:01 AM		25.636	25.01	25.195	25.383	24.802		49.342	52.66	17.162	32.469	-1.218	-7.744		50.744	0.06	14.643	0.003		2298.2	38.3031	51.2	12.4	40.9	2.820	0.009	0.009	0.000	0.217	0.19	
1619	4/21/2004	12:01:01 AM		25.624	24.998	25.193	25.366	24.709		49.21	52.565	17.713	31.815	-1.221	-7.752		49.841	0.058	14.643	0.003		2299.2	38.3197	51.1	12.2	40.5	2.793	0.009	0.009	0.000	0.212	0.18	
1620	4/21/2004	12:02:01 AM		25.618	24.992	25.212	25.305	24.738		48.689	51.978	17.588	31.447	-1.218	-7.749		48.957	0.058	14.643	0.003		2300.2	38.3364	50.5	12.0	40.1	2.763	0.009	0.009	0.000	0.215	0.18	
1621	4/21/2004	12:03:01 AM		25.617	24.991	25.226	25.279	24.687		49.214	52.554	17.747	31.804	-1.218	-7.752		49.117	0.059	14.643	0.003		2301.2	38.3531	51.1	12.0	40.5	2.793	0.009	0.009	0.000	0.216	0.18	
1622	4/21/2004	12:04:01 AM		25.622	24.986	25.236	25.349	24.857		49.243	52.59	17.754	31.774	-1.221	-7.706		49.933	0.059	14.643	0.003		2302.2	38.3697	51.1	12.2	40.5	2.793	0.009	0.009	0.000	0.216	0.18	
1623	4/21/2004	12:05:01 AM		25.642	24.991	25.276	25.439	24.987		49.224	52.577	17.726	31.813	-1.221	-7.761		50.192	0.058	14.643	0.003		2303.2	38.3864	51.1	12.3	40.5	2.794	0.009	0.009	0.000	0.212	0.18	
1624	4/21/2004	12:06:01 AM		25.641	24.98	25.28	25.448	25.051		48.886	52.14	17.733	31.453	-1.221	-7.758		50.899	0.058	14.643	0.003		2304.2	38.4031	50.7	12.5	40.2	2.770	0.009	0.009	0.000	0.214	0.18	
1625	4/21/2004	12:07:01 AM		25.651	24.995	25.27	25.518	25.136		48.834	52.163	17.657	31.482	-1.221	-7.752		50.006	0.058	14.643	0.003		2305.2	38.4197	50.7	12.3	40.2	2.769	0.009	0.009	0.000	0.214	0.18	
1626	4/21/2004	12:08:01 AM		25.652	24.981	25.246	25.549	25.227		49.195	52.691	17.798	31.626	-1.221	-7.761		49.969	0.056	14.643	0.003		2306.2	38.4364	51.2	12.2	40.4	2.786	0.008	0.008	0.000	0.205	0.17	
1627	4/21/2004	12:09:01 AM		25.653	24.992	25.252	25.595	25.178		49.023	52.523	17.738	31.482	-1.221	-7.764		51.954	0.056	14.643	0.003		2307.2	38.4531	51.1	12.7	40.3	2.775	0.008	0.008	0.000	0.206	0.18	
1628	4/21/2004	12:10:01 AM		25.659	24.998	25.263	25.676	25.294		48.783	52.204	17.7	31.341	-1.218	-7.755		49.074	0.059	14.643	0.003		2308.2	38.4697	50.7	12.0	40.1	2.762	0.009	0.009	0.000	0.218	0.19	
1629	4/21/2004	12:11:01 AM		25.671	25.015	25.285	25.703	25.226		49.141	52.585	17.802	31.671	-1.215	-7.752		49.676	0.059	14.643	0.003		2309.2	38.4864	51.1	12.2	40.4	2.786	0.009	0.009	0.000	0.216	0.18	
1630	4/21/2004	12:12:01 AM		25.678	25.022	25.302	25.68	25.148		49.135	52.525	17.443	31.975	-1.221	-7.755		50.548	0.057	14.643	0.003		2310.2	38.5031	51.1	12.4	40.6	2.796	0.008	0.008	0.000	0.208	0.18	
1631	4/21/2004	12:13:01 AM		25.689	25.038	25.328	25.652	25.039		49.154	52.598	17.598	31.841	-1.218	-7.752		50.087	0.059	14.643	0.003		2311.2	38.5197	51.1	12.3	40.5	2.792	0.009	0.009	0.000	0.215	0.18	
1632	4/21/2004	12:14:01 AM		25.674	25.028	25.298	25.516	24.979		49.015	52.401	17.387	31.936	-1.218	-7.749		49.752	0.059	14.643	0.003		2312.2	38.5364	50.9	12.2	40.5	2.791	0.009	0.009	0.000	0.216	0.18	
1633	4/21/2004	12:15:01 AM		25.674	25.033	25.293	25.471	24.924		49.164	52.573	17.431	32.063	-1.221	-7.764		49.547	0.058	14.643	0.003		2313.2	38.5531	51.1	12.1	40.6	2.800	0.009	0.009	0.000	0.211	0.18	
1634	4/21/2004	12:16:01 AM		25.678	25.032	25.312	25.39	24.818		49.345	52.693	17.429	32.26	-1.221	-7.761		52.505	0.058	14.643	0.003		2314.2	38.5697	51.2	12.9	40.8	2.813	0.009	0.009	0.000	0.210	0.18	
1635	4/21/2004	12:17:01 AM		25.672	25.021	25.306	25.359	24.762		49.013	52.463	17.307	32.03	-1.221	-7.758		49.628	0.058	14.643	0.003		2315.2	38.5864	51.0	12.2	40.5	2.794	0.009	0.009	0.000	0.212	0.18	
1636	4/21/2004	12:18:01 AM		25.676	25.02	25.325	25.303	24.736		49.185	52.61	17.363	32.12	-1.215	-7.755		49.939	0.06	14.643	0.004		2316.2	38.6031	51.1	12.2	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1637	4/21/2004	12:19:01 AM		25.664	24.993	25.313	25.245	24.704		49.135	52.751	17.302	32.028	-1.221	-7.778		50.653	0.058	14.643	0.003		2317.2	38.6197	51.3	12.4	40.6	2.798	0.009	0.009	0.000	0.211	0.18	
1638	4/21/2004	12:20:01 AM		25.673	25.007	25.332	25.295	24.838		49.166	52.726	17.39	32.005	-1.221	-7.773		49.777	0.058	14.643	0.003		2318.2	38.6364	51.3	12.2	40.6	2.798	0.009	0.009	0.000	0.211	0.18	
1639	4/21/2004	12:21:01 AM		25.672	24.991	25.336	25.399	24.892		49.311	52.898	17.322	32.276	-1.218	-7.77		49.311	0.059	14.643	0.003		2319.2	38.6531	51.4	12.1	40.8	2.813	0.009	0.009	0.000	0.214	0.18	
1640	4/21/2004	12:22:01 AM		25.672	24.996	25.341	25.404	24.972		49.282	52.687	17.247	32.393	-1.221	-7.775		50.601	0.058	14.643	0.003		2320.2	38.6697	51.2	12.4	40.8	2.816	0.009	0.009	0.000	0.210	0.18	
1641	4/21/2004	12:23:01 AM		25.678	24.997	25.352	25.46	25.018		49.243	52.639	17.226	32.438	-1.221	-7.775		50.021	0.059	14.643	0.003		2321.2	38.6864	51.2	12.3	40.8	2.816	0.009	0.009	0.000	0.213	0.18	
1642	4/21/2004	12:24:01 AM		25.678	24.982	25.327	25.51	25.078		49	52.633	17.135	32.127	-1.221	-7.729		49.756	0.055	14.643	0.003		2322.2	38.7031	51.2	12.2	40.6	2.797	0.008	0.008	0.000	0.200	0.17	
1643	4/21/2004	12:25:01 AM		25.684	24.998	25.318	25.602	25.104		49.152	52.656	17.249	32.209	-1.221	-7.732		48.435	0.061	14.643	0.003		2323.2	38.7197	51.2	11.9	40.7	2.805	0.009	0.009	0.000	0.222	0.19	
1644	4/21/2004	12:26:01 AM		25.684	24.993	25.318	25.582	25.189		49.245	52.766	17.151	32.43	-1.218	-7.747		53.183	0.059	14.643	0.003		2324.2	38.7364	51.3	13.0	40.8	2.816	0.009	0.009	0.000	0.213	0.18	
1645	4/21/2004	12:27:01 AM		25.696	25.005	25.331	25.649	25.311		49.162	52.71	17.122	32.307	-1.224	-7.747		49.835	0.059	14.643	0.003		2325.2	38.7531	51.2	12.2	40.7	2.809	0.009	0.009	0.000	0.214	0.18	
1646	4/21/2004	12:28:01 AM		25.718	25.033	25.368	25.696	25.378		49.154	52.793	17.279	32.194	-1.221	-7.744		49.691	0.059	14.643	0.003		2326.2	38.7697	51.3	12.2	40.7	2.804	0.009	0.009	0.000	0.214	0.18	
1647	4/21/2004	12:29:01 AM		25.706	25.03	25.355	25.678	25.211		49.392	52.942	17.316	32.395	-1.218	-7.752		50.498	0.058	14.643	0.003		2327.2	38.7864	51.5	12.4	40.9	2.819	0.009	0.009	0.000	0.209	0.18	
1648	4/21/2004	12:30:01 AM		25.707	25.041	25.356	25.594	25.062		49.029	52.683	17.193	32.196	-1.218	-7.747		49.906	0.059	14.643	0.003		2328.2	38.8031	51.2	12.2	40.6	2.800	0.009	0.009	0.000	0.214	0.18	
1649	4/21/2004	12:31:01 AM		25.713	25.037	25.358	25.511	24.943		48.841	52.565	17.19	31.948	-1.224	-7.755		49.564	0.058	14.643	0.003		2329.2	38.8197	51.1	12.1	40.4	2.785	0.009	0.009	0.000	0.212	0.18	
1650	4/21/2004	12:32:01 AM		25.713	25.052	25.367	25.45	24.908		49.289	52.84	17.335	32.264	-1.221	-7.747		49.881	0.06	14.643	0.003		2330.2	38.8364	51.4	12.2	40.8	2.811	0.009	0.009	0.000	0.217	0.18	
1651	4/21/2004	12:33:01 AM		25.707	25.041	25.361	25.359	24.887		49.301	52.909	17.244	32.408	-1.221	-7.752		47.964	0.058	14.643	0.003		2331.2	38.8531	51.4	11.8	40.9	2.817	0.009	0.009	0.000	0.210	0.18	
1652	4/21/2004	12:34:01 AM		25.711	25.035	25.37	25.263	24.806		49.056	52.619	17.137	32.221	-1.218	-7.744		49.145	0.06	14.643	0.003		2332.2	38.8697	51.1	12.0	40.6	2.802	0.009	0.009	0.000	0.218	0.19	
1653	4/21/2004	12:35:01 AM		25.701	25.03	25.365	25.227	24.731		49.114	52.691	17.22	32.2	-1.221	-7.749		48.517	0.06	14.643	0.003		2333.2	38.8864	51.2	11.9	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1654	4/21/2004	12:36:01 AM		25.695	25.014	25.364	25.157	24.7		49.367	52.907	17.215	32.471	-1.221	-7.755		50.265	0.059	14.643	0.003		2334.2	38.9031	51.4	12.3	40.9	2.821	0.009	0.009	0.000	0.213	0.18	
1655	4/21/2004	12:37:01 AM		25.708	25.013	25.358	25.155	24.724		48.992	52.561	17.187	32.042	-1.218	-7.758		48.953	0.058	14.643	0.003		2335.2	38.9197	51.1	12.0	40.5	2.794	0.009	0.009	0.000	0.211	0.18	
1656	4/21/2004	12:38:01 AM		25.697	24.996	25.326	25.194	24.802		49.344	53.052	17.162	32.373	-1.221	-7.747		49.581	0.059	14.643	0.003		2336.2	38.9364	51.6	12.2	40.9	2.817	0.009	0.009	0.000	0.213	0.18	
1657	4/21/2004	12:39:01 AM		25.696	24.995	25.335	25.268	24.831		49.071	52.741	17.066	32.309	-1.221	-7.747		49.445	0.059	14.643	0.003		2337.2	38.9531	51.3	12.1	40.7	2.805	0.009	0.009	0.000	0.214	0.18	
1658	4/21/2004	12:40:01 AM		25.685	24.989	25.334	25.357	24.985		48.953	52.641	17.049	32.17	-1.221	-7.755		50.117	0.058	14.643	0.003		2338.2	38.9697	51.2	12.3	40.6	2.797	0.009	0.009	0.000	0.211	0.18	
1659	4/21/2004	12:41:01 AM		25.691	24.965	25.331	25.399	25.032		49.201	52.77	17.069	32.496	-1.224	-7.749		48.855	0.06	14.643	0.003		2339.2	38.9864	51.3	12.0	40.8	2.816	0.009	0.009	0.000	0.217	0.18	
1660	4/21/2004	12:42:01 AM		25.701	24.99	25.36	25.513	25.081		49.116	52.795	17.108	32.385	-1.221	-7.747		49.117	0.059	14.643	0.003		2340.2	39.0031	51.3	12.0	40.8	2.810	0.009	0.009	0.000	0.214	0.18	
1661	4/21/2004	12:43:01 AM		25.686	24.98	25.365	25.578	25.061		49.272	52.921	17.185	32.461	-1.218	-7.738		49.069	0.058	14.643	0.004		2341.2	39.0197	51.4	12.0	40.9	2.818	0.009	0.009	0.000	0.209	0.18	
1662	4/21/2004	12:44:01 AM		25.691	24.985	25.361	25.594	25.116		48.899	52.519	16.986	32.256	-1.221	-7.738		50.309	0.06	14.643	0.003		2342.2	39.0364	51.0	12.3	40.6	2.798	0.009	0.009	0.000	0.218	0.19	
1663	4/21/2004	12:45:01 AM		25.686	24.99	25.366	25.639	25.146		49.421	53.162	17.169	32.564	-1.218	-7.744		50.288	0.059	14.643	0.003		2343.2	39.0531	51.7	12.3	41.0	2.826	0.009	0.009	0.000	0.212	0.18	
1664	4/21/2004	12:46:01 AM		25.718	25.018	25.408	25.696	25.179		49.228	52.892	17.182	32.42	-1.215	-7.747		49.184	0.058	14.643	0.003		2344.2	39.0697	51.4	12.1	40.8	2.815	0.009	0.009	0.000	0.209	0.18	
1665	4/21/2004	12:47:01 AM		25.704	25.003	25.373	25.607	25.109		48.909	52.548	17.109	32.079	-1.218	-7.744		49.274	0.059	14.643	0.003		2345.2	39.0864	51.1	12.1	40.5	2.792	0.009	0.009	0.000	0.215	0.18	
1666	4/21/2004	12:48:01 AM		25.721	25.02	25.4	25.558	25.061		48.955	52.762	17.142	32.137	-1.218	-7.747		49.699	0.058	14.643	0.003		2346.2	39.1031	51.3	12.2	40.5	2.796	0.009	0.009	0.000	0.211	0.18	
1667	4/21/2004	12:49:01 AM		25.731	25.04	25.415	25.513	24.986		49.488	53.218	17.179	32.533	-1.218	-7.738		48.623	0.06	14.643	0.003		2347.2	39.1197	51.7	11.9	41.0	2.828	0.009	0.009	0.000	0.216	0.18	
1668	4/21/2004	12:50:01 AM		25.715	25.019	25.399	25.392	24.915		48.973	52.71	17.057	32.297	-1.221	-7.744		49.71	0.06	14.643	0.003		2348.2	39.1364	51.2	12.2	40.6	2.802	0.009	0.009	0.000	0.218	0.19	
1669	4/21/2004	12:51:01 AM		25.718	25.013	25.403	25.305	24.814		49.224	53.019	17.094	32.436	-1.221	-7.747		49.117	0.059	14.643	0.003		2349.2	39.1531	51.5	12.0	40.8	2.815	0.009	0.009	0.000	0.213	0.18	
1670	4/21/2004	12:52:01 AM		25.713	25.022	25.412	25.265	24.733		49.038	52.809	17.048	32.324	-1.221	-7.744		51.523	0.058	14.643	0.003		2350.2	39.1697	51.3	12.6	40.7	2.805	0.009	0.009	0.000	0.210	0.18	
1671	4/21/2004	12:53:01 AM		25.707	25.001	25.406	25.179	24.732		49.006	52.714	17.089	32.204	-1.221	-7.747		50.123	0.06	14.643	0.003		2351.2	39.1864	51.2	12.3	40.6	2.800	0.009	0.009	0.000	0.218	0.19	
1672	4/21/2004	12:54:01 AM		25.7	24.999	25.379	25.182	24.655		49.085	52.851	17.201	32.18	-1.221	-7.752		48.202	0.058	14.643	0.003		2352.2	39.2031	51.4	11.8	40.6	2.801	0.009	0.009	0.000	0.211	0.18	
1673	4/21/2004	12:55:01 AM		25.699	24.978	25.343	25.206	24.719		49.276	53.157	17.09	32.441	-1.218	-7.747		48.59	0.058	14.643	0.003		2353.2	39.2197	51.7	11.9	40.9	2.817	0.009	0.009	0.000	0.210	0.18	
1674	4/21/2004	12:56:01 AM		25.703	24.982	25.342	25.23	24.858		49.309	53.133	16.967	32.656	-1.221	-7.749		49.43	0.059	14.643	0.003		2354.2	39.2364	51.7	12.1	41.0	2.826	0.009	0.009	0.000	0.213	0.18	
1675	4/21/2004	12:57:01 AM		25.702	24.986	25.351	25.279	24.972		49.085	52.838	17.062	32.354	-1.221	-7.738		49.007	0.06	14.643	0.003		2355.2	39.2531	51.4	12.0	40.7	2.807	0.009	0.009	0.000	0.218	0.19	
1676	4/21/2004	12:58:01 AM		25.697	24.975	25.356	25.319	25.037		49.438	53.23	17.147	32.574	-1.224	-7.747		49.084	0.06	14.643	0.003		2356.2	39.2697	51.8	12.0	41.0	2.827	0.009	0.009	0.000	0.216	0.18	
1677	4/21/2004	12:59:01 AM		25.702	24.981	25.376	25.399	25.042		49.143	53.046	16.979	32.555	-1.221	-7.677		50.552	0.057	14.643	0.003		2357.2	39.2864	51.6	12.4	40.8	2.816	0.008	0.008	0.000	0.206	0.18	
1678	4/21/2004	1:00:01 AM		25.687	24.976	25.371	25.424	25.112		49.038	52.836	16.936	32.307	-1.221	-7.735		49.122	0.058	14.643	0.003		2358.2	39.3031	51.4	12.0	40.7	2.804	0.009	0.009	0.000	0.210	0.18	
1679	4/21/2004	1:01:01 AM		25.683	24.967	25.352	25.47	25.093		49.253	53.122	17.098	32.441	-1.221	-7.741		49.372	0.058	14.643	0.003		2359.2	39.3197	51.6	12.1	40.8	2.816	0.009	0.009	0.000	0.210	0.18	
1680	4/21/2004	1:02:01 AM		25.699	24.978	25.378	25.526	25.164		49.141	52.913	16.991	32.49	-1.224	-7.738		49.61	0.058	14.643	0.003		2360.2	39.3364	51.4	12.2	40.8	2.814	0.009	0.009	0.000	0.210	0.18	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1681	4/21/2004	1:03:01 AM		25.694	24.993	25.398	25.546	25.184		49.197	52.992	17.048	32.432	-1.221	-7.732		49.866	0.06	14.643	0.003		2361.2	39.3531	51.5	12.2	40.8	2.814	0.009	0.009	0.000	0.217	0.18	
1682	4/21/2004	1:04:01 AM		25.696	24.995	25.385	25.518	25.241		49.174	53.139	16.993	32.461	-1.224	-7.744		48.886	0.057	14.643	0.003		2362.2	39.3697	51.7	12.0	40.8	2.814	0.008	0.008	0.000	0.206	0.18	
1683	4/21/2004	1:05:01 AM		25.706	25.01	25.415	25.483	25.096		48.986	52.753	16.947	32.371	-1.218	-7.741		46.485	0.057	14.643	0.003		2363.2	39.3864	51.3	11.4	40.7	2.805	0.008	0.008	0.000	0.206	0.18	
1684	4/21/2004	1:06:01 AM		25.706	25.025	25.426	25.459	24.907		49.259	53.18	17.004	32.519	-1.215	-7.735		49.795	0.059	14.643	0.003		2364.2	39.4031	51.7	12.2	40.9	2.819	0.009	0.009	0.000	0.213	0.18	
1685	4/21/2004	1:07:01 AM		25.701	25.005	25.41	25.383	24.821		49.129	52.96	17.069	32.44	-1.221	-7.738		50.213	0.058	14.643	0.003		2365.2	39.4197	51.5	12.3	40.8	2.812	0.009	0.009	0.000	0.210	0.18	
1686	4/21/2004	1:08:01 AM		25.705	25.009	25.414	25.317	24.745		49.16	53.07	17.045	32.348	-1.218	-7.735		49.174	0.058	14.643	0.003		2366.2	39.4364	51.6	12.1	40.8	2.810	0.009	0.009	0.000	0.210	0.18	
1687	4/21/2004	1:09:01 AM		25.699	24.998	25.413	25.21	24.694		49.141	52.958	17.08	32.373	-1.221	-7.738		48.283	0.059	14.643	0.003		2367.2	39.4531	51.5	11.8	40.8	2.810	0.009	0.009	0.000	0.213	0.18	
1688	4/21/2004	1:10:01 AM		25.703	24.997	25.422	25.185	24.693		48.917	52.811	16.867	32.356	-1.218	-7.738		51.946	0.06	14.643	0.003		2368.2	39.4697	51.3	12.7	40.6	2.802	0.009	0.009	0.000	0.218	0.19	
1689	4/21/2004	1:11:01 AM		25.707	24.991	25.441	25.189	24.687		49.307	53.232	17.056	32.518	-1.215	-7.735		48.577	0.057	14.643	0.004		2369.2	39.4864	51.8	11.9	40.9	2.821	0.008	0.008	0.000	0.205	0.17	
1690	4/21/2004	1:12:01 AM		25.701	24.975	25.44	25.223	24.751		49.289	53.147	17.067	32.5	-1.218	-7.735		47.705	0.059	14.643	0.003		2370.2	39.5031	51.7	11.7	40.9	2.820	0.009	0.009	0.000	0.212	0.18	
1691	4/21/2004	1:13:01 AM		25.699	24.968	25.439	25.256	24.83		48.899	52.836	17.05	32.096	-1.221	-7.735		48.333	0.059	14.643	0.003		2371.2	39.5197	51.4	11.8	40.5	2.792	0.009	0.009	0.000	0.215	0.18	
1692	4/21/2004	1:14:01 AM		25.704	24.973	25.434	25.336	24.87		49.031	52.882	16.966	32.414	-1.221	-7.755		48.55	0.056	14.643	0.003		2372.2	39.5364	51.4	11.9	40.7	2.808	0.008	0.008	0.000	0.203	0.17	
1693	4/21/2004	1:15:01 AM		25.699	24.958	25.359	25.331	24.96		48.95	52.876	16.902	32.371	-1.221	-7.732		46.66	0.06	14.643	0.003		2373.2	39.5531	51.4	11.4	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1694	4/21/2004	1:16:01 AM		25.689	24.938	25.339	25.377	25.02		49.036	52.979	16.802	32.51	-1.221	-7.738		50.621	0.058	14.643	0.003		2374.2	39.5697	51.5	12.4	40.8	2.811	0.009	0.009	0.000	0.210	0.18	
1695	4/21/2004	1:17:01 AM		25.696	24.95	25.355	25.448	25.001		49.027	52.983	16.836	32.434	-1.221	-7.614		48.337	0.058	14.643	0.003		2375.2	39.5864	51.5	11.8	40.7	2.808	0.009	0.009	0.000	0.210	0.18	
1696	4/21/2004	1:18:01 AM		25.707	24.97	25.386	25.514	25.062		49.282	53.296	16.885	32.656	-1.215	-7.703		47.699	0.058	14.643	0.004		2376.2	39.6031	51.8	11.7	41.0	2.825	0.009	0.009	0.000	0.209	0.18	
1697	4/21/2004	1:19:01 AM		25.703	24.962	25.377	25.53	25.138		49.303	53.207	16.927	32.674	-1.221	-7.694		50.039	0.06	14.643	0.003		2377.2	39.6197	51.7	12.3	41.0	2.826	0.009	0.009	0.000	0.216	0.18	
1698	4/21/2004	1:20:01 AM		25.709	24.973	25.388	25.546	25.179		49.069	52.956	16.828	32.56	-1.218	-7.596		45.035	0.06	14.643	0.003		2378.2	39.6364	51.5	11.0	40.8	2.814	0.009	0.009	0.000	0.217	0.18	
1699	4/21/2004	1:21:01 AM		25.71	24.984	25.394	25.562	25.07		49.031	53.05	16.871	32.391	-1.218	-7.645		48.878	0.059	14.643	0.003		2379.2	39.6531	51.6	12.0	40.7	2.807	0.009	0.009	0.000	0.214	0.18	
1700	4/21/2004	1:22:01 AM		25.705	24.979	25.389	25.492	24.955		49.284	53.261	16.868	32.716	-1.221	-7.663		49.019	0.058	14.643	0.003		2380.2	39.6697	51.8	12.0	41.0	2.827	0.009	0.009	0.000	0.209	0.18	
1701	4/21/2004	1:23:01 AM		25.696	24.99	25.39	25.398	24.921		48.998	52.95	16.945	32.326	-1.221	-7.668		49.12	0.056	14.643	0.003		2381.2	39.6864	51.5	12.0	40.7	2.804	0.008	0.008	0.000	0.203	0.17	
1702	4/21/2004	1:24:01 AM		25.695	24.989	25.394	25.322	24.81		49.048	53.06	16.991	32.363	-1.221	-7.666		48.577	0.058	14.643	0.003		2382.2	39.7031	51.6	11.9	40.7	2.807	0.009	0.009	0.000	0.210	0.18	
1703	4/21/2004	1:25:01 AM		25.689	24.978	25.374	25.226	24.759		49.058	52.896	16.889	32.482	-1.224	-7.671		49.349	0.057	14.643	0.003		2383.2	39.7197	51.4	12.1	40.8	2.811	0.008	0.008	0.000	0.206	0.18	
1704	4/21/2004	1:26:01 AM		25.692	24.981	25.396	25.159	24.647		49.096	53.052	16.864	32.568	-1.221	-7.616		48.064	0.061	14.643	0.003		2384.2	39.7364	51.6	11.8	40.8	2.815	0.009	0.009	0.000	0.220	0.19	
1705	4/21/2004	1:27:01 AM		25.706	24.985	25.43	25.117	24.656		49.351	53.317	16.923	32.752	-1.215	-7.66		49.082	0.059	14.643	0.003		2385.2	39.7531	51.8	12.0	41.1	2.830	0.009	0.009	0.000	0.212	0.18	
1706	4/21/2004	1:28:01 AM		25.689	24.968	25.414	25.146	24.645		49.264	53.195	17.004	32.57	-1.218	-7.666		48.7	0.058	14.643	0.003		2386.2	39.7697	51.7	11.9	40.9	2.821	0.009	0.009	0.000	0.209	0.18	
1707	4/21/2004	1:29:01 AM		25.693	24.962	25.422	25.195	24.808		49.212	53.265	16.92	32.584	-1.221	-7.507		48.556	0.055	14.643	0.003		2387.2	39.7864	51.8	11.9	40.9	2.820	0.008	0.008	0.000	0.198	0.17	
1708	4/21/2004	1:30:01 AM		25.688	24.962	25.422	25.24	24.913		48.971	53.004	16.896	32.354	-1.221	-7.611		48.583	0.062	14.643	0.003		2388.2	39.8031	51.5	11.9	40.7	2.804	0.009	0.009	0.000	0.225	0.19	
1709	4/21/2004	1:31:01 AM		25.687	24.956	25.437	25.329	24.972		49.235	53.271	16.923	32.677	-1.218	-7.602		51.752	0.06	14.643	0.003		2389.2	39.8197	51.8	12.7	41.0	2.824	0.009	0.009	0.000	0.216	0.18	
1710	4/21/2004	1:32:01 AM		25.698	24.947	25.437	25.34	25.058		49.204	53.242	17.006	32.49	-1.221	-7.645		49.326	0.062	14.643	0.003		2390.2	39.8364	51.8	12.1	40.8	2.816	0.009	0.009	0.000	0.224	0.19	
1711	4/21/2004	1:33:01 AM		25.689	24.958	25.439	25.397	25.09		49.27	53.166	16.869	32.73	-1.224	-7.66		49.683	0.06	14.643	0.003		2391.2	39.8531	51.7	12.2	41.0	2.827	0.009	0.009	0.000	0.216	0.18	
1712	4/21/2004	1:34:01 AM		25.699	24.958	25.398	25.461	25.064		49.226	53.251	17.083	32.455	-1.218	-7.463		49.533	0.06	14.643	0.003		2392.2	39.8697	51.8	12.1	40.8	2.816	0.009	0.009	0.000	0.217	0.18	
1713	4/21/2004	1:35:01 AM		25.694	24.963	25.374	25.467	25.105		48.874	52.83	16.984	32.155	-1.221	-7.616		49.359	0.058	14.643	0.003		2393.2	39.8864	51.4	12.1	40.5	2.793	0.009	0.009	0.000	0.211	0.18	
1714	4/21/2004	1:36:01 AM		25.711	24.975	25.4	25.553	25.101		49.114	53.157	16.983	32.43	-1.215	-7.614		47.634	0.057	14.643	0.003		2394.2	39.9031	51.7	11.7	40.8	2.811	0.008	0.008	0.000	0.206	0.18	
1715	4/21/2004	1:37:01 AM		25.707	24.981	25.396	25.54	25.212		49.092	53.006	17.007	32.361	-1.218	-7.625		48.285	0.056	14.643	0.003		2395.2	39.9197	51.5	11.8	40.7	2.808	0.008	0.008	0.000	0.203	0.17	
1716	4/21/2004	1:38:01 AM		25.704	24.988	25.398	25.511	25.119		48.897	52.882	16.875	32.389	-1.218	-7.616		48.419	0.059	14.643	0.003		2396.2	39.9364	51.4	11.9	40.6	2.802	0.009	0.009	0.000	0.214	0.18	
1717	4/21/2004	1:39:01 AM		25.705	24.989	25.394	25.447	24.99		48.967	52.894	17.207	32.106	-1.224	-7.619		48.26	0.059	14.643	0.003		2397.2	39.9531	51.4	11.8	40.5	2.795	0.009	0.009	0.000	0.215	0.18	
1718	4/21/2004	1:40:01 AM		25.7	24.994	25.409	25.362	24.825		48.998	52.952	17.231	32.124	-1.221	-7.616		48.848	0.058	14.643	0.003		2398.2	39.9697	51.5	12.0	40.6	2.797	0.009	0.009	0.000	0.211	0.18	
1719	4/21/2004	1:41:01 AM		25.689	24.988	25.409	25.311	24.764		48.735	52.737	17.186	31.843	-1.221	-7.616		48.928	0.059	14.643	0.003		2399.2	39.9864	51.3	12.0	40.3	2.778	0.009	0.009	0.000	0.216	0.18	
1720	4/21/2004	1:42:01 AM		25.689	24.973	25.409	25.226	24.709		48.961	52.861	17.199	32.077	-1.221	-7.512		51.427	0.059	14.643	0.003		2400.2	40.0031	51.4	12.6	40.5	2.794	0.009	0.009	0.000	0.215	0.18	
1721	4/21/2004	1:43:01 AM		25.704	24.983	25.433	25.19	24.684		48.93	52.927	17.138	32.2	-1.218	-7.472		49.827	0.062	14.643	0.003		2401.2	40.0197	51.5	12.2	40.6	2.797	0.009	0.009	0.000	0.225	0.19	
1722	4/21/2004	1:44:01 AM		25.67	24.949	25.409	25.087	24.585		48.863	52.936	17.086	32.116	-1.221	-7.489		49.628	0.056	14.643	0.003		2402.2	40.0364	51.5	12.2	40.5	2.792	0.008	0.008	0.000	0.204	0.17	
1723	4/21/2004	1:45:01 AM		25.684	24.968	25.439	25.131	24.62		48.951	52.979	17.105	32.129	-1.215	-7.492		49.324	0.057	14.643	0.004		2403.2	40.0531	51.5	12.1	40.5	2.795	0.008	0.008	0.000	0.207	0.18	
1724	4/21/2004	1:46:01 AM		25.678	24.942	25.437	25.13	24.718		48.764	52.832	17.105	31.946	-1.218	-7.512		49.43	0.057	14.643	0.003		2404.2	40.0697	51.4	12.1	40.4	2.782	0.008	0.008	0.000	0.208	0.18	
1725	4/21/2004	1:47:01 AM		25.682	24.936	25.447	25.154	24.767		49.019	53.149	17.063	32.282	-1.221	-7.518		51.399	0.058	14.643	0.003		2405.2	40.0864	51.7	12.6	40.7	2.803	0.009	0.009	0.000	0.210	0.18	
1726	4/21/2004	1:48:01 AM		25.67	24.909	25.43	25.187	24.835		48.608	52.797	17.102	31.739	-1.221	-7.521		46.627	0.057	14.643	0.003		2406.2	40.1031	51.3	11.4	40.2	2.770	0.008	0.008	0.000	0.209	0.18	
1727	4/21/2004	1:49:01 AM		25.68	24.914	25.45	25.262	24.91		49.193	53.298	17.141	32.471	-1.221	-7.509		49.284	0.057	14.643	0.003		2407.2	40.1197	51.8	12.1	40.8	2.815	0.008	0.008	0.000	0.206	0.17	
1728	4/21/2004	1:50:01 AM		25.675	24.908	25.454	25.332	24.935		48.812	52.898	17.14	31.981	-1.221	-7.515		50.503	0.06	14.643	0.003		2408.2	40.1364	51.4	12.4	40.4	2.785	0.009	0.009	0.000	0.219	0.19	
1729	4/21/2004	1:51:01 AM		25.685	24.919	25.46	25.367	24.995		48.82	52.873	17.105	32.077	-1.221	-7.515		49.543	0.059	14.643	0.003		2409.2	40.1531	51.4	12.1	40.4	2.789	0.009	0.009	0.000	0.215	0.18	
1730	4/21/2004	1:52:01 AM		25.696	24.92	25.405	25.403	25.031		48.805	52.913	17.235	31.866	-1.221	-7.521		49.735	0.057	14.643	0.003		2410.2	40.1697	51.4	12.2	40.3	2.781	0.008	0.008	0.000	0.208	0.18	
1731	4/21/2004	1:53:01 AM		25.696	24.915	25.405	25.473	25.001		48.66	52.741	17.138	31.882	-1.221	-7.515		49.161	0.058	14.643	0.003		2411.2	40.1864	51.3	12.0	40.3	2.777	0.009	0.009	0.000	0.212	0.18	
1732	4/21/2004	1:54:01 AM		25.703	24.927	25.417	25.49	25.128		48.671	52.759	17.178	31.747	-1.218	-7.521		45.684	0.056	14.643	0.003		2412.2	40.2031	51.3	11.2	40.2	2.772	0.008	0.008	0.000	0.205	0.17	
1733	4/21/2004	1:55:01 AM		25.689	24.928	25.413	25.476	25.094		48.509	52.548	17.069	31.759	-1.221	-7.515		49.875	0.059	14.643	0.003		2413.2	40.2197	51.1	12.2	40.1	2.767	0.009	0.009	0.000	0.217	0.18	
1734	4/21/2004	1:56:01 AM		25.704	24.938	25.434	25.487	24.925		48.961	53.046	17.222	32.059	-1.218	-7.518		48.707	0.057	14.643	0.003		2414.2	40.2364	51.6	11.9	40.5	2.793	0.008	0.008	0.000	0.207	0.18	
1735	4/21/2004	1:57:01 AM		25.706	24.94	25.43	25.413	24.901		48.919	53.016	17.281	31.909	-1.221	-7.391		50.963	0.053	14.643	0.003		2415.2	40.2531	51.5	12.5	40.4	2.786	0.008	0.008	0.000	0.193	0.16	
1736	4/21/2004	1:58:01 AM		25.712	24.94	25.436	25.344	24.877		48.787	53.012	17.17	32.008	-1.218	-7.287		48.823	0.058	14.643	0.004		2416.2	40.2697	51.5	12.0	40.4	2.785	0.009	0.009	0.000	0.211	0.18	
1737	4/21/2004	1:59:01 AM		25.7	24.934	25.429	25.252	24.755		48.511	52.643	17.093	31.753	-1.221	-7.423		49.42	0.057	14.643	0.003		2417.2	40.2864	51.2	12.1	40.1	2.767	0.008	0.008	0.000	0.209	0.18	
1738	4/21/2004	2:00:01 AM		25.699	24.923	25.439	25.216	24.64		48.905	53.064	17.2	32.014	-1.221	-7.443		50.208	0.057	14.643	0.003		2418.2	40.3031	51.6	12.3	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1739	4/21/2004	2:01:01 AM		25.688	24.917	25.432	25.125	24.573		48.89	53.13	17.297	31.837	-1.221	-7.449		48.17	0.058	14.643	0.003		2419.2	40.3197	51.7	11.8	40.4	2.783	0.009	0.009	0.000	0.212	0.18	
1740	4/21/2004	2:02:01 AM		25.692	24.911	25.447	25.104	24.672		48.724	52.975	17.262	31.716	-1.221	-7.446		48.168	0.057	14.643	0.003		2420.2	40.3364	51.5	11.8	40.2	2.773	0.008	0.008	0.000	0.209	0.18	
1741	4/21/2004	2:03:01 AM		25.675	24.884	25.42	25.107	24.74		48.884	52.987	17.222	32.022	-1.221	-7.455		47.344	0.056	14.643	0.003		2421.2	40.3531	51.5	11.6	40.5	2.789	0.008	0.008	0.000	0.204	0.17	
1742	4/21/2004	2:04:01 AM		25.695	24.904	25.465	25.152	24.785		48.648	52.712	17.155	31.886	-1.218	-7.449		50.457	0.057	14.643	0.003		2422.2	40.3697	51.2	12.4	40.3	2.776	0.008	0.008	0.000	0.208	0.18	
1743	4/21/2004	2:05:01 AM		25.71	24.909	25.495	25.262	24.785		48.507	52.577	17.066	31.8	-1.218	-7.44		49.449	0.059	14.643	0.003		2423.2	40.3864	51.1	12.1	40.2	2.768	0.009	0.009	0.000	0.216	0.18	
1744	4/21/2004	2:06:01 AM		25.689	24.893	25.468	25.291	24.859		49.16	53.431	17.357	32.065	-1.218	-7.44		50.628	0.059	14.643	0.003		2424.2	40.4031	52.0	12.4	40.6	2.800	0.009	0.009	0.000	0.214	0.18	
1745	4/21/2004	2:07:01 AM		25.715	24.898	25.509	25.337	24.985		48.824	53.07	17.238	31.913	-1.218	-7.437		47.732	0.056	14.643	0.003		2425.2	40.4197	51.6	11.7	40.4	2.783	0.008	0.008	0.000	0.204	0.17	
1746	4/21/2004	2:08:01 AM		25.705	24.889	25.485	25.387	24.97		48.602	52.724	17.086	31.876	-1.218	-7.426		47.651	0.06	14.643	0.003		2426.2	40.4364	51.3	11.7	40.2	2.774	0.009	0.009	0.000	0.219	0.19	
1747	4/21/2004	2:09:01 AM		25.716	24.895	25.51	25.433	25.026		49.05	53.464	17.241	32.104	-1.218	-7.31		49.954	0.056	14.643	0.003		2427.2	40.4531	52.0	12.2	40.6	2.798	0.008	0.008	0.000	0.203	0.17	
1748	4/21/2004	2:10:01 AM		25.712	24.9	25.506	25.434	25.117		48.94	53.151	17.102	32.151	-1.221	-7.339		49.856	0.058	14.643	0.003		2428.2	40.4697	51.7	12.2	40.5	2.795	0.009	0.009	0.000	0.210	0.18	
1749	4/21/2004	2:11:01 AM		25.717	24.895	25.461	25.474	25.072		48.569	52.757	17.164	31.755	-1.218	-7.368		50.104	0.057	14.643	0.003		2429.2	40.4864	51.3	12.3	40.2	2.769	0.008	0.008	0.000	0.209	0.18	
1750	4/21/2004	2:12:01 AM		25.711	24.89	25.425	25.433	24.951		48.617	52.834	17.072	31.835	-1.221	-7.374		49.24	0.058	14.643	0.003		2430.2	40.5031	51.4	12.1	40.2	2.773	0.009	0.009	0.000	0.212	0.18	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1751	4/21/2004	2:13:01 AM		25.716	24.91	25.42	25.358	24.871		48.909	53.116	17.063	32.161	-1.221	-7.376		50.609	0.057	14.643	0.003		2431.2	40.5197	51.6	12.4	40.5	2.795	0.008	0.008	0.000	0.207	0.18	
1752	4/21/2004	2:14:01 AM		25.72	24.903	25.429	25.327	24.75		48.951	53.238	17.009	32.243	-1.221	-7.374		49.881	0.057	14.643	0.003		2432.2	40.5364	51.8	12.2	40.6	2.799	0.008	0.008	0.000	0.207	0.18	
1753	4/21/2004	2:15:01 AM		25.708	24.902	25.432	25.28	24.718		49.191	53.417	16.969	32.539	-1.221	-7.374		50.82	0.057	14.643	0.003		2433.2	40.5531	51.9	12.5	40.9	2.817	0.008	0.008	0.000	0.205	0.17	
1754	4/21/2004	2:16:01 AM		25.713	24.907	25.437	25.165	24.658		48.811	53.174	16.904	32.196	-1.221	-7.362		48.905	0.059	14.643	0.003		2434.2	40.5697	51.7	12.0	40.5	2.793	0.009	0.009	0.000	0.215	0.18	
1755	4/21/2004	2:17:01 AM		25.701	24.88	25.43	25.108	24.541		48.527	52.784	16.938	31.927	-1.221	-7.362		49.455	0.059	14.643	0.003		2435.2	40.5864	51.3	12.1	40.2	2.774	0.009	0.009	0.000	0.216	0.18	
1756	4/21/2004	2:18:01 AM		25.695	24.879	25.439	25.051	24.52		48.755	53.103	16.885	32.168	-1.218	-7.368		48.229	0.058	14.643	0.003		2436.2	40.6031	51.6	11.8	40.5	2.790	0.009	0.009	0.000	0.211	0.18	
1757	4/21/2004	2:19:01 AM		25.694	24.873	25.443	25.106	24.624		48.853	52.938	16.983	32.225	-1.218	-7.342		49.362	0.062	14.643	0.003		2437.2	40.6197	51.5	12.1	40.5	2.795	0.009	0.009	0.000	0.225	0.19	
1758	4/21/2004	2:20:01 AM		25.689	24.863	25.443	25.126	24.779		48.675	53.029	16.906	32.157	-1.221	-7.18		48.827	0.056	14.643	0.003		2438.2	40.6364	51.6	12.0	40.4	2.787	0.008	0.008	0.000	0.204	0.17	
1759	4/21/2004	2:21:01 AM		25.679	24.853	25.438	25.191	24.864		48.637	52.94	16.922	32.053	-1.221	-7.264		49.845	0.057	14.643	0.003		2439.2	40.6531	51.5	12.2	40.3	2.782	0.008	0.008	0.000	0.208	0.18	
1760	4/21/2004	2:22:01 AM		25.684	24.848	25.453	25.256	24.824		48.652	52.913	16.928	32.053	-1.221	-7.267		47.294	0.059	14.643	0.003		2440.2	40.6697	51.4	11.6	40.4	2.782	0.009	0.009	0.000	0.215	0.18	
1761	4/21/2004	2:23:01 AM		25.688	24.852	25.473	25.3	24.894		48.774	53.043	16.975	32.166	-1.218	-7.281		49.458	0.057	14.643	0.003		2441.2	40.6864	51.6	12.1	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1762	4/21/2004	2:24:01 AM		25.683	24.842	25.458	25.335	24.959		48.422	52.726	16.924	31.739	-1.224	-7.296		48.673	0.055	14.643	0.003		2442.2	40.7031	51.3	11.9	40.1	2.763	0.008	0.008	0.000	0.202	0.17	
1763	4/21/2004	2:25:01 AM		25.684	24.848	25.463	25.356	24.964		48.872	53.174	16.999	32.172	-1.224	-7.284		49.491	0.057	14.643	0.003		2443.2	40.7197	51.7	12.1	40.5	2.794	0.008	0.008	0.000	0.207	0.18	
1764	4/21/2004	2:26:01 AM		25.695	24.858	25.484	25.392	24.975		48.683	52.967	16.963	32.055	-1.218	-7.281		49.437	0.056	14.643	0.003		2444.2	40.7364	51.5	12.1	40.4	2.783	0.008	0.008	0.000	0.204	0.17	
1765	4/21/2004	2:27:01 AM		25.691	24.854	25.465	25.388	25.011		48.942	53.247	16.991	32.213	-1.227	-7.29		49.311	0.057	14.643	0.003		2445.2	40.7531	51.8	12.1	40.6	2.798	0.008	0.008	0.000	0.207	0.18	
1766	4/21/2004	2:28:01 AM		25.716	24.87	25.5	25.463	24.956		48.778	53.178	17.009	32.112	-1.221	-7.281		48.867	0.057	14.643	0.003		2446.2	40.7697	51.7	12.0	40.4	2.789	0.008	0.008	0.000	0.207	0.18	
1767	4/21/2004	2:29:01 AM		25.716	24.885	25.505	25.388	24.831		48.955	53.352	16.989	32.293	-1.218	-7.284		49.209	0.058	14.643	0.003		2447.2	40.7864	51.9	12.1	40.6	2.801	0.009	0.009	0.000	0.210	0.18	
1768	4/21/2004	2:30:01 AM		25.721	24.884	25.51	25.262	24.776		48.859	53.168	16.953	32.291	-1.218	-7.281		48.961	0.056	14.643	0.003		2448.2	40.8031	51.7	12.0	40.6	2.798	0.008	0.008	0.000	0.203	0.17	
1769	4/21/2004	2:31:01 AM		25.71	24.869	25.509	25.217	24.665		48.619	52.907	16.988	31.948	-1.215	-7.241		48.362	0.054	14.643	0.003		2449.2	40.8197	51.4	11.9	40.3	2.777	0.008	0.008	0.000	0.197	0.17	
1770	4/21/2004	2:32:01 AM		25.709	24.873	25.518	25.151	24.609		48.93	53.265	16.982	32.283	-1.169	-7.209		50.154	0.056	14.643	0.003		2450.2	40.8364	51.8	12.3	40.6	2.800	0.008	0.008	0.000	0.203	0.17	
1771	4/21/2004	2:33:01 AM		25.713	24.861	25.512	25.059	24.548		48.828	53.178	16.897	32.287	-1.2	-7.267		49.147	0.057	14.643	0.003		2451.2	40.8531	51.7	12.0	40.6	2.796	0.008	0.008	0.000	0.207	0.18	
1772	4/21/2004	2:34:01 AM		25.696	24.844	25.49	25.032	24.546		48.807	53.064	17.044	32.141	-1.227	-7.278		50.11	0.057	14.643	0.003		2452.2	40.8697	51.6	12.3	40.5	2.791	0.008	0.008	0.000	0.207	0.18	
1773	4/21/2004	2:35:01 AM		25.704	24.842	25.453	25.095	24.559		48.654	52.985	17.065	31.923	-1.195	-7.264		48.256	0.056	14.643	0.003		2453.2	40.8864	51.5	11.8	40.3	2.778	0.008	0.008	0.000	0.205	0.17	
1774	4/21/2004	2:36:01 AM		25.703	24.837	25.422	25.115	24.713		48.687	53.012	17.026	31.903	-1.151	-7.197		49.472	0.055	14.643	0.003		2454.2	40.9031	51.5	12.1	40.3	2.778	0.008	0.008	0.000	0.201	0.17	
1775	4/21/2004	2:37:01 AM		25.697	24.83	25.411	25.133	24.747		49.096	53.516	17.126	32.202	-1.189	-7.255		49.149	0.059	14.643	0.003		2455.2	40.9197	52.0	12.0	40.6	2.803	0.009	0.009	0.000	0.214	0.18	
1776	4/21/2004	2:38:01 AM		25.696	24.82	25.43	25.233	24.696		48.65	53.054	17.084	31.854	-1.154	-7.165		47.568	0.057	14.643	0.003		2456.2	40.9364	51.6	11.7	40.3	2.775	0.008	0.008	0.000	0.209	0.18	
1777	4/21/2004	2:39:01 AM		25.696	24.83	25.445	25.268	24.836		48.552	52.973	16.985	31.843	-1.148	-7.189		49.001	0.056	14.643	0.004		2457.2	40.9531	51.5	12.0	40.2	2.771	0.008	0.008	0.000	0.205	0.17	
1778	4/21/2004	2:40:01 AM		25.681	24.809	25.435	25.298	24.846		48.706	53.083	17.077	31.938	-1.154	-7.232		50.425	0.056	14.643	0.003		2458.2	40.9697	51.6	12.4	40.3	2.780	0.008	0.008	0.000	0.205	0.17	
1779	4/21/2004	2:41:01 AM		25.687	24.825	25.451	25.354	24.842		48.604	52.952	17.127	31.792	-1.154	-7.232		49.067	0.057	14.643	0.003		2459.2	40.9864	51.5	12.0	40.2	2.772	0.008	0.008	0.000	0.209	0.18	
1780	4/21/2004	2:42:01 AM		25.682	24.816	25.446	25.374	24.962		48.979	53.157	17.069	32.192	-1.221	-7.206		49.499	0.043	14.643	0.003		2460.2	41.0031	51.7	12.1	40.6	2.798	0.006	0.006	0.000	0.156	0.13	
1781	4/21/2004	2:43:01 AM		25.689	24.817	25.448	25.376	25.044		48.687	53.245	17.108	31.897	-1.027	-6.795		48.634	0.054	14.643	0.003		2461.2	41.0197	51.8	11.9	40.3	2.778	0.008	0.008	0.000	0.197	0.17	
1782	4/21/2004	2:44:01 AM		25.69	24.829	25.454	25.392	25.07		48.625	53.041	16.996	31.968	-1.16	-7.058		49.733	0.058	14.643	0.003		2462.2	41.0364	51.6	12.2	40.3	2.778	0.009	0.009	0.000	0.212	0.18	
1783	4/21/2004	2:45:01 AM		25.702	24.856	25.481	25.459	24.967		48.834	53.238	17.052	32.085	-1.154	-7.079		50.479	0.058	14.643	0.003		2463.2	41.0531	51.8	12.4	40.5	2.790	0.009	0.009	0.000	0.211	0.18	
1784	4/21/2004	2:46:01 AM		25.698	24.841	25.477	25.415	24.888		48.324	52.722	17.001	31.62	-1.154	-7.099		47.515	0.057	14.643	0.003		2464.2	41.0697	51.2	11.6	40.0	2.756	0.008	0.008	0.000	0.210	0.18	
1785	4/21/2004	2:47:01 AM		25.688	24.842	25.468	25.325	24.764		48.308	52.714	17.022	31.533	-1.137	-7.111		48.803	0.055	14.643	0.003		2465.2	41.0864	51.2	12.0	39.9	2.752	0.008	0.008	0.000	0.203	0.17	
1786	4/21/2004	2:48:01 AM		25.703	24.856	25.502	25.23	24.683		48.785	53.199	17.093	31.917	-1.154	-7.105		48.969	0.057	14.643	0.003		2466.2	41.1031	51.7	12.0	40.4	2.782	0.008	0.008	0.000	0.208	0.18	
1787	4/21/2004	2:49:01 AM		25.681	24.84	25.466	25.153	24.596		48.633	53.141	17.014	31.843	-1.108	-7.119		50.041	0.058	14.643	0.003		2467.2	41.1197	51.7	12.3	40.2	2.774	0.009	0.009	0.000	0.212	0.18	
1788	4/21/2004	2:50:01 AM		25.681	24.834	25.48	25.077	24.576		48.664	53.126	17.004	31.964	-1.14	-7.113		50.534	0.058	14.643	0.003		2468.2	41.1364	51.7	12.4	40.3	2.780	0.009	0.009	0.000	0.212	0.18	
1789	4/21/2004	2:51:01 AM		25.684	24.823	25.479	25.011	24.529		48.807	53.332	17.039	32.036	-1.096	-7.116		47.874	0.057	14.643	0.003		2469.2	41.1531	51.9	11.7	40.4	2.787	0.008	0.008	0.000	0.207	0.18	
1790	4/21/2004	2:52:01 AM		25.684	24.817	25.483	25.05	24.524		48.55	53.025	16.995	31.774	-1.105	-7.134		49.943	0.058	14.643	0.003		2470.2	41.1697	51.6	12.2	40.2	2.769	0.009	0.009	0.000	0.212	0.18	
1791	4/21/2004	2:53:01 AM		25.683	24.812	25.492	25.084	24.603		48.785	53.313	17.013	32.053	-1.114	-7.16		47.355	0.056	14.643	0.003		2471.2	41.1864	51.8	11.6	40.4	2.787	0.008	0.008	0.000	0.204	0.17	
1792	4/21/2004	2:54:01 AM		25.676	24.799	25.495	25.143	24.666		48.569	53.052	16.954	31.942	-1.099	-7.131		48.581	0.055	14.643	0.003		2472.2	41.2031	51.6	11.9	40.3	2.775	0.008	0.008	0.000	0.201	0.17	
1793	4/21/2004	2:55:01 AM		25.671	24.774	25.48	25.178	24.746		48.621	53.081	16.977	32.065	-1.099	-7.111		50.217	0.056	14.643	0.003		2473.2	41.2197	51.6	12.3	40.3	2.782	0.008	0.008	0.000	0.204	0.17	
1794	4/21/2004	2:56:01 AM		25.681	24.789	25.5	25.248	24.776		48.693	53.052	17.108	31.925	-1.099	-7.137		49.775	0.058	14.643	0.003		2474.2	41.2364	51.6	12.2	40.3	2.779	0.009	0.009	0.000	0.212	0.18	
1795	4/21/2004	2:57:01 AM		25.687	24.79	25.521	25.304	24.877		48.834	53.265	16.992	32.116	-1.099	-7.165		49.232	0.057	14.643	0.003		2475.2	41.2531	51.8	12.1	40.5	2.791	0.008	0.008	0.000	0.207	0.18	
1796	4/21/2004	2:58:01 AM		25.682	24.791	25.491	25.299	24.877		48.959	53.325	16.98	32.305	-1.096	-7.165		48.035	0.058	14.643	0.003		2476.2	41.2697	51.9	11.8	40.6	2.801	0.009	0.009	0.000	0.210	0.18	
1797	4/21/2004	2:59:01 AM		25.693	24.781	25.442	25.32	24.933		48.699	53.186	17.028	31.975	-1.111	-7.163		50.586	0.058	14.643	0.003		2477.2	41.2864	51.7	12.4	40.3	2.781	0.009	0.009	0.000	0.212	0.18	
1798	4/21/2004	3:00:01 AM		25.706	24.799	25.455	25.373	25.076		48.523	53.006	16.991	31.841	-1.096	-7.079		48.631	0.051	14.643	0.003		2478.2	41.3031	51.5	11.9	40.2	2.770	0.008	0.008	0.000	0.187	0.16	
1799	4/21/2004	3:01:01 AM		25.706	24.794	25.45	25.393	24.946		49.056	53.729	17.185	32.182	-1.099	-7.085		47.651	0.056	14.643	0.003		2479.2	41.3197	52.3	11.7	40.6	2.801	0.008	0.008	0.000	0.203	0.17	
1800	4/21/2004	3:02:01 AM		25.696	24.799	25.44	25.408	25.006		48.33	52.774	16.869	31.767	-1.102	-7.096		49.522	0.057	14.643	0.003		2480.2	41.3364	51.3	12.1	40.0	2.761	0.008	0.008	0.000	0.210	0.18	
1801	4/21/2004	3:02:24 AM		25.696	24.81	25.456	25.404	24.996		48.627	53.131	17.032	31.825	-1.099	-7.096		49.837	0.057	14.643	0.003		2480.6	41.3428	51.7	12.2	40.2	2.773	0.008	0.008	0.000	0.209	0.18	
1802	4/21/2004	3:03:24 AM		25.703	24.816	25.462	25.425	24.863		48.567	53.166	17.039	31.845	-1.099	-7.099		47.904	0.057	14.643	0.003		2481.6	41.3594	51.7	11.7	40.2	2.772	0.008	0.008	0.000	0.209	0.18	
1803	4/21/2004	3:04:24 AM		25.688	24.812	25.443	25.3	24.739		48.727	53.172	17.086	31.966	-1.09	-7.108		50.398	0.057	14.643	0.003		2482.6	41.3761	51.7	12.4	40.3	2.782	0.008	0.008	0.000	0.208	0.18	
1804	4/21/2004	3:05:24 AM		25.693	24.826	25.462	25.23	24.688		48.432	52.905	17.046	31.652	-1.079	-7.108		48.644	0.056	14.643	0.003		2483.6	41.3928	51.4	11.9	40.0	2.761	0.008	0.008	0.000	0.206	0.18	
1805	4/21/2004	3:06:24 AM		25.692	24.816	25.466	25.129	24.597		48.789	53.307	17.034	32.17	-1.044	-7.108		51.329	0.055	14.643	0.003		2484.6	41.4094	51.8	12.6	40.5	2.791	0.008	0.008	0.000	0.200	0.17	
1806	4/21/2004	3:07:24 AM		25.686	24.814	25.46	25.042	24.506		48.465	53.037	16.973	31.845	-1.076	-7.113		49.991	0.053	14.643	0.003		2485.6	41.4261	51.6	12.3	40.2	2.769	0.008	0.008	0.000	0.194	0.17	
1807	4/21/2004	3:08:24 AM		25.679	24.817	25.483	25.01	24.524		48.697	53.209	16.971	31.954	-1.021	-7.108		47.772	0.055	14.643	0.003		2486.6	41.4428	51.7	11.7	40.3	2.780	0.008	0.008	0.000	0.201	0.17	
1808	4/21/2004	3:09:24 AM		25.682	24.796	25.476	24.974	24.602		48.556	53.124	16.971	31.913	-1.004	-7.105		48.74	0.057	14.643	0.003		2487.6	41.4594	51.7	11.9	40.2	2.774	0.008	0.008	0.000	0.208	0.18	
1809	4/21/2004	3:10:24 AM		25.677	24.791	25.471	25.059	24.617		48.418	52.936	16.938	31.852	-1.056	-7.099		49.228	0.056	14.643	0.003		2488.6	41.4761	51.5	12.1	40.1	2.767	0.008	0.008	0.000	0.205	0.17	
1810	4/21/2004	3:11:24 AM		25.671	24.784	25.475	25.097	24.656		48.654	53.234	16.894	32.061	-0.995	-6.978		47.824	0.055	14.643	0.003		2489.6	41.4928	51.8	11.7	40.4	2.783	0.008	0.008	0.000	0.200	0.17	
1811	4/21/2004	3:12:24 AM		25.675	24.779	25.484	25.147	24.73		48.602	53.101	16.939	32.001	-0.995	-7.015		50.277	0.057	14.643	0.003		2490.6	41.5094	51.6	12.3	40.3	2.779	0.008	0.008	0.000	0.208	0.18	
1812	4/21/2004	3:13:24 AM		25.675	24.773	25.494	25.256	24.705		48.824	53.425	17.042	32.118	-0.992	-7.047		50.104	0.057	14.643	0.003		2491.6	41.5261	52.0	12.3	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1813	4/21/2004	3:14:24 AM		25.68	24.778	25.504	25.281	24.895		48.867	53.423	17.096	32.057	-1.012	-7.061		47.956	0.057	14.643	0.003		2492.6	41.5428	52.0	11.8	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1814	4/21/2004	3:15:24 AM		25.679	24.767	25.458	25.276	24.849		48.453	52.857	17	31.79	-1.004	-7.061		48.898	0.056	14.643	0.003		2493.6	41.5594	51.4	12.0	40.1	2.766	0.008	0.008	0.000	0.205	0.17	
1815	4/21/2004	3:16:24 AM		25.685	24.779	25.449	25.312	24.87		48.874	53.443	17.033	32.178	-1.018	-7.067		50.648	0.058	14.643	0.003		2494.6	41.5761	52.0	12.4	40.5	2.794	0.009	0.009	0.000	0.211	0.18	
1816	4/21/2004	3:17:24 AM		25.691	24.784	25.45	25.343	24.971		48.364	52.844	16.955	31.745	-1.027	-7.128		49.291	0.06	14.643	0.003		2495.6	41.5928	51.4	12.1	40.1	2.762	0.009	0.009	0.000	0.221	0.19	
1817	4/21/2004	3:18:24 AM		25.687	24.781	25.456	25.374	24.947		48.546	53.01	16.997	31.886	-0.94	-6.946		49.72	0.054	14.643	0.003		2496.6	41.6094	51.5	12.2	40.2	2.773	0.008	0.008	0.000	0.198	0.17	
1818	4/21/2004	3:19:24 AM		25.684	24.787	25.458	25.406	24.949		48.388	52.944	17.043	31.687	-0.937	-6.992		48.423	0.056	14.643	0.003		2497.6	41.6261	51.5	11.9	40.0	2.760	0.008	0.008	0.000	0.206	0.18	
1819	4/21/2004	3:20:24 AM		25.695	24.804	25.469	25.382	24.86		48.492	53.162	17.08	31.65	-0.937	-7.047		50.077	0.056	14.643	0.003		2498.6	41.6428	51.7	12.3	40.1	2.763	0.008	0.008	0.000	0.206	0.17	
1820	4/21/2004	3:21:24 AM		25.684	24.803	25.474	25.266	24.774		48.486	53.033	17.134	31.644	-0.937	-7.053		49.061	0.057	14.643	0.003		2499.6	41.6594	51.6	12.0	40.1	2.762	0.008	0.008	0.000	0.209	0.18	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1821	4/21/2004	3:22:24 AM		25.679	24.792	25.458	25.205	24.659		48.822	53.367	17.071	32.108	-0.969	-7.053		48.915	0.055	14.643	0.003		2500.6	41.6761	51.9	12.0	40.5	2.790	0.008	0.008	0.000	0.200	0.17	
1822	4/21/2004	3:23:24 AM		25.677	24.785	25.466	25.128	24.627		48.245	52.861	16.96	31.585	-0.989	-7.053		48.859	0.055	14.643	0.003		2501.6	41.6928	51.4	12.0	39.9	2.752	0.008	0.008	0.000	0.203	0.17	
1823	4/21/2004	3:24:24 AM		25.677	24.79	25.481	25.058	24.577		48.223	52.741	16.952	31.583	-0.986	-7.061		49.556	0.055	14.643	0.003		2502.6	41.7094	51.3	12.1	39.9	2.751	0.008	0.008	0.000	0.203	0.17	
1824	4/21/2004	3:25:24 AM		25.676	24.784	25.48	25.007	24.476		48.453	53.077	17.094	31.616	-0.934	-6.937		49.812	0.057	14.643	0.003		2503.6	41.7261	51.6	12.2	40.0	2.760	0.008	0.008	0.000	0.209	0.18	
1825	4/21/2004	3:26:24 AM		25.66	24.768	25.474	25.001	24.499		48.484	53.025	17.037	31.749	-0.937	-7.041		50.225	0.056	14.643	0.003		2504.6	41.7428	51.6	12.3	40.1	2.766	0.008	0.008	0.000	0.205	0.17	
1826	4/21/2004	3:27:24 AM		25.663	24.762	25.487	25.08	24.543		48.505	53.046	16.931	31.968	-0.96	-7.035		47.126	0.056	14.643	0.003		2505.6	41.7594	51.6	11.5	40.2	2.774	0.008	0.008	0.000	0.205	0.17	
1827	4/21/2004	3:28:24 AM		25.662	24.76	25.496	25.128	24.612		48.695	53.211	16.986	32.028	-0.992	-7.038		48.654	0.055	14.643	0.003		2506.6	41.7761	51.7	11.9	40.4	2.783	0.008	0.008	0.000	0.200	0.17	
1828	4/21/2004	3:29:24 AM		25.668	24.766	25.512	25.199	24.728		48.285	52.809	16.988	31.655	-0.934	-6.928		51.256	0.053	14.643	0.003		2507.6	41.7928	51.3	12.6	40.0	2.756	0.008	0.008	0.000	0.195	0.17	
1829	4/21/2004	3:30:24 AM		25.657	24.745	25.506	25.174	24.787		48.407	53.072	16.985	31.732	-0.934	-6.983		49.257	0.058	14.643	0.003		2508.6	41.8094	51.6	12.1	40.1	2.763	0.009	0.009	0.000	0.213	0.18	
1830	4/21/2004	3:31:24 AM		25.663	24.746	25.517	25.194	24.788		48.793	53.396	17.129	31.903	-0.934	-7.012		48.354	0.055	14.643	0.003		2509.6	41.8261	51.9	11.8	40.3	2.782	0.008	0.008	0.000	0.200	0.17	
1831	4/21/2004	3:32:24 AM		25.668	24.752	25.527	25.23	24.868		48.384	53.112	16.967	31.628	-0.937	-7.024		48.567	0.055	14.643	0.003		2510.6	41.8428	51.6	11.9	40.0	2.758	0.008	0.008	0.000	0.202	0.17	
1832	4/21/2004	3:33:24 AM		25.669	24.747	25.523	25.231	24.889		48.532	53.089	17.04	31.878	-0.937	-7.021		48.669	0.057	14.643	0.003		2511.6	41.8594	51.6	11.9	40.2	2.772	0.008	0.008	0.000	0.208	0.18	
1833	4/21/2004	3:34:24 AM		25.664	24.737	25.523	25.271	24.959		48.923	53.62	17.1	32.102	-0.937	-7.03		48.352	0.056	14.643	0.003		2512.6	41.8761	52.1	11.8	40.5	2.793	0.008	0.008	0.000	0.203	0.17	
1834	4/21/2004	3:35:24 AM		25.677	24.76	25.481	25.268	25.032		48.312	52.944	16.934	31.7	-0.937	-7.032		49.142	0.055	14.643	0.003		2513.6	41.8928	51.5	12.0	40.0	2.758	0.008	0.008	0.000	0.202	0.17	
1835	4/21/2004	3:36:24 AM		25.687	24.776	25.466	25.344	24.922		48.617	53.207	16.952	32.036	-0.931	-6.928		48.508	0.058	14.643	0.004		2514.6	41.9094	51.7	11.9	40.3	2.780	0.009	0.009	0.000	0.212	0.18	
1836	4/21/2004	3:37:24 AM		25.678	24.761	25.437	25.325	24.963		48.364	52.948	17.016	31.64	-0.902	-6.911		46.76	0.056	14.643	0.003		2515.6	41.9261	51.5	11.5	40.0	2.758	0.008	0.008	0.000	0.206	0.18	
1837	4/21/2004	3:38:24 AM		25.699	24.792	25.468	25.381	24.879		48.476	53.058	17.084	31.677	-0.885	-6.934		49.733	0.057	14.643	0.003		2516.6	41.9428	51.6	12.2	40.1	2.763	0.008	0.008	0.000	0.209	0.18	
1838	4/21/2004	3:39:24 AM		25.698	24.802	25.487	25.32	24.803		48.411	53.095	17.044	31.737	-0.934	-6.983		50.098	0.056	14.643	0.003		2517.6	41.9594	51.6	12.3	40.1	2.763	0.008	0.008	0.000	0.206	0.17	
1839	4/21/2004	3:40:24 AM		25.672	24.776	25.456	25.219	24.677		48.5	53.099	17.034	31.739	-0.934	-6.989		48.855	0.055	14.643	0.003		2518.6	41.9761	51.6	12.0	40.1	2.766	0.008	0.008	0.000	0.202	0.17	
1840	4/21/2004	3:41:24 AM		25.682	24.791	25.471	25.119	24.547		48.21	52.983	16.993	31.497	-0.934	-6.989		49.113	0.057	14.643	0.003		2519.6	41.9928	51.5	12.0	39.9	2.748	0.008	0.008	0.000	0.210	0.18	
1841	4/21/2004	3:42:24 AM		25.66	24.768	25.439	25.056	24.464		48.654	53.346	17.066	31.849	-0.925	-7.001		48.125	0.054	14.643	0.003		2520.6	42.0094	51.9	11.8	40.3	2.775	0.008	0.008	0.000	0.198	0.17	
1842	4/21/2004	3:43:24 AM		25.673	24.766	25.472	25.019	24.367		48.83	53.516	17.095	32.051	-0.92	-6.992		50.356	0.056	14.643	0.003		2521.6	42.0261	52.0	12.3	40.4	2.788	0.008	0.008	0.000	0.204	0.17	
1843	4/21/2004	3:44:24 AM		25.649	24.753	25.458	24.975	24.354		48.532	53.162	17.019	31.813	-0.905	-6.995		49.157	0.055	14.643	0.003		2522.6	42.0428	51.7	12.0	40.2	2.770	0.008	0.008	0.000	0.202	0.17	
1844	4/21/2004	3:45:24 AM		25.646	24.73	25.46	24.943	24.396		48.49	53.112	17.055	31.829	-0.888	-6.989		48.636	0.058	14.643	0.003		2523.6	42.0594	51.6	11.9	40.2	2.769	0.009	0.009	0.000	0.213	0.18	
1845	4/21/2004	3:46:24 AM		25.651	24.735	25.486	24.973	24.491		48.685	53.348	17.077	31.849	-0.894	-6.943		48.859	0.056	14.643	0.003		2524.6	42.0761	51.9	12.0	40.3	2.776	0.008	0.008	0.000	0.205	0.17	
1846	4/21/2004	3:47:24 AM		25.641	24.714	25.485	25.007	24.586		48.66	53.282	17.122	31.808	-0.882	-6.928		49.276	0.056	14.643	0.003		2525.6	42.0928	51.8	12.1	40.2	2.774	0.008	0.008	0.000	0.205	0.17	
1847	4/21/2004	3:48:24 AM		25.645	24.703	25.484	25.066	24.575		48.743	53.448	17.005	32.092	-0.914	-6.989		49.526	0.058	14.643	0.003		2526.6	42.1094	52.0	12.1	40.4	2.787	0.009	0.009	0.000	0.211	0.18	
1848	4/21/2004	3:49:24 AM		25.639	24.698	25.493	25.106	24.644		48.349	53.13	16.965	31.679	-0.896	-6.972		48.682	0.057	14.643	0.003		2527.6	42.1261	51.7	11.9	40.0	2.759	0.008	0.008	0.000	0.209	0.18	
1849	4/21/2004	3:50:24 AM		25.639	24.693	25.498	25.156	24.644		48.529	53.18	16.944	31.927	-0.882	-6.966		50.457	0.055	14.643	0.003		2528.6	42.1428	51.7	12.4	40.2	2.774	0.008	0.008	0.000	0.201	0.17	
1850	4/21/2004	3:51:24 AM		25.65	24.698	25.519	25.182	24.745		48.496	53.288	17	31.802	-0.882	-6.972		49.983	0.056	14.643	0.003		2529.6	42.1594	51.8	12.2	40.1	2.768	0.008	0.008	0.000	0.205	0.17	
1851	4/21/2004	3:52:24 AM		25.646	24.695	25.521	25.208	24.766		48.565	53.211	16.96	31.934	-0.882	-6.992		47.374	0.051	14.643	0.004		2530.6	42.1761	51.7	11.6	40.2	2.775	0.008	0.007	0.000	0.186	0.16	
1852	4/21/2004	3:53:24 AM		25.646	24.68	25.516	25.223	24.806		48.357	53.155	16.909	31.591	-0.882	-6.888		49.591	0.054	14.643	0.003		2531.6	42.1928	51.7	12.2	40.0	2.756	0.008	0.008	0.000	0.199	0.17	
1853	4/21/2004	3:54:24 AM		25.663	24.701	25.527	25.275	24.748		48.585	53.28	17.146	31.741	-0.882	-6.923		49.082	0.057	14.643	0.003		2532.6	42.2094	51.8	12.0	40.2	2.769	0.008	0.008	0.000	0.208	0.18	
1854	4/21/2004	3:55:24 AM		25.658	24.691	25.522	25.295	24.798		48.328	53.083	17.019	31.564	-0.885	-6.937		49.409	0.056	14.643	0.003		2533.6	42.2261	51.6	12.1	39.9	2.754	0.008	0.008	0.000	0.206	0.18	
1855	4/21/2004	3:56:24 AM		25.658	24.696	25.527	25.3	24.788		48.631	53.358	17.034	31.88	-0.879	-6.934		48.427	0.057	14.643	0.003		2534.6	42.2428	51.9	11.9	40.3	2.775	0.008	0.008	0.000	0.208	0.18	
1856	4/21/2004	3:57:24 AM		25.679	24.712	25.548	25.336	24.859		48.484	53.234	17.065	31.751	-0.873	-6.934		46.3	0.055	14.643	0.003		2535.6	42.2594	51.8	11.3	40.1	2.766	0.008	0.008	0.000	0.201	0.17	
1857	4/21/2004	3:58:24 AM		25.68	24.713	25.544	25.327	24.815		48.88	53.562	17.019	32.188	-0.882	-6.94		47.78	0.056	14.643	0.003		2536.6	42.2761	52.1	11.7	40.5	2.795	0.008	0.008	0.000	0.203	0.17	
1858	4/21/2004	3:59:24 AM		25.68	24.719	25.54	25.287	24.65		48.558	53.271	16.972	31.938	-0.818	-6.847		49.795	0.055	14.643	0.003		2537.6	42.2928	51.8	12.2	40.2	2.775	0.008	0.008	0.000	0.201	0.17	
1859	4/21/2004	4:00:24 AM		25.681	24.724	25.55	25.198	24.616		48.527	53.305	17.049	31.728	-0.818	-6.905		49.443	0.053	14.643	0.003		2538.6	42.3094	51.8	12.1	40.1	2.767	0.008	0.008	0.000	0.194	0.17	
1860	4/21/2004	4:01:24 AM		25.695	24.729	25.49	25.107	24.57		48.484	53.282	16.962	31.815	-0.813	-6.92		48.179	0.055	14.643	0.003		2539.6	42.3261	51.8	11.8	40.1	2.768	0.008	0.008	0.000	0.201	0.17	
1861	4/21/2004	4:02:24 AM		25.689	24.722	25.448	25.02	24.434		48.565	53.34	17.011	31.81	-0.818	-6.914		48.765	0.055	14.643	0.003		2540.6	42.3428	51.9	12.0	40.2	2.771	0.008	0.008	0.000	0.201	0.17	
1862	4/21/2004	4:03:24 AM		25.683	24.717	25.438	24.97	24.323		48.376	53.139	16.869	31.817	-0.859	-6.902		48.031	0.055	14.643	0.003		2541.6	42.3594	51.7	11.8	40.1	2.765	0.008	0.008	0.000	0.202	0.17	
1863	4/21/2004	4:04:24 AM		25.661	24.69	25.435	24.943	24.371		48.175	52.96	16.981	31.496	-0.818	-6.862		48.523	0.058	14.643	0.003		2542.6	42.3761	51.5	11.9	39.8	2.747	0.009	0.009	0.000	0.214	0.18	
1864	4/21/2004	4:05:24 AM		25.66	24.688	25.439	24.971	24.45		48.714	53.493	17.057	31.969	-0.818	-6.928		48.656	0.055	14.643	0.003		2543.6	42.3928	52.0	11.9	40.3	2.781	0.008	0.008	0.000	0.201	0.17	
1865	4/21/2004	4:06:24 AM		25.649	24.682	25.443	25.035	24.589		48.353	53.106	16.898	31.681	-0.83	-6.92		48.473	0.057	14.643	0.003		2544.6	42.4094	51.6	11.9	40.0	2.759	0.008	0.008	0.000	0.210	0.18	
1866	4/21/2004	4:07:24 AM		25.649	24.682	25.463	25.105	24.594		48.492	53.195	16.963	31.856	-0.815	-6.83		49.157	0.054	14.643	0.003		2545.6	42.4261	51.7	12.0	40.2	2.770	0.008	0.008	0.000	0.198	0.17	
1867	4/21/2004	4:08:24 AM		25.644	24.667	25.453	25.115	24.654		48.828	53.682	17.048	32.086	-0.818	-6.839		48.135	0.058	14.643	0.003		2546.6	42.4428	52.2	11.8	40.5	2.789	0.009	0.009	0.000	0.211	0.18	
1868	4/21/2004	4:09:24 AM		25.644	24.662	25.463	25.205	24.689		48.776	53.497	17.016	31.962	-0.818	-6.902		48.419	0.055	14.643	0.003		2547.6	42.4594	52.0	11.9	40.4	2.783	0.008	0.008	0.000	0.201	0.17	
1869	4/21/2004	4:10:24 AM		25.65	24.673	25.489	25.217	24.705		48.276	53.077	16.982	31.636	-0.815	-6.902		49.051	0.053	14.643	0.003		2548.6	42.4761	51.6	12.0	40.0	2.755	0.008	0.008	0.000	0.195	0.17	
1870	4/21/2004	4:11:24 AM		25.63	24.663	25.464	25.207	24.775		48.536	53.222	16.96	31.927	-0.821	-6.914		49.968	0.056	14.643	0.003		2549.6	42.4928	51.7	12.2	40.2	2.774	0.008	0.008	0.000	0.205	0.17	
1871	4/21/2004	4:12:24 AM		25.657	24.68	25.496	25.259	24.837		48.486	53.24	16.945	31.825	-0.798	-6.816		49.695	0.055	14.643	0.003		2550.6	42.5094	51.8	12.2	40.2	2.769	0.008	0.008	0.000	0.201	0.17	
1872	4/21/2004	4:13:24 AM		25.648	24.676	25.482	25.265	24.923		48.314	53.209	16.969	31.605	-0.781	-6.821		45.841	0.054	14.643	0.003		2551.6	42.5261	51.7	11.2	40.0	2.755	0.008	0.008	0.000	0.199	0.17	
1873	4/21/2004	4:14:24 AM		25.643	24.681	25.487	25.32	24.838		48.585	53.396	17.006	31.86	-0.818	-6.871		48.139	0.056	14.643	0.003		2552.6	42.5428	51.9	11.8	40.2	2.773	0.008	0.008	0.000	0.205	0.17	
1874	4/21/2004	4:15:24 AM		25.655	24.703	25.504	25.317	24.925		48.741	53.588	16.959	32.086	-0.772	-6.873		48.942	0.056	14.643	0.003		2553.6	42.5594	52.1	12.0	40.4	2.786	0.008	0.008	0.000	0.204	0.17	
1875	4/21/2004	4:16:24 AM		25.65	24.699	25.49	25.307	24.951		48.364	53.075	16.93	31.698	-0.772	-6.873		49.412	0.056	14.643	0.003		2554.6	42.5761	51.6	12.1	40.0	2.760	0.008	0.008	0.000	0.206	0.18	
1876	4/21/2004	4:17:24 AM		25.65	24.704	25.5	25.317	24.806		48.521	53.408	17.009	31.858	-0.815	-6.885		49.182	0.054	14.643	0.003		2555.6	42.5928	51.9	12.1	40.2	2.771	0.008	0.008	0.000	0.198	0.17	
1877	4/21/2004	4:18:24 AM		25.667	24.725	25.521	25.239	24.757		48.585	53.402	16.999	31.829	-0.784	-6.882		48.463	0.054	14.643	0.003		2556.6	42.6094	51.9	11.9	40.2	2.772	0.008	0.008	0.000	0.197	0.17	
1878	4/21/2004	4:19:24 AM		25.667	24.725	25.516	25.163	24.402		48.654	53.369	17.073	31.897	-0.815	-6.842		49.07	0.05	14.643	0.003		2557.6	42.6261	51.9	12.0	40.3	2.777	0.007	0.007	0.000	0.182	0.16	
1879	4/21/2004	4:20:24 AM		25.661	24.709	25.5	25.078	24.341		48.606	53.431	16.897	31.987	-0.731	-6.642		49.057	0.053	14.643	0.003		2558.6	42.6428	52.0	12.0	40.3	2.778	0.008	0.008	0.000	0.193	0.16	
1880	4/21/2004	4:21:24 AM		25.66	24.719	25.52	25.027	24.43		48.494	53.431	17.033	31.739	-0.769	-6.781		48.488	0.055	14.643	0.003		2559.6	42.6594	52.0	11.9	40.1	2.766	0.008	0.008	0.000	0.201	0.17	
1881	4/21/2004	4:22:24 AM		25.65	24.703	25.514	24.931	24.485		48.614	53.4	17.08	31.903	-0.769	-6.801		48.404	0.055	14.643	0.003		2560.6	42.6761	51.9	11.9	40.3	2.776	0.008	0.008	0.000	0.201	0.17	
1882	4/21/2004	4:23:24 AM		25.66	24.708	25.524	24.956	24.505		48.529	53.388	16.991	31.95	-0.769	-6.81		49.345	0.055	14.643	0.003		2561.6	42.6928	51.9	12.1	40.2	2.774	0.008	0.008	0.000	0.201	0.17	
1883	4/21/2004	4:24:24 AM		25.649	24.692	25.523	24.965	24.549		48.281	53.05	16.946	31.669	-0.769	-6.81		48.9	0.055	14.643	0.003		2562.6	42.7094	51.6	12.0	40.0	2.756	0.008	0.008	0.000	0.202	0.17	
1884	4/21/2004	4:25:24 AM		25.658	24.692	25.538	25.015	24.598		48.534	53.396	16.961	31.88	-0.766	-6.81		49.026	0.055	14.643	0.003		2563.6	42.7261	51.9	12.0	40.2	2.772	0.008	0.008	0.000	0.201	0.17	
1885	4/21/2004	4:26:24 AM		25.648	24.682	25.488	25.07	24.633		48.384	53.112	17.015	31.745	-0.772	-6.819		48.625	0.055	14.643	0.003		2564.6	42.7428	51.6	11.9	40.1	2.762	0.008	0.008	0.000	0.202	0.17	
1886	4/21/2004	4:27:24 AM		25.673	24.697	25.458	25.15	24.708		48.536	53.35	17.048	31.815	-0.769	-6.81		49.716	0.056	14.643	0.003		2565.6	42.7594	51.9	12.2	40.2	2.770	0.008	0.008	0.000	0.205	0.17	
1887	4/21/2004	4:28:24 AM		25.653	24.687	25.443	25.165	24.813		48.544	53.336	17.005	31.835	-0.769	-6.807		48.996	0.056	14.643	0.003		2566.6	42.7761	51.9	12.0	40.2	2.771	0.008	0.008	0.000	0.205	0.17	
1888	4/21/2004	4:29:24 AM		25.66	24.688	25.449	25.232	24.735		48.689	53.725	16.968	31.971	-0.769	-6.807		48.221	0.055	14.643	0.003		2567.6	42.7928	52.3	11.8	40.3	2.781	0.008	0.008	0.000	0.201	0.17	
1889	4/21/2004	4:30:24 AM		25.65	24.689	25.46	25.222	24.781		48.484	53.336	16.903	31.927	-0.726	-6.807		49.595	0.055	14.643	0.003		2568.6	42.8094	51.9	12.2	40.2	2.772	0.008	0.008	0.000	0.201	0.17	
1890	4/21/2004	4:31:24 AM		25.656	24.689	25.455	25.273	24.886		48.532	53.35	16.793	32.036	-0.755	-6.801		48.715	0.053	14.643	0.003		2569.6	42.8261	51.9	11.9	40.3	2.777	0.008	0.008	0.000	0.194	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1891	4/21/2004	4:32:24 AM		25.653	24.706	25.462	25.304	24.863		48.341	53.276	16.761	31.852	-0.717	-6.798		48.342	0.056	14.643	0.003		2570.6	42.8428	51.8	11.8	40.1	2.765	0.008	0.008	0.000	0.206	0.17	
1892	4/21/2004	4:33:24 AM		25.664	24.717	25.473	25.306	24.909		48.644	53.489	16.875	32.137	-0.705	-6.804		48.861	0.056	14.643	0.003		2571.6	42.8594	52.0	12.0	40.4	2.785	0.008	0.008	0.000	0.204	0.17	
1893	4/21/2004	4:34:24 AM		25.655	24.723	25.479	25.312	24.915		48.279	53.197	16.82	31.87	-0.705	-6.807		49.47	0.055	14.643	0.003		2572.6	42.8761	51.7	12.1	40.1	2.763	0.008	0.008	0.000	0.202	0.17	
1894	4/21/2004	4:35:24 AM		25.65	24.724	25.464	25.287	24.845		48.664	53.578	16.795	32.159	-0.705	-6.7		47.837	0.057	14.643	0.003		2573.6	42.8928	52.1	11.7	40.4	2.786	0.008	0.008	0.000	0.208	0.18	
1895	4/21/2004	4:36:24 AM		25.655	24.734	25.474	25.257	24.66		48.712	53.605	16.869	32.133	-0.708	-6.7		47.303	0.057	14.643	0.003		2574.6	42.9094	52.1	11.6	40.4	2.787	0.008	0.008	0.000	0.207	0.18	
1896	4/21/2004	4:37:24 AM		25.655	24.723	25.474	25.156	24.66		48.768	53.653	16.898	32.237	-0.726	-6.816		48.354	0.056	14.643	0.003		2575.6	42.9261	52.2	11.8	40.5	2.793	0.008	0.008	0.000	0.203	0.17	
1897	4/21/2004	4:38:24 AM		25.643	24.706	25.467	25.075	24.483		48.668	53.458	16.769	32.264	-0.772	-6.81		48.596	0.057	14.643	0.003		2576.6	42.9428	52.0	11.9	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1898	4/21/2004	4:39:24 AM		25.653	24.742	25.487	24.989	24.478		48.523	53.553	16.744	32.083	-0.691	-6.596		52.476	0.052	14.643	0.003		2577.6	42.9594	52.1	12.9	40.3	2.779	0.008	0.008	0.000	0.190	0.16	
1899	4/21/2004	4:40:24 AM		25.651	24.724	25.485	24.957	24.446		48.583	53.526	16.886	31.96	-0.705	-6.703		48.949	0.053	14.643	0.003		2578.6	42.9761	52.1	12.0	40.3	2.777	0.008	0.008	0.000	0.194	0.16	
1900	4/21/2004	4:41:24 AM		25.645	24.714	25.495	24.937	24.56		48.627	53.653	16.825	32.063	-0.705	-6.616		48.083	0.058	14.643	0.003		2579.6	42.9928	52.2	11.8	40.3	2.782	0.009	0.009	0.000	0.211	0.18	
1901	4/21/2004	4:42:24 AM		25.64	24.709	25.49	24.947	24.66		48.714	53.504	16.859	32.205	-0.769	-6.798		49.349	0.057	14.643	0.003		2580.6	43.0094	52.0	12.1	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1902	4/21/2004	4:43:24 AM		25.655	24.714	25.51	25.017	24.63		48.741	53.661	16.874	32.186	-0.711	-6.798		48.456	0.056	14.643	0.003		2581.6	43.0261	52.2	11.9	40.5	2.790	0.008	0.008	0.000	0.203	0.17	
1903	4/21/2004	4:44:24 AM		25.666	24.719	25.53	25.108	24.676		48.627	53.421	16.783	32.127	-0.798	-6.85		48.834	0.048	14.643	0.003		2582.6	43.0428	51.9	12.0	40.4	2.784	0.007	0.007	0.000	0.175	0.15	
1904	4/21/2004	4:45:24 AM		25.637	24.695	25.511	25.113	24.712		48.677	53.531	16.567	32.404	-0.705	-6.634		48.108	0.054	14.643	0.003		2583.6	43.0594	52.1	11.8	40.5	2.795	0.008	0.008	0.000	0.196	0.17	
1905	4/21/2004	4:46:24 AM		25.637	24.7	25.506	25.169	24.682		48.471	53.253	16.798	31.975	-0.743	-6.738		48.861	0.054	14.643	0.003		2584.6	43.0761	51.8	12.0	40.2	2.773	0.008	0.008	0.000	0.197	0.17	
1906	4/21/2004	4:47:24 AM		25.643	24.686	25.522	25.169	24.728		48.592	53.504	16.836	32.067	-0.749	-6.761		48.097	0.054	14.643	0.003		2585.6	43.0928	52.0	11.8	40.3	2.781	0.008	0.008	0.000	0.197	0.17	
1907	4/21/2004	4:48:24 AM		25.648	24.696	25.522	25.185	24.873		48.59	53.402	16.917	31.973	-0.763	-6.752		48.759	0.057	14.643	0.003		2586.6	43.1094	51.9	11.9	40.3	2.777	0.008	0.008	0.000	0.208	0.18	
1908	4/21/2004	4:49:24 AM		25.665	24.718	25.549	25.216	24.92		48.643	53.52	16.852	32.098	-0.743	-6.769		47.83	0.056	14.643	0.003		2587.6	43.1261	52.0	11.7	40.4	2.783	0.008	0.008	0.000	0.204	0.17	
1909	4/21/2004	4:50:24 AM		25.66	24.719	25.544	25.257	24.925		48.511	53.437	16.937	31.866	-0.708	-6.764		49.288	0.056	14.643	0.003		2588.6	43.1428	52.0	12.1	40.2	2.771	0.008	0.008	0.000	0.205	0.17	
1910	4/21/2004	4:51:24 AM		25.662	24.715	25.551	25.299	24.922		48.704	53.597	16.929	32.11	-0.705	-6.767		48.815	0.055	14.643	0.003		2589.6	43.1594	52.1	12.0	40.4	2.786	0.008	0.008	0.000	0.200	0.17	
1911	4/21/2004	4:52:24 AM		25.674	24.737	25.563	25.316	24.939		48.76	53.715	17.039	31.907	-0.705	-6.764		48.982	0.055	14.643	0.003		2590.6	43.1761	52.2	12.0	40.3	2.781	0.008	0.008	0.000	0.200	0.17	
1912	4/21/2004	4:53:24 AM		25.675	24.743	25.564	25.312	24.93		48.72	53.663	16.954	32.04	-0.705	-6.775		47.563	0.054	14.643	0.003		2591.6	43.1928	52.2	11.7	40.4	2.784	0.008	0.008	0.000	0.196	0.17	
1913	4/21/2004	4:54:24 AM		25.676	24.75	25.576	25.263	24.861		48.372	53.282	16.744	31.971	-0.705	-6.772		47.916	0.056	14.643	0.003		2592.6	43.2094	51.8	11.7	40.2	2.770	0.008	0.008	0.000	0.205	0.17	
1914	4/21/2004	4:55:24 AM		25.677	24.75	25.566	25.174	24.717		48.783	53.736	17.132	31.932	-0.705	-6.772		46.652	0.055	14.643	0.003		2593.6	43.2261	52.3	11.4	40.4	2.783	0.008	0.008	0.000	0.200	0.17	
1915	4/21/2004	4:56:24 AM		25.681	24.75	25.576	25.088	24.651		48.451	53.539	17.01	31.706	-0.705	-6.769		46.982	0.055	14.643	0.003		2594.6	43.2428	52.1	11.5	40.1	2.763	0.008	0.008	0.000	0.201	0.17	
1916	4/21/2004	4:57:24 AM		25.674	24.742	25.523	25.035	24.484		48.55	53.501	16.909	31.952	-0.7	-6.767		47.868	0.055	14.643	0.003		2595.6	43.2594	52.0	11.7	40.3	2.775	0.008	0.008	0.000	0.201	0.17	
1917	4/21/2004	4:58:24 AM		25.674	24.732	25.443	24.95	24.534		48.397	53.34	16.935	31.679	-0.708	-6.781		48.356	0.052	14.643	0.003		2596.6	43.2761	51.9	11.9	40.0	2.760	0.008	0.008	0.000	0.191	0.16	
1918	4/21/2004	4:59:24 AM		25.683	24.741	25.467	24.989	24.483		48.422	53.265	16.819	31.925	-0.705	-6.772		48.64	0.055	14.643	0.003		2597.6	43.2928	51.8	11.9	40.2	2.770	0.008	0.008	0.000	0.201	0.17	
1919	4/21/2004	5:00:04 AM		25.683	24.736	25.477	25.009	24.558		48.791	53.808	16.937	32.149	-0.703	-6.775		48.673	0.054	14.643	0.003		2598.2	43.3039	52.3	11.9	40.5	2.790	0.008	0.008	0.000	0.196	0.17	
1920	4/21/2004	5:01:04 AM		25.672	24.731	25.476	25.054	24.622		48.573	53.4	16.929	31.985	-0.705	-6.767		47.002	0.055	14.643	0.003		2599.2	43.3206	51.9	11.5	40.3	2.777	0.008	0.008	0.000	0.201	0.17	
1921	4/21/2004	5:02:04 AM		25.671	24.729	25.495	25.138	24.636		48.627	53.559	16.953	31.946	-0.703	-6.749		49.163	0.056	14.643	0.004		2600.2	43.3372	52.1	12.0	40.3	2.778	0.008	0.008	0.000	0.204	0.17	
1922	4/21/2004	5:03:04 AM		25.665	24.724	25.494	25.122	24.72		48.809	53.767	16.879	32.252	-0.648	-6.616		48.982	0.054	14.643	0.003		2601.2	43.3539	52.3	12.0	40.5	2.794	0.008	0.008	0.000	0.196	0.17	
1923	4/21/2004	5:04:04 AM		25.655	24.714	25.489	25.177	24.73		48.337	53.387	16.882	31.685	-0.65	-6.654		50.284	0.058	14.643	0.003		2602.2	43.3706	51.9	12.3	40.0	2.759	0.009	0.009	0.000	0.213	0.18	
1924	4/21/2004	5:05:04 AM		25.66	24.713	25.504	25.161	24.745		48.592	53.603	16.853	32.03	-0.703	-6.712		48.168	0.054	14.643	0.003		2603.2	43.3872	52.1	11.8	40.3	2.779	0.008	0.008	0.000	0.197	0.17	
1925	4/21/2004	5:06:04 AM		25.665	24.713	25.504	25.216	24.835		48.357	53.292	16.859	31.831	-0.648	-6.706		49.264	0.055	14.643	0.003		2604.2	43.4039	51.8	12.1	40.1	2.764	0.008	0.008	0.000	0.202	0.17	
1926	4/21/2004	5:07:04 AM		25.67	24.709	25.504	25.237	24.785		48.444	53.429	16.881	31.872	-0.65	-6.712		48.2	0.054	14.643	0.003		2605.2	43.4206	52.0	11.8	40.2	2.769	0.008	0.008	0.000	0.198	0.17	
1927	4/21/2004	5:08:04 AM		25.671	24.719	25.51	25.303	24.866		48.345	53.286	16.735	31.923	-0.65	-6.7		48.892	0.054	14.643	0.003		2606.2	43.4372	51.8	12.0	40.1	2.767	0.008	0.008	0.000	0.198	0.17	
1928	4/21/2004	5:09:04 AM		25.672	24.726	25.516	25.309	24.887		48.803	53.802	16.887	32.198	-0.648	-6.602		47.966	0.055	14.643	0.003		2607.2	43.4539	52.3	11.8	40.5	2.792	0.008	0.008	0.000	0.200	0.17	
1929	4/21/2004	5:10:04 AM		25.677	24.746	25.531	25.369	24.822		48.498	53.398	16.915	31.948	-0.708	-6.746		48.861	0.056	14.643	0.003		2608.2	43.4706	51.9	12.0	40.2	2.773	0.008	0.008	0.000	0.204	0.17	
1930	4/21/2004	5:11:04 AM		25.677	24.741	25.531	25.349	24.907		48.6	53.613	16.807	32.046	-0.705	-6.694		48.183	0.052	14.643	0.003		2609.2	43.4872	52.1	11.8	40.3	2.780	0.008	0.008	0.000	0.189	0.16	
1931	4/21/2004	5:12:04 AM		25.688	24.746	25.537	25.345	24.773		48.577	53.591	16.827	32.003	-0.65	-6.657		50.177	0.055	14.643	0.003		2610.2	43.5039	52.1	12.3	40.3	2.778	0.008	0.008	0.000	0.200	0.17	
1932	4/21/2004	5:13:04 AM		25.693	24.756	25.547	25.26	24.748		48.447	53.427	16.866	31.858	-0.705	-6.749		47.612	0.054	14.643	0.003		2611.2	43.5206	52.0	11.7	40.2	2.768	0.008	0.008	0.000	0.197	0.17	
1933	4/21/2004	5:14:04 AM		25.699	24.752	25.558	25.18	24.659		48.83	53.829	17.004	32.106	-0.703	-6.743		49.656	0.056	14.643	0.003		2612.2	43.5372	52.4	12.2	40.5	2.790	0.008	0.008	0.000	0.203	0.17	
1934	4/21/2004	5:15:04 AM		25.687	24.746	25.556	25.104	24.487		48.459	53.359	16.907	31.975	-0.705	-6.749		48.859	0.056	14.643	0.004		2613.2	43.5539	51.9	12.0	40.2	2.773	0.008	0.008	0.000	0.204	0.17	
1935	4/21/2004	5:16:04 AM		25.681	24.729	25.55	24.972	24.426		48.415	53.396	16.937	31.714	-0.653	-6.775		48.367	0.05	14.643	0.003		2614.2	43.5706	51.9	11.9	40.1	2.762	0.007	0.007	0.000	0.183	0.16	
1936	4/21/2004	5:17:04 AM		25.68	24.718	25.544	24.931	24.364		48.49	53.45	17.005	31.753	-0.65	-6.608		49.199	0.055	14.643	0.003		2615.2	43.5872	52.0	12.1	40.1	2.766	0.008	0.008	0.000	0.201	0.17	
1937	4/21/2004	5:18:04 AM		25.683	24.706	25.557	24.934	24.467		48.289	53.242	16.775	31.864	-0.65	-6.738		47.841	0.054	14.643	0.003		2616.2	43.6039	51.8	11.7	40.1	2.763	0.008	0.008	0.000	0.198	0.17	
1938	4/21/2004	5:19:04 AM		25.687	24.71	25.571	24.963	24.517		48.386	53.255	16.894	31.796	-0.705	-6.761		48.329	0.051	14.643	0.004		2617.2	43.6206	51.8	11.8	40.1	2.764	0.008	0.007	0.000	0.187	0.16	
1939	4/21/2004	5:20:04 AM		25.68	24.699	25.575	24.967	24.57		48.546	53.545	16.931	31.831	-0.648	-6.596		48.807	0.051	14.643	0.003		2618.2	43.6372	52.1	12.0	40.2	2.771	0.008	0.007	0.000	0.186	0.16	
1940	4/21/2004	5:21:04 AM		25.685	24.689	25.58	25.032	24.63		48.708	53.634	16.917	32.157	-0.65	-6.657		47.63	0.056	14.643	0.003		2619.2	43.6539	52.2	11.7	40.4	2.788	0.008	0.008	0.000	0.203	0.17	
1941	4/21/2004	5:22:04 AM		25.675	24.678	25.584	25.041	24.665		48.577	53.553	16.828	32.067	-0.648	-6.683		46.704	0.054	14.643	0.003		2620.2	43.6706	52.1	11.4	40.3	2.780	0.008	0.008	0.000	0.196	0.17	
1942	4/21/2004	5:23:04 AM		25.685	24.679	25.585	25.122	24.65		48.839	53.758	16.918	32.246	-0.65	-6.686		47.046	0.055	14.643	0.003		2621.2	43.6872	52.3	11.5	40.5	2.795	0.008	0.008	0.000	0.199	0.17	
1943	4/21/2004	5:24:04 AM		25.69	24.674	25.515	25.147	24.766		48.648	53.644	16.96	31.952	-0.65	-6.694		47.987	0.054	14.643	0.003		2622.2	43.7039	52.2	11.8	40.3	2.779	0.008	0.008	0.000	0.197	0.17	
1944	4/21/2004	5:25:04 AM		25.681	24.664	25.495	25.193	24.786		48.6	53.52	16.897	32.036	-0.65	-6.694		48.196	0.054	14.643	0.004		2623.2	43.7206	52.0	11.8	40.3	2.780	0.008	0.008	0.000	0.197	0.17	
1945	4/21/2004	5:26:04 AM		25.687	24.68	25.511	25.249	24.762		48.341	53.412	16.891	31.648	-0.65	-6.697		46.391	0.053	14.643	0.003		2624.2	43.7372	51.9	11.4	40.0	2.757	0.008	0.008	0.000	0.195	0.17	
1946	4/21/2004	5:27:04 AM		25.688	24.696	25.517	25.264	24.808		48.66	53.707	16.964	31.975	-0.648	-6.694		48.463	0.054	14.643	0.003		2625.2	43.7539	52.2	11.9	40.3	2.780	0.008	0.008	0.000	0.197	0.17	
1947	4/21/2004	5:28:04 AM		25.683	24.691	25.517	25.224	24.878		48.897	53.98	17.061	32.157	-0.648	-6.694		48.971	0.054	14.643	0.003		2626.2	43.7706	52.5	12.0	40.5	2.794	0.008	0.008	0.000	0.196	0.17	
1948	4/21/2004	5:29:04 AM		25.675	24.683	25.509	25.221	24.96		48.279	53.332	16.751	31.866	-0.65	-6.703		48.266	0.053	14.643	0.003		2627.2	43.7872	51.9	11.8	40.1	2.763	0.008	0.008	0.000	0.194	0.17	
1949	4/21/2004	5:30:04 AM		25.69	24.709	25.534	25.267	24.87		48.405	53.396	17.014	31.743	-0.65	-6.694		48.15	0.054	14.643	0.003		2628.2	43.8039	51.9	11.8	40.1	2.763	0.008	0.008	0.000	0.198	0.17	
1950	4/21/2004	5:31:04 AM		25.693	24.726	25.547	25.325	24.943		48.621	53.584	16.966	31.948	-0.65	-6.686		48.944	0.055	14.643	0.003		2629.2	43.8206	52.1	12.0	40.3	2.777	0.008	0.008	0.000	0.200	0.17	
1951	4/21/2004	5:32:04 AM		25.693	24.736	25.562	25.365	24.733		48.598	53.667	16.978	31.938	-0.572	-6.541		48.049	0.053	14.643	0.004		2630.2	43.8372	52.2	11.8	40.3	2.776	0.008	0.008	0.000	0.193	0.16	
1952	4/21/2004	5:33:04 AM		25.683	24.731	25.547	25.26	24.598		48.308	53.334	17.005	31.622	-0.613	-6.648		47.344	0.055	14.643	0.003		2631.2	43.8539	51.9	11.6	40.0	2.755	0.008	0.008	0.000	0.202	0.17	
1953	4/21/2004	5:34:04 AM		25.672	24.716	25.531	25.139	24.577		48.587	53.63	17.094	31.747	-0.584	-6.66		48.999	0.053	14.643	0.003		2632.2	43.8706	52.2	12.0	40.2	2.769	0.008	0.008	0.000	0.194	0.16	
1954	4/21/2004	5:35:04 AM		25.687	24.726	25.551	25.029	24.517		48.386	53.346	17.023	31.614	-0.578	-6.657		48.608	0.057	14.643	0.003		2633.2	43.8872	51.9	11.9	40.0	2.758	0.008	0.008	0.000	0.209	0.18	
1955	4/21/2004	5:36:04 AM		25.686	24.724	25.56	24.957	24.396		48.343	53.412	17.033	31.531	-0.558	-6.636		46.103	0.051	14.643	0.003		2634.2	43.9039	51.9	11.3	39.9	2.754	0.008	0.007	0.000	0.187	0.16	
1956	4/21/2004	5:37:04 AM		25.673	24.711	25.562	24.904	24.328		48.438	53.485	16.931	31.856	-0.538	-6.492		48.097	0.054	14.643	0.003		2635.2	43.9206	52.0	11.8	40.1	2.768	0.008	0.008	0.000	0.197	0.17	
1957	4/21/2004	5:38:04 AM		25.665	24.689	25.555	24.841	24.425		48.633	53.719	17.069	31.8	-0.566	-6.593		47.637	0.053	14.643	0.003		2636.2	43.9372	52.2	11.7	40.2	2.773	0.008	0.008	0.000	0.193	0.16	
1958	4/21/2004	5:39:04 AM		25.674	24.672	25.563	24.845	24.479		48.266	53.356	17.014	31.572	-0.558	-6.616		46.923	0.053	14.643	0.003		2637.2	43.9539	51.9	11.5	39.9	2.752	0.008	0.008	0.000	0.195	0.17	
1959	4/21/2004	5:40:04 AM		25.688	24.692	25.603	24.965	24.523		48.31	53.423	16.967	31.687	-0.566	-6.613		49.094	0.052	14.643	0.003		2638.2	43.9706	52.0	12.0	40.0	2.758	0.008	0.008	0.000	0.191	0.16	
1960	4/21/2004	5:41:04 AM		25.667	24.65	25.561	24.953	24.597		48.106	53.128	16.928	31.542	-0.546	-6.619		48.202	0.052	14.643	0.003		2639.2	43.9872	51.7	11.8	39.8	2.746	0.008	0.008	0.000	0.192	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1961	4/21/2004	5:42:04 AM		25.686	24.675	25.611	25.103	24.566		48.324	53.516	16.937	31.624	-0.54	-6.608		48.12	0.054	14.643	0.003		2640.2	44.0039	52.0	11.8	40.0	2.756	0.008	0.008	0.000	0.198	0.17	
1962	4/21/2004	5:43:04 AM		25.671	24.645	25.586	25.088	24.686		48.807	53.835	17.101	32.026	-0.543	-6.61		49.361	0.054	14.643	0.003		2641.2	44.0206	52.4	12.1	40.4	2.787	0.008	0.008	0.000	0.196	0.17	
1963	4/21/2004	5:44:04 AM		25.686	24.65	25.606	25.173	24.716		48.249	53.427	17.072	31.392	-0.54	-6.605		48.39	0.055	14.643	0.003		2642.2	44.0372	52.0	11.9	39.8	2.745	0.008	0.008	0.000	0.202	0.17	
1964	4/21/2004	5:45:04 AM		25.678	24.651	25.582	25.149	24.828		48.37	53.487	16.977	31.646	-0.546	-6.605		49.297	0.056	14.643	0.003		2643.2	44.0539	52.0	12.1	40.0	2.758	0.008	0.008	0.000	0.205	0.17	
1965	4/21/2004	5:46:04 AM		25.689	24.652	25.558	25.176	24.884		48.349	53.497	17.029	31.655	-0.511	-6.486		48.613	0.053	14.643	0.003		2644.2	44.0706	52.0	11.9	40.0	2.758	0.008	0.008	0.000	0.194	0.17	
1966	4/21/2004	5:47:04 AM		25.69	24.663	25.559	25.181	24.805		48.222	53.193	17.014	31.486	-0.546	-6.622		48.398	0.055	14.643	0.003		2645.2	44.0872	51.7	11.9	39.9	2.748	0.008	0.008	0.000	0.203	0.17	
1967	4/21/2004	5:48:04 AM		25.69	24.679	25.565	25.232	24.831		48.77	53.812	17.017	32.003	-0.653	-6.7		48.771	0.055	14.643	0.003		2646.2	44.1039	52.3	12.0	40.4	2.785	0.008	0.008	0.000	0.200	0.17	
1968	4/21/2004	5:49:04 AM		25.7	24.679	25.575	25.257	24.846		48.1	53.265	16.983	31.421	-0.483	-6.145		51.126	0.047	14.643	0.003		2647.2	44.1206	51.8	12.5	39.8	2.741	0.007	0.007	0.000	0.173	0.15	
1969	4/21/2004	5:50:04 AM		25.685	24.673	25.554	25.272	24.74		48.393	53.508	17.049	31.603	-0.483	-6.157		48.832	0.052	14.643	0.003		2648.2	44.1372	52.0	12.0	40.0	2.758	0.008	0.008	0.000	0.191	0.16	
1970	4/21/2004	5:51:04 AM		25.691	24.694	25.575	25.268	24.856		48.729	53.638	17.04	31.888	-0.653	-6.561		49.453	0.055	14.643	0.003		2649.2	44.1539	52.2	12.1	40.3	2.779	0.008	0.008	0.000	0.200	0.17	
1971	4/21/2004	5:52:04 AM		25.702	24.695	25.586	25.234	24.702		48.596	53.599	17.04	31.884	-0.65	-6.622		47.459	0.052	14.643	0.003		2650.2	44.1706	52.1	11.6	40.2	2.774	0.008	0.008	0.000	0.190	0.16	
1972	4/21/2004	5:53:04 AM		25.697	24.705	25.596	25.148	24.622		48.316	53.344	17.119	31.535	-0.639	-6.599		47.943	0.054	14.643	0.003		2651.2	44.1872	51.9	11.7	39.9	2.753	0.008	0.008	0.000	0.198	0.17	
1973	4/21/2004	5:54:04 AM		25.691	24.694	25.59	25.078	24.496		48.671	53.765	17.044	31.813	-0.648	-6.622		48.346	0.053	14.643	0.003		2652.2	44.2039	52.3	11.8	40.2	2.775	0.008	0.008	0.000	0.193	0.16	
1974	4/21/2004	5:55:04 AM		25.685	24.689	25.585	24.982	24.385		48.809	53.779	17.065	32.032	-0.65	-6.645		47.413	0.053	14.643	0.003		2653.2	44.2206	52.3	11.6	40.4	2.787	0.008	0.008	0.000	0.192	0.16	
1975	4/21/2004	5:56:04 AM		25.684	24.677	25.593	24.905	24.374		48.534	53.557	16.913	31.958	-0.65	-6.639		48.039	0.053	14.643	0.003		2654.2	44.2372	52.1	11.8	40.2	2.775	0.008	0.008	0.000	0.193	0.16	
1976	4/21/2004	5:57:04 AM		25.672	24.665	25.591	24.883	24.382		48.473	53.52	17.009	31.823	-0.648	-6.654		49.387	0.052	14.643	0.003		2655.2	44.2539	52.0	12.1	40.1	2.768	0.008	0.008	0.000	0.190	0.16	
1977	4/21/2004	5:58:04 AM		25.686	24.67	25.626	24.902	24.501		48.515	53.611	17.032	31.751	-0.65	-6.639		48.2	0.054	14.643	0.003		2656.2	44.2706	52.1	11.8	40.1	2.767	0.008	0.008	0.000	0.197	0.17	
1978	4/21/2004	5:59:04 AM		25.675	24.658	25.619	24.946	24.45		48.693	53.744	17.162	31.839	-0.648	-6.648		50.528	0.053	14.643	0.003		2657.2	44.2872	52.3	12.4	40.3	2.776	0.008	0.008	0.000	0.193	0.16	
1979	4/21/2004	6:00:04 AM		25.679	24.647	25.618	25.015	24.494		48.55	53.601	17.024	31.847	-0.624	-6.645		49.658	0.054	14.643	0.003		2658.2	44.3039	52.1	12.2	40.2	2.772	0.008	0.008	0.000	0.197	0.17	
1980	4/21/2004	6:01:04 AM		25.673	24.636	25.617	25.044	24.568		48.534	53.489	16.877	32.051	-0.587	-6.645		47.906	0.055	14.643	0.003		2659.2	44.3206	52.0	11.7	40.3	2.778	0.008	0.008	0.000	0.200	0.17	
1981	4/21/2004	6:02:04 AM		25.674	24.632	25.623	25.065	24.584		48.579	53.649	17.084	31.747	-0.616	-6.648		48.99	0.054	14.643	0.003		2660.2	44.3372	52.2	12.0	40.2	2.769	0.008	0.008	0.000	0.197	0.17	
1982	4/21/2004	6:03:04 AM		25.684	24.637	25.638	25.12	24.684		48.256	53.271	16.917	31.624	-0.584	-6.645		48.661	0.054	14.643	0.003		2661.2	44.3539	51.8	11.9	39.9	2.754	0.008	0.008	0.000	0.198	0.17	
1983	4/21/2004	6:04:04 AM		25.688	24.626	25.657	25.13	24.698		49.585	54.739	17.082	32.794	-0.569	-6.634		49.541	0.061	14.643	0.004		2662.2	44.3706	53.3	12.1	41.2	2.840	0.009	0.009	0.000	0.217	0.18	
1984	4/21/2004	6:05:04 AM		25.689	24.637	25.688	25.19	24.734		49.452	54.48	17.607	32.065	-0.607	-6.625		49.47	0.056	14.643	0.004		2663.2	44.3872	53.0	12.1	40.8	2.810	0.008	0.008	0.000	0.201	0.17	
1985	4/21/2004	6:06:04 AM		25.705	24.638	25.704	25.187	24.765		49.102	54.148	17.675	31.72	-0.543	-6.538		48.573	0.053	14.643	0.003		2664.2	44.4039	52.7	11.9	40.4	2.786	0.008	0.008	0.000	0.192	0.16	
1986	4/21/2004	6:07:04 AM		25.711	24.644	25.73	25.197	24.816		49.278	54.372	17.544	32.075	-0.569	-6.602		49.683	0.055	14.643	0.003		2665.2	44.4206	52.9	12.2	40.7	2.805	0.008	0.008	0.000	0.198	0.17	
1987	4/21/2004	6:08:04 AM		25.711	24.645	25.751	25.193	24.856		48.876	53.908	17.658	31.523	-0.549	-6.605		49.53	0.054	14.643	0.003		2666.2	44.4372	52.4	12.1	40.2	2.772	0.008	0.008	0.000	0.196	0.17	
1988	4/21/2004	6:09:04 AM		25.728	24.661	25.762	25.199	24.788		49.434	54.573	17.681	32.088	-0.54	-6.605		48.025	0.054	14.643	0.003		2667.2	44.4539	53.1	11.8	40.8	2.810	0.008	0.008	0.000	0.193	0.16	
1989	4/21/2004	6:10:04 AM		25.718	24.632	25.693	25.175	24.713		49.089	54.273	17.755	31.659	-0.561	-6.61		49.958	0.053	14.643	0.003		2668.2	44.4706	52.8	12.2	40.4	2.784	0.008	0.008	0.000	0.192	0.16	
1990	4/21/2004	6:11:04 AM		25.728	24.652	25.703	25.18	24.568		48.673	53.765	17.59	31.429	-0.543	-6.532		48.235	0.051	14.643	0.003		2669.2	44.4872	52.3	11.8	40.1	2.761	0.008	0.007	0.000	0.186	0.16	
1991	4/21/2004	6:12:04 AM		25.744	24.662	25.733	25.096	24.494		49.289	54.335	17.692	31.95	-0.538	-6.564		49.581	0.054	14.643	0.004		2670.2	44.5039	52.9	12.2	40.6	2.801	0.008	0.008	0.000	0.194	0.17	
1992	4/21/2004	6:13:04 AM		25.738	24.651	25.732	25.019	24.368		49.212	54.428	17.709	31.815	-0.54	-6.584		48.865	0.055	14.643	0.003		2671.2	44.5206	53.0	12.0	40.5	2.793	0.008	0.008	0.000	0.198	0.17	
1993	4/21/2004	6:14:04 AM		25.731	24.639	25.745	24.912	24.341		49.199	54.304	17.593	31.874	-0.54	-6.576		49.518	0.054	14.643	0.003		2672.2	44.5372	52.8	12.1	40.5	2.795	0.008	0.008	0.000	0.194	0.17	
1994	4/21/2004	6:15:04 AM		25.739	24.627	25.769	24.845	24.319		49.042	54.217	17.547	31.78	-0.54	-6.579		48.913	0.056	14.643	0.003		2673.2	44.5539	52.7	12.0	40.4	2.786	0.008	0.008	0.000	0.202	0.17	
1995	4/21/2004	6:16:04 AM		25.742	24.64	25.787	24.833	24.297		48.82	53.953	17.532	31.56	-0.48	-6.437		47.903	0.061	14.643	0.003		2674.2	44.5706	52.5	11.7	40.2	2.771	0.009	0.009	0.000	0.221	0.19	
1996	4/21/2004	6:17:04 AM		25.72	24.603	25.774	24.846	24.339		49.473	54.532	17.533	32.161	-0.535	-6.544		49.664	0.052	14.643	0.003		2675.2	44.5872	53.1	12.2	40.8	2.814	0.008	0.008	0.000	0.186	0.16	
1997	4/21/2004	6:18:04 AM		25.734	24.602	25.798	24.895	24.434		48.95	54.158	17.554	31.689	-0.52	-6.544		49.455	0.052	14.643	0.003		2676.2	44.6039	52.7	12.1	40.3	2.780	0.008	0.008	0.000	0.188	0.16	
1998	4/21/2004	6:19:04 AM		25.734	24.597	25.828	24.91	24.509		49.044	54.239	17.554	31.811	-0.517	-6.535		51.55	0.053	14.643	0.003		2677.2	44.6206	52.8	12.6	40.4	2.787	0.008	0.008	0.000	0.191	0.16	
1999	4/21/2004	6:20:04 AM		25.73	24.568	25.814	24.921	24.635		48.855	54.045	17.422	31.665	-0.526	-6.538		49.485	0.055	14.643	0.003		2678.2	44.6372	52.6	12.1	40.3	2.776	0.008	0.008	0.000	0.199	0.17	
2000	4/21/2004	6:21:04 AM		25.742	24.595	25.856	25.033	24.632		49.098	54.219	17.482	31.936	-0.477	-6.544		49.551	0.053	14.643	0.003		2679.2	44.6539	52.7	12.1	40.5	2.794	0.008	0.008	0.000	0.190	0.16	
2001	4/21/2004	6:22:04 AM		25.749	24.592	25.883	25.02	24.664		48.882	54.034	17.509	31.646	-0.474	-6.532		50.678	0.052	14.643	0.004		2680.2	44.6706	52.6	12.4	40.3	2.776	0.008	0.008	0.000	0.188	0.16	
2002	4/21/2004	6:23:04 AM		25.751	24.579	25.881	25.038	24.711		49.098	54.358	17.53	31.923	-0.477	-6.529		50.824	0.055	14.643	0.003		2681.2	44.6872	52.9	12.5	40.5	2.793	0.008	0.008	0.000	0.197	0.17	
2003	4/21/2004	6:24:04 AM		25.758	24.586	25.903	25.085	24.633		48.795	53.951	17.561	31.622	-0.474	-6.538		49.585	0.051	14.643	0.003		2682.2	44.7039	52.5	12.2	40.2	2.772	0.008	0.007	0.000	0.184	0.16	
2004	4/21/2004	6:25:04 AM		25.76	24.583	25.905	25.072	24.64		48.828	53.984	17.458	31.749	-0.48	-6.466		48.999	0.049	14.643	0.003		2683.2	44.7206	52.5	12.0	40.3	2.778	0.007	0.007	0.000	0.177	0.15	
2005	4/21/2004	6:26:04 AM		25.762	24.58	25.912	25.079	24.738		48.87	53.989	17.542	31.63	-0.425	-6.396		49.72	0.057	14.643	0.003		2684.2	44.7372	52.5	12.2	40.3	2.775	0.008	0.008	0.000	0.206	0.18	
2006	4/21/2004	6:27:04 AM		25.77	24.588	25.934	25.122	24.805		49.127	54.409	17.528	31.923	-0.474	-6.463		49.647	0.054	14.643	0.003		2685.2	44.7539	52.9	12.2	40.5	2.794	0.008	0.008	0.000	0.194	0.16	
2007	4/21/2004	6:28:04 AM		25.779	24.597	25.948	25.145	24.759		49.056	54.275	17.505	31.878	-0.448	-6.466		48.556	0.053	14.643	0.003		2686.2	44.7706	52.8	11.9	40.5	2.790	0.008	0.008	0.000	0.190	0.16	
2008	4/21/2004	6:29:04 AM		25.775	24.598	25.949	25.117	24.705		49.143	54.341	17.563	31.905	-0.425	-6.46		48.744	0.055	14.643	0.003		2687.2	44.7872	52.9	11.9	40.5	2.794	0.008	0.008	0.000	0.197	0.17	
2009	4/21/2004	6:30:04 AM		25.783	24.606	25.972	25.129	24.743		49.322	54.513	17.626	31.969	-0.439	-6.469		49.658	0.053	14.643	0.003		2688.2	44.8039	53.0	12.2	40.6	2.802	0.008	0.008	0.000	0.189	0.16	
2010	4/21/2004	6:31:04 AM		25.79	24.603	25.979	25.111	24.665		48.961	54.076	17.47	31.819	-0.433	-6.466		49.462	0.053	14.643	0.003		2689.2	44.8206	52.6	12.1	40.4	2.785	0.008	0.008	0.000	0.190	0.16	
2011	4/21/2004	6:32:04 AM		25.8	24.603	25.994	25.036	24.51		49.069	54.337	17.464	31.954	-0.425	-6.46		49.564	0.054	14.643	0.003		2690.2	44.8372	52.9	12.1	40.5	2.793	0.008	0.008	0.000	0.193	0.16	
2012	4/21/2004	6:33:04 AM		25.793	24.601	25.983	24.945	24.398		49.315	54.53	17.543	32.108	-0.427	-6.469		49.291	0.053	14.643	0.003		2691.2	44.8539	53.1	12.1	40.7	2.807	0.008	0.008	0.000	0.189	0.16	
2013	4/21/2004	6:34:04 AM		25.797	24.595	25.996	24.828	24.287		49.452	54.652	17.542	32.219	-0.425	-6.48		47.303	0.055	14.643	0.003		2692.2	44.8706	53.2	11.6	40.8	2.815	0.008	0.008	0.000	0.195	0.17	
2014	4/21/2004	6:35:04 AM		25.806	24.589	25.97	24.741	24.225		49.218	54.461	17.573	31.913	-0.425	-6.342		49.247	0.048	14.643	0.003		2693.2	44.8872	53.0	12.1	40.6	2.797	0.007	0.007	0.000	0.172	0.15	
2015	4/21/2004	6:36:04 AM		25.806	24.579	25.9	24.706	24.27		49.133	54.335	17.577	31.798	-0.425	-6.385		49.587	0.056	14.643	0.003		2694.2	44.9039	52.9	12.2	40.5	2.790	0.008	0.008	0.000	0.201	0.17	
2016	4/21/2004	6:37:04 AM		25.804	24.567	25.898	24.734	24.158		48.969	54.256	17.539	31.679	-0.425	-6.362		49.52	0.052	14.643	0.003		2695.2	44.9206	52.8	12.1	40.3	2.780	0.008	0.008	0.000	0.187	0.16	
2017	4/21/2004	6:38:04 AM		25.797	24.55	25.902	24.728	24.267		48.969	54.13	17.621	31.644	-0.425	-6.457		49.578	0.053	14.643	0.003		2696.2	44.9372	52.7	12.1	40.3	2.779	0.008	0.008	0.000	0.191	0.16	
2018	4/21/2004	6:39:04 AM		25.797	24.544	25.916	24.777	24.426		49.021	54.316	17.483	31.874	-0.427	-6.451		50.427	0.054	14.643	0.003		2697.2	44.9539	52.8	12.4	40.4	2.789	0.008	0.008	0.000	0.194	0.17	
2019	4/21/2004	6:40:04 AM		25.796	24.529	25.93	24.872	24.456		48.77	54.074	17.516	31.538	-0.425	-6.46		48.36	0.053	14.643	0.003		2698.2	44.9706	52.6	11.9	40.2	2.768	0.008	0.008	0.000	0.192	0.16	
2020	4/21/2004	6:41:04 AM		25.78	24.518	25.929	24.916	24.42		48.953	54.177	17.545	31.659	-0.425	-6.46		49.754	0.053	14.643	0.003		2699.2	44.9872	52.7	12.2	40.3	2.779	0.008	0.008	0.000	0.191	0.16	
2021	4/21/2004	6:42:04 AM		25.8	24.533	25.964	24.981	24.485		49.123	54.308	17.474	31.913	-0.425	-6.446		49.76	0.054	14.643	0.003		2700.2	45.0039	52.8	12.2	40.5	2.794	0.008	0.008	0.000	0.193	0.16	
2022	4/21/2004	6:43:04 AM		25.795	24.508	25.949	25.027	24.495		48.886	54.179	17.528	31.622	-0.459	-6.454		49.626	0.054	14.643	0.003		2701.2	45.0206	52.7	12.2	40.3	2.775	0.008	0.008	0.000	0.195	0.17	
2023	4/21/2004	6:44:04 AM		25.795	24.507	25.964	25.061	24.52		49.062	54.432	17.622	31.716	-0.355	-6.313		50.263	0.052	14.643	0.003		2702.2	45.0372	53.0	12.3	40.4	2.785	0.008	0.008	0.000	0.187	0.16	
2024	4/21/2004	6:45:04 AM		25.795	24.502	25.974	25.081	24.515		48.919	54.204	17.492	31.585	-0.425	-6.428		46.99	0.054	14.643	0.003		2703.2	45.0539	52.7	11.5	40.3	2.775	0.008	0.008	0.000	0.195	0.17	
2025	4/21/2004	6:46:04 AM		25.79	24.482	25.959	25.076	24.555		48.729	53.997	17.561	31.433	-0.427	-6.434		48.097	0.057	14.643	0.003		2704.2	45.0706	52.5	11.8	40.1	2.763	0.008	0.008	0.000	0.206	0.18	
2026	4/21/2004	6:47:04 AM		25.806	24.509	25.99	25.143	24.611		48.913	54.214	17.572	31.558	-0.425	-6.437		47.858	0.054	14.643	0.003		2705.2	45.0872	52.7	11.7	40.2	2.774	0.008	0.008	0.000	0.195	0.17	
2027	4/21/2004	6:48:04 AM		25.812	24.515	26.002	25.154	24.682		49.129	54.368	17.591	31.835	-0.425	-6.431		49.92	0.056	14.643	0.003		2706.2	45.1039	52.9	12.2	40.5	2.791	0.008	0.008	0.000	0.201	0.17	
2028	4/21/2004	6:49:04 AM		25.839	24.542	26.044	25.221	24.744		48.836	54.028	17.519	31.706	-0.384	-6.327		48.356	0.051	14.643	0.003		2707.2	45.1206	52.6	11.9	40.3	2.777	0.008	0.007	0.000	0.183	0.16	
2029	4/21/2004	6:50:04 AM		25.816	24.523	26.02	25.102	24.546		48.839	54.086	17.625	31.517	-0.358	-6.327		49.77	0.055	14.643	0.003		2708.2	45.1372	52.6	12.2	40.2	2.770	0.008	0.008	0.000	0.198	0.17	
2030	4/21/2004	6:51:04 AM		25.803	24.501	26.012	24.643	24.073		49.131	54.5	17.511	31.936	-0.407	-6.394		49.825	0.052	14.643	0.003		2709.2	45.1539	53.0	12.2	40.5	2.795	0.008	0.008	0.000	0.186	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2031	4/21/2004	6:52:04 AM		25.804	24.472	26.019	24.264	23.724		49.104	54.447	17.615	31.712	-0.358	-6.385		48.74	0.055	14.643	0.003		2710.2	45.1706	53.0	11.9	40.4	2.786	0.008	0.008	0.000	0.197	0.17	
2032	4/21/2004	6:53:04 AM		25.788	24.441	26.013	23.866	23.517		49.075	54.386	17.62	31.702	-0.352	-6.391		49.122	0.054	14.643	0.003		2711.2	45.1872	52.9	12.0	40.4	2.785	0.008	0.008	0.000	0.194	0.16	
2033	4/21/2004	6:54:04 AM		25.77	24.388	25.999	23.662	23.293		48.753	54.101	17.499	31.511	-0.358	-6.388		49.779	0.054	14.643	0.003		2712.2	45.2039	52.6	12.2	40.1	2.767	0.008	0.008	0.000	0.195	0.17	
2034	4/21/2004	6:55:04 AM		25.757	24.344	26.006	23.498	23.245		49.013	54.277	17.563	31.79	-0.355	-6.388		50.559	0.055	14.643	0.003		2713.2	45.2206	52.8	12.4	40.4	2.786	0.008	0.008	0.000	0.197	0.17	
2035	4/21/2004	6:56:04 AM		25.734	24.281	25.998	23.309	23.202		49.208	54.575	17.628	31.927	-0.358	-6.405		50.603	0.051	14.643	0.003		2714.2	45.2372	53.1	12.4	40.6	2.797	0.008	0.007	0.000	0.182	0.16	
2036	4/21/2004	6:57:04 AM		25.721	24.228	26.005	23.236	23.179		48.899	54.119	17.511	31.743	-0.355	-6.382		49.539	0.055	14.643	0.003		2715.2	45.2539	52.6	12.1	40.3	2.780	0.008	0.008	0.000	0.198	0.17	
2037	4/21/2004	6:58:04 AM		25.704	24.186	26.018	23.244	23.197		49.067	54.273	17.6	31.689	-0.355	-6.376		50.196	0.053	14.643	0.003		2716.2	45.2706	52.8	12.3	40.4	2.784	0.008	0.008	0.000	0.190	0.16	
2038	4/21/2004	6:59:04 AM		25.682	24.109	26.011	23.247	23.25		49.147	54.179	17.512	31.968	-0.54	-6.602		50.828	0.068	14.643	0.003		2717.2	45.2872	52.7	12.5	40.6	2.796	0.010	0.010	0.000	0.243	0.21	
2039	4/21/2004	7:00:04 AM		25.651	24.037	25.995	23.286	22.923		49.079	54.293	17.535	31.86	-0.471	-5.758		50.221	0.03	14.643	0.003		2718.2	45.3039	52.8	12.3	40.5	2.790	0.004	0.004	0.000	0.107	0.09	
2040	4/21/2004	7:00:06 AM		25.661	24.047	26.015	23.296	22.933		48.741	53.866	17.511	31.614	-0.422	-5.734		49.797	0.014	14.643	0.003		2718.3	45.3044	52.4	12.2	40.2	2.770	0.002	0.002	0.000	0.050	0.04	
2041	4/21/2004	7:01:06 AM		25.642	23.968	25.996	23.277	22.949		48.737	54.453	17.653	31.336	0.004	-5.177		49.635	0.056	14.643	0.003		2719.3	45.3211	53.0	12.2	40.0	2.760	0.008	0.008	0.000	0.203	0.17	
2042	4/21/2004	7:02:06 AM		25.633	23.913	25.927	23.268	23.251		49.344	54.542	17.617	31.985	-0.48	-6.171		49.264	0.051	14.643	0.003		2720.3	45.3378	53.1	12.1	40.7	2.804	0.008	0.007	0.000	0.182	0.16	
2043	4/21/2004	7:03:06 AM		26.067	23.857	25.896	23.317	23.195		49.235	54.13	17.586	31.901	-0.708	-6.726		49.774	0.058	14.643	0.003		2721.3	45.3544	52.7	12.2	40.6	2.797	0.009	0.008	0.000	0.208	0.18	
2044	4/21/2004	7:04:06 AM		26.017	23.808	25.906	23.358	23.24		49.26	54.275	17.537	31.946	-0.766	-6.784		49.457	0.054	14.643	0.003		2722.3	45.3711	52.8	12.1	40.6	2.799	0.008	0.008	0.000	0.193	0.16	
2045	4/21/2004	7:05:06 AM		25.873	23.764	25.897	23.369	23.281		49.577	54.48	17.621	32.196	-0.766	-6.845		49.72	0.053	14.643	0.003		2723.3	45.3878	53.0	12.2	40.9	2.819	0.008	0.008	0.000	0.188	0.16	
2046	4/21/2004	7:06:06 AM		25.769	23.719	25.908	23.359	23.247		49.409	54.246	17.56	32.102	-0.815	-6.755		50.202	0.053	14.643	0.003		2724.3	45.4044	52.8	12.3	40.8	2.810	0.008	0.008	0.000	0.189	0.16	
2047	4/21/2004	7:07:06 AM		25.709	23.674	25.898	23.32	23.287		49.081	54.14	17.463	31.93	-0.572	-6.211		49.666	0.053	14.643	0.003		2725.3	45.4211	52.7	12.2	40.5	2.793	0.008	0.008	0.000	0.190	0.16	
2048	4/21/2004	7:08:06 AM		25.678	23.657	25.926	23.318	23.331		48.979	53.935	17.58	31.642	-0.648	-6.414		48.258	0.06	14.643	0.003		2726.3	45.4378	52.5	11.8	40.3	2.779	0.009	0.009	0.000	0.216	0.18	
2049	4/21/2004	7:09:06 AM		25.626	23.63	25.919	23.291	23.329		49.276	54.308	17.569	31.964	-0.645	-6.423		50.114	0.05	14.643	0.004		2727.3	45.4544	52.8	12.3	40.6	2.801	0.007	0.007	0.000	0.179	0.15	
2050	4/21/2004	7:10:06 AM		25.568	23.582	25.901	23.192	23.2		49.672	54.614	17.566	32.391	-0.705	-6.66		49.814	0.052	14.643	0.003		2728.3	45.4711	53.1	12.2	41.0	2.829	0.008	0.008	0.000	0.184	0.16	
2051	4/21/2004	7:11:06 AM		25.518	23.547	25.902	23.142	23.105		49.139	53.901	17.454	31.993	-0.708	-6.671		50.375	0.053	14.643	0.003		2729.3	45.4878	52.4	12.3	40.6	2.797	0.008	0.008	0.000	0.190	0.16	
2052	4/21/2004	7:12:06 AM		25.486	23.52	25.899	23.14	23.173		49.216	54.113	17.534	31.964	-0.708	-6.668		48.978	0.054	14.643	0.003		2730.3	45.5044	52.6	12.0	40.6	2.799	0.008	0.008	0.000	0.193	0.16	
2053	4/21/2004	7:13:06 AM		25.449	23.498	25.903	23.144	23.372		49.284	54.258	17.603	31.971	-0.769	-6.686		49.147	0.055	14.643	0.003		2731.3	45.5211	52.8	12.0	40.6	2.801	0.008	0.008	0.000	0.197	0.17	
2054	4/21/2004	7:14:06 AM		25.416	23.46	25.895	23.166	23.108		49.309	54.148	17.474	32.168	-0.723	-6.691		50.78	0.053	14.643	0.003		2732.3	45.5378	52.7	12.4	40.7	2.809	0.008	0.008	0.000	0.189	0.16	
2055	4/21/2004	7:15:06 AM		25.371	23.42	25.89	23.13	22.988		49.274	54.138	17.503	32.055	-0.711	-6.7		50.204	0.052	14.643	0.003		2733.3	45.5544	52.7	12.3	40.7	2.804	0.008	0.008	0.000	0.186	0.16	
2056	4/21/2004	7:16:06 AM		25.335	23.373	25.873	23.074	22.58		49.102	54.119	17.578	31.852	-0.705	-6.694		49.62	0.054	14.643	0.003		2734.3	45.5711	52.6	12.2	40.5	2.791	0.008	0.008	0.000	0.194	0.17	
2057	4/21/2004	7:17:06 AM		25.329	23.352	25.882	23.002	22.404		49.199	54.059	17.607	31.88	-0.703	-6.694		51.228	0.054	14.643	0.003		2735.3	45.5878	52.6	12.6	40.5	2.795	0.008	0.008	0.000	0.194	0.16	
2058	4/21/2004	7:18:06 AM		25.307	23.315	25.876	22.92	22.528		49.276	54.2	17.574	31.977	-0.703	-6.703		48.788	0.053	14.643	0.003		2736.3	45.6044	52.7	12.0	40.6	2.801	0.008	0.008	0.000	0.190	0.16	
2059	4/21/2004	7:19:06 AM		25.279	23.267	25.872	22.836	22.614		49.374	54.273	17.603	32.046	-0.705	-6.691		48.004	0.055	14.643	0.003		2737.3	45.6211	52.8	11.8	40.7	2.807	0.008	0.008	0.000	0.197	0.17	
2060	4/21/2004	7:20:06 AM		25.251	23.228	25.874	22.798	22.606		49.11	54.018	17.582	31.833	-0.703	-6.697		47.04	0.053	14.643	0.003		2738.3	45.6378	52.5	11.5	40.5	2.790	0.008	0.008	0.000	0.191	0.16	
2061	4/21/2004	7:21:06 AM		25.212	23.18	25.876	22.795	22.578		49.288	54.132	17.62	31.997	-0.703	-6.686		49.147	0.052	14.643	0.003		2739.3	45.6544	52.7	12.0	40.6	2.802	0.008	0.008	0.000	0.186	0.16	
2062	4/21/2004	7:22:06 AM		25.159	23.136	25.842	22.816	22.564		49.359	54.179	17.499	32.25	-0.703	-6.709		49.032	0.052	14.643	0.003		2740.3	45.6711	52.7	12.0	40.8	2.813	0.008	0.008	0.000	0.186	0.16	
2063	4/21/2004	7:23:06 AM		25.114	23.086	25.767	22.826	22.434		49.388	54.256	17.546	32.157	-0.705	-6.706		50.008	0.053	14.643	0.003		2741.3	45.6878	52.8	12.3	40.8	2.811	0.008	0.008	0.000	0.190	0.16	
2064	4/21/2004	7:24:06 AM		25.045	23.017	25.709	22.793	22.139		49.307	54.148	17.341	32.2	-0.703	-6.717		50.096	0.051	14.643	0.003		2742.3	45.7044	52.7	12.3	40.8	2.810	0.008	0.007	0.000	0.183	0.16	
2065	4/21/2004	7:25:06 AM		25.042	22.984	25.711	22.8	21.845		49.027	53.995	17.527	31.825	-0.7	-6.712		49.326	0.052	14.643	0.003		2743.3	45.7211	52.5	12.1	40.4	2.787	0.008	0.008	0.000	0.188	0.16	
2066	4/21/2004	7:26:06 AM		25.04	22.926	25.704	22.752	21.988		49.145	54.086	17.349	32.112	-0.688	-6.66		49.266	0.051	14.643	0.003		2744.3	45.7378	52.6	12.1	40.6	2.801	0.008	0.007	0.000	0.183	0.16	
2067	4/21/2004	7:27:06 AM		25.047	22.868	25.686	22.724	22.026		49.237	54.1	17.562	31.968	-0.705	-6.743		49.933	0.055	14.643	0.003		2745.3	45.7544	52.6	12.2	40.6	2.799	0.008	0.008	0.000	0.198	0.17	
2068	4/21/2004	7:28:06 AM		25.103	22.848	25.736	22.785	22.182		49.172	54.146	17.527	31.895	-0.703	-6.738		50.041	0.054	14.643	0.003		2746.3	45.7711	52.7	12.3	40.5	2.795	0.008	0.008	0.000	0.195	0.17	
2069	4/21/2004	7:29:06 AM		25.122	22.782	25.705	22.754	22.13		49.172	54.057	17.481	32.071	-0.703	-6.732		49.556	0.058	14.643	0.003		2747.3	45.7878	52.6	12.1	40.6	2.801	0.009	0.008	0.000	0.209	0.18	
2070	4/21/2004	7:30:06 AM		25.12	22.715	25.668	22.757	21.907		49.28	54.235	17.529	32.04	-0.705	-6.752		50.432	0.054	14.643	0.003		2748.3	45.8044	52.8	12.4	40.7	2.803	0.008	0.008	0.000	0.194	0.17	
2071	4/21/2004	7:31:06 AM		25.137	22.667	25.681	22.82	21.89		49.075	54.101	17.578	31.732	-0.703	-6.746		49.368	0.052	14.643	0.003		2749.3	45.8211	52.6	12.1	40.4	2.786	0.008	0.008	0.000	0.188	0.16	
2072	4/21/2004	7:32:06 AM		25.152	22.637	25.68	22.865	21.814		49.645	54.594	17.548	32.426	-0.682	-6.634		49.864	0.055	14.643	0.003		2750.3	45.8378	53.1	12.2	41.0	2.829	0.008	0.008	0.000	0.196	0.17	
2073	4/21/2004	7:33:06 AM		25.163	22.602	25.691	22.911	21.805		49.309	54.192	17.593	32.036	-0.671	-6.651		50.699	0.052	14.643	0.003		2751.3	45.8544	52.7	12.4	40.7	2.804	0.008	0.008	0.000	0.187	0.16	
2074	4/21/2004	7:34:06 AM		25.148	22.537	25.667	22.886	21.816		49.203	54.183	17.556	31.975	-0.653	-6.665		49.604	0.053	14.643	0.003		2752.3	45.8711	52.7	12.2	40.6	2.798	0.008	0.008	0.000	0.191	0.16	
2075	4/21/2004	7:35:06 AM		25.135	22.479	25.638	22.873	21.787		49.174	54.03	17.571	31.819	-0.668	-6.66		49.858	0.053	14.643	0.003		2753.3	45.8878	52.6	12.2	40.5	2.792	0.008	0.008	0.000	0.192	0.16	
2076	4/21/2004	7:36:06 AM		25.14	22.459	25.658	22.954	21.993		49.21	54.036	17.654	31.95	-0.648	-6.651		48.093	0.054	14.643	0.003		2754.3	45.9044	52.6	11.8	40.6	2.798	0.008	0.008	0.000	0.195	0.17	
2077	4/21/2004	7:37:06 AM		25.116	22.42	25.654	22.985	21.814		49.359	54.293	17.566	32.077	-0.648	-6.665		49.453	0.051	14.643	0.003		2755.3	45.9211	52.8	12.1	40.7	2.807	0.008	0.007	0.000	0.183	0.16	
2078	4/21/2004	7:38:06 AM		25.107	22.37	25.64	22.966	21.619		49.092	53.98	17.604	31.854	-0.648	-6.657		50.102	0.053	14.643	0.003		2756.3	45.9378	52.5	12.3	40.5	2.790	0.008	0.008	0.000	0.192	0.16	
2079	4/21/2004	7:39:06 AM		25.114	22.357	25.647	22.943	21.827		48.903	53.816	17.536	31.679	-0.65	-6.657		48.05	0.052	14.643	0.003		2757.3	45.9544	52.3	11.8	40.3	2.778	0.008	0.008	0.000	0.189	0.16	
2080	4/21/2004	7:40:06 AM		25.086	22.324	25.639	22.924	21.894		49.401	54.285	17.613	32.063	-0.65	-6.657		49.641	0.053	14.643	0.003		2758.3	45.9711	52.8	12.2	40.7	2.808	0.008	0.008	0.000	0.191	0.16	
2081	4/21/2004	7:41:06 AM		25.078	22.296	25.646	22.921	21.75		49.257	54.252	17.595	31.921	-0.648	-6.648		48.803	0.053	14.643	0.003		2759.3	45.9878	52.8	12.0	40.6	2.798	0.008	0.008	0.000	0.191	0.16	
2082	4/21/2004	7:42:06 AM		25.06	22.273	25.643	22.848	21.722		48.878	53.843	17.521	31.577	-0.645	-6.654		51.003	0.053	14.643	0.004		2760.3	46.0044	52.4	12.5	40.2	2.774	0.008	0.008	0.000	0.193	0.16	
2083	4/21/2004	7:43:06 AM		25.048	22.225	25.616	22.76	21.76		49.26	54.117	17.557	32.047	-0.648	-6.648		50.557	0.052	14.643	0.003		2761.3	46.0211	52.6	12.4	40.7	2.803	0.008	0.008	0.000	0.187	0.16	
2084	4/21/2004	7:44:06 AM		25.027	22.219	25.63	22.759	21.769		49.064	54.173	17.688	31.63	-0.645	-6.645		49.501	0.053	14.643	0.003		2762.3	46.0378	52.7	12.1	40.3	2.782	0.008	0.008	0.000	0.192	0.16	
2085	4/21/2004	7:45:06 AM		25.005	22.192	25.618	22.717	21.913		49.15	54.144	17.559	31.911	-0.578	-6.55		49.804	0.051	14.643	0.003		2763.3	46.0544	52.7	12.2	40.5	2.794	0.008	0.007	0.000	0.184	0.16	
2086	4/21/2004	7:46:06 AM		25.009	22.186	25.642	22.756	21.982		49.195	54.103	17.533	32.001	-0.61	-6.625		50.171	0.052	14.643	0.004		2764.3	46.0711	52.6	12.3	40.6	2.799	0.008	0.008	0.000	0.188	0.16	
2087	4/21/2004	7:47:06 AM		25.008	22.175	25.676	22.801	22.177		48.899	53.904	17.57	31.634	-0.645	-6.654		50.094	0.052	14.643	0.004		2765.3	46.0878	52.4	12.3	40.3	2.776	0.008	0.008	0.000	0.189	0.16	
2088	4/21/2004	7:48:06 AM		25.008	22.175	25.696	22.881	22.232		49.137	54.115	17.583	31.794	-0.653	-6.608		49.245	0.056	14.643	0.003		2766.3	46.1044	52.6	12.1	40.5	2.790	0.008	0.008	0.000	0.202	0.17	
2089	4/21/2004	7:49:06 AM		24.999	22.156	25.698	22.943	22.224		48.955	54.011	17.457	31.774	-0.54	-6.469		50.409	0.052	14.643	0.003		2767.3	46.1211	52.5	12.4	40.4	2.783	0.008	0.008	0.000	0.188	0.16	
2090	4/21/2004	7:50:06 AM		25.007	22.184	25.64	22.99	22.708		49.123	54.005	17.628	31.821	-0.581	-6.521		48.504	0.051	14.643	0.003		2768.3	46.1378	52.5	11.9	40.5	2.790	0.008	0.007	0.000	0.185	0.16	
2091	4/21/2004	7:51:06 AM		25.006	22.203	25.634	23.175	22.932		49.154	54.169	17.57	31.792	-0.578	-6.57		48.467	0.052	14.643	0.003		2769.3	46.1544	52.7	11.9	40.5	2.790	0.008	0.008	0.000	0.188	0.16	
2092	4/21/2004	7:52:06 AM		25	22.233	25.643	23.336	23.253		49.251	54.272	17.64	31.771	-0.624	-6.593		50.926	0.052	14.643	0.003		2770.3	46.1711	52.8	12.5	40.5	2.793	0.008	0.008	0.000	0.188	0.16	
2093	4/21/2004	7:53:06 AM		25.001	22.253	25.644	23.457	23.309		49.363	54.312	17.735	31.88	-0.578	-6.584		49.455	0.053	14.643	0.003		2771.3	46.1878	52.8	12.1	40.6	2.801	0.008	0.008	0.000	0.191	0.16	
2094	4/21/2004	7:54:06 AM		25.007	22.294	25.66	23.578	23.45		49.407	54.393	17.631	32.018	-0.566	-6.579		49.51	0.051	14.643	0.003		2772.3	46.2044	52.9	12.1	40.7	2.807	0.008	0.007	0.000	0.183	0.16	
2095	4/21/2004	7:55:06 AM		24.998	22.32	25.671	23.825	23.716		49.199	54.15	17.618	31.942	-0.566	-6.57		49.799	0.052	14.643	0.003		2773.3	46.2211	52.7	12.2	40.6	2.797	0.008	0.008	0.000	0.188	0.16	
2096	4/21/2004	7:56:06 AM		24.999	22.372	25.677	24.032	23.868		49.164	54.173	17.604	31.796	-0.543	-6.555		49.074	0.053	14.643	0.003		2774.3	46.2378	52.7	12.0	40.5	2.791	0.008	0.008	0.000	0.192	0.16	
2097	4/21/2004	7:57:06 AM		25.01	22.419	25.689	24.179	24.044		49.264	54.331	17.707	31.788	-0.54	-6.564		50.845	0.05	14.643	0.003		2775.3	46.2544	52.9	12.5	40.5	2.794	0.007	0.007	0.000	0.180	0.15	
2098	4/21/2004	7:58:06 AM		25.018	22.477	25.701	24.307	24.062		49.21	54.181	17.502	32.083	-0.54	-6.544		49.993	0.054	14.643	0.003		2776.3	46.2711	52.7	12.3	40.6	2.802	0.008	0.008	0.000	0.194	0.17	
2099	4/21/2004	7:59:06 AM		25.014	22.513	25.703	24.429	24.184		49.282	54.243	17.6	31.983	-0.54	-6.544		49.816	0.053	14.643	0.003		2777.3	46.2878	52.8	12.2	40.6	2.801	0.008	0.008	0.000	0.191	0.16	
2100	4/21/2004	8:00:06 AM		25.032	22.566	25.716	24.457	24.136		48.971	54.02	17.45	31.88	-0.54	-6.524		49.23	0.053	14.643	0.003		2778.3	46.3044	52.5	12.1	40.4	2.787	0.008	0.008	0.000	0.192	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2101	4/21/2004	8:01:06 AM		25.051	22.626	25.725	24.476	24.12		49.446	54.428	17.612	32.168	-0.54	-6.529		49.028	0.052	14.643	0.003		2779.3	46.3211	53.0	12.0	40.8	2.813	0.008	0.008	0.000	0.186	0.16	
2102	4/21/2004	8:02:06 AM		25.052	22.662	25.731	24.467	24.026		49.006	54.105	17.614	31.628	-0.54	-6.529		50.256	0.051	14.643	0.003		2780.3	46.3378	52.6	12.3	40.3	2.780	0.008	0.007	0.000	0.185	0.16	
2103	4/21/2004	8:03:06 AM		25.068	22.728	25.741	24.422	24.002		49.12	54.21	17.577	31.837	-0.509	-6.527		49.117	0.053	14.643	0.003		2781.3	46.3544	52.7	12.0	40.5	2.791	0.008	0.008	0.000	0.191	0.16	
2104	4/21/2004	8:04:06 AM		25.087	22.763	25.746	24.407	24.072		49.189	54.221	17.634	31.901	-0.517	-6.518		48.598	0.053	14.643	0.003		2782.3	46.3711	52.7	11.9	40.5	2.795	0.008	0.008	0.000	0.191	0.16	
2105	4/21/2004	8:05:06 AM		25.106	22.802	25.755	24.386	24.025		49.247	54.328	17.636	31.862	-0.497	-6.529		50.734	0.051	14.643	0.003		2783.3	46.3878	52.9	12.4	40.6	2.796	0.008	0.007	0.000	0.184	0.16	
2106	4/21/2004	8:06:06 AM		25.12	22.846	25.759	24.36	24.064		49.664	54.735	17.674	32.186	-0.52	-6.521		48.423	0.053	14.643	0.003		2784.3	46.4044	53.3	11.9	40.9	2.822	0.008	0.008	0.000	0.189	0.16	
2107	4/21/2004	8:07:06 AM		25.135	22.886	25.778	24.404	24.184		48.946	54.092	17.553	31.685	-0.483	-6.518		49.572	0.051	14.643	0.003		2785.3	46.4211	52.6	12.1	40.3	2.780	0.008	0.007	0.000	0.185	0.16	
2108	4/21/2004	8:08:06 AM		25.164	22.941	25.798	24.494	24.204		49.191	54.345	17.569	31.893	-0.477	-6.521		50.114	0.053	14.643	0.003		2786.3	46.4378	52.9	12.3	40.5	2.795	0.008	0.008	0.000	0.191	0.16	
2109	4/21/2004	8:09:06 AM		25.169	22.965	25.792	24.594	24.298		49.154	54.302	17.465	31.936	-0.52	-6.521		49.174	0.053	14.643	0.003		2787.3	46.4544	52.8	12.1	40.5	2.795	0.008	0.008	0.000	0.191	0.16	
2110	4/21/2004	8:10:06 AM		25.188	23.01	25.817	24.653	24.368		49.199	54.275	17.575	31.975	-0.477	-6.408		50.63	0.053	14.643	0.003		2788.3	46.4711	52.8	12.4	40.6	2.798	0.008	0.008	0.000	0.190	0.16	
2111	4/21/2004	8:11:06 AM		25.208	23.055	25.827	24.729	24.473		48.834	53.931	17.629	31.474	-0.48	-6.512		50.626	0.052	14.643	0.003		2789.3	46.4878	52.5	12.4	40.2	2.768	0.008	0.008	0.000	0.189	0.16	
2112	4/21/2004	8:12:06 AM		25.214	23.086	25.827	24.774	24.503		49.125	54.185	17.539	31.899	-0.48	-6.509		50.815	0.053	14.643	0.003		2790.3	46.5044	52.7	12.5	40.5	2.793	0.008	0.008	0.000	0.191	0.16	
2113	4/21/2004	8:13:06 AM		25.244	23.136	25.857	24.869	24.608		49.04	54.057	17.567	31.78	-0.514	-6.515		48.719	0.051	14.643	0.003		2791.3	46.5211	52.6	11.9	40.4	2.786	0.008	0.007	0.000	0.184	0.16	
2114	4/21/2004	8:14:06 AM		25.273	23.18	25.887	24.934	24.688		49.245	54.347	17.582	31.934	-0.477	-6.457		49.001	0.056	14.643	0.003		2792.3	46.5378	52.9	12.0	40.6	2.799	0.008	0.008	0.000	0.201	0.17	
2115	4/21/2004	8:15:06 AM		25.284	23.217	25.808	24.935	24.819		49.036	54.198	17.501	31.804	-0.48	-6.492		48.377	0.051	14.643	0.003		2793.3	46.5544	52.7	11.9	40.4	2.787	0.008	0.007	0.000	0.184	0.16	
2116	4/21/2004	8:16:06 AM		25.3	23.258	25.794	24.961	24.875		49.28	54.37	17.619	31.989	-0.483	-6.495		49.061	0.052	14.643	0.003		2794.3	46.5711	52.9	12.0	40.6	2.802	0.008	0.008	0.000	0.187	0.16	
2117	4/21/2004	8:17:06 AM		25.326	23.304	25.814	25.037	24.865		49.038	54.154	17.6	31.743	-0.48	-6.486		49.793	0.052	14.643	0.003		2795.3	46.5878	52.7	12.2	40.4	2.785	0.008	0.008	0.000	0.188	0.16	
2118	4/21/2004	8:18:06 AM		25.326	23.339	25.809	25.057	24.89		49.121	54.246	17.498	31.889	-0.477	-6.391		49.847	0.049	14.643	0.003		2796.3	46.6044	52.8	12.2	40.5	2.793	0.007	0.007	0.000	0.176	0.15	
2119	4/21/2004	8:19:06 AM		25.366	23.39	25.85	25.113	24.801		48.797	54.007	17.449	31.54	-0.425	-6.42		51.418	0.052	14.643	0.003		2797.3	46.6211	52.5	12.6	40.2	2.769	0.008	0.008	0.000	0.188	0.16	
2120	4/21/2004	8:20:06 AM		25.371	23.419	25.85	25.082	24.741		49.199	54.3	17.555	31.962	-0.425	-6.451		48.043	0.052	14.643	0.003		2798.3	46.6378	52.8	11.8	40.6	2.798	0.008	0.008	0.000	0.187	0.16	
2121	4/21/2004	8:21:06 AM		25.38	23.459	25.854	25.027	24.69		48.926	53.997	17.584	31.657	-0.48	-6.454		48.786	0.052	14.643	0.003		2799.3	46.6544	52.5	12.0	40.3	2.778	0.008	0.008	0.000	0.188	0.16	
2122	4/21/2004	8:22:06 AM		25.399	23.498	25.863	24.955	24.594		49.112	54.225	17.671	31.72	-0.425	-6.451		50.148	0.051	14.643	0.003		2800.3	46.6711	52.8	12.3	40.4	2.787	0.008	0.007	0.000	0.184	0.16	
2123	4/21/2004	8:23:06 AM		25.408	23.527	25.872	24.894	24.423		48.868	53.945	17.505	31.679	-0.427	-6.451		50.872	0.051	14.643	0.003		2801.3	46.6878	52.5	12.5	40.3	2.777	0.008	0.007	0.000	0.184	0.16	
2124	4/21/2004	8:24:06 AM		25.426	23.565	25.885	24.837	24.351		48.72	53.866	17.594	31.418	-0.442	-6.451		49.42	0.052	14.643	0.003		2802.3	46.7044	52.4	12.1	40.1	2.763	0.008	0.008	0.000	0.189	0.16	
2125	4/21/2004	8:25:06 AM		25.449	23.603	25.903	24.84	24.569		48.986	54.217	17.646	31.607	-0.422	-6.342		49.766	0.053	14.643	0.003		2803.3	46.7211	52.7	12.2	40.3	2.778	0.008	0.008	0.000	0.191	0.16	
2126	4/21/2004	8:26:06 AM		25.456	23.62	25.915	24.857	24.661		48.975	54.132	17.621	31.694	-0.425	-6.423		49.134	0.053	14.643	0.003		2804.3	46.7378	52.7	12.0	40.3	2.781	0.008	0.008	0.000	0.191	0.16	
2127	4/21/2004	8:27:06 AM		25.469	23.644	25.923	24.885	24.754		49.042	54.316	17.642	31.622	-0.425	-6.443		49.839	0.051	14.643	0.003		2805.3	46.7544	52.8	12.2	40.3	2.781	0.008	0.007	0.000	0.184	0.16	
2128	4/21/2004	8:28:06 AM		25.477	23.666	25.916	24.948	24.781		48.965	54.194	17.605	31.614	-0.427	-6.477		48.367	0.047	14.643	0.003		2806.3	46.7711	52.7	11.9	40.3	2.778	0.007	0.007	0.000	0.170	0.14	
2129	4/21/2004	8:29:06 AM		25.505	23.705	25.949	25.031	24.975		48.988	54.341	17.619	31.63	-0.425	-6.344		50.212	0.053	14.643	0.003		2807.3	46.7878	52.9	12.3	40.3	2.779	0.008	0.008	0.000	0.191	0.16	
2130	4/21/2004	8:30:06 AM		25.533	23.753	25.982	25.13	25.093		49.052	54.229	17.674	31.622	-0.422	-6.382		49.307	0.052	14.643	0.003		2808.3	46.8044	52.8	12.1	40.3	2.781	0.008	0.008	0.000	0.187	0.16	
2131	4/21/2004	8:31:06 AM		25.526	23.751	25.96	25.123	25.091		49.1	54.219	17.537	31.913	-0.427	-6.454		49.13	0.053	14.643	0.003		2809.3	46.8211	52.7	12.0	40.5	2.793	0.008	0.008	0.000	0.190	0.16	
2132	4/21/2004	8:32:06 AM		25.555	23.796	25.994	25.192	24.955		49.025	54.154	17.678	31.595	-0.425	-6.37		48.548	0.048	14.643	0.003		2810.3	46.8378	52.7	11.9	40.3	2.779	0.007	0.007	0.000	0.173	0.15	
2133	4/21/2004	8:33:06 AM		25.559	23.81	25.983	25.251	25.069		48.965	54.275	17.693	31.546	-0.358	-6.298		49.172	0.054	14.643	0.003		2811.3	46.8544	52.8	12.1	40.3	2.775	0.008	0.008	0.000	0.195	0.17	
2134	4/21/2004	8:34:06 AM		25.593	23.869	26.047	25.34	25.193		48.905	54.19	17.573	31.648	-0.422	-6.362		49.044	0.053	14.643	0.003		2812.3	46.8711	52.7	12.0	40.3	2.777	0.008	0.008	0.000	0.191	0.16	
2135	4/21/2004	8:35:06 AM		25.592	23.878	26.031	25.359	25.237		48.708	53.951	17.478	31.453	-0.381	-6.385		48.713	0.052	14.643	0.003		2813.3	46.8878	52.5	11.9	40.1	2.763	0.008	0.008	0.000	0.188	0.16	
2136	4/21/2004	8:36:06 AM		25.612	23.923	26.046	25.409	25.257		48.517	53.736	17.502	31.273	-0.425	-6.391		49.701	0.052	14.643	0.003		2814.3	46.9044	52.3	12.2	39.9	2.751	0.008	0.008	0.000	0.189	0.16	
2137	4/21/2004	8:37:06 AM		25.641	23.952	26.07	25.433	25.201		49.237	54.453	17.585	31.938	-0.361	-6.385		48.967	0.052	14.643	0.003		2815.3	46.9211	53.0	12.0	40.6	2.798	0.008	0.008	0.000	0.185	0.16	
2138	4/21/2004	8:38:06 AM		25.649	23.97	26.073	25.391	25.064		49.326	54.586	17.634	31.94	-0.358	-6.408		49.395	0.052	14.643	0.003		2816.3	46.9378	53.1	12.1	40.6	2.802	0.008	0.008	0.000	0.185	0.16	
2139	4/21/2004	8:39:06 AM		25.672	24.003	26.011	25.344	25.007		48.892	54.034	17.632	31.529	-0.358	-6.388		49.17	0.055	14.643	0.003		2817.3	46.9544	52.6	12.0	40.2	2.772	0.008	0.008	0.000	0.198	0.17	
2140	4/21/2004	8:40:06 AM		25.69	24.036	25.974	25.296	24.83		49.185	54.44	17.592	31.921	-0.401	-6.391		48.523	0.052	14.643	0.003		2818.3	46.9711	53.0	11.9	40.6	2.796	0.008	0.008	0.000	0.186	0.16	
2141	4/21/2004	8:41:06 AM		25.707	24.058	25.991	25.263	24.922		49.05	54.244	17.557	31.798	-0.355	-6.391		49.143	0.052	14.643	0.003		2819.3	46.9878	52.8	12.0	40.4	2.787	0.008	0.008	0.000	0.187	0.16	
2142	4/21/2004	8:42:06 AM		25.708	24.079	25.987	25.2	24.803		48.957	54.243	17.62	31.622	-0.399	-6.373		49.898	0.055	14.643	0.003		2820.3	47.0044	52.8	12.2	40.3	2.778	0.008	0.008	0.000	0.198	0.17	
2143	4/21/2004	8:43:06 AM		25.709	24.095	25.993	25.16	24.799		48.961	54.181	17.589	31.599	-0.358	-6.307		49.069	0.05	14.643	0.003		2821.3	47.0211	52.7	12.0	40.3	2.777	0.007	0.007	0.000	0.180	0.15	
2144	4/21/2004	8:44:06 AM		25.725	24.126	26.009	25.121	24.69		48.895	54.235	17.69	31.462	-0.306	-6.243		48.594	0.054	14.643	0.003		2822.3	47.0378	52.8	11.9	40.2	2.770	0.008	0.008	0.000	0.195	0.17	
2145	4/21/2004	8:45:06 AM		25.736	24.138	26.025	25.123	24.851		48.774	54.047	17.605	31.437	-0.335	-6.264		49.683	0.052	14.643	0.003		2823.3	47.0544	52.6	12.2	40.1	2.765	0.008	0.008	0.000	0.188	0.16	
2146	4/21/2004	8:46:06 AM		25.749	24.156	26.038	25.176	24.929		48.789	54.161	17.532	31.529	-0.326	-6.264		49.428	0.053	14.643	0.003		2824.3	47.0711	52.7	12.1	40.2	2.769	0.008	0.008	0.000	0.191	0.16	
2147	4/21/2004	8:47:06 AM		25.751	24.168	26.045	25.198	25.006		48.87	54.285	17.555	31.568	-0.309	-6.269		48.972	0.051	14.643	0.003		2825.3	47.0878	52.8	12.0	40.2	2.773	0.008	0.007	0.000	0.184	0.16	
2148	4/21/2004	8:48:06 AM		25.752	24.184	26.066	25.269	25.032		48.693	53.976	17.592	31.369	-0.268	-6.261		51.164	0.053	14.643	0.003		2826.3	47.1044	52.5	12.5	40.0	2.760	0.008	0.008	0.000	0.192	0.16	
2149	4/21/2004	8:49:06 AM		25.765	24.207	26.074	25.357	25.045		49.152	54.465	17.647	31.741	-0.274	-6.292		49.564	0.05	14.643	0.003		2827.3	47.1211	53.0	12.1	40.4	2.789	0.007	0.007	0.000	0.179	0.15	
2150	4/21/2004	8:50:06 AM		25.783	24.23	26.098	25.451	25.053		49.096	54.459	17.591	31.806	-0.236	-6.206		48.531	0.053	14.643	0.003		2828.3	47.1378	53.0	11.9	40.5	2.789	0.008	0.008	0.000	0.189	0.16	
2151	4/21/2004	8:51:06 AM		25.785	24.252	26.11	25.508	25.33		48.87	54.239	17.583	31.552	-0.303	-6.301		50.703	0.054	14.643	0.003		2829.3	47.1544	52.8	12.4	40.2	2.772	0.008	0.008	0.000	0.194	0.17	
2152	4/21/2004	8:52:06 AM		25.79	24.267	26.114	25.563	25.42		49.033	54.316	17.635	31.648	-0.277	-6.298		48.913	0.051	14.643	0.003		2830.3	47.1711	52.8	12.0	40.3	2.781	0.008	0.007	0.000	0.183	0.16	
2153	4/21/2004	8:53:06 AM		25.814	24.296	26.139	25.647	25.534		49.083	54.43	17.712	31.654	-0.283	-6.287		50.721	0.052	14.643	0.003		2831.3	47.1878	53.0	12.4	40.4	2.783	0.008	0.008	0.000	0.186	0.16	
2154	4/21/2004	8:54:06 AM		25.828	24.32	26.137	25.66	25.503		48.801	54.109	17.671	31.455	-0.28	-6.292		51.043	0.053	14.643	0.003		2832.3	47.2044	52.6	12.5	40.1	2.767	0.008	0.008	0.000	0.191	0.16	
2155	4/21/2004	8:55:06 AM		25.851	24.353	26.17	25.744	25.496		48.847	54.179	17.575	31.618	-0.239	-6.281		47.453	0.055	14.643	0.003		2833.3	47.2211	52.7	11.6	40.2	2.774	0.008	0.008	0.000	0.197	0.17	
2156	4/21/2004	8:56:06 AM		25.853	24.376	26.172	25.726	25.338		48.946	54.401	17.516	31.728	-0.219	-6.2		49.71	0.053	14.643	0.003		2834.3	47.2378	52.9	12.2	40.3	2.781	0.008	0.008	0.000	0.190	0.16	
2157	4/21/2004	8:57:06 AM		25.877	24.394	26.181	25.709	25.347		49.007	54.215	17.602	31.665	-0.367	-6.344		49.747	0.046	14.643	0.003		2835.3	47.2544	52.7	12.2	40.3	2.781	0.007	0.007	0.000	0.164	0.14	
2158	4/21/2004	8:58:06 AM		25.889	24.416	26.183	25.621	25.234		48.88	54.277	17.514	31.638	-0.19	-5.708		49.937	0.037	14.643	0.003		2836.3	47.2711	52.8	12.2	40.3	2.776	0.006	0.005	0.000	0.133	0.11	
2159	4/21/2004	8:59:06 AM		26.129	24.432	26.199	25.567	25.185		48.648	54.3	17.528	31.398	-0.069	-5.587		49.286	0.065	14.643	0.003		2837.3	47.2878	52.8	12.1	40.0	2.759	0.010	0.009	0.000	0.234	0.20	
2160	4/21/2004	9:00:06 AM		26.121	24.453	26.215	25.548	25.116		49.191	54.66	17.606	31.886	-0.112	-5.763		50.379	0.043	14.643	0.003		2838.3	47.3044	53.2	12.3	40.5	2.795	0.006	0.006	0.000	0.153	0.13	
2161	4/21/2004	9:00:13 AM		26.111	24.458	26.215	25.543	25.111		48.741	54.235	17.59	31.548	-0.112	-5.677		49.263	0.047	14.643	0.003		2838.4	47.3064	52.8	12.1	40.1	2.768	0.007	0.007	0.000	0.169	0.14	
2162	4/21/2004	9:01:13 AM		26.117	24.49	26.246	25.535	25.092		48.729	54.231	17.567	31.396	-0.109	-5.688		49.313	0.054	14.643	0.003		2839.4	47.3231	52.8	12.1	40.1	2.762	0.008	0.008	0.000	0.194	0.17	
2163	4/21/2004	9:02:13 AM		26.098	24.491	26.237	25.465	25.048		48.982	54.306	17.481	31.847	-0.181	-5.954		49.136	0.071	14.643	0.003		2840.4	47.3397	52.8	12.0	40.4	2.786	0.011	0.010	0.000	0.253	0.22	
2164	4/21/2004	9:03:13 AM		26.238	24.496	26.238	25.421	24.974		50.825	54.641	17.501	33.696	-1.221	-5.656		48.575	0.032	14.643	0.003		2841.4	47.3564	53.2	11.9	42.3	2.914	0.005	0.005	0.000	0.109	0.09	
2165	4/21/2004	9:04:13 AM		26.218	24.506	26.238	25.401	24.984		49.023	54.575	17.539	31.724	-0.089	-3.341		49.184	0.029	14.643	0.003		2842.4	47.3731	53.1	12.1	40.4	2.784	0.004	0.004	0.000	0.103	0.09	
2166	4/21/2004	9:05:13 AM		26.134	24.522	26.229	25.416	25.144		47.677	54.422	17.654	30.296	1.049	-0.884		49.08	0.051	14.643	0.003		2843.4	47.3897	52.9	12.0	39.0	2.688	0.008	0.007	0.000	0.188	0.16	
2167	4/21/2004	9:06:13 AM		26.085	24.528	26.15	25.458	25.231		49.882	54.687	17.61	32.584	-0.818	-5.405		50.225	0.049	14.643	0.003		2844.4	47.4064	53.2	12.3	41.2	2.843	0.007	0.007	0.000	0.172	0.15	
2168	4/21/2004	9:07:13 AM		26.061	24.554	26.151	25.534	25.296		50.334	54.751	17.565	33.149	-1.221	-6.498		49.633	0.053	14.643	0.003		2845.4	47.4231	53.3	12.2	41.7	2.878	0.008	0.008	0.000	0.183	0.16	
2169	4/21/2004	9:08:13 AM		26.048	24.566	26.158	25.611	25.413		50.176	54.231	17.612	32.925	-1.218	-7.038		49.195	0.053	14.643	0.003		2846.4	47.4397	52.8	12.1	41.6	2.865	0.008	0.008	0.000	0.184	0.16	
2170	4/21/2004	9:09:13 AM		26.051	24.574	26.181	25.724	25.421		50.102	54.154	17.487	32.91	-1.218	-7.058		46.679	0.055	14.643	0.003		2847.4	47.4564	52.7	11.4	41.5	2.862	0.008	0.008	0.000	0.191	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2171	4/21/2004	9:10:13 AM		26.064	24.613	26.209	25.787	25.475		50.622	54.656	17.492	33.463	-1.218	-7.058		48.112	0.058	14.643	0.003		2848.4	47.4731	53.2	11.8	42.0	2.899	0.009	0.008	0.000	0.199	0.17	
2172	4/21/2004	9:11:13 AM		26.038	24.631	26.208	25.836	25.563		50.371	54.382	17.524	33.21	-1.218	-7.082		48.924	0.053	14.643	0.003		2849.4	47.4897	52.9	12.0	41.8	2.881	0.008	0.008	0.000	0.183	0.16	
2173	4/21/2004	9:12:13 AM		26.022	24.64	26.221	25.885	25.646		50.176	54.235	17.497	33.081	-1.221	-7.085		49.616	0.055	14.643	0.003		2850.4	47.5064	52.8	12.2	41.6	2.870	0.008	0.008	0.000	0.190	0.16	
2174	4/21/2004	9:13:13 AM		26.04	24.678	26.255	25.983	25.71		50.597	54.675	17.614	33.313	-1.218	-7.09		49.195	0.054	14.643	0.003		2851.4	47.5231	53.2	12.1	42.0	2.893	0.008	0.008	0.000	0.185	0.16	
2175	4/21/2004	9:14:13 AM		26.008	24.681	26.227	25.951	25.793		50.234	54.32	17.513	33.054	-1.224	-7.09		48.999	0.054	14.643	0.003		2852.4	47.5397	52.8	12.0	41.6	2.871	0.008	0.008	0.000	0.187	0.16	
2176	4/21/2004	9:15:13 AM		26.031	24.724	26.275	25.974	25.666		50.578	54.716	17.593	33.341	-1.218	-7.09		50.44	0.053	14.643	0.003		2853.4	47.5564	53.2	12.4	42.0	2.893	0.008	0.008	0.000	0.182	0.15	
2177	4/21/2004	9:16:13 AM		26.007	24.721	26.272	25.89	25.657		50.717	54.685	17.543	33.532	-1.221	-7.085		49.633	0.055	14.643	0.003		2854.4	47.5731	53.2	12.2	42.1	2.904	0.008	0.008	0.000	0.188	0.16	
2178	4/21/2004	9:17:13 AM		25.989	24.742	26.258	25.821	25.509		50.344	54.503	17.541	33.116	-1.224	-7.038		49.712	0.054	14.643	0.003		2855.4	47.5897	53.0	12.2	41.7	2.877	0.008	0.008	0.000	0.186	0.16	
2179	4/21/2004	9:18:13 AM		25.989	24.763	26.284	25.782	25.374		50.566	54.625	17.579	33.354	-1.218	-7.105		49.604	0.055	14.643	0.003		2856.4	47.6064	53.2	12.2	42.0	2.893	0.008	0.008	0.000	0.189	0.16	
2180	4/21/2004	9:19:13 AM		25.965	24.784	26.29	25.713	25.35		50.502	54.774	17.467	33.383	-1.221	-7.093		48.813	0.055	14.643	0.003		2857.4	47.6231	53.3	12.0	41.9	2.892	0.008	0.008	0.000	0.189	0.16	
2181	4/21/2004	9:20:13 AM		25.945	24.784	26.294	25.648	25.3		50.369	54.445	17.589	33.19	-1.221	-7.105		49.142	0.053	14.643	0.003		2858.4	47.6397	53.0	12.0	41.8	2.881	0.008	0.008	0.000	0.182	0.16	
2182	4/21/2004	9:21:13 AM		25.951	24.814	26.315	25.608	25.286		50.236	54.449	17.514	33.153	-1.221	-7.105		48.846	0.053	14.643	0.003		2859.4	47.6564	53.0	12.0	41.7	2.875	0.008	0.008	0.000	0.183	0.16	
2183	4/21/2004	9:22:13 AM		25.961	24.819	26.33	25.568	25.226		49.577	53.671	18.325	31.579	-1.221	-7.119		50.542	0.051	14.643	0.003		2860.4	47.6731	52.2	12.4	40.6	2.798	0.008	0.007	0.000	0.181	0.15	
2184	4/21/2004	9:23:13 AM		26.001	24.82	26.341	25.539	25.112		49.372	53.493	18.355	31.359	-1.221	-7.108		50.613	0.052	14.643	0.003		2861.4	47.6897	52.0	12.4	40.4	2.783	0.008	0.007	0.000	0.185	0.16	
2185	4/21/2004	9:24:13 AM		26.021	24.819	26.35	25.493	25.106		49.533	53.644	18.269	31.704	-1.224	-7.108		53.61	0.052	14.643	0.003		2862.4	47.7064	52.2	13.1	40.6	2.801	0.008	0.007	0.000	0.184	0.16	
2186	4/21/2004	9:25:13 AM		26.056	24.844	26.375	25.513	25.206		50.006	54.142	18.073	32.246	-1.218	-7.105		50.313	0.053	14.643	0.003		2863.4	47.7231	52.7	12.3	41.1	2.835	0.008	0.008	0.000	0.185	0.16	
2187	4/21/2004	9:26:13 AM		26.076	24.844	26.385	25.568	25.386		49.913	54.113	18.063	32.133	-1.218	-7.099		49.001	0.052	14.643	0.004		2864.4	47.7397	52.6	12.0	41.0	2.828	0.008	0.007	0.000	0.182	0.15	
2188	4/21/2004	9:27:13 AM		26.106	24.85	26.396	25.659	25.382		50.124	54.254	18.141	32.336	-1.218	-7.093		50.06	0.055	14.643	0.003		2865.4	47.7564	52.8	12.3	41.2	2.843	0.008	0.008	0.000	0.191	0.16	
2189	4/21/2004	9:28:13 AM		26.148	24.872	26.412	25.726	25.493		49.788	53.964	18.014	32.083	-1.221	-7.102		49.291	0.053	14.643	0.003		2866.4	47.7731	52.5	12.1	40.9	2.822	0.008	0.008	0.000	0.186	0.16	
2190	4/21/2004	9:29:13 AM		26.16	24.874	26.424	25.808	25.61		50.089	54.405	18.025	32.326	-1.221	-7.085		49.639	0.056	14.643	0.003		2867.4	47.7897	52.9	12.2	41.2	2.841	0.008	0.008	0.000	0.195	0.17	
2191	4/21/2004	9:30:13 AM		26.172	24.886	26.437	25.875	25.657		49.809	53.964	17.976	32.25	-1.221	-7.099		50.496	0.053	14.643	0.003		2868.4	47.8064	52.5	12.4	41.0	2.829	0.008	0.008	0.000	0.185	0.16	
2192	4/21/2004	9:31:13 AM		26.194	24.893	26.449	25.927	25.714		49.925	54.03	17.954	32.369	-1.221	-7.09		49.71	0.054	14.643	0.003		2869.4	47.8231	52.6	12.2	41.1	2.837	0.008	0.008	0.000	0.188	0.16	
2193	4/21/2004	9:32:13 AM		26.202	24.906	26.402	25.96	25.777		49.73	53.926	17.99	32.106	-1.224	-7.09		49.074	0.054	14.643	0.003		2870.4	47.8397	52.5	12.0	40.9	2.821	0.008	0.008	0.000	0.189	0.16	
2194	4/21/2004	9:33:13 AM		26.225	24.929	26.349	26.098	25.76		49.815	53.862	17.999	32.196	-1.221	-7.09		50.582	0.053	14.643	0.003		2871.4	47.8564	52.4	12.4	41.0	2.827	0.008	0.008	0.000	0.186	0.16	
2195	4/21/2004	9:34:13 AM		26.231	24.94	26.326	26.089	25.741		49.824	54.003	17.959	32.182	-1.221	-7.09		50.162	0.052	14.643	0.003		2872.4	47.8731	52.5	12.3	41.0	2.827	0.008	0.007	0.000	0.182	0.16	
2196	4/21/2004	9:35:13 AM		26.25	24.964	26.354	26.068	25.74		49.732	54.053	17.979	32.077	-1.221	-7.035		49.215	0.051	14.643	0.003		2873.4	47.8897	52.6	12.1	40.9	2.820	0.008	0.007	0.000	0.179	0.15	
2197	4/21/2004	9:36:13 AM		26.266	24.99	26.366	26.029	25.556		49.919	54.187	17.894	32.383	-1.221	-7.087		50.432	0.052	14.643	0.003		2874.4	47.9064	52.7	12.4	41.2	2.837	0.008	0.007	0.000	0.181	0.15	
2198	4/21/2004	9:37:13 AM		26.262	24.992	26.387	25.981	25.563		49.612	53.825	17.925	32.018	-1.215	-7.085		49.27	0.051	14.643	0.004		2875.4	47.9231	52.4	12.1	40.8	2.814	0.008	0.007	0.000	0.179	0.15	
2199	4/21/2004	9:38:13 AM		26.268	24.998	26.373	25.897	25.444		49.99	54.281	17.955	32.373	-1.224	-7.09		49.883	0.051	14.643	0.003		2876.4	47.9397	52.8	12.2	41.2	2.839	0.008	0.007	0.000	0.178	0.15	
2200	4/21/2004	9:39:13 AM		26.264	25.013	26.384	25.827	25.374		49.61	53.738	18.005	31.981	-1.224	-7.087		49.879	0.052	14.643	0.003		2877.4	47.9564	52.3	12.2	40.8	2.813	0.008	0.007	0.000	0.183	0.16	
2201	4/21/2004	9:40:13 AM		26.269	25.023	26.389	25.757	25.564		49.892	54.165	17.982	32.157	-1.221	-7.096		51.422	0.049	14.643	0.003		2878.4	47.9731	52.7	12.6	41.0	2.828	0.007	0.007	0.000	0.171	0.15	
2202	4/21/2004	9:41:13 AM		26.285	25.035	26.405	25.718	25.446		49.772	53.926	17.87	32.254	-1.221	-7.093		50.694	0.051	14.643	0.003		2879.4	47.9897	52.5	12.4	41.0	2.828	0.008	0.007	0.000	0.178	0.15	
2203	4/21/2004	9:42:13 AM		26.28	25.024	26.4	25.643	25.31		49.996	54.355	17.82	32.523	-1.221	-7.09		47.595	0.051	14.643	0.003		2880.4	48.0064	52.9	11.7	41.3	2.845	0.008	0.007	0.000	0.177	0.15	
2204	4/21/2004	9:43:13 AM		26.29	25.05	26.415	25.653	25.281		49.695	54.069	18.026	31.993	-1.218	-7.076		49.908	0.054	14.643	0.003		2881.4	48.0231	52.6	12.2	40.8	2.816	0.008	0.008	0.000	0.189	0.16	
2205	4/21/2004	9:44:13 AM		26.29	25.049	26.424	25.648	25.24		49.977	54.26	18.002	32.299	-1.218	-7.093		49.109	0.05	14.643	0.003		2882.4	48.0397	52.8	12.0	41.1	2.836	0.007	0.007	0.000	0.174	0.15	
2206	4/21/2004	9:45:13 AM		26.294	25.048	26.424	25.642	25.285		49.579	53.881	18.008	31.87	-1.218	-7.073		51.435	0.055	14.643	0.003		2883.4	48.0564	52.4	12.6	40.7	2.808	0.008	0.008	0.000	0.193	0.16	
2207	4/21/2004	9:46:13 AM		26.294	25.053	26.429	25.682	25.434		49.851	54.239	18.062	32.127	-1.221	-7.09		49.019	0.05	14.643	0.003		2884.4	48.0731	52.8	12.0	41.0	2.826	0.007	0.007	0.000	0.175	0.15	
2208	4/21/2004	9:47:13 AM		26.299	25.053	26.439	25.747	25.554		49.875	54.053	17.93	32.414	-1.218	-7.061		52.244	0.055	14.643	0.004		2885.4	48.0897	52.6	12.8	41.1	2.837	0.008	0.008	0.000	0.191	0.16	
2209	4/21/2004	9:48:13 AM		26.31	25.065	26.45	25.844	25.676		49.853	54.078	17.912	32.278	-1.224	-7.082		50.167	0.051	14.643	0.003		2886.4	48.1064	52.6	12.3	41.1	2.831	0.008	0.007	0.000	0.178	0.15	
2210	4/21/2004	9:49:13 AM		26.302	25.056	26.432	25.91	25.777		49.77	53.997	17.829	32.246	-1.221	-7.082		49.405	0.052	14.643	0.003		2887.4	48.1231	52.5	12.1	41.0	2.827	0.008	0.007	0.000	0.182	0.15	
2211	4/21/2004	9:50:13 AM		26.324	25.079	26.469	25.982	25.904		49.904	54.254	17.958	32.227	-1.224	-7.067		49.409	0.053	14.643	0.003		2888.4	48.1397	52.8	12.1	41.1	2.831	0.008	0.008	0.000	0.185	0.16	
2212	4/21/2004	9:51:13 AM		26.335	25.09	26.47	26.059	25.875		49.884	54.206	17.856	32.389	-1.221	-7.067		49.41	0.053	14.643	0.003		2889.4	48.1564	52.7	12.1	41.1	2.836	0.008	0.008	0.000	0.184	0.16	
2213	4/21/2004	9:52:13 AM		26.337	25.112	26.487	26.116	25.783		49.428	53.817	18.391	31.304	-1.224	-7.076		50.957	0.052	14.643	0.003		2890.4	48.1731	52.3	12.5	40.4	2.783	0.008	0.007	0.000	0.184	0.16	
2214	4/21/2004	9:53:13 AM		26.35	25.115	26.51	26.189	25.801		49.257	53.702	18.25	31.291	-1.218	-7.061		51.216	0.052	14.643	0.003		2891.4	48.1897	52.2	12.6	40.3	2.777	0.008	0.007	0.000	0.185	0.16	
2215	4/21/2004	9:54:13 AM		26.378	25.158	26.548	26.177	25.739		49.529	53.846	18.415	31.445	-1.218	-7.07		50.936	0.051	14.643	0.003		2892.4	48.2064	52.4	12.5	40.5	2.791	0.008	0.007	0.000	0.180	0.15	
2216	4/21/2004	9:55:13 AM		26.371	25.161	26.536	26.125	25.647		49.709	54.036	18.434	31.64	-1.218	-7.07		51.673	0.051	14.643	0.003		2893.4	48.2231	52.6	12.7	40.7	2.804	0.008	0.007	0.000	0.179	0.15	
2217	4/21/2004	9:56:13 AM		26.373	25.163	26.543	26.041	25.633		49.28	53.56	18.39	31.203	-1.221	-7.067		50.377	0.052	14.643	0.003		2894.4	48.2397	52.1	12.3	40.2	2.775	0.008	0.007	0.000	0.185	0.16	
2218	4/21/2004	9:57:13 AM		26.374	25.164	26.539	25.963	25.754		49.305	53.597	18.411	31.211	-1.221	-7.073		52.436	0.051	14.643	0.003		2895.4	48.2564	52.1	12.9	40.3	2.776	0.008	0.007	0.000	0.181	0.15	
2219	4/21/2004	9:58:13 AM		26.384	25.174	26.554	25.923	25.734		49.446	53.748	18.315	31.503	-1.218	-7.064		51.324	0.052	14.643	0.003		2896.4	48.2731	52.3	12.6	40.5	2.791	0.008	0.007	0.000	0.183	0.16	
2220	4/21/2004	9:59:13 AM		26.404	25.194	26.564	25.882	25.814		49.533	53.928	18.297	31.636	-1.224	-7.073		50.811	0.051	14.643	0.003		2897.4	48.2897	52.5	12.5	40.6	2.798	0.008	0.007	0.000	0.179	0.15	
2221	4/21/2004	10:00:13 AM		26.403	25.193	26.493	25.852	25.624		49.488	53.862	18.441	31.291	-1.224	-7.073		52.24	0.051	14.643	0.003		2898.4	48.3064	52.4	12.8	40.4	2.785	0.008	0.007	0.000	0.181	0.15	
2222	4/21/2004	10:01:13 AM		26.417	25.203	26.453	25.881	25.473		48.982	53.416	18.408	30.83	-1.218	-7.067		51.105	0.051	14.643	0.003		2899.4	48.3231	51.9	12.5	39.9	2.751	0.008	0.007	0.000	0.183	0.16	
2223	4/21/2004	10:02:13 AM		26.427	25.217	26.442	25.855	25.413		49.232	53.551	18.285	31.265	-1.221	-7.07		50.09	0.051	14.643	0.003		2900.4	48.3397	52.1	12.3	40.2	2.775	0.008	0.007	0.000	0.181	0.15	
2224	4/21/2004	10:03:13 AM		26.426	25.211	26.441	25.784	25.367		49.284	53.686	18.343	31.341	-1.221	-7.07		50.663	0.051	14.643	0.003		2901.4	48.3564	52.2	12.4	40.3	2.779	0.008	0.007	0.000	0.181	0.15	
2225	4/21/2004	10:04:13 AM		26.411	25.211	26.431	25.724	25.352		49.324	53.597	18.332	31.39	-1.224	-7.064		51.055	0.052	14.643	0.003		2902.4	48.3731	52.1	12.5	40.4	2.782	0.008	0.007	0.000	0.185	0.16	
2226	4/21/2004	10:05:13 AM		26.43	25.235	26.485	25.758	25.36		49.148	53.545	18.317	31.164	-1.221	-7.061		50.361	0.052	14.643	0.003		2903.4	48.3897	52.1	12.3	40.2	2.769	0.008	0.007	0.000	0.185	0.16	
2227	4/21/2004	10:06:13 AM		26.419	25.224	26.474	25.787	25.465		49.237	53.611	18.276	31.293	-1.203	-7.064		49.695	0.051	14.643	0.003		2904.4	48.4064	52.1	12.2	40.3	2.776	0.008	0.007	0.000	0.181	0.15	
2228	4/21/2004	10:07:13 AM		26.414	25.224	26.484	25.847	25.609		49.332	53.698	18.288	31.412	-1.215	-7.067		51.274	0.051	14.643	0.003		2905.4	48.4231	52.2	12.6	40.4	2.784	0.008	0.007	0.000	0.181	0.15	
2229	4/21/2004	10:08:13 AM		26.425	25.24	26.51	25.923	25.66		49.177	53.528	18.132	31.429	-1.215	-7.058		50.876	0.052	14.643	0.004		2906.4	48.4397	52.1	12.5	40.3	2.779	0.008	0.007	0.000	0.184	0.16	
2230	4/21/2004	10:09:13 AM		26.422	25.242	26.507	26.005	25.847		49.289	53.711	18.279	31.353	-1.169	-7.064		50.79	0.051	14.643	0.003		2907.4	48.4564	52.2	12.4	40.3	2.780	0.008	0.007	0.000	0.181	0.15	
2231	4/21/2004	10:10:13 AM		26.43	25.25	26.53	26.093	25.94		49.62	54.069	18.293	31.665	-1.195	-7.061		50.415	0.051	14.643	0.003		2908.4	48.4731	52.6	12.4	40.6	2.802	0.008	0.007	0.000	0.179	0.15	
2232	4/21/2004	10:11:13 AM		26.432	25.257	26.537	26.166	26.027		49.11	53.661	18.25	31.166	-1.154	-7.021		52.488	0.052	14.643	0.003		2909.4	48.4897	52.2	12.9	40.1	2.767	0.008	0.007	0.000	0.185	0.16	
2233	4/21/2004	10:12:13 AM		26.44	25.27	26.55	26.214	26.02		49.096	53.531	18.397	31.057	-1.151	-7.041		52.15	0.051	14.643	0.004		2910.4	48.5064	52.1	12.8	40.1	2.763	0.008	0.007	0.000	0.182	0.15	
2234	4/21/2004	10:13:13 AM		26.432	25.272	26.532	26.241	26.057		49.313	53.713	18.262	31.406	-1.154	-7.047		52.255	0.052	14.643	0.003		2911.4	48.5231	52.2	12.8	40.4	2.783	0.008	0.007	0.000	0.184	0.16	
2235	4/21/2004	10:14:13 AM		26.45	25.295	26.565	26.274	26.01		49.129	53.622	18.179	31.205	-1.154	-7.044		47.833	0.051	14.643	0.003		2912.4	48.5397	52.2	11.7	40.2	2.769	0.008	0.007	0.000	0.181	0.15	
2236	4/21/2004	10:15:13 AM		26.456	25.297	26.561	26.23	25.992		49.05	53.475	18.176	31.279	-1.157	-7.047		50.434	0.051	14.643	0.003		2913.4	48.5564	52.0	12.4	40.2	2.769	0.008	0.007	0.000	0.181	0.15	
2237	4/21/2004	10:16:13 AM		26.459	25.314	26.569	26.197	25.789		49.585	54.165	18.426	31.396	-1.154	-7.044		50.82	0.052	14.643	0.003		2914.4	48.5731	52.7	12.5	40.5	2.792	0.008	0.007	0.000	0.183	0.16	
2238	4/21/2004	10:17:13 AM		26.48	25.325	26.59	26.154	25.771		49.048	53.408	18.258	31.121	-1.154	-7.041		50.356	0.053	14.643	0.003		2915.4	48.5897	51.9	12.3	40.1	2.764	0.008	0.008	0.000	0.189	0.16	
2239	4/21/2004	10:18:13 AM		26.481	25.332	26.592	26.095	25.752		49.259	53.756	18.229	31.406	-1.154	-7.047		50.918	0.052	14.643	0.003		2916.4	48.6064	52.3	12.5	40.3	2.781	0.008	0.007	0.000	0.184	0.16	
2240	4/21/2004	10:19:13 AM		26.492	25.348	26.602	26.041	25.638		49.705	54.322	18.367	31.585	-1.105	-7.047		51.005	0.051	14.643	0.003		2917.4	48.6231	52.9	12.5	40.6	2.802	0.008	0.007	0.000	0.179	0.15	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2241	4/21/2004	10:20:13 AM		26.492	25.348	26.612	25.981	25.613		49.241	53.713	18.174	31.441	-1.14	-7.058		51.585	0.049	14.643	0.003		2918.4	48.6397	52.2	12.6	40.3	2.781	0.007	0.007	0.000	0.173	0.15	
2242	4/21/2004	10:21:13 AM		26.509	25.369	26.624	25.952	25.549		49.544	54.013	18.349	31.579	-1.096	-7.038		50.613	0.052	14.643	0.003		2919.4	48.6564	52.5	12.4	40.6	2.797	0.008	0.007	0.000	0.183	0.16	
2243	4/21/2004	10:22:13 AM		26.503	25.353	26.618	25.912	25.504		49.425	53.93	18.381	31.357	-1.096	-7.047		50.6	0.052	14.643	0.003		2920.4	48.6731	52.5	12.4	40.4	2.785	0.008	0.007	0.000	0.183	0.16	
2244	4/21/2004	10:23:13 AM		26.501	25.357	26.612	25.905	25.512		49.344	53.939	18.348	31.273	-1.099	-7.041		50.425	0.052	14.643	0.003		2921.4	48.6897	52.5	12.4	40.3	2.779	0.008	0.007	0.000	0.184	0.16	
2245	4/21/2004	10:24:13 AM		26.52	25.36	26.63	25.909	25.451		49.293	53.758	18.311	31.349	-1.096	-7.044		50.703	0.051	14.643	0.003		2922.4	48.7064	52.3	12.4	40.3	2.780	0.008	0.007	0.000	0.180	0.15	
2246	4/21/2004	10:25:13 AM		26.523	25.354	26.644	25.887	25.549		49.071	53.775	18.277	31.08	-1.093	-7.041		50.446	0.052	14.643	0.003		2923.4	48.7231	52.3	12.4	40.1	2.763	0.008	0.007	0.000	0.185	0.16	
2247	4/21/2004	10:26:13 AM		26.523	25.353	26.633	25.866	25.474		49.641	54.136	18.34	31.552	-1.099	-7.047		48.511	0.051	14.643	0.003		2924.4	48.7397	52.7	11.9	40.6	2.799	0.008	0.007	0.000	0.179	0.15	
2248	4/21/2004	10:27:13 AM		26.536	25.357	26.656	25.89	25.502		49.318	53.885	18.216	31.478	-1.093	-7.035		50.215	0.054	14.643	0.004		2925.4	48.7564	52.4	12.3	40.4	2.785	0.008	0.008	0.000	0.190	0.16	
2249	4/21/2004	10:28:13 AM		26.54	25.356	26.656	25.924	25.606		49.398	53.879	18.315	31.408	-1.096	-7.058		49.883	0.048	14.643	0.003		2926.4	48.7731	52.4	12.2	40.4	2.786	0.007	0.007	0.000	0.169	0.14	
2250	4/21/2004	10:29:13 AM		26.551	25.357	26.502	25.99	25.732		49.5	54.109	18.386	31.484	-1.099	-7.047		50.899	0.05	14.643	0.003		2927.4	48.7897	52.6	12.5	40.5	2.792	0.007	0.007	0.000	0.177	0.15	
2251	4/21/2004	10:30:13 AM		26.552	25.368	26.512	26.066	25.947		48.98	53.506	18.173	31.183	-1.096	-7.035		49.954	0.052	14.643	0.003		2928.4	48.8064	52.0	12.2	40.1	2.763	0.008	0.007	0.000	0.185	0.16	
2252	4/21/2004	10:31:13 AM		26.543	25.359	26.499	26.102	25.939		49.04	53.481	18.215	31.176	-1.038	-7.044		47.814	0.051	14.643	0.003		2929.4	48.8231	52.0	11.7	40.1	2.765	0.008	0.007	0.000	0.182	0.15	
2253	4/21/2004	10:32:13 AM		26.541	25.366	26.511	26.2	25.996		49.407	53.864	18.318	31.488	-1.07	-7.044		51.504	0.05	14.643	0.003		2930.4	48.8397	52.4	12.6	40.4	2.789	0.007	0.007	0.000	0.177	0.15	
2254	4/21/2004	10:33:13 AM		26.542	25.383	26.542	26.286	26.177		48.857	53.458	18.178	31.014	-1.067	-7.032		50.922	0.053	14.643	0.003		2931.4	48.8564	52.0	12.5	39.9	2.753	0.008	0.008	0.000	0.190	0.16	
2255	4/21/2004	10:34:13 AM		26.54	25.396	26.55	26.349	26.3		49.276	53.844	18.204	31.423	-1.047	-7.041		50.738	0.05	14.643	0.003		2932.4	48.8731	52.4	12.4	40.3	2.782	0.007	0.007	0.000	0.177	0.15	
2256	4/21/2004	10:35:13 AM		26.543	25.414	26.573	26.422	26.158		49.438	54.038	18.241	31.486	-1.015	-7.03		51.109	0.052	14.643	0.003		2933.4	48.8897	52.6	12.5	40.5	2.790	0.008	0.007	0.000	0.183	0.16	
2257	4/21/2004	10:36:13 AM		26.552	25.422	26.572	26.396	26.022		49.311	53.868	18.325	31.234	-1.03	-7.032		50.653	0.051	14.643	0.003		2934.4	48.9064	52.4	12.4	40.3	2.777	0.008	0.007	0.000	0.181	0.15	
2258	4/21/2004	10:37:13 AM		26.554	25.44	26.594	26.378	25.974		49.102	53.572	18.224	31.201	-0.998	-7.032		49.66	0.051	14.643	0.003		2935.4	48.9231	52.1	12.2	40.2	2.768	0.008	0.007	0.000	0.181	0.15	
2259	4/21/2004	10:38:13 AM		26.561	25.457	26.606	26.33	26.061		49.04	53.665	18.331	31.024	-0.992	-7.032		50.594	0.05	14.643	0.003		2936.4	48.9397	52.2	12.4	40.0	2.760	0.007	0.007	0.000	0.178	0.15	
2260	4/21/2004	10:39:13 AM		26.542	25.433	26.572	26.251	25.952		49.106	53.62	18.123	31.242	-1.001	-7.03		50.229	0.051	14.643	0.003		2937.4	48.9564	52.1	12.3	40.2	2.770	0.008	0.007	0.000	0.181	0.15	
2261	4/21/2004	10:40:13 AM		26.578	25.474	26.639	26.272	25.864		49.411	54.005	18.253	31.613	-0.995	-7.027		51.362	0.051	14.643	0.003		2938.4	48.9731	52.5	12.6	40.5	2.793	0.008	0.007	0.000	0.179	0.15	
2262	4/21/2004	10:41:13 AM		26.569	25.475	26.619	26.203	25.89		49.26	53.729	18.177	31.548	-0.995	-7.03		49.699	0.051	14.643	0.003		2939.4	48.9897	52.3	12.2	40.4	2.786	0.008	0.007	0.000	0.180	0.15	
2263	4/21/2004	10:42:13 AM		26.573	25.474	26.614	26.142	25.799		49.288	53.953	18.175	31.458	-0.998	-7.027		51.612	0.051	14.643	0.003		2940.4	49.0064	52.5	12.6	40.4	2.784	0.008	0.007	0.000	0.180	0.15	
2264	4/21/2004	10:43:13 AM		26.572	25.483	26.617	26.141	25.833		49.363	53.943	18.093	31.614	-0.992	-7.041		49.829	0.051	14.643	0.003		2941.4	49.0231	52.5	12.2	40.5	2.792	0.008	0.007	0.000	0.179	0.15	
2265	4/21/2004	10:44:13 AM		26.592	25.498	26.632	26.141	25.882		49.353	53.918	18.065	31.681	-0.937	-7.024		52.824	0.05	14.643	0.003		2942.4	49.0397	52.4	12.9	40.5	2.794	0.007	0.007	0.000	0.176	0.15	
2266	4/21/2004	10:45:13 AM		26.586	25.492	26.626	26.115	25.867		49.581	54.262	18.13	31.728	-0.937	-7.018		50.63	0.054	14.643	0.003		2943.4	49.0564	52.8	12.4	40.7	2.803	0.008	0.008	0.000	0.189	0.16	
2267	4/21/2004	10:46:13 AM		26.586	25.497	26.616	26.1	25.737		49.558	54.231	18.161	31.648	-0.94	-7.027		50.519	0.052	14.643	0.003		2944.4	49.0731	52.8	12.4	40.6	2.799	0.008	0.007	0.000	0.182	0.16	
2268	4/21/2004	10:47:13 AM		26.598	25.494	26.638	26.132	25.884		49.691	54.273	18.06	32.038	-0.937	-7.027		48.362	0.051	14.643	0.003		2945.4	49.0897	52.8	11.9	40.9	2.817	0.008	0.007	0.000	0.178	0.15	
2269	4/21/2004	10:48:13 AM		26.613	25.504	26.658	26.122	25.729		49.423	54.121	18.054	31.737	-0.937	-7.024		50.963	0.051	14.643	0.003		2946.4	49.1064	52.6	12.5	40.6	2.798	0.008	0.007	0.000	0.179	0.15	
2270	4/21/2004	10:49:13 AM		26.617	25.513	26.667	26.141	25.762		49.372	54.018	18.135	31.523	-0.937	-7.027		49.979	0.05	14.643	0.003		2947.4	49.1231	52.5	12.2	40.4	2.789	0.007	0.007	0.000	0.176	0.15	
2271	4/21/2004	10:50:13 AM		26.621	25.522	26.686	26.125	25.747		49.475	54.183	17.958	31.827	-0.934	-7.018		51.061	0.052	14.643	0.004		2948.4	49.1397	52.7	12.5	40.7	2.803	0.008	0.007	0.000	0.182	0.15	
2272	4/21/2004	10:51:13 AM		26.626	25.512	26.681	26.145	25.842		49.367	54.011	18.153	31.542	-0.934	-7.024		51.694	0.051	14.643	0.003		2949.4	49.1564	52.5	12.7	40.5	2.789	0.008	0.007	0.000	0.179	0.15	
2273	4/21/2004	10:52:13 AM		26.636	25.517	26.686	26.205	25.946		49.583	54.32	17.986	31.864	-0.937	-7.021		49.624	0.052	14.643	0.003		2950.4	49.1731	52.8	12.2	40.7	2.808	0.008	0.007	0.000	0.182	0.15	
2274	4/21/2004	10:53:13 AM		26.646	25.523	26.702	26.281	26.142		49.606	54.285	17.977	32.01	-0.937	-7.012		49.641	0.052	14.643	0.003		2951.4	49.1897	52.8	12.2	40.8	2.814	0.008	0.007	0.000	0.181	0.15	
2275	4/21/2004	10:54:13 AM		26.634	25.525	26.684	26.353	26.189		49.475	54.293	17.958	31.81	-0.937	-7.018		48.815	0.052	14.643	0.003		2952.4	49.2064	52.8	12.0	40.6	2.802	0.008	0.007	0.000	0.182	0.15	
2276	4/21/2004	10:55:13 AM		26.651	25.542	26.477	26.47	26.236		49.678	54.202	17.971	32.116	-0.937	-7.012		50.194	0.051	14.643	0.003		2953.4	49.2231	52.7	12.3	40.9	2.820	0.008	0.007	0.000	0.178	0.15	
2277	4/21/2004	10:56:13 AM		26.65	25.556	26.48	26.549	26.414		49.573	54.275	17.893	31.952	-0.937	-7.009		49.827	0.052	14.643	0.003		2954.4	49.2397	52.8	12.2	40.8	2.810	0.008	0.007	0.000	0.182	0.16	
2278	4/21/2004	10:57:13 AM		26.648	25.57	26.479	26.588	26.254		49.763	54.364	17.862	32.291	-0.94	-7.03		48.412	0.049	14.643	0.003		2955.4	49.2564	52.9	11.9	41.0	2.829	0.007	0.007	0.000	0.171	0.15	
2279	4/21/2004	10:58:13 AM		26.646	25.577	26.501	26.57	26.226		49.492	54.287	17.826	31.969	-0.934	-7.006		49.426	0.051	14.643	0.003		2956.4	49.2731	52.8	12.1	40.7	2.808	0.008	0.007	0.000	0.179	0.15	
2280	4/21/2004	10:59:13 AM		26.649	25.59	26.509	26.523	26.144		49.542	54.302	17.884	31.93	-0.911	-6.992		49.019	0.054	14.643	0.003		2957.4	49.2897	52.8	12.0	40.7	2.809	0.008	0.008	0.000	0.189	0.16	
2281	4/21/2004	11:00:13 AM		26.641	25.602	26.522	26.495	26.011		49.513	54.208	17.842	32.051	-0.937	-7.015		48.352	0.05	14.643	0.003		2958.4	49.3064	52.7	11.8	40.8	2.812	0.007	0.007	0.000	0.175	0.15	
2282	4/21/2004	11:01:13 AM		26.63	25.606	26.521	26.499	26.031		49.73	54.391	17.901	32.147	-0.934	-6.96		49.731	0.05	14.643	0.003		2959.4	49.3231	52.9	12.2	40.9	2.823	0.007	0.007	0.000	0.174	0.15	
2283	4/21/2004	11:02:13 AM		26.642	25.618	26.542	26.466	26.027		49.446	54.308	17.762	32.049	-0.815	-6.758		49.656	0.054	14.643	0.004		2960.4	49.3397	52.8	12.2	40.7	2.809	0.008	0.008	0.000	0.189	0.16	
2284	4/21/2004	11:03:13 AM		26.651	25.632	26.557	26.42	25.937		49.432	54.08	17.775	32.047	-0.882	-6.946		48.711	0.05	14.643	0.003		2961.4	49.3564	52.6	11.9	40.7	2.809	0.007	0.007	0.000	0.175	0.15	
2285	4/21/2004	11:04:13 AM		26.631	25.627	26.527	26.325	25.882		49.446	54.273	17.817	31.999	-0.888	-6.963		49.67	0.051	14.643	0.003		2962.4	49.3731	52.8	12.2	40.7	2.808	0.008	0.007	0.000	0.179	0.15	
2286	4/21/2004	11:04:46 AM		26.636	25.642	26.552	26.315	25.897		49.759	54.612	17.944	32.161	-0.888	-6.952		50.404	0.052	14.643	0.003		2962.9	49.3822	53.1	12.4	41.0	2.824	0.008	0.007	0.000	0.181	0.15	
2287	4/21/2004	11:05:46 AM		26.637	25.648	26.562	26.296	25.847		49.241	53.966	17.827	31.728	-0.885	-6.954		49.343	0.05	14.643	0.003		2963.9	49.3989	52.5	12.1	40.5	2.791	0.007	0.007	0.000	0.176	0.15	
2288	4/21/2004	11:06:46 AM		26.657	25.669	26.593	26.312	25.883		49.477	54.339	17.995	31.687	-0.885	-6.949		49.679	0.051	14.643	0.003		2964.9	49.4156	52.9	12.2	40.6	2.798	0.008	0.007	0.000	0.179	0.15	
2289	4/21/2004	11:07:46 AM		26.631	25.642	26.567	26.25	26.136		49.28	54.065	18.021	31.587	-0.888	-6.949		50.273	0.052	14.643	0.003		2965.9	49.4322	52.6	12.3	40.4	2.788	0.008	0.007	0.000	0.184	0.16	
2290	4/21/2004	11:08:46 AM		26.629	25.641	26.57	26.244	26.045		49.228	54.003	18.173	31.357	-0.888	-6.96		48.26	0.05	14.643	0.003		2966.9	49.4489	52.5	11.8	40.3	2.778	0.007	0.007	0.000	0.177	0.15	
2291	4/21/2004	11:09:46 AM		26.646	25.653	26.597	26.266	25.867		49.407	54.159	17.994	31.835	-0.885	-6.957		49.795	0.052	14.643	0.003		2967.9	49.4656	52.7	12.2	40.6	2.801	0.008	0.007	0.000	0.183	0.16	
2292	4/21/2004	11:10:46 AM		26.651	25.663	26.602	26.236	25.757		49.421	54.225	18.272	31.568	-0.865	-6.952		50.169	0.052	14.643	0.003		2968.9	49.4822	52.8	12.3	40.5	2.792	0.008	0.007	0.000	0.183	0.16	
2293	4/21/2004	11:11:46 AM		26.656	25.667	26.616	26.22	25.762		49.282	54.047	18.111	31.527	-0.885	-6.943		50.292	0.053	14.643	0.003		2969.9	49.4989	52.6	12.3	40.4	2.786	0.008	0.008	0.000	0.187	0.16	
2294	4/21/2004	11:12:46 AM		26.656	25.657	26.616	26.205	25.752		49.255	54.059	17.949	31.659	-0.882	-6.943		51.153	0.053	14.643	0.003		2970.9	49.5156	52.6	12.5	40.5	2.789	0.008	0.008	0.000	0.187	0.16	
2295	4/21/2004	11:13:46 AM		26.661	25.678	26.637	26.231	25.737		49.197	53.862	18.026	31.363	-0.847	-6.954		50.601	0.05	14.643	0.003		2971.9	49.5322	52.4	12.4	40.3	2.777	0.007	0.007	0.000	0.177	0.15	
2296	4/21/2004	11:14:46 AM		26.656	25.652	26.616	26.19	25.672		49.496	54.374	18.037	31.823	-0.873	-6.946		49.937	0.052	14.643	0.003		2972.9	49.5489	52.9	12.2	40.7	2.803	0.008	0.007	0.000	0.182	0.16	
2297	4/21/2004	11:15:46 AM		26.661	25.662	26.636	26.2	25.742		49.492	54.198	18.047	31.823	-0.821	-6.952		50.594	0.051	14.643	0.003		2973.9	49.5656	52.7	12.4	40.7	2.803	0.008	0.007	0.000	0.179	0.15	
2298	4/21/2004	11:16:46 AM		26.645	25.641	26.615	26.134	25.746		49.316	54.076	18.086	31.529	-0.841	-6.946		50.163	0.053	14.643	0.003		2974.9	49.5822	52.6	12.3	40.4	2.787	0.008	0.008	0.000	0.187	0.16	
2299	4/21/2004	11:17:46 AM		26.655	25.646	26.625	26.129	25.636		49.483	54.362	18.223	31.568	-0.821	-6.862		50.311	0.054	14.643	0.003		2975.9	49.5989	52.9	12.3	40.5	2.794	0.008	0.008	0.000	0.190	0.16	
2300	4/21/2004	11:18:46 AM		26.66	25.641	26.64	26.149	25.656		49.284	54.084	17.999	31.566	-0.818	-6.926		50.991	0.051	14.643	0.003		2976.9	49.6156	52.6	12.5	40.4	2.787	0.008	0.007	0.000	0.180	0.15	
2301	4/21/2004	11:19:46 AM		26.671	25.642	26.661	26.185	25.891		49.21	54.109	18.167	31.355	-0.815	-6.923		48.496	0.051	14.643	0.003		2977.9	49.6322	52.6	11.9	40.3	2.777	0.008	0.007	0.000	0.180	0.15	
2302	4/21/2004	11:20:46 AM		26.686	25.658	26.687	26.301	26.002		49.43	54.244	18.132	31.646	-0.818	-6.92		48.337	0.051	14.643	0.003		2978.9	49.6489	52.8	11.8	40.5	2.795	0.008	0.007	0.000	0.179	0.15	
2303	4/21/2004	11:21:46 AM		26.684	25.661	26.68	26.414	26.19		49.32	54.096	17.887	31.774	-0.821	-6.885		49.568	0.052	14.643	0.003		2979.9	49.6656	52.6	12.1	40.5	2.796	0.008	0.007	0.000	0.182	0.16	
2304	4/21/2004	11:22:46 AM		26.697	25.668	26.682	26.506	26.327		49.305	54.14	17.846	31.843	-0.772	-6.827		49.412	0.055	14.643	0.003		2980.9	49.6822	52.7	12.1	40.6	2.797	0.008	0.008	0.000	0.193	0.16	
2305	4/21/2004	11:23:46 AM		26.698	25.669	26.569	26.607	26.363		49.434	54.254	17.931	31.891	-0.795	-6.905		50.158	0.052	14.643	0.003		2981.9	49.6989	52.8	12.3	40.7	2.804	0.008	0.007	0.000	0.182	0.16	
2306	4/21/2004	11:24:46 AM		26.7	25.687	26.536	26.69	26.38		49.38	54.159	17.981	31.757	-0.818	-6.908		49.672	0.051	14.643	0.003		2982.9	49.7156	52.7	12.2	40.6	2.797	0.008	0.007	0.000	0.180	0.15	
2307	4/21/2004	11:25:46 AM		26.697	25.688	26.543	26.701	26.287		49.328	54.14	18.038	31.618	-0.818	-6.917		50.943	0.05	14.643	0.003		2983.9	49.7322	52.7	12.5	40.5	2.790	0.007	0.007	0.000	0.176	0.15	
2308	4/21/2004	11:26:46 AM		26.7	25.696	26.551	26.694	26.19		48.928	53.771	17.909	31.291	-0.818	-6.891		50.943	0.05	14.643	0.003		2984.9	49.7489	52.3	12.5	40.1	2.765	0.007	0.007	0.000	0.178	0.15	
2309	4/21/2004	11:27:46 AM		26.701	25.717	26.561	26.635	26.036		49.212	54.053	18.047	31.458	-0.775	-6.853		50.642	0.053	14.643	0.003		2985.9	49.7656	52.6	12.4	40.3	2.781	0.008	0.008	0.000	0.188	0.16	
2310	4/21/2004	11:28:46 AM		26.707	25.724	26.583	26.581	26.148		49.579	54.443	17.958	31.895	-0.792	-6.897		51.785	0.051	14.643	0.003		2986.9	49.7822	53.0	12.7	40.7	2.809	0.008	0.007	0.000	0.179	0.15	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2311	4/21/2004	11:29:46 AM		26.704	25.73	26.589	26.538	26.149		49.353	54.208	17.796	31.934	-0.818	-6.894		48.189	0.052	14.643	0.003		2987.9	49.7989	52.7	11.8	40.6	2.802	0.008	0.007	0.000	0.182	0.16	
2312	4/21/2004	11:30:46 AM		26.715	25.742	26.601	26.535	26.126		48.951	53.833	17.885	31.505	-0.775	-6.926		50.584	0.049	14.643	0.003		2988.9	49.8156	52.4	12.4	40.2	2.774	0.007	0.007	0.000	0.174	0.15	
2313	4/21/2004	11:31:46 AM		26.711	25.742	26.612	26.505	26.052		49.428	54.37	18.077	31.601	-0.772	-6.813		49.777	0.047	14.643	0.003		2989.9	49.8322	52.9	12.2	40.5	2.793	0.007	0.007	0.000	0.165	0.14	
2314	4/21/2004	11:32:46 AM		26.697	25.738	26.567	26.446	26.102		49.407	54.215	17.95	31.847	-0.772	-6.865		51.287	0.052	14.643	0.003		2990.9	49.8489	52.7	12.6	40.6	2.801	0.008	0.007	0.000	0.183	0.16	
2315	4/21/2004	11:33:46 AM		26.712	25.743	26.567	26.446	25.997		49.235	54.011	17.953	31.611	-0.781	-6.923		48.777	0.047	14.643	0.003		2991.9	49.8656	52.5	12.0	40.4	2.787	0.007	0.007	0.000	0.166	0.14	
2316	4/21/2004	11:34:46 AM		26.712	25.743	26.528	26.401	25.947		49.247	54.057	17.976	31.614	-0.815	-6.902		51.47	0.048	14.643	0.003		2992.9	49.8822	52.6	12.6	40.4	2.788	0.007	0.007	0.000	0.170	0.14	
2317	4/21/2004	11:35:46 AM		26.712	25.758	26.508	26.406	25.977		49.396	54.329	18.04	31.589	-0.786	-6.885		48.748	0.052	14.643	0.003		2993.9	49.8989	52.9	11.9	40.5	2.792	0.008	0.007	0.000	0.184	0.16	
2318	4/21/2004	11:36:46 AM		26.708	25.765	26.499	26.348	25.884		49.428	54.293	18.078	31.71	-0.813	-6.897		48.608	0.05	14.643	0.003		2994.9	49.9156	52.8	11.9	40.6	2.797	0.007	0.007	0.000	0.176	0.15	
2319	4/21/2004	11:37:46 AM		26.714	25.775	26.495	26.378	25.91		49.206	54.065	17.865	31.683	-0.789	-6.879		50.578	0.053	14.643	0.003		2995.9	49.9322	52.6	12.4	40.4	2.789	0.008	0.008	0.000	0.187	0.16	
2320	4/21/2004	11:38:46 AM		26.694	25.76	26.44	26.328	25.96		49.512	54.358	18.139	31.667	-0.784	-6.894		50.265	0.051	14.643	0.003		2996.9	49.9489	52.9	12.3	40.6	2.799	0.008	0.007	0.000	0.180	0.15	
2321	4/21/2004	11:39:46 AM		26.695	25.756	26.441	26.284	25.896		49.318	54.21	17.941	31.704	-0.798	-6.897		48.661	0.048	14.643	0.003		2997.9	49.9656	52.7	11.9	40.5	2.793	0.007	0.007	0.000	0.170	0.14	
2322	4/21/2004	11:40:46 AM		26.674	25.76	26.34	26.328	26		49.266	54.159	18.045	31.54	-0.775	-6.845		51.535	0.048	14.643	0.003		2998.9	49.9822	52.7	12.6	40.4	2.786	0.007	0.007	0.000	0.171	0.15	
2323	4/21/2004	11:41:46 AM		26.669	25.77	26.32	26.368	25.89		49.143	53.995	17.935	31.554	-0.766	-6.816		50.167	0.051	14.643	0.003		2999.9	49.9989	52.5	12.3	40.3	2.782	0.008	0.007	0.000	0.182	0.15	
2324	4/21/2004	11:42:46 AM		26.665	25.761	26.281	26.314	25.906		49.249	54.115	17.952	31.517	-0.769	-6.827		50.267	0.052	14.643	0.003		3000.9	50.0156	52.6	12.3	40.4	2.784	0.008	0.007	0.000	0.185	0.16	
2325	4/21/2004	11:43:46 AM		26.649	25.75	26.285	26.268	25.86		49.452	54.297	18.013	31.794	-0.772	-6.842		50.263	0.05	14.643	0.003		3001.9	50.0322	52.8	12.3	40.6	2.801	0.007	0.007	0.000	0.177	0.15	
2326	4/21/2004	11:44:46 AM		26.634	25.745	26.265	26.243	25.875		49.361	54.3	17.951	31.724	-0.769	-6.842		50.719	0.049	14.643	0.003		3002.9	50.0489	52.8	12.4	40.5	2.795	0.007	0.007	0.000	0.174	0.15	
2327	4/21/2004	11:45:46 AM		26.618	25.755	26.264	26.227	25.909		49.069	53.891	17.973	31.462	-0.772	-6.836		50.676	0.051	14.643	0.003		3003.9	50.0656	52.4	12.4	40.3	2.776	0.008	0.007	0.000	0.182	0.16	
2328	4/21/2004	11:46:46 AM		26.603	25.744	26.258	26.222	25.783		49.266	54.194	18.033	31.515	-0.769	-6.839		48.517	0.049	14.643	0.003		3004.9	50.0822	52.7	11.9	40.4	2.785	0.007	0.007	0.000	0.175	0.15	
2329	4/21/2004	11:47:46 AM		26.581	25.732	26.222	26.195	25.777		49.137	54.047	17.971	31.47	-0.749	-6.839		49.985	0.051	14.643	0.003		3005.9	50.0989	52.6	12.2	40.3	2.779	0.008	0.007	0.000	0.182	0.16	
2330	4/21/2004	11:48:46 AM		26.565	25.726	26.21	26.229	25.805		49.133	54.047	17.785	31.62	-0.772	-6.842		49.841	0.051	14.643	0.003		3006.9	50.1156	52.6	12.2	40.4	2.784	0.008	0.007	0.000	0.182	0.15	
2331	4/21/2004	11:49:46 AM		26.562	25.729	26.228	26.236	25.783		49.27	54.13	17.954	31.636	-0.717	-6.833		50.805	0.051	14.643	0.003		3007.9	50.1322	52.7	12.5	40.5	2.789	0.008	0.007	0.000	0.182	0.15	
2332	4/21/2004	11:50:46 AM		26.567	25.753	26.237	26.306	25.842		49.475	54.277	17.989	31.72	-0.729	-6.833		49.587	0.05	14.643	0.003		3008.9	50.1489	52.8	12.2	40.6	2.799	0.007	0.007	0.000	0.177	0.15	
2333	4/21/2004	11:51:46 AM		26.545	25.741	26.206	26.244	25.911		49.427	54.378	18.072	31.657	-0.731	-6.833		51.011	0.05	14.643	0.003		3009.9	50.1656	52.9	12.5	40.5	2.795	0.007	0.007	0.000	0.178	0.15	
2334	4/21/2004	11:52:46 AM		26.534	25.735	26.215	26.233	25.725		49.222	54.235	17.96	31.566	-0.726	-6.827		49.956	0.052	14.643	0.003		3010.9	50.1822	52.8	12.2	40.4	2.785	0.008	0.007	0.000	0.186	0.16	
2335	4/21/2004	11:53:46 AM		26.529	25.73	26.189	26.228	25.749		49.396	54.293	17.93	31.808	-0.772	-6.819		49.766	0.049	14.643	0.003		3011.9	50.1989	52.8	12.2	40.6	2.799	0.007	0.007	0.000	0.174	0.15	
2336	4/21/2004	11:54:46 AM		26.513	25.724	26.199	26.207	25.814		49.407	54.328	18.021	31.72	-0.705	-6.772		49.691	0.054	14.643	0.003		3012.9	50.2156	52.9	12.2	40.6	2.797	0.008	0.008	0.000	0.192	0.16	
2337	4/21/2004	11:55:46 AM		26.518	25.729	26.204	26.257	26.068		49.55	54.488	18.128	31.745	-0.749	-6.836		49.749	0.051	14.643	0.003		3013.9	50.2322	53.0	12.2	40.6	2.803	0.008	0.007	0.000	0.181	0.15	
2338	4/21/2004	11:56:46 AM		26.516	25.732	26.067	26.29	26.012		48.998	53.866	18.008	31.314	-0.752	-6.847		50.699	0.05	14.643	0.003		3014.9	50.2489	52.4	12.4	40.2	2.769	0.007	0.007	0.000	0.180	0.15	
2339	4/21/2004	11:57:46 AM		26.5	25.721	26.071	26.269	25.91		49.228	54.279	17.988	31.535	-0.755	-6.865		48.848	0.048	14.643	0.004		3015.9	50.2656	52.8	12.0	40.4	2.784	0.007	0.007	0.000	0.172	0.15	
2340	4/21/2004	11:58:46 AM		26.49	25.726	26.046	26.264	25.86		49.04	53.916	18.025	31.355	-0.772	-6.842		50.648	0.048	14.643	0.003		3016.9	50.2822	52.4	12.4	40.2	2.771	0.007	0.007	0.000	0.173	0.15	
2341	4/21/2004	11:59:46 AM		26.485	25.716	26.041	26.224	25.741		49.201	54.15	18.087	31.355	-0.772	-6.842		50.452	0.051	14.643	0.003		3017.9	50.2989	52.7	12.4	40.3	2.777	0.008	0.007	0.000	0.183	0.16	
2342	4/21/2004	12:00:46 PM		26.455	25.716	26.036	26.129	25.691		49.257	54.175	17.978	31.665	-0.743	-6.85		49.397	0.05	14.643	0.003		3018.9	50.3156	52.7	12.1	40.5	2.790	0.007	0.007	0.000	0.179	0.15	
2343	4/21/2004	12:01:46 PM		26.461	25.722	26.046	26.14	25.731		48.984	53.966	17.992	31.308	-0.766	-6.842		50.304	0.051	14.643	0.003		3019.9	50.3322	52.5	12.3	40.1	2.768	0.008	0.007	0.000	0.184	0.16	
2344	4/21/2004	12:02:46 PM		26.43	25.716	26.046	26.124	25.831		49.141	53.987	18.034	31.447	-0.717	-6.847		49.501	0.051	14.643	0.003		3020.9	50.3489	52.5	12.1	40.3	2.778	0.008	0.007	0.000	0.183	0.16	
2345	4/21/2004	12:03:46 PM		26.427	25.717	26.057	26.21	25.982		48.986	54.022	18.009	31.295	-0.772	-6.758		51.084	0.051	14.643	0.003		3021.9	50.3656	52.5	12.5	40.1	2.768	0.008	0.007	0.000	0.184	0.16	
2346	4/21/2004	12:04:46 PM		26.423	25.729	26.054	26.312	26.093		49.044	54.034	18.05	31.341	-0.65	-6.599		50.623	0.05	14.643	0.003		3022.9	50.3822	52.6	12.4	40.2	2.771	0.007	0.007	0.000	0.180	0.15	
2347	4/21/2004	12:05:46 PM		26.422	25.733	26.082	26.401	26.042		49.313	54.324	17.793	31.85	-0.705	-6.743		50.799	0.054	14.643	0.003		3023.9	50.3989	52.9	12.4	40.6	2.798	0.008	0.008	0.000	0.192	0.16	
2348	4/21/2004	12:06:46 PM		26.411	25.737	26.067	26.51	26.246		49.374	54.337	17.845	31.858	-0.708	-6.729		48.863	0.05	14.643	0.003		3024.9	50.4156	52.9	12.0	40.6	2.800	0.007	0.007	0.000	0.178	0.15	
2349	4/21/2004	12:07:46 PM		26.408	25.739	26.059	26.582	26.218		49.479	54.542	17.862	31.796	-0.708	-6.729		50.321	0.05	14.643	0.003		3025.9	50.4322	53.1	12.3	40.6	2.802	0.007	0.007	0.000	0.178	0.15	
2350	4/21/2004	12:08:46 PM		26.41	25.746	26.071	26.599	26.235		49.272	54.27	17.807	31.743	-0.705	-6.729		50.225	0.05	14.643	0.003		3026.9	50.4489	52.8	12.3	40.5	2.793	0.007	0.007	0.000	0.179	0.15	
2351	4/21/2004	12:09:46 PM		26.413	25.769	26.059	26.607	26.168		49.537	54.476	17.787	32.034	-0.708	-6.726		49.848	0.05	14.643	0.003		3027.9	50.4656	53.0	12.2	40.8	2.812	0.007	0.007	0.000	0.177	0.15	
2352	4/21/2004	12:10:46 PM		26.415	25.771	26.07	26.554	26.2		49.631	54.637	17.83	32.137	-0.694	-6.732		49.572	0.05	14.643	0.003		3028.9	50.4822	53.2	12.1	40.9	2.819	0.007	0.007	0.000	0.177	0.15	
2353	4/21/2004	12:11:46 PM		26.411	25.771	26.071	26.519	26.165		49.423	54.386	17.836	31.811	-0.7	-6.735		49.622	0.05	14.643	0.003		3029.9	50.4989	52.9	12.2	40.6	2.800	0.007	0.007	0.000	0.178	0.15	
2354	4/21/2004	12:12:46 PM		26.407	25.773	26.048	26.496	26.222		49.407	54.362	17.748	32.014	-0.65	-6.691		49.558	0.051	14.643	0.003		3030.9	50.5156	52.9	12.1	40.7	2.807	0.008	0.007	0.000	0.181	0.15	
2355	4/21/2004	12:13:46 PM		26.414	25.795	26.069	26.452	26.248		49.075	54.123	17.812	31.669	-0.676	-6.732		48.696	0.051	14.643	0.003		3031.9	50.5322	52.7	11.9	40.4	2.784	0.008	0.007	0.000	0.183	0.16	
2356	4/21/2004	12:14:46 PM		26.419	25.805	26.08	26.433	26.055		49.315	54.322	17.866	31.739	-0.648	-6.732		49.458	0.049	14.643	0.004		3032.9	50.5489	52.8	12.1	40.5	2.794	0.007	0.007	0.000	0.175	0.15	
2357	4/21/2004	12:15:46 PM		26.399	25.8	26.04	26.423	26.134		49.726	54.685	17.963	32.046	-0.653	-6.735		49.445	0.049	14.643	0.003		3033.9	50.5656	53.2	12.1	40.9	2.819	0.007	0.007	0.000	0.174	0.15	
2358	4/21/2004	12:16:46 PM		26.409	25.805	26.065	26.398	26.01		49.315	54.287	17.707	31.979	-0.653	-6.738		49.67	0.05	14.643	0.003		3034.9	50.5822	52.8	12.2	40.6	2.802	0.007	0.007	0.000	0.178	0.15	
2359	4/21/2004	12:17:46 PM		26.415	25.811	26.066	26.409	25.99		49.363	54.275	17.786	31.864	-0.65	-6.732		49.883	0.051	14.643	0.003		3035.9	50.5989	52.8	12.2	40.6	2.800	0.008	0.007	0.000	0.182	0.15	
2360	4/21/2004	12:18:46 PM		26.414	25.81	26.05	26.398	25.965		49.232	54.235	17.625	31.987	-0.653	-6.729		49.447	0.049	14.643	0.003		3036.9	50.6156	52.8	12.1	40.6	2.800	0.007	0.007	0.000	0.175	0.15	
2361	4/21/2004	12:19:46 PM		26.415	25.816	26.026	26.394	26.05		49.044	53.987	17.724	31.671	-0.653	-6.729		50.694	0.05	14.643	0.003		3037.9	50.6322	52.5	12.4	40.4	2.783	0.007	0.007	0.000	0.179	0.15	
2362	4/21/2004	12:20:46 PM		26.414	25.805	25.99	26.388	25.975		49.083	54.129	17.736	31.611	-0.65	-6.732		48.237	0.05	14.643	0.003		3038.9	50.6489	52.7	11.8	40.3	2.782	0.007	0.007	0.000	0.180	0.15	
2363	4/21/2004	12:21:46 PM		26.399	25.805	25.979	26.367	25.869		49.233	54.225	17.894	31.62	-0.653	-6.729		50.229	0.051	14.643	0.003		3039.9	50.6656	52.8	12.3	40.4	2.787	0.008	0.007	0.000	0.183	0.16	
2364	4/21/2004	12:22:46 PM		26.399	25.81	25.999	26.357	25.884		49.349	54.403	17.82	31.944	-0.65	-6.729		50.248	0.051	14.643	0.003		3040.9	50.6822	52.9	12.3	40.6	2.802	0.008	0.007	0.000	0.182	0.15	
2365	4/21/2004	12:23:46 PM		26.383	25.799	25.969	26.357	25.883		49.143	54.198	17.88	31.704	-0.653	-6.729		52.169	0.05	14.643	0.003		3041.9	50.6989	52.7	12.8	40.4	2.787	0.007	0.007	0.000	0.179	0.15	
2366	4/21/2004	12:24:46 PM		26.392	25.798	25.998	26.321	25.917		49.479	54.594	17.698	32.116	-0.653	-6.723		51.143	0.05	14.643	0.003		3042.9	50.7156	53.1	12.5	40.8	2.813	0.007	0.007	0.000	0.178	0.15	
2367	4/21/2004	12:25:46 PM		26.376	25.812	25.996	26.344	25.846		48.984	54.072	17.821	31.509	-0.65	-6.726		50.321	0.05	14.643	0.003		3043.9	50.7322	52.6	12.3	40.2	2.775	0.007	0.007	0.000	0.180	0.15	
2368	4/21/2004	12:26:46 PM		26.381	25.812	25.986	26.334	25.861		49.239	54.248	17.846	31.677	-0.648	-6.723		50.158	0.05	14.643	0.003		3044.9	50.7489	52.8	12.3	40.5	2.789	0.007	0.007	0.000	0.179	0.15	
2369	4/21/2004	12:27:46 PM		26.386	25.807	26.021	26.339	25.956		49.326	54.362	17.82	31.843	-0.65	-6.723		48.857	0.048	14.643	0.003		3045.9	50.7656	52.9	12.0	40.6	2.798	0.007	0.007	0.000	0.171	0.15	
2370	4/21/2004	12:28:46 PM		26.379	25.79	26.01	26.353	25.909		49.353	54.463	17.812	31.778	-0.621	-6.662		49.299	0.049	14.643	0.003		3046.9	50.7822	53.0	12.1	40.6	2.797	0.007	0.007	0.000	0.175	0.15	
2371	4/21/2004	12:29:46 PM		26.358	25.784	25.989	26.357	25.879		49.191	54.277	17.844	31.638	-0.581	-6.697		49.574	0.051	14.643	0.003		3047.9	50.7989	52.8	12.1	40.4	2.786	0.008	0.007	0.000	0.183	0.16	
2372	4/21/2004	12:30:46 PM		26.383	25.804	26.024	26.387	25.849		49.264	54.308	17.782	31.831	-0.61	-6.7		48.963	0.051	14.643	0.003		3048.9	50.8156	52.8	12.0	40.5	2.796	0.008	0.007	0.000	0.182	0.16	
2373	4/21/2004	12:31:46 PM		26.383	25.808	26.018	26.436	25.803		49.091	54.217	17.724	31.646	-0.581	-6.593		49.12	0.045	14.643	0.003		3049.9	50.8322	52.7	12.0	40.4	2.783	0.007	0.007	0.000	0.162	0.14	
2374	4/21/2004	12:32:46 PM		26.388	25.798	26.043	26.446	25.883		49.125	54.194	17.83	31.558	-0.578	-6.642		50.763	0.052	14.643	0.004		3050.9	50.8489	52.7	12.4	40.3	2.781	0.008	0.008	0.000	0.187	0.16	
2375	4/21/2004	12:33:46 PM		26.371	25.792	26.022	26.46	25.891		49.386	54.472	17.804	31.948	-0.648	-6.688		49.827	0.05	14.643	0.003		3051.9	50.8656	53.0	12.2	40.7	2.804	0.007	0.007	0.000	0.178	0.15	
2376	4/21/2004	12:34:46 PM		26.381	25.792	26.017	26.465	25.886		49.183	54.169	17.775	31.691	-0.581	-6.694		50.031	0.048	14.643	0.003		3052.9	50.8822	52.7	12.3	40.4	2.788	0.007	0.007	0.000	0.172	0.15	
2377	4/21/2004	12:35:46 PM		26.385	25.786	26.041	26.419	25.896		49.457	54.546	17.835	31.921	-0.581	-6.691		48.331	0.049	14.643	0.003		3053.9	50.8989	53.1	11.8	40.7	2.805	0.007	0.007	0.000	0.174	0.15	
2378	4/21/2004	12:36:46 PM		26.38	25.79	26.035	26.373	25.82		49.786	54.89	17.906	32.125	-0.581	-6.688		50.235	0.047	14.643	0.003		3054.9	50.9156	53.4	12.3	41.0	2.824	0.007	0.007	0.000	0.166	0.14	
2379	4/21/2004	12:37:46 PM		26.385	25.796	26.036	26.344	25.821		49.042	54.117	17.785	31.574	-0.581	-6.697		51.47	0.049	14.643	0.003		3055.9	50.9322	52.6	12.6	40.3	2.779	0.007	0.007	0.000	0.176	0.15	
2380	4/21/2004	12:38:46 PM		26.385	25.79	26.055	26.303	25.965		49.376	54.465	17.935	31.728	-0.607	-6.68		49.556	0.052	14.643	0.003		3056.9	50.9489	53.0	12.1	40.6	2.796	0.008	0.008	0.000	0.186	0.16	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2381	4/21/2004	12:39:46 PM		26.39	25.796	26.046	26.319	26.005		49.372	54.501	17.77	31.897	-0.543	-6.535		49.597	0.038	14.643	0.003		3057.9	50.9656	53.0	12.2	40.6	2.802	0.006	0.006	0.000	0.135	0.12	
2382	4/21/2004	12:40:46 PM		26.407	25.808	26.087	26.316	26.072		49.291	54.413	17.93	31.659	-0.552	-6.657		51.162	0.05	14.643	0.003		3058.9	50.9822	52.9	12.5	40.5	2.791	0.007	0.007	0.000	0.179	0.15	
2383	4/21/2004	12:41:46 PM		26.392	25.798	26.067	26.326	25.937		49.382	54.544	17.835	31.874	-0.546	-6.668		50.34	0.05	14.643	0.003		3059.9	50.9989	53.1	12.3	40.6	2.801	0.007	0.007	0.000	0.178	0.15	
2384	4/21/2004	12:42:46 PM		26.391	25.782	26.052	26.35	25.986		49.243	54.366	17.7	31.87	-0.555	-6.665		50.212	0.05	14.643	0.003		3060.9	51.0156	52.9	12.3	40.6	2.796	0.007	0.007	0.000	0.178	0.15	
2385	4/21/2004	12:43:46 PM		26.39	25.791	26.081	26.359	25.931		49.206	54.333	17.794	31.661	-0.543	-6.561		50.692	0.038	14.643	0.003		3061.9	51.0322	52.9	12.4	40.4	2.788	0.006	0.005	0.000	0.136	0.12	
2386	4/21/2004	12:44:46 PM		26.4	25.791	26.076	26.334	26.08		49.409	54.579	17.846	31.815	-0.543	-6.634		47.916	0.049	14.643	0.003		3062.9	51.0489	53.1	11.7	40.6	2.800	0.007	0.007	0.000	0.175	0.15	
2387	4/21/2004	12:45:46 PM		26.396	25.787	26.072	26.34	26.081		49.309	54.413	17.74	31.938	-0.549	-6.686		49.449	0.052	14.643	0.003		3063.9	51.0656	52.9	12.1	40.6	2.801	0.008	0.008	0.000	0.185	0.16	
2388	4/21/2004	12:46:46 PM		26.399	25.785	26.085	26.373	25.995		49.206	54.241	17.743	31.804	-0.65	-6.558		49.714	0.047	14.643	0.003		3064.9	51.0822	52.8	12.2	40.5	2.793	0.007	0.007	0.000	0.168	0.14	
2389	4/21/2004	12:47:46 PM		26.402	25.783	26.078	26.376	25.863		49.152	54.368	17.789	31.652	-0.48	-6.336		49.04	0.054	14.643	0.003		3065.9	51.0989	52.9	12.0	40.4	2.786	0.008	0.008	0.000	0.193	0.16	
2390	4/21/2004	12:48:46 PM		26.411	25.782	26.101	26.334	25.816		49.378	54.554	17.759	31.874	-0.477	-6.313		50.797	0.047	14.643	0.003		3066.9	51.1156	53.1	12.4	40.6	2.801	0.007	0.007	0.000	0.167	0.14	
2391	4/21/2004	12:49:46 PM		26.397	25.768	26.077	26.161	25.643		49.255	54.467	17.741	31.929	-0.483	-6.33		49.263	0.05	14.643	0.003		3067.9	51.1322	53.0	12.1	40.6	2.799	0.007	0.007	0.000	0.178	0.15	
2392	4/21/2004	12:50:46 PM		26.383	25.754	26.049	26.032	25.534		49.16	54.405	17.829	31.661	-0.483	-6.344		49.512	0.05	14.643	0.003		3068.9	51.1489	52.9	12.1	40.4	2.786	0.007	0.007	0.000	0.179	0.15	
2393	4/21/2004	12:51:46 PM		26.39	25.751	26.096	25.884	25.511		48.988	54.187	17.588	31.722	-0.483	-6.388		47.849	0.047	14.643	0.003		3069.9	51.1656	52.7	11.7	40.4	2.782	0.007	0.007	0.000	0.168	0.14	
2394	4/21/2004	12:52:46 PM		26.391	25.742	26.087	25.89	25.602		49.141	54.287	17.721	31.765	-0.483	-6.339		50.104	0.05	14.643	0.003		3070.9	51.1822	52.8	12.3	40.5	2.789	0.007	0.007	0.000	0.179	0.15	
2395	4/21/2004	12:53:46 PM		26.383	25.744	26.079	25.947	25.799		50.848	54.581	17.814	33.526	-1.221	-6.66		51.153	0.06	14.643	0.003		3071.9	51.1989	53.1	12.5	42.2	2.909	0.009	0.009	0.000	0.206	0.18	
2396	4/21/2004	12:54:46 PM		26.407	25.738	26.022	26.101	25.832		49.832	54.53	17.917	32.196	-0.94	-4.896		47.628	0.008	14.643	0.003		3072.9	51.2156	53.1	11.7	41.0	2.828	0.001	0.001	0.000	0.028	0.02	
2397	4/21/2004	12:55:46 PM		26.411	25.742	26.002	26.215	25.916		48.393	54.509	17.867	30.69	0.253	-2.078		50.373	0.03	14.643	0.003		3073.9	51.2322	53.0	12.3	39.5	2.726	0.004	0.004	0.000	0.110	0.09	
2398	4/21/2004	12:56:46 PM		26.405	25.731	26.016	26.179	25.896		47.679	54.351	17.762	30.241	0.93	-0.991		50.248	0.112	14.643	0.003		3074.9	51.2489	52.9	12.3	39.0	2.686	0.017	0.016	0.000	0.417	0.35	
2399	4/21/2004	12:57:46 PM		26.37	25.731	26.021	26.204	26.02		50.357	54.436	17.879	32.806	-1.221	-6.859		50.819	0.053	14.643	0.003		3075.9	51.2656	53.0	12.5	41.6	2.867	0.008	0.008	0.000	0.185	0.16	
2400	4/21/2004	12:58:46 PM		26.376	25.717	26.017	26.235	25.841		50.831	54.82	17.941	33.194	-1.221	-7.137		50.227	0.054	14.643	0.003		3076.9	51.2822	53.3	12.3	42.0	2.897	0.008	0.008	0.000	0.186	0.16	
2401	4/21/2004	12:59:46 PM		26.372	25.728	26.022	26.206	25.847		50.384	54.312	17.934	32.761	-1.227	-7.215		50.611	0.053	14.643	0.003		3077.9	51.2989	52.8	12.4	41.6	2.866	0.008	0.008	0.000	0.185	0.16	
2402	4/21/2004	1:00:46 PM		26.367	25.728	26.017	26.236	25.877		49.38	53.143	17.472	32.319	-1.218	-7.281		49.222	0.052	14.643	0.003		3078.9	51.3156	51.7	12.1	40.8	2.816	0.008	0.008	0.000	0.184	0.16	
2403	4/21/2004	1:01:46 PM		26.368	25.733	26.018	26.206	25.883		49.361	53.164	17.555	32.157	-1.221	-7.322		53.197	0.051	14.643	0.003		3079.9	51.3322	51.7	13.0	40.8	2.810	0.008	0.007	0.000	0.181	0.15	
2404	4/21/2004	1:02:46 PM		26.363	25.719	25.989	26.262	25.919		49.307	53.058	17.38	32.354	-1.221	-7.44		48.414	0.051	14.643	0.003		3080.9	51.3489	51.6	11.9	40.8	2.815	0.008	0.007	0.000	0.181	0.15	
2405	4/21/2004	1:03:46 PM		26.359	25.72	25.97	26.283	25.8		49.344	53.095	17.598	32.051	-1.218	-7.463		48.767	0.05	14.643	0.003		3081.9	51.3656	51.6	12.0	40.7	2.806	0.007	0.007	0.000	0.178	0.15	
2406	4/21/2004	1:04:46 PM		26.358	25.719	25.989	26.277	25.854		49.338	52.979	17.566	32.219	-1.218	-7.42		51.362	0.05	14.643	0.003		3082.9	51.3822	51.5	12.6	40.8	2.812	0.007	0.007	0.000	0.178	0.15	
2407	4/21/2004	1:05:46 PM		26.343	25.714	25.944	26.257	25.839		49.544	53.28	17.555	32.356	-1.221	-7.452		49.284	0.05	14.643	0.003		3083.9	51.3989	51.8	12.1	41.0	2.823	0.007	0.007	0.000	0.177	0.15	
2408	4/21/2004	1:06:46 PM		26.348	25.719	25.954	26.247	25.779		49.456	53.153	17.468	32.445	-1.221	-7.449		50.623	0.05	14.643	0.003		3084.9	51.4156	51.7	12.4	41.0	2.823	0.007	0.007	0.000	0.177	0.15	
2409	4/21/2004	1:07:46 PM		26.337	25.703	25.917	26.276	25.867		49.413	53.033	17.431	32.385	-1.224	-7.596		49.276	0.053	14.643	0.003		3085.9	51.4322	51.6	12.1	40.9	2.820	0.008	0.008	0.000	0.188	0.16	
2410	4/21/2004	1:08:46 PM		26.347	25.718	25.912	26.286	25.957		49.71	53.359	17.449	32.705	-1.221	-7.559		51.62	0.05	14.643	0.003		3086.9	51.4489	51.9	12.7	41.2	2.841	0.007	0.007	0.000	0.176	0.15	
2411	4/21/2004	1:09:46 PM		26.335	25.726	25.926	26.264	25.916		49.519	53.141	17.473	32.512	-1.221	-7.648		49.094	0.051	14.643	0.003		3087.9	51.4656	51.7	12.0	41.0	2.828	0.008	0.007	0.000	0.181	0.15	
2412	4/21/2004	1:10:46 PM		26.325	25.715	25.91	26.308	25.935		49.681	53.39	17.554	32.461	-1.221	-7.645		49.589	0.05	14.643	0.003		3088.9	51.4822	51.9	12.2	41.1	2.832	0.007	0.007	0.000	0.177	0.15	
2413	4/21/2004	1:11:46 PM		26.323	25.709	25.909	26.302	26.008		49.836	53.487	17.521	32.757	-1.221	-7.645		49.482	0.049	14.643	0.003		3089.9	51.4989	52.0	12.1	41.3	2.847	0.007	0.007	0.000	0.172	0.15	
2414	4/21/2004	1:12:46 PM		26.318	25.714	25.859	26.322	25.928		49.367	53.035	17.505	32.256	-1.221	-7.611		49.656	0.05	14.643	0.003		3090.9	51.5156	51.6	12.2	40.8	2.814	0.007	0.007	0.000	0.178	0.15	
2415	4/21/2004	1:13:46 PM		26.317	25.723	25.833	26.356	25.863		49.587	53.377	17.615	32.299	-1.221	-7.648		47.645	0.049	14.643	0.003		3091.9	51.5322	51.9	11.7	40.9	2.823	0.007	0.007	0.000	0.174	0.15	
2416	4/21/2004	1:14:46 PM		26.302	25.707	25.832	26.305	25.952		49.709	53.414	17.612	32.576	-1.221	-7.651		48.85	0.05	14.643	0.003		3092.9	51.5489	51.9	12.0	41.1	2.837	0.007	0.007	0.000	0.177	0.15	
2417	4/21/2004	1:15:46 PM		26.291	25.702	25.796	26.34	25.986		48.824	52.5	17.258	31.979	-1.224	-7.657		48.556	0.049	14.643	0.003		3093.9	51.5656	51.0	11.9	40.4	2.786	0.007	0.007	0.000	0.177	0.15	
2418	4/21/2004	1:16:46 PM		26.296	25.712	25.811	26.37	26.051		48.807	52.5	17.401	31.79	-1.221	-7.66		49.366	0.049	14.643	0.003		3094.9	51.5822	51.0	12.1	40.3	2.778	0.007	0.007	0.000	0.177	0.15	
2419	4/21/2004	1:17:46 PM		26.302	25.732	25.802	26.415	25.952		48.801	52.602	17.348	31.827	-1.221	-7.657		47.447	0.049	14.643	0.003		3095.9	51.5989	51.1	11.6	40.3	2.780	0.007	0.007	0.000	0.177	0.15	
2420	4/21/2004	1:18:46 PM		26.292	25.722	25.762	26.385	25.907		48.617	52.27	17.553	31.472	-1.224	-7.666		48.802	0.048	14.643	0.003		3096.9	51.6156	50.8	12.0	40.0	2.761	0.007	0.007	0.000	0.175	0.15	
2421	4/21/2004	1:19:46 PM		26.293	25.738	25.793	26.406	25.913		48.532	52.252	17.521	31.451	-1.218	-7.657		49.322	0.048	14.643	0.003		3097.9	51.6322	50.8	12.1	40.0	2.757	0.007	0.007	0.000	0.175	0.15	
2422	4/21/2004	1:20:46 PM		26.273	25.728	25.738	26.386	25.933		48.863	52.675	17.478	31.796	-1.221	-7.666		48.483	0.048	14.643	0.003		3098.9	51.6489	51.2	11.9	40.3	2.781	0.007	0.007	0.000	0.174	0.15	
2423	4/21/2004	1:21:46 PM		26.268	25.733	25.753	26.381	25.973		48.644	52.418	17.447	31.525	-1.218	-7.663		49.466	0.048	14.643	0.003		3099.9	51.6656	50.9	12.1	40.1	2.764	0.007	0.007	0.000	0.175	0.15	
2424	4/21/2004	1:22:46 PM		26.245	25.711	25.716	26.414	25.935		48.7	52.357	17.348	31.708	-1.224	-7.666		49.791	0.048	14.643	0.003		3100.9	51.6822	50.9	12.2	40.2	2.772	0.007	0.007	0.000	0.174	0.15	
2425	4/21/2004	1:23:46 PM		26.25	25.721	25.716	26.364	25.915		48.324	52.086	17.409	31.275	-1.221	-7.666		50.035	0.049	14.643	0.003		3101.9	51.6989	50.6	12.3	39.8	2.744	0.007	0.007	0.000	0.180	0.15	
2426	4/21/2004	1:24:46 PM		26.236	25.727	25.696	26.355	26.021		48.702	52.364	17.368	31.786	-1.227	-7.668		49.651	0.048	14.643	0.003		3102.9	51.7156	50.9	12.2	40.2	2.775	0.007	0.007	0.000	0.174	0.15	
2427	4/21/2004	1:25:41 PM		26.248	25.743	25.708	26.376	25.913		48.745	52.496	17.482	31.65	-1.221	-7.666		49.549	0.048	14.643	0.003		3103.9	51.7308	51.0	12.1	40.2	2.771	0.007	0.007	0.000	0.175	0.15	
2428	4/21/2004	1:26:41 PM		26.218	25.728	25.693	26.331	25.893		48.469	52.276	17.551	31.281	-1.221	-7.666		49.19	0.048	14.643	0.003		3104.9	51.7475	50.8	12.1	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2429	4/21/2004	1:27:41 PM		26.218	25.739	25.684	26.377	26.023		48.511	52.283	17.491	31.447	-1.218	-7.663		49.704	0.048	14.643	0.003		3105.9	51.7642	50.8	12.2	40.0	2.756	0.007	0.007	0.000	0.176	0.15	
2430	4/21/2004	1:28:41 PM		26.226	25.746	25.696	26.344	26.015		48.652	52.43	17.349	31.704	-1.221	-7.666		49.737	0.048	14.643	0.003		3106.9	51.7808	51.0	12.2	40.2	2.770	0.007	0.007	0.000	0.175	0.15	
2431	4/21/2004	1:29:41 PM		26.216	25.737	25.677	26.345	25.921		48.587	52.279	17.472	31.497	-1.227	-7.674		48.878	0.049	14.643	0.003		3107.9	51.7975	50.8	12.0	40.0	2.761	0.007	0.007	0.000	0.179	0.15	
2432	4/21/2004	1:30:41 PM		26.212	25.743	25.667	26.346	25.922		48.614	52.411	17.412	31.663	-1.221	-7.671		48.179	0.048	14.643	0.003		3108.9	51.8142	50.9	11.8	40.1	2.767	0.007	0.007	0.000	0.175	0.15	
2433	4/21/2004	1:31:41 PM		26.197	25.738	25.647	26.281	25.917		48.739	52.399	17.587	31.591	-1.224	-7.666		50.336	0.044	14.643	0.003		3109.9	51.8308	50.9	12.3	40.2	2.769	0.007	0.006	0.000	0.160	0.14	
2434	4/21/2004	1:32:41 PM		26.188	25.743	25.598	26.306	25.933		48.538	52.355	17.49	31.511	-1.221	-7.611		49.326	0.048	14.643	0.003		3110.9	51.8475	50.9	12.1	40.0	2.760	0.007	0.007	0.000	0.176	0.15	
2435	4/21/2004	1:33:41 PM		26.188	25.743	25.623	26.331	25.928		48.507	52.359	17.513	31.371	-1.218	-7.611		48.277	0.048	14.643	0.003		3111.9	51.8642	50.9	11.8	39.9	2.754	0.007	0.007	0.000	0.176	0.15	
2436	4/21/2004	1:34:41 PM		26.179	25.744	25.594	26.392	25.919		48.575	52.38	17.518	31.515	-1.224	-7.614		49.09	0.048	14.643	0.003		3112.9	51.8808	50.9	12.0	40.0	2.761	0.007	0.007	0.000	0.176	0.15	
2437	4/21/2004	1:35:41 PM		26.173	25.748	25.613	26.401	26.073		48.724	52.656	17.652	31.423	-1.221	-7.602		49.572	0.049	14.643	0.003		3113.9	51.8975	51.2	12.1	40.1	2.763	0.007	0.007	0.000	0.179	0.15	
2438	4/21/2004	1:36:41 PM		26.168	25.748	25.593	26.376	25.973		48.374	52.187	17.466	31.205	-1.224	-7.608		48.394	0.047	14.643	0.003		3114.9	51.9142	50.7	11.9	39.8	2.743	0.007	0.007	0.000	0.173	0.15	
2439	4/21/2004	1:37:41 PM		26.168	25.758	25.598	26.361	25.988		48.194	52.048	17.451	31.107	-1.218	-7.608		48.569	0.047	14.643	0.003		3115.9	51.9308	50.6	11.9	39.7	2.734	0.007	0.007	0.000	0.174	0.15	
2440	4/21/2004	1:38:41 PM		26.147	25.748	25.587	26.321	25.887		48.768	52.548	17.52	31.616	-1.221	-7.608		47.831	0.047	14.643	0.003		3116.9	51.9475	51.1	11.7	40.2	2.771	0.007	0.007	0.000	0.171	0.15	
2441	4/21/2004	1:39:41 PM		26.143	25.748	25.563	26.296	25.853		48.67	52.558	17.494	31.496	-1.227	-7.602		48.433	0.049	14.643	0.003		3117.9	51.9642	51.1	11.9	40.1	2.764	0.007	0.007	0.000	0.179	0.15	
2442	4/21/2004	1:40:41 PM		26.143	25.753	25.598	26.311	25.823		48.681	52.54	17.466	31.646	-1.221	-7.608		49.75	0.048	14.643	0.003		3118.9	51.9808	51.1	12.2	40.2	2.769	0.007	0.007	0.000	0.175	0.15	
2443	4/21/2004	1:41:41 PM		26.138	25.758	25.578	26.371	25.923		48.438	52.214	17.467	31.425	-1.224	-7.608		49.061	0.048	14.643	0.003		3119.9	51.9975	50.7	12.0	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2444	4/21/2004	1:42:41 PM		26.118	25.748	25.578	26.406	25.988		48.334	52.25	17.417	31.285	-1.221	-7.602		48.652	0.048	14.643	0.003		3120.9	52.0142	50.8	11.9	39.8	2.745	0.007	0.007	0.000	0.177	0.15	
2445	4/21/2004	1:43:41 PM		26.134	25.769	25.594	26.442	25.919		48.675	52.583	17.561	31.427	-1.221	-7.605		48.337	0.047	14.643	0.003		3121.9	52.0308	51.1	11.8	40.1	2.761	0.007	0.007	0.000	0.172	0.15	
2446	4/21/2004	1:44:41 PM		26.124	25.764	25.564	26.427	25.939		48.449	52.38	17.548	31.222	-1.221	-7.602		49.95	0.048	14.643	0.003		3122.9	52.0475	50.9	12.2	39.8	2.747	0.007	0.007	0.000	0.177	0.15	
2447	4/21/2004	1:45:41 PM		26.129	25.77	25.59	26.428	25.944		48.635	52.422	17.62	31.425	-1.221	-7.602		49.714	0.048	14.643	0.003		3123.9	52.0642	50.9	12.2	40.0	2.760	0.007	0.007	0.000	0.176	0.15	
2448	4/21/2004	1:46:41 PM		26.124	25.765	25.575	26.433	25.964		48.42	52.285	17.403	31.341	-1.221	-7.602		49.674	0.048	14.643	0.003		3124.9	52.0808	50.8	12.2	39.9	2.750	0.007	0.007	0.000	0.177	0.15	
2449	4/21/2004	1:47:41 PM		26.124	25.76	25.595	26.408	25.944		48.478	52.43	17.538	31.279	-1.224	-7.605		49.597	0.048	14.643	0.003		3125.9	52.0975	51.0	12.2	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2450	4/21/2004	1:48:41 PM		26.129	25.775	25.58	26.493	25.979		48.683	52.471	17.517	31.654	-1.221	-7.602		47.428	0.048	14.643	0.003		3126.9	52.1142	51.0	11.6	40.2	2.769	0.007	0.007	0.000	0.175	0.15	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2451	4/21/2004	1:49:41 PM		26.129	25.765	25.59	26.478	25.969		48.397	52.237	17.533	31.205	-1.221	-7.541		49.62	0.049	14.643	0.003		3127.9	52.1308	50.8	12.2	39.8	2.744	0.007	0.007	0.000	0.181	0.15	
2452	4/21/2004	1:50:41 PM		26.12	25.781	25.585	26.484	26.02		48.418	52.432	17.57	31.295	-1.221	-7.582		49.712	0.048	14.643	0.003		3128.9	52.1475	51.0	12.2	39.9	2.748	0.007	0.007	0.000	0.177	0.15	
2453	4/21/2004	1:51:41 PM		26.115	25.771	25.565	26.489	25.985		48.643	52.602	17.472	31.529	-1.227	-7.585		48.052	0.047	14.643	0.003		3129.9	52.1642	51.1	11.8	40.1	2.764	0.007	0.007	0.000	0.172	0.15	
2454	4/21/2004	1:52:41 PM		26.131	25.777	25.601	26.504	25.976		48.473	52.502	17.472	31.394	-1.221	-7.579		49.393	0.048	14.643	0.003		3130.9	52.1808	51.0	12.1	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2455	4/21/2004	1:53:41 PM		26.127	25.762	25.572	26.53	26.106		48.65	52.656	17.518	31.556	-1.221	-7.588		48.369	0.047	14.643	0.003		3131.9	52.1975	51.2	11.9	40.1	2.765	0.007	0.007	0.000	0.172	0.15	
2456	4/21/2004	1:54:41 PM		26.132	25.783	25.608	26.486	26.077		48.529	52.486	17.362	31.556	-1.218	-7.579		49.167	0.048	14.643	0.003		3132.9	52.2142	51.0	12.0	40.0	2.761	0.007	0.007	0.000	0.176	0.15	
2457	4/21/2004	1:55:41 PM		26.132	25.787	25.587	26.54	25.992		48.741	52.6	17.491	31.661	-1.221	-7.579		47.411	0.048	14.643	0.003		3133.9	52.2308	51.1	11.6	40.2	2.772	0.007	0.007	0.000	0.175	0.15	
2458	4/21/2004	1:56:41 PM		26.127	25.787	25.557	26.52	26.091		48.652	52.625	17.436	31.568	-1.221	-7.579		49.405	0.047	14.643	0.003		3134.9	52.2475	51.2	12.1	40.1	2.765	0.007	0.007	0.000	0.172	0.15	
2459	4/21/2004	1:57:41 PM		26.126	25.782	25.551	26.419	26.116		48.681	52.608	17.638	31.398	-1.224	-7.582		51.041	0.048	14.643	0.003		3135.9	52.2642	51.1	12.5	40.0	2.761	0.007	0.007	0.000	0.176	0.15	
2460	4/21/2004	1:58:41 PM		26.13	25.786	25.55	26.384	26.11		48.446	52.359	17.32	31.531	-1.221	-7.582		48.946	0.047	14.643	0.003		3136.9	52.2808	50.9	12.0	40.0	2.757	0.007	0.007	0.000	0.173	0.15	
2461	4/21/2004	1:59:41 PM		26.124	25.789	25.559	26.337	26.003		48.476	52.494	17.496	31.312	-1.218	-7.576		48.982	0.048	14.643	0.003		3137.9	52.2975	51.0	12.0	39.9	2.751	0.007	0.007	0.000	0.177	0.15	
2462	4/21/2004	2:00:41 PM		26.118	25.789	25.543	26.291	25.883		48.498	52.426	17.381	31.523	-1.221	-7.582		47.743	0.047	14.643	0.003		3138.9	52.3142	51.0	11.7	40.0	2.759	0.007	0.007	0.000	0.172	0.15	
2463	4/21/2004	2:01:41 PM		26.111	25.777	25.552	26.15	25.792		48.299	52.272	17.394	31.213	-1.218	-7.579		49.783	0.048	14.643	0.003		3139.9	52.3308	50.8	12.2	39.8	2.741	0.007	0.007	0.000	0.177	0.15	
2464	4/21/2004	2:02:41 PM		26.109	25.775	25.534	26.118	25.565		48.54	52.511	17.414	31.455	-1.224	-7.582		49.161	0.048	14.643	0.003		3140.9	52.3475	51.0	12.0	40.0	2.758	0.007	0.007	0.000	0.176	0.15	
2465	4/21/2004	2:03:41 PM		26.103	25.763	25.538	26.101	25.613		48.503	52.405	17.446	31.418	-1.224	-7.582		50.083	0.048	14.643	0.003		3141.9	52.3642	50.9	12.3	40.0	2.755	0.007	0.007	0.000	0.176	0.15	
2466	4/21/2004	2:04:41 PM		26.101	25.766	25.536	26.059	25.426		48.662	52.695	17.467	31.564	-1.221	-7.582		48.198	0.047	14.643	0.003		3142.9	52.3808	51.2	11.8	40.1	2.766	0.007	0.007	0.000	0.172	0.15	
2467	4/21/2004	2:05:41 PM		26.087	25.752	25.527	26.025	25.442		48.254	52.239	17.42	31.226	-1.221	-7.582		49.057	0.048	14.643	0.003		3143.9	52.3975	50.8	12.0	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2468	4/21/2004	2:06:41 PM		26.07	25.725	25.515	26.018	25.45		48.476	52.496	17.267	31.574	-1.221	-7.585		48.926	0.048	14.643	0.003		3144.9	52.4142	51.0	12.0	40.0	2.760	0.007	0.007	0.000	0.176	0.15	
2469	4/21/2004	2:07:41 PM		26.067	25.728	25.512	26.031	25.523		48.764	52.778	17.476	31.622	-1.224	-7.588		48.949	0.048	14.643	0.003		3145.9	52.4308	51.3	12.0	40.2	2.771	0.007	0.007	0.000	0.176	0.15	
2470	4/21/2004	2:08:41 PM		26.067	25.727	25.537	26.05	25.627		48.592	52.583	17.244	31.694	-1.224	-7.579		49.163	0.048	14.643	0.003		3146.9	52.4475	51.1	12.0	40.1	2.768	0.007	0.007	0.000	0.176	0.15	
2471	4/21/2004	2:09:41 PM		26.066	25.716	25.521	26.139	25.721		48.376	52.324	17.408	31.392	-1.224	-7.585		49.211	0.047	14.643	0.003		3147.9	52.4642	50.9	12.1	39.9	2.750	0.007	0.007	0.000	0.173	0.15	
2472	4/21/2004	2:10:41 PM		26.059	25.705	25.534	26.118	25.66		48.291	52.235	17.393	31.207	-1.224	-7.582		49.41	0.048	14.643	0.003		3148.9	52.4808	50.8	12.1	39.7	2.741	0.007	0.007	0.000	0.177	0.15	
2473	4/21/2004	2:11:41 PM		26.064	25.715	25.529	26.168	25.67		48.762	52.871	17.578	31.484	-1.221	-7.582		48.056	0.048	14.643	0.003		3149.9	52.4975	51.4	11.8	40.1	2.766	0.007	0.007	0.000	0.176	0.15	
2474	4/21/2004	2:12:41 PM		26.055	25.706	25.5	26.218	25.735		48.671	52.716	17.472	31.607	-1.224	-7.585		49.687	0.048	14.643	0.003		3150.9	52.5142	51.2	12.2	40.1	2.767	0.007	0.007	0.000	0.176	0.15	
2475	4/21/2004	2:13:41 PM		26.05	25.701	25.465	26.263	25.745		48.386	52.426	17.507	31.322	-1.224	-7.582		48.719	0.048	14.643	0.003		3151.9	52.5308	51.0	11.9	39.9	2.748	0.007	0.007	0.000	0.177	0.15	
2476	4/21/2004	2:14:41 PM		26.041	25.691	25.426	26.304	25.866		48.654	52.737	17.491	31.57	-1.221	-7.585		49.247	0.047	14.643	0.003		3152.9	52.5475	51.3	12.1	40.1	2.766	0.007	0.007	0.000	0.173	0.15	
2477	4/21/2004	2:15:41 PM		26.047	25.698	25.397	26.391	25.892		48.812	52.878	17.513	31.735	-1.221	-7.585		49.943	0.047	14.643	0.003		3153.9	52.5642	51.4	12.2	40.3	2.777	0.007	0.007	0.000	0.172	0.15	
2478	4/21/2004	2:16:41 PM		26.037	25.683	25.347	26.381	25.762		48.643	52.552	17.467	31.587	-1.218	-7.588		47.593	0.047	14.643	0.003		3154.9	52.5808	51.1	11.7	40.1	2.766	0.007	0.007	0.000	0.173	0.15	
2479	4/21/2004	2:17:41 PM		26.027	25.683	25.312	26.411	25.907		48.521	52.527	17.487	31.412	-1.221	-7.588		46.537	0.047	14.643	0.003		3155.9	52.5975	51.1	11.4	40.0	2.756	0.007	0.007	0.000	0.174	0.15	
2480	4/21/2004	2:18:41 PM		26.033	25.689	25.288	26.462	25.933		48.82	52.805	17.595	31.546	-1.221	-7.585		51.03	0.047	14.643	0.003		3156.9	52.6142	51.3	12.5	40.2	2.770	0.007	0.007	0.000	0.173	0.15	
2481	4/21/2004	2:19:41 PM		26.039	25.709	25.274	26.507	26.043		48.749	52.751	17.438	31.741	-1.218	-7.585		48.269	0.046	14.643	0.003		3157.9	52.6308	51.3	11.8	40.2	2.775	0.007	0.007	0.000	0.169	0.14	
2482	4/21/2004	2:20:41 PM		26.009	25.684	25.219	26.472	25.944		48.513	52.471	17.557	31.324	-1.224	-7.588		49.635	0.046	14.643	0.003		3158.9	52.6475	51.0	12.2	39.9	2.752	0.007	0.007	0.000	0.171	0.15	
2483	4/21/2004	2:21:41 PM		25.995	25.7	25.199	26.498	25.919		48.778	52.712	17.474	31.796	-1.221	-7.582		48.777	0.046	14.643	0.003		3159.9	52.6642	51.2	12.0	40.3	2.778	0.007	0.007	0.000	0.169	0.14	
2484	4/21/2004	2:22:41 PM		25.975	25.691	25.16	26.479	26.015		48.559	52.619	17.464	31.54	-1.221	-7.585		48.218	0.047	14.643	0.003		3160.9	52.6808	51.1	11.8	40.0	2.761	0.007	0.007	0.000	0.174	0.15	
2485	4/21/2004	2:23:41 PM		25.977	25.697	25.142	26.475	26.126		48.525	52.592	17.59	31.334	-1.224	-7.585		48.325	0.047	14.643	0.003		3161.9	52.6975	51.1	11.8	39.9	2.753	0.007	0.007	0.000	0.175	0.15	
2486	4/21/2004	2:24:41 PM		25.973	25.719	25.123	26.477	26.098		48.687	52.737	17.468	31.654	-1.218	-7.576		47.626	0.046	14.643	0.004		3162.9	52.7142	51.3	11.7	40.2	2.770	0.007	0.007	0.000	0.170	0.14	
2487	4/21/2004	2:25:41 PM		25.939	25.704	25.049	26.452	26.019		48.469	52.523	17.476	31.341	-1.224	-7.582		48.825	0.047	14.643	0.003		3163.9	52.7308	51.1	12.0	39.9	2.751	0.007	0.007	0.000	0.175	0.15	
2488	4/21/2004	2:26:41 PM		25.941	25.716	25.09	26.484	25.955		48.762	52.77	17.562	31.597	-1.221	-7.579		49.576	0.048	14.643	0.003		3164.9	52.7475	51.3	12.1	40.2	2.770	0.007	0.007	0.000	0.178	0.15	
2489	4/21/2004	2:27:41 PM		25.932	25.717	25.067	26.485	25.877		48.766	52.71	17.583	31.593	-1.224	-7.585		48.807	0.047	14.643	0.003		3165.9	52.7642	51.2	12.0	40.2	2.770	0.007	0.007	0.000	0.174	0.15	
2490	4/21/2004	2:28:41 PM		25.923	25.728	25.062	26.456	25.773		48.357	52.494	17.617	31.113	-1.224	-7.579		48.992	0.047	14.643	0.003		3166.9	52.7808	51.0	12.0	39.7	2.740	0.007	0.007	0.000	0.176	0.15	
2491	4/21/2004	2:29:41 PM		25.907	25.722	25.017	26.38	25.657		48.366	52.49	17.516	31.137	-1.218	-7.579		49.236	0.046	14.643	0.003		3167.9	52.7975	51.0	12.1	39.8	2.741	0.007	0.007	0.000	0.172	0.15	
2492	4/21/2004	2:30:41 PM		25.896	25.727	25.006	26.29	25.512		48.353	52.345	17.647	31.102	-1.218	-7.585		48.379	0.046	14.643	0.003		3168.9	52.8142	50.9	11.9	39.7	2.739	0.007	0.007	0.000	0.173	0.15	
2493	4/21/2004	2:31:41 PM		25.874	25.709	24.988	26.182	25.439		48.305	52.303	17.432	31.295	-1.224	-7.588		48.421	0.046	14.643	0.003		3169.9	52.8308	50.8	11.9	39.8	2.744	0.007	0.007	0.000	0.172	0.15	
2494	4/21/2004	2:32:41 PM		25.872	25.712	25.001	26.18	25.382		48.509	52.546	17.651	31.226	-1.218	-7.579		47.336	0.046	14.643	0.003		3170.9	52.8475	51.1	11.6	39.9	2.749	0.007	0.007	0.000	0.172	0.15	
2495	4/21/2004	2:33:41 PM		25.823	25.678	24.937	26.051	25.368		48.666	52.67	17.499	31.574	-1.224	-7.585		49.712	0.046	14.643	0.003		3171.9	52.8642	51.2	12.2	40.1	2.766	0.007	0.007	0.000	0.171	0.15	
2496	4/21/2004	2:34:41 PM		25.81	25.681	24.91	25.978	25.336		48.581	52.637	17.681	31.258	-1.224	-7.59		48.778	0.046	14.643	0.003		3172.9	52.8808	51.2	12.0	39.9	2.752	0.007	0.007	0.000	0.172	0.15	
2497	4/21/2004	2:35:41 PM		25.813	25.683	24.957	25.971	25.403		48.22	52.268	17.525	31.078	-1.221	-7.588		49.161	0.046	14.643	0.003		3173.9	52.8975	50.8	12.0	39.6	2.734	0.007	0.007	0.000	0.173	0.15	
2498	4/21/2004	2:36:41 PM		25.802	25.677	24.941	26.055	25.442		48.53	52.538	17.654	31.273	-1.218	-7.585		48.594	0.046	14.643	0.004		3174.9	52.9142	51.1	11.9	39.9	2.751	0.007	0.007	0.000	0.172	0.15	
2499	4/21/2004	2:37:41 PM		25.785	25.665	24.919	26.128	25.515		48.654	52.741	17.59	31.295	-1.221	-7.59		49.236	0.045	14.643	0.003		3175.9	52.9308	51.3	12.1	40.0	2.756	0.007	0.007	0.000	0.168	0.14	
2500	4/21/2004	2:38:41 PM		25.773	25.658	24.902	26.196	25.573		48.26	52.409	17.37	31.275	-1.218	-7.59		49.021	0.047	14.643	0.003		3176.9	52.9475	50.9	12.0	39.8	2.742	0.007	0.007	0.000	0.177	0.15	
2501	4/21/2004	2:39:41 PM		25.757	25.642	24.866	26.215	25.557		48.542	52.675	17.403	31.377	-1.224	-7.59		48.39	0.046	14.643	0.003		3177.9	52.9642	51.2	11.9	40.0	2.755	0.007	0.007	0.000	0.172	0.15	
2502	4/21/2004	2:40:41 PM		25.752	25.647	24.851	26.22	25.596		48.391	52.5	17.563	31.222	-1.224	-7.59		48.7	0.046	14.643	0.003		3178.9	52.9808	51.0	11.9	39.8	2.745	0.007	0.007	0.000	0.173	0.15	
2503	4/21/2004	2:41:41 PM		25.742	25.657	24.831	26.265	25.716		48.714	52.832	17.53	31.519	-1.221	-7.59		48.433	0.046	14.643	0.003		3179.9	52.9975	51.4	11.9	40.1	2.766	0.007	0.007	0.000	0.172	0.15	
2504	4/21/2004	2:42:41 PM		25.742	25.647	24.816	26.26	25.772		48.791	52.88	17.612	31.544	-1.218	-7.585		47.897	0.046	14.643	0.003		3180.9	53.0142	51.4	11.7	40.2	2.769	0.007	0.007	0.000	0.172	0.15	
2505	4/21/2004	2:43:41 PM		25.724	25.659	24.783	26.252	25.823		48.67	52.772	17.586	31.552	-1.224	-7.588		48.362	0.046	14.643	0.003		3181.9	53.0308	51.3	11.9	40.1	2.766	0.007	0.007	0.000	0.172	0.15	
2506	4/21/2004	2:44:41 PM		25.709	25.654	24.758	26.262	25.773		48.391	52.434	17.528	31.174	-1.221	-7.588		48.07	0.046	14.643	0.003		3182.9	53.0475	51.0	11.8	39.8	2.743	0.007	0.007	0.000	0.174	0.15	
2507	4/21/2004	2:45:41 PM		25.694	25.634	24.718	26.347	25.833		48.658	52.867	17.672	31.408	-1.224	-7.59		48.736	0.045	14.643	0.003		3183.9	53.0642	51.4	11.9	40.0	2.760	0.007	0.007	0.000	0.169	0.14	
2508	4/21/2004	2:46:41 PM		25.675	25.63	24.668	26.333	25.849		48.635	52.658	17.59	31.375	-1.224	-7.59		49.222	0.046	14.643	0.003		3184.9	53.0808	51.2	12.1	40.0	2.758	0.007	0.007	0.000	0.173	0.15	
2509	4/21/2004	2:47:41 PM		25.686	25.656	24.685	26.344	25.92		48.608	52.718	17.71	31.185	-1.218	-7.585		49.065	0.045	14.643	0.003		3185.9	53.0975	51.2	12.0	39.9	2.751	0.007	0.007	0.000	0.170	0.14	
2510	4/21/2004	2:48:41 PM		25.666	25.646	24.64	26.319	25.831		48.038	52.156	17.444	30.938	-1.221	-7.59		48.807	0.045	14.643	0.003		3186.9	53.1142	50.7	12.0	39.5	2.723	0.007	0.007	0.000	0.172	0.15	
2511	4/21/2004	2:49:41 PM		25.662	25.652	24.63	26.365	25.906		48.575	52.614	17.582	31.349	-1.221	-7.582		47.878	0.045	14.643	0.003		3187.9	53.1308	51.1	11.7	40.0	2.755	0.007	0.007	0.000	0.170	0.14	
2512	4/21/2004	2:50:41 PM		25.642	25.647	24.58	26.385	25.906		48.187	52.31	17.58	30.981	-1.221	-7.588		47.563	0.045	14.643	0.003		3188.9	53.1475	50.8	11.7	39.6	2.729	0.007	0.007	0.000	0.172	0.15	
2513	4/21/2004	2:51:41 PM		25.642	25.677	24.58	26.605	26.046		48.411	52.532	17.479	31.289	-1.224	-7.585		48.74	0.045	14.643	0.003		3189.9	53.1642	51.1	11.9	39.9	2.748	0.007	0.007	0.000	0.170	0.14	
2514	4/21/2004	2:52:41 PM		25.627	25.662	24.555	26.62	26.141		48.527	52.589	17.436	31.548	-1.221	-7.59		48.738	0.045	14.643	0.003		3190.9	53.1808	51.1	11.9	40.0	2.760	0.007	0.007	0.000	0.170	0.14	
2515	4/21/2004	2:53:41 PM		25.607	25.662	24.505	26.645	26.061		48.241	52.418	17.537	31.094	-1.224	-7.593		48.798	0.045	14.643	0.003		3191.9	53.1975	50.9	12.0	39.7	2.735	0.007	0.007	0.000	0.172	0.15	
2516	4/21/2004	2:54:41 PM		25.607	25.677	24.5	26.655	26.001		48.451	52.561	17.606	31.224	-1.221	-7.544		46.957	0.046	14.643	0.003		3192.9	53.2142	51.1	11.5	39.8	2.747	0.007	0.007	0.000	0.175	0.15	
2517	4/21/2004	2:55:41 PM		25.601	25.676	24.479	26.669	26.04		48.276	52.478	17.632	30.951	-1.221	-7.544		49.107	0.046	14.643	0.003		3193.9	53.2308	51.0	12.0	39.6	2.731	0.007	0.007	0.000	0.176	0.15	
2518	4/21/2004	2:56:41 PM		25.596	25.686	24.469	26.684	26.08		48.374	52.446	17.564	31.148	-1.218	-7.544		48.586	0.045	14.643	0.003		3194.9	53.2475	51.0	11.9	39.8	2.741	0.007	0.007	0.000	0.171	0.15	
2519	4/21/2004	2:57:41 PM		25.586	25.686	24.444	26.699	26.1		48.511	52.616	17.648	31.139	-1.224	-7.55		48.972	0.045	14.643	0.003		3195.9	53.2642	51.1	12.0	39.8	2.746	0.007	0.007	0.000	0.171	0.15	
2520	4/21/2004	2:58:41 PM		25.58	25.69	24.433	26.743	26.02		48.534	52.66	17.647	31.226	-1.221	-7.544		48.788	0.046	14.643	0.003		3196.9	53.2808	51.2	12.0	39.9	2.750	0.007	0.007	0.000	0.175	0.15	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2521	4/21/2004	2:59:41 PM		25.581	25.691	24.414	26.729	26.04		48.436	52.618	17.513	31.33	-1.221	-7.553		49.286	0.045	14.643	0.003		3197.9	53.2975	51.1	12.1	39.9	2.750	0.007	0.007	0.000	0.171	0.15	
2522	4/21/2004	3:00:41 PM		25.577	25.717	24.415	26.72	26.086		48.274	52.457	17.532	31.115	-1.218	-7.547		48.118	0.046	14.643	0.003		3198.9	53.3142	51.0	11.8	39.7	2.737	0.007	0.007	0.000	0.176	0.15	
2523	4/21/2004	3:01:41 PM		25.562	25.712	24.38	26.69	26.026		48.442	52.563	17.595	31.203	-1.221	-7.556		46.858	0.046	14.643	0.003		3199.9	53.3308	51.1	11.5	39.8	2.746	0.007	0.007	0.000	0.175	0.15	
2524	4/21/2004	3:02:41 PM		25.552	25.697	24.36	26.635	25.926		48.395	52.639	17.64	31.014	-1.221	-7.547		48.965	0.046	14.643	0.003		3200.9	53.3475	51.2	12.0	39.7	2.737	0.007	0.007	0.000	0.176	0.15	
2525	4/21/2004	3:03:41 PM		25.551	25.711	24.354	26.594	25.756		48.43	52.571	17.619	31.172	-1.218	-7.535		49.543	0.047	14.643	0.003		3201.9	53.3642	51.1	12.1	39.8	2.744	0.007	0.007	0.000	0.179	0.15	
2526	4/21/2004	3:04:41 PM		25.52	25.68	24.302	26.398	25.669		48.326	52.519	17.472	31.162	-1.221	-7.553		46.631	0.045	14.643	0.003		3202.9	53.3808	51.0	11.4	39.7	2.740	0.007	0.007	0.000	0.172	0.15	
2527	4/21/2004	3:05:41 PM		25.502	25.667	24.27	26.36	25.552		48.415	52.616	17.475	31.291	-1.221	-7.55		48.246	0.045	14.643	0.003		3203.9	53.3975	51.1	11.8	39.9	2.748	0.007	0.007	0.000	0.172	0.15	
2528	4/21/2004	3:06:41 PM		25.522	25.692	24.304	26.3	25.606		48.415	52.598	17.585	31.125	-1.221	-7.553		49.658	0.045	14.643	0.003		3204.9	53.4142	51.1	12.2	39.8	2.742	0.007	0.007	0.000	0.172	0.15	
2529	4/21/2004	3:07:41 PM		25.489	25.654	24.247	26.217	25.484		48.71	52.902	17.629	31.419	-1.227	-7.562		48.243	0.044	14.643	0.003		3205.9	53.4308	51.4	11.8	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2530	4/21/2004	3:08:41 PM		25.478	25.663	24.246	26.251	25.523		48.2	52.426	17.519	31.092	-1.221	-7.556		47.42	0.044	14.643	0.003		3206.9	53.4475	51.0	11.6	39.6	2.733	0.007	0.007	0.000	0.169	0.14	
2531	4/21/2004	3:09:41 PM		25.452	25.646	24.214	26.234	25.626		48.469	52.728	17.659	31.144	-1.221	-7.553		48.558	0.044	14.643	0.003		3207.9	53.4642	51.3	11.9	39.8	2.745	0.007	0.007	0.000	0.168	0.14	
2532	4/21/2004	3:10:41 PM		25.43	25.62	24.173	26.243	25.795		48.092	52.258	17.565	30.827	-1.224	-7.553		48.757	0.045	14.643	0.003		3208.9	53.4808	50.8	11.9	39.5	2.721	0.007	0.007	0.000	0.174	0.15	
2533	4/21/2004	3:11:41 PM		25.443	25.638	24.2	26.361	25.767		48.316	52.519	17.499	31.242	-1.221	-7.55		48.871	0.044	14.643	0.003		3209.9	53.4975	51.0	12.0	39.8	2.743	0.007	0.007	0.000	0.169	0.14	
2534	4/21/2004	3:12:41 PM		25.428	25.638	24.165	26.376	25.847		48.438	52.643	17.688	31.082	-1.221	-7.55		49.021	0.047	14.643	0.003		3210.9	53.5142	51.2	12.0	39.8	2.741	0.007	0.007	0.000	0.180	0.15	
2535	4/21/2004	3:13:41 PM		25.412	25.632	24.155	26.44	25.792		48.577	52.803	17.572	31.369	-1.221	-7.556		45.39	0.045	14.643	0.003		3211.9	53.5308	51.3	11.1	40.0	2.756	0.007	0.007	0.000	0.172	0.15	
2536	4/21/2004	3:14:41 PM		25.407	25.642	24.155	26.475	25.822		48.142	52.386	17.559	30.985	-1.218	-7.544		49.401	0.043	14.643	0.003		3212.9	53.5475	50.9	12.1	39.6	2.728	0.006	0.007	0.000	0.166	0.14	
2537	4/21/2004	3:15:41 PM		25.398	25.633	24.13	26.491	25.872		48.14	52.256	17.523	30.986	-1.221	-7.553		49.118	0.045	14.643	0.003		3213.9	53.5642	50.8	12.0	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2538	4/21/2004	3:16:41 PM		25.384	25.634	24.106	26.527	26.008		48.409	52.652	17.73	30.932	-1.224	-7.544		48.627	0.046	14.643	0.003		3214.9	53.5808	51.2	11.9	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2539	4/21/2004	3:17:41 PM		25.374	25.634	24.106	26.547	25.983		48.249	52.507	17.458	31.123	-1.218	-7.541		49.153	0.046	14.643	0.003		3215.9	53.5975	51.0	12.0	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2540	4/21/2004	3:18:41 PM		25.385	25.65	24.112	26.588	25.934		48.424	52.666	17.699	31.08	-1.218	-7.544		49.647	0.045	14.643	0.003		3216.9	53.6142	51.2	12.2	39.8	2.741	0.007	0.007	0.000	0.173	0.15	
2541	4/21/2004	3:19:41 PM		25.356	25.636	24.083	26.599	26.05		48.337	52.457	17.559	31.189	-1.221	-7.541		49.143	0.045	14.643	0.003		3217.9	53.6308	51.0	12.0	39.8	2.742	0.007	0.007	0.000	0.173	0.15	
2542	4/21/2004	3:20:02 PM		25.357	25.636	24.079	26.585	26.026		48.505	52.762	17.706	31.189	-1.221	-7.53		48.679	0.048	14.643	0.003		3218.2	53.6367	51.3	11.9	39.8	2.747	0.007	0.007	0.000	0.184	0.16	
2543	4/21/2004	3:21:02 PM		25.364	25.659	24.091	26.632	26.063		48.424	52.646	17.674	31.047	-1.221	-7.446		48.419	0.039	14.643	0.003		3219.2	53.6533	51.2	11.9	39.7	2.740	0.006	0.006	0.000	0.150	0.13	
2544	4/21/2004	3:22:02 PM		25.339	25.634	24.052	26.607	26.094		48.432	52.674	17.683	31.158	-1.221	-7.443		48.623	0.044	14.643	0.003		3220.2	53.67	51.2	11.9	39.8	2.744	0.007	0.007	0.000	0.169	0.14	
2545	4/21/2004	3:23:02 PM		25.337	25.642	24.044	26.635	26.056		48.561	52.751	17.597	31.326	-1.221	-7.446		48.529	0.045	14.643	0.003		3221.2	53.6867	51.3	11.9	39.9	2.754	0.007	0.007	0.000	0.173	0.15	
2546	4/21/2004	3:24:02 PM		25.328	25.658	24.035	26.626	26.057		48.308	52.583	17.681	31.037	-1.224	-7.446		47.878	0.044	14.643	0.003		3222.2	53.7033	51.1	11.7	39.7	2.735	0.007	0.007	0.000	0.170	0.14	
2547	4/21/2004	3:25:02 PM		25.324	25.659	24.036	26.587	26.043		48.449	52.637	17.486	31.4	-1.215	-7.443		49.435	0.045	14.643	0.003		3223.2	53.72	51.2	12.1	39.9	2.753	0.007	0.007	0.000	0.173	0.15	
2548	4/21/2004	3:26:02 PM		25.315	25.66	24.022	26.578	26.029		48.366	52.695	17.688	30.986	-1.221	-7.44		49.299	0.045	14.643	0.003		3224.2	53.7367	51.2	12.1	39.7	2.736	0.007	0.007	0.000	0.174	0.15	
2549	4/21/2004	3:27:02 PM		25.316	25.676	24.013	26.574	25.881		48.31	52.561	17.568	31.129	-1.221	-7.446		48.721	0.044	14.643	0.003		3225.2	53.7533	51.1	11.9	39.7	2.739	0.007	0.007	0.000	0.170	0.14	
2550	4/21/2004	3:28:02 PM		25.29	25.65	23.982	26.498	25.824		48.278	52.577	17.666	30.912	-1.224	-7.449		49.286	0.044	14.643	0.003		3226.2	53.77	51.1	12.1	39.6	2.730	0.007	0.007	0.000	0.171	0.15	
2551	4/21/2004	3:29:02 PM		25.299	25.654	23.991	26.407	25.574		48.131	52.362	17.633	30.903	-1.221	-7.446		48.584	0.045	14.643	0.003		3227.2	53.7867	50.9	11.9	39.5	2.725	0.007	0.007	0.000	0.175	0.15	
2552	4/21/2004	3:30:02 PM		25.292	25.657	23.984	26.26	25.572		48.26	52.457	17.688	30.912	-1.218	-7.405		48.152	0.044	14.643	0.003		3228.2	53.8033	51.0	11.8	39.6	2.729	0.007	0.007	0.000	0.171	0.15	
2553	4/21/2004	3:31:02 PM		25.265	25.635	23.972	26.138	25.445		48.27	52.504	17.722	30.899	-1.224	-7.431		49.124	0.044	14.643	0.003		3229.2	53.82	51.0	12.0	39.6	2.729	0.007	0.007	0.000	0.171	0.15	
2554	4/21/2004	3:32:02 PM		25.257	25.627	23.964	26.045	25.302		48.053	52.227	17.588	30.774	-1.224	-7.434		48.487	0.044	14.643	0.003		3230.2	53.8367	50.8	11.9	39.4	2.717	0.007	0.007	0.000	0.171	0.15	
2555	4/21/2004	3:33:02 PM		25.254	25.634	23.961	26.057	25.389		48.596	52.902	17.682	31.271	-1.218	-7.434		49.305	0.045	14.643	0.003		3231.2	53.8533	51.4	12.1	39.9	2.753	0.007	0.007	0.000	0.173	0.15	
2556	4/21/2004	3:34:02 PM		25.246	25.621	23.968	26.089	25.481		48.239	52.475	17.703	30.94	-1.215	-7.434		48.671	0.044	14.643	0.003		3232.2	53.87	51.0	11.9	39.6	2.730	0.007	0.007	0.000	0.171	0.15	
2557	4/21/2004	3:35:02 PM		25.228	25.613	23.95	26.101	25.543		48.16	52.473	17.574	31.053	-1.218	-7.434		48.496	0.044	14.643	0.003		3233.2	53.8867	51.0	11.9	39.6	2.731	0.007	0.007	0.000	0.171	0.15	
2558	4/21/2004	3:36:02 PM		25.212	25.592	23.924	26.12	25.637		48.241	52.5	17.6	31.08	-1.221	-7.434		49.683	0.044	14.643	0.003		3234.2	53.9033	51.0	12.2	39.7	2.734	0.007	0.007	0.000	0.171	0.15	
2559	4/21/2004	3:37:02 PM		25.201	25.596	23.918	26.174	25.636		48.214	52.531	17.612	31.012	-1.215	-7.434		49.038	0.044	14.643	0.004		3235.2	53.92	51.1	12.0	39.6	2.731	0.007	0.007	0.000	0.171	0.15	
2560	4/21/2004	3:38:02 PM		25.191	25.58	23.897	26.218	25.65		48.038	52.341	17.528	30.903	-1.221	-7.434		49.222	0.044	14.643	0.003		3236.2	53.9367	50.9	12.1	39.5	2.721	0.007	0.007	0.000	0.171	0.15	
2561	4/21/2004	3:39:02 PM		25.185	25.575	23.891	26.268	25.779		48.293	52.55	17.518	31.148	-1.221	-7.434		50.092	0.044	14.643	0.003		3237.2	53.9533	51.1	12.3	39.7	2.739	0.007	0.007	0.000	0.170	0.15	
2562	4/21/2004	3:40:02 PM		25.17	25.57	23.881	26.283	25.724		48.39	52.704	17.528	31.209	-1.221	-7.434		48.25	0.043	14.643	0.003		3238.2	53.97	51.2	11.8	39.8	2.744	0.006	0.007	0.000	0.166	0.14	
2563	4/21/2004	3:41:02 PM		25.16	25.56	23.876	26.293	25.784		48.335	52.73	17.618	31.039	-1.218	-7.431		48.717	0.044	14.643	0.003		3239.2	53.9867	51.3	11.9	39.7	2.736	0.007	0.007	0.000	0.171	0.15	
2564	4/21/2004	3:42:02 PM		25.155	25.56	23.866	26.353	25.754		48.227	52.521	17.649	30.957	-1.218	-7.431		48.74	0.044	14.643	0.003		3240.2	54.0033	51.0	11.9	39.6	2.730	0.007	0.007	0.000	0.171	0.15	
2565	4/21/2004	3:43:02 PM		25.156	25.55	23.867	26.384	25.8		48.254	52.527	17.71	30.936	-1.218	-7.431		49.541	0.044	14.643	0.003		3241.2	54.02	51.1	12.1	39.6	2.730	0.007	0.007	0.000	0.171	0.15	
2566	4/21/2004	3:44:02 PM		25.141	25.545	23.847	26.359	25.86		48.612	52.969	17.726	31.236	-1.221	-7.429		48.688	0.044	14.643	0.003		3242.2	54.0367	51.5	11.9	39.9	2.753	0.007	0.007	0.000	0.170	0.14	
2567	4/21/2004	3:45:02 PM		25.147	25.567	23.849	26.42	25.931		48.079	52.376	17.582	30.811	-1.224	-7.431		47.816	0.044	14.643	0.003		3243.2	54.0533	50.9	11.7	39.4	2.720	0.007	0.007	0.000	0.172	0.15	
2568	4/21/2004	3:46:02 PM		25.127	25.547	23.823	26.435	25.846		48.573	52.942	17.682	31.248	-1.224	-7.434		48.49	0.044	14.643	0.003		3244.2	54.07	51.5	11.9	39.9	2.752	0.007	0.007	0.000	0.170	0.14	
2569	4/21/2004	3:47:02 PM		25.133	25.558	23.85	26.486	25.913		48.144	52.403	17.723	30.788	-1.221	-7.426		48.901	0.043	14.643	0.003		3245.2	54.0867	50.9	12.0	39.5	2.721	0.006	0.007	0.000	0.168	0.14	
2570	4/21/2004	3:48:02 PM		25.135	25.57	23.836	26.473	25.984		47.994	52.353	17.503	30.868	-1.218	-7.429		47.947	0.043	14.643	0.003		3246.2	54.1033	50.9	11.8	39.4	2.719	0.006	0.007	0.000	0.168	0.14	
2571	4/21/2004	3:49:02 PM		25.131	25.566	23.827	26.489	25.96		48.225	52.532	17.482	31.162	-1.221	-7.429		49.647	0.044	14.643	0.003		3247.2	54.12	51.1	12.2	39.7	2.737	0.007	0.007	0.000	0.171	0.15	
2572	4/21/2004	3:50:02 PM		25.137	25.572	23.834	26.515	26.011		48.268	52.625	17.65	30.977	-1.221	-7.426		48.736	0.043	14.643	0.003		3248.2	54.1367	51.2	11.9	39.6	2.732	0.006	0.007	0.000	0.167	0.14	
2573	4/21/2004	3:51:02 PM		25.127	25.567	23.824	26.525	26.001		48.372	52.712	17.504	31.267	-1.221	-7.429		48.098	0.044	14.643	0.003		3249.2	54.1533	51.2	11.8	39.8	2.745	0.007	0.007	0.000	0.170	0.14	
2574	4/21/2004	3:52:02 PM		25.123	25.568	23.819	26.501	25.972		48.22	52.521	17.722	30.86	-1.221	-7.426		47.622	0.044	14.643	0.003		3250.2	54.17	51.0	11.7	39.5	2.726	0.007	0.007	0.000	0.172	0.15	
2575	4/21/2004	3:53:02 PM		25.135	25.595	23.832	26.528	26.019		48.422	52.716	17.7	31.121	-1.224	-7.429		48.052	0.044	14.643	0.003		3251.2	54.1867	51.2	11.8	39.8	2.742	0.007	0.007	0.000	0.170	0.15	
2576	4/21/2004	3:54:02 PM		25.121	25.581	23.807	26.514	26.03		48.121	52.428	17.655	30.764	-1.227	-7.431		48.552	0.044	14.643	0.003		3252.2	54.2033	51.0	11.9	39.4	2.719	0.007	0.007	0.000	0.172	0.15	
2577	4/21/2004	3:55:02 PM		25.126	25.596	23.823	26.555	26.106		48.289	52.6	17.724	30.959	-1.221	-7.414		49.226	0.046	14.643	0.003		3253.2	54.22	51.1	12.1	39.6	2.732	0.007	0.007	0.000	0.179	0.15	
2578	4/21/2004	3:56:02 PM		25.123	25.603	23.819	26.621	26.017		48.482	52.753	17.77	31.057	-1.224	-7.322		48.012	0.042	14.643	0.003		3254.2	54.2367	51.3	11.8	39.8	2.742	0.006	0.006	0.000	0.163	0.14	
2579	4/21/2004	3:57:02 PM		25.124	25.599	23.831	26.632	26.029		48.154	52.529	17.51	31.024	-1.218	-7.319		47.557	0.045	14.643	0.003		3255.2	54.2533	51.1	11.7	39.6	2.730	0.007	0.007	0.000	0.175	0.15	
2580	4/21/2004	3:58:02 PM		25.127	25.612	23.828	26.59	25.986		48.43	52.776	17.539	31.209	-1.221	-7.466		47.72	0.045	14.643	0.003		3256.2	54.27	51.3	11.7	39.8	2.745	0.007	0.007	0.000	0.174	0.15	
2581	4/21/2004	3:59:02 PM		25.112	25.607	23.818	26.53	25.926		48.179	52.635	17.61	30.869	-1.221	-7.154		50.023	0.038	14.643	0.003		3257.2	54.2867	51.2	12.3	39.5	2.725	0.006	0.006	0.000	0.148	0.13	
2582	4/21/2004	4:00:02 PM		25.107	25.602	23.838	26.45	25.746		48.382	52.77	17.709	31.066	-1.224	-7.197		48.656	0.044	14.643	0.003		3258.2	54.3033	51.3	11.9	39.7	2.739	0.007	0.007	0.000	0.171	0.15	
2583	4/21/2004	4:01:02 PM		25.116	25.601	23.832	26.404	25.671		48.181	52.451	17.606	30.975	-1.218	-7.197		48.654	0.044	14.643	0.003		3259.2	54.32	51.0	11.9	39.6	2.729	0.007	0.007	0.000	0.171	0.15	
2584	4/21/2004	4:02:02 PM		25.099	25.594	23.815	26.342	25.663		48.222	52.641	17.681	30.897	-1.221	-7.186		49.013	0.044	14.643	0.003		3260.2	54.3367	51.2	12.0	39.6	2.727	0.007	0.007	0.000	0.171	0.15	
2585	4/21/2004	4:03:02 PM		25.103	25.608	23.814	26.206	25.578		47.97	52.42	17.541	30.661	-1.221	-7.217		48.634	0.044	14.643	0.003		3261.2	54.3533	50.9	11.9	39.3	2.711	0.007	0.007	0.000	0.173	0.15	
2586	4/21/2004	4:04:02 PM		25.085	25.59	23.796	26.068	25.515		48.407	52.801	17.597	31.224	-1.221	-7.215		49.065	0.043	14.643	0.003		3262.2	54.37	51.3	12.0	39.8	2.745	0.006	0.007	0.000	0.167	0.14	
2587	4/21/2004	4:05:02 PM		25.089	25.598	23.795	26.071	25.523		48.14	52.525	17.476	30.94	-1.221	-7.215		48.387	0.045	14.643	0.003		3263.2	54.3867	51.1	11.9	39.5	2.726	0.007	0.007	0.000	0.176	0.15	
2588	4/21/2004	4:06:02 PM		25.083	25.588	23.784	26.126	25.538		48.193	52.569	17.541	30.918	-1.224	-7.212		47.808	0.043	14.643	0.003		3264.2	54.4033	51.1	11.7	39.6	2.727	0.006	0.007	0.000	0.168	0.14	
2589	4/21/2004	4:07:02 PM		25.071	25.576	23.773	26.169	25.646		48.133	52.507	17.676	30.866	-1.221	-7.212		49.585	0.043	14.643	0.003		3265.2	54.42	51.0	12.2	39.5	2.723	0.006	0.007	0.000	0.168	0.14	
2590	4/21/2004	4:08:02 PM		25.076	25.576	23.777	26.244	25.72		47.625	52.04	17.527	30.468	-1.221	-7.212		49.124	0.043	14.643	0.003		3266.2	54.4367	50.6	12.0	39.0	2.692	0.006	0.007	0.000	0.170	0.14	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2591	4/21/2004	4:09:02 PM		25.076	25.581	23.772	26.284	25.76		48.146	52.604	17.451	31.109	-1.224	-7.212		48.287	0.043	14.643	0.003		3267.2	54.4533	51.1	11.8	39.6	2.732	0.006	0.007	0.000	0.167	0.14	
2592	4/21/2004	4:10:02 PM		25.076	25.576	23.772	26.329	25.76		48.042	52.446	17.46	30.971	-1.221	-7.209		48.488	0.043	14.643	0.003		3268.2	54.47	51.0	11.9	39.5	2.724	0.006	0.007	0.000	0.168	0.14	
2593	4/21/2004	4:11:02 PM		25.071	25.571	23.772	26.374	25.76		48.04	52.43	17.649	30.756	-1.221	-7.209		48.402	0.043	14.643	0.003		3269.2	54.4867	51.0	11.9	39.4	2.716	0.006	0.007	0.000	0.168	0.14	
2594	4/21/2004	4:12:02 PM		25.061	25.571	23.757	26.434	25.815		48.069	52.438	17.654	30.768	-1.221	-7.212		48.604	0.043	14.643	0.003		3270.2	54.5033	51.0	11.9	39.4	2.718	0.006	0.007	0.000	0.168	0.14	
2595	4/21/2004	4:13:02 PM		25.046	25.55	23.732	26.379	25.85		48.237	52.674	17.652	30.932	-1.224	-7.212		48.027	0.044	14.643	0.003		3271.2	54.52	51.2	11.8	39.6	2.729	0.007	0.007	0.000	0.172	0.15	
2596	4/21/2004	4:14:02 PM		25.072	25.572	23.763	26.43	25.852		48.142	52.592	17.651	30.879	-1.221	-7.209		48.838	0.043	14.643	0.003		3272.2	54.5367	51.1	12.0	39.5	2.724	0.006	0.007	0.000	0.168	0.14	
2597	4/21/2004	4:15:02 PM		25.063	25.568	23.759	26.426	25.907		48.173	52.618	17.664	30.94	-1.221	-7.209		48.268	0.043	14.643	0.003		3273.2	54.5533	51.1	11.8	39.6	2.727	0.006	0.007	0.000	0.168	0.14	
2598	4/21/2004	4:16:02 PM		25.048	25.558	23.739	26.436	25.857		48.299	52.706	17.74	30.854	-1.224	-7.209		48.803	0.043	14.643	0.003		3274.2	54.57	51.2	12.0	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2599	4/21/2004	4:17:02 PM		25.049	25.569	23.746	26.427	25.944		48.279	52.646	17.717	30.864	-1.224	-7.209		48.544	0.044	14.643	0.003		3275.2	54.5867	51.2	11.9	39.6	2.728	0.007	0.007	0.000	0.172	0.15	
2600	4/21/2004	4:18:02 PM		25.066	25.571	23.757	26.464	25.9		48.104	52.612	17.624	30.825	-1.177	-7.197		48.175	0.041	14.643	0.003		3276.2	54.6033	51.1	11.8	39.5	2.721	0.006	0.006	0.000	0.160	0.14	
2601	4/21/2004	4:19:02 PM		25.056	25.571	23.753	26.45	25.886		48.046	52.457	17.613	30.803	-1.221	-7.194		47.611	0.043	14.643	0.003		3277.2	54.62	51.0	11.7	39.4	2.718	0.006	0.007	0.000	0.168	0.14	
2602	4/21/2004	4:20:02 PM		25.052	25.577	23.754	26.45	25.912		48.285	52.884	17.693	30.947	-1.195	-7.197		48.957	0.043	14.643	0.003		3278.2	54.6367	51.4	12.0	39.6	2.731	0.006	0.007	0.000	0.168	0.14	
2603	4/21/2004	4:21:02 PM		25.058	25.583	23.749	26.486	25.977		48.467	53.019	17.567	31.213	-1.224	-7.2		47.117	0.043	14.643	0.003		3279.2	54.6533	51.5	11.5	39.8	2.747	0.006	0.007	0.000	0.167	0.14	
2604	4/21/2004	4:22:02 PM		25.053	25.578	23.749	26.531	26.007		47.988	52.461	17.66	30.77	-1.195	-7.197		48.51	0.043	14.643	0.003		3280.2	54.67	51.0	11.9	39.4	2.715	0.006	0.007	0.000	0.169	0.14	
2605	4/21/2004	4:23:02 PM		25.069	25.594	23.76	26.572	25.973		47.911	52.289	17.558	30.637	-1.189	-7.197		47.096	0.043	14.643	0.003		3281.2	54.6867	50.8	11.5	39.3	2.708	0.006	0.007	0.000	0.169	0.14	
2606	4/21/2004	4:24:02 PM		25.054	25.599	23.751	26.597	26.069		48.173	52.616	17.68	30.852	-1.154	-7.197		48.054	0.043	14.643	0.003		3282.2	54.7033	51.1	11.8	39.5	2.724	0.006	0.007	0.000	0.168	0.14	
2607	4/21/2004	4:25:02 PM		25.067	25.602	23.768	26.59	26.011		48.154	52.66	17.715	30.704	-1.157	-7.2		49.812	0.042	14.643	0.003		3283.2	54.72	51.2	12.2	39.4	2.718	0.006	0.006	0.000	0.164	0.14	
2608	4/21/2004	4:26:02 PM		25.079	25.624	23.79	26.582	25.923		48.09	52.453	17.618	30.817	-1.169	-7.197		49.034	0.043	14.643	0.003		3284.2	54.7367	51.0	12.0	39.5	2.720	0.006	0.007	0.000	0.168	0.14	
2609	4/21/2004	4:27:02 PM		25.058	25.608	23.759	26.456	25.798		47.932	52.411	17.679	30.723	-1.157	-7.206		48.219	0.043	14.643	0.003		3285.2	54.7533	50.9	11.8	39.3	2.711	0.006	0.007	0.000	0.169	0.14	
2610	4/21/2004	4:28:02 PM		25.053	25.598	23.749	26.361	25.678		48.063	52.587	17.674	30.713	-1.157	-7.197		48.654	0.046	14.643	0.003		3286.2	54.77	51.1	11.9	39.4	2.716	0.007	0.007	0.000	0.180	0.15	
2611	4/21/2004	4:29:02 PM		25.057	25.607	23.749	26.26	25.552		48.077	52.579	17.441	30.986	-1.154	-7.2		47.712	0.042	14.643	0.003		3287.2	54.7867	51.1	11.7	39.5	2.726	0.006	0.006	0.000	0.164	0.14	
2612	4/21/2004	4:30:02 PM		25.057	25.607	23.753	26.17	25.447		48.303	52.934	17.77	30.881	-1.151	-7.2		48.648	0.043	14.643	0.003		3288.2	54.8033	51.5	11.9	39.6	2.730	0.006	0.007	0.000	0.168	0.14	
2613	4/21/2004	4:31:02 PM		25.034	25.584	23.74	26.097	25.384		48.372	52.846	17.797	30.947	-1.154	-7.197		47.699	0.042	14.643	0.003		3289.2	54.82	51.4	11.7	39.7	2.734	0.006	0.006	0.000	0.164	0.14	
2614	4/21/2004	4:32:02 PM		25.031	25.581	23.738	26.094	25.471		48.542	53.054	17.684	31.158	-1.154	-7.2		48.164	0.043	14.643	0.003		3290.2	54.8367	51.6	11.8	39.9	2.748	0.006	0.007	0.000	0.167	0.14	
2615	4/21/2004	4:33:02 PM		25.036	25.576	23.752	26.109	25.601		48.185	52.618	17.789	30.554	-1.154	-7.194		48.627	0.044	14.643	0.003		3291.2	54.8533	51.1	11.9	39.4	2.714	0.007	0.007	0.000	0.173	0.15	
2616	4/21/2004	4:34:02 PM		25.034	25.574	23.746	26.107	25.534		48.113	52.666	17.798	30.749	-1.111	-7.197		48.064	0.043	14.643	0.003		3292.2	54.87	51.2	11.8	39.4	2.719	0.006	0.007	0.000	0.168	0.14	
2617	4/21/2004	4:35:02 PM		25.018	25.563	23.734	26.141	25.658		48.301	52.811	17.758	30.868	-1.137	-7.194		47.503	0.043	14.643	0.003		3293.2	54.8867	51.3	11.6	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2618	4/21/2004	4:36:02 PM		25.037	25.582	23.768	26.23	25.707		48.314	52.892	17.84	30.86	-1.134	-7.194		48.412	0.043	14.643	0.003		3294.2	54.9033	51.4	11.9	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2619	4/21/2004	4:37:02 PM		25.021	25.566	23.773	26.234	25.826		48.326	52.944	17.782	30.86	-1.102	-7.191		48.356	0.044	14.643	0.003		3295.2	54.92	51.5	11.9	39.6	2.730	0.007	0.007	0.000	0.172	0.15	
2620	4/21/2004	4:38:02 PM		25.026	25.561	23.838	26.284	25.846		48.071	52.606	17.871	30.499	-1.137	-7.197		49.305	0.043	14.643	0.003		3296.2	54.9367	51.1	12.1	39.3	2.709	0.006	0.007	0.000	0.169	0.14	
2621	4/21/2004	4:39:02 PM		25.023	25.558	23.849	26.316	25.837		47.957	52.502	17.727	30.626	-1.125	-7.206		49.266	0.041	14.643	0.003		3297.2	54.9533	51.0	12.1	39.3	2.709	0.006	0.006	0.000	0.161	0.14	
2622	4/21/2004	4:40:02 PM		25.023	25.563	23.839	26.361	25.777		47.936	52.531	17.766	30.571	-1.099	-7.203		48.191	0.041	14.643	0.003		3298.2	54.97	51.1	11.8	39.3	2.706	0.006	0.006	0.000	0.161	0.14	
2623	4/21/2004	4:41:02 PM		25.039	25.578	23.855	26.427	25.843		47.924	52.529	17.601	30.622	-1.099	-7.2		48.592	0.041	14.643	0.003		3299.2	54.9867	51.1	11.9	39.3	2.708	0.006	0.006	0.000	0.161	0.14	
2624	4/21/2004	4:42:02 PM		25.034	25.558	23.825	26.467	25.978		48.05	52.577	17.77	30.573	-1.099	-7.099		48.252	0.043	14.643	0.003		3300.2	55.0033	51.1	11.8	39.3	2.710	0.006	0.007	0.000	0.169	0.14	
2625	4/21/2004	4:43:02 PM		25.034	25.569	23.816	26.502	25.924		47.945	52.556	17.669	30.604	-1.093	-7.064		48.934	0.042	14.643	0.003		3301.2	55.02	51.1	12.0	39.3	2.708	0.006	0.006	0.000	0.165	0.14	
2626	4/21/2004	4:44:02 PM		25.031	25.561	23.802	26.509	25.995		48.138	52.538	17.793	30.594	-1.221	-7.284		48.181	0.045	14.643	0.003		3302.2	55.0367	51.1	11.8	39.4	2.714	0.007	0.007	0.000	0.176	0.15	
2627	4/21/2004	4:45:02 PM		25.036	25.571	23.798	26.555	25.996		48.552	52.563	17.604	31.336	-1.221	-6.61		47.641	0.029	14.643	0.003		3303.2	55.0533	51.1	11.7	39.9	2.754	0.004	0.004	0.000	0.112	0.10	
2628	4/21/2004	4:46:02 PM		25.043	25.568	23.789	26.526	25.907		47.314	52.552	17.845	29.719	-0.427	-4.526		49.453	0.026	14.643	0.003		3304.2	55.07	51.1	12.1	38.5	2.656	0.004	0.004	0.000	0.104	0.09	
2629	4/21/2004	4:47:02 PM		25.039	25.579	23.801	26.532	26.019		48.206	52.577	17.77	30.834	-1.154	-6.671		48.419	0.042	14.643	0.003		3305.2	55.0867	51.1	11.9	39.5	2.725	0.006	0.006	0.000	0.164	0.14	
2630	4/21/2004	4:48:02 PM		25.051	25.576	23.782	26.524	25.99		48.202	52.631	17.792	30.717	-1.221	-6.949		48.221	0.112	14.643	0.003		3306.2	55.1033	51.2	11.8	39.5	2.721	0.017	0.017	0.000	0.438	0.37	
2631	4/21/2004	4:49:02 PM		25.042	25.582	23.794	26.555	25.912		48.54	52.656	17.811	31.096	-1.218	-7.486		48.992	0.043	14.643	0.003		3307.2	55.12	51.2	12.0	39.8	2.745	0.006	0.007	0.000	0.167	0.14	
2632	4/21/2004	4:50:02 PM		25.054	25.599	23.795	26.562	25.973		48.739	52.766	17.745	31.421	-1.221	-7.553		47.872	0.041	14.643	0.003		3308.2	55.1367	51.3	11.7	40.1	2.763	0.006	0.006	0.000	0.158	0.13	
2633	4/21/2004	4:51:02 PM		25.03	25.574	23.761	26.528	26.049		48.532	52.507	17.602	31.302	-1.224	-7.602		49.013	0.044	14.643	0.003		3309.2	55.1533	51.0	12.0	39.9	2.752	0.007	0.007	0.000	0.170	0.14	
2634	4/21/2004	4:52:02 PM		25.051	25.601	23.777	26.559	26		48.704	52.592	17.675	31.48	-1.221	-7.642		48.085	0.044	14.643	0.003		3310.2	55.17	51.1	11.8	40.1	2.764	0.007	0.007	0.000	0.169	0.14	
2635	4/21/2004	4:53:02 PM		25.052	25.617	23.793	26.48	25.841		48.442	52.513	17.639	31.176	-1.215	-7.316		49.13	0.043	14.643	0.003		3311.2	55.1867	51.0	12.0	39.8	2.745	0.006	0.007	0.000	0.167	0.14	
2636	4/21/2004	4:54:02 PM		25.035	25.595	23.757	26.363	25.795		48.718	52.884	17.682	31.388	-1.224	-7.382		48.723	0.045	14.643	0.003		3312.2	55.2033	51.4	11.9	40.1	2.762	0.007	0.007	0.000	0.173	0.15	
2637	4/21/2004	4:55:02 PM		25.038	25.588	23.759	26.251	25.528		48.654	52.639	17.731	31.246	-1.221	-7.379		47.816	0.044	14.643	0.003		3313.2	55.22	51.2	11.7	40.0	2.754	0.007	0.007	0.000	0.170	0.14	
2638	4/21/2004	4:56:02 PM		25.026	25.576	23.742	26.119	25.441		48.602	52.679	17.647	31.334	-1.221	-7.382		48.652	0.042	14.643	0.003		3314.2	55.2367	51.2	11.9	40.0	2.756	0.006	0.006	0.000	0.162	0.14	
2639	4/21/2004	4:57:02 PM		25.024	25.584	23.745	26.032	25.499		48.739	52.902	17.818	31.265	-1.218	-7.385		48.175	0.043	14.643	0.003		3315.2	55.2533	51.4	11.8	40.0	2.758	0.006	0.007	0.000	0.166	0.14	
2640	4/21/2004	4:58:02 PM		25.032	25.582	23.754	26.065	25.557		48.465	52.54	17.758	31.143	-1.218	-7.382		48.068	0.045	14.643	0.004		3316.2	55.27	51.1	11.8	39.8	2.744	0.007	0.007	0.000	0.175	0.15	
2641	4/21/2004	4:59:02 PM		25.014	25.564	23.731	26.067	25.569		48.677	52.674	17.658	31.232	-1.221	-7.391		48.608	0.042	14.643	0.003		3317.2	55.2867	51.2	11.9	40.0	2.755	0.006	0.006	0.000	0.162	0.14	
2642	4/21/2004	5:00:02 PM		25.018	25.573	23.74	26.101	25.703		48.417	52.546	17.79	31.066	-1.224	-7.385		48.942	0.042	14.643	0.003		3318.2	55.3033	51.1	12.0	39.7	2.740	0.006	0.006	0.000	0.163	0.14	
2643	4/21/2004	5:01:02 PM		25.017	25.562	23.738	26.115	25.652		48.708	52.788	17.714	31.263	-1.221	-7.394		48.146	0.042	14.643	0.003		3319.2	55.32	51.3	11.8	40.0	2.757	0.006	0.006	0.000	0.162	0.14	
2644	4/21/2004	5:02:02 PM		25.021	25.566	23.758	26.194	25.726		48.666	52.77	17.809	31.172	-1.218	-7.394		48.711	0.041	14.643	0.003		3320.2	55.3367	51.3	11.9	39.9	2.752	0.006	0.006	0.000	0.159	0.13	
2645	4/21/2004	5:03:02 PM		25.016	25.566	23.748	26.244	25.746		48.418	52.488	17.844	31.018	-1.218	-7.376		48.396	0.044	14.643	0.004		3321.2	55.3533	51.0	11.9	39.7	2.738	0.007	0.007	0.000	0.171	0.15	
2646	4/21/2004	5:04:02 PM		25.026	25.555	23.762	26.324	25.745		48.652	52.801	17.676	31.382	-1.218	-7.376		47.73	0.044	14.643	0.003		3322.2	55.37	51.3	11.7	40.0	2.759	0.007	0.007	0.000	0.170	0.14	
2647	4/21/2004	5:05:02 PM		25.006	25.545	23.732	26.299	25.76		48.826	53.006	17.843	31.371	-1.224	-7.379		48.325	0.043	14.643	0.003		3323.2	55.3867	51.5	11.8	40.1	2.765	0.006	0.007	0.000	0.166	0.14	
2648	4/21/2004	5:06:02 PM		25.016	25.541	23.743	26.319	25.726		48.699	52.664	17.683	31.494	-1.221	-7.385		48.339	0.042	14.643	0.003		3324.2	55.4033	51.2	11.8	40.1	2.765	0.006	0.006	0.000	0.162	0.14	
2649	4/21/2004	5:07:02 PM		25.011	25.541	23.753	26.349	25.826		48.716	52.863	17.655	31.404	-1.218	-7.382		49.889	0.042	14.643	0.003		3325.2	55.42	51.4	12.2	40.1	2.762	0.006	0.006	0.000	0.162	0.14	
2650	4/21/2004	5:08:02 PM		25.001	25.535	23.757	26.354	25.79		48.476	52.573	17.6	31.18	-1.215	-7.374		48.346	0.043	14.643	0.004		3326.2	55.4367	51.1	11.8	39.8	2.746	0.006	0.007	0.000	0.167	0.14	
2651	4/21/2004	5:09:02 PM		25.001	25.531	23.818	26.339	25.711		48.395	52.449	17.611	31.271	-1.221	-7.371		47.732	0.043	14.643	0.003		3327.2	55.4533	51.0	11.7	39.8	2.746	0.006	0.007	0.000	0.166	0.14	
2652	4/21/2004	5:10:02 PM		25.002	25.522	23.824	26.34	25.772		48.5	52.623	17.609	31.261	-1.221	-7.379		49.088	0.041	14.643	0.003		3328.2	55.47	51.1	12.0	39.9	2.750	0.006	0.006	0.000	0.158	0.13	
2653	4/21/2004	5:11:02 PM		25.001	25.521	23.813	26.329	25.826		48.409	52.548	17.733	31.121	-1.221	-7.371		48.074	0.043	14.643	0.003		3329.2	55.4867	51.1	11.8	39.8	2.742	0.006	0.007	0.000	0.167	0.14	
2654	4/21/2004	5:12:02 PM		24.992	25.527	23.794	26.375	25.787		48.334	52.428	17.604	31.197	-1.224	-7.371		48.644	0.042	14.643	0.003		3330.2	55.5033	51.0	11.9	39.8	2.742	0.006	0.006	0.000	0.163	0.14	
2655	4/21/2004	5:13:02 PM		25.002	25.527	23.783	26.36	25.872		48.762	52.965	17.78	31.164	-1.224	-7.365		48.681	0.043	14.643	0.003		3331.2	55.52	51.5	11.9	40.0	2.755	0.006	0.007	0.000	0.166	0.14	
2656	4/21/2004	5:14:02 PM		25.007	25.522	23.783	26.355	25.802		48.662	52.799	17.894	31.131	-1.224	-7.371		48.667	0.042	14.643	0.003		3332.2	55.5367	51.3	11.9	39.9	2.751	0.006	0.006	0.000	0.162	0.14	
2657	4/21/2004	5:15:02 PM		25.012	25.517	23.783	26.335	25.712		48.424	52.623	17.771	31.025	-1.221	-7.362		48.373	0.043	14.643	0.003		3333.2	55.5533	51.1	11.9	39.7	2.739	0.006	0.007	0.000	0.167	0.14	
2658	4/21/2004	5:16:02 PM		25.006	25.516	23.758	26.294	25.776		48.154	52.299	17.74	30.854	-1.224	-7.362		47.369	0.044	14.643	0.003		3334.2	55.57	50.8	11.6	39.5	2.724	0.007	0.007	0.000	0.172	0.15	
2659	4/21/2004	5:17:02 PM		25.011	25.516	23.758	26.299	25.736		48.554	52.704	17.825	31.156	-1.221	-7.365		50.945	0.042	14.643	0.003		3335.2	55.5867	51.2	12.5	39.9	2.748	0.006	0.006	0.000	0.163	0.14	
2660	4/21/2004	5:17:23 PM		25.006	25.521	23.763	26.294	25.711		48.349	52.583	17.721	30.955	-1.224	-7.371		48.052	0.041	14.643	0.003		3335.6	55.5925	51.1	11.8	39.7	2.734	0.006	0.006	0.000	0.160	0.14	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2661	4/21/2004	5:18:23 PM		25.011	25.525	23.762	26.274	25.67		48.256	52.44	17.731	30.897	-1.221	-7.362		48.688	0.043	14.643	0.003		3336.6	55.6092	51.0	11.9	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2662	4/21/2004	5:19:23 PM		25.011	25.52	23.757	26.304	25.81		48.641	52.805	17.868	31.244	-1.218	-7.359		48.671	0.042	14.643	0.003		3337.6	55.6258	51.3	11.9	39.9	2.754	0.006	0.006	0.000	0.162	0.14	
2663	4/21/2004	5:20:23 PM		24.999	25.514	23.74	26.292	25.779		48.534	52.78	17.777	31.166	-1.224	-7.356		48.456	0.042	14.643	0.003		3338.6	55.6425	51.3	11.9	39.9	2.748	0.006	0.006	0.000	0.163	0.14	
2664	4/21/2004	5:21:23 PM		25.005	25.52	23.746	26.308	25.745		48.55	52.728	17.847	31.107	-1.224	-7.362		49.366	0.042	14.643	0.003		3339.6	55.6592	51.3	12.1	39.8	2.746	0.006	0.006	0.000	0.163	0.14	
2665	4/21/2004	5:22:23 PM		25.016	25.53	23.772	26.314	25.7		48.697	52.919	17.631	31.497	-1.218	-7.397		47.916	0.042	14.643	0.003		3340.6	55.6758	51.4	11.7	40.1	2.765	0.006	0.006	0.000	0.162	0.14	
2666	4/21/2004	5:23:23 PM		25.001	25.52	23.747	26.239	25.7		48.484	52.714	17.872	31.031	-1.221	-7.388		47.447	0.043	14.643	0.003		3341.6	55.6925	51.2	11.6	39.8	2.741	0.006	0.007	0.000	0.167	0.14	
2667	4/21/2004	5:24:23 PM		24.996	25.51	23.747	26.239	25.7		48.554	52.776	17.705	31.123	-1.218	-7.382		48.079	0.043	14.643	0.003		3342.6	55.7092	51.3	11.8	39.8	2.747	0.006	0.007	0.000	0.167	0.14	
2668	4/21/2004	5:25:23 PM		24.996	25.516	23.738	26.214	25.761		48.546	52.82	17.802	30.946	-1.224	-7.385		47.257	0.043	14.643	0.003		3343.6	55.7258	51.3	11.6	39.7	2.740	0.006	0.007	0.000	0.167	0.14	
2669	4/21/2004	5:26:23 PM		24.986	25.515	23.732	26.234	25.72		48.465	52.614	17.726	31.098	-1.224	-7.394		48.809	0.042	14.643	0.003		3344.6	55.7425	51.1	12.0	39.8	2.743	0.006	0.006	0.000	0.163	0.14	
2670	4/21/2004	5:27:23 PM		24.981	25.505	23.727	26.254	25.795		48.527	52.693	17.806	31.127	-1.224	-7.388		47.805	0.043	14.643	0.003		3345.6	55.7592	51.2	11.7	39.8	2.746	0.006	0.007	0.000	0.167	0.14	
2671	4/21/2004	5:28:23 PM		25.001	25.511	23.748	26.264	25.736		48.324	52.453	17.852	30.903	-1.218	-7.379		48.241	0.044	14.643	0.003		3346.6	55.7758	51.0	11.8	39.6	2.731	0.007	0.007	0.000	0.172	0.15	
2672	4/21/2004	5:29:23 PM		24.991	25.505	23.737	26.229	25.76		48.469	52.627	17.687	31.158	-1.221	-7.382		47.778	0.043	14.643	0.003		3347.6	55.7925	51.2	11.7	39.8	2.745	0.006	0.007	0.000	0.167	0.14	
2673	4/21/2004	5:30:23 PM		24.985	25.5	23.731	26.233	25.705		48.463	52.616	17.701	31.144	-1.221	-7.388		48.538	0.041	14.643	0.003		3348.6	55.8092	51.1	11.9	39.8	2.744	0.006	0.006	0.000	0.159	0.14	
2674	4/21/2004	5:31:23 PM		24.979	25.499	23.74	26.237	25.649		48.575	52.828	17.736	31.197	-1.218	-7.391		49.382	0.041	14.643	0.003		3349.6	55.8258	51.4	12.1	39.9	2.750	0.006	0.006	0.000	0.159	0.14	
2675	4/21/2004	5:32:23 PM		24.989	25.504	23.74	26.222	25.799		48.469	52.662	17.591	31.275	-1.221	-7.391		49.676	0.04	14.643	0.003		3350.6	55.8425	51.2	12.2	39.9	2.749	0.006	0.006	0.000	0.155	0.13	
2676	4/21/2004	5:33:23 PM		24.979	25.499	23.735	26.237	25.734		48.569	52.809	17.678	31.31	-1.221	-7.379		48.584	0.043	14.643	0.003		3351.6	55.8592	51.3	11.9	39.9	2.754	0.006	0.007	0.000	0.166	0.14	
2677	4/21/2004	5:34:23 PM		24.978	25.493	23.73	26.196	25.718		48.571	52.759	17.646	31.314	-1.221	-7.374		48.596	0.044	14.643	0.003		3352.6	55.8758	51.3	11.9	39.9	2.754	0.007	0.007	0.000	0.170	0.14	
2678	4/21/2004	5:35:23 PM		24.973	25.497	23.739	26.211	25.692		48.552	52.759	17.888	31.076	-1.221	-7.379		47.678	0.042	14.643	0.003		3353.6	55.8925	51.3	11.7	39.8	2.745	0.006	0.006	0.000	0.163	0.14	
2679	4/21/2004	5:36:23 PM		24.978	25.492	23.744	26.171	25.697		48.749	52.907	17.786	31.316	-1.221	-7.408		48.504	0.043	14.643	0.003		3354.6	55.9092	51.4	11.9	40.0	2.760	0.006	0.007	0.000	0.166	0.14	
2680	4/21/2004	5:37:23 PM		24.962	25.472	23.713	26.13	25.732		48.233	52.548	17.602	31.014	-1.224	-7.414		48.819	0.043	14.643	0.003		3355.6	55.9258	51.1	12.0	39.6	2.732	0.006	0.007	0.000	0.168	0.14	
2681	4/21/2004	5:38:23 PM		24.972	25.482	23.733	26.165	25.572		48.548	52.712	17.787	31.178	-1.221	-7.403		48.565	0.044	14.643	0.003		3356.6	55.9425	51.2	11.9	39.9	2.748	0.007	0.007	0.000	0.171	0.15	
2682	4/21/2004	5:39:23 PM		24.955	25.465	23.722	26.173	25.52		48.532	52.766	17.814	31.129	-1.221	-7.403		47.301	0.043	14.643	0.003		3357.6	55.9592	51.3	11.6	39.8	2.746	0.006	0.007	0.000	0.167	0.14	
2683	4/21/2004	5:40:23 PM		24.96	25.465	23.772	26.138	25.56		48.548	52.764	17.749	31.045	-1.221	-7.397		48.075	0.045	14.643	0.003		3358.6	55.9758	51.3	11.8	39.8	2.744	0.007	0.007	0.000	0.175	0.15	
2684	4/21/2004	5:41:23 PM		24.955	25.465	23.826	26.113	25.605		48.256	52.529	17.912	30.727	-1.224	-7.408		49.138	0.045	14.643	0.003		3359.6	55.9925	51.1	12.0	39.5	2.723	0.007	0.007	0.000	0.176	0.15	
2685	4/21/2004	5:42:23 PM		24.954	25.464	23.821	26.132	25.659		48.218	52.457	17.765	30.879	-1.221	-7.397		49.094	0.043	14.643	0.003		3360.6	56.0092	51.0	12.0	39.5	2.727	0.006	0.007	0.000	0.168	0.14	
2686	4/21/2004	5:43:23 PM		24.959	25.464	23.821	26.147	25.709		48.235	52.475	17.679	30.963	-1.221	-7.403		48.154	0.041	14.643	0.003		3361.6	56.0258	51.0	11.8	39.6	2.730	0.006	0.006	0.000	0.160	0.14	
2687	4/21/2004	5:44:23 PM		24.959	25.459	23.805	26.152	25.709		48.48	52.708	17.847	31.033	-1.221	-7.397		49.082	0.042	14.643	0.003		3362.6	56.0425	51.2	12.0	39.8	2.741	0.006	0.006	0.000	0.163	0.14	
2688	4/21/2004	5:45:23 PM		24.953	25.448	23.795	26.141	25.718		48.334	52.648	17.783	30.897	-1.221	-7.397		48.696	0.043	14.643	0.003		3363.6	56.0592	51.2	11.9	39.6	2.731	0.006	0.007	0.000	0.167	0.14	
2689	4/21/2004	5:46:23 PM		24.947	25.432	23.773	26.125	25.672		48.399	52.6	17.808	31.022	-1.221	-7.403		47.949	0.042	14.643	0.003		3364.6	56.0758	51.1	11.8	39.7	2.738	0.006	0.006	0.000	0.163	0.14	
2690	4/21/2004	5:47:23 PM		24.951	25.436	23.767	26.124	25.641		48.326	52.449	17.708	31.051	-1.224	-7.405		50.194	0.042	14.643	0.003		3365.6	56.0925	51.0	12.3	39.7	2.736	0.006	0.006	0.000	0.163	0.14	
2691	4/21/2004	5:48:23 PM		24.951	25.436	23.762	26.114	25.636		48.26	52.467	17.703	30.93	-1.221	-7.4		48.75	0.042	14.643	0.003		3366.6	56.1092	51.0	11.9	39.6	2.730	0.006	0.006	0.000	0.164	0.14	
2692	4/21/2004	5:49:23 PM		24.955	25.445	23.772	26.143	25.67		48.451	52.733	17.74	30.994	-1.221	-7.405		48.039	0.041	14.643	0.003		3367.6	56.1258	51.3	11.8	39.7	2.739	0.006	0.006	0.000	0.159	0.14	
2693	4/21/2004	5:50:23 PM		24.95	25.434	23.761	26.123	25.644		48.417	52.72	17.929	30.799	-1.218	-7.391		49.422	0.043	14.643	0.004		3368.6	56.1425	51.2	12.1	39.6	2.731	0.006	0.007	0.000	0.168	0.14	
2694	4/21/2004	5:51:23 PM		24.943	25.418	23.749	26.101	25.493		48.281	52.565	17.8	30.754	-1.221	-7.391		48.467	0.041	14.643	0.004		3369.6	56.1592	51.1	11.9	39.5	2.725	0.006	0.006	0.000	0.160	0.14	
2695	4/21/2004	5:52:23 PM		24.948	25.433	23.749	26.101	25.623		48.53	52.871	17.869	30.924	-1.221	-7.391		47.223	0.042	14.643	0.003		3370.6	56.1758	51.4	11.6	39.7	2.739	0.006	0.006	0.000	0.163	0.14	
2696	4/21/2004	5:53:23 PM		24.937	25.416	23.728	26.1	25.607		48.733	52.996	17.791	31.24	-1.224	-7.388		48.581	0.042	14.643	0.003		3371.6	56.1925	51.5	11.9	40.0	2.757	0.006	0.006	0.000	0.162	0.14	
2697	4/21/2004	5:54:23 PM		24.937	25.411	23.733	26.085	25.552		48.382	52.641	17.755	30.924	-1.224	-7.376		47.845	0.042	14.643	0.003		3372.6	56.2092	51.2	11.7	39.7	2.734	0.006	0.006	0.000	0.164	0.14	
2698	4/21/2004	5:55:23 PM		24.936	25.416	23.727	26.059	25.551		48.312	52.527	17.839	30.819	-1.221	-7.376		48.765	0.042	14.643	0.003		3373.6	56.2258	51.1	12.0	39.6	2.728	0.006	0.006	0.000	0.164	0.14	
2699	4/21/2004	5:56:23 PM		24.925	25.405	23.721	26.048	25.555		48.417	52.716	17.686	31.024	-1.221	-7.376		49.107	0.043	14.643	0.003		3374.6	56.2425	51.2	12.0	39.7	2.739	0.006	0.007	0.000	0.167	0.14	
2700	4/21/2004	5:57:23 PM		24.93	25.4	23.737	26.048	25.395		48.268	52.577	17.869	30.706	-1.215	-7.376		48.469	0.041	14.643	0.003		3375.6	56.2592	51.1	11.9	39.5	2.722	0.006	0.006	0.000	0.160	0.14	
2701	4/21/2004	5:58:23 PM		24.929	25.394	23.726	26.057	25.175		48.164	52.417	17.722	30.834	-1.224	-7.374		47.783	0.043	14.643	0.003		3376.6	56.2758	50.9	11.7	39.5	2.723	0.006	0.007	0.000	0.168	0.14	
2702	4/21/2004	5:59:23 PM		24.914	25.394	23.715	26.072	25.489		48.722	53.016	17.895	31.078	-1.218	-7.376		48.546	0.042	14.643	0.003		3377.6	56.2925	51.5	11.9	39.9	2.751	0.006	0.006	0.000	0.163	0.14	
2703	4/21/2004	6:00:23 PM		24.918	25.393	23.714	26.081	25.503		48.451	52.706	17.794	31.027	-1.221	-7.371		46.894	0.042	14.643	0.003		3378.6	56.3092	51.2	11.5	39.7	2.740	0.006	0.006	0.000	0.163	0.14	
2704	4/21/2004	6:01:23 PM		24.912	25.387	23.709	26.035	25.552		48.391	52.793	17.893	30.858	-1.224	-7.374		49.439	0.043	14.643	0.003		3379.6	56.3258	51.3	12.1	39.6	2.732	0.006	0.007	0.000	0.168	0.14	
2705	4/21/2004	6:02:23 PM		24.907	25.386	23.723	26.015	25.547		48.592	52.921	17.881	31.119	-1.221	-7.376		48.876	0.041	14.643	0.003		3380.6	56.3425	51.4	12.0	39.9	2.748	0.006	0.006	0.000	0.159	0.14	
2706	4/21/2004	6:03:23 PM		24.891	25.366	23.747	25.974	25.486		48.276	52.596	17.796	30.795	-1.224	-7.371		48.542	0.04	14.643	0.003		3381.6	56.3592	51.1	11.9	39.5	2.726	0.006	0.006	0.000	0.156	0.13	
2707	4/21/2004	6:04:23 PM		24.9	25.38	23.756	25.988	25.555		48.388	52.732	17.789	30.92	-1.221	-7.371		46.948	0.041	14.643	0.003		3382.6	56.3758	51.3	11.5	39.7	2.734	0.006	0.006	0.000	0.160	0.14	
2708	4/21/2004	6:05:23 PM		24.89	25.36	23.736	25.988	25.54		48.175	52.453	17.668	30.895	-1.221	-7.365		48.625	0.041	14.643	0.003		3383.6	56.3925	51.0	11.9	39.5	2.726	0.006	0.006	0.000	0.160	0.14	
2709	4/21/2004	6:06:23 PM		24.894	25.359	23.746	25.997	25.554		48.216	52.446	17.679	30.887	-1.221	-7.371		48.204	0.04	14.643	0.003		3384.6	56.4092	51.0	11.8	39.6	2.727	0.006	0.006	0.000	0.156	0.13	
2710	4/21/2004	6:07:23 PM		24.894	25.363	23.735	25.977	25.379		48.432	52.691	17.805	30.92	-1.218	-7.359		48.235	0.044	14.643	0.003		3385.6	56.4258	51.2	11.8	39.7	2.736	0.007	0.007	0.000	0.171	0.15	
2711	4/21/2004	6:08:23 PM		24.888	25.353	23.714	25.946	25.463		48.312	52.762	17.866	30.782	-1.224	-7.405		49.03	0.045	14.643	0.003		3386.6	56.4425	51.3	12.0	39.5	2.727	0.007	0.007	0.000	0.176	0.15	
2712	4/21/2004	6:09:23 PM		24.872	25.337	23.703	25.96	25.477		48.167	52.513	17.728	30.852	-1.221	-7.411		48.093	0.044	14.643	0.003		3387.6	56.4592	51.0	11.8	39.5	2.724	0.007	0.007	0.000	0.172	0.15	
2713	4/21/2004	6:10:23 PM		24.887	25.341	23.708	25.944	25.487		48.534	52.882	17.733	31.197	-1.221	-7.411		48.867	0.042	14.643	0.003		3388.6	56.4758	51.4	12.0	39.9	2.749	0.006	0.006	0.000	0.163	0.14	
2714	4/21/2004	6:11:23 PM		24.87	25.33	23.701	25.933	25.535		48.337	52.662	17.535	31.082	-1.218	-7.42		49.288	0.041	14.643	0.003		3389.6	56.4925	51.2	12.1	39.7	2.738	0.006	0.006	0.000	0.160	0.14	
2715	4/21/2004	6:12:23 PM		24.885	25.345	23.721	25.973	25.495		48.463	52.844	17.749	30.99	-1.218	-7.408		48.477	0.041	14.643	0.003		3390.6	56.5092	51.4	11.9	39.7	2.739	0.006	0.006	0.000	0.160	0.14	
2716	4/21/2004	6:13:23 PM		24.869	25.318	23.68	25.912	25.414		48.484	52.761	17.714	31.131	-1.221	-7.417		48.85	0.04	14.643	0.003		3391.6	56.5258	51.3	12.0	39.8	2.745	0.006	0.006	0.000	0.156	0.13	
2717	4/21/2004	6:14:23 PM		24.858	25.318	23.679	25.896	25.523		48.256	52.529	17.768	30.908	-1.221	-7.403		47.62	0.043	14.643	0.003		3392.6	56.5425	51.1	11.7	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2718	4/21/2004	6:15:23 PM		24.861	25.305	23.677	25.919	25.546		48.204	52.451	17.607	30.955	-1.218	-7.405		48.519	0.042	14.643	0.003		3393.6	56.5592	51.0	11.9	39.6	2.729	0.006	0.007	0.000	0.164	0.14	
2719	4/21/2004	6:16:23 PM		24.86	25.3	23.661	25.903	25.43		48.525	52.813	17.777	31.113	-1.224	-7.4		48.8	0.043	14.643	0.003		3394.6	56.5758	51.3	12.0	39.8	2.745	0.006	0.007	0.000	0.167	0.14	
2720	4/21/2004	6:17:23 PM		24.86	25.305	23.671	25.918	25.45		48.407	52.795	17.821	30.957	-1.221	-7.411		48.73	0.043	14.643	0.003		3395.6	56.5925	51.3	11.9	39.7	2.736	0.006	0.007	0.000	0.168	0.14	
2721	4/21/2004	6:18:23 PM		24.849	25.294	23.67	25.942	25.474		48.486	52.861	17.72	31.178	-1.215	-7.388		48.552	0.044	14.643	0.004		3396.6	56.6092	51.4	11.9	39.8	2.746	0.007	0.007	0.000	0.171	0.15	
2722	4/21/2004	6:19:23 PM		24.839	25.288	23.655	25.977	25.509		48.384	52.67	17.693	31.035	-1.221	-7.313		48.373	0.041	14.643	0.003		3397.6	56.6258	51.2	11.9	39.7	2.738	0.006	0.006	0.000	0.160	0.14	
2723	4/21/2004	6:20:23 PM		24.839	25.283	23.66	26.057	25.609		48.208	52.507	17.657	30.893	-1.221	-7.298		48.152	0.042	14.643	0.003		3398.6	56.6425	51.0	11.8	39.6	2.727	0.006	0.007	0.000	0.164	0.14	
2724	4/21/2004	6:21:23 PM		24.844	25.289	23.665	26.132	25.784		48.816	53.224	17.687	31.48	-1.218	-7.284		47.495	0.043	14.643	0.003		3399.6	56.6592	51.8	11.6	40.1	2.768	0.006	0.007	0.000	0.166	0.14	
2725	4/21/2004	6:22:23 PM		24.861	25.32	23.692	26.234	25.825		48.436	52.849	17.774	30.944	-1.218	-7.287		48.494	0.041	14.643	0.003		3400.6	56.6758	51.4	11.9	39.7	2.736	0.006	0.006	0.000	0.160	0.14	
2726	4/21/2004	6:23:23 PM		24.852	25.307	23.678	26.31	25.947		48.583	52.938	17.73	31.322	-1.221	-7.284		48.592	0.04	14.643	0.003		3401.6	56.6925	51.5	11.9	40.0	2.755	0.006	0.006	0.000	0.155	0.13	
2727	4/21/2004	6:24:23 PM		24.855	25.31	23.666	26.348	25.9		47.98	52.266	17.676	30.663	-1.227	-7.284		48.421	0.042	14.643	0.003		3402.6	56.7092	50.8	11.9	39.3	2.711	0.006	0.007	0.000	0.165	0.14	
2728	4/21/2004	6:25:23 PM		24.852	25.322	23.673	26.365	25.827		48.415	52.844	17.795	31.025	-1.218	-7.275		48.008	0.042	14.643	0.003		3403.6	56.7258	51.4	11.8	39.7	2.739	0.006	0.007	0.000	0.164	0.14	
2729	4/21/2004	6:26:24 PM		24.854	25.319	23.675	26.338	25.864		48.301	52.59	17.647	31.059	-1.224	-7.281		48.139	0.042	14.643	0.003		3404.6	56.7428	51.1	11.8	39.7	2.736	0.006	0.007	0.000	0.164	0.14	
2730	4/21/2004	6:27:24 PM		24.861	25.331	23.672	26.294	25.796		48.278	52.672	17.823	30.788	-1.221	-7.272		48.74	0.042	14.643	0.003		3405.6	56.7594	51.2	11.9	39.5	2.726	0.006	0.007	0.000	0.164	0.14	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2731	4/21/2004	6:28:24 PM		24.862	25.336	23.678	26.28	25.771		48.409	52.851	17.604	31.088	-1.221	-7.272		47.645	0.043	14.643	0.003		3406.6	56.7761	51.4	11.7	39.7	2.741	0.006	0.007	0.000	0.167	0.14	
2732	4/21/2004	6:29:24 PM		24.867	25.347	23.693	26.26	25.717		48.646	53.081	17.792	31.16	-1.221	-7.281		48.208	0.04	14.643	0.003		3407.6	56.7928	51.6	11.8	39.9	2.751	0.006	0.006	0.000	0.155	0.13	
2733	4/21/2004	6:30:24 PM		24.852	25.326	23.663	26.2	25.611		48.505	52.932	17.726	31.217	-1.221	-7.27		48.531	0.041	14.643	0.003		3408.6	56.8094	51.5	11.9	39.9	2.748	0.006	0.006	0.000	0.159	0.14	
2734	4/21/2004	6:31:24 PM		24.857	25.341	23.668	26.16	25.676		48.529	52.938	17.802	30.977	-1.224	-7.203		47.593	0.042	14.643	0.003		3409.6	56.8261	51.5	11.7	39.8	2.741	0.006	0.007	0.000	0.164	0.14	
2735	4/21/2004	6:32:24 PM		24.856	25.331	23.732	26.109	25.566		48.509	52.84	17.774	31.111	-1.224	-7.226		47.63	0.042	14.643	0.003		3410.6	56.8428	51.4	11.7	39.8	2.745	0.006	0.006	0.000	0.163	0.14	
2736	4/21/2004	6:33:24 PM		24.861	25.341	23.757	26.099	25.586		48.249	52.672	17.652	30.961	-1.221	-7.226		47.589	0.042	14.643	0.003		3411.6	56.8594	51.2	11.7	39.6	2.731	0.006	0.006	0.000	0.164	0.14	
2737	4/21/2004	6:34:24 PM		24.86	25.34	23.746	26.068	25.55		48.258	52.805	17.729	30.846	-1.221	-7.235		48.402	0.043	14.643	0.003		3412.6	56.8761	51.3	11.9	39.6	2.727	0.006	0.007	0.000	0.168	0.14	
2738	4/21/2004	6:35:24 PM		24.865	25.345	23.746	26.058	25.45		48.357	52.824	17.867	30.83	-1.218	-7.244		49.531	0.042	14.643	0.003		3413.6	56.8928	51.4	12.1	39.6	2.730	0.006	0.006	0.000	0.164	0.14	
2739	4/21/2004	6:36:24 PM		24.869	25.354	23.756	26.047	25.474		48.335	52.735	17.723	30.983	-1.218	-7.241		48.045	0.043	14.643	0.003		3414.6	56.9094	51.3	11.8	39.7	2.734	0.006	0.007	0.000	0.167	0.14	
2740	4/21/2004	6:37:24 PM		24.858	25.333	23.719	25.981	25.483		48.581	52.983	17.771	31.176	-1.186	-7.246		48.487	0.041	14.643	0.003		3415.6	56.9261	51.5	11.9	39.9	2.749	0.006	0.006	0.000	0.159	0.14	
2741	4/21/2004	6:38:24 PM		24.857	25.327	23.713	25.98	25.487		48.21	52.681	17.64	30.852	-1.218	-7.255		50.538	0.04	14.643	0.003		3416.6	56.9428	51.2	12.4	39.5	2.726	0.006	0.006	0.000	0.156	0.13	
2742	4/21/2004	6:39:24 PM		24.862	25.326	23.718	25.954	25.522		48.602	53.046	17.945	30.951	-1.221	-7.244		47.764	0.042	14.643	0.003		3417.6	56.9594	51.6	11.7	39.8	2.742	0.006	0.006	0.000	0.163	0.14	
2743	4/21/2004	6:40:24 PM		24.86	25.325	23.706	25.963	25.45		48.397	52.807	17.789	30.944	-1.221	-7.241		48.362	0.042	14.643	0.003		3418.6	56.9761	51.3	11.9	39.7	2.735	0.006	0.006	0.000	0.164	0.14	
2744	4/21/2004	6:41:24 PM		24.854	25.314	23.695	25.937	25.464		48.316	52.863	17.789	30.844	-1.215	-7.249		48.915	0.04	14.643	0.003		3419.6	56.9928	51.4	12.0	39.6	2.729	0.006	0.006	0.000	0.156	0.13	
2745	4/21/2004	6:42:24 PM		24.849	25.303	23.7	25.927	25.459		48.256	52.652	17.66	30.905	-1.18	-7.238		47.265	0.043	14.643	0.003		3420.6	57.0094	51.2	11.6	39.6	2.729	0.006	0.007	0.000	0.168	0.14	
2746	4/21/2004	6:43:24 PM		24.852	25.307	23.693	25.93	25.397		48.393	52.824	17.84	30.971	-1.183	-7.241		48.054	0.042	14.643	0.003		3421.6	57.0261	51.4	11.8	39.7	2.736	0.006	0.006	0.000	0.164	0.14	
2747	4/21/2004	6:44:24 PM		24.846	25.296	23.688	25.909	25.392		48.326	52.749	17.762	30.895	-1.192	-7.241		48.7	0.042	14.643	0.003		3422.6	57.0428	51.3	11.9	39.6	2.731	0.006	0.006	0.000	0.164	0.14	
2748	4/21/2004	6:45:24 PM		24.841	25.286	23.683	25.879	25.412		48.451	52.965	17.822	30.986	-1.163	-7.238		48.133	0.042	14.643	0.003		3423.6	57.0594	51.5	11.8	39.7	2.738	0.006	0.006	0.000	0.164	0.14	
2749	4/21/2004	6:46:24 PM		24.851	25.296	23.688	25.899	25.442		48.262	52.842	17.658	31.02	-1.154	-7.165		48.139	0.038	14.643	0.003		3424.6	57.0761	51.4	11.8	39.6	2.733	0.006	0.006	0.000	0.148	0.13	
2750	4/21/2004	6:47:24 PM		24.835	25.28	23.671	25.868	25.475		48.374	52.849	17.818	30.951	-1.102	-7.085		47.885	0.042	14.643	0.003		3425.6	57.0928	51.4	11.7	39.7	2.735	0.006	0.007	0.000	0.164	0.14	
2751	4/21/2004	6:48:24 PM		24.834	25.273	23.675	25.846	25.459		48.194	52.786	17.77	30.704	-1.096	-7.099		47.947	0.04	14.643	0.003		3426.6	57.1094	51.3	11.8	39.4	2.720	0.006	0.006	0.000	0.157	0.13	
2752	4/21/2004	6:49:24 PM		24.827	25.267	23.668	25.82	25.412		48.428	52.818	17.688	31.09	-1.099	-7.085		48.214	0.042	14.643	0.003		3427.6	57.1261	51.3	11.8	39.8	2.741	0.006	0.007	0.000	0.164	0.14	
2753	4/21/2004	6:50:24 PM		24.826	25.261	23.672	25.809	25.392		48.467	53.052	17.764	31.076	-1.099	-7.09		48.254	0.041	14.643	0.003		3428.6	57.1428	51.6	11.8	39.8	2.742	0.006	0.006	0.000	0.160	0.14	
2754	4/21/2004	6:51:24 PM		24.821	25.255	23.662	25.834	25.426		48.48	52.992	17.903	30.959	-1.096	-7.085		47.908	0.042	14.643	0.003		3429.6	57.1594	51.5	11.7	39.7	2.739	0.006	0.007	0.000	0.164	0.14	
2755	4/21/2004	6:52:24 PM		24.821	25.255	23.667	25.909	25.536		48.384	52.853	17.871	30.864	-1.099	-7.102		48.229	0.041	14.643	0.003		3430.6	57.1761	51.4	11.8	39.6	2.732	0.006	0.006	0.000	0.160	0.14	
2756	4/21/2004	6:53:24 PM		24.821	25.255	23.677	26.019	25.716		48.453	52.969	17.708	31.033	-1.096	-7.096		48.969	0.041	14.643	0.003		3431.6	57.1928	51.5	12.0	39.7	2.740	0.006	0.006	0.000	0.160	0.14	
2757	4/21/2004	6:54:24 PM		24.821	25.256	23.667	26.109	25.766		48.067	52.583	17.622	30.815	-1.099	-7.096		47.061	0.038	14.643	0.003		3432.6	57.2094	51.1	11.5	39.4	2.719	0.006	0.006	0.000	0.149	0.13	
2758	4/21/2004	6:55:24 PM		24.818	25.252	23.669	26.186	25.523		48.183	52.733	17.661	30.788	-1.096	-7.096		47.805	0.04	14.643	0.003		3433.6	57.2261	51.3	11.7	39.5	2.722	0.006	0.006	0.000	0.157	0.13	
2759	4/21/2004	6:56:24 PM		24.814	25.259	23.68	26.287	25.784		48.33	52.871	17.787	30.817	-1.096	-7.09		48.584	0.04	14.643	0.003		3434.6	57.2428	51.4	11.9	39.6	2.728	0.006	0.006	0.000	0.156	0.13	
2760	4/21/2004	6:57:24 PM		24.832	25.277	23.698	26.35	25.977		48.241	52.793	17.748	30.84	-1.099	-7.082		49.243	0.043	14.643	0.003		3435.6	57.2594	51.3	12.1	39.5	2.726	0.006	0.007	0.000	0.168	0.14	
2761	4/21/2004	6:58:24 PM		24.829	25.269	23.726	26.327	25.894		48.266	52.869	17.75	30.823	-1.102	-7.079		48.258	0.042	14.643	0.003		3436.6	57.2761	51.4	11.8	39.5	2.726	0.006	0.006	0.000	0.164	0.14	
2762	4/21/2004	6:59:24 PM		24.821	25.271	23.743	26.28	25.836		48.337	52.998	17.772	30.858	-1.073	-7.073		46.652	0.039	14.643	0.003		3437.6	57.2928	51.5	11.4	39.6	2.730	0.006	0.006	0.000	0.152	0.13	
2763	4/21/2004	7:00:24 PM		24.848	25.288	23.764	26.256	25.743		48.341	52.834	17.682	31.031	-1.099	-7.073		47.203	0.04	14.643	0.003		3438.6	57.3094	51.4	11.6	39.7	2.736	0.006	0.006	0.000	0.156	0.13	
2764	4/21/2004	7:01:24 PM		24.844	25.294	23.756	26.223	25.734		48.198	52.892	17.669	30.834	-1.096	-7.07		49.278	0.041	14.643	0.003		3439.6	57.3261	51.4	12.1	39.5	2.724	0.006	0.006	0.000	0.160	0.14	
2765	4/21/2004	7:02:24 PM		24.845	25.3	23.751	26.173	25.74		48.451	52.942	17.773	31.008	-1.099	-7.067		47.903	0.042	14.643	0.003		3440.6	57.3428	51.5	11.7	39.7	2.739	0.006	0.006	0.000	0.163	0.14	
2766	4/21/2004	7:03:24 PM		24.841	25.295	23.742	26.144	25.721		48.38	52.902	17.791	30.971	-1.088	-7.073		48.273	0.04	14.643	0.003		3441.6	57.3594	51.4	11.8	39.7	2.735	0.006	0.006	0.000	0.156	0.13	
2767	4/21/2004	7:04:24 PM		24.851	25.305	23.737	26.109	25.726		48.27	52.855	17.635	30.998	-1.073	-7.07		48.079	0.041	14.643	0.003		3442.6	57.3761	51.4	11.8	39.6	2.733	0.006	0.006	0.000	0.160	0.14	
2768	4/21/2004	7:05:24 PM		24.855	25.31	23.731	26.083	25.695		48.214	52.82	17.714	30.838	-1.096	-7.067		48.661	0.042	14.643	0.003		3443.6	57.3928	51.3	11.9	39.5	2.725	0.006	0.006	0.000	0.164	0.14	
2769	4/21/2004	7:06:24 PM		24.855	25.305	23.726	26.043	25.58		48.098	52.757	17.908	30.446	-1.027	-7.07		48.262	0.042	14.643	0.003		3444.6	57.4094	51.3	11.8	39.3	2.708	0.006	0.006	0.000	0.165	0.14	
2770	4/21/2004	7:07:24 PM		24.854	25.303	23.72	26.007	25.604		48.243	52.844	17.7	30.791	-1.027	-7.07		48.066	0.04	14.643	0.003		3445.6	57.4261	51.4	11.8	39.5	2.725	0.006	0.006	0.000	0.156	0.13	
2771	4/21/2004	7:08:24 PM		24.869	25.313	23.73	26.002	25.569		48.032	52.573	17.744	30.665	-1.076	-7.076		50.357	0.039	14.643	0.003		3446.6	57.4428	51.1	12.3	39.3	2.713	0.006	0.006	0.000	0.153	0.13	
2772	4/21/2004	7:09:24 PM		24.867	25.306	23.728	25.984	25.512		48.442	52.952	17.658	31.135	-1.027	-7.064		50.229	0.041	14.643	0.003		3447.6	57.4594	51.5	12.3	39.8	2.743	0.006	0.006	0.000	0.159	0.14	
2773	4/21/2004	7:10:24 PM		24.866	25.315	23.727	25.979	25.536		48.017	52.577	17.802	30.438	-1.027	-7.07		47.566	0.04	14.643	0.003		3448.6	57.4761	51.1	11.7	39.2	2.705	0.006	0.006	0.000	0.158	0.13	
2774	4/21/2004	7:11:24 PM		24.854	25.294	23.701	25.942	25.534		48.378	53.12	17.672	31.057	-1.027	-7.064		47.586	0.041	14.643	0.003		3449.6	57.4928	51.6	11.7	39.7	2.738	0.006	0.006	0.000	0.160	0.14	
2775	4/21/2004	7:12:24 PM		24.848	25.298	23.704	25.946	25.503		48.013	52.679	17.769	30.491	-1.015	-7.061		47.939	0.042	14.643	0.003		3450.6	57.5094	51.2	11.7	39.3	2.706	0.006	0.006	0.000	0.165	0.14	
2776	4/21/2004	7:13:24 PM		24.858	25.293	23.709	25.951	25.493		48.359	52.853	17.605	31.133	-1.024	-7.058		49.289	0.043	14.643	0.003		3451.6	57.5261	51.4	12.1	39.7	2.740	0.006	0.007	0.000	0.167	0.14	
2777	4/21/2004	7:14:24 PM		24.842	25.272	23.683	25.905	25.457		48.202	52.836	17.749	30.721	-1.03	-7.073		48.608	0.04	14.643	0.003		3452.6	57.5428	51.4	11.9	39.5	2.721	0.006	0.006	0.000	0.157	0.13	
2778	4/21/2004	7:15:24 PM		24.846	25.285	23.692	25.904	25.526		48.067	52.672	17.631	30.768	-1.024	-7.064		48.583	0.041	14.643	0.003		3453.6	57.5594	51.2	11.9	39.4	2.718	0.006	0.006	0.000	0.161	0.14	
2779	4/21/2004	7:16:24 PM		24.85	25.285	23.711	25.913	25.44		48.249	52.898	17.613	30.973	-1.018	-7.07		47.862	0.04	14.643	0.003		3454.6	57.5761	51.4	11.7	39.6	2.731	0.006	0.006	0.000	0.156	0.13	
2780	4/21/2004	7:17:24 PM		24.829	25.269	23.685	25.902	25.444		48.185	52.846	17.664	30.799	-1.012	-7.067		48.736	0.039	14.643	0.003		3455.6	57.5928	51.4	11.9	39.5	2.723	0.006	0.006	0.000	0.153	0.13	
2781	4/21/2004	7:18:24 PM		24.834	25.274	23.685	25.887	25.404		48.455	53.01	17.79	31.02	-0.998	-7.061		47.123	0.04	14.643	0.003		3456.6	57.6094	51.5	11.5	39.7	2.740	0.006	0.006	0.000	0.156	0.13	
2782	4/21/2004	7:19:24 PM		24.828	25.262	23.684	25.891	25.463		48.413	53.11	17.799	30.838	-0.995	-7.058		48.435	0.041	14.643	0.003		3457.6	57.6261	51.6	11.9	39.6	2.732	0.006	0.006	0.000	0.160	0.14	
2783	4/21/2004	7:20:24 PM		24.837	25.262	23.698	25.89	25.442		48.214	52.735	17.801	30.834	-0.952	-7.047		48.696	0.041	14.643	0.004		3458.6	57.6428	51.3	11.9	39.5	2.725	0.006	0.006	0.000	0.160	0.14	
2784	4/21/2004	7:21:24 PM		24.831	25.255	23.687	25.879	25.406		48.237	52.774	17.778	30.727	-0.972	-7.047		48.475	0.042	14.643	0.003		3459.6	57.6594	51.3	11.9	39.5	2.722	0.006	0.006	0.000	0.165	0.14	
2785	4/21/2004	7:22:24 PM		24.836	25.26	23.717	25.914	25.556		48.231	52.902	17.742	30.778	-0.986	-7.053		48.417	0.039	14.643	0.003		3460.6	57.6761	51.4	11.9	39.5	2.724	0.006	0.006	0.000	0.153	0.13	
2786	4/21/2004	7:23:24 PM		24.826	25.26	23.747	25.984	25.676		48.196	52.934	17.671	30.813	-0.952	-7.053		48.75	0.041	14.643	0.003		3461.6	57.6928	51.5	11.9	39.5	2.724	0.006	0.006	0.000	0.160	0.14	
2787	4/21/2004	7:24:24 PM		24.821	25.261	23.758	26.115	25.706		48.102	52.681	17.753	30.715	-0.986	-7.053		48.041	0.041	14.643	0.003		3462.6	57.7094	51.2	11.8	39.4	2.717	0.006	0.006	0.000	0.161	0.14	
2788	4/21/2004	7:25:24 PM		24.827	25.252	23.748	26.205	25.677		48.133	52.851	17.784	30.565	-0.954	-7.044		49.791	0.042	14.643	0.003		3463.6	57.7261	51.4	12.2	39.3	2.713	0.006	0.006	0.000	0.165	0.14	
2789	4/21/2004	7:26:24 PM		24.829	25.259	23.746	26.292	25.894		48.142	52.832	17.771	30.682	-0.943	-7.044		47.728	0.043	14.643	0.003		3464.6	57.7428	51.4	11.7	39.4	2.717	0.006	0.007	0.000	0.169	0.14	
2790	4/21/2004	7:27:24 PM		24.851	25.281	23.763	26.38	26.006		47.918	52.606	17.692	30.587	-0.966	-7.035		47.672	0.043	14.643	0.003		3465.6	57.7594	51.1	11.7	39.3	2.706	0.006	0.007	0.000	0.169	0.14	
2791	4/21/2004	7:28:24 PM		24.849	25.274	23.746	26.448	26.104		48.15	52.766	17.725	30.749	-0.937	-7.038		48.21	0.041	14.643	0.003		3466.6	57.7761	51.3	11.8	39.4	2.720	0.006	0.006	0.000	0.161	0.14	
2792	4/21/2004	7:29:24 PM		24.862	25.287	23.754	26.47	26.032		47.826	52.478	17.773	30.485	-0.946	-7.035		48.788	0.041	14.643	0.003		3467.6	57.7928	51.0	12.0	39.2	2.700	0.006	0.006	0.000	0.162	0.14	
2793	4/21/2004	7:30:24 PM		24.869	25.304	23.751	26.453	25.974		48.291	52.96	17.66	31.059	-0.934	-7.032		48.369	0.041	14.643	0.003		3468.6	57.8094	51.5	11.9	39.7	2.735	0.006	0.006	0.000	0.160	0.14	
2794	4/21/2004	7:31:24 PM		24.861	25.305	23.742	26.404	25.925		48.158	52.793	17.827	30.651	-0.937	-7.03		48.938	0.037	14.643	0.003		3469.6	57.8261	51.3	12.0	39.4	2.717	0.006	0.006	0.000	0.145	0.12	
2795	4/21/2004	7:32:24 PM		24.862	25.297	23.719	26.31	25.812		48.484	53.116	17.884	30.928	-0.943	-7.018		48.392	0.041	14.643	0.003		3470.6	57.8428	51.6	11.9	39.7	2.738	0.006	0.006	0.000	0.160	0.14	
2796	4/21/2004	7:33:24 PM		24.874	25.318	23.735	26.277	25.778		48.1	52.805	17.744	30.626	-0.899	-7.006		48.206	0.042	14.643	0.003		3471.6	57.8594	51.3	11.8	39.4	2.714	0.006	0.006	0.000	0.165	0.14	
2797	4/21/2004	7:34:24 PM		24.869	25.308	23.715	26.212	25.788		48.266	53.025	17.809	30.745	-0.943	-7.009		48.377	0.041	14.643	0.003		3472.6	57.8761	51.6	11.9	39.5	2.724	0.006	0.006	0.000	0.160	0.14	
2798	4/21/2004	7:35:24 PM		24.889	25.314	23.736	26.178	25.744		47.997	52.737	17.756	30.567	-0.908	-7.012		48.976	0.04	14.643	0.003		3473.6	57.8928	51.3	12.0	39.3	2.708	0.006	0.006	0.000	0.157	0.13	
2799	4/21/2004	7:36:24 PM		24.899	25.333	23.75	26.167	25.699		47.785	52.467	17.686	30.509	-0.937	-7.006		48.984	0.04	14.643	0.003		3474.6	57.9094	51.0	12.0	39.1	2.699	0.006	0.006	0.000	0.158	0.13	
2800	4/21/2004	7:37:24 PM		24.878	25.328	23.714	26.111	25.673		48.156	52.942	17.876	30.622	-0.94	-7.004		47.263	0.043	14.643	0.003		3475.6	57.9261	51.5	11.6	39.4	2.716	0.006	0.007	0.000	0.169	0.14	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2801	4/21/2004	7:38:24 PM		24.882	25.332	23.724	26.085	25.687		48.16	52.9	17.772	30.729	-0.934	-7.006		48.404	0.041	14.643	0.003		3476.6	57.9428	51.4	11.9	39.4	2.720	0.006	0.006	0.000	0.161	0.14	
2802	4/21/2004	7:39:24 PM		24.887	25.331	23.728	26.05	25.611		47.822	52.473	17.825	30.386	-0.934	-7.004		48.189	0.04	14.643	0.004		3477.6	57.9594	51.0	11.8	39.1	2.696	0.006	0.006	0.000	0.158	0.13	
2803	4/21/2004	7:40:24 PM		24.887	25.331	23.723	26.025	25.552		48.183	52.824	17.748	30.799	-0.94	-7.009		47.714	0.04	14.643	0.003		3478.6	57.9761	51.4	11.7	39.5	2.723	0.006	0.006	0.000	0.157	0.13	
2804	4/21/2004	7:41:24 PM		24.88	25.315	23.711	26.003	25.5		48.391	53.083	17.759	30.947	-0.888	-6.998		48.348	0.04	14.643	0.003		3479.6	57.9928	51.6	11.8	39.7	2.735	0.006	0.006	0.000	0.156	0.13	
2805	4/21/2004	7:42:24 PM		24.879	25.319	23.716	25.987	25.534		48.057	52.824	17.754	30.589	-0.931	-7.001		48.285	0.04	14.643	0.003		3480.6	58.0094	51.4	11.8	39.3	2.711	0.006	0.006	0.000	0.157	0.13	
2806	4/21/2004	7:43:24 PM		24.889	25.328	23.73	25.982	25.469		48.349	53.025	17.663	31.059	-0.891	-6.992		47.163	0.041	14.643	0.003		3481.6	58.0261	51.6	11.6	39.7	2.737	0.006	0.006	0.000	0.160	0.14	
2807	4/21/2004	7:44:24 PM		24.868	25.303	23.704	25.936	25.463		48.169	52.834	17.755	30.731	-0.896	-6.998		49.047	0.039	14.643	0.003		3482.6	58.0428	51.4	12.0	39.5	2.720	0.006	0.006	0.000	0.153	0.13	
2808	4/21/2004	7:45:24 PM		24.873	25.313	23.724	25.941	25.403		48.007	52.697	17.685	30.782	-0.894	-6.995		48.141	0.04	14.643	0.003		3483.6	58.0594	51.2	11.8	39.4	2.716	0.006	0.006	0.000	0.157	0.13	
2809	4/21/2004	7:46:24 PM		24.872	25.301	23.718	25.909	25.452		48.256	52.967	17.761	30.766	-0.885	-7.001		48.202	0.04	14.643	0.003		3484.6	58.0761	51.5	11.8	39.5	2.724	0.006	0.006	0.000	0.157	0.13	
2810	4/21/2004	7:47:24 PM		24.881	25.315	23.752	25.904	25.416		48.137	52.921	17.78	30.663	-0.888	-7.004		44.906	0.041	14.643	0.003		3485.6	58.0928	51.4	11.0	39.4	2.716	0.006	0.006	0.000	0.161	0.14	
2811	4/21/2004	7:48:24 PM		24.864	25.294	23.776	25.872	25.454		48.167	52.875	17.616	30.883	-0.896	-7.001		48.475	0.041	14.643	0.003		3486.6	58.1094	51.4	11.9	39.5	2.725	0.006	0.006	0.000	0.160	0.14	
2812	4/21/2004	7:49:24 PM		24.857	25.287	23.764	25.835	25.437		48.247	53.021	17.844	30.778	-0.885	-7.006		48.237	0.04	14.643	0.003		3487.6	58.1261	51.5	11.8	39.5	2.724	0.006	0.006	0.000	0.156	0.13	
2813	4/21/2004	7:50:24 PM		24.865	25.275	23.771	25.838	25.355		47.999	52.675	17.714	30.583	-0.882	-7.004		48.404	0.042	14.643	0.003		3488.6	58.1428	51.2	11.9	39.3	2.709	0.006	0.006	0.000	0.165	0.14	
2814	4/21/2004	7:51:24 PM		24.843	25.267	23.744	25.791	25.303		48.052	52.795	17.805	30.565	-0.894	-7.012		48.629	0.04	14.643	0.003		3489.6	58.1594	51.3	11.9	39.3	2.710	0.006	0.006	0.000	0.157	0.13	
2815	4/21/2004	7:52:24 PM		24.867	25.272	23.774	25.89	25.457		48.16	52.925	17.694	30.743	-0.891	-7.006		48.252	0.037	14.643	0.003		3490.6	58.1761	51.5	11.8	39.5	2.720	0.006	0.006	0.000	0.145	0.12	
2816	4/21/2004	7:53:24 PM		24.862	25.272	23.758	25.945	25.617		48.138	52.905	17.657	30.793	-0.847	-6.92		48.137	0.04	14.643	0.003		3491.6	58.1928	51.4	11.8	39.5	2.721	0.006	0.006	0.000	0.157	0.13	
2817	4/21/2004	7:54:24 PM		24.858	25.262	23.744	26.056	25.683		47.997	52.855	17.794	30.495	-0.865	-6.928		48.081	0.039	14.643	0.003		3492.6	58.2094	51.4	11.8	39.2	2.706	0.006	0.006	0.000	0.154	0.13	
2818	4/21/2004	7:55:24 PM		24.869	25.264	23.761	26.142	25.774		48.081	52.847	17.696	30.791	-0.885	-6.923		47.146	0.04	14.643	0.003		3493.6	58.2261	51.4	11.6	39.4	2.719	0.006	0.006	0.000	0.157	0.13	
2819	4/21/2004	7:56:24 PM		24.86	25.265	23.756	26.218	25.89		47.961	52.757	17.638	30.784	-0.856	-6.897		48.433	0.041	14.643	0.003		3494.6	58.2428	51.3	11.9	39.4	2.715	0.006	0.006	0.000	0.161	0.14	
2820	4/21/2004	7:57:24 PM		24.867	25.277	23.754	26.285	25.962		48.073	52.757	17.706	30.71	-0.879	-6.902		48.692	0.041	14.643	0.003		3495.6	58.2594	51.3	11.9	39.4	2.716	0.006	0.006	0.000	0.161	0.14	
2821	4/21/2004	7:58:24 PM		24.865	25.275	23.751	26.348	25.999		48.036	52.865	17.615	30.743	-0.836	-6.908		48.515	0.04	14.643	0.003		3496.6	58.2761	51.4	11.9	39.4	2.716	0.006	0.006	0.000	0.157	0.13	
2822	4/21/2004	7:59:24 PM		24.877	25.287	23.749	26.375	25.937		48.196	53.008	17.657	30.731	-0.818	-6.894		48.191	0.041	14.643	0.003		3497.6	58.2928	51.5	11.8	39.5	2.721	0.006	0.006	0.000	0.160	0.14	
2823	4/21/2004	8:00:24 PM		24.874	25.294	23.746	26.348	25.844		48.133	52.94	17.733	30.616	-0.821	-6.894		47.947	0.04	14.643	0.003		3498.6	58.3094	51.5	11.8	39.4	2.715	0.006	0.006	0.000	0.157	0.13	
2824	4/21/2004	8:01:24 PM		24.88	25.295	23.751	26.298	25.79		48.117	53.033	17.656	30.784	-0.818	-6.897		48.139	0.04	14.643	0.003		3499.6	58.3261	51.6	11.8	39.5	2.720	0.006	0.006	0.000	0.157	0.13	
2825	4/21/2004	8:02:24 PM		24.876	25.3	23.742	26.219	25.686		47.855	52.674	17.748	30.448	-0.818	-6.897		47.751	0.041	14.643	0.003		3500.6	58.3428	51.2	11.7	39.2	2.699	0.006	0.006	0.000	0.162	0.14	
2826	4/21/2004	8:03:24 PM		24.875	25.295	23.731	26.158	25.625		48.025	52.859	17.702	30.725	-0.818	-6.897		48.853	0.043	14.643	0.003		3501.6	58.3594	51.4	12.0	39.4	2.715	0.006	0.007	0.000	0.169	0.14	
2827	4/21/2004	8:04:24 PM		24.886	25.3	23.742	26.119	25.606		48.104	52.985	17.844	30.569	-0.815	-6.894		48.525	0.041	14.643	0.003		3502.6	58.3761	51.5	11.9	39.3	2.712	0.006	0.006	0.000	0.161	0.14	
2828	4/21/2004	8:05:24 PM		24.875	25.3	23.726	26.038	25.545		48.152	53.01	17.766	30.721	-0.821	-6.891		48.216	0.041	14.643	0.003		3503.6	58.3928	51.5	11.8	39.4	2.719	0.006	0.006	0.000	0.161	0.14	
2829	4/21/2004	8:06:24 PM		24.889	25.304	23.741	25.992	25.564		48.108	52.859	17.796	30.692	-0.818	-6.897		47.094	0.039	14.643	0.003		3504.6	58.4094	51.4	11.5	39.4	2.716	0.006	0.006	0.000	0.153	0.13	
2830	4/21/2004	8:07:24 PM		24.873	25.293	23.709	25.931	25.483		48.05	52.884	17.767	30.633	-0.821	-6.897		48.308	0.042	14.643	0.003		3505.6	58.4261	51.4	11.8	39.3	2.712	0.006	0.006	0.000	0.165	0.14	
2831	4/21/2004	8:08:24 PM		24.871	25.29	23.727	25.909	25.506		47.903	52.722	17.637	30.616	-0.818	-6.897		48.734	0.039	14.643	0.003		3506.6	58.4428	51.2	11.9	39.3	2.707	0.006	0.006	0.000	0.154	0.13	
2832	4/21/2004	8:09:24 PM		24.864	25.289	23.721	25.862	25.325		48.386	53.188	17.794	30.862	-0.815	-6.891		48.25	0.041	14.643	0.003		3507.6	58.4594	51.7	11.8	39.6	2.732	0.006	0.006	0.000	0.160	0.14	
2833	4/21/2004	8:10:24 PM		24.868	25.288	23.729	25.861	25.403		48.111	52.853	17.631	30.795	-0.818	-6.891		48.613	0.04	14.643	0.003		3508.6	58.4761	51.4	11.9	39.5	2.720	0.006	0.006	0.000	0.157	0.13	
2834	4/21/2004	8:11:24 PM		24.866	25.276	23.748	25.829	25.372		47.822	52.538	17.755	30.495	-0.818	-6.879		48.331	0.041	14.643	0.003		3509.6	58.4928	51.1	11.8	39.2	2.700	0.006	0.006	0.000	0.162	0.14	
2835	4/21/2004	8:11:45 PM		24.861	25.28	23.772	25.834	25.406		47.916	52.778	17.676	30.583	-0.815	-6.894		48.723	0.04	14.643	0.003		3509.9	58.4986	51.3	11.9	39.2	2.706	0.006	0.006	0.000	0.157	0.13	
2836	4/21/2004	8:12:45 PM		24.854	25.273	23.785	25.826	25.364		48.231	53.135	17.771	30.848	-0.815	-6.885		48.575	0.039	14.643	0.004		3510.9	58.5153	51.7	11.9	39.5	2.726	0.006	0.006	0.000	0.152	0.13	
2837	4/21/2004	8:13:45 PM		24.846	25.255	23.772	25.778	25.336		47.982	52.805	17.737	30.606	-0.818	-6.885		49.341	0.043	14.643	0.003		3511.9	58.5319	51.3	12.1	39.3	2.709	0.006	0.007	0.000	0.169	0.14	
2838	4/21/2004	8:14:45 PM		24.87	25.265	23.786	25.763	25.255		48.053	52.871	17.848	30.598	-0.818	-6.885		48.296	0.04	14.643	0.003		3512.9	58.5486	51.4	11.8	39.3	2.711	0.006	0.006	0.000	0.157	0.13	
2839	4/21/2004	8:15:45 PM		24.843	25.242	23.759	25.731	25.263		48.138	52.958	17.921	30.444	-0.798	-6.882		47.516	0.04	14.643	0.003		3513.9	58.5653	51.5	11.6	39.3	2.709	0.006	0.006	0.000	0.157	0.13	
2840	4/21/2004	8:16:45 PM		24.846	25.235	23.757	25.743	25.246		47.864	52.753	17.872	30.316	-0.807	-6.879		48.058	0.04	14.643	0.003		3514.9	58.5819	51.3	11.8	39.1	2.695	0.006	0.006	0.000	0.158	0.13	
2841	4/21/2004	8:17:45 PM		24.855	25.24	23.771	25.808	25.415		47.918	52.753	17.879	30.37	-0.804	-6.876		48.634	0.04	14.643	0.003		3515.9	58.5986	51.3	11.9	39.1	2.699	0.006	0.006	0.000	0.158	0.13	
2842	4/21/2004	8:18:45 PM		24.84	25.225	23.746	25.853	25.52		48.1	52.977	17.851	30.593	-0.818	-6.868		49.295	0.042	14.643	0.003		3516.9	58.6153	51.5	12.1	39.3	2.713	0.006	0.006	0.000	0.165	0.14	
2843	4/21/2004	8:19:45 PM		24.85	25.23	23.766	25.968	25.64		47.853	52.677	17.745	30.405	-0.769	-6.859		48.3	0.038	14.643	0.004		3517.9	58.6319	51.2	11.8	39.1	2.698	0.006	0.006	0.000	0.150	0.13	
2844	4/21/2004	8:20:45 PM		24.84	25.225	23.746	26.043	25.705		47.959	52.813	17.83	30.366	-0.769	-6.824		48.239	0.041	14.643	0.003		3518.9	58.6486	51.3	11.8	39.2	2.700	0.006	0.006	0.000	0.162	0.14	
2845	4/21/2004	8:21:45 PM		24.841	25.221	23.738	26.079	25.781		47.938	52.842	17.726	30.528	-0.772	-6.827		47.184	0.04	14.643	0.003		3519.9	58.6653	51.4	11.6	39.2	2.705	0.006	0.006	0.000	0.158	0.13	
2846	4/21/2004	8:22:45 PM		24.834	25.213	23.72	26.147	25.748		47.887	52.851	17.733	30.538	-0.775	-6.824		50.135	0.04	14.643	0.003		3520.9	58.6819	51.4	12.3	39.2	2.704	0.006	0.006	0.000	0.158	0.13	
2847	4/21/2004	8:23:45 PM		24.856	25.245	23.762	26.229	25.785		47.829	52.697	17.797	30.339	-0.769	-6.827		48.598	0.039	14.643	0.003		3521.9	58.6986	51.2	11.9	39.1	2.695	0.006	0.006	0.000	0.154	0.13	
2848	4/21/2004	8:24:45 PM		24.842	25.217	23.733	26.235	25.747		47.802	52.687	17.628	30.46	-0.772	-6.83		48.068	0.039	14.643	0.003		3522.9	58.7153	51.2	11.8	39.1	2.698	0.006	0.006	0.000	0.154	0.13	
2849	4/21/2004	8:25:45 PM		24.85	25.24	23.741	26.228	25.76		47.658	52.575	17.652	30.423	-0.769	-6.821		49.201	0.039	14.643	0.003		3523.9	58.7319	51.1	12.1	39.0	2.692	0.006	0.006	0.000	0.154	0.13	
2850	4/21/2004	8:26:45 PM		24.846	25.236	23.733	26.175	25.666		47.918	52.753	17.64	30.641	-0.769	-6.821		48.563	0.04	14.643	0.003		3524.9	58.7486	51.3	11.9	39.3	2.708	0.006	0.006	0.000	0.157	0.13	
2851	4/21/2004	8:27:45 PM		24.852	25.232	23.733	26.105	25.612		47.961	52.88	17.761	30.479	-0.769	-6.819		48.986	0.041	14.643	0.003		3525.9	58.7653	51.4	12.0	39.2	2.704	0.006	0.006	0.000	0.162	0.14	
2852	4/21/2004	8:28:45 PM		24.838	25.232	23.709	26.036	25.573		47.733	52.608	17.647	30.462	-0.772	-6.813		50.165	0.04	14.643	0.003		3526.9	58.7819	51.1	12.3	39.1	2.696	0.006	0.006	0.000	0.158	0.13	
2853	4/21/2004	8:29:45 PM		24.846	25.246	23.728	25.994	25.442		47.969	52.894	17.832	30.454	-0.769	-6.821		48.214	0.039	14.643	0.003		3527.9	58.7986	51.4	11.8	39.2	2.703	0.006	0.006	0.000	0.154	0.13	
2854	4/21/2004	8:30:45 PM		24.85	25.25	23.736	25.958	25.44		47.913	52.811	17.645	30.555	-0.772	-6.81		48.146	0.04	14.643	0.003		3528.9	58.8153	51.3	11.8	39.2	2.705	0.006	0.006	0.000	0.158	0.13	
2855	4/21/2004	8:31:45 PM		24.844	25.229	23.721	25.872	25.419		47.972	52.956	17.717	30.497	-0.743	-6.813		47.647	0.039	14.643	0.003		3529.9	58.8319	51.5	11.7	39.2	2.705	0.006	0.006	0.000	0.154	0.13	
2856	4/21/2004	8:32:45 PM		24.858	25.247	23.744	25.861	25.323		48.096	52.99	17.788	30.559	-0.769	-6.813		48.438	0.04	14.643	0.003		3530.9	58.8486	51.5	11.9	39.3	2.711	0.006	0.006	0.000	0.157	0.13	
2857	4/21/2004	8:33:45 PM		24.841	25.226	23.723	25.794	25.312		47.901	52.641	17.841	30.45	-0.726	-6.816		48.438	0.04	14.643	0.003		3531.9	58.8653	51.2	11.9	39.2	2.701	0.006	0.006	0.000	0.158	0.13	
2858	4/21/2004	8:34:45 PM		24.829	25.224	23.726	25.752	25.274		47.936	52.954	17.91	30.37	-0.726	-6.813		47.985	0.04	14.643	0.003		3532.9	58.8819	51.5	11.8	39.2	2.699	0.006	0.006	0.000	0.158	0.13	
2859	4/21/2004	8:35:45 PM		24.842	25.232	23.743	25.745	25.257		48.1	53.118	17.792	30.618	-0.711	-6.801		47.739	0.042	14.643	0.003		3533.9	58.8986	51.6	11.7	39.4	2.714	0.006	0.006	0.000	0.165	0.14	
2860	4/21/2004	8:36:45 PM		24.831	25.215	23.727	25.693	25.206		48.196	53.118	17.854	30.598	-0.734	-6.807		48.127	0.041	14.643	0.003		3534.9	58.9153	51.6	11.8	39.4	2.716	0.006	0.006	0.000	0.161	0.14	
2861	4/21/2004	8:37:45 PM		24.824	25.208	23.735	25.661	25.189		48.22	53.174	17.753	30.745	-0.755	-6.81		48.183	0.04	14.643	0.003		3535.9	58.9319	51.7	11.8	39.5	2.722	0.006	0.006	0.000	0.157	0.13	
2862	4/21/2004	8:38:45 PM		24.821	25.191	23.723	25.614	25.147		48.013	53.002	17.67	30.616	-0.694	-6.642		46.859	0.039	14.643	0.003		3536.9	58.9486	51.5	11.5	39.3	2.711	0.006	0.006	0.000	0.153	0.13	
2863	4/21/2004	8:39:45 PM		24.824	25.194	23.771	25.632	25.205		48.071	53.074	17.691	30.624	-0.676	-6.634		48.402	0.04	14.643	0.003		3537.9	58.9653	51.6	11.9	39.3	2.713	0.006	0.006	0.000	0.157	0.13	
2864	4/21/2004	8:40:45 PM		24.807	25.172	23.789	25.615	25.157		48.005	52.963	17.776	30.534	-0.653	-6.639		49.063	0.039	14.643	0.003		3538.9	58.9819	51.5	12.0	39.3	2.707	0.006	0.006	0.000	0.153	0.13	
2865	4/21/2004	8:41:45 PM		24.795	25.154	23.781	25.618	25.22		47.578	52.625	17.651	30.13	-0.685	-6.628		48.058	0.041	14.643	0.003		3539.9	58.9986	51.2	11.8	38.9	2.679	0.006	0.006	0.000	0.163	0.14	
2866	4/21/2004	8:42:45 PM		24.794	25.144	23.781	25.677	25.379		47.918	52.975	17.738	30.489	-0.65	-6.634		49.055	0.039	14.643	0.003		3540.9	59.0153	51.5	12.0	39.2	2.703	0.006	0.006	0.000	0.154	0.13	
2867	4/21/2004	8:43:45 PM		24.799	25.153	23.78	25.741	25.384		48.079	53.112	17.845	30.468	-0.65	-6.622		47.793	0.041	14.643	0.003		3541.9	59.0319	51.6	11.7	39.3	2.708	0.006	0.006	0.000	0.161	0.14	
2868	4/21/2004	8:44:45 PM		24.794	25.133	23.765	25.801	25.499		47.785	52.737	17.856	30.245	-0.65	-6.625		48.181	0.038	14.643	0.003		3542.9	59.0486	51.3	11.8	39.0	2.690	0.006	0.006	0.000	0.150	0.13	
2869	4/21/2004	8:45:45 PM		24.799	25.134	23.761	25.882	25.564		47.6	52.641	17.761	30.16	-0.648	-6.619		48.517	0.04	14.643	0.003		3543.9	59.0653	51.2	11.9	38.9	2.681	0.006	0.006	0.000	0.159	0.14	
2870	4/21/2004	8:46:45 PM		24.801	25.13	23.747	25.939	25.661		47.652	52.699	17.683	30.23	-0.653	-6.619		48.235	0.041	14.643	0.003		3544.9	59.0819	51.2	11.8	38.9	2.685	0.006	0.006	0.000	0.163	0.14	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2871	4/21/2004	8:47:45 PM		24.801	25.136	23.758	26.019	25.571		47.847	52.818	17.655	30.522	-0.65	-6.616		48.479	0.039	14.643	0.003		3545.9	59.0986	51.3	11.9	39.2	2.702	0.006	0.006	0.000	0.154	0.13	
2872	4/21/2004	8:48:45 PM		24.803	25.137	23.754	26.076	25.698		47.648	52.708	17.743	30.202	-0.65	-6.622		47.733	0.034	14.643	0.003		3546.9	59.1153	51.2	11.7	38.9	2.684	0.005	0.005	0.000	0.135	0.11	
2873	4/21/2004	8:49:45 PM		24.809	25.144	23.751	26.132	25.754		47.992	53.008	17.934	30.331	-0.648	-6.602		48.045	0.04	14.643	0.003		3547.9	59.1319	51.5	11.8	39.2	2.700	0.006	0.006	0.000	0.158	0.13	
2874	4/21/2004	8:50:45 PM		24.806	25.146	23.743	26.14	25.751		47.885	52.875	17.728	30.548	-0.65	-6.605		47.939	0.041	14.643	0.003		3548.9	59.1486	51.4	11.7	39.2	2.704	0.006	0.006	0.000	0.162	0.14	
2875	4/21/2004	8:51:45 PM		24.818	25.152	23.754	26.131	25.663		47.694	52.791	17.672	30.325	-0.65	-6.599		48.342	0.04	14.643	0.003		3549.9	59.1653	51.3	11.8	39.0	2.690	0.006	0.006	0.000	0.158	0.13	
2876	4/21/2004	8:52:45 PM		24.794	25.128	23.71	26.047	25.608		48.023	53.091	17.786	30.495	-0.653	-6.596		47.993	0.041	14.643	0.003		3550.9	59.1819	51.6	11.8	39.3	2.707	0.006	0.006	0.000	0.161	0.14	
2877	4/21/2004	8:53:45 PM		24.809	25.149	23.726	26.007	25.489		47.868	52.954	17.641	30.47	-0.65	-6.593		48.46	0.04	14.643	0.003		3551.9	59.1986	51.5	11.9	39.2	2.701	0.006	0.006	0.000	0.158	0.13	
2878	4/21/2004	8:54:45 PM		24.815	25.159	23.741	25.948	25.4		48.561	53.659	17.906	31.016	-0.65	-6.593		48.442	0.041	14.643	0.003		3552.9	59.2153	52.2	11.9	39.8	2.743	0.006	0.006	0.000	0.159	0.14	
2879	4/21/2004	8:55:45 PM		24.814	25.169	23.761	25.892	25.334		48.559	53.647	18.04	30.813	-0.648	-6.587		48.492	0.041	14.643	0.003		3553.9	59.2319	52.2	11.9	39.7	2.736	0.006	0.006	0.000	0.160	0.14	
2880	4/21/2004	8:56:45 PM		24.819	25.163	23.775	25.836	25.339		48.807	53.866	18.005	31.131	-0.642	-6.587		48.239	0.041	14.643	0.003		3554.9	59.2486	52.4	11.8	40.0	2.756	0.006	0.006	0.000	0.158	0.13	
2881	4/21/2004	8:57:45 PM		24.812	25.137	23.768	25.755	25.317		48.675	53.673	17.804	31.16	-0.63	-6.593		48.533	0.041	14.643	0.003		3555.9	59.2653	52.2	11.9	39.9	2.752	0.006	0.006	0.000	0.159	0.13	
2882	4/21/2004	8:58:45 PM		24.805	25.144	23.786	25.693	25.22		48.529	53.597	17.992	30.801	-0.581	-6.584		48.953	0.042	14.643	0.003		3556.9	59.2819	52.1	12.0	39.7	2.735	0.006	0.006	0.000	0.163	0.14	
2883	4/21/2004	8:59:45 PM		24.809	25.148	23.8	25.661	25.209		48.654	53.713	17.863	31.039	-0.621	-6.584		48.462	0.041	14.643	0.003		3557.9	59.2986	52.2	11.9	39.8	2.747	0.006	0.006	0.000	0.159	0.14	
2884	4/21/2004	9:00:45 PM		24.806	25.146	23.818	25.629	25.167		48.438	53.481	18.064	30.632	-0.627	-6.59		48.657	0.04	14.643	0.003		3558.9	59.3153	52.0	11.9	39.5	2.726	0.006	0.006	0.000	0.156	0.13	
2885	4/21/2004	9:01:45 PM		24.804	25.128	23.82	25.601	25.149		48.67	53.81	17.935	31.094	-0.598	-6.579		48.485	0.041	14.643	0.004		3559.9	59.3319	52.3	11.9	39.9	2.750	0.006	0.006	0.000	0.158	0.13	
2886	4/21/2004	9:02:45 PM		24.786	25.106	23.803	25.544	25.067		48.5	53.589	17.819	31.018	-0.587	-6.593		47.125	0.041	14.643	0.003		3560.9	59.3486	52.1	11.5	39.8	2.741	0.006	0.006	0.000	0.159	0.14	
2887	4/21/2004	9:03:45 PM		24.794	25.109	23.826	25.537	25.135		48.666	53.759	18.085	30.862	-0.587	-6.59		48.832	0.039	14.643	0.003		3561.9	59.3653	52.3	12.0	39.8	2.742	0.006	0.006	0.000	0.151	0.13	
2888	4/21/2004	9:04:45 PM		24.792	25.097	23.839	25.515	25.048		48.93	54.04	17.887	31.404	-0.566	-6.584		50.041	0.042	14.643	0.003		3562.9	59.3819	52.6	12.3	40.2	2.769	0.006	0.006	0.000	0.161	0.14	
2889	4/21/2004	9:05:45 PM		24.791	25.085	23.852	25.548	25.136		48.299	53.394	17.905	30.643	-0.569	-6.576		46.798	0.042	14.643	0.003		3563.9	59.3986	51.9	11.5	39.5	2.721	0.006	0.006	0.000	0.164	0.14	
2890	4/21/2004	9:06:45 PM		24.79	25.079	23.862	25.633	25.26		48.581	53.663	17.874	31.057	-0.561	-6.582		48.657	0.039	14.643	0.003		3564.9	59.4153	52.2	11.9	39.8	2.745	0.006	0.006	0.000	0.151	0.13	
2891	4/21/2004	9:07:45 PM		24.779	25.069	23.866	25.682	25.325		48.614	53.694	17.973	30.928	-0.555	-6.576		47.991	0.04	14.643	0.003		3565.9	59.4319	52.2	11.8	39.8	2.742	0.006	0.006	0.000	0.155	0.13	
2892	4/21/2004	9:08:45 PM		24.78	25.049	23.867	25.728	25.42		48.787	53.879	18.089	31.022	-0.566	-6.573		48.135	0.041	14.643	0.003		3566.9	59.4486	52.4	11.8	39.9	2.751	0.006	0.006	0.000	0.158	0.13	
2893	4/21/2004	9:09:45 PM		24.792	25.056	23.933	25.829	25.552		48.797	53.879	18.132	30.946	-0.578	-6.57		49.806	0.041	14.643	0.003		3567.9	59.4653	52.4	12.2	39.9	2.749	0.006	0.006	0.000	0.158	0.13	
2894	4/21/2004	9:10:45 PM		24.798	25.052	23.94	25.886	25.503		48.756	53.775	17.983	30.998	-0.549	-6.561		48.583	0.041	14.643	0.003		3568.9	59.4819	52.3	11.9	39.9	2.749	0.006	0.006	0.000	0.158	0.13	
2895	4/21/2004	9:11:45 PM		24.799	25.059	23.961	25.937	25.554		48.502	53.591	17.891	30.996	-0.543	-6.555		49.117	0.04	14.643	0.003		3569.9	59.4986	52.1	12.0	39.7	2.741	0.006	0.006	0.000	0.155	0.13	
2896	4/21/2004	9:12:45 PM		24.816	25.075	23.973	26.009	25.596		48.399	53.541	17.965	30.706	-0.543	-6.558		48.337	0.04	14.643	0.003		3570.9	59.5153	52.1	11.8	39.6	2.727	0.006	0.006	0.000	0.155	0.13	
2897	4/21/2004	9:13:45 PM		24.827	25.061	23.974	26.025	25.597		48.511	53.605	18.052	30.778	-0.543	-6.553		48.371	0.04	14.643	0.003		3571.9	59.5319	52.1	11.9	39.6	2.733	0.006	0.006	0.000	0.155	0.13	
2898	4/21/2004	9:14:45 PM		24.833	25.067	23.975	26.046	25.563		48.478	53.698	18.007	30.743	-0.543	-6.555		49.708	0.04	14.643	0.003		3572.9	59.5486	52.2	12.2	39.6	2.731	0.006	0.006	0.000	0.155	0.13	
2899	4/21/2004	9:15:45 PM		24.844	25.074	23.981	26.012	25.554		48.529	53.611	18.065	30.768	-0.543	-6.541		50.757	0.041	14.643	0.003		3573.9	59.5653	52.1	12.4	39.6	2.734	0.006	0.006	0.000	0.159	0.14	
2900	4/21/2004	9:16:45 PM		24.855	25.084	23.982	25.948	25.475		48.681	53.823	18.22	30.692	-0.54	-6.529		48.287	0.041	14.643	0.003		3574.9	59.5819	52.4	11.8	39.7	2.736	0.006	0.006	0.000	0.159	0.13	
2901	4/21/2004	9:17:45 PM		24.861	25.085	23.988	25.884	25.326		48.534	53.636	17.927	31.035	-0.54	-6.544		48.323	0.041	14.643	0.003		3575.9	59.5986	52.2	11.8	39.8	2.743	0.006	0.006	0.000	0.158	0.13	
2902	4/21/2004	9:18:45 PM		24.855	25.089	23.992	25.803	25.28		48.482	53.684	18.166	30.637	-0.54	-6.55		48.775	0.041	14.643	0.003		3576.9	59.6153	52.2	12.0	39.6	2.727	0.006	0.006	0.000	0.159	0.14	
2903	4/21/2004	9:19:45 PM		24.885	25.094	24.012	25.783	25.195		48.415	53.58	18.111	30.632	-0.538	-6.541		48.281	0.04	14.643	0.003		3577.9	59.6319	52.1	11.8	39.5	2.725	0.006	0.006	0.000	0.155	0.13	
2904	4/21/2004	9:20:45 PM		24.868	25.072	23.98	25.691	25.183		48.756	53.806	17.968	31.185	-0.546	-6.547		48.803	0.041	14.643	0.003		3578.9	59.6486	52.3	12.0	40.0	2.756	0.006	0.006	0.000	0.157	0.13	
2905	4/21/2004	9:21:45 PM		24.856	25.07	23.978	25.628	25.141		48.399	53.479	17.951	30.725	-0.511	-6.538		48.657	0.042	14.643	0.003		3579.9	59.6653	52.0	11.9	39.6	2.728	0.006	0.006	0.000	0.163	0.14	
2906	4/21/2004	9:22:45 PM		24.865	25.069	23.987	25.613	25.05		48.534	53.682	18.048	30.873	-0.538	-6.532		48.266	0.041	14.643	0.003		3580.9	59.6819	52.2	11.8	39.7	2.737	0.006	0.006	0.000	0.158	0.13	
2907	4/21/2004	9:23:45 PM		24.874	25.068	24.001	25.581	25.139		48.571	53.75	18.104	30.772	-0.54	-6.535		48.999	0.041	14.643	0.003		3581.9	59.6986	52.3	12.0	39.7	2.735	0.006	0.006	0.000	0.158	0.13	
2908	4/21/2004	9:24:45 PM		24.862	25.041	23.989	25.525	25.098		48.687	53.779	18.104	30.926	-0.509	-6.544		49.132	0.041	14.643	0.003		3582.9	59.7153	52.3	12.0	39.8	2.745	0.006	0.006	0.000	0.158	0.13	
2909	4/21/2004	9:25:45 PM		24.859	25.034	23.996	25.487	25.065		48.668	53.779	18.053	30.949	-0.538	-6.538		46.502	0.04	14.643	0.003		3583.9	59.7319	52.3	11.4	39.8	2.745	0.006	0.006	0.000	0.154	0.13	
2910	4/21/2004	9:26:45 PM		24.847	25.021	23.984	25.439	25.022		48.465	53.607	17.903	30.881	-0.509	-6.541		49.222	0.041	14.643	0.003		3584.9	59.7486	52.1	12.1	39.7	2.735	0.006	0.006	0.000	0.159	0.13	
2911	4/21/2004	9:27:45 PM		24.85	25.014	23.991	25.442	24.915		48.735	53.916	18.059	31.014	-0.543	-6.535		49.92	0.042	14.643	0.003		3585.9	59.7653	52.4	12.2	39.9	2.749	0.006	0.006	0.000	0.162	0.14	
2912	4/21/2004	9:28:45 PM		24.847	24.997	23.984	25.425	25.018		48.778	54.03	18	30.994	-0.497	-6.544		48.202	0.037	14.643	0.003		3586.9	59.7819	52.6	11.8	39.9	2.750	0.006	0.006	0.000	0.142	0.12	
2913	4/21/2004	9:29:45 PM		24.856	25	24.003	25.498	25.116		48.503	53.647	17.872	31.002	-0.514	-6.535		48.694	0.04	14.643	0.003		3587.9	59.7986	52.2	11.9	39.8	2.741	0.006	0.006	0.000	0.154	0.13	
2914	4/21/2004	9:30:45 PM		24.856	25	24.013	25.564	25.206		48.42	53.584	18.007	30.671	-0.535	-6.524		48.417	0.04	14.643	0.003		3588.9	59.8153	52.1	11.9	39.5	2.727	0.006	0.006	0.000	0.155	0.13	
2915	4/21/2004	9:31:45 PM		24.86	24.984	24.007	25.653	25.31		48.521	53.703	17.982	30.852	-0.514	-6.524		49.122	0.041	14.643	0.003		3589.9	59.8319	52.2	12.0	39.7	2.736	0.006	0.006	0.000	0.158	0.13	
2916	4/21/2004	9:32:45 PM		24.856	24.98	24.013	25.704	25.346		48.614	53.783	18.128	30.704	-0.491	-6.521		48.684	0.04	14.643	0.003		3590.9	59.8486	52.3	11.9	39.7	2.734	0.006	0.006	0.000	0.155	0.13	
2917	4/21/2004	9:33:45 PM		24.862	24.976	24.019	25.775	25.427		48.561	53.709	18.07	30.721	-0.483	-6.521		47.322	0.04	14.643	0.003		3591.9	59.8653	52.2	11.6	39.6	2.733	0.006	0.006	0.000	0.155	0.13	
2918	4/21/2004	9:34:45 PM		24.868	24.982	24.03	25.821	25.418		48.936	54.111	18.013	31.291	-0.483	-6.521		48.556	0.041	14.643	0.003		3592.9	59.8819	52.6	11.9	40.1	2.766	0.006	0.006	0.000	0.157	0.13	
2919	4/21/2004	9:35:45 PM		24.875	24.989	24.107	25.902	25.45		48.643	53.765	17.982	30.903	-0.523	-6.57		49.633	0.042	14.643	0.003		3593.9	59.8986	52.3	12.2	39.8	2.742	0.006	0.006	0.000	0.161	0.14	
2920	4/21/2004	9:36:45 PM		24.877	24.986	24.099	25.945	25.542		48.534	53.703	17.928	30.932	-0.546	-6.613		51.258	0.041	14.643	0.003		3594.9	59.9153	52.2	12.6	39.7	2.739	0.006	0.006	0.000	0.158	0.13	
2921	4/21/2004	9:37:45 PM		24.884	24.993	24.096	25.987	25.629		48.834	53.939	18.069	31.012	-0.54	-6.587		47.933	0.043	14.643	0.003		3595.9	59.9319	52.5	11.7	39.9	2.753	0.006	0.007	0.000	0.165	0.14	
2922	4/21/2004	9:38:45 PM		24.911	25.015	24.128	26.034	25.621		48.38	53.545	18.137	30.544	-0.569	-6.619		49.065	0.042	14.643	0.004		3596.9	59.9486	52.1	12.0	39.5	2.721	0.006	0.006	0.000	0.163	0.14	
2923	4/21/2004	9:39:45 PM		25.132	25.001	24.104	25.975	25.482		50.379	53.783	17.987	32.833	-1.221	-6.307		49.053	0.064	14.643	0.003		3597.9	59.9653	52.3	12.0	41.6	2.869	0.010	0.010	0.000	0.235	0.20	
2924	4/21/2004	9:40:45 PM		25.382	25.011	24.1	25.905	25.417		48.89	53.41	17.998	31.168	-1.096	-4.939		48.725	0.01	14.643	0.003		3598.9	59.9819	51.9	11.9	40.0	2.760	0.001	0.002	0.000	0.038	0.03	
2925	4/21/2004	9:41:45 PM		25.272	25.006	24.084	25.825	25.367		48.117	53.761	17.995	30.417	-0.092	-2.864		48.35	0.026	14.643	0.003		3599.9	59.9986	52.3	11.8	39.3	2.707	0.004	0.004	0.000	0.101	0.09	
2926	4/21/2004	9:42:45 PM		25.182	25.006	24.084	25.75	25.138		46.966	53.709	17.965	29.305	1.035	-0.412		49.804	0.027	14.643	0.003		3600.9	60.0153	52.2	12.2	38.1	2.629	0.004	0.004	0.000	0.108	0.09	
2927	4/21/2004	9:43:45 PM		25.092	25.016	24.079	25.705	25.192		48.907	53.883	18.054	31.115	-0.778	-4.801		48.611	0.056	14.643	0.003		3601.9	60.0319	52.4	11.9	40.0	2.759	0.008	0.009	0.000	0.214	0.18	
2928	4/21/2004	9:44:45 PM		25.067	25.026	24.105	25.69	25.192		49.195	53.568	17.965	31.63	-1.218	-6.006		48.827	0.04	14.643	0.003		3602.9	60.0486	52.1	12.0	40.4	2.786	0.006	0.006	0.000	0.151	0.13	
2929	4/21/2004	9:45:45 PM		25.02	25.004	24.072	25.602	25.155		49.342	53.377	18.01	31.706	-1.218	-6.714		49.384	0.043	14.643	0.003		3603.9	60.0653	51.9	12.1	40.5	2.794	0.006	0.007	0.000	0.162	0.14	
2930	4/21/2004	9:46:45 PM		25.004	24.998	24.066	25.576	24.974		50.066	53.987	18.083	32.324	-1.224	-7.171		49.284	0.042	14.643	0.003		3604.9	60.0819	52.5	12.1	41.2	2.840	0.006	0.006	0.000	0.156	0.13	
2931	4/21/2004	9:47:45 PM		24.977	24.991	24.069	25.504	24.992		50.058	53.883	17.913	32.588	-1.221	-7.203		49.676	0.041	14.643	0.003		3605.9	60.0986	52.4	12.2	41.3	2.849	0.006	0.006	0.000	0.152	0.13	
2932	4/21/2004	9:48:45 PM		24.954	24.983	24.071	25.456	25.019		49.882	53.636	18.076	32.254	-1.218	-7.258		48.93	0.045	14.643	0.003		3606.9	60.1153	52.2	12.0	41.1	2.831	0.007	0.007	0.000	0.168	0.14	
2933	4/21/2004	9:49:45 PM		24.937	24.976	24.074	25.424	25.032		50.112	53.86	18.097	32.43	-1.218	-7.362		48.761	0.041	14.643	0.003		3607.9	60.1319	52.4	11.9	41.3	2.845	0.006	0.006	0.000	0.152	0.13	
2934	4/21/2004	9:50:45 PM		24.91	24.964	24.052	25.407	25.095		50.087	53.868	17.95	32.469	-1.224	-7.371		49.654	0.043	14.643	0.003		3608.9	60.1486	52.4	12.2	41.3	2.846	0.006	0.007	0.000	0.160	0.14	
2935	4/21/2004	9:51:45 PM		24.903	24.957	24.08	25.441	25.103		50.22	53.987	18.054	32.574	-1.218	-7.327		49.097	0.042	14.643	0.003		3609.9	60.1653	52.5	12.0	41.4	2.854	0.006	0.006	0.000	0.155	0.13	
2936	4/21/2004	9:52:45 PM		24.877	24.951	24.074	25.489	25.192		50.137	53.841	18.034	32.387	-1.221	-7.348		47.816	0.042	14.643	0.003		3610.9	60.1819	52.4	11.7	41.3	2.845	0.006	0.006	0.000	0.156	0.13	
2937	4/21/2004	9:53:45 PM		24.862	24.951	24.079	25.579	25.327		50.064	53.827	17.959	32.506	-1.221	-7.4		48.21	0.042	14.643	0.003		3611.9	60.1986	52.4	11.8	41.3	2.846	0.006	0.006	0.000	0.156	0.13	
2938	4/21/2004	9:54:45 PM		24.847	24.941	24.084	25.639	25.347		49.896	53.636	17.983	32.385	-1.221	-7.408		49.053	0.041	14.643	0.003		3612.9	60.2153	52.2	12.0	41.1	2.836	0.006	0.006	0.000	0.152	0.13	
2939	4/21/2004	9:55:45 PM		24.858	24.932	24.085	25.705	25.353		49.79	53.522	18.023	32.159	-1.218	-7.403		48.784	0.041	14.643	0.003		3613.9	60.2319	52.0	12.0	41.0	2.825	0.006	0.006	0.000	0.153	0.13	
2940	4/21/2004	9:56:45 PM		24.849	24.943	24.086	25.742	25.469		50.176	53.955	17.955	32.74	-1.224	-7.405		48.621	0.041	14.643	0.003		3614.9	60.2486	52.5	11.9	41.5	2.858	0.006	0.006	0.000	0.151	0.13	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2941	4/21/2004	9:57:45 PM		24.83	24.939	24.098	25.823	25.46		49.963	53.719	17.954	32.389	-1.221	-7.4		48.536	0.041	14.643	0.003		3615.9	60.2653	52.2	11.9	41.2	2.839	0.006	0.006	0.000	0.152	0.13	
2942	4/21/2004	9:58:45 PM		24.827	24.941	24.094	25.83	25.547		49.961	53.628	17.918	32.43	-1.224	-7.4		48.665	0.042	14.643	0.003		3616.9	60.2819	52.2	11.9	41.2	2.840	0.006	0.006	0.000	0.156	0.13	
2943	4/21/2004	9:59:45 PM		24.833	24.952	24.11	25.866	25.493		49.78	53.528	18.05	32.069	-1.221	-7.397		48.371	0.042	14.643	0.003		3617.9	60.2986	52.1	11.9	40.9	2.822	0.006	0.006	0.000	0.157	0.13	
2944	4/21/2004	10:00:45 PM		24.824	24.938	24.091	25.787	25.429		50.274	54.109	18.144	32.461	-1.224	-7.394		48.828	0.042	14.643	0.003		3618.9	60.3153	52.6	12.0	41.4	2.852	0.006	0.006	0.000	0.155	0.13	
2945	4/21/2004	10:01:45 PM		24.839	24.953	24.106	25.747	25.349		50.002	53.723	18.172	32.149	-1.221	-7.4		48.844	0.041	14.643	0.003		3619.9	60.3319	52.3	12.0	41.1	2.832	0.006	0.006	0.000	0.153	0.13	
2946	4/21/2004	10:02:45 PM		24.855	24.954	24.117	25.702	25.25		50.33	54.088	18.216	32.438	-1.221	-7.4		48.264	0.041	14.643	0.003		3620.9	60.3486	52.6	11.8	41.4	2.853	0.006	0.006	0.000	0.151	0.13	
2947	4/21/2004	10:03:45 PM		24.855	24.949	24.107	25.637	25.165		49.844	53.593	18.066	32.17	-1.221	-7.394		48.229	0.042	14.643	0.003		3621.9	60.3653	52.1	11.8	41.0	2.827	0.006	0.006	0.000	0.157	0.13	
2948	4/21/2004	10:04:45 PM		24.864	24.958	24.121	25.586	25.169		50.228	53.978	18.072	32.597	-1.221	-7.394		48.333	0.042	14.643	0.003		3622.9	60.3819	52.5	11.8	41.4	2.855	0.006	0.006	0.000	0.155	0.13	
2949	4/21/2004	10:05:45 PM		24.857	24.926	24.099	25.514	25.152		49.983	53.742	18.013	32.35	-1.221	-7.388		48.584	0.043	14.643	0.003		3623.9	60.3986	52.3	11.9	41.2	2.838	0.006	0.007	0.000	0.160	0.14	
2950	4/21/2004	10:06:45 PM		24.875	24.944	24.138	25.488	25.031		49.394	53.041	19.058	30.696	-1.218	-7.391		49.22	0.041	14.643	0.003		3624.9	60.4153	51.6	12.1	40.0	2.761	0.006	0.006	0.000	0.156	0.13	
2951	4/21/2004	10:06:53 PM		24.86	24.939	24.127	25.467	25.035		49.152	52.952	18.993	30.639	-1.221	-7.397		50.636	0.041	14.643	0.003		3625.1	60.4175	51.5	12.4	39.9	2.751	0.006	0.006	0.000	0.157	0.13	
2952	4/21/2004	10:07:53 PM		24.873	24.937	24.196	25.436	25.048		49.266	52.948	19.126	30.544	-1.224	-7.403		50.083	0.04	14.643	0.003		3626.1	60.4342	51.5	12.3	39.9	2.751	0.006	0.006	0.000	0.153	0.13	
2953	4/21/2004	10:08:53 PM		24.875	24.919	24.198	25.413	24.951		49.372	53.155	18.893	30.854	-1.221	-7.391		49.591	0.04	14.643	0.003		3627.1	60.4508	51.7	12.2	40.1	2.766	0.006	0.006	0.000	0.152	0.13	
2954	4/21/2004	10:09:53 PM		24.883	24.917	24.211	25.406	24.954		49.23	53.027	18.887	30.762	-1.218	-7.394		50.74	0.04	14.643	0.003		3628.1	60.4675	51.6	12.4	40.0	2.758	0.006	0.006	0.000	0.152	0.13	
2955	4/21/2004	10:10:53 PM		24.886	24.905	24.204	25.424	25.126		49.664	53.402	18.967	31.084	-1.218	-7.394		49.933	0.041	14.643	0.003		3629.1	60.4842	51.9	12.2	40.4	2.784	0.006	0.006	0.000	0.155	0.13	
2956	4/21/2004	10:11:53 PM		24.9	24.914	24.217	25.507	25.215		49.092	52.888	18.824	30.655	-1.221	-7.391		50.659	0.041	14.643	0.003		3630.1	60.5008	51.4	12.4	39.9	2.749	0.006	0.006	0.000	0.157	0.13	
2957	4/21/2004	10:12:53 PM		24.896	24.899	24.218	25.568	25.296		49.359	53.164	19.03	30.721	-1.218	-7.394		51.316	0.041	14.643	0.003		3631.1	60.5175	51.7	12.6	40.0	2.761	0.006	0.006	0.000	0.156	0.13	
2958	4/21/2004	10:13:53 PM		24.891	24.904	24.218	25.628	25.311		49.272	53.099	18.915	30.795	-1.221	-7.391		51.249	0.041	14.643	0.003		3632.1	60.5342	51.6	12.6	40.0	2.760	0.006	0.006	0.000	0.156	0.13	
2959	4/21/2004	10:14:53 PM		24.896	24.9	24.219	25.694	25.406		49.338	53.06	18.858	30.918	-1.221	-7.388		50.123	0.04	14.643	0.003		3633.1	60.5508	51.6	12.3	40.1	2.767	0.006	0.006	0.000	0.152	0.13	
2960	4/21/2004	10:15:53 PM		24.902	24.891	24.219	25.725	25.492		49.257	53.128	18.763	30.805	-1.218	-7.388		49.843	0.041	14.643	0.003		3634.1	60.5675	51.7	12.2	40.0	2.760	0.006	0.006	0.000	0.156	0.13	
2961	4/21/2004	10:16:53 PM		24.903	24.902	24.221	25.801	25.443		49.332	53.13	18.477	31.314	-1.221	-7.382		48.909	0.041	14.643	0.003		3635.1	60.5842	51.7	12.0	40.3	2.780	0.006	0.006	0.000	0.155	0.13	
2962	4/21/2004	10:17:53 PM		24.916	24.909	24.223	25.843	25.49		49.409	53.228	18.196	31.566	-1.218	-7.376		49.412	0.042	14.643	0.003		3636.1	60.6008	51.8	12.1	40.5	2.791	0.006	0.006	0.000	0.158	0.13	
2963	4/21/2004	10:18:53 PM		24.917	24.916	24.204	25.895	25.527		49.417	53.218	18.404	31.332	-1.221	-7.385		48.963	0.041	14.643	0.003		3637.1	60.6175	51.7	12.0	40.4	2.784	0.006	0.006	0.000	0.155	0.13	
2964	4/21/2004	10:19:53 PM		24.918	24.922	24.206	25.911	25.563		49.347	53.141	18.214	31.519	-1.221	-7.379		49.232	0.041	14.643	0.003		3638.1	60.6342	51.7	12.1	40.4	2.788	0.006	0.006	0.000	0.155	0.13	
2965	4/21/2004	10:20:53 PM		24.93	24.939	24.212	25.923	25.475		49.324	53.126	18.037	31.595	-1.215	-7.379		49.754	0.041	14.643	0.003		3639.1	60.6508	51.7	12.2	40.5	2.790	0.006	0.006	0.000	0.154	0.13	
2966	4/21/2004	10:21:53 PM		24.932	24.936	24.194	25.86	25.412		49.322	53.18	18.084	31.665	-1.218	-7.376		46.804	0.041	14.643	0.003		3640.1	60.6675	51.7	11.5	40.5	2.792	0.006	0.006	0.000	0.154	0.13	
2967	4/21/2004	10:22:53 PM		24.933	24.946	24.18	25.82	25.353		49.776	53.673	18.064	31.999	-1.221	-7.376		48.788	0.041	14.643	0.003		3641.1	60.6842	52.2	12.0	40.9	2.819	0.006	0.006	0.000	0.153	0.13	
2968	4/21/2004	10:23:53 PM		24.932	24.941	24.169	25.729	25.292		49.763	53.518	18.141	31.977	-1.221	-7.382		47.768	0.041	14.643	0.003		3642.1	60.7008	52.0	11.7	40.9	2.818	0.006	0.006	0.000	0.153	0.13	
2969	4/21/2004	10:24:53 PM		24.927	24.931	24.144	25.649	25.222		49.452	53.238	18.113	31.689	-1.224	-7.376		48.784	0.041	14.643	0.003		3643.1	60.7175	51.8	12.0	40.6	2.797	0.006	0.006	0.000	0.154	0.13	
2970	4/21/2004	10:25:53 PM		24.946	24.95	24.158	25.609	25.191		49.643	53.576	17.909	32.18	-1.221	-7.376		48.951	0.04	14.643	0.003		3644.1	60.7342	52.1	12.0	40.9	2.821	0.006	0.006	0.000	0.149	0.13	
2971	4/21/2004	10:26:53 PM		24.93	24.929	24.127	25.527	25.075		49.554	53.429	18.019	31.796	-1.221	-7.365		48.575	0.043	14.643	0.003		3645.1	60.7508	52.0	11.9	40.7	2.804	0.006	0.007	0.000	0.162	0.14	
2972	4/21/2004	10:27:53 PM		24.943	24.937	24.151	25.521	25.083		49.475	53.259	17.83	31.979	-1.221	-7.365		46.162	0.042	14.643	0.003		3646.1	60.7675	51.8	11.3	40.7	2.808	0.006	0.006	0.000	0.157	0.13	
2973	4/21/2004	10:28:53 PM		24.933	24.926	24.125	25.455	25.008		49.508	53.417	17.913	31.989	-1.224	-7.368		49.299	0.041	14.643	0.003		3647.1	60.7842	51.9	12.1	40.7	2.809	0.006	0.006	0.000	0.154	0.13	
2974	4/21/2004	10:29:53 PM		24.931	24.925	24.128	25.423	25.026		49.662	53.508	17.963	32.02	-1.218	-7.374		48.531	0.04	14.643	0.003		3648.1	60.8008	52.0	11.9	40.8	2.816	0.006	0.006	0.000	0.150	0.13	
2975	4/21/2004	10:30:53 PM		24.946	24.924	24.138	25.413	25.001		49.531	53.452	17.992	31.927	-1.218	-7.362		48.462	0.042	14.643	0.003		3649.1	60.8175	52.0	11.9	40.7	2.808	0.006	0.006	0.000	0.158	0.13	
2976	4/21/2004	10:31:53 PM		24.923	24.897	24.096	25.366	25.049		49.351	53.228	17.72	31.999	-1.224	-7.368		47.491	0.042	14.643	0.003		3650.1	60.8342	51.8	11.6	40.7	2.804	0.006	0.006	0.000	0.158	0.13	
2977	4/21/2004	10:32:53 PM		24.922	24.901	24.099	25.424	25.132		49.432	53.383	17.879	31.971	-1.221	-7.371		48.477	0.041	14.643	0.003		3651.1	60.8508	51.9	11.9	40.7	2.806	0.006	0.006	0.000	0.154	0.13	
2978	4/21/2004	10:33:53 PM		24.916	24.885	24.103	25.469	25.231		49.699	53.487	18.015	31.964	-1.218	-7.356		48.379	0.042	14.643	0.004		3652.1	60.8675	52.0	11.9	40.8	2.815	0.006	0.006	0.000	0.157	0.13	
2979	4/21/2004	10:34:53 PM		24.916	24.885	24.108	25.529	25.281		49.525	53.329	17.826	32.069	-1.218	-7.359		48.554	0.042	14.643	0.003		3653.1	60.8842	51.9	11.9	40.8	2.813	0.006	0.006	0.000	0.157	0.13	
2980	4/21/2004	10:35:53 PM		24.911	24.88	24.093	25.584	25.356		50.021	53.974	18.009	32.336	-1.218	-7.371		47.891	0.04	14.643	0.003		3654.1	60.9008	52.5	11.7	41.2	2.839	0.006	0.006	0.000	0.149	0.13	
2981	4/21/2004	10:36:53 PM		24.918	24.882	24.1	25.665	25.418		49.61	53.543	17.713	32.143	-1.218	-7.362		48.604	0.041	14.643	0.003		3655.1	60.9175	52.1	11.9	40.9	2.818	0.006	0.006	0.000	0.153	0.13	
2982	4/21/2004	10:37:53 PM		24.918	24.877	24.116	25.706	25.403		49.637	53.601	17.768	32.299	-1.221	-7.365		47.976	0.04	14.643	0.003		3656.1	60.9342	52.1	11.8	41.0	2.825	0.006	0.006	0.000	0.149	0.13	
2983	4/21/2004	10:38:53 PM		24.921	24.889	24.133	25.758	25.46		49.961	53.86	17.881	32.326	-1.221	-7.353		48.221	0.043	14.643	0.003		3657.1	60.9508	52.4	11.8	41.1	2.837	0.006	0.007	0.000	0.160	0.14	
2984	4/21/2004	10:39:53 PM		24.901	24.865	24.113	25.774	25.466		49.853	53.748	17.942	32.176	-1.221	-7.365		48.602	0.041	14.643	0.003		3658.1	60.9675	52.3	11.9	41.0	2.828	0.006	0.006	0.000	0.153	0.13	
2985	4/21/2004	10:40:53 PM		24.923	24.897	24.131	25.831	25.533		49.776	53.653	18.066	31.991	-1.221	-7.359		48.033	0.042	14.643	0.003		3659.1	60.9842	52.2	11.8	40.9	2.819	0.006	0.006	0.000	0.157	0.13	
2986	4/21/2004	10:41:53 PM		24.925	24.888	24.127	25.893	25.505		49.635	53.491	17.954	32.125	-1.221	-7.362		48.704	0.041	14.643	0.003		3660.1	61.0008	52.0	11.9	40.9	2.819	0.006	0.006	0.000	0.153	0.13	
2987	4/21/2004	10:42:53 PM		24.931	24.905	24.128	25.884	25.396		49.612	53.547	18.024	32.007	-1.218	-7.353		48.206	0.04	14.643	0.003		3661.1	61.0175	52.1	11.8	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
2988	4/21/2004	10:43:53 PM		24.953	24.916	24.145	25.825	25.288		49.309	53.267	17.955	31.659	-1.221	-7.35		49.259	0.042	14.643	0.003		3662.1	61.0342	51.8	12.1	40.5	2.791	0.006	0.006	0.000	0.158	0.13	
2989	4/21/2004	10:44:53 PM		24.932	24.911	24.104	25.744	25.282		49.479	53.445	17.834	31.979	-1.221	-7.353		48.408	0.042	14.643	0.003		3663.1	61.0508	52.0	11.9	40.7	2.808	0.006	0.006	0.000	0.158	0.13	
2990	4/21/2004	10:45:53 PM		24.942	24.926	24.109	25.664	25.292		49.336	53.245	17.808	31.884	-1.221	-7.35		47.501	0.04	14.643	0.003		3664.1	61.0675	51.8	11.6	40.6	2.800	0.006	0.006	0.000	0.151	0.13	
2991	4/21/2004	10:46:53 PM		24.935	24.909	24.103	25.613	25.141		49.398	53.404	17.83	31.979	-1.218	-7.348		48.604	0.041	14.643	0.003		3665.1	61.0842	51.9	11.9	40.7	2.805	0.006	0.006	0.000	0.154	0.13	
2992	4/21/2004	10:47:53 PM		24.93	24.914	24.087	25.562	25.15		49.595	53.468	17.855	32.102	-1.218	-7.348		48.1	0.042	14.643	0.003		3666.1	61.1008	52.0	11.8	40.8	2.816	0.006	0.006	0.000	0.157	0.13	
2993	4/21/2004	10:48:53 PM		24.918	24.902	24.08	25.496	25.073		49.699	53.531	17.98	32.1	-1.218	-7.35		48.834	0.04	14.643	0.003		3667.1	61.1175	52.1	12.0	40.9	2.820	0.006	0.006	0.000	0.150	0.13	
2994	4/21/2004	10:49:53 PM		24.922	24.906	24.079	25.459	25.032		49.369	53.292	17.842	31.891	-1.218	-7.35		48.636	0.036	14.643	0.004		3668.1	61.1342	51.8	11.9	40.6	2.801	0.005	0.006	0.000	0.136	0.12	
2995	4/21/2004	10:50:53 PM		24.911	24.884	24.063	25.413	25.016		49.539	53.458	17.976	31.985	-1.218	-7.35		48.133	0.04	14.643	0.003		3669.1	61.1508	52.0	11.8	40.8	2.810	0.006	0.006	0.000	0.150	0.13	
2996	4/21/2004	10:51:53 PM		24.903	24.882	24.06	25.396	25.024		49.732	53.651	17.951	32.258	-1.218	-7.342		48.148	0.041	14.643	0.003		3670.1	61.1675	52.2	11.8	41.0	2.826	0.006	0.006	0.000	0.153	0.13	
2997	4/21/2004	10:52:53 PM		24.902	24.881	24.064	25.419	25.082		49.637	53.506	17.71	32.369	-1.221	-7.345		47.628	0.042	14.643	0.003		3671.1	61.1842	52.0	11.7	41.0	2.827	0.006	0.006	0.000	0.157	0.13	
2998	4/21/2004	10:53:53 PM		24.901	24.874	24.063	25.453	25.156		49.606	53.591	17.997	32.012	-1.221	-7.35		48.06	0.04	14.643	0.003		3672.1	61.2008	52.1	11.8	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
2999	4/21/2004	10:54:53 PM		24.901	24.864	24.053	25.508	25.211		49.656	53.578	17.973	31.979	-1.224	-7.348		47.263	0.04	14.643	0.003		3673.1	61.2175	52.1	11.6	40.8	2.814	0.006	0.006	0.000	0.150	0.13	
3000	4/21/2004	10:55:53 PM		24.9	24.869	24.067	25.582	25.265		49.363	53.361	17.883	31.936	-1.215	-7.35		48.089	0.039	14.643	0.004		3674.1	61.2342	51.9	11.8	40.6	2.803	0.006	0.006	0.000	0.147	0.12	
3001	4/21/2004	10:56:53 PM		24.896	24.864	24.068	25.633	25.381		49.523	53.423	18.068	31.811	-1.221	-7.342		48.431	0.042	14.643	0.003		3675.1	61.2508	52.0	11.9	40.7	2.804	0.006	0.006	0.000	0.158	0.13	
3002	4/21/2004	10:57:53 PM		24.901	24.86	24.093	25.664	25.386		49.68	53.674	17.934	32.153	-1.221	-7.342		48.402	0.04	14.643	0.003		3676.1	61.2675	52.2	11.9	40.9	2.821	0.006	0.006	0.000	0.150	0.13	
3003	4/21/2004	10:58:53 PM		24.902	24.871	24.104	25.745	25.392		49.564	53.516	17.817	32.071	-1.218	-7.336		48.556	0.041	14.643	0.003		3677.1	61.2842	52.0	11.9	40.8	2.814	0.006	0.006	0.000	0.154	0.13	
3004	4/21/2004	10:59:53 PM		24.898	24.872	24.096	25.751	25.403		49.894	53.955	17.905	32.445	-1.218	-7.333		48.853	0.041	14.643	0.003		3678.1	61.3008	52.5	12.0	41.2	2.838	0.006	0.006	0.000	0.152	0.13	
3005	4/21/2004	11:00:53 PM		24.896	24.869	24.083	25.808	25.52		49.259	53.244	18.246	31.371	-1.224	-7.339		48.663	0.042	14.643	0.003		3679.1	61.3175	51.8	11.9	40.3	2.780	0.006	0.006	0.000	0.159	0.14	
3006	4/21/2004	11:01:53 PM		24.903	24.886	24.105	25.845	25.498		48.986	52.94	18.642	30.561	-1.224	-7.345		50.872	0.04	14.643	0.003		3680.1	61.3342	51.5	12.5	39.8	2.742	0.006	0.006	0.000	0.154	0.13	
3007	4/21/2004	11:02:53 PM		24.924	24.908	24.136	25.847	25.439		48.712	52.612	18.495	30.514	-1.218	-7.339		50.129	0.04	14.643	0.003		3681.1	61.3508	51.1	12.3	39.6	2.731	0.006	0.006	0.000	0.154	0.13	
3008	4/21/2004	11:03:53 PM		24.904	24.888	24.111	25.772	25.384		49.185	53.091	18.385	31.283	-1.221	-7.365		49.724	0.038	14.643	0.003		3682.1	61.3675	51.6	12.2	40.2	2.774	0.006	0.006	0.000	0.144	0.12	
3009	4/21/2004	11:04:53 PM		24.905	24.883	24.107	25.707	25.275		49.021	52.992	18.453	30.914	-1.224	-7.33		48.817	0.041	14.643	0.003		3683.1	61.3842	51.5	12.0	40.0	2.756	0.006	0.006	0.000	0.157	0.13	
3010	4/21/2004	11:05:53 PM		24.894	24.883	24.096	25.622	25.134		49.262	53.137	18.263	31.396	-1.224	-7.469		49.505	0.041	14.643	0.003		3684.1	61.4008	51.7	12.1	40.3	2.781	0.006	0.006	0.000	0.155	0.13	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3011	4/21/2004	11:06:53 PM		24.899	24.883	24.111	25.576	25.289		49.243	53.184	18.317	31.338	-1.218	-7.472		48.523	0.04	14.643	0.003		3685.1	61.4175	51.7	11.9	40.3	2.778	0.006	0.006	0.000	0.152	0.13	
3012	4/21/2004	11:07:53 PM		24.893	24.877	24.11	25.526	25.173		49.573	53.609	18.249	31.593	-1.221	-7.469		48.865	0.041	14.643	0.003		3686.1	61.4342	52.1	12.0	40.6	2.798	0.006	0.006	0.000	0.154	0.13	
3013	4/21/2004	11:08:53 PM		24.902	24.881	24.104	25.464	25.067		49.216	53.112	18.103	31.468	-1.218	-7.423		49.366	0.04	14.643	0.003		3687.1	61.4508	51.6	12.1	40.3	2.781	0.006	0.006	0.000	0.152	0.13	
3014	4/21/2004	11:09:53 PM		24.894	24.873	24.091	25.406	24.934		49.428	53.416	18.096	31.751	-1.224	-7.429		48.513	0.042	14.643	0.003		3688.1	61.4675	51.9	11.9	40.6	2.799	0.006	0.006	0.000	0.158	0.13	
3015	4/21/2004	11:10:53 PM		24.896	24.869	24.098	25.373	24.881		49.548	53.477	18.244	31.683	-1.218	-7.429		48.56	0.039	14.643	0.003		3689.1	61.4842	52.0	11.9	40.6	2.800	0.006	0.006	0.000	0.147	0.12	
3016	4/21/2004	11:11:53 PM		24.874	24.852	24.071	25.301	24.859		49.33	53.383	18.269	31.494	-1.224	-7.42		48.675	0.042	14.643	0.003		3690.1	61.5008	51.9	11.9	40.4	2.786	0.006	0.006	0.000	0.159	0.14	
3017	4/21/2004	11:12:53 PM		24.881	24.845	24.084	25.283	24.887		49.504	53.462	18.305	31.501	-1.218	-7.426		49.022	0.04	14.643	0.003		3691.1	61.5175	52.0	12.0	40.5	2.793	0.006	0.006	0.000	0.151	0.13	
3018	4/21/2004	11:13:53 PM		24.873	24.832	24.075	25.305	24.913		49.481	53.359	18.058	31.841	-1.218	-7.417		48.928	0.041	14.643	0.003		3692.1	61.5342	51.9	12.0	40.7	2.803	0.006	0.006	0.000	0.154	0.13	
3019	4/21/2004	11:14:53 PM		24.862	24.815	24.054	25.329	25.007		49	52.934	18.043	31.287	-1.221	-7.417		49.952	0.041	14.643	0.003		3693.1	61.5508	51.5	12.2	40.1	2.768	0.006	0.006	0.000	0.156	0.13	
3020	4/21/2004	11:15:53 PM		24.871	24.83	24.093	25.408	25.111		49.396	53.367	18.248	31.49	-1.218	-7.411		48.89	0.041	14.643	0.003		3694.1	61.5675	51.9	12.0	40.4	2.788	0.006	0.006	0.000	0.155	0.13	
3021	4/21/2004	11:16:53 PM		24.876	24.825	24.093	25.458	25.156		49.666	53.649	18.057	31.979	-1.221	-7.423		48.258	0.039	14.643	0.003		3695.1	61.5842	52.2	11.8	40.8	2.815	0.006	0.006	0.000	0.146	0.12	
3022	4/21/2004	11:17:53 PM		24.871	24.825	24.093	25.543	25.201		49.222	53.234	18.03	31.581	-1.215	-7.411		47.653	0.041	14.643	0.003		3696.1	61.6008	51.8	11.7	40.4	2.786	0.006	0.006	0.000	0.155	0.13	
3023	4/21/2004	11:18:53 PM		24.862	24.811	24.074	25.58	25.267		49.284	53.302	17.885	31.694	-1.221	-7.42		47.301	0.04	14.643	0.003		3697.1	61.6175	51.8	11.6	40.5	2.792	0.006	0.006	0.000	0.151	0.13	
3024	4/21/2004	11:19:53 PM		24.868	24.822	24.09	25.636	25.268		49.878	53.839	18.295	32.008	-1.218	-7.414		48.492	0.04	14.643	0.003		3698.1	61.6342	52.4	11.9	40.9	2.823	0.006	0.006	0.000	0.149	0.13	
3025	4/21/2004	11:20:53 PM		24.853	24.807	24.075	25.646	25.378		49.459	53.458	18.234	31.499	-1.221	-7.417		47.297	0.04	14.643	0.003		3699.1	61.6508	52.0	11.6	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
3026	4/21/2004	11:21:53 PM		24.859	24.812	24.081	25.716	25.294		49.55	53.541	18.181	31.726	-1.221	-7.411		47.309	0.041	14.643	0.003		3700.1	61.6675	52.1	11.6	40.6	2.802	0.006	0.006	0.000	0.154	0.13	
3027	4/21/2004	11:22:53 PM		24.849	24.808	24.071	25.702	25.409		49.633	53.667	18.121	31.79	-1.221	-7.417		47.551	0.042	14.643	0.003		3701.1	61.6842	52.2	11.7	40.7	2.807	0.006	0.006	0.000	0.158	0.13	
3028	4/21/2004	11:23:53 PM		24.871	24.83	24.094	25.719	25.247		49.419	53.416	18.153	31.665	-1.224	-7.42		47.908	0.04	14.643	0.003		3702.1	61.7008	51.9	11.7	40.5	2.795	0.006	0.006	0.000	0.151	0.13	
3029	4/21/2004	11:24:53 PM		24.867	24.826	24.089	25.655	25.192		49.456	53.466	18.187	31.648	-1.224	-7.42		47.484	0.04	14.643	0.003		3703.1	61.7175	52.0	11.6	40.6	2.796	0.006	0.006	0.000	0.151	0.13	
3030	4/21/2004	11:25:53 PM		24.861	24.815	24.089	25.594	25.207		49.647	53.671	18.139	31.884	-1.221	-7.417		48.05	0.04	14.643	0.003		3704.1	61.7342	52.2	11.8	40.8	2.811	0.006	0.006	0.000	0.150	0.13	
3031	4/21/2004	11:26:53 PM		24.871	24.82	24.099	25.549	25.077		49.43	53.379	18.316	31.451	-1.218	-7.414		48.715	0.04	14.643	0.003		3705.1	61.7508	51.9	11.9	40.4	2.788	0.006	0.006	0.000	0.151	0.13	
3032	4/21/2004	11:27:53 PM		24.87	24.824	24.097	25.487	25.095		49.423	53.445	18.294	31.457	-1.221	-7.42		49.034	0.039	14.643	0.003		3706.1	61.7675	52.0	12.0	40.4	2.788	0.006	0.006	0.000	0.147	0.13	
3033	4/21/2004	11:28:53 PM		24.869	24.818	24.167	25.417	25.01		49.226	53.189	18.233	31.267	-1.221	-7.408		48.392	0.041	14.643	0.003		3707.1	61.7842	51.7	11.9	40.2	2.775	0.006	0.006	0.000	0.155	0.13	
3034	4/21/2004	11:29:53 PM		24.862	24.811	24.145	25.379	24.872		49.413	53.402	18.289	31.47	-1.218	-7.408		50.509	0.04	14.643	0.003		3708.1	61.8008	51.9	12.4	40.4	2.788	0.006	0.006	0.000	0.151	0.13	
3035	4/21/2004	11:30:53 PM		24.865	24.794	24.132	25.322	24.865		49.315	53.323	18.13	31.614	-1.221	-7.408		49.228	0.041	14.643	0.003		3709.1	61.8175	51.9	12.1	40.5	2.790	0.006	0.006	0.000	0.155	0.13	
3036	4/21/2004	11:31:53 PM		24.863	24.787	24.12	25.295	24.848		49.345	53.462	18.294	31.412	-1.221	-7.417		48.306	0.039	14.643	0.003		3710.1	61.8342	52.0	11.8	40.4	2.784	0.006	0.006	0.000	0.148	0.13	
3037	4/21/2004	11:32:53 PM		24.845	24.769	24.087	25.247	24.896		49.16	53.218	18.256	31.18	-1.221	-7.414		48.711	0.04	14.643	0.003		3711.1	61.8508	51.7	11.9	40.2	2.770	0.006	0.006	0.000	0.152	0.13	
3038	4/21/2004	11:33:53 PM		24.865	24.774	24.113	25.277	24.941		49.569	53.589	18.276	31.689	-1.218	-7.405		49.32	0.04	14.643	0.003		3712.1	61.8675	52.1	12.1	40.6	2.801	0.006	0.006	0.000	0.151	0.13	
3039	4/21/2004	11:34:53 PM		24.865	24.783	24.112	25.327	25.03		49.55	53.576	18.299	31.572	-1.218	-7.405		47.851	0.041	14.643	0.003		3713.1	61.8842	52.1	11.7	40.6	2.797	0.006	0.006	0.000	0.155	0.13	
3040	4/21/2004	11:35:53 PM		24.86	24.773	24.097	25.387	25.13		49.519	53.56	18.303	31.517	-1.218	-7.411		48.836	0.04	14.643	0.003		3714.1	61.9008	52.1	12.0	40.5	2.794	0.006	0.006	0.000	0.151	0.13	
3041	4/21/2004	11:36:53 PM		24.865	24.769	24.108	25.458	25.131		49.114	53.118	18.225	31.281	-1.218	-7.403		48.26	0.04	14.643	0.003		3715.1	61.9175	51.6	11.8	40.2	2.771	0.006	0.006	0.000	0.152	0.13	
3042	4/21/2004	11:37:53 PM		24.86	24.764	24.097	25.523	25.206		49.301	53.361	18.117	31.591	-1.221	-7.4		49.178	0.04	14.643	0.003		3716.1	61.9342	51.9	12.1	40.4	2.789	0.006	0.006	0.000	0.151	0.13	
3043	4/21/2004	11:38:53 PM		24.855	24.764	24.087	25.593	25.231		49.386	53.412	18.334	31.474	-1.218	-7.4		49.332	0.04	14.643	0.003		3717.1	61.9508	51.9	12.1	40.4	2.788	0.006	0.006	0.000	0.151	0.13	
3044	4/21/2004	11:39:53 PM		24.857	24.755	24.084	25.614	25.312		49.542	53.713	18.165	31.681	-1.221	-7.403		48.725	0.039	14.643	0.003		3718.1	61.9675	52.2	11.9	40.6	2.800	0.006	0.006	0.000	0.147	0.13	
3045	4/21/2004	11:40:53 PM		24.842	24.751	24.064	25.625	25.248		49.49	53.559	18.101	31.849	-1.221	-7.4		48.002	0.04	14.643	0.003		3719.1	61.9842	52.1	11.8	40.7	2.804	0.006	0.006	0.000	0.151	0.13	
3046	4/21/2004	11:41:53 PM		24.875	24.788	24.107	25.712	25.36		49.504	53.601	18.275	31.691	-1.218	-7.4		48.07	0.039	14.643	0.003		3720.1	62.0008	52.1	11.8	40.6	2.799	0.006	0.006	0.000	0.147	0.12	
3047	4/21/2004	11:42:53 PM		24.855	24.774	24.082	25.673	25.37		49.384	53.448	18.091	31.63	-1.221	-7.394		48.73	0.04	14.643	0.003		3721.1	62.0175	52.0	11.9	40.5	2.793	0.006	0.006	0.000	0.151	0.13	
3048	4/21/2004	11:43:53 PM		24.87	24.789	24.107	25.683	25.215		49.21	53.276	18.148	31.46	-1.215	-7.385		48.454	0.041	14.643	0.003		3722.1	62.0342	51.8	11.9	40.3	2.781	0.006	0.006	0.000	0.155	0.13	
3049	4/21/2004	11:44:53 PM		24.855	24.778	24.077	25.592	25.15		49.33	53.412	18.261	31.394	-1.221	-7.391		48.811	0.04	14.643	0.003		3723.1	62.0508	51.9	12.0	40.4	2.783	0.006	0.006	0.000	0.152	0.13	
3050	4/21/2004	11:45:53 PM		24.849	24.782	24.071	25.531	25.124		49.363	53.361	18.353	31.394	-1.221	-7.394		49.117	0.039	14.643	0.003		3724.1	62.0675	51.9	12.0	40.4	2.784	0.006	0.006	0.000	0.148	0.13	
3051	4/21/2004	11:46:53 PM		24.859	24.787	24.081	25.461	25.044		49.307	53.373	18.275	31.349	-1.218	-7.382		50.711	0.041	14.643	0.004		3725.1	62.0842	51.9	12.4	40.3	2.780	0.006	0.006	0.000	0.156	0.13	
3052	4/21/2004	11:47:53 PM		24.852	24.776	24.064	25.395	24.953		49.411	53.547	18.138	31.591	-1.221	-7.385		48.565	0.041	14.643	0.003		3726.1	62.1008	52.1	11.9	40.5	2.792	0.006	0.006	0.000	0.155	0.13	
3053	4/21/2004	11:48:53 PM		24.845	24.779	24.052	25.327	24.951		49.432	53.417	18.149	31.65	-1.221	-7.391		48.777	0.04	14.643	0.003		3727.1	62.1175	51.9	12.0	40.5	2.795	0.006	0.006	0.000	0.151	0.13	
3054	4/21/2004	11:49:53 PM		24.838	24.762	24.05	25.285	24.894		49.608	53.761	18.314	31.698	-1.218	-7.385		48.84	0.04	14.643	0.003		3728.1	62.1342	52.3	12.0	40.7	2.803	0.006	0.006	0.000	0.151	0.13	
3055	4/21/2004	11:50:53 PM		24.836	24.75	24.043	25.238	24.821		49.467	53.582	18.19	31.568	-1.221	-7.388		48.463	0.039	14.643	0.003		3729.1	62.1508	52.1	11.9	40.5	2.794	0.006	0.006	0.000	0.147	0.13	
3056	4/21/2004	11:51:53 PM		24.834	24.758	24.061	25.206	24.764		49.471	53.599	18.317	31.453	-1.218	-7.385		48.51	0.04	14.643	0.003		3730.1	62.1675	52.1	11.9	40.5	2.790	0.006	0.006	0.000	0.151	0.13	
3057	4/21/2004	11:52:53 PM		24.822	24.746	24.049	25.184	24.822		49.475	53.53	18.302	31.486	-1.218	-7.382		48.533	0.04	14.643	0.003		3731.1	62.1842	52.1	11.9	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
3058	4/21/2004	11:53:53 PM		24.836	24.75	24.063	25.223	24.952		49.235	53.3	18.152	31.437	-1.221	-7.382		48.805	0.041	14.643	0.003		3732.1	62.2008	51.8	12.0	40.3	2.781	0.006	0.006	0.000	0.156	0.13	
3059	4/21/2004	11:54:53 PM		24.841	24.749	24.078	25.273	25.036		49.401	53.549	18.269	31.546	-1.218	-7.379		47.912	0.04	14.643	0.003		3733.1	62.2175	52.1	11.7	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
3060	4/21/2004	11:55:53 PM		24.815	24.729	24.047	25.292	25.02		49.291	53.383	18.317	31.326	-1.221	-7.382		48.317	0.039	14.643	0.003		3734.1	62.2342	51.9	11.8	40.3	2.779	0.006	0.006	0.000	0.148	0.13	
3061	4/21/2004	11:56:53 PM		24.821	24.729	24.068	25.398	25.016		49.336	53.439	18.236	31.496	-1.218	-7.368		49.03	0.041	14.643	0.003		3735.1	62.2508	52.0	12.0	40.4	2.787	0.006	0.006	0.000	0.155	0.13	
3062	4/21/2004	11:57:53 PM		24.821	24.725	24.073	25.459	25.102		49.423	53.516	18.221	31.609	-1.218	-7.376		48.815	0.037	14.643	0.003		3736.1	62.2675	52.0	12.0	40.5	2.793	0.006	0.006	0.000	0.140	0.12	
3063	4/21/2004	11:58:53 PM		24.807	24.701	24.049	25.5	25.147		49.421	53.533	18.095	31.661	-1.221	-7.371		48.577	0.04	14.643	0.003		3737.1	62.2842	52.1	11.9	40.5	2.795	0.006	0.006	0.000	0.151	0.13	
3064	4/21/2004	11:59:53 PM		24.809	24.722	24.055	25.546	25.219		49.77	53.895	18.215	31.778	-1.221	-7.374		48.296	0.039	14.643	0.003		3738.1	62.3008	52.4	11.8	40.8	2.811	0.006	0.006	0.000	0.146	0.12	
3065	4/22/2004	8:44:25 AM		23.001	21.578	24.417	22.858	22.506		49.591	54.6	19.552	30.271	-0.48	-6.295		47.831	0.048	14.643	0.003		4262.6	71.0431	53.1	11.7	39.9	2.753	0.007	0.007	0.000	0.182	0.16	
3066	4/22/2004	8:45:25 AM		23.298	21.599	24.373	22.844	22.512		50.52	54.722	19.404	31.513	-1.218	-6.584		48.704	0.053	14.643	0.003		4263.6	71.0597	53.2	11.9	41.0	2.828	0.008	0.008	0.000	0.196	0.17	
3067	4/22/2004	8:46:25 AM		23.471	21.636	24.355	22.886	22.513		50.249	54.505	19.614	30.922	-1.218	-5.177		47.805	0.003	14.643	0.003		4264.6	71.0764	53.0	11.7	40.6	2.798	0.000	0.000	0.000	0.011	0.01	
3068	4/22/2004	8:47:25 AM		23.342	21.663	24.316	22.883	22.525		49.168	54.556	19.433	29.933	-0.106	-3.029		48.394	0.026	14.643	0.003		4265.6	71.0931	53.1	11.9	39.6	2.727	0.004	0.004	0.000	0.100	0.09	
3069	4/22/2004	8:48:25 AM		23.434	21.696	24.293	22.915	22.612		48.965	55.338	19.549	29.66	0.939	-0.869		48.515	0.036	14.643	0.003		4266.6	71.1097	53.9	11.9	39.3	2.710	0.005	0.005	0.000	0.139	0.12	
3070	4/22/2004	8:49:25 AM		23.513	21.735	24.292	22.994	22.767		49.734	55.276	19.411	30.563	0.091	-2.774		48.152	0.091	14.643	0.003		4267.6	71.1264	53.8	11.8	40.1	2.768	0.014	0.014	0.000	0.345	0.29	
3071	4/22/2004	8:50:25 AM		23.512	21.753	24.275	23.053	22.871		51.028	55.539	19.406	31.884	-0.995	-5.229		47.787	0.073	14.643	0.003		4268.6	71.1431	54.1	11.7	41.5	2.858	0.011	0.011	0.000	0.268	0.23	
3072	4/22/2004	8:51:25 AM		23.486	21.792	24.269	23.112	22.97		50.803	54.758	20.126	31.018	-1.212	-6.582		49.245	0.046	14.643	0.003		4269.6	71.1597	53.3	12.1	40.9	2.821	0.007	0.007	0.000	0.171	0.15	
3073	4/22/2004	8:52:25 AM		23.497	21.824	24.265	23.174	23.096		50.664	54.671	20.096	30.873	-1.215	-6.414		49.512	0.067	14.643	0.003		4270.6	71.1764	53.2	12.1	40.8	2.811	0.010	0.010	0.000	0.250	0.21	
3074	4/22/2004	8:53:25 AM		23.452	21.854	24.265	23.279	23.151		50.935	54.95	20.188	31.088	-1.215	-6.44		49.896	0.041	14.643	0.003		4271.6	71.1931	53.5	12.2	41.0	2.828	0.006	0.006	0.000	0.152	0.13	
3075	4/22/2004	8:54:25 AM		23.433	21.886	24.262	23.381	23.183		51.19	55.201	20.238	31.34	-1.218	-6.463		47.459	0.041	14.643	0.003		4272.6	71.2097	53.7	11.6	41.3	2.845	0.006	0.006	0.000	0.151	0.13	
3076	4/22/2004	8:55:25 AM		23.411	21.914	24.255	23.409	23.246		50.151	54.138	20.023	30.511	-1.218	-6.483		49.311	0.041	14.643	0.003		4273.6	71.2264	52.7	12.1	40.3	2.781	0.006	0.006	0.000	0.155	0.13	
3077	4/22/2004	8:56:25 AM		23.413	21.946	24.237	23.487	23.384		50.618	54.631	20.078	30.789	-1.218	-6.48		48.552	0.042	14.643	0.003		4274.6	71.2431	53.2	11.9	40.7	2.806	0.006	0.006	0.000	0.157	0.13	
3078	4/22/2004	8:57:25 AM		23.447	21.99	24.225	23.515	23.332		50.572	54.594	19.96	30.957	-1.218	-6.477		49.109	0.041	14.643	0.003		4275.6	71.2597	53.1	12.0	40.8	2.811	0.006	0.006	0.000	0.153	0.13	
3079	4/22/2004	8:58:25 AM		23.469	22.007	24.183	23.503	23.505		50.61	54.596	19.711	31.137	-1.218	-6.48		47.236	0.04	14.643	0.003		4276.6	71.2764	53.1	11.6	40.9	2.818	0.006	0.006	0.000	0.149	0.13	
3080	4/22/2004	8:59:25 AM		23.512	22.045	24.195	23.631	23.522		50.381	54.384	19.929	30.686	-1.215	-6.477		48.218	0.041	14.643	0.003		4277.6	71.2931	52.9	11.8	40.5	2.795	0.006	0.006	0.000	0.154	0.13	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3081	4/22/2004	9:00:25 AM		23.54	22.078	24.173	23.664	23.59		50.39	54.326	19.826	30.764	-1.215	-6.532		49.207	0.041	14.643	0.003		4278.6	71.3097	52.9	12.1	40.6	2.798	0.006	0.006	0.000	0.154	0.13	
3082	4/22/2004	9:01:25 AM		23.573	22.111	24.091	23.702	23.653		50.45	54.457	19.902	30.719	-1.218	-6.535		49.168	0.041	14.643	0.003		4279.6	71.3264	53.0	12.0	40.6	2.798	0.006	0.006	0.000	0.155	0.13	
3083	4/22/2004	9:02:25 AM		23.606	22.165	24.089	23.77	23.646		50.298	54.231	20.044	30.565	-1.215	-6.535		48.527	0.041	14.643	0.003		4280.6	71.3431	52.8	11.9	40.4	2.788	0.006	0.006	0.000	0.155	0.13	
3084	4/22/2004	9:03:25 AM		23.638	22.187	24.066	23.798	23.588		50.338	54.289	20.034	30.596	-1.215	-6.532		49.117	0.04	14.643	0.003		4281.6	71.3597	52.8	12.0	40.5	2.790	0.006	0.006	0.000	0.151	0.13	
3085	4/22/2004	9:04:25 AM		23.667	22.231	24.069	23.806	23.482		50.379	54.368	19.944	30.71	-1.218	-6.532		48.809	0.04	14.643	0.003		4282.6	71.3764	52.9	12.0	40.5	2.795	0.006	0.006	0.000	0.151	0.13	
3086	4/22/2004	9:05:25 AM		23.679	22.243	24.037	23.808	23.424		50.458	54.38	19.954	30.793	-1.218	-6.532		49.372	0.04	14.643	0.003		4283.6	71.3931	52.9	12.1	40.6	2.801	0.006	0.006	0.000	0.151	0.13	
3087	4/22/2004	9:06:25 AM		23.692	22.276	24.024	23.796	23.422		50.533	54.523	19.942	30.959	-1.218	-6.535		49.305	0.04	14.643	0.003		4284.6	71.4097	53.1	12.1	40.7	2.809	0.006	0.006	0.000	0.150	0.13	
3088	4/22/2004	9:07:25 AM		23.715	22.309	24.017	23.809	23.374		50.342	54.341	19.788	30.879	-1.215	-6.532		49.785	0.04	14.643	0.003		4285.6	71.4264	52.9	12.2	40.6	2.800	0.006	0.006	0.000	0.151	0.13	
3089	4/22/2004	9:08:25 AM		23.722	22.337	24	23.776	23.342		50.522	54.476	19.719	31.211	-1.218	-6.532		49.848	0.04	14.643	0.003		4286.6	71.4431	53.0	12.2	40.9	2.818	0.006	0.006	0.000	0.150	0.13	
3090	4/22/2004	9:09:25 AM		23.729	22.354	23.981	23.753	23.303		50.402	54.428	19.914	30.682	-1.218	-6.532		49.658	0.042	14.643	0.003		4287.6	71.4597	53.0	12.2	40.5	2.795	0.006	0.006	0.000	0.159	0.14	
3091	4/22/2004	9:10:25 AM		23.735	22.375	23.958	23.729	23.355		50.023	53.945	19.571	30.827	-1.218	-6.538		48.143	0.04	14.643	0.003		4288.6	71.4764	52.5	11.8	40.4	2.787	0.006	0.006	0.000	0.152	0.13	
3092	4/22/2004	9:11:25 AM		23.752	22.402	23.955	23.731	23.387		50.126	54.144	19.634	30.69	-1.215	-6.538		48.565	0.04	14.643	0.003		4289.6	71.4931	52.7	11.9	40.4	2.786	0.006	0.006	0.000	0.152	0.13	
3093	4/22/2004	9:12:25 AM		23.765	22.43	23.947	23.754	23.454		50.352	54.351	19.622	31.027	-1.218	-6.532		48.379	0.04	14.643	0.003		4290.6	71.5097	52.9	11.9	40.7	2.805	0.006	0.006	0.000	0.151	0.13	
3094	4/22/2004	9:13:25 AM		23.787	22.472	23.964	23.816	23.537		50.172	54.146	19.767	30.735	-1.215	-6.535		48.898	0.039	14.643	0.003		4291.6	71.5264	52.7	12.0	40.5	2.789	0.006	0.006	0.000	0.148	0.13	
3095	4/22/2004	9:14:25 AM		23.784	22.484	23.931	23.793	23.714		50.193	54.188	19.728	30.671	-1.215	-6.529		48.412	0.041	14.643	0.004		4292.6	71.5431	52.7	11.9	40.4	2.788	0.006	0.006	0.000	0.156	0.13	
3096	4/22/2004	9:15:25 AM		23.801	22.502	23.928	23.886	23.726		50.315	54.277	19.614	31.09	-1.218	-6.532		49.493	0.04	14.643	0.003		4293.6	71.5597	52.8	12.1	40.7	2.806	0.006	0.006	0.000	0.151	0.13	
3097	4/22/2004	9:16:25 AM		23.798	22.524	23.911	23.983	23.779		50.11	54.086	19.631	30.854	-1.218	-6.529		48.773	0.042	14.643	0.003		4294.6	71.5764	52.6	12.0	40.5	2.791	0.006	0.006	0.000	0.160	0.14	
3098	4/22/2004	9:17:25 AM		23.811	22.552	23.913	24.026	23.762		50.481	54.42	19.618	31.121	-1.221	-6.532		48.93	0.04	14.643	0.003		4295.6	71.5931	52.9	12.0	40.8	2.813	0.006	0.006	0.000	0.151	0.13	
3099	4/22/2004	9:18:25 AM		23.825	22.586	23.907	24.11	23.91		50.201	54.119	19.807	30.686	-1.218	-6.532		48.158	0.039	14.643	0.003		4296.6	71.6097	52.6	11.8	40.4	2.788	0.006	0.006	0.000	0.148	0.13	
3100	4/22/2004	9:19:25 AM		23.844	22.61	23.911	24.195	24.02		50.056	54.047	19.835	30.532	-1.218	-6.527		48.59	0.04	14.643	0.004		4297.6	71.6264	52.6	11.9	40.3	2.778	0.006	0.006	0.000	0.153	0.13	
3101	4/22/2004	9:20:25 AM		23.853	22.639	23.905	24.218	24.023		50.442	54.413	19.58	31.261	-1.221	-6.527		48.73	0.04	14.643	0.003		4298.6	71.6431	52.9	11.9	40.9	2.817	0.006	0.006	0.000	0.151	0.13	
3102	4/22/2004	9:21:25 AM		23.856	22.662	23.898	24.271	24.151		50.471	54.513	19.759	30.965	-1.215	-6.524		48.598	0.04	14.643	0.003		4299.6	71.6597	53.0	11.9	40.7	2.807	0.006	0.006	0.000	0.151	0.13	
3103	4/22/2004	9:22:25 AM		23.88	22.696	23.902	24.386	24.175		50.581	54.552	19.797	31.098	-1.218	-6.524		47.924	0.039	14.643	0.003		4300.6	71.6764	53.1	11.7	40.8	2.816	0.006	0.006	0.000	0.147	0.12	
3104	4/22/2004	9:23:25 AM		23.899	22.736	23.901	24.46	24.19		50.34	54.3	19.652	30.936	-1.218	-6.521		48.732	0.041	14.643	0.003		4301.6	71.6931	52.8	11.9	40.6	2.802	0.006	0.006	0.000	0.155	0.13	
3105	4/22/2004	9:24:25 AM		23.919	22.766	23.906	24.465	24.254		50.238	54.237	19.519	31.045	-1.218	-6.524		49.003	0.04	14.643	0.003		4302.6	71.7097	52.8	12.0	40.6	2.802	0.006	0.006	0.000	0.151	0.13	
3106	4/22/2004	9:25:25 AM		23.923	22.805	23.895	24.484	24.209		49.958	53.964	20.029	30.234	-1.221	-6.521		49.211	0.04	14.643	0.003		4303.6	71.7264	52.5	12.1	40.1	2.764	0.006	0.006	0.000	0.153	0.13	
3107	4/22/2004	9:26:25 AM		23.931	22.823	23.898	24.472	24.071		49.824	53.794	20.117	30.011	-1.215	-6.521		49.215	0.039	14.643	0.003		4304.6	71.7431	52.3	12.1	39.9	2.752	0.006	0.006	0.000	0.150	0.13	
3108	4/22/2004	9:27:25 AM		23.939	22.852	23.901	24.456	24.045		49.857	53.827	19.911	30.319	-1.218	-6.524		48.78	0.038	14.643	0.003		4305.6	71.7597	52.4	12.0	40.1	2.764	0.006	0.006	0.000	0.146	0.12	
3109	4/22/2004	9:28:25 AM		23.964	22.886	23.911	24.425	24.064		49.969	53.91	19.934	30.355	-1.218	-6.524		50.382	0.041	14.643	0.003		4306.6	71.7764	52.4	12.3	40.2	2.769	0.006	0.006	0.000	0.157	0.13	
3110	4/22/2004	9:29:25 AM		23.956	22.908	23.898	24.397	24.021		49.99	53.918	19.945	30.411	-1.218	-6.521		49.207	0.039	14.643	0.003		4307.6	71.7931	52.4	12.1	40.2	2.772	0.006	0.006	0.000	0.149	0.13	
3111	4/22/2004	9:30:25 AM		23.979	22.936	23.906	24.369	23.964		50.292	54.231	20.015	30.591	-1.218	-6.521		48.316	0.041	14.643	0.003		4308.6	71.8097	52.8	11.8	40.4	2.788	0.006	0.006	0.000	0.156	0.13	
3112	4/22/2004	9:31:25 AM		23.985	22.963	23.922	24.361	23.966		50.087	54.061	19.832	30.624	-1.212	-6.518		47.962	0.039	14.643	0.003		4309.6	71.8264	52.6	11.8	40.4	2.782	0.006	0.006	0.000	0.149	0.13	
3113	4/22/2004	9:32:25 AM		23.987	22.98	23.914	24.343	23.978		50.074	54.057	19.871	30.472	-1.215	-6.521		50.467	0.039	14.643	0.003		4310.6	71.8431	52.6	12.4	40.3	2.777	0.006	0.006	0.000	0.149	0.13	
3114	4/22/2004	9:33:25 AM		23.993	22.986	23.895	24.294	23.854		50.06	54.065	20.009	30.417	-1.218	-6.524		47.359	0.039	14.643	0.003		4311.6	71.8597	52.6	11.6	40.2	2.774	0.006	0.006	0.000	0.149	0.13	
3115	4/22/2004	9:34:25 AM		24	23.018	23.902	24.3	23.805		50.162	54.187	19.974	30.46	-1.218	-6.521		49.095	0.04	14.643	0.003		4312.6	71.8764	52.7	12.0	40.3	2.779	0.006	0.006	0.000	0.153	0.13	
3116	4/22/2004	9:35:25 AM		24.006	23.029	23.903	24.276	23.886		50.052	54.082	19.819	30.55	-1.215	-6.518		49.495	0.04	14.643	0.003		4313.6	71.8931	52.6	12.1	40.3	2.779	0.006	0.006	0.000	0.153	0.13	
3117	4/22/2004	9:36:25 AM		24.012	23.045	23.904	24.253	23.872		50.128	54.208	19.947	30.594	-1.218	-6.515		49.48	0.041	14.643	0.003		4314.6	71.9097	52.7	12.1	40.4	2.783	0.006	0.006	0.000	0.156	0.13	
3118	4/22/2004	9:37:25 AM		24.019	23.067	23.906	24.29	24.064		50.004	54.067	19.892	30.501	-1.218	-6.515		49.191	0.04	14.643	0.003		4315.6	71.9264	52.6	12.1	40.3	2.775	0.006	0.006	0.000	0.153	0.13	
3119	4/22/2004	9:38:25 AM		24.025	23.079	23.912	24.326	24.051		49.884	54.032	19.714	30.534	-1.221	-6.521		47.951	0.039	14.643	0.003		4316.6	71.9431	52.6	11.8	40.2	2.772	0.006	0.006	0.000	0.149	0.13	
3120	4/22/2004	9:39:25 AM		24.043	23.106	23.92	24.414	24.163		49.882	53.978	19.971	30.316	-1.218	-6.521		48.723	0.039	14.643	0.003		4317.6	71.9597	52.5	11.9	40.1	2.765	0.006	0.006	0.000	0.149	0.13	
3121	4/22/2004	9:40:25 AM		24.056	23.124	23.933	24.507	24.246		50.29	54.299	19.361	31.232	-1.218	-6.515		48.446	0.04	14.643	0.003		4318.6	71.9764	52.8	11.9	40.8	2.810	0.006	0.006	0.000	0.151	0.13	
3122	4/22/2004	9:41:25 AM		24.058	23.141	23.925	24.574	24.258		50.245	54.264	19.648	31.02	-1.218	-6.515		49.474	0.039	14.643	0.003		4319.6	71.9931	52.8	12.1	40.6	2.801	0.006	0.006	0.000	0.148	0.13	
3123	4/22/2004	9:42:25 AM		24.071	23.17	23.933	24.643	24.387		50.334	54.413	19.652	31.037	-1.218	-6.532		49.13	0.037	14.643	0.003		4320.6	72.0097	52.9	12.0	40.7	2.805	0.006	0.006	0.000	0.140	0.12	
3124	4/22/2004	9:43:25 AM		24.084	23.193	23.936	24.726	24.475		50.257	54.233	19.802	30.86	-1.221	-6.521		48.243	0.039	14.643	0.003		4321.6	72.0264	52.8	11.8	40.6	2.796	0.006	0.006	0.000	0.148	0.13	
3125	4/22/2004	9:44:25 AM		24.109	23.223	23.946	24.781	24.53		50.404	54.357	19.761	30.998	-1.218	-6.515		48.106	0.04	14.643	0.003		4322.6	72.0431	52.9	11.8	40.7	2.806	0.006	0.006	0.000	0.151	0.13	
3126	4/22/2004	9:45:25 AM		24.112	23.246	23.949	24.804	24.538		50.13	54.244	19.722	30.786	-1.218	-6.515		50.281	0.039	14.643	0.003		4323.6	72.0597	52.8	12.3	40.5	2.789	0.006	0.006	0.000	0.148	0.13	
3127	4/22/2004	9:46:25 AM		24.142	23.281	23.979	24.874	24.668		50.054	54.14	19.827	30.585	-1.218	-6.521		49.176	0.04	14.643	0.003		4324.6	72.0764	52.7	12.1	40.3	2.780	0.006	0.006	0.000	0.152	0.13	
3128	4/22/2004	9:47:25 AM		24.147	23.301	23.899	24.924	24.533		50.301	54.326	19.593	31.084	-1.221	-6.515		49.407	0.039	14.643	0.003		4325.6	72.0931	52.9	12.1	40.7	2.806	0.006	0.006	0.000	0.147	0.13	
3129	4/22/2004	9:48:25 AM		24.165	23.339	23.912	24.987	24.581		50.261	54.401	19.599	31.057	-1.215	-6.512		48.025	0.039	14.643	0.003		4326.6	72.1097	52.9	11.8	40.7	2.803	0.006	0.006	0.000	0.147	0.13	
3130	4/22/2004	9:49:25 AM		24.179	23.358	23.906	24.961	24.474		50.18	54.275	19.371	31.187	-1.221	-6.521		48.365	0.039	14.643	0.003		4327.6	72.1264	52.8	11.9	40.7	2.805	0.006	0.006	0.000	0.147	0.13	
3131	4/22/2004	9:50:25 AM		24.192	23.391	23.914	24.919	24.493		50.267	54.434	19.638	30.985	-1.218	-6.512		48.815	0.039	14.643	0.003		4328.6	72.1431	53.0	12.0	40.6	2.801	0.006	0.006	0.000	0.148	0.13	
3132	4/22/2004	9:51:25 AM		24.189	23.399	23.896	24.886	24.385		50.209	54.399	19.627	31.018	-1.218	-6.515		48.358	0.039	14.643	0.003		4329.6	72.1597	52.9	11.9	40.6	2.800	0.006	0.006	0.000	0.148	0.13	
3133	4/22/2004	9:52:25 AM		24.202	23.427	23.899	24.854	24.418		50.22	54.285	19.622	30.949	-1.221	-6.515		47.745	0.04	14.643	0.003		4330.6	72.1764	52.8	11.7	40.6	2.798	0.006	0.006	0.000	0.152	0.13	
3134	4/22/2004	9:53:25 AM		24.218	23.453	23.905	24.83	24.414		50.301	54.434	19.415	31.267	-1.221	-6.515		49.777	0.039	14.643	0.003		4331.6	72.1931	53.0	12.2	40.8	2.812	0.006	0.006	0.000	0.147	0.13	
3135	4/22/2004	9:54:25 AM		24.215	23.479	23.906	24.816	24.435		50.394	54.463	19.465	31.32	-1.218	-6.512		48.972	0.041	14.643	0.003		4332.6	72.2097	53.0	12.0	40.9	2.817	0.006	0.006	0.000	0.154	0.13	
3136	4/22/2004	9:55:25 AM		24.231	23.491	23.918	24.797	24.401		50.485	54.59	19.522	31.361	-1.215	-6.506		48.208	0.039	14.643	0.004		4333.6	72.2264	53.1	11.8	40.9	2.821	0.006	0.006	0.000	0.146	0.12	
3137	4/22/2004	9:56:25 AM		24.236	23.526	23.913	24.763	24.327		50.543	54.581	19.147	31.923	-1.218	-6.509		48.611	0.039	14.643	0.003		4334.6	72.2431	53.1	11.9	41.2	2.843	0.006	0.006	0.000	0.145	0.12	
3138	4/22/2004	9:57:25 AM		24.237	23.527	23.899	24.754	24.373		50.164	54.231	19.611	30.916	-1.218	-6.503		48.456	0.033	14.643	0.003		4335.6	72.2597	52.8	11.9	40.5	2.795	0.005	0.005	0.000	0.125	0.11	
3139	4/22/2004	9:58:25 AM		24.238	23.553	23.9	24.75	24.324		50.214	54.289	19.387	31.15	-1.221	-6.509		48.613	0.039	14.643	0.003		4336.6	72.2764	52.8	11.9	40.7	2.805	0.006	0.006	0.000	0.147	0.13	
3140	4/22/2004	9:59:25 AM		24.24	23.57	23.902	24.737	24.271		50.143	54.136	19.513	31.047	-1.218	-6.503		48.56	0.04	14.643	0.003		4337.6	72.2931	52.7	11.9	40.6	2.799	0.006	0.006	0.000	0.152	0.13	
3141	4/22/2004	10:00:25 AM		24.246	23.576	23.903	24.707	24.321		50.35	54.413	19.49	31.267	-1.218	-6.501		48.558	0.039	14.643	0.003		4338.6	72.3097	52.9	11.9	40.8	2.814	0.006	0.006	0.000	0.147	0.13	
3142	4/22/2004	10:01:25 AM		24.249	23.589	23.896	24.705	24.079		50.182	54.215	19.724	30.823	-1.224	-6.512		48.131	0.039	14.643	0.003		4339.6	72.3264	52.7	11.8	40.5	2.793	0.006	0.006	0.000	0.148	0.13	
3143	4/22/2004	10:02:25 AM		24.269	23.614	23.93	24.75	24.319		50.211	54.279	19.704	30.916	-1.218	-6.498		49.015	0.041	14.643	0.003		4340.6	72.3431	52.8	12.0	40.6	2.797	0.006	0.006	0.000	0.155	0.13	
3144	4/22/2004	10:03:25 AM		24.271	23.621	23.923	24.793	24.362		50.201	54.335	19.651	30.918	-1.218	-6.506		48.815	0.039	14.643	0.003		4341.6	72.3597	52.9	12.0	40.6	2.796	0.006	0.006	0.000	0.148	0.13	
3145	4/22/2004	10:04:25 AM		24.273	23.633	23.935	24.855	24.464		50.143	54.285	19.614	31.035	-1.218	-6.503		49.011	0.039	14.643	0.003		4342.6	72.3764	52.8	12.0	40.6	2.798	0.006	0.006	0.000	0.148	0.13	
3146	4/22/2004	10:05:25 AM		24.28	23.635	23.932	24.892	24.465		50.093	54.175	19.547	30.949	-1.218	-6.498		47.897	0.039	14.643	0.003		4343.6	72.3931	52.7	11.7	40.5	2.794	0.006	0.006	0.000	0.148	0.13	
3147	4/22/2004	10:06:25 AM		24.282	23.652	23.929	24.954	24.597		50.143	54.237	19.817	30.674	-1.221	-6.498		49.564	0.038	14.643	0.003		4344.6	72.4097	52.8	12.1	40.4	2.786	0.006	0.006	0.000	0.145	0.12	
3148	4/22/2004	10:07:25 AM		24.309	23.68	23.971	25.042	24.58		50.184	54.206	19.63	30.99	-1.218	-6.527		48.302	0.039	14.643	0.003		4345.6	72.4264	52.7	11.8	40.6	2.798	0.006	0.006	0.000	0.147	0.13	
3149	4/22/2004	10:08:25 AM		24.317	23.708	23.969	25.094	24.678		50.162	54.229	19.471	31.072	-1.218	-6.524		47.935	0.04	14.643	0.003		4346.6	72.4431	52.8	11.7	40.6	2.800	0.006	0.006	0.000	0.151	0.13	
3150	4/22/2004	10:09:25 AM		24.319	23.71	23.961	25.156	24.82		50.321	54.343	19.521	31.211	-1.218	-6.518		48.529	0.039	14.643	0.003		4347.6	72.4597	52.9	11.9	40.8	2.811	0.006	0.006	0.000	0.147	0.12	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3151	4/22/2004	10:10:25 AM		24.353	23.754	23.99	25.235	24.873		49.919	54.011	19.545	30.774	-1.221	-6.532		48.262	0.039	14.643	0.003		4348.6	72.4764	52.5	11.8	40.3	2.782	0.006	0.006	0.000	0.148	0.13	
3152	4/22/2004	10:11:25 AM		24.339	23.755	23.976	25.252	24.795		50.274	54.362	19.417	31.345	-1.218	-6.527		48.938	0.039	14.643	0.003		4349.6	72.4931	52.9	12.0	40.8	2.814	0.006	0.006	0.000	0.147	0.12	
3153	4/22/2004	10:12:25 AM		24.357	23.768	23.979	25.235	24.813		50.282	54.442	19.602	31.002	-1.221	-6.527		47.972	0.039	14.643	0.003		4350.6	72.5097	53.0	11.8	40.6	2.802	0.006	0.006	0.000	0.147	0.13	
3154	4/22/2004	10:13:25 AM		24.369	23.795	23.991	25.212	24.83		50.226	54.302	19.444	31.166	-1.218	-6.518		48.317	0.038	14.643	0.003		4351.6	72.5264	52.8	11.8	40.7	2.806	0.006	0.006	0.000	0.143	0.12	
3155	4/22/2004	10:14:25 AM		24.391	23.822	23.998	25.193	24.681		50.377	54.438	19.616	31.143	-1.218	-6.512		47.881	0.039	14.643	0.003		4352.6	72.5431	53.0	11.7	40.8	2.810	0.006	0.006	0.000	0.147	0.12	
3156	4/22/2004	10:15:25 AM		24.393	23.839	24.01	25.165	24.733		50.199	54.362	19.534	31.029	-1.218	-6.518		47.126	0.039	14.643	0.003		4353.6	72.5597	52.9	11.5	40.6	2.800	0.006	0.006	0.000	0.147	0.13	
3157	4/22/2004	10:16:25 AM		24.405	23.856	24.012	25.147	24.695		50.253	54.329	19.469	31.174	-1.221	-6.515		48.246	0.039	14.643	0.003		4354.6	72.5764	52.9	11.8	40.7	2.807	0.006	0.006	0.000	0.147	0.12	
3158	4/22/2004	10:17:25 AM		24.406	23.862	24.003	25.118	24.656		50.508	54.635	19.569	31.392	-1.218	-6.515		46.792	0.039	14.643	0.003		4355.6	72.5931	53.2	11.5	41.0	2.823	0.006	0.006	0.000	0.146	0.12	
3159	4/22/2004	10:18:25 AM		24.422	23.888	24.024	25.109	24.688		50.178	54.324	19.448	30.986	-1.218	-6.518		49.556	0.039	14.643	0.003		4356.6	72.6097	52.9	12.1	40.6	2.798	0.006	0.006	0.000	0.147	0.13	
3160	4/22/2004	10:19:25 AM		24.417	23.893	24.024	25.089	24.712		50.311	54.434	19.627	31.024	-1.221	-6.509		48.327	0.039	14.643	0.003		4357.6	72.6264	53.0	11.8	40.7	2.804	0.006	0.006	0.000	0.147	0.13	
3161	4/22/2004	10:20:25 AM		24.442	23.924	24.039	25.114	24.638		50.402	54.511	19.526	31.318	-1.218	-6.509		48.093	0.039	14.643	0.003		4358.6	72.6431	53.0	11.8	40.9	2.817	0.006	0.006	0.000	0.146	0.12	
3162	4/22/2004	10:21:25 AM		24.443	23.929	24.03	25.085	24.658		50.668	54.836	19.42	31.595	-1.221	-6.512		48.488	0.039	14.643	0.003		4359.6	72.6597	53.4	11.9	41.1	2.836	0.006	0.006	0.000	0.145	0.12	
3163	4/22/2004	10:22:25 AM		24.459	23.945	24.051	25.096	24.629		50.284	54.382	19.513	31.164	-1.221	-6.503		48.729	0.039	14.643	0.003		4360.6	72.6764	52.9	11.9	40.7	2.808	0.006	0.006	0.000	0.147	0.12	
3164	4/22/2004	10:23:25 AM		24.464	23.951	24.051	25.096	24.69		50.263	54.443	19.636	30.938	-1.218	-6.501		48.008	0.039	14.643	0.003		4361.6	72.6931	53.0	11.8	40.6	2.799	0.006	0.006	0.000	0.147	0.13	
3165	4/22/2004	10:24:25 AM		24.475	23.956	24.062	25.077	24.72		50.477	54.621	19.736	31.055	-1.218	-6.503		47.903	0.039	14.643	0.003		4362.6	72.7097	53.1	11.7	40.8	2.811	0.006	0.006	0.000	0.146	0.12	
3166	4/22/2004	10:25:25 AM		24.486	23.978	24.083	25.078	24.672		50.338	54.43	19.724	30.996	-1.218	-6.503		48.583	0.038	14.643	0.003		4363.6	72.7264	53.0	11.9	40.7	2.804	0.006	0.006	0.000	0.143	0.12	
3167	4/22/2004	10:26:25 AM		24.481	23.978	24.018	25.058	24.672		50.251	54.372	19.553	31.178	-1.224	-6.506		48.556	0.038	14.643	0.003		4364.6	72.7431	52.9	11.9	40.7	2.807	0.006	0.006	0.000	0.143	0.12	
3168	4/22/2004	10:27:25 AM		24.498	23.999	24.025	25.095	24.653		50.253	54.366	19.613	31.105	-1.221	-6.503		48.01	0.039	14.643	0.003		4365.6	72.7597	52.9	11.8	40.7	2.805	0.006	0.006	0.000	0.147	0.13	
3169	4/22/2004	10:28:25 AM		24.498	24.004	24.025	25.14	24.783		50.131	54.254	19.657	30.93	-1.215	-6.495		47.954	0.041	14.643	0.003		4366.6	72.7764	52.8	11.8	40.5	2.794	0.006	0.006	0.000	0.155	0.13	
3170	4/22/2004	10:29:25 AM		24.509	24.016	24.026	25.181	24.824		50.33	54.376	19.612	31.08	-1.221	-6.503		48.446	0.039	14.643	0.003		4367.6	72.7931	52.9	11.9	40.7	2.806	0.006	0.006	0.000	0.147	0.12	
3171	4/22/2004	10:30:25 AM		24.51	24.032	24.032	25.268	24.961		50.315	54.362	19.495	31.203	-1.218	-6.501		47.801	0.034	14.643	0.003		4368.6	72.8097	52.9	11.7	40.8	2.810	0.005	0.005	0.000	0.128	0.11	
3172	4/22/2004	10:31:25 AM		24.523	24.055	24.035	25.33	25.068		49.979	54.115	19.434	30.907	-1.218	-6.495		48.431	0.039	14.643	0.003		4369.6	72.8264	52.6	11.9	40.4	2.788	0.006	0.006	0.000	0.148	0.13	
3173	4/22/2004	10:32:25 AM		24.536	24.072	24.048	25.413	25.131		50.226	54.422	19.338	31.271	-1.218	-6.486		48.321	0.039	14.643	0.003		4370.6	72.8431	52.9	11.8	40.7	2.809	0.006	0.006	0.000	0.147	0.12	
3174	4/22/2004	10:33:25 AM		24.538	24.074	24.024	25.445	25.348		50.234	54.393	19.256	31.322	-1.221	-6.486		48.2	0.041	14.643	0.003		4371.6	72.8597	52.9	11.8	40.8	2.812	0.006	0.006	0.000	0.154	0.13	
3175	4/22/2004	10:34:25 AM		24.56	24.107	24.057	25.528	25.285		50.27	54.393	19.351	31.429	-1.218	-6.486		48.341	0.04	14.643	0.003		4372.6	72.8764	52.9	11.8	40.8	2.816	0.006	0.006	0.000	0.150	0.13	
3176	4/22/2004	10:35:25 AM		24.582	24.134	24.059	25.545	25.207		50.471	54.565	19.569	31.191	-1.221	-6.498		47.906	0.037	14.643	0.003		4373.6	72.8931	53.1	11.7	40.8	2.815	0.006	0.006	0.000	0.139	0.12	
3177	4/22/2004	10:36:25 AM		24.594	24.15	24.061	25.546	25.194		50.187	54.395	19.467	31.065	-1.218	-6.486		48.492	0.04	14.643	0.003		4374.6	72.9097	52.9	11.9	40.6	2.801	0.006	0.006	0.000	0.151	0.13	
3178	4/22/2004	10:37:25 AM		24.6	24.172	24.067	25.528	25.12		50.222	54.31	19.366	31.273	-1.215	-6.486		48.266	0.039	14.643	0.003		4375.6	72.9264	52.8	11.8	40.7	2.809	0.006	0.006	0.000	0.147	0.12	
3179	4/22/2004	10:38:25 AM		24.613	24.195	24.075	25.51	24.973		50.213	54.299	19.639	31.041	-1.218	-6.483		48.21	0.039	14.643	0.003		4376.6	72.9431	52.8	11.8	40.6	2.801	0.006	0.006	0.000	0.147	0.13	
3180	4/22/2004	10:39:25 AM		24.619	24.206	24.081	25.511	24.894		50.265	54.482	19.547	31.049	-1.221	-6.483		48.763	0.039	14.643	0.003		4377.6	72.9597	53.0	12.0	40.7	2.803	0.006	0.006	0.000	0.147	0.12	
3181	4/22/2004	10:40:25 AM		24.62	24.217	24.077	25.482	24.75		50.187	54.331	19.545	31.037	-1.218	-6.483		48.45	0.039	14.643	0.003		4378.6	72.9764	52.9	11.9	40.6	2.800	0.006	0.006	0.000	0.147	0.13	
3182	4/22/2004	10:41:25 AM		24.62	24.227	24.077	25.463	24.775		50.18	54.258	19.382	31.129	-1.218	-6.477		48.575	0.038	14.643	0.003		4379.6	72.9931	52.8	11.9	40.7	2.803	0.006	0.006	0.000	0.143	0.12	
3183	4/22/2004	10:42:25 AM		24.641	24.243	24.108	25.448	24.811		50.224	54.241	19.527	31.113	-1.215	-6.477		49.215	0.038	14.643	0.004		4380.6	73.0097	52.8	12.1	40.7	2.804	0.006	0.006	0.000	0.143	0.12	
3184	4/22/2004	10:43:25 AM		24.642	24.254	24.099	25.429	24.747		50.473	54.639	19.615	31.133	-1.218	-6.48		48.064	0.038	14.643	0.003		4381.6	73.0264	53.2	11.8	40.8	2.813	0.006	0.006	0.000	0.142	0.12	
3185	4/22/2004	10:44:25 AM		24.662	24.275	24.119	25.435	24.742		50.545	54.745	19.281	31.642	-1.218	-6.472		48.967	0.039	14.643	0.003		4382.6	73.0431	53.3	12.0	41.1	2.833	0.006	0.006	0.000	0.145	0.12	
3186	4/22/2004	10:44:27 AM		24.652	24.264	24.104	25.414	24.727		50.639	54.791	19.39	31.65	-1.218	-6.469		48.608	0.039	14.643	0.003		4382.6	73.0436	53.3	11.9	41.1	2.837	0.006	0.006	0.000	0.145	0.12	
3187	4/22/2004	10:45:28 AM		24.667	24.289	24.124	25.409	24.707		50.454	54.61	19.299	31.396	-1.218	-6.463		48.314	0.04	14.643	0.003		4383.6	73.0606	53.1	11.8	40.9	2.822	0.006	0.006	0.000	0.149	0.13	
3188	4/22/2004	10:46:28 AM		24.646	24.268	24.083	25.363	24.711		50.645	54.847	19.344	31.7	-1.221	-6.46		48.623	0.039	14.643	0.003		4384.6	73.0772	53.4	11.9	41.2	2.839	0.006	0.006	0.000	0.145	0.12	
3189	4/22/2004	10:47:28 AM		24.682	24.304	24.134	25.424	24.727		50.384	54.536	19.383	31.412	-1.215	-6.457		48.56	0.039	14.643	0.004		4385.6	73.0939	53.1	11.9	40.9	2.820	0.006	0.006	0.000	0.146	0.12	
3190	4/22/2004	10:48:28 AM		24.676	24.303	24.128	25.383	24.701		50.093	54.252	19.802	30.614	-1.221	-6.46		48.815	0.039	14.643	0.003		4386.6	73.1106	52.8	12.0	40.4	2.782	0.006	0.006	0.000	0.148	0.13	
3191	4/22/2004	10:49:28 AM		24.68	24.313	24.132	25.383	24.775		49.9	53.941	19.759	30.516	-1.218	-6.46		48.738	0.039	14.643	0.003		4387.6	73.1272	52.5	11.9	40.2	2.772	0.006	0.006	0.000	0.148	0.13	
3192	4/22/2004	10:50:28 AM		24.685	24.312	24.142	25.397	24.69		50.018	54.119	19.752	30.651	-1.218	-6.457		48.815	0.039	14.643	0.003		4388.6	73.1439	52.6	12.0	40.3	2.781	0.006	0.006	0.000	0.148	0.13	
3193	4/22/2004	10:51:28 AM		24.689	24.321	24.146	25.381	24.754		50.06	54.161	19.753	30.635	-1.224	-6.46		48.905	0.038	14.643	0.003		4389.6	73.1606	52.7	12.0	40.3	2.782	0.006	0.006	0.000	0.144	0.12	
3194	4/22/2004	10:52:28 AM		24.703	24.34	24.185	25.41	24.693		49.921	54.096	19.664	30.678	-1.218	-6.457		48.51	0.038	14.643	0.003		4390.6	73.1772	52.6	11.9	40.3	2.779	0.006	0.006	0.000	0.144	0.12	
3195	4/22/2004	10:53:28 AM		24.702	24.329	24.174	25.389	24.657		49.967	54.212	19.802	30.45	-1.218	-6.457		48.246	0.039	14.643	0.003		4391.6	73.1939	52.7	11.8	40.2	2.772	0.006	0.006	0.000	0.148	0.13	
3196	4/22/2004	10:54:28 AM		24.701	24.334	24.173	25.394	24.741		50.046	54.262	19.709	30.632	-1.221	-6.454		48.648	0.038	14.643	0.003		4392.6	73.2106	52.8	11.9	40.3	2.781	0.006	0.006	0.000	0.144	0.12	
3197	4/22/2004	10:55:28 AM		24.711	24.344	24.178	25.399	24.691		50.305	54.416	19.834	30.752	-1.221	-6.457		48.279	0.038	14.643	0.003		4393.6	73.2272	52.9	11.8	40.5	2.794	0.006	0.006	0.000	0.143	0.12	
3198	4/22/2004	10:56:28 AM		24.727	24.365	24.199	25.424	24.652		50.083	54.328	19.909	30.552	-1.221	-6.457		48.859	0.038	14.643	0.003		4394.6	73.2439	52.9	12.0	40.3	2.780	0.006	0.006	0.000	0.144	0.12	
3199	4/22/2004	10:57:28 AM		24.722	24.354	24.189	25.404	24.752		49.786	53.885	19.916	30.251	-1.221	-6.454		50.4	0.037	14.643	0.003		4395.6	73.2606	52.4	12.4	40.0	2.759	0.006	0.006	0.000	0.141	0.12	
3200	4/22/2004	10:58:28 AM		24.731	24.354	24.204	25.414	24.751		49.973	54.121	19.753	30.614	-1.221	-6.446		49.376	0.037	14.643	0.003		4396.6	73.2772	52.6	12.1	40.3	2.778	0.006	0.006	0.000	0.140	0.12	
3201	4/22/2004	10:59:28 AM		24.741	24.364	24.214	25.414	24.701		50.126	54.244	19.909	30.499	-1.218	-6.449		49.314	0.039	14.643	0.003		4397.6	73.2939	52.8	12.1	40.3	2.779	0.006	0.006	0.000	0.147	0.13	
3202	4/22/2004	11:00:28 AM		24.741	24.368	24.218	25.408	24.696		50.29	54.453	19.992	30.684	-1.218	-6.446		49.015	0.039	14.643	0.003		4398.6	73.3106	53.0	12.0	40.5	2.791	0.006	0.006	0.000	0.147	0.12	
3203	4/22/2004	11:01:28 AM		24.762	24.39	24.244	25.434	24.707		50.035	54.264	19.866	30.493	-1.221	-6.449		49.401	0.038	14.643	0.003		4399.6	73.3272	52.8	12.1	40.3	2.776	0.006	0.006	0.000	0.144	0.12	
3204	4/22/2004	11:02:28 AM		24.757	24.38	24.229	25.419	24.747		49.925	54.132	19.719	30.493	-1.221	-6.449		49.651	0.038	14.643	0.003		4400.6	73.3439	52.7	12.2	40.2	2.772	0.006	0.006	0.000	0.144	0.12	
3205	4/22/2004	11:03:28 AM		24.762	24.39	24.254	25.449	24.957		49.907	54.136	19.843	30.399	-1.215	-6.446		49.038	0.038	14.643	0.004		4401.6	73.3606	52.7	12.0	40.2	2.768	0.006	0.006	0.000	0.144	0.12	
3206	4/22/2004	11:04:28 AM		24.773	24.406	24.261	25.441	24.948		49.963	54.183	19.861	30.44	-1.218	-6.449		49.195	0.038	14.643	0.003		4402.6	73.3772	52.7	12.1	40.2	2.772	0.006	0.006	0.000	0.144	0.12	
3207	4/22/2004	11:05:28 AM		24.79	24.422	24.272	25.487	25.105		50.083	54.273	19.979	30.479	-1.215	-6.44		51.539	0.038	14.643	0.003		4403.6	73.3939	52.8	12.6	40.3	2.777	0.006	0.006	0.000	0.144	0.12	
3208	4/22/2004	11:06:28 AM		24.796	24.419	24.238	25.564	25.211		49.774	53.949	19.794	30.382	-1.218	-6.44		48.281	0.038	14.643	0.003		4404.6	73.4106	52.5	11.8	40.1	2.763	0.006	0.006	0.000	0.144	0.12	
3209	4/22/2004	11:07:28 AM		24.798	24.421	24.24	25.641	25.208		50.025	54.179	19.814	30.602	-1.221	-6.44		48.892	0.037	14.643	0.003		4405.6	73.4272	52.7	12.0	40.3	2.779	0.006	0.006	0.000	0.140	0.12	
3210	4/22/2004	11:08:28 AM		24.806	24.438	24.238	25.708	25.441		49.963	54.188	19.852	30.462	-1.221	-6.44		48.166	0.038	14.643	0.003		4406.6	73.4439	52.7	11.8	40.2	2.773	0.006	0.006	0.000	0.144	0.12	
3211	4/22/2004	11:09:28 AM		24.818	24.456	24.251	25.796	25.463		50.07	54.231	19.826	30.676	-1.224	-6.443		50.578	0.038	14.643	0.003		4407.6	73.4606	52.8	12.4	40.4	2.784	0.006	0.006	0.000	0.143	0.12	
3212	4/22/2004	11:10:28 AM		24.826	24.469	24.258	25.844	25.426		49.894	54.142	19.735	30.475	-1.218	-6.431		49.616	0.036	14.643	0.003		4408.6	73.4772	52.7	12.2	40.2	2.771	0.005	0.005	0.000	0.136	0.12	
3213	4/22/2004	11:11:28 AM		24.839	24.487	24.266	25.837	25.369		49.784	53.899	19.808	30.323	-1.221	-6.434		48.367	0.039	14.643	0.003		4409.6	73.4939	52.4	11.9	40.1	2.762	0.006	0.006	0.000	0.148	0.13	
3214	4/22/2004	11:12:28 AM		24.841	24.494	24.253	25.839	25.306		50.037	54.212	19.896	30.542	-1.221	-6.434		49.332	0.04	14.643	0.003		4410.6	73.5106	52.7	12.1	40.3	2.778	0.006	0.006	0.000	0.151	0.13	
3215	4/22/2004	11:13:28 AM		24.868	24.526	24.281	25.816	25.248		49.927	54.181	19.759	30.477	-1.218	-6.431		50.892	0.039	14.643	0.003		4411.6	73.5272	52.7	12.5	40.2	2.772	0.006	0.006	0.000	0.148	0.13	
3216	4/22/2004	11:14:28 AM		24.86	24.528	24.267	25.768	25.28		50.031	54.25	19.806	30.573	-1.224	-6.431		48.39	0.038	14.643	0.003		4412.6	73.5439	52.8	11.9	40.3	2.779	0.006	0.006	0.000	0.144	0.12	
3217	4/22/2004	11:15:28 AM		24.862	24.525	24.264	25.76	25.337		49.855	54.111	19.829	30.357	-1.221	-6.431		48.875	0.038	14.643	0.003		4413.6	73.5606	52.6	12.0	40.1	2.765	0.006	0.006	0.000	0.144	0.12	
3218	4/22/2004	11:16:28 AM		24.889	24.562	24.291	25.767	25.329		49.979	54.221	19.69	30.587	-1.218	-6.425		47.48	0.039	14.643	0.003		4414.6	73.5772	52.7	11.6	40.3	2.777	0.006	0.006	0.000	0.147	0.13	
3219	4/22/2004	11:17:28 AM		24.9	24.573	24.298	25.748	25.265		49.967	54.221	19.758	30.479	-1.218	-6.431		49.155	0.038	14.643	0.003		4415.6	73.5939	52.7	12.0	40.2	2.773	0.006	0.006	0.000	0.144	0.12	
3220	4/22/2004	11:18:28 AM		24.89	24.573	24.293	25.723	25.305		50.238	54.445	19.639	30.916	-1.221	-6.423		47.119	0.038	14.643	0.003		4416.6	73.6106	53.0	11.5	40.6	2.798	0.006	0.006	0.000	0.142	0.12	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3221	4/22/2004	11:19:28 AM		24.907	24.6	24.299	25.714	25.317		50.365	54.65	19.529	31.15	-1.218	-6.417		47.855	0.04	14.643	0.003		4417.6	73.6272	53.2	11.7	40.8	2.810	0.006	0.006	0.000	0.149	0.13	
3222	4/22/2004	11:20:28 AM		24.917	24.605	24.304	25.709	25.287		50.158	54.364	19.395	31.08	-1.221	-6.414		47.739	0.038	14.643	0.003		4418.6	73.6439	52.9	11.7	40.6	2.801	0.006	0.006	0.000	0.142	0.12	
3223	4/22/2004	11:21:28 AM		24.922	24.61	24.305	25.695	25.202		50.288	54.546	19.676	30.91	-1.221	-6.42		47.655	0.038	14.643	0.003		4419.6	73.6606	53.1	11.7	40.6	2.799	0.006	0.006	0.000	0.142	0.12	
3224	4/22/2004	11:22:28 AM		24.932	24.63	24.315	25.69	25.232		50.218	54.53	19.614	30.992	-1.221	-6.411		48.834	0.039	14.643	0.003		4420.6	73.6772	53.1	12.0	40.6	2.800	0.006	0.006	0.000	0.146	0.12	
3225	4/22/2004	11:23:28 AM		24.938	24.646	24.325	25.701	25.168		50.296	54.476	19.593	31.063	-1.218	-6.414		48.145	0.039	14.643	0.003		4421.6	73.6939	53.0	11.8	40.7	2.805	0.006	0.006	0.000	0.146	0.12	
3226	4/22/2004	11:24:28 AM		24.928	24.636	24.32	25.681	25.148		50.07	54.229	19.549	30.895	-1.218	-6.414		49.299	0.039	14.643	0.003		4422.6	73.7106	52.8	12.1	40.5	2.791	0.006	0.006	0.000	0.146	0.12	
3227	4/22/2004	11:25:28 AM		24.954	24.662	24.351	25.726	25.189		50.031	54.214	19.642	30.71	-1.218	-6.405		49.101	0.039	14.643	0.003		4423.6	73.7272	52.7	12.0	40.4	2.783	0.006	0.006	0.000	0.147	0.12	
3228	4/22/2004	11:26:28 AM		24.954	24.668	24.342	25.722	25.179		50.102	54.306	19.556	30.907	-1.218	-6.405		48.525	0.039	14.643	0.003		4424.6	73.7439	52.8	11.9	40.5	2.793	0.006	0.006	0.000	0.146	0.12	
3229	4/22/2004	11:27:28 AM		24.949	24.663	24.332	25.717	25.229		50.091	54.426	19.533	30.864	-1.221	-6.411		47.601	0.039	14.643	0.003		4425.6	73.7606	53.0	11.7	40.5	2.791	0.006	0.006	0.000	0.146	0.12	
3230	4/22/2004	11:28:28 AM		24.955	24.668	24.343	25.693	25.16		50.232	54.467	19.535	31.018	-1.221	-6.411		49.626	0.038	14.643	0.003		4426.6	73.7772	53.0	12.2	40.6	2.801	0.006	0.006	0.000	0.142	0.12	
3231	4/22/2004	11:29:28 AM		24.964	24.683	24.347	25.697	25.199		50.29	54.5	19.491	31.146	-1.218	-6.399		48.218	0.04	14.643	0.003		4427.6	73.7939	53.0	11.8	40.7	2.807	0.006	0.006	0.000	0.149	0.13	
3232	4/22/2004	11:30:28 AM		24.964	24.678	24.347	25.707	25.204		50.35	54.604	19.519	31.17	-1.221	-6.405		47.284	0.039	14.643	0.003		4428.6	73.8106	53.1	11.6	40.8	2.810	0.006	0.006	0.000	0.145	0.12	
3233	4/22/2004	11:31:28 AM		24.985	24.703	24.368	25.753	25.24		49.998	54.343	19.639	30.68	-1.212	-6.405		48.525	0.038	14.643	0.003		4429.6	73.8272	52.9	11.9	40.3	2.781	0.006	0.006	0.000	0.143	0.12	
3234	4/22/2004	11:32:28 AM		24.986	24.704	24.343	25.743	25.271		50.166	54.517	19.458	31.053	-1.218	-6.405		48.104	0.039	14.643	0.003		4430.6	73.8439	53.0	11.8	40.6	2.800	0.006	0.006	0.000	0.146	0.12	
3235	4/22/2004	11:33:28 AM		24.99	24.713	24.333	25.738	25.165		50.334	54.623	19.598	31.09	-1.221	-6.402		48.919	0.04	14.643	0.003		4431.6	73.8606	53.2	12.0	40.7	2.807	0.006	0.006	0.000	0.149	0.13	
3236	4/22/2004	11:34:28 AM		24.989	24.698	24.327	25.722	25.139		50.037	54.324	19.452	30.885	-1.221	-6.405		50.231	0.039	14.643	0.003		4432.6	73.8772	52.9	12.3	40.5	2.790	0.006	0.006	0.000	0.146	0.12	
3237	4/22/2004	11:35:28 AM		24.994	24.713	24.337	25.762	25.139		50.274	54.382	19.555	31.057	-1.221	-6.399		48.94	0.038	14.643	0.003		4433.6	73.8939	52.9	12.0	40.7	2.804	0.006	0.006	0.000	0.142	0.12	
3238	4/22/2004	11:36:28 AM		24.994	24.717	24.336	25.756	25.134		50.025	54.268	19.434	31.025	-1.221	-6.396		48.091	0.036	14.643	0.004		4434.6	73.9106	52.8	11.8	40.5	2.794	0.005	0.005	0.000	0.135	0.11	
3239	4/22/2004	11:37:28 AM		24.993	24.721	24.33	25.741	25.168		50.056	54.405	19.601	30.75	-1.218	-6.396		48.535	0.038	14.643	0.003		4435.6	73.9272	52.9	11.9	40.4	2.786	0.006	0.006	0.000	0.143	0.12	
3240	4/22/2004	11:38:28 AM		24.992	24.716	24.34	25.7	25.152		50.207	54.581	19.572	30.979	-1.218	-6.394		48.623	0.038	14.643	0.003		4436.6	73.9439	53.1	11.9	40.6	2.799	0.006	0.006	0.000	0.142	0.12	
3241	4/22/2004	11:39:28 AM		24.992	24.725	24.334	25.709	25.157		50.085	54.31	19.514	30.854	-1.221	-6.391		49.138	0.04	14.643	0.003		4437.6	73.9606	52.8	12.0	40.5	2.790	0.006	0.006	0.000	0.150	0.13	
3242	4/22/2004	11:40:28 AM		24.997	24.731	24.35	25.745	25.177		50.089	54.362	19.551	30.908	-1.218	-6.388		47.78	0.039	14.643	0.003		4438.6	73.9772	52.9	11.7	40.5	2.792	0.006	0.006	0.000	0.146	0.12	
3243	4/22/2004	11:41:28 AM		25.004	24.737	24.371	25.791	25.473		50.255	54.567	19.641	30.959	-1.218	-6.382		48.773	0.038	14.643	0.003		4439.6	73.9939	53.1	12.0	40.6	2.800	0.006	0.006	0.000	0.142	0.12	
3244	4/22/2004	11:42:28 AM		25.006	24.749	24.378	25.803	25.211		50.139	54.391	19.572	30.932	-1.221	-6.385		49.18	0.039	14.643	0.003		4440.6	74.0106	52.9	12.1	40.5	2.795	0.006	0.006	0.000	0.146	0.12	
3245	4/22/2004	11:43:28 AM		25.006	24.74	24.374	25.829	25.246		50.091	54.416	19.625	30.901	-1.218	-6.388		49.211	0.038	14.643	0.003		4441.6	74.0272	52.9	12.1	40.5	2.792	0.006	0.006	0.000	0.142	0.12	
3246	4/22/2004	11:44:28 AM		25.018	24.751	24.395	25.83	25.298		50.238	54.532	19.61	30.947	-1.215	-6.379		49.055	0.039	14.643	0.004		4442.6	74.0439	53.1	12.0	40.6	2.799	0.006	0.006	0.000	0.146	0.12	
3247	4/22/2004	11:45:28 AM		25.013	24.752	24.381	25.786	25.248		50.166	54.449	19.376	31.119	-1.221	-6.382		49.562	0.038	14.643	0.003		4443.6	74.0606	53.0	12.1	40.6	2.802	0.006	0.006	0.000	0.142	0.12	
3248	4/22/2004	11:46:28 AM		25.02	24.758	24.387	25.787	25.245		49.934	54.397	19.5	30.727	-1.224	-6.385		48.928	0.038	14.643	0.003		4444.6	74.0772	52.9	12.0	40.3	2.781	0.006	0.006	0.000	0.143	0.12	
3249	4/22/2004	11:47:28 AM		25.036	24.775	24.414	25.799	25.266		49.878	54.198	19.598	30.762	-1.218	-6.382		48.754	0.038	14.643	0.003		4445.6	74.0939	52.7	11.9	40.3	2.780	0.006	0.006	0.000	0.143	0.12	
3250	4/22/2004	11:48:28 AM		25.047	24.78	24.425	25.825	25.282		49.973	54.36	19.522	30.688	-1.221	-6.379		49.353	0.039	14.643	0.003		4446.6	74.1106	52.9	12.1	40.3	2.781	0.006	0.006	0.000	0.147	0.12	
3251	4/22/2004	11:49:28 AM		25.037	24.775	24.415	25.825	25.232		50.122	54.478	19.606	30.856	-1.218	-6.33		47.069	0.039	14.643	0.003		4447.6	74.1272	53.0	11.5	40.5	2.792	0.006	0.006	0.000	0.146	0.12	
3252	4/22/2004	11:50:28 AM		25.043	24.781	24.425	25.795	25.302		49.846	54.142	19.371	30.836	-1.221	-6.324		48.193	0.039	14.643	0.003		4448.6	74.1439	52.7	11.8	40.3	2.781	0.006	0.006	0.000	0.146	0.12	
3253	4/22/2004	11:51:28 AM		25.048	24.776	24.42	25.82	25.302		50.259	54.631	19.661	30.986	-1.224	-6.324		48.16	0.039	14.643	0.003		4449.6	74.1606	53.2	11.8	40.6	2.801	0.006	0.006	0.000	0.145	0.12	
3254	4/22/2004	11:52:28 AM		25.057	24.79	24.43	25.815	25.347		49.989	54.335	19.529	30.754	-1.221	-6.316		50.062	0.038	14.643	0.003		4450.6	74.1772	52.9	12.3	40.4	2.783	0.006	0.006	0.000	0.143	0.12	
3255	4/22/2004	11:53:28 AM		25.063	24.801	24.445	25.825	25.307		50.166	54.445	19.512	31.016	-1.221	-6.318		48.229	0.038	14.643	0.003		4451.6	74.1939	53.0	11.8	40.6	2.799	0.006	0.006	0.000	0.142	0.12	
3256	4/22/2004	11:54:28 AM		25.072	24.8	24.45	25.825	25.282		50.261	54.575	19.63	31.024	-1.221	-6.457		46.458	0.04	14.643	0.003		4452.6	74.2106	53.1	11.4	40.6	2.802	0.006	0.006	0.000	0.149	0.13	
3257	4/22/2004	11:55:28 AM		25.078	24.806	24.45	25.835	25.272		50.077	54.407	19.54	30.889	-1.221	-6.469		48.018	0.038	14.643	0.003		4453.6	74.2272	52.9	11.8	40.5	2.791	0.006	0.006	0.000	0.142	0.12	
3258	4/22/2004	11:56:28 AM		25.088	24.816	24.47	25.87	25.327		50.193	54.521	19.528	30.983	-1.221	-6.463		50.705	0.038	14.643	0.003		4454.6	74.2439	53.0	12.4	40.6	2.798	0.006	0.006	0.000	0.142	0.12	
3259	4/22/2004	11:57:28 AM		25.092	24.825	24.48	25.875	25.282		50.265	54.627	19.475	31.096	-1.218	-6.475		48.663	0.039	14.643	0.003		4455.6	74.2606	53.2	11.9	40.7	2.805	0.006	0.006	0.000	0.145	0.12	
3260	4/22/2004	11:58:28 AM		25.107	24.825	24.48	25.86	25.282		50.224	54.55	19.652	30.871	-1.224	-6.48		47.57	0.038	14.643	0.003		4456.6	74.2772	53.1	11.7	40.5	2.796	0.006	0.006	0.000	0.142	0.12	
3261	4/22/2004	11:59:28 AM		25.111	24.84	24.489	25.864	25.306		50.433	54.714	19.551	31.261	-1.218	-6.475		48.404	0.038	14.643	0.003		4457.6	74.2939	53.2	11.9	40.8	2.816	0.006	0.006	0.000	0.141	0.12	
3262	4/22/2004	12:00:28 PM		25.111	24.834	24.503	25.863	25.285		50.211	54.606	19.567	31.029	-1.221	-6.477		48.402	0.038	14.643	0.003		4458.6	74.3106	53.1	11.9	40.6	2.801	0.006	0.006	0.000	0.141	0.12	
3263	4/22/2004	12:01:28 PM		25.116	24.835	24.504	25.889	25.276		50	54.3	19.458	30.901	-1.218	-6.475		50.684	0.038	14.643	0.003		4459.6	74.3272	52.8	12.4	40.5	2.789	0.006	0.006	0.000	0.142	0.12	
3264	4/22/2004	12:02:28 PM		25.132	24.85	24.51	25.885	25.302		50.286	54.592	19.536	30.875	-1.221	-6.472		48.21	0.038	14.643	0.003		4460.6	74.3439	53.1	11.8	40.6	2.798	0.006	0.006	0.000	0.142	0.12	
3265	4/22/2004	12:03:28 PM		25.138	24.856	24.515	25.91	25.342		50.456	54.716	19.53	31.24	-1.221	-6.475		48.51	0.039	14.643	0.003		4461.6	74.3606	53.2	11.9	40.8	2.816	0.006	0.006	0.000	0.144	0.12	
3266	4/22/2004	12:04:28 PM		25.153	24.866	24.56	25.94	25.367		50.099	54.442	19.482	30.975	-1.215	-6.469		48.435	0.039	14.643	0.003		4462.6	74.3772	53.0	11.9	40.5	2.795	0.006	0.006	0.000	0.145	0.12	
3267	4/22/2004	12:05:28 PM		25.133	24.857	24.506	25.891	25.443		50.452	54.778	19.635	31.127	-1.221	-6.472		48.097	0.038	14.643	0.003		4463.6	74.3939	53.3	11.8	40.8	2.812	0.006	0.006	0.000	0.141	0.12	
3268	4/22/2004	12:06:28 PM		25.154	24.868	24.542	25.927	25.404		50.045	54.322	19.56	30.711	-1.221	-6.466		48.6	0.038	14.643	0.003		4464.6	74.4106	52.8	11.9	40.4	2.784	0.006	0.006	0.000	0.142	0.12	
3269	4/22/2004	12:07:28 PM		25.165	24.873	24.558	25.937	25.404		50.01	54.343	19.484	30.834	-1.221	-6.463		48.233	0.038	14.643	0.003		4465.6	74.4272	52.9	11.8	40.4	2.787	0.006	0.006	0.000	0.142	0.12	
3270	4/22/2004	12:08:28 PM		25.181	24.885	24.569	25.964	25.396		50.214	54.639	19.756	30.856	-1.218	-6.463		49.228	0.038	14.643	0.003		4466.6	74.4439	53.2	12.1	40.5	2.795	0.006	0.006	0.000	0.141	0.12	
3271	4/22/2004	12:09:28 PM		25.176	24.885	24.559	25.969	25.371		50.045	54.49	19.529	30.86	-1.221	-6.463		48.066	0.037	14.643	0.003		4467.6	74.4606	53.0	11.8	40.5	2.789	0.006	0.006	0.000	0.138	0.12	
3272	4/22/2004	12:10:28 PM		25.197	24.9	24.595	26.014	25.461		50.303	54.635	19.586	31.01	-1.218	-6.457		47.228	0.037	14.643	0.003		4468.6	74.4772	53.2	11.6	40.7	2.803	0.006	0.006	0.000	0.137	0.12	
3273	4/22/2004	12:11:28 PM		25.187	24.895	24.575	26.004	25.456		50.135	54.486	19.502	30.953	-1.221	-6.463		48.924	0.039	14.643	0.003		4469.6	74.4939	53.0	12.0	40.5	2.795	0.006	0.006	0.000	0.145	0.12	
3274	4/22/2004	12:12:28 PM		25.192	24.916	24.585	26.015	25.477		50.28	54.66	19.558	31.031	-1.221	-6.457		48.704	0.038	14.643	0.003		4470.6	74.5106	53.2	11.9	40.7	2.803	0.006	0.006	0.000	0.141	0.12	
3275	4/22/2004	12:13:28 PM		25.208	24.922	24.596	26.031	25.523		50.377	54.708	19.604	31.139	-1.218	-6.454		48.667	0.038	14.643	0.003		4471.6	74.5272	53.2	11.9	40.8	2.810	0.006	0.006	0.000	0.141	0.12	
3276	4/22/2004	12:14:28 PM		25.214	24.923	24.597	26.072	25.474		50.187	54.586	19.47	31.076	-1.221	-6.454		49.067	0.038	14.643	0.003		4472.6	74.5439	53.1	12.0	40.6	2.801	0.006	0.006	0.000	0.141	0.12	
3277	4/22/2004	12:15:28 PM		25.225	24.929	24.608	26.068	25.47		50.334	54.704	19.549	31.129	-1.218	-6.454		48.243	0.038	14.643	0.003		4473.6	74.5606	53.2	11.8	40.7	2.808	0.006	0.006	0.000	0.141	0.12	
3278	4/22/2004	12:16:28 PM		25.226	24.935	24.614	26.054	25.52		49.965	54.188	19.528	30.754	-1.221	-6.451		47.845	0.038	14.643	0.003		4474.6	74.5772	52.7	11.7	40.4	2.783	0.006	0.006	0.000	0.142	0.12	
3279	4/22/2004	12:17:28 PM		25.266	24.945	24.61	26.064	25.611		47.536	54.451	19.322	28.48	1.509	-0.303		48.039	0.003	14.643	0.003		4475.6	74.5939	53.0	11.8	38.0	2.621	0.000	0.000	0.000	0.012	0.01	
3280	4/22/2004	12:59:34 PM		25.507	25.191	24.926	26.04	25.741		50.064	54.789	19.866	30.409	-0.937	-5.893		48.118	0.036	14.643	0.003		4517.7	75.2956	53.3	11.8	40.2	2.774	0.005	0.005	0.000	0.134	0.11	
3281	4/22/2004	1:00:34 PM		25.5	25.184	24.923	26.033	25.809		49.859	54.556	19.746	30.374	-0.934	-5.896		48.554	0.036	14.643	0.003		4518.7	75.3122	53.1	11.9	40.1	2.766	0.005	0.005	0.000	0.134	0.11	
3282	4/22/2004	1:01:34 PM		25.508	25.202	24.921	26.061	26.012		50.151	54.811	19.785	30.612	-0.937	-5.896		48.001	0.037	14.643	0.003		4519.7	75.3289	53.3	11.8	40.4	2.784	0.006	0.006	0.000	0.137	0.12	
3283	4/22/2004	1:02:34 PM		25.526	25.225	24.959	26.109	26.05		49.873	54.648	19.751	30.419	-0.975	-5.893		48.189	0.036	14.643	0.003		4520.7	75.3456	53.2	11.8	40.1	2.768	0.005	0.005	0.000	0.134	0.11	
3284	4/22/2004	1:03:34 PM		25.504	25.213	24.912	26.067	26.033		49.873	54.503	19.887	30.249	-0.943	-5.896		47.947	0.036	14.643	0.003		4521.7	75.3622	53.0	11.8	40.1	2.762	0.005	0.005	0.000	0.134	0.11	
3285	4/22/2004	1:04:34 PM		25.507	25.226	24.925	26.09	26.001		49.826	54.532	19.818	30.353	-0.963	-5.893		48.438	0.036	14.643	0.003		4522.7	75.3789	53.1	11.9	40.1	2.764	0.005	0.005	0.000	0.134	0.11	
3286	4/22/2004	1:05:34 PM		25.521	25.25	24.935	26.119	26.05		49.585	54.212	19.908	29.961	-0.934	-5.891		47.549	0.036	14.643	0.003		4523.7	75.3956	52.7	11.7	39.8	2.742	0.005	0.005	0.000	0.135	0.12	
3287	4/22/2004	1:06:34 PM		25.519	25.258	24.927	26.142	25.908		49.95	54.648	19.82	30.442	-0.934	-5.893		48.21	0.037	14.643	0.003		4524.7	75.4122	53.2	11.8	40.2	2.771	0.006	0.006	0.000	0.138	0.12	
3288	4/22/2004	1:07:34 PM		25.53	25.264	24.913	26.173	25.914		49.886	54.569	19.942	30.245	-0.937	-5.888		48.527	0.037	14.643	0.003		4525.7	75.4289	53.1	11.9	40.1	2.762	0.006	0.006	0.000	0.138	0.12	
3289	4/22/2004	1:08:34 PM		25.53	25.264	24.898	26.133	25.894		49.718	54.428	19.832	30.044	-0.934	-5.888		48.269	0.036	14.643	0.003		4526.7	75.4456	53.0	11.8	39.9	2.750	0.005	0.005	0.000	0.135	0.11	
3290	4/22/2004	1:09:34 PM		25.53	25.275	24.884	26.118	25.71		49.917	54.646	19.865	30.427	-0.934	-5.888		48.448	0.037	14.643	0.003		4527.7	75.4622	53.2	11.9	40.2	2.770	0.006	0.006	0.000	0.138	0.12	

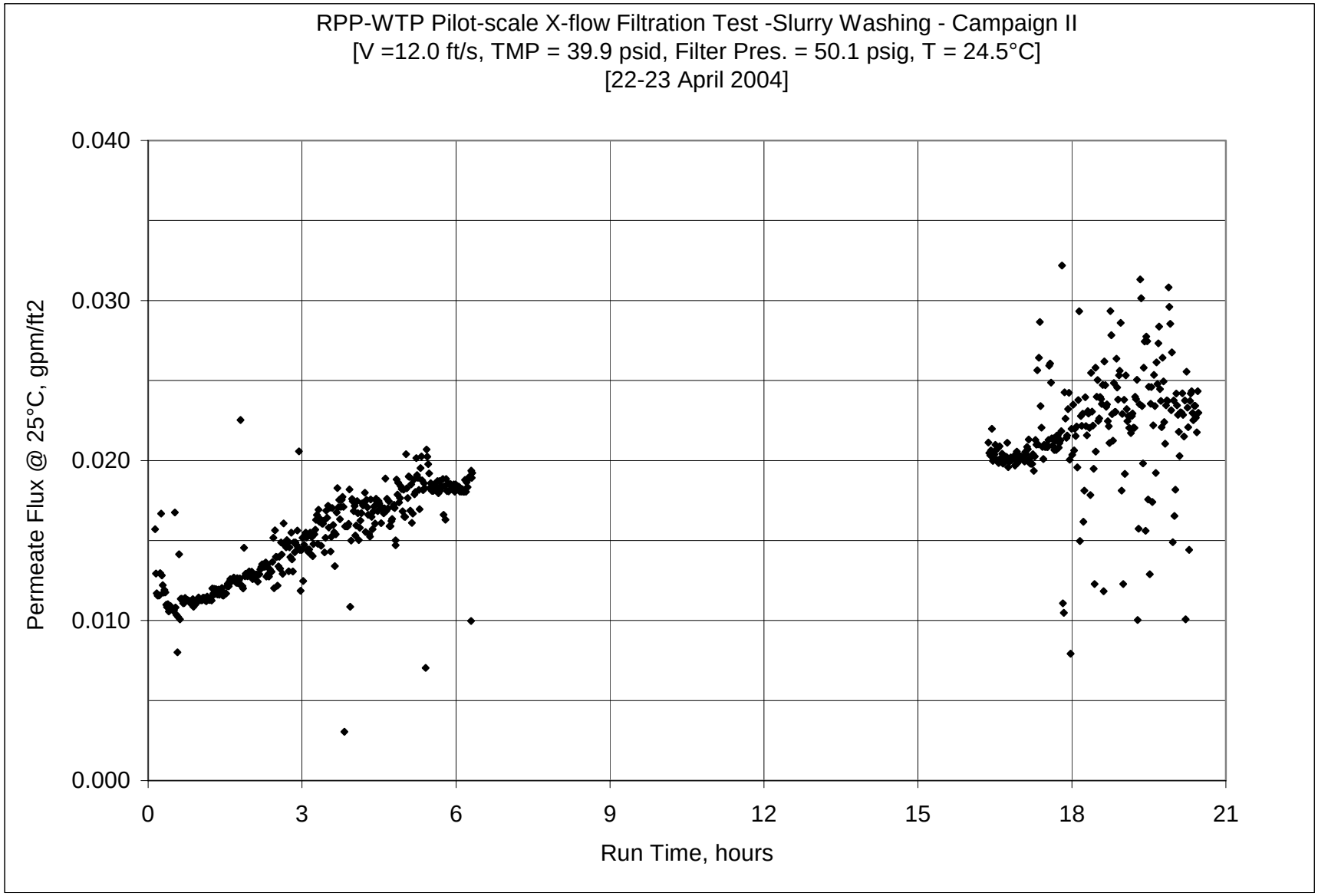
RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3291	4/22/2004	1:10:34 PM		25.53	25.27	24.874	26.148	25.575		49.882	54.529	19.933	30.208	-0.94	-5.896		49.478	0.036	14.643	0.003		4528.7	75.4789	53.1	12.1	40.0	2.761	0.005	0.005	0.000	0.135	0.11	
3292	4/22/2004	1:11:34 PM		25.541	25.286	24.879	26.184	25.586		49.589	54.293	19.818	30.07	-0.937	-5.893		47.906	0.036	14.643	0.003		4529.7	75.4956	52.8	11.7	39.8	2.746	0.005	0.005	0.000	0.135	0.12	
3293	4/22/2004	1:12:34 PM		25.551	25.296	24.884	26.209	25.516		49.73	54.44	19.799	30.304	-0.937	-5.891		51.047	0.036	14.643	0.003		4530.7	75.5122	53.0	12.5	40.0	2.759	0.005	0.005	0.000	0.135	0.11	
3294	4/22/2004	1:13:34 PM		25.55	25.295	24.884	26.208	25.58		49.863	54.567	19.733	30.487	-0.934	-5.893		48.077	0.036	14.643	0.003		4531.7	75.5289	53.1	11.8	40.2	2.770	0.005	0.005	0.000	0.134	0.11	
3295	4/22/2004	1:14:34 PM		25.556	25.306	24.884	26.199	25.576		50.251	55.048	20.134	30.417	-0.94	-5.891		48.396	0.036	14.643	0.003		4532.7	75.5456	53.6	11.9	40.3	2.781	0.005	0.005	0.000	0.134	0.11	
3296	4/22/2004	1:15:34 PM		25.545	25.284	24.858	26.178	25.519		50.045	54.847	19.874	30.587	-0.94	-5.893		48.656	0.037	14.643	0.003		4533.7	75.5622	53.4	11.9	40.3	2.780	0.006	0.006	0.000	0.137	0.12	
3297	4/22/2004	1:16:34 PM		25.554	25.299	24.882	26.232	25.559		50.074	54.842	19.975	30.292	-0.934	-5.891		48.321	0.037	14.643	0.003		4534.7	75.5789	53.4	11.8	40.2	2.770	0.006	0.006	0.000	0.138	0.12	
3298	4/22/2004	1:17:34 PM		25.568	25.303	24.902	26.241	25.533		50.089	54.876	19.978	30.44	-0.934	-5.891		47.822	0.036	14.643	0.003		4535.7	75.5956	53.4	11.7	40.3	2.776	0.005	0.005	0.000	0.134	0.11	
3299	4/22/2004	1:18:34 PM		25.568	25.292	24.891	26.191	25.527		49.819	54.486	19.924	30.206	-0.931	-5.893		47.497	0.036	14.643	0.003		4536.7	75.6122	53.0	11.6	40.0	2.759	0.005	0.005	0.000	0.135	0.11	
3300	4/22/2004	1:19:34 PM		25.558	25.277	24.876	26.16	25.577		49.566	54.229	19.766	30.113	-0.94	-5.891		49.08	0.037	14.643	0.003		4537.7	75.6289	52.8	12.0	39.8	2.747	0.006	0.006	0.000	0.139	0.12	
3301	4/22/2004	1:20:34 PM		25.561	25.281	24.895	26.204	25.516		49.95	54.652	19.849	30.505	-0.934	-5.891		47.764	0.037	14.643	0.003		4538.7	75.6456	53.2	11.7	40.2	2.774	0.006	0.006	0.000	0.138	0.12	
3302	4/22/2004	1:21:34 PM		25.555	25.274	24.878	26.193	25.634		49.834	54.53	20.079	30.005	-0.899	-5.888		47.805	0.036	14.643	0.003		4539.7	75.6622	53.1	11.7	39.9	2.752	0.005	0.005	0.000	0.135	0.11	
3303	4/22/2004	1:22:34 PM		25.558	25.273	24.867	26.151	25.533		49.705	54.536	19.775	30.335	-0.923	-5.893		45.405	0.037	14.643	0.003		4540.7	75.6789	53.1	11.1	40.0	2.759	0.006	0.006	0.000	0.138	0.12	
3304	4/22/2004	1:23:34 PM		25.588	25.302	24.911	26.191	25.557		50.089	54.876	19.909	30.423	-0.914	-5.891		48.171	0.037	14.643	0.003		4541.7	75.6956	53.4	11.8	40.3	2.776	0.006	0.006	0.000	0.137	0.12	
3305	4/22/2004	1:24:34 PM		25.586	25.296	24.905	26.209	25.556		49.817	54.509	19.999	30.308	-0.92	-5.885		48.767	0.037	14.643	0.003		4542.7	75.7122	53.0	12.0	40.1	2.762	0.006	0.006	0.000	0.138	0.12	
3306	4/22/2004	1:25:34 PM		25.607	25.302	24.916	26.2	25.592		50.072	54.892	19.821	30.54	-0.92	-5.891		48.707	0.036	14.643	0.003		4543.7	75.7289	53.4	11.9	40.3	2.779	0.005	0.005	0.000	0.133	0.11	
3307	4/22/2004	1:26:34 PM		25.603	25.307	24.921	26.286	25.657		49.983	54.671	19.905	30.433	-0.885	-5.893		47.628	0.036	14.643	0.003		4544.7	75.7456	53.2	11.7	40.2	2.772	0.005	0.005	0.000	0.134	0.11	
3308	4/22/2004	1:27:34 PM		25.608	25.312	24.926	26.281	25.777		50.06	54.758	19.908	30.357	-0.902	-5.888		46.569	0.036	14.643	0.003		4545.7	75.7622	53.3	11.4	40.2	2.772	0.005	0.005	0.000	0.134	0.11	
3309	4/22/2004	1:28:34 PM		25.613	25.307	24.921	26.291	25.687		49.94	54.747	19.99	30.224	-0.902	-5.888		48.544	0.037	14.643	0.003		4546.7	75.7789	53.3	11.9	40.1	2.764	0.006	0.006	0.000	0.138	0.12	
3310	4/22/2004	1:29:34 PM		25.618	25.307	24.926	26.296	25.602		49.658	54.415	19.852	30.126	-0.885	-5.888		48.425	0.036	14.643	0.003		4547.7	75.7956	52.9	11.9	39.9	2.750	0.005	0.005	0.000	0.135	0.11	
3311	4/22/2004	1:30:34 PM		25.618	25.322	24.926	26.271	25.747		49.751	54.505	19.935	30.15	-0.917	-5.891		48.02	0.036	14.643	0.003		4548.7	75.8122	53.0	11.8	40.0	2.754	0.005	0.005	0.000	0.135	0.11	
3312	4/22/2004	1:31:34 PM		25.618	25.312	24.921	26.256	25.677		49.602	54.279	19.957	30.039	-0.888	-5.893		48.164	0.036	14.643	0.003		4549.7	75.8289	52.8	11.8	39.8	2.745	0.005	0.005	0.000	0.135	0.11	
3313	4/22/2004	1:32:34 PM		25.638	25.358	24.967	26.296	25.683		49.824	54.592	19.771	30.444	-0.882	-5.888		48.49	0.036	14.643	0.003		4550.7	75.8456	53.1	11.9	40.1	2.767	0.005	0.005	0.000	0.134	0.11	
3314	4/22/2004	1:33:34 PM		25.633	25.328	24.947	26.261	25.688		49.643	54.407	19.768	30.206	-0.882	-5.888		47.966	0.036	14.643	0.003		4551.7	75.8622	52.9	11.8	39.9	2.753	0.005	0.005	0.000	0.135	0.11	
3315	4/22/2004	1:34:34 PM		25.633	25.343	24.937	26.266	25.693		49.834	54.55	19.84	30.277	-0.882	-5.888		47.945	0.036	14.643	0.003		4552.7	75.8789	53.1	11.7	40.1	2.762	0.005	0.005	0.000	0.134	0.11	
3316	4/22/2004	1:35:34 PM		25.633	25.348	24.937	26.276	25.723		50.006	54.778	19.804	30.563	-0.885	-5.888		47.678	0.037	14.643	0.003		4553.7	75.8956	53.3	11.7	40.3	2.777	0.006	0.006	0.000	0.137	0.12	
3317	4/22/2004	1:36:34 PM		25.643	25.357	24.946	26.316	25.672		49.753	54.556	20.13	29.935	-0.885	-5.891		48.957	0.036	14.643	0.003		4554.7	75.9122	53.1	12.0	39.8	2.747	0.005	0.005	0.000	0.135	0.11	
3318	4/22/2004	1:37:34 PM		25.643	25.357	24.951	26.356	25.707		49.579	54.31	19.813	30.146	-0.882	-5.885		48.392	0.036	14.643	0.003		4555.7	75.9289	52.8	11.9	39.9	2.748	0.005	0.005	0.000	0.135	0.11	
3319	4/22/2004	1:38:34 PM		25.653	25.378	24.967	26.382	25.773		49.552	54.36	19.866	29.953	-0.885	-5.888		48.903	0.036	14.643	0.003		4556.7	75.9456	52.9	12.0	39.8	2.741	0.005	0.005	0.000	0.135	0.12	
3320	4/22/2004	1:39:34 PM		25.653	25.368	24.957	26.376	25.588		49.537	54.254	19.838	30.003	-0.885	-5.891		49.85	0.036	14.643	0.003		4557.7	75.9622	52.8	12.2	39.8	2.742	0.005	0.005	0.000	0.135	0.11	
3321	4/22/2004	1:40:34 PM		25.642	25.377	24.951	26.325	25.472		49.923	54.621	19.838	30.396	-0.882	-5.885		48.212	0.036	14.643	0.003		4558.7	75.9789	53.1	11.8	40.2	2.769	0.005	0.005	0.000	0.134	0.11	
3322	4/22/2004	1:41:34 PM		25.656	25.38	24.969	26.344	25.625		49.608	54.463	19.768	30.259	-0.879	-5.882		48.784	0.036	14.643	0.003		4559.7	75.9956	53.0	12.0	39.9	2.753	0.005	0.005	0.000	0.135	0.11	
3323	4/22/2004	1:42:34 PM		25.655	25.385	24.944	26.313	25.575		49.863	54.581	19.981	30.148	-0.873	-5.882		48.216	0.036	14.643	0.003		4560.7	76.0122	53.1	11.8	40.0	2.758	0.005	0.005	0.000	0.134	0.11	
3324	4/22/2004	1:43:34 PM		25.658	25.373	24.947	26.291	25.418		49.805	54.648	19.936	30.144	-0.876	-5.876		46.932	0.036	14.643	0.003		4561.7	76.0289	53.2	11.5	40.0	2.756	0.005	0.005	0.000	0.134	0.11	
3325	4/22/2004	1:44:34 PM		25.656	25.376	24.925	26.189	25.446		49.635	54.407	19.796	30.128	-0.888	-5.885		48.511	0.036	14.643	0.003		4562.7	76.0456	52.9	11.9	39.9	2.750	0.005	0.005	0.000	0.135	0.11	
3326	4/22/2004	1:45:34 PM		25.663	25.378	24.937	26.116	25.298		49.699	54.471	19.941	30.056	-0.882	-5.879		48.485	0.036	14.643	0.003		4563.7	76.0622	53.0	11.9	39.9	2.749	0.005	0.005	0.000	0.135	0.11	
3327	4/22/2004	1:46:34 PM		25.666	25.385	24.939	26.028	25.161		49.539	54.333	19.803	30.068	-0.882	-5.879		49.314	0.036	14.643	0.003		4564.7	76.0789	52.9	12.1	39.8	2.744	0.005	0.005	0.000	0.135	0.11	
3328	4/22/2004	1:47:34 PM		25.673	25.373	24.931	25.966	25.343		49.77	54.536	19.981	29.955	-0.83	-5.879		48.567	0.036	14.643	0.003		4565.7	76.0956	53.1	11.9	39.9	2.748	0.005	0.005	0.000	0.135	0.11	
3329	4/22/2004	1:48:34 PM		25.675	25.39	24.944	25.978	25.41		49.765	54.527	19.871	30.224	-0.876	-5.879		48.077	0.036	14.643	0.003		4566.7	76.1122	53.1	11.8	40.0	2.757	0.005	0.005	0.000	0.134	0.11	
3330	4/22/2004	1:49:34 PM		25.683	25.378	24.937	26.026	25.393		49.494	54.322	19.702	29.988	-0.87	-5.879		48.316	0.036	14.643	0.003		4567.7	76.1289	52.8	11.8	39.7	2.740	0.005	0.005	0.000	0.135	0.12	
3331	4/22/2004	1:50:34 PM		25.676	25.376	24.93	26.029	25.426		49.817	54.625	19.861	30.318	-0.85	-5.879		50.444	0.036	14.643	0.003		4568.7	76.1456	53.2	12.4	40.1	2.763	0.005	0.005	0.000	0.134	0.11	
3332	4/22/2004	1:51:34 PM		25.691	25.39	24.964	26.068	25.52		49.585	54.443	19.607	30.304	-0.865	-5.873		52.106	0.036	14.643	0.003		4569.7	76.1622	53.0	12.8	39.9	2.754	0.005	0.005	0.000	0.135	0.11	
3333	4/22/2004	1:52:34 PM		25.686	25.381	24.95	26.089	25.641		49.739	54.559	19.769	30.224	-0.818	-5.876		48.396	0.036	14.643	0.003		4570.7	76.1789	53.1	11.9	40.0	2.757	0.005	0.005	0.000	0.134	0.11	
3334	4/22/2004	1:53:34 PM		25.677	25.387	24.955	26.12	25.552		49.749	54.521	19.694	30.269	-0.833	-5.876		48.266	0.036	14.643	0.003		4571.7	76.1956	53.0	11.8	40.0	2.758	0.005	0.005	0.000	0.134	0.11	
3335	4/22/2004	1:54:34 PM		25.678	25.382	24.956	26.16	25.517		49.68	54.416	19.891	30.085	-0.847	-5.873		47.584	0.036	14.643	0.004		4572.7	76.2122	52.9	11.7	39.9	2.750	0.005	0.005	0.000	0.135	0.11	
3336	4/22/2004	1:55:34 PM		25.674	25.379	24.947	26.157	25.578		49.815	54.617	19.947	30.163	-0.841	-5.873		48.709	0.036	14.643	0.003		4573.7	76.2289	53.1	11.9	40.0	2.757	0.005	0.005	0.000	0.134	0.11	
3337	4/22/2004	1:56:34 PM		25.659	25.369	24.932	26.157	25.698		49.971	54.714	19.969	30.278	-0.815	-5.879		48.369	0.036	14.643	0.003		4574.7	76.2456	53.2	11.9	40.1	2.766	0.005	0.005	0.000	0.134	0.11	
3338	4/22/2004	1:57:34 PM		25.66	25.369	24.933	26.178	25.594		49.527	54.349	19.765	29.984	-0.815	-5.879		47.284	0.036	14.643	0.003		4575.7	76.2622	52.9	11.6	39.8	2.741	0.005	0.005	0.000	0.135	0.12	
3339	4/22/2004	1:58:34 PM		25.666	25.381	24.939	26.254	25.541		49.517	54.37	19.936	29.957	-0.815	-5.882		48.896	0.035	14.643	0.003		4576.7	76.2789	52.9	12.0	39.7	2.740	0.005	0.005	0.000	0.132	0.11	
3340	4/22/2004	1:59:34 PM		25.666	25.376	24.859	26.269	25.595		49.176	54.015	20.324	29.087	-0.839	-5.885		50.805	0.035	14.643	0.003		4577.7	76.2956	52.5	12.5	39.1	2.698	0.005	0.005	0.000	0.134	0.11	
3341	4/22/2004	2:00:34 PM		25.672	25.391	24.84	26.255	25.611		48.926	53.684	20.347	28.917	-0.813	-5.882		51.064	0.035	14.643	0.003		4578.7	76.3122	52.2	12.5	38.9	2.684	0.005	0.005	0.000	0.135	0.11	
3342	4/22/2004	2:01:34 PM		25.673	25.393	24.796	26.301	25.652		49.054	53.854	20.275	29.081	-0.833	-5.885		49.172	0.035	14.643	0.003		4579.7	76.3289	52.4	12.1	39.1	2.694	0.005	0.005	0.000	0.134	0.11	
3343	4/22/2004	2:02:34 PM		25.659	25.383	24.747	26.282	25.683		48.977	53.748	20.324	28.954	-0.818	-5.888		49.777	0.036	14.643	0.003		4580.7	76.3456	52.3	12.2	39.0	2.687	0.005	0.005	0.000	0.139	0.12	
3344	4/22/2004	2:03:34 PM		25.656	25.395	24.724	26.294	25.78		48.861	53.702	20.296	28.822	-0.841	-5.891		50.527	0.035	14.643	0.003		4581.7	76.3622	52.2	12.4	38.8	2.678	0.005	0.005	0.000	0.135	0.12	
3345	4/22/2004	2:04:34 PM		25.641	25.381	24.674	26.279	25.791		48.87	53.694	20.087	29.042	-0.818	-5.891		50.792	0.035	14.643	0.003		4582.7	76.3789	52.2	12.4	39.0	2.686	0.005	0.005	0.000	0.135	0.12	
3346	4/22/2004	2:05:34 PM		25.638	25.398	24.656	26.306	25.738		49.011	53.792	20.201	29.067	-0.818	-5.891		50.048	0.035	14.643	0.003		4583.7	76.3956	52.3	12.3	39.0	2.692	0.005	0.005	0.000	0.135	0.11	
3347	4/22/2004	2:06:34 PM		25.655	25.425	24.658	26.338	25.865		49.098	53.991	20.351	28.999	-0.815	-5.888		50.041	0.035	14.643	0.003		4584.7	76.4122	52.5	12.3	39.0	2.692	0.005	0.005	0.000	0.135	0.11	
3348	4/22/2004	2:07:34 PM		25.633	25.418	24.611	26.296	26.107		48.673	53.502	20.245	28.636	-0.818	-5.888		50.148	0.035	14.643	0.003		4585.7	76.4289	52.0	12.3	38.7	2.665	0.005	0.005	0.000	0.136	0.12	
3349	4/22/2004	2:08:34 PM		25.62	25.405	24.568	26.333	25.854		48.816	53.719	20.229	28.882	-0.821	-5.896		51.616	0.035	14.643	0.003		4586.7	76.4456	52.2	12.6	38.8	2.679	0.005	0.005	0.000	0.136	0.12	
3350	4/22/2004	2:09:34 PM		25.616	25.411	24.554	26.339	25.836		48.975	53.839	20.156	29.095	-0.818	-5.891		49.138	0.035	14.643	0.003		4587.7	76.4622	52.4	12.0	39.0	2.691	0.005	0.005	0.000	0.135	0.12	
3351	4/22/2004	2:10:34 PM		25.613	25.423	24.531	26.371	25.802		49.054	53.902	20.243	29.114	-0.818	-5.885		48.523	0.035	14.643	0.003		4588.7	76.4789	52.4	11.9	39.1	2.695	0.005	0.005	0.000	0.135	0.12	
3352	4/22/2004	2:11:34 PM		25.614	25.439	24.517	26.412	25.719		48.803	53.68	20.202	28.956	-0.815	-5.885		49.645	0.035	14.643	0.003		4589.7	76.4956	52.2	12.2	38.9	2.681	0.005	0.005	0.000	0.136	0.12	
3353	4/22/2004	2:12:34 PM		25.616	25.445	24.498	26.379	25.75		48.843	53.74	20.201	28.919	-0.818	-5.888		48.861	0.035	14.643	0.003		4590.7	76.5122	52.3	12.0	38.9	2.681	0.005	0.005	0.000	0.136	0.12	
3354	4/22/2004	2:13:34 PM		25.607	25.457	24.475	26.4	25.721		48.72	53.543	20.036	29.056	-0.821	-5.888		51.285	0.035	14.643	0.003		4591.7	76.5289	52.1	12.6	38.9	2.681	0.005	0.005	0.000	0.136	0.12	
3355	4/22/2004	2:14:34 PM		25.603	25.468	24.466	26.416	25.788		48.855	53.74	20.061	29.108	-0.815	-5.888		51.804	0.035	14.643	0.003		4592.7	76.5456	52.3	12.7	39.0	2.688	0.005	0.005	0.000	0.136	0.12	
3356	4/22/2004	2:15:34 PM		25.599	25.474	24.442	26.377	25.793		48.774	53.609	19.964	29.138	-0.818	-5.882		48.828	0.035	14.643	0.003		4593.7	76.5622	52.1	12.0	39.0	2.686	0.005	0.005	0.000	0.136	0.12	
3357	4/22/2004	2:16:34 PM		25.584	25.479	24.427	26.332	25.629		48.776	53.657	20.062	29.024	-0.818	-5.885		51.037	0.035	14.643	0.003		4594.7	76.5789	52.2	12.5	38.9	2.682	0.005	0.005	0.000	0.136	0.12	
3358	4/22/2004	2:17:34 PM		25.585	25.49	24.417	26.293	25.564		48.94	53.744	20.12	29.108	-0.813	-5.882		50.988	0.035	14.643	0.004		4595.7	76.5956	52.3	12.5	39.0	2.691	0.005	0.005	0.000	0.136	0.12	
3359	4/22/2004	2:18:34 PM		25.565	25.49	24.403	26.253	25.7		48.594	53.387	19.902	28.993	-0.815	-5.885		50.094	0.035	14.643	0.003		4596.7	76.6122	51.9	12.3	38.8	2.675	0.005	0.005	0.000	0.137	0.12	
3360	4/22/2004	2:19:34 PM		25.545	25.49	24.373	26.203	25.53		48.83	53.674	20.094	29.03	-0.818	-5.885		49.933	0.035	14.643	0.003		4597.7	76.6289	52.2	12.2	38.9	2.684	0.005	0.005	0.000	0.136	0.12	

RUN # 2.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3361	4/22/2004	2:20:34 PM		25.519	25.469	24.346	26.097	25.329		48.897	53.831	20.098	29.052	-0.818	-5.879		50.046	0.035	14.643	0.003		4598.7	76.6456	52.4	12.3	39.0	2.687	0.005	0.005	0.000	0.136	0.12	
3362	4/22/2004	2:21:34 PM		25.517	25.472	24.334	26.08	25.212		48.913	53.742	19.97	29.288	-0.804	-5.879		50.552	0.035	14.643	0.003		4599.7	76.6622	52.3	12.4	39.1	2.696	0.005	0.005	0.000	0.136	0.12	
3363	4/22/2004	2:22:34 PM		25.496	25.466	24.319	26.074	25.291		48.772	53.601	19.997	29.063	-0.804	-5.876		49.603	0.035	14.643	0.003		4600.7	76.6789	52.1	12.2	38.9	2.683	0.005	0.005	0.000	0.137	0.12	
3364	4/22/2004	2:23:34 PM		25.498	25.473	24.321	26.106	25.363		49.087	53.972	20.092	29.257	-0.807	-5.876		49.856	0.035	14.643	0.003		4601.7	76.6956	52.5	12.2	39.2	2.701	0.005	0.005	0.000	0.136	0.12	
3365	4/22/2004	2:24:34 PM		25.478	25.458	24.296	26.156	25.503		49.21	54.047	20.137	29.352	-0.789	-5.873		49.668	0.035	14.643	0.003		4602.7	76.7122	52.6	12.2	39.3	2.708	0.005	0.005	0.000	0.136	0.12	
3366	4/22/2004	2:25:34 PM		25.458	25.453	24.281	26.236	25.483		48.851	53.682	19.949	29.184	-0.795	-5.876		51.481	0.035	14.643	0.003		4603.7	76.7289	52.2	12.6	39.0	2.690	0.005	0.005	0.000	0.136	0.12	
3367	4/22/2004	2:26:34 PM		25.444	25.444	24.256	26.267	25.604		48.61	53.47	19.912	28.962	-0.789	-5.882		50.004	0.035	14.643	0.003		4604.7	76.7456	52.0	12.3	38.8	2.674	0.005	0.005	0.000	0.137	0.12	
3368	4/22/2004	2:27:34 PM		25.44	25.449	24.247	26.303	25.764		48.88	53.825	19.966	29.2	-0.795	-5.876		48.717	0.035	14.643	0.003		4605.7	76.7622	52.4	11.9	39.0	2.692	0.005	0.005	0.000	0.137	0.12	
3369	4/22/2004	2:28:34 PM		25.431	25.446	24.243	26.324	25.715		48.782	53.615	19.978	29.206	-0.798	-5.876		48.335	0.035	14.643	0.003		4606.7	76.7789	52.1	11.8	39.0	2.688	0.005	0.005	0.000	0.137	0.12	
3370	4/22/2004	2:29:34 PM		25.427	25.452	24.23	26.335	26.026		48.548	53.423	19.839	29.104	-0.789	-5.879		50.325	0.035	14.643	0.003		4607.7	76.7956	52.0	12.3	38.8	2.677	0.005	0.005	0.000	0.137	0.12	
3371	4/22/2004	2:30:34 PM		25.423	25.458	24.205	26.446	26.252		48.662	53.537	19.936	29.022	-0.818	-5.879		47.297	0.036	14.643	0.003		4608.7	76.8122	52.1	11.6	38.8	2.678	0.005	0.005	0.000	0.141	0.12	
3372	4/22/2004	2:31:34 PM		25.449	25.484	24.227	26.657	25.744		48.517	53.404	19.889	28.952	-0.772	-5.873		49.167	0.035	14.643	0.003		4609.7	76.8289	51.9	12.0	38.7	2.671	0.005	0.005	0.000	0.138	0.12	
3373	4/22/2004	2:32:34 PM		25.434	25.484	24.197	26.512	25.319		48.612	53.576	19.911	28.993	-0.766	-5.873		49.747	0.035	14.643	0.003		4610.7	76.8456	52.1	12.2	38.8	2.675	0.005	0.005	0.000	0.138	0.12	
3374	4/22/2004	2:33:34 PM		25.419	25.484	24.166	26.372	25.379		48.942	53.902	20.002	29.204	-0.769	-5.873		50.05	0.035	14.643	0.003		4611.7	76.8622	52.4	12.3	39.1	2.694	0.005	0.005	0.000	0.137	0.12	
3375	4/22/2004	2:34:34 PM		25.414	25.499	24.156	26.322	25.364		48.486	53.313	19.783	29.044	-0.772	-5.873		49.109	0.035	14.643	0.003		4612.7	76.8789	51.8	12.0	38.8	2.673	0.005	0.005	0.000	0.138	0.12	
3376	4/22/2004	2:35:34 PM		25.419	25.514	24.156	26.312	25.409		48.801	53.779	19.861	29.159	-0.769	-5.87		46.986	0.036	14.643	0.003		4613.7	76.8956	52.3	11.5	39.0	2.688	0.005	0.005	0.000	0.141	0.12	
3377	4/22/2004	2:36:34 PM		25.414	25.534	24.156	26.352	25.494		48.619	53.539	19.839	29.03	-0.769	-5.873		48.581	0.035	14.643	0.003		4614.7	76.9122	52.1	11.9	38.8	2.677	0.005	0.005	0.000	0.138	0.12	
3378	4/22/2004	2:37:34 PM		25.41	25.54	24.127	26.338	25.56		48.845	53.769	19.928	29.157	-0.772	-5.873		49.683	0.036	14.643	0.003		4615.7	76.9289	52.3	12.2	39.0	2.689	0.005	0.006	0.000	0.141	0.12	
3379	4/22/2004	2:38:34 PM		25.416	25.556	24.133	26.309	25.585		48.845	53.777	19.894	29.278	-0.769	-5.87		49.122	0.035	14.643	0.003		4616.7	76.9456	52.3	12.0	39.1	2.693	0.005	0.005	0.000	0.137	0.12	
3380	4/22/2004	2:39:34 PM		25.406	25.566	24.128	26.239	25.576		48.843	53.729	19.748	29.446	-0.769	-5.87		49.76	0.036	14.643	0.003		4617.7	76.9622	52.3	12.2	39.1	2.699	0.005	0.006	0.000	0.141	0.12	
3381	4/22/2004	2:40:34 PM		25.396	25.551	24.103	26.109	25.481		48.467	53.296	19.857	28.857	-0.772	-5.873		49.505	0.035	14.643	0.003		4618.7	76.9789	51.8	12.1	38.7	2.666	0.005	0.005	0.000	0.138	0.12	
3382	4/22/2004	2:41:34 PM		25.376	25.551	24.078	26.044	25.431		48.704	53.601	19.787	29.161	-0.769	-5.87		49.128	0.036	14.643	0.003		4619.7	76.9956	52.1	12.0	38.9	2.684	0.005	0.006	0.000	0.141	0.12	
3383	4/22/2004	2:42:34 PM		25.37	25.55	24.077	26.028	25.15		48.697	53.616	19.767	29.204	-0.769	-5.873		50.613	0.036	14.643	0.003		4620.7	77.0122	52.1	12.4	39.0	2.686	0.005	0.006	0.000	0.141	0.12	
3384	4/22/2004	2:43:34 PM		25.357	25.542	24.049	25.995	24.907		48.559	53.417	19.738	29.186	-0.772	-5.873		49.618	0.035	14.643	0.003		4621.7	77.0289	51.9	12.2	38.9	2.680	0.005	0.005	0.000	0.138	0.12	
3385	4/22/2004	2:44:34 PM		25.354	25.539	24.041	25.917	24.839		48.648	53.603	19.787	29.169	-0.769	-5.87		49.328	0.035	14.643	0.003		4622.7	77.0456	52.1	12.1	38.9	2.683	0.005	0.005	0.000	0.138	0.12	
3386	4/22/2004	2:45:34 PM		25.323	25.523	24.014	25.805	24.763		48.903	53.835	19.929	29.149	-0.772	-5.873		48.873	0.035	14.643	0.003		4623.7	77.0622	52.4	12.0	39.0	2.691	0.005	0.005	0.000	0.137	0.12	
3387	4/22/2004	2:46:34 PM		25.312	25.507	24.003	25.779	24.917		48.505	53.417	19.848	28.95	-0.769	-5.87		51.906	0.036	14.643	0.003		4624.7	77.0789	51.9	12.7	38.7	2.670	0.005	0.006	0.000	0.143	0.12	
3388	4/22/2004	2:47:34 PM		25.32	25.54	24.016	25.777	25.175		48.621	53.568	19.812	28.956	-0.729	-5.867		48.867	0.035	14.643	0.004		4625.7	77.0956	52.1	12.0	38.8	2.674	0.005	0.005	0.000	0.138	0.12	
3389	4/22/2004	2:48:34 PM		25.307	25.517	24.009	25.8	25.347		48.617	53.524	19.677	29.196	-0.758	-5.867		49.38	0.035	14.643	0.003		4626.7	77.1122	52.1	12.1	38.9	2.682	0.005	0.005	0.000	0.138	0.12	
3390	4/22/2004	2:49:34 PM		25.296	25.516	24.008	25.874	25.411		48.641	53.564	19.712	29.18	-0.726	-5.87		49.161	0.035	14.643	0.003		4627.7	77.1289	52.1	12.0	38.9	2.683	0.005	0.005	0.000	0.138	0.12	
3391	4/22/2004	2:50:34 PM		25.271	25.491	23.992	25.933	25.435		48.469	53.425	19.67	29.122	-0.769	-5.867		50.527	0.036	14.643	0.003		4628.7	77.1456	52.0	12.4	38.8	2.675	0.005	0.006	0.000	0.142	0.12	
3392	4/22/2004	2:51:34 PM		25.271	25.481	23.997	25.998	25.485		48.629	53.535	19.79	29.173	-0.752	-5.867		50.845	0.035	14.643	0.003		4629.7	77.1622	52.1	12.5	38.9	2.682	0.005	0.005	0.000	0.138	0.12	
3393	4/22/2004	2:52:34 PM		25.261	25.491	23.997	26.069	25.58		48.656	53.582	19.745	29.106	-0.758	-5.865		49.981	0.036	14.643	0.003		4630.7	77.1789	52.1	12.2	38.9	2.681	0.005	0.006	0.000	0.142	0.12	
3394																																	
3395	Wash 1 & 2																																
3396		Averages		25.526	24.690	25.117	25.880	24.739		47.754	51.606	15.759	32.436	-1.037	-6.842		48.809	0.076	14.643	0.003				50.13	11.96	40.10	2.764	0.011	0.011	0.000	0.281	0.239	
3397		Maximum		26.715	25.816	26.702	28.041	26.414		51.190	55.539	20.351	37.877	36.412	90.589		55.402	0.426	14.643	0.006				54.07	13.58	42.93	2.960	0.064	0.063	0.002	1.823	1.551	
3398		Median		25.647	25.000	25.285	25.902	24.897		48.561	52.897	17.127	32.006	-1.218	-7.073		48.849	0.058	14.643	0.003				51.42	11.97	40.32	2.780	0.009	0.009	0.000	0.210	0.179	
3399		Minimum		22.757	21.578	23.655	22.717	21.619		-5.637	-0.958	1.158	-6.078	-1.227	-7.778		-0.079	0.003	14.643	0.003				-2.43	-0.02	-5.86	-0.404	0.000	0.000	0.000	-0.268	-0.228	
3400		2 x Std Dev		1.119	1.951	1.481	1.941	1.875		6.617	7.609	6.570	5.446	2.131	4.077		5.556	0.101	0.000	0.000				7.61	1.36	4.98	0.343	0.015	0.015	0.000	0.373	0.318	
3401	Number of Points Used*			3370	3370	3370	3370	3370		3370	3370	3370	3370	3370	3370		3370	3370	3370	3370				3370	3370	3370	3370	3370	3370	3370	3370	3370	
3402		* Backpulse points in box are not included																															
3403																																	
3404	Wash 1																																
3405		Averages		25.556	24.136	25.196	25.810	23.835		44.738	47.126	10.882	34.579	-1.079	-6.463		48.667	0.138	14.643	0.003				45.653	#####	####	2.734	0.021	0.020	0.001	0.508	0.432	
3406		Maximum		26.499	25.521	25.803	27.326	25.448		48.673	49.800	13.813	37.877	36.412	90.589		53.454	0.426	14.643	0.006				48.328	#####	####	2.950	0.064	0.063	0.002	1.823	1.551	
3407		Median		25.573	24.585	25.148	25.870	24.047		45.178	47.454	10.588	35.191	-1.218	-7.075		49.031	0.118	14.643	0.003				45.982	#####	####	2.771	0.018	0.017	0.000	0.440	0.374	
3408		Minimum		24.784	22.156	24.714	23.206	22.260		-5.637	-0.958	1.158	-6.078	-1.227	-7.567		-0.079	0.003	14.643	0.003				-2.430	-0.019	####	-0.404	0.000	0.000	0.000	-0.268	-0.228	
3409		2 x Std Dev		0.710	2.382	0.471	2.013	1.561		9.788	9.128	3.207	8.416	3.917	7.374		9.450	0.117	0.000	0.001				9.128	2.316	8.983	0.619	0.017	0.017	0.000	0.438	0.373	
3410	Number of Points Used*			946	946	946	946	946		946	946	946	946	946	946		946	946	946	946				946	946	946	946	946	946	946	946	946	
3411		* Backpulse points in box are not included																															
3412																																	
3413	Wash 2																																
3414		Averages		25.516	24.893	25.103	25.901	25.082		48.935	53.348	17.615	31.652	-1.025	-7.014		48.845	0.053	14.643	0.003				51.876	#####	####	2.778	0.008	0.008	0.000	0.193	0.164	
3415		Maximum		26.715	25.816	26.702	28.041	26.414		51.190	55.539	20.347	34.989	1.796	0.224		55.402	0.170	14.643	0.006				54.066	#####	####	2.960	0.025	0.025	0.001	0.614	0.522	
3416		Median		25.678	25.007	25.445	25.903	25.207		48.811	53.224	17.578	31.683	-1.218	-7.085		48.748	0.052	14.643	0.003				51.751	#####	####	2.783	0.008	0.008	0.000	0.186	0.158	
3417		Minimum		22.757	21.578	23.655	22.717	21.619		13.619	14.446	3.785	10.186	-1.227	-7.778		12.671	0.003	14.643	0.003				12.973	3.105	####	0.821	0.000	0.000	0.000	0.011	0.010	
3418		2 x Std Dev		1.255	1.561	1.718	1.927	1.478		1.952	2.121	1.998	1.775	0.570	1.224		2.833	0.024	0.000	0.000				2.121	0.694	1.577	0.109	0.004	0.003	0.000	0.083	0.070	
3419	Number of Points Used*			2374	2374	2374	2374	2374		2374	2374	2374	2374	2374	2374		2374	2374	2374	2374				2374	2374	2374	2374	2374	2374	2374	2374	2374	
3420		* Backpulse points in box are not included																															
3421																																	
3422																																	
3423																									Average flux to 17% UDS =				0.018				
3424																									Average flux to 20% UDS=				0.015				

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING



RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	4/14/2004	1:30:58 PM		24.687	21.862	24.835	24.226	22.583		0.054	0.02	-0.021	-0.005	-0.179	0.099		-0.08	0.003	0.086	0.005				Filter Surface A		6.707	FT2						
8	4/19/2004	7:37:13 AM		22.595	22.228	23.926	21.772	22.175		0.046	0.082	-0.025	-0.009	-0.179	0.143		-0.086	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	4/19/2004	8:21:39 AM		22.248	22.333	22.324	22.194	22.199		-0.008	0.059	0.002	0.007	-0.132	0.131		-0.084	0.003	14.643	0.005													
10	4/20/2004	12:41:36 PM		22.772	22.767	22.049	23.603	24.746		-0.004	0.045	-0.009	-0.007	-0.176	0.108		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	4/22/2004	8:40:43 AM		22.558	21.446	24.471	22.716	22.489		0.01	0.028	0.001	0.001	-0.205	0.096		46.562	0.043	14.643	0.004													
12	4/23/2004	8:53:20 AM		21.548	21.737	22.041	21.89	21.369		-0.004	0.026	0.003	-0.005	-0.196	0.082		-0.082	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	4/26/2004	9:00:47 AM		22.379	22.907	23.455	22.416	21.819		-0.012	0.08	0	-0.009	-0.205	0.044		-0.08	0.003	14.643	0.005				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	4/27/2004	9:14:59 AM		20.374	19.305	19.368	20.841	19.777		-0.002	0.02	-0.001	0.005	-0.193	0.111		-0.084	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	4/22/2004	4:43:04 PM		24.927	25.572	23.883	26.605	27.278		48.625	54.032	18.901	30.013	-0.184	-5.44		48.095	0.036	14.643	0.003		0.0	0	52.6	11.8	39.3	2.711	0.005	0.006	0.000	0.141	0.12	
18	4/22/2004	4:46:15 PM		24.927	25.572	23.883	26.605	27.278		48.625	54.032	18.901	30.013	-0.184	-5.44		48.095	0.036	14.643	0.003		3.2	0.05306	52.6	11.8	39.3	2.711	0.005	0.006	0.000	0.141	0.12	
19	4/22/2004	4:47:15 PM		24.939	25.569	23.87	26.532	27.095		46.368	53.816	18.891	27.671	1.903	20.457		51.195	0.003	14.643	0.003		4.2	0.06972	52.3	12.5	37.0	2.552	0.000	0.000	0.000	0.012	0.01	
20	4/22/2004	4:48:15 PM		24.97	25.575	23.897	26.433	27.057		43.401	53.796	18.816	24.726	4.865	20.24		49.597	0.003	14.643	0.003		5.2	0.08639	52.3	12.2	34.1	2.349	0.000	0.000	0.000	0.014	0.01	
21	4/22/2004	4:49:15 PM		25.184	25.574	23.88	26.367	26.741		-7.265	52.612	11.331	-18.543	59.7	61.348		52.25	0.003	14.643	1.069		6.2	0.10306	51.1	12.8	-12.9	-0.890	0.000	0.000	0.000	-0.036	-0.03	
22	4/22/2004	4:50:15 PM		24.854	25.579	23.89	26.372	26.776		46.615	52.971	14.045	32.882	0.609	0.394		51.028	0.158	14.643	0.004		7.2	0.11972	51.5	12.5	39.7	2.741	0.024	0.024	0.001	0.612	0.52	
23	4/22/2004	4:51:15 PM		24.447	25.552	23.859	26.28	26.865		47.03	53.182	15.748	31.648	0.38	0.446		50.15	0.102	14.643	0.003		8.2	0.13639	51.7	12.3	39.3	2.712	0.015	0.016	0.000	0.399	0.34	
24	4/22/2004	4:52:15 PM		24.292	25.562	23.839	26.255	26.904		47.229	53.288	16.691	30.805	0.409	0.498		51.452	0.084	14.643	0.003		9.2	0.15306	51.8	12.6	39.0	2.690	0.013	0.013	0.000	0.332	0.28	
25	4/22/2004	4:53:15 PM		24.296	25.582	23.878	26.335	26.944		47.196	53.34	17.122	30.436	0.398	0.518		48.659	0.076	14.643	0.003		10.2	0.16972	51.9	11.9	38.8	2.676	0.011	0.012	0.000	0.301	0.26	
26	4/22/2004	4:54:15 PM		24.267	25.567	23.829	26.31	27.004		46.8	52.985	16.776	30.345	0.467	0.544		50.156	0.075	14.643	0.003		11.2	0.18639	51.5	12.3	38.6	2.659	0.011	0.012	0.000	0.300	0.26	
27	4/22/2004	4:55:15 PM		24.255	25.551	23.792	26.329	27.003		47.063	53.178	16.901	30.495	0.476	0.57		52.96	0.075	14.643	0.003		12.2	0.20306	51.7	13.0	38.8	2.674	0.011	0.012	0.000	0.298	0.25	
28	4/22/2004	4:56:15 PM		24.201	25.562	23.783	26.37	27.048		46.866	53.01	16.984	30.238	0.479	0.594		49.316	0.075	14.643	0.003		13.2	0.21972	51.5	12.1	38.6	2.658	0.011	0.012	0.000	0.300	0.26	
29	4/22/2004	4:57:15 PM		24.056	25.562	23.774	26.445	27.044		47.183	53.414	16.902	30.596	0.545	0.585		49.914	0.084	14.643	0.004		14.2	0.23639	51.9	12.2	38.9	2.681	0.013	0.013	0.000	0.333	0.28	
30	4/22/2004	4:58:15 PM		24.508	25.553	23.744	26.461	27.09		50.178	53.114	16.948	33.655	-1.221	-5.934		49.82	0.108	14.643	0.003		15.2	0.25306	51.6	12.2	41.9	2.890	0.016	0.017	0.000	0.398	0.34	
31	4/22/2004	4:59:15 PM		24.639	25.559	23.73	26.492	27.12		50.734	53.099	17.142	33.98	-1.221	-7.258		50.411	0.083	14.643	0.003		16.2	0.26972	51.6	12.4	42.4	2.920	0.012	0.013	0.000	0.303	0.26	
32	4/22/2004	5:00:15 PM		24.569	25.544	23.711	26.518	27.151		51.209	53.452	17.313	34.181	-1.221	-7.614		49.706	0.079	14.643	0.003		17.2	0.28639	52.0	12.2	42.7	2.944	0.012	0.012	0.000	0.286	0.24	
33	4/22/2004	5:01:15 PM		24.531	25.562	23.708	26.52	27.208		51.224	53.574	17.34	34.173	-1.221	-7.625		49.476	0.076	14.643	0.003		18.2	0.30306	52.1	12.1	42.7	2.944	0.011	0.012	0.000	0.275	0.23	
34	4/22/2004	5:02:15 PM		24.528	25.573	23.699	26.561	27.239		51.35	53.591	17.448	34.191	-1.218	-7.57		51.794	0.077	14.643	0.003		19.2	0.31972	52.1	12.7	42.8	2.949	0.011	0.012	0.000	0.278	0.24	
35	4/22/2004	5:03:15 PM		24.513	25.569	23.685	26.602	27.255		51.178	53.305	17.396	34.13	-1.221	-7.628		49.86	0.076	14.643	0.003		20.2	0.33639	51.8	12.2	42.7	2.941	0.011	0.012	0.000	0.276	0.23	
36	4/22/2004	5:04:15 PM		24.508	25.564	23.665	26.627	27.25		50.135	52.361	17.204	33.216	-1.218	-7.599		50.34	0.071	14.643	0.003		21.2	0.35306	50.9	12.3	41.7	2.873	0.011	0.011	0.000	0.264	0.22	
37	4/22/2004	5:05:15 PM		24.51	25.575	23.626	26.658	27.316		49.148	51.423	16.842	32.629	-1.218	-7.64		48.882	0.07	14.643	0.003		22.2	0.36972	49.9	12.0	40.9	2.819	0.010	0.011	0.000	0.265	0.23	
38	4/22/2004	5:06:15 PM		24.496	25.592	23.572	26.665	27.337		48.919	51.151	16.898	32.399	-1.221	-7.634		49.533	0.071	14.643	0.003		23.2	0.38639	49.7	12.1	40.7	2.803	0.011	0.011	0.000	0.271	0.23	
39	4/22/2004	5:07:15 PM		24.498	25.599	23.529	26.722	27.374		48.884	51.076	16.929	32.282	-1.221	-7.57		49.508	0.068	14.643	0.003		24.2	0.40306	49.6	12.1	40.6	2.798	0.010	0.011	0.000	0.260	0.22	
40	4/22/2004	5:08:15 PM		24.495	25.616	23.506	26.809	26.474		49.065	51.249	16.885	32.555	-1.221	-7.631		46.283	0.069	14.643	0.003		25.2	0.41972	49.8	11.3	40.8	2.814	0.010	0.011	0.000	0.263	0.22	
41	4/22/2004	5:09:15 PM		24.472	25.607	23.437	26.765	25.757		48.861	51.126	16.921	32.219	-1.224	-7.631		47.601	0.07	14.643	0.003		26.2	0.43639	49.7	11.7	40.5	2.795	0.010	0.011	0.000	0.269	0.23	
42	4/22/2004	5:10:15 PM		24.468	25.624	23.419	26.697	25.479		49.004	51.201	17.038	32.241	-1.221	-7.628		49.138	0.069	14.643	0.003		27.2	0.45306	49.7	12.0	40.6	2.801	0.010	0.011	0.000	0.265	0.23	
43	4/22/2004	5:11:15 PM		24.448	25.624	23.384	26.657	25.344		48.975	51.246	16.985	32.289	-1.221	-7.631		49.155	0.069	14.643	0.003		28.2	0.46972	49.8	12.0	40.6	2.801	0.010	0.011	0.000	0.265	0.23	
44	4/22/2004	5:12:15 PM		24.428	25.624	23.338	26.567	25.244		49.05	51.379	17.07	32.299	-1.221	-7.634		48.723	0.068	14.643	0.003		29.2	0.48639	49.9	11.9	40.7	2.804	0.010	0.011	0.000	0.261	0.22	
45	4/22/2004	5:13:15 PM		24.402	25.617	23.297	26.485	25.167		49.002	51.248	17.004	32.358	-1.218	-7.631		49.222	0.068	14.643	0.004		30.2	0.50306	49.8	12.1	40.7	2.805	0.010	0.011	0.000	0.262	0.22	
46	4/22/2004	5:14:15 PM		23.69	25.622	23.262	26.445	25.162		45.22	51.439	17.164	28.371	0.594	0.411		47.584	0.107	14.643	0.003		31.2	0.51972	50.0	11.7	36.8	2.537	0.016	0.017	0.000	0.455	0.39	
47	4/22/2004	5:15:15 PM		24.406	25.617	23.231	26.49	25.092		48.231	51.18	17.075	31.556	-1.221	-6.264		47.755	0.069	14.643	0.003		32.2	0.53639	49.7	11.7	39.9	2.751	0.010	0.011	0.000	0.271	0.23	
48	4/22/2004	5:16:15 PM		24.293	25.609	23.193	26.482	25.029		48.463	51.429	17.145	31.657	-1.221	-6.423		47.887	0.066	14.643	0.003		33.2	0.55306	50.0	11.7	40.1	2.762	0.010	0.010	0.000	0.259	0.22	
49	4/22/2004	5:17:15 PM		24.241	25.607	23.161	26.515	25.052		48.393	51.344	17.175	31.628	-1.218	-6.37		48.183	0.051	14.643	0.003		34.2	0.56972	49.9	11.8	40.0	2.759	0.008	0.008	0.000	0.200	0.17	
50	4/22/2004	5:18:15 PM		24.239	25.615	23.129	26.513	25.1		48.121	51.058	17.04	31.462	-1.224	-6.264		48.319	0.065	14.643	0.003		35.2	0.58639	49.6	11.8	39.8	2.743	0.010	0.010	0.000	0.257	0.22	
51	4/22/2004	5:19:15 PM		24.269	25.62	23.139	26.503	25.15		48.741	51.485	16.959	32.196	-1.221	-7.105		48.402	0.09	14.643	0.003		36.2	0.60306	50.0	11.9	40.5	2.790	0.013	0.014	0.000	0.350	0.30	
52	4/22/2004	5:20:15 PM		24.264	25.615	23.083	26.518	25.21		47.862	50.421	16.442	31.849	-1.221	-7.53		48.7	0.064	14.643	0.003		37.2	0.61972	48.9	11.9	39.9	2.748	0.010	0.010	0.000	0.253	0.22	
53	4/22/2004	5:21:15 PM		24.214	25.605	23.024	26.543	25.255		47.943	50.533	16.56	31.774	-1.224	-7.622		49.994	0.072	14.643	0.003		38.2	0.63639	49.1	12.3	39.9	2.748	0.011	0.011	0.000	0.285	0.24	
54	4/22/2004	5:22:15 PM		24.18	25.606	22.974	26.559	25.296		48.021	50.581	16.44	31.958	-1.221	-7.573		46.758	0.072	14.643	0.003		39.2	0.65306	49.1	11.5	40.0	2.757	0.011	0.011	0.000	0.284	0.24	
55	4/22/2004	5:23:15 PM		24.167	25.618	22.941	26.591	25.338		48.013	50.685	16.434	31.995	-1.221	-7.602		48.746	0.071	14.643	0.003		40.2	0.66972	49.2	11.9	40.0	2.758	0.011	0.011	0.000	0.281	0.24	
56	4/22/2004	5:24:15 PM		24.149	25.625	22.903	26.638	25.35		47.88	50.459	16.526	31.759	-1.224	-7.605		49.134	0.07	14.643	0.003		41.2	0.68639	49.0	12.0	39.8	2.745	0.010	0.011	0.000	0.278	0.24	
57	4/22/2004	5:25:15 PM		24.12	25.622	22.864	26.695	25.362		48.15	50.716	16.538	31.964	-1.221	-7.605		47.411	0.07	14.643	0.003		42.2	0.70306	49.2	11.6	40.1	2.762	0.010	0.011	0.000	0.277	0.24	
58	4/22/2004	5:26:15 PM		24.096	25.607	22.85	26.655	25.367		48.148	50.724	16.506	32.007	-1.221	-7.596		48.56	0.072	14.643	0.003		43.2	0.71972	49.3	11.9	40.1	2.763	0.011	0.011	0.000	0.285	0.24	
59	4/22/2004	5:27:15 PM		24.067	25.628	22.846	26.666	25.383		47.984	50.591	16.456	31.907	-1.221	-7.602		48.688	0.071	14.643	0.003		44.2	0.73639	49.1	11.9	39.9	2.754	0.011	0.011	0.000	0.282	0.24	
60	4/22/2004	5:28:15 PM		24.048	25.619	22.822	26.662	25.384		48.166	50.817	16.583	31.93	-1.221	-7.541		48.435	0.071	14.643	0.003		45.2	0.75306	49.3	11.9	40.0	2.761	0.011	0.011	0.000	0.281	0.24	
61	4/22/2004	5:29:15 PM		24.051	25.632	22.82	26.685	25.437		48.021	50.62	16.516	31.886	-1.221	-7.602		49.914	0.071	14.643	0.003		46.2	0.76972	49.1	12.2	40.0	2.755	0.011	0.011	0.000	0.282	0.24	
62	4/22/2004	5:30:15 PM		24.047	25.649	22.866	26.677	25.444		47.999	50.579	16.508	31.936	-1.221	-7.59		48.896	0.071	14.643	0.003		47.2	0.78639	49.1	12.0	40.0	2.756	0.011	0.011	0.000	0.281	0.24	
63	4/22/2004	5:31:15 PM		24.025	25.646	22.924	26.684	25.471		48.057	50.772	16.526	31.891	-1.221	-7.585		50.1	0.071	14.643	0.003		48.2	0.80306	49.3	12.3	40.0	2.756	0.011	0.011	0.000	0.281	0.24	
64	4/22/2004	5:32:15 PM		24.032	25.658	22.976	26.681	25.408		47.839	50.558	16.527	31.691	-1.224	-7.582		47.078	0.071	14.643	0.003		49.2	0.81972	49.1	11.5	39.8	2.742	0.011	0.011	0.000	0.282	0.24	
65	4/22/2004	5:33:15 PM		24.032	25.648	22.996	26.551	25.278		47.994	50.656	16.526	31.893	-1.218	-7.59		45.509	0.07	14.643	0.003		50.2	0.83639	49.2	11.2	39.9	2.754	0.010	0.011	0.000	0.277	0.24	
66	4/22/2004	5:34:15 PM		24.032	25.643	23.031	26.431	25.138		47.94	50.602	16.48	31.889	-1.221	-7.556		47.716	0.071	14.643	0.003		51.2	0.85306	49.1	11.7	39.9	2.752	0.011	0.011	0.000	0.280	0.24	
67	4/22/2004	5:35:15 PM		24.042	25.653	23.072	26.391	25.103		47.974	50.664	16.455	31.819	-1.218	-7.576		48.609	0.072	14.643	0.003		52.2	0.86972	49.2	11.9	39.9	2.751	0.011	0.011	0.000	0.284	0.24	
68	4/22/2004	5:36:15 PM		24.045	25.636	23.075	26.304	25.016		47.941	50.654	16.429	31.905	-1.224	-7.585		48.853	0.069	14.643	0.003		53.2	0.88639	49.2	12.0	39.9	2.753	0.010	0.011	0.000	0.272	0.23	
69	4/22/2004	5:37:15 PM		24.083	25.624	23.087	26.187	24.939		47.994	50.679	16.488	31.866	-1.221	-7.547		48.193	0.07	14.643	0.003		54.2	0.90306	49.2	11.8	39.9	2.753	0.010	0.011	0.000	0.276	0.23	
70	4/22/2004	5:38:15 PM		24.14	25.626	23.125	26.074	24.886		47.93	50.635	16.622	31.661	-1.221	-7.567		48.586	0.07	14.643	0.003		55.2	0.91972	49.2	11.9	39.8	2.744	0.010	0.011	0.000	0.277	0.24	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	4/22/2004	5:39:15 PM		24.156	25.592	23.161	26.02	24.817		47.94	50.652	16.5	31.85	-1.221	-7.585		48.9	0.071	14.643	0.003		56.2	0.93639	49.2	12.0	39.9	2.751	0.011	0.011	0.000	0.280	0.24	
72	4/22/2004	5:40:15 PM		24.183	25.604	23.194	26.042	24.845		47.683	50.475	16.348	31.728	-1.218	-7.579		48.285	0.071	14.643	0.004		57.2	0.95306	49.0	11.8	39.7	2.738	0.011	0.011	0.000	0.281	0.24	
73	4/22/2004	5:41:15 PM		24.201	25.592	23.212	26.025	24.877		47.644	50.475	16.306	31.73	-1.221	-7.573		50.528	0.072	14.643	0.003		58.2	0.96972	49.0	12.4	39.7	2.736	0.011	0.011	0.000	0.285	0.24	
74	4/22/2004	5:42:15 PM		24.215	25.586	23.23	26.049	24.921		47.833	50.703	16.353	31.899	-1.224	-7.53		48.004	0.073	14.643	0.003		59.2	0.98639	49.2	11.8	39.9	2.749	0.011	0.011	0.000	0.287	0.24	
75	4/22/2004	5:43:15 PM		24.229	25.584	23.249	26.102	24.975		47.692	50.471	16.3	31.749	-1.221	-7.553		48.765	0.072	14.643	0.003		60.2	1.00306	49.0	12.0	39.7	2.739	0.011	0.011	0.000	0.284	0.24	
76	4/22/2004	5:44:15 PM		24.242	25.578	23.257	26.121	24.978		47.515	50.336	16.391	31.521	-1.218	-7.55		49.779	0.072	14.643	0.003		61.2	1.01972	48.9	12.2	39.5	2.725	0.011	0.011	0.000	0.285	0.24	
77	4/22/2004	5:45:15 PM		24.257	25.573	23.272	26.166	24.998		47.66	50.533	16.318	31.628	-1.221	-7.553		48.246	0.072	14.643	0.003		62.2	1.03639	49.1	11.8	39.6	2.733	0.011	0.011	0.000	0.284	0.24	
78	4/22/2004	5:46:15 PM		24.261	25.562	23.301	26.16	25.012		47.882	50.726	16.358	31.923	-1.221	-7.55		46.752	0.072	14.643	0.003		63.2	1.05306	49.3	11.5	39.9	2.751	0.011	0.011	0.000	0.282	0.24	
79	4/22/2004	5:47:15 PM		24.271	25.552	23.291	26.18	25.027		47.638	50.376	16.392	31.595	-1.218	-7.544		50.44	0.073	14.643	0.003		64.2	1.06972	48.9	12.4	39.6	2.731	0.011	0.011	0.000	0.288	0.25	
80	4/22/2004	5:48:15 PM		24.292	25.573	23.338	26.191	25.083		47.884	50.734	16.443	31.733	-1.221	-7.533		49.337	0.073	14.643	0.003		65.2	1.08639	49.3	12.1	39.8	2.745	0.011	0.011	0.000	0.287	0.24	
81	4/22/2004	5:49:15 PM		24.287	25.557	23.337	26.235	25.112		47.963	50.983	16.41	31.919	-1.221	-7.535		49.153	0.073	14.643	0.003		66.2	1.10306	49.5	12.0	39.9	2.754	0.011	0.011	0.000	0.286	0.24	
82	4/22/2004	5:50:15 PM		24.297	25.548	23.388	26.206	25.133		47.576	50.48	16.42	31.486	-1.224	-7.475		48.206	0.072	14.643	0.003		67.2	1.11972	49.0	11.8	39.5	2.726	0.011	0.011	0.000	0.284	0.24	
83	4/22/2004	5:51:15 PM		24.302	25.542	23.462	26.195	25.117		47.779	50.674	16.475	31.632	-1.224	-7.533		48.951	0.072	14.643	0.003		68.2	1.13639	49.2	12.0	39.7	2.738	0.011	0.011	0.000	0.282	0.24	
84	4/22/2004	5:52:15 PM		24.322	25.543	23.538	26.206	25.153		47.538	50.486	16.436	31.455	-1.221	-7.515		48.884	0.074	14.643	0.003		69.2	1.15306	49.0	12.0	39.5	2.723	0.011	0.011	0.000	0.291	0.25	
85	4/22/2004	5:53:15 PM		24.332	25.543	23.609	26.231	25.163		47.675	50.608	16.398	31.607	-1.221	-7.518		49.255	0.073	14.643	0.003		70.2	1.16972	49.1	12.1	39.6	2.733	0.011	0.011	0.000	0.286	0.24	
86	4/22/2004	5:54:15 PM		24.352	25.533	23.664	26.236	25.173		47.582	50.542	16.369	31.657	-1.224	-7.521		50.634	0.073	14.643	0.003		71.2	1.18639	49.1	12.4	39.6	2.732	0.011	0.011	0.000	0.285	0.24	
87	4/22/2004	5:55:15 PM		24.378	25.544	23.75	26.272	25.184		47.48	50.5	16.477	31.287	-1.221	-7.512		48.417	0.073	14.643	0.003		72.2	1.20306	49.0	11.9	39.4	2.715	0.011	0.011	0.000	0.286	0.24	
88	4/22/2004	5:56:15 PM		24.399	25.539	23.771	26.298	25.205		47.04	50.034	16.02	31.316	-1.227	-7.515		47.799	0.074	14.643	0.003		73.2	1.21972	48.6	11.7	39.2	2.701	0.011	0.011	0.000	0.292	0.25	
89	4/22/2004	5:57:15 PM		24.429	25.539	23.826	26.323	25.205		47.227	50.316	16.058	31.455	-1.221	-7.434		48.314	0.073	14.643	0.003		74.2	1.23639	48.8	11.8	39.3	2.712	0.011	0.011	0.000	0.286	0.24	
90	4/22/2004	5:58:15 PM		24.46	25.546	23.872	26.314	25.246		47.015	50.05	16.063	31.279	-1.221	-7.492		49.153	0.078	14.643	0.003		75.2	1.25306	48.6	12.0	39.1	2.699	0.012	0.012	0.000	0.307	0.26	
91	4/22/2004	5:59:15 PM		24.491	25.562	23.913	26.355	25.262		47.119	50.16	16.007	31.392	-1.224	-7.55		47.069	0.076	14.643	0.003		76.2	1.26972	48.7	11.5	39.3	2.707	0.011	0.012	0.000	0.298	0.25	
92	4/22/2004	6:00:15 PM		24.523	25.563	23.95	26.351	25.278		47.003	50.088	15.993	31.334	-1.221	-7.535		50.017	0.078	14.643	0.003		77.2	1.28639	48.6	12.3	39.2	2.701	0.012	0.012	0.000	0.306	0.26	
93	4/22/2004	6:01:15 PM		24.543	25.569	23.981	26.347	25.249		47.202	50.254	16.047	31.499	-1.221	-7.538		49.178	0.076	14.643	0.003		78.2	1.30306	48.8	12.1	39.4	2.713	0.011	0.012	0.000	0.296	0.25	
94	4/22/2004	6:02:15 PM		24.564	25.564	24.011	26.317	25.185		47.352	50.513	15.885	31.778	-1.221	-7.527		49.136	0.078	14.643	0.003		79.2	1.31972	49.0	12.0	39.6	2.728	0.012	0.012	0.000	0.302	0.26	
95	4/22/2004	6:03:15 PM		24.583	25.554	24.031	26.217	25.079		47.26	50.345	15.882	31.673	-1.218	-7.492		45.749	0.077	14.643	0.003		80.2	1.33639	48.9	11.2	39.5	2.721	0.011	0.012	0.000	0.299	0.25	
96	4/22/2004	6:04:15 PM		24.608	25.558	24.085	26.131	24.973		47.219	50.307	15.796	31.753	-1.218	-7.533		47.839	0.076	14.643	0.004		81.2	1.35306	48.8	11.7	39.5	2.722	0.011	0.012	0.000	0.294	0.25	
97	4/22/2004	6:05:15 PM		24.621	25.561	24.103	26.014	24.881		47.304	50.378	15.944	31.681	-1.221	-7.556		48.004	0.078	14.643	0.003		82.2	1.36972	48.9	11.8	39.5	2.723	0.012	0.012	0.000	0.302	0.26	
98	4/22/2004	6:06:15 PM		24.643	25.554	24.141	25.937	24.809		47.341	50.504	15.921	31.794	-1.215	-7.567		47.732	0.076	14.643	0.003		83.2	1.38639	49.0	11.7	39.6	2.728	0.011	0.012	0.000	0.293	0.25	
99	4/22/2004	6:07:15 PM		24.657	25.547	24.155	25.84	24.777		47.071	50.181	15.847	31.529	-1.218	-7.518		48.775	0.078	14.643	0.003		84.2	1.40306	48.7	12.0	39.3	2.710	0.012	0.012	0.000	0.303	0.26	
100	4/22/2004	6:08:15 PM		24.669	25.519	24.177	25.812	24.755		47.061	50.222	15.852	31.525	-1.221	-7.564		52.843	0.077	14.643	0.003		85.2	1.41972	48.7	12.9	39.3	2.709	0.011	0.012	0.000	0.299	0.25	
101	4/22/2004	6:09:15 PM		24.699	25.539	24.242	25.867	24.815		47.047	50.229	15.888	31.451	-1.215	-7.55		49.118	0.079	14.643	0.003		86.2	1.43639	48.8	12.0	39.2	2.706	0.012	0.012	0.000	0.307	0.26	
102	4/22/2004	6:10:15 PM		24.702	25.517	24.255	25.9	24.888		47.159	50.378	15.971	31.494	-1.218	-7.564		47.524	0.076	14.643	0.003		87.2	1.45306	48.9	11.6	39.3	2.711	0.011	0.012	0.000	0.294	0.25	
103	4/22/2004	6:11:15 PM		24.726	25.522	24.304	25.965	24.892		47.32	50.546	15.91	31.671	-1.218	-7.521		50.484	0.076	14.643	0.003		88.2	1.46972	49.1	12.4	39.5	2.723	0.011	0.012	0.000	0.293	0.25	
104	4/22/2004	6:12:15 PM		24.741	25.496	24.314	26.004	24.966		46.986	50.249	15.886	31.449	-1.218	-7.547		47.491	0.077	14.643	0.003		89.2	1.48639	48.8	11.6	39.2	2.704	0.011	0.012	0.000	0.298	0.25	
105	4/22/2004	6:13:15 PM		24.759	25.484	24.322	26.022	24.995		47.184	50.45	16.016	31.511	-1.221	-7.544		49.224	0.077	14.643	0.003		90.2	1.50306	49.0	12.1	39.3	2.713	0.011	0.012	0.000	0.297	0.25	
106	4/22/2004	6:14:15 PM		24.784	25.494	24.347	26.098	25.035		46.802	50.061	15.829	31.252	-1.218	-7.541		46.74	0.077	14.643	0.003		91.2	1.51972	48.6	11.5	39.0	2.691	0.011	0.012	0.000	0.300	0.25	
107	4/22/2004	6:15:15 PM		24.804	25.494	24.342	26.148	25.065		46.723	49.986	15.557	31.48	-1.218	-7.53		48.836	0.08	14.643	0.003		92.2	1.53639	48.5	12.0	39.1	2.696	0.012	0.012	0.000	0.311	0.26	
108	4/22/2004	6:16:15 PM		24.809	25.484	24.347	26.142	25.069		46.613	49.959	15.608	31.285	-1.221	-7.486		47.935	0.081	14.643	0.003		93.2	1.55306	48.5	11.7	38.9	2.685	0.012	0.012	0.000	0.316	0.27	
109	4/22/2004	6:17:15 PM		24.834	25.494	24.367	26.158	25.11		46.555	49.851	15.662	31.172	-1.218	-7.544		50.721	0.08	14.643	0.003		94.2	1.56972	48.4	12.4	38.9	2.680	0.012	0.012	0.000	0.312	0.27	
110	4/22/2004	6:18:15 PM		24.85	25.49	24.388	26.183	25.145		47.885	51.224	15.922	32.213	-1.221	-7.492		47.422	0.082	14.643	0.003		95.2	1.58639	49.8	11.6	40.0	2.761	0.012	0.012	0.000	0.311	0.26	
111	4/22/2004	6:19:15 PM		24.849	25.484	24.392	26.238	25.155		47.654	51.052	15.932	31.977	-1.218	-7.518		47.44	0.083	14.643	0.003		96.2	1.60306	49.6	11.6	39.8	2.745	0.012	0.013	0.000	0.316	0.27	
112	4/22/2004	6:20:15 PM		24.871	25.496	24.424	26.239	25.181		47.845	51.246	15.962	32.207	-1.224	-7.521		50.242	0.082	14.643	0.003		97.2	1.61972	49.8	12.3	40.0	2.760	0.012	0.012	0.000	0.310	0.26	
113	4/22/2004	6:21:15 PM		24.882	25.492	24.465	26.29	25.187		47.801	51.188	15.987	32.125	-1.218	-7.518		46.934	0.083	14.643	0.003		98.2	1.63639	49.7	11.5	40.0	2.755	0.012	0.013	0.000	0.314	0.27	
114	4/22/2004	6:22:15 PM		24.908	25.503	24.516	26.271	25.223		47.806	51.19	15.88	32.268	-1.218	-7.521		50.144	0.083	14.643	0.003		99.2	1.65306	49.7	12.3	40.0	2.760	0.012	0.013	0.000	0.313	0.27	
115	4/22/2004	6:23:15 PM		24.923	25.508	24.536	26.321	25.238		47.87	51.269	15.998	32.165	-1.218	-7.481		49.478	0.084	14.643	0.003		100.2	1.66972	49.8	12.1	40.0	2.759	0.013	0.013	0.000	0.317	0.27	
116	4/22/2004	6:24:15 PM		24.944	25.524	24.568	26.333	25.275		47.963	51.404	15.893	32.328	-1.221	-7.504		49.835	0.083	14.643	0.003		101.2	1.68639	49.9	12.2	40.1	2.768	0.012	0.013	0.000	0.312	0.27	
117	4/22/2004	6:25:15 PM		24.971	25.536	24.599	26.379	25.316		47.816	51.207	15.946	32.211	-1.221	-7.515		52.163	0.083	14.643	0.003		102.2	1.70306	49.7	12.8	40.0	2.759	0.012	0.013	0.000	0.313	0.27	
118	4/22/2004	6:26:15 PM		24.973	25.533	24.606	26.376	25.318		47.804	51.228	15.905	32.225	-1.221	-7.521		49.877	0.082	14.643	0.003		103.2	1.71972	49.8	12.2	40.0	2.759	0.012	0.012	0.000	0.309	0.26	
119	4/22/2004	6:27:15 PM		25.004	25.539	24.648	26.393	25.344		47.745	51.207	15.917	32.071	-1.218	-7.472		48.671	0.084	14.643	0.003		104.2	1.73639	49.7	11.9	39.9	2.752	0.013	0.013	0.000	0.317	0.27	
120	4/22/2004	6:28:15 PM		25.016	25.556	24.674	26.389	25.356		48.2	51.684	15.974	32.486	-1.221	-7.509		47.655	0.082	14.643	0.003		105.2	1.75306	50.2	11.7	40.3	2.782	0.012	0.012	0.000	0.306	0.26	
121	4/22/2004	6:29:15 PM		25.018	25.538	24.666	26.396	25.378		47.808	51.205	15.952	32.155	-1.224	-7.512		51.452	0.083	14.643	0.003		106.2	1.76972	49.7	12.6	40.0	2.757	0.012	0.012	0.000	0.312	0.27	
122	4/22/2004	6:30:15 PM		25.054	25.559	24.703	26.428	25.374		47.77	51.234	15.986	32.014	-1.221	-7.509		47.895	0.084	14.643	0.003		107.2	1.78639	49.8	11.7	39.9	2.750	0.013	0.013	0.000	0.317	0.27	
123	4/22/2004	6:31:15 PM		25.096	25.566	24.724	26.429	25.406		44.324	51.228	15.966	28.396	1.501	-0.106		48.581	0.15	14.643	0.003		108.2	1.80306	49.8	11.9	36.4	2.507	0.022	0.023	0.001	0.620	0.53	
124	4/22/2004	6:32:15 PM		25.091	25.571	24.739	26.444	25.406		47.24	51.325	15.948	31.517	-1.221	-6.197		49.159	0.081	14.643	0.003		109.2	1.81972	49.9	12.0	39.4	2.715	0.012	0.012	0.000	0.309	0.26	
125	4/22/2004	6:33:15 PM		25.12	25.58	24.784	26.538	25.385		47.37	51.449	15.998	31.614	-1.215	-6.339		50.323	0.081	14.643	0.004		110.2	1.83639	50.0	12.3	39.5	2.723	0.012	0.012	0.000	0.308	0.26	
126	4/22/2004	6:34:15 PM		25.125	25.575	24.779	26.513	25.39		47.175	51.338	16.007	31.404	-1.221	-6.116		48.266	0.08	14.643	0.003		111.2	1.85306	49.9	11.8	39.3	2.709	0.012	0.012	0.000	0.305	0.26	
127	4/22/2004	6:35:15 PM		25.147	25.602	24.8	26.46	25.292		47.306	51.118	15.942	31.654	-1.221	-7.07		50.173	0.097	14.643	0.003		112.2	1.86972	49.6	12.3	39.5	2.722	0.014	0.015	0.000	0.368	0.31	
128	4/22/2004	6:36:15 PM		25.157	25.592	24.75	26.345	25.192		47.032	50.625	15.537	31.831	-1.221	-7.44		48.631	0.085	14.643	0.003		113.2	1.88639	49.2	11.9	39.4	2.719	0.013	0.013	0.000	0.324	0.28	
129	4/22/2004	6:37:15 PM		25.151	25.586	24.739	26.199	25.101		47.167	50.927	15.696	31.78	-1.221	-7.382		49.973	0.086	14.643	0.003		114.2	1.90306	49.5	12.2	39.5	2.722	0.013	0.013	0.000	0.327	0.28	
130	4/22/2004	6:38:15 PM		25.164	25.589	24.767	26.137	25.004		47.2	50.938	15.697	31.821	-1.221	-7.469		50.144	0.086	14.643	0.003		115.2	1.91972	49.5	12.3	39.5	2.724	0.013	0.013	0.000	0.327	0.28	
131	4/22/2004	6:39:15 PM		25.167	25.587	24.77	26.065	24.947		47.053	50.749	15.617	31.726	-1.221	-7.475		48.827	0.085	14.643	0.003		116.2	1.93639	49.3	12.0	39.4	2.716	0.013	0.013	0.000	0.324	0.28	
132	4/22/2004	6:40:15 PM		25.165	25.574	24.748	26.002	24.925		47.244	50.931	15.663	31.905	-1.221	-7.472		49.349	0.086	14.643	0.003		117.2	1.95306	49.5	12.1	39.6	2.729	0.013	0.013	0.000	0.326	0.28	
133	4/22/2004	6:41:15 PM		25.173	25.588	24.757	26.016	24.963		47.281	51.01	15.762	31.813	-1.221	-7.466		48.195	0.087	14.643	0.003		118.2	1.96972	49.5	11.8	39.5	2.727	0.013	0.013	0.000	0.330	0.28	
134	4/22/2004	6:42:15 PM		25.192	25.592	24.791	26.07	24.997		47.302	50.987	15.732	31.897	-1.218	-7.405		48.928	0.086	14.643	0.003		119.2	1.98639	49.5	12.0	39.6	2.730	0.013	0.013	0.000	0.326	0.28	
135	4/22/2004	6:43:15 PM		25.186	25.581	24.8	26.074	25.031		47.072	50.792	15.631	31.776	-1.221	-7.452		48.442	0.086	14.643	0.003		120.2	2.00306	49.3	11.9	39.4	2.718	0.013	0.013	0.000	0.327	0.28	
136	4/22/2004	6:44:15 PM		25.179	25.559	24.782	26.082	25.049		47.343	51.087	15.682	31.954	-1.218	-7.457		50.221	0.087	14.643	0.003		121.2	2.01972	49.6	12.3	39.6	2.734	0.013	0.013	0.000	0.329	0.28	
137	4/22/2004	6:45:15 PM		25.205	25.57	24.808	26.127	25.11		47.25	51.05	15.729	31.798	-1.221	-7.472		48.73	0.084	14.643	0.003		122.2	2.03639	49.6	11.9	39.5	2.725	0.013	0.013	0.000	0.319	0.27	
138	4/22/2004	6:46:15 PM		25.195	25.565	24.803	26.147	25.115		47.422	51.251	15.682	32.01	-1.221	-7.423		49.126	0.086	14.643	0.003		123.2	2.05306	49.8	12.0	39.7	2.738	0.013	0.013	0.000	0.325	0.28	
139	4/22/2004	6:47:15 PM		25.199	25.554	24.812	26.152	25.139		47.086	50.896	15.732	31.667	-1.221	-7.466		50.479	0.085	14.643	0.003		124.2	2.06972	49.4	12.4	39.4	2.715	0.013	0.013	0.000	0.324	0.28	
140	4/22/2004	6:48:15 PM		25.204	25.559	24.812	26.192	25.169		47.268	51.105	15.65	31.948	-1.224	-7.472		48.031	0.085	14.643	0.003		125.2	2.08639	49.6	11.8	39.6	2.731	0.013	0.013	0.000	0.322	0.27	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	4/22/2004	6:49:15 PM		25.215	25.555	24.833	26.243	25.195		47.173	51.002	15.757	31.671	-1.218	-7.466		51.831	0.086	14.643	0.003		126.2	2.10306	49.5	12.7	39.4	2.718	0.013	0.013	0.000	0.327	0.28	
142	4/22/2004	6:50:15 PM		25.22	25.56	24.849	26.263	25.2		46.912	50.712	15.66	31.511	-1.221	-7.446		49.27	0.086	14.643	0.003		127.2	2.11972	49.2	12.1	39.2	2.703	0.013	0.013	0.000	0.328	0.28	
143	4/22/2004	6:51:15 PM		25.23	25.56	24.849	26.303	25.23		46.941	50.871	15.709	31.455	-1.221	-7.394		48.608	0.083	14.643	0.003		128.2	2.13639	49.4	11.9	39.2	2.703	0.012	0.012	0.000	0.317	0.27	
144	4/22/2004	6:52:15 PM		25.237	25.562	24.825	26.29	25.232		46.978	50.917	15.572	31.655	-1.221	-7.437		48.832	0.086	14.643	0.003		129.2	2.15306	49.4	12.0	39.3	2.711	0.013	0.013	0.000	0.328	0.28	
145	4/22/2004	6:53:15 PM		25.237	25.562	24.8	26.25	25.222		46.632	50.565	15.488	31.404	-1.221	-7.431		50.913	0.086	14.643	0.003		130.2	2.16972	49.1	12.5	39.0	2.690	0.013	0.013	0.000	0.330	0.28	
146	4/22/2004	6:54:15 PM		25.242	25.562	24.801	26.27	25.237		46.783	50.695	15.543	31.439	-1.221	-7.446		51.155	0.088	14.643	0.003		131.2	2.18639	49.2	12.5	39.1	2.697	0.013	0.013	0.000	0.337	0.29	
147	4/22/2004	6:55:15 PM		25.238	25.563	24.787	26.251	25.253		46.671	50.645	15.492	31.414	-1.221	-7.388		48.483	0.089	14.643	0.003		132.2	2.20306	49.2	11.9	39.0	2.692	0.013	0.013	0.000	0.342	0.29	
148	4/22/2004	6:56:15 PM		25.238	25.563	24.772	26.306	25.263		46.792	50.753	15.561	31.445	-1.218	-7.44		50.208	0.089	14.643	0.003		133.2	2.21972	49.3	12.3	39.1	2.697	0.013	0.013	0.000	0.341	0.29	
149	4/22/2004	6:56:25 PM		25.228	25.558	24.757	26.286	25.258		46.424	50.44	15.455	31.195	-1.221	-7.437		50.546	0.09	14.643	0.003		133.4	2.2225	49.0	12.4	38.8	2.676	0.013	0.014	0.000	0.348	0.30	
150	4/22/2004	6:57:25 PM		25.244	25.564	24.777	26.317	25.259		46.657	50.705	15.53	31.32	-1.218	-7.443		47.096	0.089	14.643	0.003		134.4	2.23917	49.2	11.5	39.0	2.688	0.013	0.013	0.000	0.342	0.29	
151	4/22/2004	6:58:25 PM		25.244	25.579	24.787	26.357	25.264		46.76	50.73	15.55	31.394	-1.221	-7.42		50.017	0.09	14.643	0.003		135.4	2.25583	49.3	12.3	39.1	2.694	0.013	0.013	0.000	0.345	0.29	
152	4/22/2004	6:59:25 PM		25.24	25.584	24.783	26.293	25.285		46.646	50.658	15.518	31.31	-1.221	-7.388		50.127	0.089	14.643	0.003		136.4	2.2725	49.2	12.3	39.0	2.687	0.013	0.013	0.000	0.343	0.29	
153	4/22/2004	7:00:25 PM		25.255	25.59	24.814	26.333	25.3		46.538	50.536	15.542	31.248	-1.215	-7.403		50.486	0.091	14.643	0.003		137.4	2.28917	49.1	12.4	38.9	2.682	0.014	0.014	0.000	0.351	0.30	
154	4/22/2004	7:01:25 PM		25.246	25.591	24.785	26.294	25.301		46.507	50.589	15.509	31.193	-1.221	-7.33		49.687	0.085	14.643	0.003		138.4	2.30583	49.1	12.2	38.9	2.679	0.013	0.013	0.000	0.328	0.28	
155	4/22/2004	7:02:25 PM		25.246	25.596	24.779	26.359	25.286		46.468	50.542	15.541	31.135	-1.221	-7.348		49.791	0.09	14.643	0.003		139.4	2.3225	49.1	12.2	38.8	2.675	0.013	0.014	0.000	0.348	0.30	
156	4/22/2004	7:03:25 PM		25.246	25.596	24.79	26.319	25.266		46.959	50.96	15.376	31.774	-1.221	-7.252		51.139	0.086	14.643	0.003		140.4	2.33917	49.5	12.5	39.4	2.714	0.013	0.013	0.000	0.328	0.28	
157	4/22/2004	7:04:25 PM		25.236	25.596	24.785	26.314	25.246		46.81	50.871	15.484	31.453	-1.221	-7.209		49.645	0.085	14.643	0.003		141.4	2.35583	49.4	12.2	39.1	2.698	0.013	0.013	0.000	0.326	0.28	
158	4/22/2004	7:05:25 PM		25.247	25.607	24.796	26.275	25.292		46.482	50.529	15.487	31.158	-1.221	-7.223		49.03	0.088	14.643	0.003		142.4	2.3725	49.1	12.0	38.8	2.677	0.013	0.013	0.000	0.340	0.29	
159	4/22/2004	7:06:25 PM		25.252	25.602	24.785	26.355	25.312		46.644	50.757	15.431	31.443	-1.224	-7.35		49.103	0.087	14.643	0.003		143.4	2.38917	49.3	12.0	39.0	2.692	0.013	0.013	0.000	0.334	0.28	
160	4/22/2004	7:07:25 PM		25.246	25.601	24.779	26.304	25.306		46.667	50.697	15.476	31.419	-1.224	-7.342		50.5	0.087	14.643	0.003		144.4	2.40583	49.2	12.4	39.0	2.692	0.013	0.013	0.000	0.334	0.28	
161	4/22/2004	7:08:25 PM		25.251	25.616	24.734	26.279	25.276		46.232	50.353	15.19	31.232	-1.221	-7.171		50.423	0.091	14.643	0.003		145.4	2.4225	48.9	12.4	38.7	2.670	0.014	0.014	0.000	0.353	0.30	
162	4/22/2004	7:09:25 PM		25.25	25.62	24.739	26.278	25.28		46.29	50.334	15.267	31.17	-1.221	-7.307		49.629	0.101	14.643	0.003		146.4	2.43917	48.9	12.2	38.7	2.670	0.015	0.015	0.000	0.392	0.33	
163	4/22/2004	7:10:25 PM		25.255	25.62	24.733	26.298	25.285		46.329	50.419	15.204	31.398	-1.215	-6.96		50.569	0.08	14.643	0.004		147.4	2.45583	48.9	12.4	38.9	2.680	0.012	0.012	0.000	0.309	0.26	
164	4/22/2004	7:11:25 PM		25.24	25.625	24.708	26.283	25.285		46.306	50.436	15.249	31.314	-1.218	-7.142		49.591	0.104	14.643	0.003		148.4	2.4725	49.0	12.2	38.8	2.676	0.016	0.016	0.000	0.403	0.34	
165	4/22/2004	7:12:25 PM		25.24	25.625	24.698	26.293	25.295		46.325	50.334	15.297	31.201	-1.221	-7.327		49.403	0.093	14.643	0.003		149.4	2.48917	48.9	12.1	38.8	2.673	0.014	0.014	0.000	0.361	0.31	
166	4/22/2004	7:13:25 PM		25.25	25.64	24.729	26.338	25.3		46.097	50.069	15.233	31.105	-1.215	-7.353		51.378	0.093	14.643	0.003		150.4	2.50583	48.6	12.6	38.6	2.661	0.014	0.014	0.000	0.362	0.31	
167	4/22/2004	7:14:25 PM		25.225	25.62	24.699	26.333	25.295		46.466	50.515	15.351	31.275	-1.221	-7.151		51.009	0.081	14.643	0.003		151.4	2.5225	49.0	12.5	38.9	2.680	0.012	0.012	0.000	0.313	0.27	
168	4/22/2004	7:15:25 PM		25.215	25.63	24.694	26.313	25.29		46.325	50.37	15.31	31.209	-1.224	-7.252		51.001	0.089	14.643	0.003		152.4	2.53917	48.9	12.5	38.8	2.673	0.013	0.013	0.000	0.345	0.29	
169	4/22/2004	7:16:25 PM		25.225	25.625	24.698	26.323	25.299		47.016	51.112	15.53	31.694	-1.218	-7.319		48.548	0.093	14.643	0.003		153.4	2.55583	49.6	11.9	39.4	2.713	0.014	0.014	0.000	0.355	0.30	
170	4/22/2004	7:17:25 PM		25.21	25.63	24.688	26.283	25.304		47.074	51.103	15.372	31.897	-1.221	-7.16		48.066	0.088	14.643	0.003		154.4	2.5725	49.6	11.8	39.5	2.722	0.013	0.013	0.000	0.335	0.29	
171	4/22/2004	7:18:25 PM		25.215	25.645	24.724	26.258	25.28		47.038	51.105	15.481	31.772	-1.224	-7.278		49.806	0.099	14.643	0.003		155.4	2.58917	49.6	12.2	39.4	2.717	0.015	0.015	0.000	0.377	0.32	
172	4/22/2004	7:19:25 PM		25.22	25.64	24.734	26.258	25.29		47.032	51.244	15.527	31.7	-1.221	-6.937		51.147	0.094	14.643	0.003		156.4	2.60583	49.8	12.5	39.4	2.714	0.014	0.014	0.000	0.359	0.31	
173	4/22/2004	7:20:25 PM		25.21	25.64	24.738	26.247	25.285		47.223	51.335	15.48	31.966	-1.224	-7.215		50.135	0.086	14.643	0.003		157.4	2.6225	49.9	12.3	39.6	2.730	0.013	0.013	0.000	0.326	0.28	
174	4/22/2004	7:21:25 PM		25.21	25.64	24.739	26.288	25.275		47.291	51.151	15.443	32.079	-1.224	-7.197		49.779	0.107	14.643	0.003		158.4	2.63917	49.7	12.2	39.7	2.736	0.016	0.016	0.000	0.405	0.34	
175	4/22/2004	7:22:25 PM		25.225	25.645	24.743	26.313	25.265		46.491	50.983	15.438	31.133	-0.978	-5.98		47.856	0.098	14.643	0.003		159.4	2.65583	49.5	11.7	38.8	2.676	0.015	0.015	0.000	0.379	0.32	
176	4/22/2004	7:23:25 PM		25.205	25.64	24.699	26.293	25.275		46.599	50.631	15.151	31.663	-1.224	-7.154		50.09	0.099	14.643	0.003		160.4	2.6725	49.2	12.3	39.1	2.698	0.015	0.015	0.000	0.380	0.32	
177	4/22/2004	7:24:25 PM		25.225	25.65	24.724	26.313	25.265		46.758	50.801	15.145	31.847	-1.218	-7.246		49.739	0.097	14.643	0.003		161.4	2.68917	49.3	12.2	39.3	2.710	0.014	0.015	0.000	0.371	0.32	
178	4/22/2004	7:25:25 PM		25.22	25.65	24.719	26.283	25.26		47.024	51.085	15.283	31.96	-1.221	-7.319		50.997	0.1	14.643	0.003		162.4	2.70583	49.6	12.5	39.5	2.723	0.015	0.015	0.000	0.381	0.32	
179	4/22/2004	7:26:25 PM		25.225	25.66	24.709	26.268	25.27		46.875	50.933	15.201	31.841	-1.221	-7.275		49.41	0.099	14.643	0.003		163.4	2.7225	49.5	12.1	39.4	2.714	0.015	0.015	0.000	0.378	0.32	
180	4/22/2004	7:27:25 PM		25.199	25.639	24.687	26.262	25.249		46.825	50.826	15.343	31.763	-1.218	-7.177		49.576	0.087	14.643	0.003		164.4	2.73917	49.4	12.1	39.3	2.709	0.013	0.013	0.000	0.333	0.28	
181	4/22/2004	7:28:25 PM		25.214	25.659	24.717	26.267	25.244		46.812	50.873	15.266	31.718	-1.221	-7.232		51.669	0.097	14.643	0.003		165.4	2.75583	49.4	12.7	39.3	2.707	0.014	0.015	0.000	0.371	0.32	
182	4/22/2004	7:29:25 PM		25.209	25.649	24.722	26.252	25.249		46.7	50.685	15.215	31.657	-1.224	-7.108		50.569	0.093	14.643	0.003		166.4	2.7725	49.2	12.4	39.2	2.701	0.014	0.014	0.000	0.357	0.30	
183	4/22/2004	7:30:25 PM		25.192	25.642	24.7	26.23	25.232		46.827	50.861	15.323	31.685	-1.221	-7.137		51.942	0.103	14.643	0.003		167.4	2.78917	49.4	12.7	39.3	2.707	0.015	0.015	0.000	0.395	0.34	
184	4/22/2004	7:31:25 PM		25.217	25.672	24.72	26.295	25.252		46.735	50.799	15.221	31.708	-1.224	-7.244		50.613	0.092	14.643	0.003		168.4	2.80583	49.3	12.4	39.2	2.704	0.014	0.014	0.000	0.352	0.30	
185	4/22/2004	7:32:25 PM		25.211	25.666	24.719	26.284	25.241		46.875	50.853	15.207	31.794	-1.221	-7.16		49.747	0.087	14.643	0.003		169.4	2.8225	49.4	12.2	39.3	2.712	0.013	0.013	0.000	0.332	0.28	
186	4/22/2004	7:33:25 PM		25.205	25.665	24.724	26.268	25.23		46.543	50.614	15.218	31.49	-1.221	-7.122		51.944	0.099	14.643	0.003		170.4	2.83917	49.1	12.7	39.0	2.690	0.015	0.015	0.000	0.381	0.32	
187	4/22/2004	7:34:25 PM		25.199	25.659	24.732	26.272	25.219		46.874	51.025	15.402	31.63	-1.221	-6.688		51.126	0.095	14.643	0.003		171.4	2.85583	49.6	12.5	39.3	2.706	0.014	0.014	0.000	0.364	0.31	
188	4/22/2004	7:35:25 PM		25.199	25.664	24.722	26.227	25.224		47.072	51.093	15.306	31.954	-1.221	-7.229		51.668	0.099	14.643	0.003		172.4	2.8725	49.6	12.7	39.5	2.724	0.015	0.015	0.000	0.376	0.32	
189	4/22/2004	7:36:25 PM		25.198	25.653	24.722	26.286	25.203		47.281	51.302	15.339	32.073	-1.218	-7.165		50.117	0.098	14.643	0.003		173.4	2.88917	49.8	12.3	39.7	2.736	0.015	0.015	0.000	0.371	0.32	
190	4/22/2004	7:37:25 PM		25.197	25.652	24.725	26.22	25.192		46.889	50.855	15.308	31.782	-1.221	-7.223		49.789	0.104	14.643	0.003		174.4	2.90583	49.4	12.2	39.3	2.712	0.016	0.016	0.000	0.397	0.34	
191	4/22/2004	7:38:25 PM		25.207	25.657	24.745	26.2	25.192		46.663	50.782	15.472	31.347	-1.221	-6.891		48.246	0.097	14.643	0.003		175.4	2.9225	49.3	11.8	39.0	2.689	0.014	0.015	0.000	0.373	0.32	
192	4/22/2004	7:39:25 PM		25.22	25.65	24.754	26.213	25.21		45.949	50.855	15.507	30.532	-0.543	-5.336		52.517	0.137	14.643	0.003		176.4	2.93917	49.4	12.9	38.2	2.637	0.020	0.021	0.001	0.538	0.46	
193	4/22/2004	7:40:25 PM		25.214	25.644	24.752	26.242	25.204		46.254	50.793	15.426	30.94	-0.937	-6.096		51.716	0.096	14.643	0.003		177.4	2.95583	49.3	12.7	38.6	2.661	0.014	0.014	0.000	0.373	0.32	
194	4/22/2004	7:41:25 PM		25.211	25.636	24.74	26.234	25.186		46.327	50.85	15.475	30.99	-0.957	-6.029		48.875	0.079	14.643	0.003		178.4	2.9725	49.4	12.0	38.7	2.665	0.012	0.012	0.000	0.307	0.26	
195	4/22/2004	7:42:25 PM		25.22	25.645	24.769	26.213	25.16		46.174	50.643	15.57	30.735	-1.096	-6.379		51.9	0.096	14.643	0.003		179.4	2.98917	49.2	12.7	38.5	2.651	0.014	0.014	0.000	0.375	0.32	
196	4/22/2004	7:43:25 PM		25.215	25.64	24.723	26.163	25.13		45.956	50.063	15.274	30.877	-1.221	-7.139		49.524	0.101	14.643	0.003		180.4	3.00583	48.6	12.1	38.4	2.649	0.015	0.015	0.000	0.395	0.34	
197	4/22/2004	7:44:25 PM		25.214	25.639	24.717	26.107	25.109		46.23	50.368	15.224	31.209	-1.221	-6.344		51.808	0.083	14.643	0.003		181.4	3.0225	48.9	12.7	38.7	2.670	0.012	0.012	0.000	0.322	0.27	
198	4/22/2004	7:45:25 PM		25.193	25.628	24.691	26.126	25.098		46.397	50.502	15.19	31.384	-1.221	-6.819		48.807	0.098	14.643	0.003		182.4	3.03917	49.0	12.0	38.9	2.681	0.015	0.015	0.000	0.379	0.32	
199	4/22/2004	7:46:25 PM		25.192	25.627	24.69	26.095	25.082		46.439	50.424	15.199	31.402	-1.221	-7.2		53.081	0.102	14.643	0.003		183.4	3.05583	49.0	13.0	38.9	2.683	0.015	0.015	0.000	0.394	0.34	
200	4/22/2004	7:47:25 PM		25.181	25.616	24.689	26.098	25.071		46.464	50.49	15.257	31.379	-1.221	-7.087		49.115	0.103	14.643	0.003		184.4	3.0725	49.0	12.0	38.9	2.684	0.015	0.015	0.000	0.398	0.34	
201	4/22/2004	7:48:25 PM		25.174	25.619	24.697	26.092	25.069		46.453	50.374	15.222	31.361	-1.221	-7.189		51.779	0.101	14.643	0.003		185.4	3.08917	48.9	12.7	38.9	2.683	0.015	0.015	0.000	0.390	0.33	
202	4/22/2004	7:49:25 PM		25.162	25.607	24.68	26.035	25.047		46.348	50.361	15.218	31.285	-1.224	-7.07		51.212	0.096	14.643	0.003		186.4	3.10583	48.9	12.6	38.8	2.676	0.014	0.014	0.000	0.372	0.32	
203	4/22/2004	7:50:25 PM		25.167	25.607	24.685	26.015	25.037		46.435	50.415	15.282	31.304	-1.224	-7.102		48.946	0.095	14.643	0.003		187.4	3.1225	48.9	12.0	38.9	2.680	0.014	0.014	0.000	0.368	0.31	
204	4/22/2004	7:51:25 PM		25.161	25.606	24.679	26.033	25.016		46.319	50.31	15.27	31.217	-1.221	-7.163		51.468	0.096	14.643	0.003		188.4	3.13917	48.8	12.6	38.8	2.673	0.014	0.014	0.000	0.373	0.32	
205	4/22/2004	7:52:25 PM		25.139	25.599	24.672	26.026	24.994		46.534	50.567	15.254	31.396	-1.221	-7.064		49.973	0.103	14.643	0.003		189.4	3.15583	49.1	12.2	39.0	2.687	0.015	0.015	0.000	0.398	0.34	
206	4/22/2004	7:53:25 PM		25.146	25.601	24.695	26.034	25.002		46.279	50.299	15.168	31.295	-1.215	-6.894		50.033	0.094	14.643	0.004		190.4	3.1725	48.8	12.3	38.8	2.674	0.014	0.014	0.000	0.364	0.31	
207	4/22/2004	7:54:25 PM		25.141	25.601	24.634	26.044	25.001		45.846	49.893	14.916	31.104	-1.218	-7.142		50.82	0.101	14.643	0.003		191.4	3.18917	48.4	12.5	38.5	2.653	0.015	0.015	0.000	0.395	0.34	
208	4/22/2004	7:55:25 PM		25.129	25.589	24.608	25.977	24.989		46.01	50.154	15.094	31.047	-1.221	-6.842		50.855	0.093	14.643	0.003		192.4	3.20583	48.7	12.5	38.5	2.656	0.014	0.014	0.000	0.364	0.31	
209	4/22/2004	7:56:25 PM		25.108	25.573	24.596	25.976	24.978		46.18	50.279	14.97	31.371	-1.218	-7.053		49.497	0.098	14.643	0.003		193.4	3.2225	48.8	12.1	38.8	2.673	0.015	0.015	0.000	0.381	0.32	
210	4/22/2004	7:57:25 PM		25.102	25.582	24.585	25.939	24.977		46.2	50.229	15.093	31.267	-1.221	-7.085		51.395	0.102	14.643	0.003		194.4	3.23917	48.8	12.6	38.7	2.671	0.015	0.015	0.000	0.397	0.34	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	4/22/2004	7:58:25 PM		25.101	25.586	24.589	25.919	24.981		46.153	50.115	15.024	31.33	-1.224	-7.197		50.89	0.104	14.643	0.003		195.4	3.25583	48.6	12.5	38.7	2.671	0.016	0.016	0.000	0.405	0.34	
212	4/22/2004	7:59:25 PM		25.095	25.57	24.598	25.887	24.95		45.981	50.038	14.891	31.221	-1.218	-7.064		51.573	0.108	14.643	0.003		196.4	3.2725	48.6	12.6	38.6	2.661	0.016	0.016	0.000	0.422	0.36	
213	4/22/2004	8:00:25 PM		25.097	25.577	24.57	25.865	24.952		47.233	51.516	13.873	33.54	-1.221	-6.46		48.25	0.11	14.643	0.003		197.4	3.28917	50.0	11.8	40.4	2.785	0.016	0.017	0.000	0.411	0.35	
214	4/22/2004	8:01:25 PM		25.093	25.588	24.561	25.886	24.938		47.401	51.601	14.067	33.419	-1.221	-6.509		48.938	0.098	14.643	0.003		198.4	3.30583	50.1	12.0	40.4	2.786	0.015	0.015	0.000	0.366	0.31	
215	4/22/2004	8:02:25 PM		25.047	25.552	24.51	25.854	24.912		48.011	51.997	14.132	33.99	-1.224	-7.021		45.709	0.112	14.643	0.003		199.4	3.3225	50.5	11.2	41.0	2.827	0.017	0.017	0.000	0.413	0.35	
216	4/22/2004	8:03:25 PM		25.042	25.547	24.51	25.864	24.887		47.916	51.947	14.168	33.928	-1.221	-7.099		46.65	0.107	14.643	0.003		200.4	3.33917	50.5	11.4	40.9	2.821	0.016	0.016	0.000	0.395	0.34	
217	4/22/2004	8:04:25 PM		25.035	25.545	24.488	25.833	24.89		47.482	51.59	14.557	33.066	-1.221	-6.622		47.246	0.108	14.643	0.003		201.4	3.35583	50.1	11.6	40.3	2.777	0.016	0.016	0.000	0.406	0.35	
218	4/22/2004	8:05:25 PM		25.02	25.545	24.473	25.818	24.855		47.723	51.721	14.224	33.707	-1.221	-7.021		48.066	0.097	14.643	0.003		202.4	3.3725	50.2	11.8	40.7	2.807	0.014	0.015	0.000	0.361	0.31	
219	4/22/2004	8:06:25 PM		24.992	25.517	24.42	25.785	24.832		48.11	52.154	14.361	33.871	-1.224	-7.03		48.264	0.106	14.643	0.003		203.4	3.38917	50.7	11.8	41.0	2.826	0.016	0.016	0.000	0.392	0.33	
220	4/22/2004	8:07:25 PM		24.991	25.516	24.444	25.819	24.836		47.754	51.705	14.641	33.259	-1.221	-7.131		47.858	0.106	14.643	0.003		204.4	3.40583	50.2	11.7	40.5	2.793	0.016	0.016	0.000	0.396	0.34	
221	4/22/2004	8:08:25 PM		24.979	25.509	24.392	25.812	24.824		47.186	51.273	14.135	33.208	-1.221	-7.134		49.263	0.107	14.643	0.003		205.4	3.4225	49.8	12.1	40.2	2.771	0.016	0.016	0.000	0.404	0.34	
222	4/22/2004	8:09:25 PM		24.978	25.508	24.386	25.771	24.818		46.918	50.94	14.129	32.911	-1.224	-6.781		46.203	0.094	14.643	0.003		206.4	3.43917	49.5	11.3	39.9	2.752	0.014	0.014	0.000	0.357	0.30	
223	4/22/2004	8:10:25 PM		24.966	25.521	24.384	25.794	24.801		47.148	51.058	14.105	33.274	-1.218	-6.989		49.034	0.1	14.643	0.003		207.4	3.45583	49.6	12.0	40.2	2.772	0.015	0.015	0.000	0.377	0.32	
224	4/22/2004	8:11:25 PM		24.939	25.484	24.332	25.737	24.779		47.277	51.41	13.917	33.465	-1.221	-6.83		48.358	0.111	14.643	0.003		208.4	3.4725	49.9	11.9	40.4	2.783	0.017	0.017	0.000	0.418	0.36	
225	4/22/2004	8:12:25 PM		24.923	25.483	24.315	25.715	24.773		47.352	51.333	13.972	33.469	-1.221	-7.053		46.959	0.108	14.643	0.003		209.4	3.48917	49.9	11.5	40.4	2.786	0.016	0.016	0.000	0.406	0.35	
226	4/22/2004	8:13:25 PM		24.911	25.481	24.309	25.699	24.761		47.609	51.653	13.642	34.088	-1.224	-6.897		47.486	0.113	14.643	0.003		210.4	3.50583	50.2	11.6	40.8	2.816	0.017	0.017	0.000	0.421	0.36	
227	4/22/2004	8:14:25 PM		24.886	25.471	24.293	25.668	24.751		47.38	51.501	13.785	33.66	-1.221	-6.85		48.465	0.104	14.643	0.003		211.4	3.5225	50.0	11.9	40.5	2.794	0.016	0.016	0.000	0.390	0.33	
228	4/22/2004	8:15:25 PM		24.869	25.454	24.281	25.656	24.719		47.582	51.659	13.746	33.932	-1.218	-7.064		47.286	0.112	14.643	0.003		212.4	3.53917	50.2	11.6	40.8	2.810	0.017	0.017	0.000	0.418	0.36	
229	4/22/2004	8:16:25 PM		24.857	25.447	24.25	25.67	24.727		47.607	51.605	13.896	33.844	-1.221	-6.865		46.402	0.094	14.643	0.003		213.4	3.55583	50.1	11.4	40.7	2.808	0.014	0.014	0.000	0.351	0.30	
230	4/22/2004	8:17:25 PM		24.852	25.446	24.259	25.704	24.802		46.719	50.877	14.883	31.954	-1.221	-6.602		48.264	0.1	14.643	0.003		214.4	3.5725	49.4	11.8	39.3	2.712	0.015	0.015	0.000	0.387	0.33	
231	4/22/2004	8:18:25 PM		24.841	25.456	24.288	25.824	24.871		46.756	50.846	14.603	32.252	-1.221	-6.995		50.315	0.112	14.643	0.003		215.4	3.58917	49.4	12.3	39.5	2.724	0.017	0.017	0.000	0.431	0.37	
232	4/22/2004	8:19:25 PM		24.835	25.45	24.288	25.928	24.96		46.893	50.987	14.534	32.521	-1.218	-7.027		49.009	0.105	14.643	0.003		216.4	3.60583	49.5	12.0	39.7	2.738	0.016	0.016	0.000	0.402	0.34	
233	4/22/2004	8:20:25 PM		24.824	25.434	24.277	25.972	25.065		46.775	50.83	14.455	32.471	-1.221	-7.03		46.936	0.102	14.643	0.003		217.4	3.6225	49.4	11.5	39.6	2.732	0.015	0.016	0.000	0.392	0.33	
234	4/22/2004	8:21:25 PM		24.831	25.441	24.238	26.064	25.156		46.765	50.867	13.968	32.867	-1.224	-6.616		46.835	0.088	14.643	0.003		218.4	3.63917	49.4	11.5	39.8	2.745	0.013	0.013	0.000	0.337	0.29	
235	4/22/2004	8:22:25 PM		24.827	25.462	24.235	26.135	25.207		46.918	51.103	13.786	33.202	-1.224	-6.625		47.376	0.101	14.643	0.003		219.4	3.65583	49.6	11.6	40.1	2.762	0.015	0.015	0.000	0.384	0.33	
236	4/22/2004	8:23:25 PM		24.829	25.474	24.241	26.152	25.174		46.937	50.991	13.675	33.327	-1.221	-6.937		46.381	0.11	14.643	0.003		220.4	3.6725	49.5	11.4	40.1	2.767	0.016	0.017	0.000	0.418	0.36	
237	4/22/2004	8:24:25 PM		24.809	25.464	24.227	26.142	25.119		47.103	51.215	13.707	33.43	-1.221	-6.96		48.921	0.12	14.643	0.003		221.4	3.68917	49.7	12.0	40.3	2.776	0.018	0.018	0.000	0.454	0.39	
238	4/22/2004	8:25:25 PM		24.795	25.465	24.207	26.098	25.08		47.3	51.36	13.748	33.67	-1.221	-6.764		49.145	0.112	14.643	0.003		222.4	3.70583	49.9	12.0	40.5	2.791	0.017	0.017	0.000	0.422	0.36	
239	4/22/2004	8:26:25 PM		24.785	25.46	24.182	26.018	25.02		47.146	51.236	13.767	33.475	-1.221	-6.845		47.518	0.115	14.643	0.003		223.4	3.7225	49.8	11.6	40.3	2.779	0.017	0.018	0.000	0.435	0.37	
240	4/22/2004	8:27:25 PM		24.769	25.464	24.156	25.982	24.974		46.986	51.035	13.726	33.434	-1.221	-6.931		47.042	0.107	14.643	0.003		224.4	3.73917	49.6	11.5	40.2	2.772	0.016	0.016	0.000	0.406	0.35	
241	4/22/2004	8:28:25 PM		24.758	25.454	24.151	25.926	24.914		47.202	51.321	13.778	33.563	-1.224	-6.983		48.173	0.112	14.643	0.003		225.4	3.75583	49.8	11.8	40.4	2.784	0.017	0.017	0.000	0.424	0.36	
242	4/22/2004	8:29:25 PM		24.752	25.452	24.154	25.88	24.877		47.2	51.306	13.819	33.467	-1.218	-6.454		49.581	0.115	14.643	0.003		226.4	3.7725	49.8	12.2	40.3	2.781	0.017	0.018	0.000	0.435	0.37	
243	4/22/2004	8:30:25 PM		24.721	25.431	24.128	25.844	24.836		47.295	51.435	13.87	33.561	-1.221	-6.784		46.884	0.116	14.643	0.003		227.4	3.78917	50.0	11.5	40.4	2.787	0.017	0.018	0.000	0.438	0.37	
244	4/22/2004	8:31:25 PM		24.734	25.449	24.142	25.817	24.835		47.212	51.284	13.895	33.436	-1.221	-6.94		47.956	0.112	14.643	0.003		228.4	3.80583	49.8	11.8	40.3	2.780	0.017	0.017	0.000	0.424	0.36	
245	4/22/2004	8:32:25 PM		24.73	25.455	24.142	25.783	24.82		46.453	50.705	14.579	31.966	-1.221	-6.535		47.762	0.02	14.643	0.003		229.4	3.8225	49.2	11.7	39.2	2.703	0.003	0.003	0.000	0.078	0.07	
246	4/22/2004	8:33:25 PM		24.728	25.443	24.135	25.786	24.833		46.263	50.979	14.266	31.997	-0.703	-5.558		50.254	0.104	14.643	0.003		230.4	3.83917	49.5	12.3	39.1	2.698	0.016	0.016	0.000	0.406	0.35	
247	4/22/2004	8:34:25 PM		24.732	25.427	24.145	25.78	24.808		46.288	50.84	14.103	32.25	-0.882	-5.995		49.712	0.104	14.643	0.004		231.4	3.85583	49.4	12.2	39.3	2.707	0.016	0.016	0.000	0.405	0.34	
248	4/22/2004	8:35:25 PM		24.73	25.435	24.142	25.738	24.781		46.296	51.076	14.125	32.137	-0.76	-5.789		48.771	0.104	14.643	0.003		232.4	3.8725	49.6	12.0	39.2	2.704	0.016	0.016	0.000	0.405	0.34	
249	4/22/2004	8:36:25 PM		24.708	25.423	24.145	25.706	24.728		46.275	50.948	14.137	32.192	-0.703	-5.787		49.841	0.104	14.643	0.003		233.4	3.88917	49.5	12.2	39.2	2.705	0.016	0.016	0.000	0.405	0.34	
250	4/22/2004	8:37:25 PM		24.708	25.418	24.145	25.66	24.723		46.454	51.221	14.207	32.28	-0.694	-5.781		46.877	0.105	14.643	0.003		234.4	3.90583	49.7	11.5	39.4	2.714	0.016	0.016	0.000	0.407	0.35	
251	4/22/2004	8:38:25 PM		24.691	25.411	24.123	25.644	24.696		47.157	51.346	14.083	33.19	-1.221	-6.897		48.216	0.119	14.643	0.003		235.4	3.9225	49.9	11.8	40.2	2.770	0.018	0.018	0.000	0.453	0.39	
252	4/22/2004	8:39:25 PM		24.71	25.401	24.103	25.623	24.681		46.173	50.623	13.847	32.371	-0.937	-4.919		47.488	0.071	14.643	0.003		236.4	3.93917	49.2	11.6	39.3	2.708	0.011	0.011	0.000	0.276	0.24	
253	4/22/2004	8:40:25 PM		24.658	25.383	24.076	25.566	24.644		46.825	50.714	13.716	33.216	-1.224	-6.648		47.142	0.098	14.643	0.003		237.4	3.95583	49.2	11.6	40.0	2.759	0.015	0.015	0.000	0.375	0.32	
254	4/22/2004	8:41:25 PM		24.667	25.382	24.079	25.55	24.612		46.677	50.631	13.73	33.122	-1.221	-6.758		47.553	0.115	14.643	0.003		238.4	3.9725	49.2	11.7	39.9	2.751	0.017	0.018	0.000	0.441	0.38	
255	4/22/2004	8:42:25 PM		24.651	25.371	24.073	25.518	24.606		47.005	50.877	13.672	33.487	-1.218	-6.926		49.624	0.114	14.643	0.004		239.4	3.98917	49.4	12.2	40.2	2.775	0.017	0.017	0.000	0.434	0.37	
256	4/22/2004	8:43:25 PM		24.634	25.359	24.051	25.517	24.59		46.893	50.848	13.629	33.399	-1.221	-6.957		49.117	0.11	14.643	0.003		240.4	4.00583	49.4	12.0	40.1	2.768	0.016	0.017	0.000	0.420	0.36	
257	4/22/2004	8:44:25 PM		24.623	25.353	24.03	25.541	24.578		47.157	51.114	13.747	33.516	-1.221	-6.957		47.974	0.112	14.643	0.003		241.4	4.0225	49.6	11.8	40.3	2.781	0.017	0.017	0.000	0.425	0.36	
258	4/22/2004	8:45:25 PM		24.606	25.351	24.033	25.539	24.551		47.043	50.95	13.644	33.524	-1.221	-6.96		48.74	0.1	14.643	0.003		242.4	4.03917	49.5	11.9	40.3	2.777	0.015	0.015	0.000	0.380	0.32	
259	4/22/2004	8:46:25 PM		24.594	25.329	24.016	25.537	24.594		47.109	51.151	13.668	33.524	-1.218	-6.645		47.931	0.104	14.643	0.003		243.4	4.05583	49.7	11.7	40.3	2.780	0.016	0.016	0.000	0.395	0.34	
260	4/22/2004	8:47:25 PM		24.594	25.349	24.036	25.582	24.679		47.169	51.221	13.685	33.557	-1.224	-6.824		47.557	0.114	14.643	0.003		244.4	4.0725	49.7	11.7	40.4	2.783	0.017	0.017	0.000	0.433	0.37	
261	4/22/2004	8:48:25 PM		24.578	25.338	24.025	25.636	24.759		47.196	51.269	13.767	33.469	-1.221	-6.899		48.923	0.109	14.643	0.003		245.4	4.08917	49.8	12.0	40.3	2.781	0.016	0.017	0.000	0.414	0.35	
262	4/22/2004	8:49:25 PM		24.579	25.334	24.011	25.712	24.834		47.26	51.282	13.875	33.516	-1.218	-6.784		47.33	0.098	14.643	0.003		246.4	4.10583	49.8	11.6	40.4	2.785	0.015	0.015	0.000	0.372	0.32	
263	4/22/2004	8:50:25 PM		24.585	25.34	24.012	25.818	24.906		47.049	51.217	13.872	33.153	-1.218	-6.449		48.536	0.103	14.643	0.003		247.4	4.1225	49.7	11.9	40.1	2.765	0.015	0.016	0.000	0.394	0.34	
264	4/22/2004	8:51:25 PM		24.582	25.347	24.029	25.895	24.957		47.219	51.311	13.868	33.391	-1.218	-6.845		47.684	0.106	14.643	0.003		248.4	4.13917	49.8	11.7	40.3	2.779	0.016	0.016	0.000	0.403	0.34	
265	4/22/2004	8:52:25 PM		24.578	25.333	24.01	25.931	25.028		47.042	51.234	13.254	33.855	-1.221	-6.862		47.979	0.109	14.643	0.003		249.4	4.15583	49.8	11.8	40.4	2.789	0.016	0.017	0.000	0.413	0.35	
266	4/22/2004	8:53:25 PM		24.571	25.341	23.988	25.934	25.011		46.984	51.184	13.219	33.848	-1.221	-6.521		44.101	0.113	14.643	0.003		250.4	4.1725	49.7	10.8	40.4	2.787	0.017	0.017	0.000	0.429	0.37	
267	4/22/2004	8:54:25 PM		24.551	25.336	23.958	25.919	24.937		47.011	51.277	13.204	33.838	-1.218	-6.732		47.707	0.112	14.643	0.003		251.4	4.18917	49.8	11.7	40.4	2.787	0.017	0.017	0.000	0.425	0.36	
268	4/22/2004	8:55:25 PM		24.556	25.346	23.948	25.894	24.877		47.121	51.362	13.226	33.932	-1.218	-6.729		45.939	0.113	14.643	0.004		252.4	4.20583	49.9	11.3	40.5	2.794	0.017	0.017	0.000	0.428	0.36	
269	4/22/2004	8:56:25 PM		24.543	25.343	23.914	25.816	24.848		47.293	51.381	13.21	34.193	-1.221	-6.827		45.782	0.117	14.643	0.003		253.4	4.2225	49.9	11.2	40.7	2.809	0.017	0.018	0.000	0.441	0.38	
270	4/22/2004	8:57:25 PM		24.543	25.343	23.91	25.786	24.804		47.217	51.423	13.197	34.084	-1.221	-6.301		46.158	0.101	14.643	0.003		254.4	4.23917	50.0	11.3	40.7	2.803	0.015	0.016	0.000	0.382	0.33	
271	4/22/2004	8:58:25 PM		24.518	25.338	23.899	25.716	24.748		47.302	51.487	13.351	33.994	-1.224	-6.648		48.834	0.114	14.643	0.003		255.4	4.25583	50.0	12.0	40.6	2.803	0.017	0.018	0.000	0.431	0.37	
272	4/22/2004	8:59:25 PM		24.518	25.338	23.894	25.63	24.713		47.268	51.41	13.396	33.98	-1.224	-6.795		47.088	0.111	14.643	0.003		256.4	4.2725	49.9	11.5	40.6	2.801	0.017	0.017	0.000	0.420	0.36	
273	4/22/2004	9:00:25 PM		24.511	25.336	23.888	25.614	24.677		47.445	51.547	13.581	33.93	-1.218	-6.839		45.866	0.108	14.643	0.003		257.4	4.28917	50.1	11.2	40.7	2.805	0.016	0.017	0.000	0.408	0.35	
274	4/22/2004	9:01:25 PM		24.495	25.325	23.851	25.593	24.65		47.669	51.75	13.61	34.127	-1.221	-6.723		45.934	0.1	14.643	0.003		258.4	4.30583	50.3	11.3	40.9	2.820	0.015	0.015	0.000	0.377	0.32	
275	4/22/2004	9:02:25 PM		24.488	25.329	23.845	25.571	24.614		47.378	51.7	13.706	33.68	-1.157	-6.423		45.252	0.099	14.643	0.003		259.4	4.3225	50.2	11.1	40.5	2.794	0.015	0.015	0.000	0.376	0.32	
276	4/22/2004	9:03:25 PM		24.461	25.311	23.842	25.544	24.586		47.401	51.563	13.774	33.701	-1.221	-6.79		45.44	0.114	14.643	0.003		260.4	4.33917	50.1	11.1	40.6	2.796	0.017	0.018	0.000	0.433	0.37	
277	4/22/2004	9:04:25 PM		24.47	25.315	23.847	25.503	24.566		47.578	51.705	13.69	33.988	-1.221	-6.833		46.535	0.107	14.643	0.003		261.4	4.35583	50.2	11.4	40.8	2.812	0.016	0.016	0.000	0.404	0.34	
278	4/22/2004	9:05:25 PM		24.464	25.314	23.835	25.466	24.534		47.074	51.342	13.307	33.809	-1.154	-6.495		45.127	0.102	14.643	0.003		262.4	4.3725	49.9	11.1	40.4	2.788	0.015	0.016	0.000	0.389	0.33	
279	4/22/2004	9:06:25 PM		24.431	25.286	23.798	25.414	24.511		46.966	51.099	13.298	33.733	-1.221	-6.686		45.232	0.109	14.643	0.003		263.4	4.38917	49.6	11.1	40.3	2.782	0.016	0.017	0.000	0.417	0.35	
280	4/22/2004	9:07:25 PM		24.423	25.283	23.77	25.366	24.469		46.993	51.083	13.284	33.799	-1.221	-6.712		45.559	0.111	14.643	0.003		264.4	4.40583	49.6	11.2	40.4	2.785	0.017	0.017	0.000	0.424	0.36	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	4/22/2004	9:08:25 PM		24.411	25.281	23.753	25.364	24.462		47.136	51.3	13.309	33.854	-1.221	-6.686		46.731	0.104	14.643	0.003		265.4	4.4225	49.8	11.5	40.5	2.792	0.016	0.016	0.000	0.397	0.34	
282	4/22/2004	9:09:25 PM		24.401	25.276	23.752	25.353	24.446		47.105	51.304	13.302	33.842	-1.154	-6.599		45.494	0.114	14.643	0.003		266.4	4.43917	49.8	11.1	40.5	2.791	0.017	0.018	0.000	0.435	0.37	
283	4/22/2004	9:10:25 PM		24.388	25.258	23.749	25.325	24.418		47.181	51.363	13.161	34.078	-1.218	-6.642		45.841	0.113	14.643	0.004		267.4	4.45583	49.9	11.2	40.6	2.801	0.017	0.017	0.000	0.430	0.37	
284	4/22/2004	9:11:25 PM		24.381	25.241	23.732	25.298	24.386		47.096	51.42	13.256	33.805	-1.038	-6.122		43.755	0.109	14.643	0.003		268.4	4.4725	49.9	10.7	40.5	2.789	0.016	0.017	0.000	0.416	0.35	
285	4/22/2004	9:12:25 PM		24.37	25.24	23.736	25.292	24.39		47.368	51.702	13.239	34.179	-1.099	-6.365		46.214	0.113	14.643	0.003		269.4	4.48917	50.2	11.3	40.8	2.811	0.017	0.017	0.000	0.428	0.36	
286	4/22/2004	9:13:25 PM		24.358	25.233	23.714	25.316	24.434		47.239	51.421	13.362	33.955	-1.218	-6.674		47.092	0.112	14.643	0.003		270.4	4.50583	49.9	11.5	40.6	2.799	0.017	0.017	0.000	0.427	0.36	
287	4/22/2004	9:14:25 PM		24.357	25.213	23.704	25.41	24.488		47.752	51.845	13.452	34.306	-1.221	-6.712		46.777	0.111	14.643	0.003		271.4	4.5225	50.4	11.5	41.0	2.829	0.017	0.017	0.000	0.418	0.36	
288	4/22/2004	9:15:25 PM		24.352	25.202	23.703	25.45	24.572		47.476	51.746	13.544	33.996	-1.154	-6.214		44.355	0.104	14.643	0.003		272.4	4.53917	50.3	10.9	40.7	2.809	0.016	0.016	0.000	0.395	0.34	
289	4/22/2004	9:16:25 PM		24.342	25.213	23.719	25.525	24.658		47.437	51.534	13.57	33.924	-1.218	-6.431		45.584	0.11	14.643	0.003		273.4	4.55583	50.1	11.2	40.7	2.805	0.016	0.017	0.000	0.418	0.36	
290	4/22/2004	9:17:25 PM		24.338	25.193	23.714	25.571	24.719		47.387	51.539	13.586	33.834	-1.218	-6.631		45.941	0.11	14.643	0.003		274.4	4.5725	50.1	11.3	40.6	2.800	0.016	0.017	0.000	0.419	0.36	
291	4/22/2004	9:18:25 PM		24.34	25.195	23.706	25.623	24.791		47.088	51.203	13.187	33.953	-1.218	-6.735		45.905	0.108	14.643	0.003		275.4	4.58917	49.7	11.2	40.5	2.794	0.016	0.017	0.000	0.412	0.35	
292	4/22/2004	9:19:25 PM		24.338	25.193	23.684	25.706	24.843		47.202	51.246	13.12	34.123	-1.221	-6.732		46.35	0.11	14.643	0.003		276.4	4.60583	49.8	11.4	40.7	2.804	0.016	0.017	0.000	0.419	0.36	
293	4/22/2004	9:20:25 PM		24.331	25.191	23.697	25.749	24.897		46.373	50.473	14.651	31.747	-1.221	-6.136		47.977	0.122	14.643	0.003		277.4	4.6225	49.0	11.8	39.1	2.693	0.018	0.019	0.000	0.483	0.41	
294	4/22/2004	9:21:25 PM		24.319	25.189	23.71	25.757	24.91		46.59	50.697	14.479	32.153	-1.221	-6.388		48.663	0.109	14.643	0.003		278.4	4.63917	49.2	11.9	39.4	2.715	0.016	0.017	0.000	0.428	0.36	
295	4/22/2004	9:22:25 PM		24.306	25.196	23.732	25.739	24.852		46.779	50.85	14.376	32.492	-1.221	-6.579		49.507	0.114	14.643	0.003		279.4	4.65583	49.4	12.1	39.6	2.733	0.017	0.018	0.000	0.444	0.38	
296	4/22/2004	9:23:25 PM		24.283	25.188	23.739	25.696	24.789		46.748	50.79	14.012	32.808	-1.221	-6.688		49.789	0.11	14.643	0.003		280.4	4.6725	49.3	12.2	39.8	2.743	0.016	0.017	0.000	0.427	0.36	
297	4/22/2004	9:24:25 PM		24.269	25.184	23.751	25.652	24.71		46.827	50.95	14.108	32.765	-1.221	-6.66		48.446	0.113	14.643	0.003		281.4	4.68917	49.5	11.9	39.8	2.744	0.017	0.017	0.000	0.439	0.37	
298	4/22/2004	9:25:25 PM		24.263	25.194	23.765	25.592	24.644		46.707	50.88	13.925	32.8	-1.218	-6.489		47.023	0.103	14.643	0.003		282.4	4.70583	49.4	11.5	39.8	2.741	0.015	0.016	0.000	0.400	0.34	
299	4/22/2004	9:26:25 PM		24.258	25.189	23.76	25.547	24.624		46.819	51.11	13.933	32.906	-1.2	-6.157		48.25	0.103	14.643	0.003		283.4	4.7225	49.6	11.8	39.9	2.748	0.015	0.016	0.000	0.399	0.34	
300	4/22/2004	9:27:25 PM		24.228	25.184	23.745	25.471	24.574		46.999	51.321	13.931	33.124	-1.14	-6.076		47.597	0.105	14.643	0.003		284.4	4.73917	49.8	11.7	40.1	2.762	0.016	0.016	0.000	0.405	0.34	
301	4/22/2004	9:28:25 PM		24.207	25.157	23.789	25.405	24.543		47.036	51.545	13.984	33.03	-0.818	-5.535		48.602	0.106	14.643	0.003		285.4	4.75583	50.1	11.9	40.0	2.760	0.016	0.016	0.000	0.409	0.35	
302	4/22/2004	9:29:25 PM		24.221	25.151	23.848	25.344	24.521		46.487	50.948	13.749	32.75	-0.885	-5.815		49.489	0.111	14.643	0.003		286.4	4.7725	49.5	12.1	39.6	2.732	0.017	0.017	0.000	0.432	0.37	
303	4/22/2004	9:30:25 PM		24.239	25.139	23.896	25.261	24.504		46.512	51.095	13.777	32.72	-0.815	-5.625		46.794	0.112	14.643	0.003		287.4	4.78917	49.6	11.5	39.6	2.731	0.017	0.017	0.000	0.435	0.37	
304	4/22/2004	9:31:25 PM		24.279	25.154	23.981	25.246	24.454		46.742	51.304	13.798	32.878	-0.772	-5.651		48.538	0.111	14.643	0.003		288.4	4.80583	49.8	11.9	39.8	2.745	0.017	0.017	0.000	0.428	0.36	
305	4/22/2004	9:32:25 PM		24.272	25.143	24.035	25.23	24.388		46.991	50.77	13.629	33.397	-1.218	-6.665		44.345	0.098	14.643	0.003		289.4	4.8225	49.3	10.9	40.2	2.771	0.015	0.015	0.000	0.374	0.32	
306	4/22/2004	9:32:32 PM		24.272	25.132	24.029	25.209	24.377		46.825	50.819	13.695	33.227	-1.221	-6.18		48.721	0.096	14.643	0.003		289.5	4.82444	49.3	11.9	40.0	2.760	0.014	0.015	0.000	0.368	0.31	
307	4/22/2004	9:33:32 PM		24.295	25.125	24.082	25.187	24.36		47.086	51.373	13.684	33.391	-1.154	-5.922		49.149	0.123	14.643	0.003		290.5	4.84111	49.9	12.0	40.2	2.774	0.018	0.019	0.000	0.468	0.40	
308	4/22/2004	9:34:32 PM		24.329	25.144	24.152	25.202	24.355		47.356	51.483	13.699	33.655	-1.218	-6.275		46.024	0.117	14.643	0.003		291.5	4.85778	50.0	11.3	40.5	2.793	0.017	0.018	0.000	0.441	0.38	
309	4/22/2004	9:35:32 PM		24.332	25.122	24.18	25.134	24.318		47.42	51.466	13.729	33.719	-1.221	-6.527		47.922	0.122	14.643	0.003		292.5	4.87444	50.0	11.7	40.6	2.797	0.018	0.019	0.000	0.459	0.39	
310	4/22/2004	9:36:32 PM		24.349	25.094	24.212	25.117	24.31		47.567	51.597	13.603	33.982	-1.218	-6.599		48.183	0.114	14.643	0.003		293.5	4.89111	50.1	11.8	40.8	2.811	0.017	0.017	0.000	0.426	0.36	
311	4/22/2004	9:37:32 PM		24.378	25.097	24.265	25.12	24.358		47.553	51.64	13.693	33.84	-1.221	-6.564		49.539	0.116	14.643	0.003		294.5	4.90778	50.2	12.1	40.7	2.806	0.017	0.018	0.000	0.434	0.37	
312	4/22/2004	9:38:32 PM		24.408	25.097	24.315	25.19	24.438		47.582	51.675	13.523	34.091	-1.218	-6.582		47.968	0.121	14.643	0.003		295.5	4.92444	50.2	11.8	40.8	2.816	0.018	0.018	0.000	0.450	0.38	
313	4/22/2004	9:39:32 PM		24.428	25.087	24.351	25.27	24.503		47.499	51.715	13.542	33.959	-1.096	-6.226		49.332	0.12	14.643	0.003		296.5	4.94111	50.2	12.1	40.7	2.808	0.018	0.018	0.000	0.447	0.38	
314	4/22/2004	9:40:32 PM		24.45	25.08	24.403	25.343	24.581		47.036	51.313	13.934	33.073	-1.096	-6.243		50.115	0.111	14.643	0.003		297.5	4.95778	49.8	12.3	40.1	2.762	0.017	0.017	0.000	0.420	0.36	
315	4/22/2004	9:41:32 PM		24.46	25.065	24.433	25.383	24.631		47.071	51.238	14.016	33.007	-1.154	-6.385		48.237	0.12	14.643	0.003		298.5	4.97444	49.8	11.8	40.0	2.761	0.018	0.018	0.000	0.454	0.39	
316	4/22/2004	9:42:32 PM		24.491	25.066	24.484	25.454	24.691		46.964	51.164	13.845	33.12	-1.099	-6.264		49.072	0.109	14.643	0.004		299.5	4.99111	49.7	12.0	40.0	2.761	0.016	0.016	0.000	0.412	0.35	
317	4/22/2004	9:43:32 PM		24.522	25.077	24.501	25.505	24.758		46.603	50.867	13.706	32.874	-1.041	-6.058		50.853	0.109	14.643	0.003		300.5	5.00778	49.4	12.5	39.7	2.740	0.016	0.016	0.000	0.415	0.35	
318	4/22/2004	9:44:32 PM		24.549	25.073	24.527	25.577	24.799		47.088	51.251	13.88	33.151	-1.154	-6.252		48.99	0.135	14.643	0.003		301.5	5.02444	49.8	12.0	40.1	2.766	0.020	0.020	0.001	0.508	0.43	
319	4/22/2004	9:45:32 PM		24.554	25.074	24.548	25.612	24.795		46.885	51.047	13.78	33.11	-1.154	-6.457		48.196	0.121	14.643	0.003		302.5	5.04111	49.6	11.8	40.0	2.758	0.018	0.018	0.000	0.457	0.39	
320	4/22/2004	9:46:32 PM		24.585	25.065	24.558	25.583	24.77		47.127	51.267	13.709	33.428	-1.221	-6.532		51.612	0.117	14.643	0.003		303.5	5.05778	49.8	12.6	40.3	2.777	0.017	0.018	0.000	0.439	0.37	
321	4/22/2004	9:47:32 PM		24.6	25.08	24.588	25.528	24.71		47.061	51.12	13.71	33.411	-1.221	-6.414		47.709	0.126	14.643	0.003		304.5	5.07444	49.6	11.7	40.2	2.774	0.019	0.019	0.000	0.472	0.40	
322	4/22/2004	9:48:32 PM		24.64	25.09	24.634	25.498	24.67		46.916	51.095	13.69	33.186	-1.14	-6.287		46.533	0.126	14.643	0.003		305.5	5.09111	49.6	11.4	40.1	2.761	0.019	0.019	0.000	0.474	0.40	
323	4/22/2004	9:49:32 PM		24.65	25.094	24.638	25.442	24.615		47.055	51.302	13.698	33.333	-1.035	-6.209		48.535	0.112	14.643	0.003		306.5	5.10778	49.8	11.9	40.2	2.771	0.017	0.017	0.000	0.420	0.36	
324	4/22/2004	9:50:32 PM		24.668	25.088	24.662	25.396	24.563		47.065	51.236	13.552	33.499	-1.154	-6.463		49.658	0.123	14.643	0.003		307.5	5.12444	49.8	12.2	40.3	2.777	0.018	0.019	0.000	0.460	0.39	
325	4/22/2004	9:51:32 PM		24.688	25.097	24.681	25.355	24.553		46.85	51.029	13.67	33.163	-1.218	-6.449		46.504	0.107	14.643	0.003		308.5	5.14111	49.6	11.4	40.0	2.758	0.016	0.016	0.000	0.402	0.34	
326	4/22/2004	9:52:32 PM		24.704	25.098	24.702	25.346	24.509		46.872	51.199	13.533	33.302	-1.007	-5.804		48.73	0.111	14.643	0.003		309.5	5.15778	49.7	11.9	40.1	2.764	0.017	0.017	0.000	0.416	0.35	
327	4/22/2004	9:53:32 PM		24.7	25.074	24.698	25.287	24.455		47.022	51.373	13.496	33.475	-1.099	-6.24		47.244	0.125	14.643	0.003		310.5	5.17444	49.9	11.6	40.2	2.775	0.019	0.019	0.000	0.467	0.40	
328	4/22/2004	9:54:32 PM		24.719	25.078	24.697	25.266	24.444		46.887	51.11	13.436	33.45	-1.154	-6.48		49.679	0.119	14.643	0.004		311.5	5.19111	49.6	12.2	40.2	2.769	0.018	0.018	0.000	0.445	0.38	
329	4/22/2004	9:55:32 PM		24.723	25.077	24.706	25.265	24.433		46.922	51.037	13.417	33.461	-1.189	-6.518		48.341	0.12	14.643	0.003		312.5	5.20778	49.6	11.8	40.2	2.771	0.018	0.018	0.000	0.449	0.38	
330	4/22/2004	9:56:32 PM		24.721	25.06	24.694	25.162	24.391		46.667	50.834	13.393	33.212	-1.157	-6.318		51.157	0.134	14.643	0.003		313.5	5.22444	49.4	12.5	39.9	2.754	0.020	0.020	0.001	0.505	0.43	
331	4/22/2004	9:57:32 PM		24.732	25.066	24.715	25.164	24.287		46.908	51.122	13.436	33.452	-1.157	-6.324		47.993	0.127	14.643	0.003		314.5	5.24111	49.6	11.8	40.2	2.770	0.019	0.019	0.000	0.475	0.40	
332	4/22/2004	9:58:32 PM		24.739	25.038	24.747	25.151	24.209		46.933	51.023	13.308	33.623	-1.151	-6.362		50.292	0.126	14.643	0.003		315.5	5.25778	49.6	12.3	40.3	2.777	0.019	0.019	0.000	0.470	0.40	
333	4/22/2004	9:59:32 PM		24.742	25.011	24.745	25.093	24.221		46.848	50.964	13.348	33.391	-1.154	-6.396		46.913	0.121	14.643	0.003		316.5	5.27444	49.5	11.5	40.1	2.766	0.018	0.018	0.000	0.453	0.39	
334	4/22/2004	10:00:32 PM		24.759	24.979	24.758	25.066	24.244		47.173	51.524	13.358	33.772	-1.111	-6.321		47.586	0.113	14.643	0.003		317.5	5.29111	50.1	11.7	40.5	2.790	0.017	0.017	0.000	0.419	0.36	
335	4/22/2004	10:01:32 PM		24.737	24.936	24.745	25.064	24.317		46.796	51.116	13.312	33.463	-1.099	-6.344		49.603	0.13	14.643	0.003		318.5	5.30778	49.6	12.2	40.1	2.767	0.019	0.020	0.000	0.486	0.41	
336	4/22/2004	10:02:32 PM		24.755	24.909	24.769	25.132	24.385		46.893	51.081	13.409	33.487	-1.154	-6.142		49.789	0.135	14.643	0.003		319.5	5.32444	49.6	12.2	40.2	2.771	0.020	0.020	0.001	0.504	0.43	
337	4/22/2004	10:03:32 PM		24.763	24.877	24.767	25.205	24.448		46.715	51.132	13.389	33.237	-0.94	-5.787		48.94	0.125	14.643	0.003		320.5	5.34111	49.7	12.0	40.0	2.756	0.019	0.019	0.000	0.469	0.40	
338	4/22/2004	10:04:32 PM		24.776	24.86	24.8	25.269	24.547		47.256	51.51	13.398	33.797	-1.154	-6.243		49.435	0.121	14.643	0.003		321.5	5.35778	50.0	12.1	40.5	2.794	0.018	0.018	0.000	0.448	0.38	
339	4/22/2004	10:05:32 PM		24.779	24.843	24.803	25.326	24.609		46.877	51.012	13.414	33.391	-1.221	-6.402		49.879	0.124	14.643	0.003		322.5	5.37444	49.5	12.2	40.1	2.767	0.018	0.019	0.000	0.463	0.39	
340	4/22/2004	10:06:32 PM		24.808	24.847	24.837	25.381	24.693		47.061	51.234	13.451	33.575	-1.096	-6.217		49.447	0.122	14.643	0.003		323.5	5.39111	49.8	12.1	40.3	2.780	0.018	0.018	0.000	0.453	0.39	
341	4/22/2004	10:07:32 PM		24.861	24.815	24.79	25.413	24.786		47.258	50.793	13.197	34.084	-1.221	-3.815		50.507	0.047	14.643	0.003		324.5	5.40778	49.3	12.4	40.7	2.804	0.007	0.007	0.000	0.173	0.15	
342	4/22/2004	10:08:32 PM		24.811	24.84	24.814	25.473	24.851		47.679	50.94	13.158	34.561	-1.218	-5.246		48.25	0.138	14.643	0.003		325.5	5.42444	49.5	11.8	41.1	2.835	0.021	0.021	0.001	0.503	0.43	
343	4/22/2004	10:09:32 PM		24.839	24.832	24.812	25.516	24.859		47.797	50.906	13.187	34.692	-1.221	-5.85		48.072	0.135	14.643	0.003		326.5	5.44111	49.4	11.8	41.2	2.844	0.020	0.020	0.000	0.491	0.42	
344	4/22/2004	10:10:32 PM		24.868	24.847	24.817	25.511	24.814		48.111	51.149	13.176	35.004	-1.224	-6.31		49.85	0.132	14.643	0.003		327.5	5.45778	49.7	12.2	41.6	2.865	0.020	0.020	0.000	0.476	0.41	
345	4/22/2004	10:11:32 PM		24.888	24.841	24.801	25.48	24.708		48.231	51.209	13.197	35.09	-1.224	-6.414		50.242	0.128	14.643	0.003		328.5	5.47444	49.7	12.3	41.7	2.872	0.019	0.019	0.000	0.461	0.39	
346	4/22/2004	10:12:32 PM		24.9	24.849	24.824	25.473	24.635		47.269	50.297	14.062	33.202	-1.221	-6.42		50.751	0.122	14.643	0.003		329.5	5.49111	48.8	12.4	40.2	2.774	0.018	0.018	0.000	0.454	0.39	
347	4/22/2004	10:13:32 PM		24.903	24.837	24.827	25.395	24.578		47.171	50.2	13.859	33.364	-1.221	-6.428		50.916	0.124	14.643	0.003		330.5	5.50778	48.7	12.5	40.3	2.776	0.018	0.019	0.000	0.461	0.39	
348	4/22/2004	10:14:32 PM		24.916	24.819	24.834	25.288	24.536		47.059	50.223	13.938	33.144	-1.221	-6.428		52.716	0.121	14.643	0.003		331.5	5.52444	48.8	12.9	40.1	2.765	0.018	0.018	0.000	0.452	0.38	
349	4/22/2004	10:15:32 PM		24.944	24.843	24.873	25.316	24.489		47.227	50.334	13.841	33.46	-1.221	-6.431		50.909	0.121	14.643	0.003		332.5	5.54111	48.9	12.5	40.3	2.782	0.018	0.018	0.000	0.449	0.38	
350	4/22/2004	10:16:32 PM		24.95	24.829	24.884	25.272	24.455		47.206	50.357	13.929	33.292	-1.218	-6.287		52.832	0.121	14.643	0.003		333.5	5.55778	48.9	12.9	40.2	2.775	0.018	0.018	0.000	0.450	0.38	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	4/22/2004	10:17:32 PM		24.958	24.821	24.856	25.24	24.363		46.762	50.1	13.611	33.177	-1.215	-6.278		48.734	0.123	14.643	0.004		334.5	5.57444	48.6	11.9	40.0	2.756	0.018	0.018	0.000	0.461	0.39	
352	4/22/2004	10:18:32 PM		24.965	24.803	24.859	25.197	24.365		46.711	50.023	13.683	33.068	-1.221	-6.284		51.379	0.124	14.643	0.003		335.5	5.59111	48.6	12.6	39.9	2.750	0.018	0.019	0.000	0.465	0.40	
353	4/22/2004	10:19:32 PM		24.966	24.794	24.854	25.167	24.32		46.738	50.03	13.593	33.194	-1.221	-6.292		53.306	0.123	14.643	0.003		336.5	5.60778	48.6	13.1	40.0	2.756	0.018	0.018	0.000	0.461	0.39	
354	4/22/2004	10:20:32 PM		24.961	24.759	24.849	25.127	24.3		46.659	50.009	13.638	33.083	-1.224	-6.266		49.66	0.121	14.643	0.003		337.5	5.62444	48.5	12.2	39.9	2.749	0.018	0.018	0.000	0.454	0.39	
355	4/22/2004	10:21:32 PM		24.956	24.735	24.84	25.083	24.206		46.675	49.903	13.647	33.015	-1.221	-6.255		50.88	0.125	14.643	0.003		338.5	5.64111	48.4	12.5	39.8	2.747	0.019	0.019	0.000	0.470	0.40	
356	4/22/2004	10:22:32 PM		24.973	24.731	24.871	25.084	24.207		46.495	49.843	13.695	32.8	-1.218	-6.252		51.904	0.12	14.643	0.004		339.5	5.65778	48.4	12.7	39.6	2.734	0.018	0.018	0.000	0.453	0.39	
357	4/22/2004	10:23:32 PM		24.964	24.697	24.858	25.045	24.199		46.735	50.216	13.62	33.097	-1.224	-6.275		49.115	0.125	14.643	0.003		340.5	5.67444	48.7	12.0	39.9	2.752	0.019	0.019	0.000	0.469	0.40	
358	4/22/2004	10:24:32 PM		24.987	24.705	24.886	25.093	24.322		46.843	50.279	13.697	33.175	-1.218	-6.261		52.918	0.121	14.643	0.003		341.5	5.69111	48.8	13.0	40.0	2.758	0.018	0.018	0.000	0.452	0.38	
359	4/22/2004	10:25:32 PM		24.98	24.683	24.878	25.121	24.395		46.709	50.15	13.609	33.093	-1.224	-6.264		50.598	0.122	14.643	0.003		342.5	5.70778	48.7	12.4	39.9	2.751	0.018	0.018	0.000	0.457	0.39	
360	4/22/2004	10:26:32 PM		24.979	24.672	24.898	25.241	24.444		46.655	50.202	13.655	33.048	-1.218	-6.246		49.076	0.123	14.643	0.003		343.5	5.72444	48.7	12.0	39.9	2.748	0.018	0.018	0.000	0.461	0.39	
361	4/22/2004	10:27:32 PM		24.964	24.637	24.883	25.231	24.469		46.777	50.301	13.785	33.003	-1.218	-6.235		51.669	0.126	14.643	0.003		344.5	5.74111	48.8	12.7	39.9	2.750	0.019	0.019	0.000	0.472	0.40	
362	4/22/2004	10:28:32 PM		24.976	24.629	24.875	25.243	24.586		46.395	50.336	13.658	32.664	-1.224	-5.396		51.264	0.111	14.643	0.003		345.5	5.75778	48.9	12.6	39.5	2.725	0.017	0.017	0.000	0.420	0.36	
363	4/22/2004	10:29:32 PM		24.977	24.63	24.885	25.294	24.682		46.476	50.332	13.529	32.898	-1.218	-5.596		52.013	0.123	14.643	0.003		346.5	5.77444	48.9	12.7	39.7	2.736	0.018	0.018	0.000	0.464	0.39	
364	4/22/2004	10:30:32 PM		24.987	24.63	24.88	25.389	24.732		46.696	50.535	13.5	33.107	-1.221	-5.466		50.371	0.109	14.643	0.003		347.5	5.79111	49.1	12.3	39.9	2.751	0.016	0.016	0.000	0.409	0.35	
365	4/22/2004	10:31:32 PM		24.997	24.64	24.88	25.429	24.672		46.675	50.61	13.562	33.062	-1.221	-5.492		49.948	0.126	14.643	0.003		348.5	5.80778	49.1	12.2	39.9	2.749	0.019	0.019	0.000	0.473	0.40	
366	4/22/2004	10:32:32 PM		25.009	24.657	24.908	25.486	24.759		46.3	50.258	13.544	32.754	-1.218	-5.469		49.136	0.121	14.643	0.003		349.5	5.82444	48.8	12.0	39.5	2.725	0.018	0.018	0.000	0.458	0.39	
367	4/22/2004	10:33:32 PM		24.998	24.661	24.887	25.45	24.778		46.298	50.237	13.486	32.783	-1.227	-5.428		49.908	0.124	14.643	0.003		350.5	5.84111	48.8	12.2	39.5	2.726	0.018	0.019	0.000	0.469	0.40	
368	4/22/2004	10:34:32 PM		25.03	24.683	24.929	25.447	24.64		46.201	50.185	13.448	32.693	-1.221	-5.431		48.462	0.121	14.643	0.003		351.5	5.85778	48.7	11.9	39.4	2.720	0.018	0.018	0.000	0.458	0.39	
369	4/22/2004	10:35:32 PM		25.036	24.704	24.935	25.418	24.591		46.426	50.405	13.513	32.839	-1.221	-5.393		49.658	0.124	14.643	0.003		352.5	5.87444	48.9	12.2	39.6	2.733	0.018	0.019	0.000	0.467	0.40	
370	4/22/2004	10:36:32 PM		25.032	24.695	24.935	25.364	24.492		46.294	50.289	13.514	32.746	-1.218	-5.399		49.616	0.124	14.643	0.003		353.5	5.89111	48.8	12.2	39.5	2.725	0.018	0.019	0.000	0.469	0.40	
371	4/22/2004	10:37:32 PM		25.054	24.712	24.948	25.346	24.449		46.211	50.278	13.535	32.601	-1.221	-5.341		51.581	0.122	14.643	0.003		354.5	5.90778	48.8	12.6	39.4	2.717	0.018	0.018	0.000	0.462	0.39	
372	4/22/2004	10:38:32 PM		25.054	24.697	24.948	25.266	24.404		46.215	50.279	13.533	32.555	-1.221	-5.35		49.351	0.122	14.643	0.003		355.5	5.92444	48.8	12.1	39.4	2.715	0.018	0.018	0.000	0.463	0.39	
373	4/22/2004	10:39:32 PM		25.053	24.696	24.942	25.21	24.383		46.238	50.285	13.463	32.703	-1.2	-5.341		50.375	0.123	14.643	0.003		356.5	5.94111	48.8	12.3	39.5	2.721	0.018	0.018	0.000	0.465	0.40	
374	4/22/2004	10:40:32 PM		25.053	24.696	24.952	25.185	24.363		46.379	50.504	13.533	32.775	-1.157	-5.338		51.137	0.124	14.643	0.003		357.5	5.95778	49.0	12.5	39.6	2.729	0.018	0.019	0.000	0.468	0.40	
375	4/22/2004	10:41:32 PM		25.062	24.686	24.976	25.174	24.322		46.373	50.484	13.583	32.672	-1.151	-5.341		52.809	0.121	14.643	0.003		358.5	5.97444	49.0	12.9	39.5	2.725	0.018	0.018	0.000	0.457	0.39	
376	4/22/2004	10:42:32 PM		25.047	24.665	24.95	25.138	24.261		46.028	50.148	13.643	32.27	-1.154	-5.336		49.103	0.124	14.643	0.003		359.5	5.99111	48.7	12.0	39.1	2.699	0.018	0.019	0.000	0.473	0.40	
377	4/22/2004	10:43:32 PM		25.05	24.633	24.938	25.071	24.234		46.213	50.353	13.523	32.633	-1.131	-5.341		47.874	0.122	14.643	0.003		360.5	6.00778	48.9	11.7	39.4	2.718	0.018	0.018	0.000	0.462	0.39	
378	4/22/2004	10:44:32 PM		25.065	24.638	24.953	25.066	24.194		46.395	50.533	13.54	32.707	-1.128	-5.321		49.528	0.122	14.643	0.003		361.5	6.02444	49.1	12.1	39.6	2.727	0.018	0.018	0.000	0.460	0.39	
379	4/22/2004	10:45:32 PM		25.047	24.615	24.951	25.013	24.171		46.229	50.457	13.486	32.679	-1.099	-5.336		48.337	0.123	14.643	0.003		362.5	6.04111	49.0	11.8	39.5	2.720	0.018	0.018	0.000	0.465	0.40	
380	4/22/2004	10:46:32 PM		25.05	24.598	24.954	24.992	24.14		46.283	50.467	13.572	32.656	-1.05	-5.338		49.24	0.123	14.643	0.003		363.5	6.05778	49.0	12.1	39.5	2.721	0.018	0.018	0.000	0.465	0.40	
381	4/22/2004	10:47:32 PM		25.064	24.582	24.968	24.975	24.109		46.163	50.351	13.543	32.508	-1.056	-5.327		50.167	0.121	14.643	0.003		364.5	6.07444	48.9	12.3	39.3	2.712	0.018	0.018	0.000	0.459	0.39	
382	4/22/2004	10:48:32 PM		25.057	24.565	24.971	24.959	24.097		46.064	50.33	13.495	32.471	-0.995	-5.338		51.798	0.122	14.643	0.003		365.5	6.09111	48.9	12.7	39.3	2.707	0.018	0.018	0.000	0.464	0.39	
383	4/22/2004	10:49:32 PM		25.055	24.528	24.964	24.977	24.17		45.945	50.26	13.476	32.356	-0.937	-5.344		50.469	0.121	14.643	0.003		366.5	6.10778	48.8	12.4	39.2	2.699	0.018	0.018	0.000	0.461	0.39	
384	4/22/2004	10:50:32 PM		25.06	24.532	24.969	25.021	24.29		46.128	50.486	13.557	32.455	-0.937	-5.376		48.463	0.122	14.643	0.003		367.5	6.12444	49.0	11.9	39.3	2.709	0.018	0.018	0.000	0.463	0.39	
385	4/22/2004	10:51:32 PM		25.075	24.527	24.989	25.111	24.325		46.055	50.343	13.54	32.369	-0.879	-5.388		50.263	0.121	14.643	0.003		368.5	6.14111	48.9	12.3	39.2	2.704	0.018	0.018	0.000	0.460	0.39	
386	4/22/2004	10:52:32 PM		25.063	24.511	24.977	25.15	24.458		45.966	50.395	13.5	32.297	-0.885	-5.425		48.016	0.121	14.643	0.003		369.5	6.15778	48.9	11.8	39.1	2.698	0.018	0.018	0.000	0.461	0.39	
387	4/22/2004	10:53:32 PM		25.075	24.527	24.994	25.236	24.55		46.024	50.413	13.506	32.422	-0.85	-5.451		52.344	0.126	14.643	0.003		370.5	6.17444	48.9	12.8	39.2	2.704	0.019	0.019	0.000	0.479	0.41	
388	4/22/2004	10:54:32 PM		25.081	24.534	25	25.283	24.616		46.124	50.558	13.464	32.531	-0.818	-5.469		50.436	0.121	14.643	0.003		371.5	6.19111	49.1	12.4	39.3	2.711	0.018	0.018	0.000	0.459	0.39	
389	4/22/2004	10:55:32 PM		25.068	24.541	25.002	25.325	24.673		46.248	50.712	13.56	32.607	-0.815	-5.46		49.701	0.125	14.643	0.003		372.5	6.20778	49.2	12.2	39.4	2.718	0.019	0.019	0.000	0.473	0.40	
390	4/22/2004	10:56:32 PM		25.085	24.562	25.003	25.387	24.715		46.008	50.442	13.44	32.445	-0.818	-5.463		49.17	0.123	14.643	0.003		373.5	6.22444	49.0	12.0	39.2	2.705	0.018	0.018	0.000	0.467	0.40	
391	4/22/2004	10:57:32 PM		25.087	24.585	24.996	25.424	24.707		45.742	50.227	13.496	32.139	-0.708	-5.24		50.673	0.127	14.643	0.003		374.5	6.24111	48.8	12.4	38.9	2.685	0.019	0.019	0.000	0.486	0.41	
392	4/22/2004	10:58:32 PM		25.088	24.591	25.007	25.5	24.723		45.808	50.256	13.417	32.305	-0.769	-5.388		48.177	0.127	14.643	0.003		375.5	6.25778	48.8	11.8	39.1	2.693	0.019	0.019	0.000	0.485	0.41	
393	4/22/2004	10:59:32 PM		25.09	24.612	25.003	25.497	24.635		45.97	50.43	13.489	32.395	-0.818	-5.281		52.303	0.127	14.643	0.003		376.5	6.27444	49.0	12.8	39.2	2.701	0.019	0.019	0.000	0.483	0.41	
394	4/22/2004	11:00:32 PM		25.037	24.635	25.031	25.525	24.517		45.902	50.33	13.443	32.361	-0.815	-2.849		51.616	0.067	14.643	0.003		377.5	6.29111	48.9	12.6	39.1	2.698	0.010	0.010	0.000	0.255	0.22	
395	4/22/2004	11:01:32 PM		25.029	24.653	25.028	25.482	24.535		46.829	50.349	13.484	33.317	-1.221	-4.945		52.847	0.127	14.643	0.003		378.5	6.30778	48.9	13.0	40.1	2.763	0.019	0.019	0.000	0.472	0.40	
396	4/22/2004	11:02:32 PM		25.035	24.648	25.024	25.437	24.46		47.194	50.641	13.585	33.639	-1.218	-5.344		50.955	0.13	14.643	0.003		377.9	6.29833	49.2	12.5	40.4	2.787	0.019	0.019	0.000	0.479	0.41	
397	4/22/2004	11:03:32 PM		25.067	24.665	25.026	25.404	24.522		47.213	50.633	13.457	33.777	-1.221	-5.573		48.244	0.129	14.643	0.003		378.9	6.315	49.2	11.8	40.5	2.792	0.019	0.019	0.000	0.475	0.40	
398	4/23/2004	9:07:06 AM		22.761	21.901	24.057	22.929	22.175		46.234	50.633	14.443	31.964	-1.096	-5.399		50.713	0.138	14.643	0.003		982.5	16.3744	49.2	12.4	39.1	2.696	0.021	0.021	0.001	0.540	0.46	
399	4/23/2004	9:08:06 AM		22.884	21.949	24.144	22.947	22.328		46.389	50.705	14.428	32.094	-1.122	-5.388		51.95	0.134	14.643	0.003		983.5	16.3911	49.2	12.7	39.2	2.706	0.020	0.020	0.001	0.522	0.44	
400	4/23/2004	9:09:06 AM		22.946	21.966	24.121	22.999	22.39		46.13	50.546	14.289	32.018	-1.148	-5.341		50.517	0.133	14.643	0.003		984.5	16.4078	49.1	12.4	39.1	2.694	0.020	0.020	0.001	0.520	0.44	
401	4/23/2004	9:10:06 AM		22.994	21.994	24.119	23.067	22.433		45.985	50.32	14.147	31.966	-1.157	-5.353		51.109	0.135	14.643	0.003		985.5	16.4244	48.8	12.5	39.0	2.687	0.020	0.021	0.001	0.529	0.45	
402	4/23/2004	9:11:06 AM		23.079	22.039	24.164	23.122	22.548		46.381	50.287	13.977	32.613	-1.218	-6.336		50.229	0.144	14.643	0.003		986.5	16.4411	48.8	12.3	39.5	2.723	0.021	0.022	0.001	0.557	0.47	
403	4/23/2004	9:12:06 AM		23.135	22.095	24.204	23.243	22.569		46.057	49.696	13.913	32.414	-1.218	-6.402		51.808	0.131	14.643	0.003		987.5	16.4578	48.2	12.7	39.2	2.705	0.020	0.020	0.001	0.509	0.43	
404	4/23/2004	9:13:06 AM		23.195	22.145	24.26	23.314	22.639		46.283	49.984	13.96	32.518	-1.218	-6.255		49.8	0.132	14.643	0.003		988.5	16.4744	48.5	12.2	39.4	2.717	0.020	0.020	0.001	0.510	0.43	
405	4/23/2004	9:14:06 AM		23.226	22.176	24.275	23.39	22.7		46.619	50.247	13.853	32.982	-1.218	-6.353		50.19	0.134	14.643	0.003		989.5	16.4911	48.8	12.3	39.8	2.744	0.020	0.020	0.001	0.512	0.44	
406	4/23/2004	9:15:06 AM		23.272	22.218	24.302	23.411	22.736		46.607	50.337	13.909	32.892	-1.218	-6.477		50.988	0.138	14.643	0.003		990.5	16.5078	48.9	12.5	39.7	2.741	0.021	0.021	0.001	0.528	0.45	
407	4/23/2004	9:16:06 AM		23.319	22.27	24.333	23.433	22.678		46.538	50.15	13.884	32.824	-1.215	-6.625		50.321	0.136	14.643	0.003		991.5	16.5244	48.7	12.3	39.7	2.736	0.020	0.021	0.001	0.521	0.44	
408	4/23/2004	9:17:06 AM		23.371	22.307	24.376	23.445	22.7		46.005	50.077	13.791	32.447	-1.218	-5.35		52.19	0.132	14.643	0.003		992.5	16.5411	48.6	12.8	39.2	2.704	0.020	0.020	0.001	0.511	0.43	
409	4/23/2004	9:18:06 AM		23.398	22.354	24.407	23.477	22.792		46.796	50.766	13.805	33.149	-1.218	-5.535		52.248	0.137	14.643	0.003		993.5	16.5578	49.3	12.8	40.0	2.756	0.020	0.021	0.001	0.520	0.44	
410	4/23/2004	9:19:06 AM		23.44	22.38	24.439	23.468	22.823		45.842	50.042	13.758	32.321	-1.218	-4.543		48.379	0.131	14.643	0.003		994.5	16.5744	48.6	11.9	39.1	2.695	0.020	0.020	0.001	0.508	0.43	
411	4/23/2004	9:20:06 AM		23.467	22.413	24.446	23.496	22.725		46.684	50.21	13.674	33.194	-1.218	-6.501		48.304	0.138	14.643	0.003		995.5	16.5911	48.7	11.8	39.9	2.754	0.021	0.021	0.001	0.523	0.45	
412	4/23/2004	9:21:06 AM		23.509	22.46	24.453	23.583	22.717		46.429	49.754	13.632	33.027	-1.215	-6.492		51.143	0.133	14.643	0.003		996.5	16.6078	48.3	12.5	39.7	2.739	0.020	0.020	0.001	0.507	0.43	
413	4/23/2004	9:22:06 AM		23.51	22.467	24.445	23.609	22.744		46.46	49.868	13.593	33.056	-1.212	-6.489		50.867	0.132	14.643	0.004		997.5	16.6244	48.4	12.5	39.8	2.741	0.020	0.020	0.001	0.503	0.43	
414	4/23/2004	9:23:06 AM		23.522	22.493	24.476	23.581	22.761		46.64	49.97	13.637	33.177	-1.215	-6.558		50.901	0.135	14.643	0.003		998.5	16.6411	48.5	12.5	39.9	2.752	0.020	0.020	0.001	0.512	0.44	
415	4/23/2004	9:24:06 AM		23.555	22.536	24.499	23.603	22.783		46.696	50.084	13.578	33.325	-1.218	-6.529		52.471	0.131	14.643	0.003		999.5	16.6578	48.6	12.9	40.0	2.759	0.020	0.020	0.000	0.495	0.42	
416	4/23/2004	9:25:06 AM		23.571	22.557	24.525	23.569	22.784		46.563	49.995	13.671	33.003	-1.215	-6.515		50.886	0.132	14.643	0.003		1000.5	16.6744	48.5	12.5	39.8	2.743	0.020	0.020	0.001	0.501	0.43	
417	4/23/2004	9:26:06 AM		23.598	22.58	24.547	23.622	22.786		46.487	49.934	13.494	33.118	-1.218	-6.532		49.841	0.132	14.643	0.003		1001.5	16.6911	48.5	12.2	39.8	2.744	0.020	0.020	0.001	0.501	0.43	
418	4/23/2004	9:27:06 AM		23.621	22.608	24.57	23.66	22.804		46.746	50.077	13.644	33.329	-1.218	-6.538		48.953	0.134	14.643	0.003		1002.5	16.7078	48.6	12.0	40.0	2.760	0.020	0.020	0.001	0.505	0.43	
419	4/23/2004	9:28:06 AM		23.633	22.62	24.577	23.677	22.846		46.607	49.957	13.537	33.28	-1.218	-6.492		47.453	0.134	14.643	0.003		1003.5	16.7244	48.5	11.6	39.9	2.754	0.020	0.020	0.001	0.506	0.43	
420	4/23/2004	9:29:06 AM		23.676	22.658	24.61	23.72	22.874		46.723	50.079	13.668	33.261	-1.218	-6.466		51.564	0.14	14.643	0.003		1004.5	16.7411	48.6	12.6	40.0	2.757	0.021	0.021	0.001	0.528	0.45	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	4/23/2004	9:30:06 AM		23.709	22.676	24.633	23.763	22.877		46.512	49.982	13.534	33.146	-1.218	-6.437		48.809	0.13	14.643	0.003		1005.5	16.7578	48.5	12.0	39.8	2.746	0.019	0.020	0.000	0.492	0.42	
422	4/23/2004	9:31:06 AM		23.736	22.698	24.59	23.795	22.889		46.246	49.617	13.498	32.952	-1.215	-6.483		51.547	0.132	14.643	0.003		1006.5	16.7744	48.1	12.6	39.6	2.730	0.020	0.020	0.001	0.503	0.43	
423	4/23/2004	9:32:06 AM		23.794	22.731	24.618	23.783	22.942		46.08	49.528	13.505	32.757	-1.218	-6.46		50.261	0.133	14.643	0.004		1007.5	16.7911	48.1	12.3	39.4	2.718	0.020	0.020	0.001	0.508	0.43	
424	4/23/2004	9:33:06 AM		23.855	22.737	24.614	23.855	23.019		46.103	49.584	13.417	32.88	-1.221	-6.437		48.924	0.134	14.643	0.003		1008.5	16.8078	48.1	12.0	39.5	2.723	0.020	0.020	0.001	0.511	0.44	
425	4/23/2004	9:34:06 AM		23.904	22.781	24.648	23.954	23.123		46.344	49.847	13.468	33.064	-1.218	-6.399		50.709	0.133	14.643	0.003		1009.5	16.8244	48.4	12.4	39.7	2.737	0.020	0.020	0.001	0.504	0.43	
426	4/23/2004	9:35:06 AM		23.922	22.804	24.681	23.966	23.191		46.437	49.891	13.476	33.155	-1.218	-6.437		50.97	0.134	14.643	0.003		1010.5	16.8411	48.4	12.5	39.8	2.744	0.020	0.020	0.001	0.507	0.43	
427	4/23/2004	9:36:06 AM		23.955	22.843	24.694	24.126	23.249		46.035	49.613	13.494	32.666	-1.218	-6.431		48.604	0.134	14.643	0.003		1011.5	16.8578	48.1	11.9	39.4	2.713	0.020	0.020	0.001	0.512	0.44	
428	4/23/2004	9:37:06 AM		23.97	22.872	24.713	24.145	23.354		46.155	49.677	13.53	32.814	-1.218	-6.428		50.06	0.134	14.643	0.003		1012.5	16.8744	48.2	12.3	39.5	2.722	0.020	0.020	0.001	0.510	0.43	
429	4/23/2004	9:38:06 AM		23.992	22.904	24.721	24.157	23.311		46.18	49.719	13.496	32.867	-1.218	-6.417		50.801	0.131	14.643	0.003		1013.5	16.8911	48.2	12.4	39.5	2.725	0.020	0.020	0.000	0.498	0.42	
430	4/23/2004	9:39:06 AM		24.026	22.943	24.749	24.186	23.289		46.142	49.621	13.479	32.876	-1.218	-6.431		50.373	0.136	14.643	0.003		1014.5	16.9078	48.1	12.3	39.5	2.724	0.020	0.020	0.001	0.517	0.44	
431	4/23/2004	9:40:06 AM		24.059	22.971	24.762	24.184	23.257		46.379	49.988	13.46	33.095	-1.218	-6.396		52.002	0.137	14.643	0.003		1015.5	16.9244	48.5	12.7	39.7	2.740	0.020	0.021	0.001	0.517	0.44	
432	4/23/2004	9:41:06 AM		24.093	23.001	24.711	24.148	23.277		45.769	49.445	13.341	32.521	-1.221	-6.411		49.889	0.132	14.643	0.003		1016.5	16.9411	48.0	12.2	39.1	2.699	0.020	0.020	0.001	0.507	0.43	
433	4/23/2004	9:42:06 AM		24.131	23.044	24.755	24.196	23.27		45.833	49.483	13.232	32.755	-1.218	-6.368		51.243	0.133	14.643	0.003		1017.5	16.9578	48.0	12.6	39.3	2.709	0.020	0.020	0.001	0.508	0.43	
434	4/23/2004	9:43:06 AM		24.135	23.058	24.743	24.195	23.264		45.601	49.273	13.315	32.48	-1.218	-6.399		49.808	0.135	14.643	0.003		1018.5	16.9744	47.8	12.2	39.0	2.692	0.020	0.020	0.001	0.519	0.44	
435	4/23/2004	9:44:06 AM		24.154	23.097	24.752	24.178	23.307		45.835	49.458	13.307	32.701	-1.221	-6.353		49.088	0.135	14.643	0.003		1019.5	16.9911	48.0	12.0	39.3	2.707	0.020	0.020	0.001	0.516	0.44	
436	4/23/2004	9:45:06 AM		24.171	23.114	24.769	24.206	23.3		46.329	50.055	13.353	33.179	-1.218	-6.33		49.249	0.135	14.643	0.003		1020.5	17.0078	48.6	12.1	39.8	2.741	0.020	0.020	0.001	0.510	0.43	
437	4/23/2004	9:46:06 AM		24.173	23.127	24.757	24.228	23.312		45.842	49.58	13.246	32.769	-1.218	-6.336		50.943	0.134	14.643	0.003		1021.5	17.0244	48.1	12.5	39.3	2.710	0.020	0.020	0.001	0.512	0.44	
438	4/23/2004	9:47:06 AM		24.191	23.155	24.775	24.216	23.325		46.219	49.97	13.329	33.107	-1.221	-6.388		50.851	0.134	14.643	0.003		1022.5	17.0411	48.5	12.5	39.7	2.735	0.020	0.020	0.001	0.507	0.43	
439	4/23/2004	9:48:06 AM		24.219	23.172	24.787	24.244	23.343		44.77	48.529	14.361	30.507	-1.218	-6.353		50.734	0.134	14.643	0.003		1023.5	17.0578	47.1	12.4	37.6	2.595	0.020	0.020	0.001	0.534	0.45	
440	4/23/2004	9:49:06 AM		24.244	23.208	24.818	24.33	23.343		46.346	50.316	13.079	33.339	-1.218	-6.463		50.857	0.133	14.643	0.003		1024.5	17.0744	48.8	12.5	39.8	2.747	0.020	0.020	0.001	0.500	0.43	
441	4/23/2004	9:50:06 AM		24.247	23.225	24.815	24.352	23.345		46.881	50.755	12.684	34.285	-1.218	-6.472		50.671	0.137	14.643	0.003		1025.5	17.0911	49.3	12.4	40.6	2.798	0.020	0.021	0.001	0.506	0.43	
442	4/23/2004	9:51:06 AM		24.262	23.236	24.821	24.367	23.316		46.812	50.734	12.771	34.136	-1.221	-6.512		47.945	0.136	14.643	0.003		1026.5	17.1078	49.3	11.7	40.5	2.791	0.020	0.020	0.001	0.504	0.43	
443	4/23/2004	9:52:06 AM		24.291	23.27	24.79	24.457	23.375		46.603	50.411	12.441	34.232	-1.218	-6.509		47.856	0.139	14.643	0.003		1027.5	17.1244	48.9	11.7	40.4	2.787	0.021	0.021	0.001	0.516	0.44	
444	4/23/2004	9:53:06 AM		24.295	23.269	24.769	24.486	23.409		46.972	51.004	12.169	34.909	-1.218	-6.261		47.115	0.138	14.643	0.003		1028.5	17.1411	49.5	11.5	40.9	2.823	0.021	0.021	0.001	0.506	0.43	
445	4/23/2004	9:54:06 AM		24.309	23.288	24.767	24.484	23.403		46.916	50.902	11.997	35.045	-1.218	-6.269		46.406	0.142	14.643	0.003		1029.5	17.1578	49.4	11.4	41.0	2.825	0.021	0.021	0.001	0.520	0.44	
446	4/23/2004	9:55:06 AM		24.315	23.309	24.758	24.46	23.439		46.124	50.088	12.838	33.339	-1.218	-6.301		48.536	0.134	14.643	0.003		1030.5	17.1744	48.6	11.9	39.7	2.739	0.020	0.020	0.001	0.506	0.43	
447	4/23/2004	9:56:06 AM		24.334	23.348	24.783	24.48	23.533		46.536	50.509	12.624	34.033	-1.221	-6.275		48.123	0.132	14.643	0.003		1031.5	17.1911	49.0	11.8	40.3	2.777	0.020	0.020	0.000	0.492	0.42	
448	4/23/2004	9:57:06 AM		24.333	23.342	24.781	24.534	23.592		46.57	50.525	12.55	34.103	-1.218	-6.344		49.301	0.132	14.643	0.003		1032.5	17.2078	49.1	12.1	40.3	2.781	0.020	0.020	0.000	0.491	0.42	
449	4/23/2004	9:58:06 AM		24.342	23.381	24.796	24.638	23.687		46.725	50.78	12.565	34.263	-1.218	-6.278		45.121	0.132	14.643	0.003		1033.5	17.2244	49.3	11.1	40.5	2.792	0.020	0.020	0.000	0.489	0.42	
450	4/23/2004	9:59:06 AM		24.357	23.406	24.785	24.643	23.731		46.702	50.834	12.459	34.384	-1.218	-6.223		48.312	0.136	14.643	0.003		1034.5	17.2411	49.4	11.8	40.5	2.795	0.020	0.020	0.001	0.503	0.43	
451	4/23/2004	10:00:06 AM		24.372	23.446	24.79	24.713	23.806		46.586	50.654	12.729	33.906	-1.218	-6.29		48.865	0.129	14.643	0.003		1035.5	17.2578	49.2	12.0	40.2	2.775	0.019	0.019	0.000	0.481	0.41	
452	4/23/2004	10:01:06 AM		24.365	23.459	24.783	24.761	23.839		46.584	50.647	12.827	33.84	-1.215	-6.214		48.769	0.135	14.643	0.003		1036.5	17.2744	49.2	12.0	40.2	2.772	0.020	0.020	0.001	0.504	0.43	
453	4/23/2004	10:02:06 AM		24.385	23.504	24.798	24.836	23.839		46.335	50.807	12.896	33.452	-0.882	-5.22		48.221	0.142	14.643	0.003		1037.5	17.2911	49.3	11.8	39.9	2.751	0.021	0.021	0.001	0.534	0.45	
454	4/23/2004	10:03:06 AM		24.382	23.526	24.795	24.813	23.846		46.52	50.994	12.954	33.619	-0.931	-5.425		48.535	0.14	14.643	0.003		1038.5	17.3078	49.5	11.9	40.1	2.763	0.021	0.021	0.001	0.524	0.45	
455	4/23/2004	10:04:06 AM		24.415	23.545	24.803	24.811	23.784		46.879	50.991	12.929	34.01	-1.218	-6.29		47.505	0.171	14.643	0.003		1039.5	17.3244	49.5	11.6	40.4	2.789	0.025	0.026	0.001	0.634	0.54	
456	4/23/2004	10:05:06 AM		24.429	23.569	24.757	24.835	23.788		46.476	50.498	12.559	34.095	-1.218	-5.954		46.512	0.14	14.643	0.003		1040.5	17.3411	49.0	11.4	40.3	2.778	0.021	0.021	0.001	0.522	0.44	
457	4/23/2004	10:06:06 AM		24.422	23.597	24.756	24.844	23.782		46.066	50.442	12.465	33.629	-1.027	-4.98		44.821	0.176	14.643	0.003		1041.5	17.3578	49.0	11.0	39.8	2.747	0.026	0.026	0.001	0.663	0.56	
458	4/23/2004	10:07:06 AM		24.436	23.621	24.769	24.847	23.8		46.42	50.318	12.48	33.988	-1.218	-5.443		47.465	0.191	14.643	0.003		1042.5	17.3744	48.8	11.6	40.2	2.772	0.028	0.029	0.001	0.713	0.61	
459	4/23/2004	10:08:06 AM		24.433	23.638	24.767	24.865	23.783		46.609	50.407	12.619	34.064	-1.218	-5.862		47.37	0.156	14.643	0.003		1043.5	17.3911	48.9	11.6	40.3	2.781	0.023	0.023	0.001	0.580	0.49	
460	4/23/2004	10:09:06 AM		24.427	23.662	24.77	24.914	23.856		46.899	50.54	12.516	34.519	-1.218	-6.405		47.814	0.147	14.643	0.003		1044.5	17.4078	49.1	11.7	40.7	2.807	0.022	0.022	0.001	0.542	0.46	
461	4/23/2004	10:10:06 AM		24.426	23.691	24.784	24.927	23.86		46.814	50.467	12.876	34.025	-1.218	-6.451		46.861	0.139	14.643	0.003		1045.5	17.4244	49.0	11.5	40.4	2.787	0.021	0.021	0.001	0.516	0.44	
462	4/23/2004	10:11:06 AM		24.413	23.698	24.786	24.859	23.812		46.955	50.579	12.832	34.222	-1.221	-6.278		48.196	0.134	14.643	0.003		1046.5	17.4411	49.1	11.8	40.6	2.798	0.020	0.020	0.000	0.495	0.42	
463	4/23/2004	10:12:06 AM		24.435	23.726	24.809	24.847	23.845		47.022	50.66	12.73	34.374	-1.218	-6.342		46.932	0.14	14.643	0.003		1047.5	17.4578	49.2	11.5	40.7	2.806	0.021	0.021	0.001	0.516	0.44	
464	4/23/2004	10:13:06 AM		24.452	23.743	24.791	24.839	23.867		46.549	50.237	12.962	33.68	-1.221	-6.275		47.524	0.139	14.643	0.003		1048.5	17.4744	48.8	11.6	40.1	2.766	0.021	0.021	0.001	0.520	0.44	
465	4/23/2004	10:14:06 AM		24.469	23.765	24.778	24.906	23.864		46.356	50.063	12.591	33.861	-1.218	-6.344		49.309	0.139	14.643	0.003		1049.5	17.4911	48.6	12.1	40.1	2.765	0.021	0.021	0.001	0.520	0.44	
466	4/23/2004	10:15:06 AM		24.475	23.776	24.779	24.892	23.865		46.184	49.972	12.592	33.684	-1.218	-6.44		47.666	0.14	14.643	0.003		1050.5	17.5078	48.5	11.7	39.9	2.753	0.021	0.021	0.001	0.526	0.45	
467	4/23/2004	10:16:06 AM		24.472	23.798	24.801	24.869	23.882		46.261	50.077	12.566	33.785	-1.221	-6.483		50.363	0.139	14.643	0.003		1051.5	17.5244	48.6	12.3	40.0	2.759	0.021	0.021	0.001	0.521	0.44	
468	4/23/2004	10:17:06 AM		24.469	23.815	24.798	24.911	23.859		46.298	50.156	12.586	33.721	-1.221	-6.495		48.502	0.142	14.643	0.003		1052.5	17.5411	48.7	11.9	40.0	2.759	0.021	0.021	0.001	0.532	0.45	
469	4/23/2004	10:18:06 AM		24.461	23.827	24.82	24.923	23.861		46.785	50.322	12.591	34.333	-1.218	-6.142		44.964	0.173	14.643	0.003		1053.5	17.5578	48.8	11.0	40.6	2.796	0.026	0.026	0.001	0.639	0.54	
470	4/23/2004	10:19:06 AM		24.458	23.849	24.827	24.91	23.893		45.249	50.073	12.598	32.611	-0.538	-2.852		48.387	0.174	14.643	0.003		1054.5	17.5744	48.6	11.9	38.9	2.684	0.026	0.026	0.001	0.670	0.57	
471	4/23/2004	10:20:06 AM		24.444	23.865	24.822	24.935	23.893		46.821	50.247	12.604	34.327	-1.221	-5.934		48.125	0.166	14.643	0.003		1055.5	17.5911	48.8	11.8	40.6	2.797	0.025	0.025	0.001	0.613	0.52	
472	4/23/2004	10:21:06 AM		24.445	23.881	24.879	24.952	23.92		46.955	50.279	12.559	34.509	-1.218	-6.396		48.367	0.143	14.643	0.003		1056.5	17.6078	48.8	11.9	40.7	2.808	0.021	0.021	0.001	0.525	0.45	
473	4/23/2004	10:22:06 AM		24.443	23.909	24.887	24.99	23.938		47.063	50.397	12.615	34.513	-1.218	-6.463		47.052	0.14	14.643	0.003		1057.5	17.6244	48.9	11.5	40.8	2.812	0.021	0.021	0.001	0.513	0.44	
474	4/23/2004	10:23:06 AM		24.414	23.916	24.888	24.976	23.934		47.221	50.521	12.699	34.643	-1.221	-6.492		47.983	0.143	14.643	0.003		1058.5	17.6411	49.0	11.8	40.9	2.822	0.021	0.021	0.001	0.523	0.44	
475	4/23/2004	10:24:06 AM		24.408	23.924	24.852	24.99	23.938		46.559	49.885	12.536	34.047	-1.221	-6.356		48.408	0.138	14.643	0.003		1059.5	17.6578	48.4	11.9	40.3	2.779	0.021	0.021	0.001	0.513	0.44	
476	4/23/2004	10:25:06 AM		24.399	23.94	24.858	25.006	23.949		46.719	50.235	12.404	34.392	-1.215	-6.376		47.488	0.142	14.643	0.003		1060.5	17.6744	48.8	11.6	40.6	2.796	0.021	0.021	0.001	0.524	0.45	
477	4/23/2004	10:26:06 AM		24.385	23.937	24.844	24.987	23.96		46.186	49.756	12.425	33.875	-1.221	-6.414		47.515	0.138	14.643	0.003		1061.5	17.6911	48.3	11.6	40.0	2.760	0.021	0.021	0.001	0.516	0.44	
478	4/23/2004	10:27:06 AM		24.392	23.964	24.856	25.074	24.012		46.819	50.384	12.462	34.444	-1.218	-6.469		49.186	0.144	14.643	0.003		1062.5	17.7078	48.9	12.1	40.6	2.801	0.021	0.022	0.001	0.531	0.45	
479	4/23/2004	10:28:06 AM		24.388	23.964	24.847	25.06	24.013		46.205	49.822	12.447	33.869	-1.218	-6.466		46.911	0.144	14.643	0.003		1063.5	17.7244	48.3	11.5	40.0	2.760	0.021	0.022	0.001	0.539	0.46	
480	4/23/2004	10:29:06 AM		24.394	23.986	24.853	25.091	24.019		46.358	50.073	12.411	33.992	-1.218	-6.48		49.956	0.139	14.643	0.003		1064.5	17.7411	48.6	12.2	40.2	2.770	0.021	0.021	0.001	0.518	0.44	
481	4/23/2004	10:30:06 AM		24.411	24.008	24.865	25.128	24.051		46.273	49.97	12.459	33.935	-1.215	-6.457		49.829	0.141	14.643	0.003		1065.5	17.7578	48.5	12.2	40.1	2.765	0.021	0.021	0.001	0.526	0.45	
482	4/23/2004	10:31:06 AM		24.433	24.025	24.867	25.115	24.068		46.082	49.965	12.506	33.627	-1.218	-6.214		47.336	0.142	14.643	0.003		1066.5	17.7744	48.5	11.6	39.9	2.748	0.021	0.021	0.001	0.533	0.45	
483	4/23/2004	10:32:06 AM		24.446	24.058	24.895	25.193	24.066		46.373	50.158	12.558	33.809	-1.215	-6.373		49.981	0.146	14.643	0.003		1067.5	17.7911	48.7	12.2	40.1	2.764	0.022	0.022	0.001	0.545	0.46	
484	4/23/2004	10:33:06 AM		24.437	24.054	24.846	25.169	24.062		47.984	50.179	12.423	35.851	-1.218	-4.595		45.738	0.215	14.643	0.003		1068.5	17.8078	48.7	11.2	41.9	2.890	0.032	0.032	0.001	0.768	0.65	
485	4/23/2004	10:34:06 AM		24.51	24.077	24.849	25.202	24.075		43.253	49.781	12.333	30.838	1.116	-0.875		51.178	0.074	14.643	0.003		1069.5	17.8244	48.3	12.5	37.0	2.554	0.011	0.011	0.000	0.299	0.25	
486	4/23/2004	10:35:06 AM		24.478	24.09	24.837	25.18	24.123		46.792	50.332	12.192	34.587	-1.224	-2.844		49.188	0.07	14.643	0.003		1070.5	17.8411	48.9	12.1	40.7	2.805	0.010	0.010	0.000	0.258	0.22	
487	4/23/2004	10:36:06 AM		24.475	24.107	24.844	25.217	24.15		48.921	50.177	12.23	36.886	-1.218	-5.96		46.871	0.162	14.643	0.003		1071.5	17.8578	48.7	11.5	42.9	2.958	0.024	0.024	0.001	0.565	0.48	
488	4/23/2004	10:37:06 AM		24.517	24.104	24.831	25.209	24.197		49.216	50.521	12.232	37.243	-1.221	-6.148		48.492	0.151	14.643	0.003		1072.5	17.8744	49.0	11.9	43.2	2.981	0.023	0.023	0.001	0.523	0.45	
489	4/23/2004	10:38:06 AM		24.549	24.126	24.838	25.241	24.204		47.553	49.002	13.464	34.357	-1.221	-6.162		51.105	0.143	14.643	0.003		1073.5	17.8911	47.5	12.5	41.0	2.824	0.021	0.021	0.001	0.523	0.45	
490	4/23/2004	10:39:06 AM		24.54	24.137	24.849	25.253	24.175		47.281	48.925	13.169	34.283	-1.221	-6.174		52.248	0.144	14.643	0.003		1074.5	17.9078	47.5	12.8	40.8	2.812	0.021	0.022	0.001	0.529	0.45	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	4/23/2004	10:40:06 AM		24.549	24.156	24.847	25.271	24.179		47.588	49.315	13.017	34.846	-1.224	-6.177		47.883	0.155	14.643	0.003		1075.5	17.9244	47.8	11.7	41.2	2.842	0.023	0.023	0.001	0.563	0.48	
492	4/23/2004	10:41:06 AM		24.511	24.178	24.88	25.293	24.201		46.785	49.611	13.041	33.82	-1.218	-5.122		51.347	0.162	14.643	0.003		1076.5	17.9411	48.1	12.6	40.3	2.779	0.024	0.024	0.001	0.601	0.51	
493	4/23/2004	10:42:06 AM		24.498	24.181	24.877	25.266	24.279		47.043	49.551	13.001	34.162	-1.221	-5.197		52.282	0.134	14.643	0.003		1077.5	17.9578	48.1	12.8	40.6	2.799	0.020	0.020	0.000	0.494	0.42	
494	4/23/2004	10:43:06 AM		24.53	24.213	24.899	25.363	24.361		47.09	49.263	13.128	33.939	-1.221	-4.486		48.07	0.053	14.643	0.003		1078.5	17.9744	47.8	11.8	40.5	2.793	0.008	0.008	0.000	0.196	0.17	
495	4/23/2004	10:44:06 AM		24.528	24.23	24.892	25.366	24.278		48.102	49.429	12.957	35.338	-1.221	-6.052		49.545	0.147	14.643	0.003		1079.5	17.9911	48.0	12.1	41.7	2.876	0.022	0.022	0.001	0.527	0.45	
496	4/23/2004	10:45:06 AM		24.575	24.237	24.864	25.348	24.26		47.916	49.053	12.78	35.406	-1.221	-6.009		49.278	0.136	14.643	0.003		1080.5	18.0078	47.6	12.1	41.7	2.872	0.020	0.020	0.000	0.489	0.42	
497	4/23/2004	10:46:06 AM		24.581	24.254	24.875	25.359	24.272		48.069	49.253	12.869	35.416	-1.218	-6.307		47.228	0.157	14.643	0.003		1081.5	18.0244	47.8	11.6	41.7	2.878	0.023	0.023	0.001	0.563	0.48	
498	4/23/2004	10:47:06 AM		24.629	24.282	24.903	25.407	24.289		47.397	48.84	13.24	34.283	-1.221	-6		50.031	0.138	14.643	0.003		1082.5	18.0411	47.4	12.3	40.8	2.816	0.021	0.021	0.001	0.505	0.43	
499	4/23/2004	10:48:06 AM		24.631	24.288	24.899	25.423	24.291		47.138	48.463	13.011	34.316	-1.218	-6.324		46.151	0.147	14.643	0.003		1083.5	18.0578	47.0	11.3	40.7	2.808	0.022	0.022	0.001	0.540	0.46	
500	4/23/2004	10:49:06 AM		24.628	24.296	24.902	25.396	24.328		46.982	48.664	12.988	34.148	-1.218	-6.42		48.014	0.144	14.643	0.003		1084.5	18.0744	47.2	11.8	40.6	2.797	0.021	0.022	0.001	0.531	0.45	
501	4/23/2004	10:50:06 AM		24.595	24.312	24.893	25.407	24.325		47.069	48.757	12.973	34.22	-1.221	-6.29		46.829	0.148	14.643	0.003		1085.5	18.0911	47.3	11.5	40.6	2.802	0.022	0.022	0.001	0.545	0.46	
502	4/23/2004	10:51:06 AM		24.591	24.343	24.915	25.413	24.281		46.599	48.579	12.812	33.887	-1.218	-5.694		51.208	0.131	14.643	0.003		1086.5	18.1078	47.1	12.5	40.2	2.775	0.020	0.020	0.000	0.486	0.41	
503	4/23/2004	10:52:06 AM		24.572	24.33	24.876	25.355	24.242		47.967	48.94	12.913	35.26	-1.221	-6.151		47.949	0.159	14.643	0.003		1087.5	18.1244	47.5	11.8	41.6	2.869	0.024	0.024	0.001	0.572	0.49	
504	4/23/2004	10:53:06 AM		24.564	24.352	24.863	25.412	24.209		46.211	48.397	12.674	33.608	-1.218	-5.596		48.398	0.196	14.643	0.003		1088.5	18.1411	46.9	11.9	39.9	2.752	0.029	0.029	0.001	0.735	0.63	
505	4/23/2004	10:54:06 AM		24.564	24.347	24.853	25.367	24.179		46.35	48.301	12.64	33.807	-1.215	-5.272		50.671	0.1	14.643	0.004		1089.5	18.1578	46.8	12.4	40.1	2.763	0.015	0.015	0.000	0.374	0.32	
506	4/23/2004	10:55:06 AM		24.543	24.335	24.822	25.19	24.163		47.146	48.554	12.767	34.534	-1.224	-6.295		48.924	0.152	14.643	0.003		1090.5	18.1744	47.1	12.0	40.8	2.816	0.023	0.023	0.001	0.558	0.47	
507	4/23/2004	10:56:06 AM		24.536	24.338	24.82	25.103	24.071		47.02	48.635	12.802	34.372	-1.221	-6.376		48.045	0.148	14.643	0.003		1091.5	18.1911	47.2	11.8	40.7	2.806	0.022	0.022	0.001	0.545	0.46	
508	4/23/2004	10:57:06 AM		24.534	24.331	24.813	25.046	24.054		47.107	48.413	12.748	34.536	-1.221	-6.356		50.129	0.153	14.643	0.003		1092.5	18.2078	46.9	12.3	40.8	2.814	0.023	0.023	0.001	0.562	0.48	
509	4/23/2004	10:58:06 AM		24.598	24.34	24.831	25.039	24.077		46.275	48.842	12.824	33.45	-1.218	-4.486		51.041	0.108	14.643	0.003		1093.5	18.2244	47.4	12.5	39.9	2.748	0.016	0.016	0.000	0.406	0.35	
510	4/23/2004	10:59:06 AM		24.588	24.35	24.841	25.014	24.077		47.598	48.426	12.799	34.981	-1.218	-6.078		49.203	0.121	14.643	0.003		1094.5	18.2411	47.0	12.1	41.3	2.847	0.018	0.018	0.000	0.439	0.37	
511	4/23/2004	11:00:06 AM		24.586	24.339	24.84	24.983	24.096		47.43	48.606	12.72	34.92	-1.221	-6.136		48.93	0.16	14.643	0.003		1095.5	18.2578	47.1	12.0	41.2	2.839	0.024	0.024	0.001	0.582	0.50	
512	4/23/2004	11:01:06 AM		24.591	24.328	24.844	25.002	24.105		46.989	48.187	13.03	34.13	-1.221	-6.33		50.119	0.148	14.643	0.003		1096.5	18.2744	46.7	12.3	40.6	2.796	0.022	0.022	0.001	0.546	0.47	
513	4/23/2004	11:02:06 AM		24.564	24.327	24.818	25.021	24.069		47.049	48.314	12.994	34.181	-1.221	-6.301		51.164	0.144	14.643	0.003		1097.5	18.2911	46.8	12.5	40.6	2.800	0.021	0.022	0.001	0.531	0.45	
514	4/23/2004	11:03:06 AM		24.548	24.316	24.802	25.085	24.108		46.901	48.059	12.705	34.37	-1.221	-6.318		47.307	0.154	14.643	0.003		1098.5	18.3078	46.6	11.6	40.6	2.802	0.023	0.023	0.001	0.568	0.48	
515	4/23/2004	11:04:06 AM		24.568	24.31	24.801	25.095	24.133		46.427	48.627	12.864	33.618	-1.221	-4.934		49.81	0.153	14.643	0.003		1099.5	18.3244	47.2	12.2	40.0	2.759	0.023	0.023	0.001	0.573	0.49	
516	4/23/2004	11:05:06 AM		24.583	24.306	24.812	25.06	24.128		47.138	48.37	12.935	34.365	-1.218	-6.258		49.616	0.147	14.643	0.003		1100.5	18.3411	46.9	12.2	40.8	2.810	0.022	0.022	0.001	0.541	0.46	
517	4/23/2004	11:06:06 AM		24.558	24.29	24.786	25.045	24.153		47.235	48.255	12.816	34.593	-1.221	-6.131		50.815	0.119	14.643	0.003		1101.5	18.3578	46.8	12.5	40.9	2.821	0.018	0.018	0.000	0.436	0.37	
518	4/23/2004	11:07:06 AM		24.58	24.317	24.819	25.052	24.155		47.163	48.295	12.886	34.372	-1.221	-6.107		50.077	0.17	14.643	0.003		1102.5	18.3744	46.8	12.3	40.8	2.811	0.025	0.025	0.001	0.625	0.53	
519	4/23/2004	11:08:06 AM		24.591	24.328	24.844	25.102	24.175		46.85	48.144	12.89	34.08	-1.218	-6.122		52.227	0.154	14.643	0.003		1103.5	18.3911	46.7	12.8	40.5	2.790	0.023	0.023	0.001	0.570	0.48	
520	4/23/2004	11:09:06 AM		24.554	24.302	24.813	25.106	24.174		46.928	48.465	12.818	34.283	-1.221	-6.307		48.56	0.148	14.643	0.003		1104.5	18.4078	47.0	11.9	40.6	2.800	0.022	0.022	0.001	0.546	0.46	
521	4/23/2004	11:10:06 AM		24.528	24.286	24.817	25.105	24.188		46.431	48.301	12.904	33.614	-1.221	-5.411		50.156	0.13	14.643	0.003		1105.5	18.4244	46.8	12.3	40.0	2.759	0.019	0.019	0.000	0.487	0.41	
522	4/23/2004	11:11:06 AM		24.53	24.312	24.839	25.112	24.21		47.2	48.483	12.878	34.468	-1.218	-5.899		47.724	0.082	14.643	0.003		1106.5	18.4411	47.0	11.7	40.8	2.815	0.012	0.012	0.000	0.301	0.26	
523	4/23/2004	11:12:06 AM		24.478	24.301	24.792	25.115	24.203		46.91	48.001	12.73	34.392	-1.221	-6.05		51.454	0.172	14.643	0.003		1107.5	18.4578	46.5	12.6	40.7	2.803	0.026	0.026	0.001	0.635	0.54	
524	4/23/2004	11:12:36 AM		24.488	24.295	24.781	25.1	24.203		47.546	48.537	12.749	34.955	-1.221	-6.107		51.045	0.137	14.643	0.003		1108.0	18.4661	47.1	12.5	41.3	2.844	0.020	0.021	0.000	0.498	0.42	
525	4/23/2004	11:13:36 AM		24.494	24.317	24.808	25.151	24.224		47.127	48.241	12.713	34.63	-1.218	-6.139		50.767	0.16	14.643	0.003		1109.0	18.4828	46.8	12.4	40.9	2.818	0.024	0.024	0.001	0.587	0.50	
526	4/23/2004	11:14:36 AM		24.505	24.317	24.809	25.167	24.245		47.181	48.504	12.682	34.62	-1.218	-5.963		51.02	0.167	14.643	0.003		1110.0	18.4994	47.0	12.5	40.9	2.820	0.025	0.025	0.001	0.612	0.52	
527	4/23/2004	11:15:36 AM		24.541	24.324	24.815	25.163	24.231		46.989	48.235	12.699	34.374	-1.218	-6.266		49.143	0.15	14.643	0.003		1111.0	18.5161	46.8	12.0	40.7	2.805	0.022	0.022	0.001	0.553	0.47	
528	4/23/2004	11:16:36 AM		24.542	24.329	24.816	25.149	24.257		47.237	48.477	12.728	34.651	-1.218	-6.31		48.504	0.151	14.643	0.003		1112.0	18.5328	47.0	11.9	40.9	2.823	0.023	0.023	0.001	0.553	0.47	
529	4/23/2004	11:17:36 AM		24.534	24.346	24.823	25.166	24.254		46.974	48.314	12.694	34.384	-1.218	-6.255		49.038	0.16	14.643	0.003		1113.0	18.5494	46.8	12.0	40.7	2.805	0.024	0.024	0.001	0.589	0.50	
530	4/23/2004	11:18:36 AM		24.502	24.325	24.796	25.15	24.258		46.742	48.384	12.75	34.119	-1.221	-6.116		51.21	0.159	14.643	0.003		1114.0	18.5661	46.9	12.5	40.4	2.788	0.024	0.024	0.001	0.590	0.50	
531	4/23/2004	11:19:36 AM		24.534	24.341	24.813	25.171	24.274		46.883	48.469	12.78	34.23	-1.221	-6.003		49.268	0.157	14.643	0.003		1115.0	18.5828	47.0	12.1	40.6	2.796	0.023	0.024	0.001	0.580	0.49	
532	4/23/2004	11:20:36 AM		24.476	24.344	24.81	25.199	24.247		45.678	48.229	12.706	33.017	-1.221	-4.882		50.688	0.165	14.643	0.003		1116.0	18.5994	46.8	12.4	39.3	2.713	0.025	0.025	0.001	0.629	0.53	
533	4/23/2004	11:21:36 AM		24.494	24.362	24.838	25.221	24.279		46.582	48.189	12.748	33.961	-1.221	-5.35		51.598	0.079	14.643	0.003		1117.0	18.6161	46.7	12.6	40.3	2.777	0.012	0.012	0.000	0.294	0.25	
534	4/23/2004	11:22:36 AM		24.485	24.378	24.854	25.243	24.286		47.665	48.593	12.865	34.961	-1.215	-5.989		50.438	0.175	14.643	0.004		1118.0	18.6328	47.1	12.4	41.3	2.848	0.026	0.026	0.001	0.634	0.54	
535	4/23/2004	11:23:36 AM		24.478	24.365	24.831	25.21	24.408		46.673	48.457	12.887	33.883	-1.218	-5.165		49.437	0.165	14.643	0.003		1119.0	18.6494	47.0	12.1	40.3	2.777	0.025	0.025	0.001	0.614	0.52	
536	4/23/2004	11:24:36 AM		24.487	24.375	24.846	25.299	24.422		47.045	48.614	12.909	34.271	-1.221	-5.286		49.633	0.156	14.643	0.003		1120.0	18.6661	47.1	12.2	40.7	2.803	0.023	0.023	0.001	0.575	0.49	
537	4/23/2004	11:25:36 AM		24.498	24.37	24.841	25.315	24.448		46.881	48.6	12.902	34.031	-1.218	-5.139		48.216	0.157	14.643	0.003		1121.0	18.6828	47.1	11.8	40.5	2.789	0.023	0.024	0.001	0.581	0.49	
538	4/23/2004	11:26:36 AM		24.528	24.375	24.846	25.31	24.358		46.976	48.753	13.078	33.99	-1.221	-5.217		51.301	0.15	14.643	0.003		1122.0	18.6994	47.3	12.6	40.5	2.791	0.022	0.022	0.001	0.555	0.47	
539	4/23/2004	11:27:36 AM		24.565	24.408	24.869	25.333	24.391		46.941	48.653	13	34.058	-1.221	-5.243		51.55	0.148	14.643	0.003		1123.0	18.7161	47.2	12.6	40.5	2.792	0.022	0.022	0.001	0.547	0.47	
540	4/23/2004	11:28:36 AM		24.552	24.399	24.866	25.354	24.402		47.144	48.457	12.9	34.322	-1.221	-6.229		49.324	0.141	14.643	0.003		1124.0	18.7328	47.0	12.1	40.7	2.808	0.021	0.021	0.001	0.518	0.44	
541	4/23/2004	11:29:36 AM		24.552	24.409	24.846	25.359	24.412		46.924	48.09	12.766	34.275	-1.218	-5.992		50.705	0.196	14.643	0.003		1125.0	18.7494	46.6	12.4	40.6	2.799	0.029	0.029	0.001	0.723	0.62	
542	4/23/2004	11:30:36 AM		24.559	24.432	24.863	25.341	24.409		46.987	48.49	12.453	34.628	-1.218	-5.844		50.244	0.186	14.643	0.003		1126.0	18.7661	47.0	12.3	40.8	2.814	0.028	0.028	0.001	0.682	0.58	
543	4/23/2004	11:31:36 AM		24.565	24.433	24.859	25.347	24.39		46.296	48.483	12.784	33.551	-1.221	-5.113		50.302	0.153	14.643	0.003		1127.0	18.7828	47.0	12.3	39.9	2.753	0.023	0.023	0.001	0.574	0.49	
544	4/23/2004	11:32:36 AM		24.546	24.449	24.87	25.334	24.397		47.296	48.43	12.736	34.692	-1.221	-5.948		50.144	0.142	14.643	0.003		1128.0	18.7994	47.0	12.3	41.0	2.826	0.021	0.021	0.001	0.518	0.44	
545	4/23/2004	11:33:36 AM		24.563	24.456	24.877	25.33	24.388		47.167	48.2	12.75	34.575	-1.215	-6.058		48.588	0.166	14.643	0.004		1129.0	18.8161	46.7	11.9	40.9	2.818	0.025	0.025	0.001	0.608	0.52	
546	4/23/2004	11:34:36 AM		24.57	24.478	24.904	25.347	24.405		46.964	48.334	12.794	34.29	-1.218	-6.05		50.156	0.154	14.643	0.003		1130.0	18.8328	46.9	12.3	40.6	2.801	0.023	0.023	0.001	0.567	0.48	
547	4/23/2004	11:35:36 AM		24.546	24.458	24.864	25.308	24.416		47.324	48.529	12.868	34.575	-1.221	-6.217		50.978	0.154	14.643	0.003		1131.0	18.8494	47.1	12.5	40.9	2.823	0.023	0.023	0.001	0.563	0.48	
548	4/23/2004	11:36:36 AM		24.534	24.462	24.828	25.342	24.424		46.646	47.953	12.623	34.148	-1.221	-5.908		50.012	0.176	14.643	0.003		1132.0	18.8661	46.5	12.3	40.4	2.785	0.026	0.026	0.001	0.653	0.56	
549	4/23/2004	11:37:36 AM		24.548	24.461	24.832	25.356	24.429		46.779	48.164	12.576	34.312	-1.221	-5.948		50.959	0.164	14.643	0.003		1133.0	18.8828	46.7	12.5	40.5	2.795	0.024	0.025	0.001	0.606	0.52	
550	4/23/2004	11:38:36 AM		24.594	24.476	24.837	25.366	24.449		47.086	48.338	12.58	34.653	-1.215	-6.174		52.098	0.159	14.643	0.003		1134.0	18.8994	46.9	12.8	40.9	2.818	0.024	0.024	0.001	0.583	0.50	
551	4/23/2004	11:39:36 AM		24.576	24.499	24.834	25.338	24.436		46.447	48.009	12.572	34.041	-1.221	-5.847		49.558	0.169	14.643	0.003		1135.0	18.9161	46.5	12.1	40.2	2.775	0.025	0.025	0.001	0.629	0.54	
552	4/23/2004	11:40:36 AM		24.572	24.5	24.831	25.334	24.432		47.113	48.394	12.573	34.673	-1.221	-6.113		48.131	0.171	14.643	0.003		1136.0	18.9328	46.9	11.8	40.9	2.819	0.025	0.026	0.001	0.626	0.53	
553	4/23/2004	11:41:36 AM		24.553	24.506	24.836	25.37	24.473		46.236	48.26	12.582	33.727	-1.218	-5.541		49.772	0.191	14.643	0.003		1137.0	18.9494	46.8	12.2	40.0	2.757	0.028	0.029	0.001	0.716	0.61	
554	4/23/2004	11:42:36 AM		24.548	24.511	24.841	25.365	24.493		46.348	48.214	12.645	33.783	-1.221	-5.353		49.159	0.121	14.643	0.003		1138.0	18.9661	46.7	12.0	40.1	2.762	0.018	0.018	0.000	0.452	0.38	
555	4/23/2004	11:43:36 AM		24.543	24.511	24.841	25.375	24.508		46.893	48.197	12.682	34.322	-1.221	-6.139		47.372	0.153	14.643	0.003		1139.0	18.9828	46.7	11.6	40.6	2.800	0.023	0.023	0.001	0.564	0.48	
556	4/23/2004	11:44:36 AM		24.564	24.532	24.853	25.381	24.494		47.005	48.378	12.743	34.314	-1.218	-5.746		46.354	0.082	14.643	0.003		1140.0	18.9994	46.9	11.4	40.7	2.803	0.012	0.012	0.000	0.302	0.26	
557	4/23/2004	11:45:36 AM		24.576	24.534	24.855	25.373	24.501		46.839	48.251	12.718	34.246	-1.224	-6.128		51.406	0.159	14.643	0.003		1141.0	19.0161	46.8	12.6	40.5	2.795	0.024	0.024	0.001	0.587	0.50	
558	4/23/2004	11:46:36 AM		24.617	24.551	24.836	25.4	24.493		46.754	47.868	12.588	34.308	-1.221	-6.142		49.065	0.128	14.643	0.003		1142.0	19.0328	46.4	12.0	40.5	2.794	0.019	0.019	0.000	0.473	0.40	
559	4/23/2004	11:47:36 AM		24.575	24.553	24.829	25.408	24.475		46.439	47.982	12.562	34	-1.221	-6.029		50.707	0.169	14.643	0.003		1143.0	19.0494	46.5	12.4	40.2	2.773	0.025	0.025	0.001	0.629	0.54	
560	4/23/2004	11:48:36 AM		24.566	24.559	24.835	25.358	24.471		46.592	48.05	12.583	34.054	-1.221	-6.206		50.557	0.155	14.643	0.003		1144.0	19.0661	46.6	12.4	40.3	2.780	0.023	0.023	0.001	0.576	0.49	

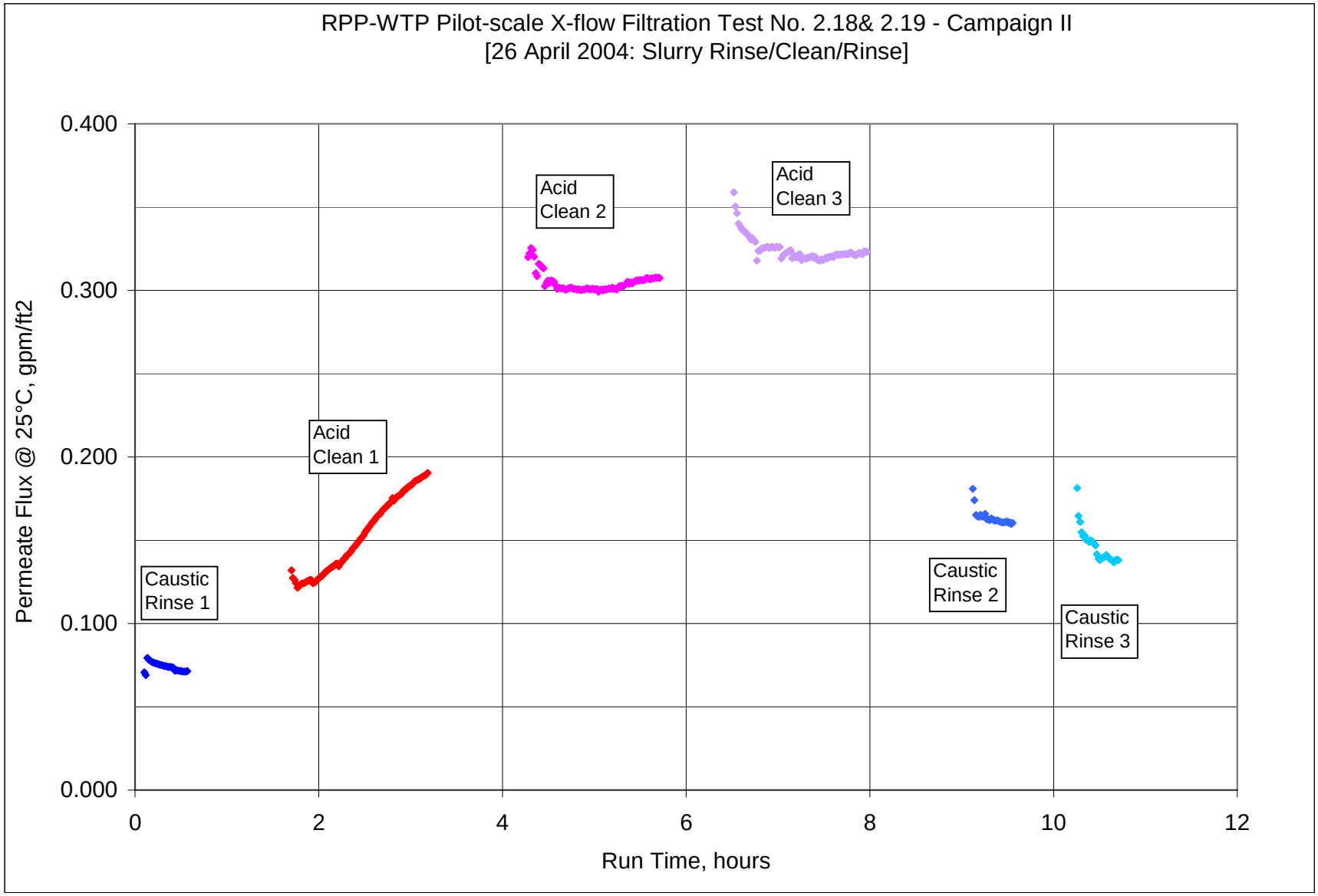
RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	4/23/2004	11:49:36 AM		24.548	24.566	24.837	25.405	24.523		46.209	47.926	12.532	33.736	-1.215	-5.914		49.495	0.15	14.643	0.003		1145.0	19.0828	46.5	12.1	40.0	2.756	0.022	0.022	0.001	0.562	0.48	
562	4/23/2004	11:50:36 AM		24.554	24.573	24.823	25.422	24.505		46.485	48.204	12.619	33.916	-1.221	-6.096		49.209	0.152	14.643	0.003		1146.0	19.0994	46.7	12.1	40.2	2.772	0.023	0.023	0.001	0.567	0.48	
563	4/23/2004	11:51:36 AM		24.54	24.563	24.809	25.392	24.5		46.46	48.226	12.607	33.896	-1.221	-6.136		49.925	0.147	14.643	0.003		1147.0	19.1161	46.8	12.2	40.2	2.770	0.022	0.022	0.001	0.548	0.47	
564	4/23/2004	11:52:36 AM		24.521	24.575	24.82	25.384	24.527		46.242	48.034	12.629	33.668	-1.224	-6.148		49.12	0.152	14.643	0.003		1148.0	19.1328	46.6	12.0	40.0	2.755	0.023	0.023	0.001	0.570	0.49	
565	4/23/2004	11:53:36 AM		24.518	24.586	24.827	25.415	24.538		46.412	48.359	12.606	33.887	-1.221	-6.084		48.266	0.145	14.643	0.003		1149.0	19.1494	46.9	11.8	40.1	2.768	0.022	0.022	0.001	0.541	0.46	
566	4/23/2004	11:54:36 AM		24.483	24.577	24.807	25.431	24.544		45.84	47.746	12.517	33.313	-1.221	-6.136		50.3	0.152	14.643	0.003		1150.0	19.1661	46.3	12.3	39.6	2.729	0.023	0.023	0.001	0.576	0.49	
567	4/23/2004	11:55:36 AM		24.5	24.603	24.799	25.467	24.54		45.696	47.858	12.519	33.247	-1.221	-6.044		49.065	0.153	14.643	0.003		1151.0	19.1828	46.4	12.0	39.5	2.721	0.023	0.023	0.001	0.581	0.49	
568	4/23/2004	11:56:36 AM		24.49	24.593	24.784	25.492	24.575		45.79	47.918	12.52	33.27	-1.221	-6.09		48.268	0.147	14.643	0.003		1152.0	19.1994	46.4	11.8	39.5	2.725	0.022	0.022	0.001	0.558	0.47	
569	4/23/2004	11:57:36 AM		24.51	24.613	24.809	25.543	24.575		45.653	47.804	12.523	33.11	-1.218	-6.102		49.96	0.147	14.643	0.003		1153.0	19.2161	46.3	12.2	39.4	2.715	0.022	0.022	0.001	0.560	0.48	
570	4/23/2004	11:58:36 AM		24.491	24.62	24.805	25.524	24.547		45.715	47.988	12.543	33.147	-1.221	-6.064		50.194	0.16	14.643	0.003		1154.0	19.2328	46.5	12.3	39.4	2.719	0.024	0.024	0.001	0.608	0.52	
571	4/23/2004	11:59:36 AM		24.497	24.626	24.806	25.53	24.578		46.118	48.513	12.283	33.813	-1.221	-5.995		49.074	0.159	14.643	0.003		1155.0	19.2494	47.0	12.0	40.0	2.755	0.024	0.024	0.001	0.596	0.51	
572	4/23/2004	12:00:36 PM		24.379	24.638	24.799	25.527	24.595		46.314	48.508	12.3	33.998	-1.224	-5.914		50.102	0.167	14.643	0.003		1156.0	19.2661	47.0	12.3	40.2	2.769	0.025	0.025	0.001	0.624	0.53	
573	4/23/2004	12:01:36 PM		24.452	24.651	24.826	25.555	24.603		44.137	48.558	12.314	31.679	-0.888	-2.76		48.519	0.067	14.643	0.003		1157.0	19.2828	47.1	11.9	37.9	2.614	0.010	0.010	0.000	0.265	0.23	
574	4/23/2004	12:02:36 PM		24.404	24.653	24.813	25.537	24.625		45.709	48.027	12.651	33.007	-1.221	-4.679		49.261	0.105	14.643	0.003		1158.0	19.2994	46.6	12.1	39.4	2.714	0.016	0.016	0.000	0.400	0.34	
575	4/23/2004	12:03:36 PM		24.396	24.674	24.835	25.614	24.686		45.808	48.042	12.735	33.056	-1.221	-5.231		48.473	0.157	14.643	0.003		1159.0	19.3161	46.6	11.9	39.4	2.719	0.023	0.024	0.001	0.596	0.51	
576	4/23/2004	12:04:36 PM		24.387	24.666	24.821	25.61	24.658		46.754	48.297	12.687	34.142	-1.218	-5.81		50.094	0.209	14.643	0.003		1160.0	19.3328	46.8	12.3	40.4	2.789	0.031	0.031	0.001	0.774	0.66	
577	4/23/2004	12:05:36 PM		24.403	24.667	24.787	25.566	24.623		46.449	48.123	12.554	33.969	-1.224	-5.575		50.757	0.201	14.643	0.003		1161.0	19.3494	46.7	12.4	40.2	2.772	0.030	0.030	0.001	0.750	0.64	
578	4/23/2004	12:06:36 PM		24.439	24.673	24.788	25.547	24.595		45.688	47.853	12.546	33.134	-1.221	-4.833		49.766	0.156	14.643	0.003		1162.0	19.3661	46.4	12.2	39.4	2.717	0.023	0.023	0.001	0.594	0.51	
579	4/23/2004	12:07:36 PM		24.46	24.674	24.759	25.488	24.641		46.864	47.837	12.482	34.499	-1.224	-6		50.834	0.132	14.643	0.003		1163.0	19.3828	46.4	12.5	40.7	2.805	0.020	0.020	0.000	0.487	0.41	
580	4/23/2004	12:08:36 PM		24.491	24.694	24.78	25.539	24.631		46.752	47.953	12.578	34.251	-1.221	-5.931		50.198	0.172	14.643	0.003		1164.0	19.3994	46.5	12.3	40.5	2.792	0.026	0.026	0.001	0.637	0.54	
581	4/23/2004	12:09:36 PM		24.476	24.689	24.8	25.523	24.621		46.402	48.096	12.554	33.889	-1.224	-5.607		50.559	0.183	14.643	0.003		1165.0	19.4161	46.6	12.4	40.1	2.768	0.027	0.027	0.001	0.683	0.58	
582	4/23/2004	12:10:36 PM		24.469	24.688	24.773	25.532	24.645		46.219	48.075	12.521	33.77	-1.221	-5.544		51.059	0.104	14.643	0.003		1166.0	19.4328	46.6	12.5	40.0	2.757	0.016	0.016	0.000	0.390	0.33	
583	4/23/2004	12:11:36 PM		24.459	24.703	24.783	25.512	24.66		46.881	48.092	12.563	34.392	-1.221	-5.85		49.215	0.185	14.643	0.003		1167.0	19.4494	46.6	12.1	40.6	2.802	0.028	0.028	0.001	0.683	0.58	
584	4/23/2004	12:12:36 PM		24.473	24.717	24.782	25.561	24.673		46.211	47.835	12.523	33.715	-1.215	-5.584		50.402	0.183	14.643	0.003		1168.0	19.4661	46.4	12.4	40.0	2.755	0.027	0.027	0.001	0.687	0.58	
585	4/23/2004	12:13:36 PM		24.482	24.716	24.756	25.555	24.693		46.317	47.936	12.454	33.916	-1.218	-5.604		48.946	0.117	14.643	0.003		1169.0	19.4828	46.5	12.0	40.1	2.766	0.017	0.018	0.000	0.438	0.37	
586	4/23/2004	12:14:36 PM		24.492	24.726	24.771	25.575	24.713		46.358	47.696	12.598	33.748	-1.221	-6.038		48.765	0.164	14.643	0.003		1170.0	19.4994	46.2	12.0	40.1	2.762	0.024	0.025	0.001	0.614	0.52	
587	4/23/2004	12:15:36 PM		24.543	24.752	24.797	25.691	24.738		45.829	47.549	12.458	33.405	-1.218	-5.443		50.075	0.086	14.643	0.003		1171.0	19.5161	46.1	12.3	39.6	2.731	0.013	0.013	0.000	0.326	0.28	
588	4/23/2004	12:16:36 PM		24.514	24.752	24.783	25.642	24.704		46.229	47.715	12.52	33.77	-1.221	-6.029		51.483	0.157	14.643	0.003		1172.0	19.5328	46.2	12.6	40.0	2.758	0.023	0.024	0.001	0.589	0.50	
589	4/23/2004	12:17:36 PM		24.546	24.77	24.795	25.659	24.641		46.393	47.723	12.449	33.982	-1.221	-6.024		49.401	0.164	14.643	0.003		1173.0	19.5494	46.3	12.1	40.2	2.771	0.024	0.025	0.001	0.612	0.52	
590	4/23/2004	12:18:36 PM		24.561	24.765	24.78	25.604	24.546		46.526	47.858	12.5	34.146	-1.221	-5.734		49.328	0.116	14.643	0.003		1174.0	19.5661	46.4	12.1	40.3	2.781	0.017	0.017	0.000	0.431	0.37	
591	4/23/2004	12:19:36 PM		24.571	24.75	24.78	25.539	24.487		46.414	47.741	12.495	34.006	-1.218	-5.948		51.176	0.148	14.643	0.003		1175.0	19.5828	46.3	12.5	40.2	2.772	0.022	0.022	0.001	0.552	0.47	
592	4/23/2004	12:20:36 PM		24.588	24.757	24.777	25.445	24.423		46.439	47.625	12.549	34.004	-1.224	-5.943		51.128	0.169	14.643	0.003		1176.0	19.5994	46.2	12.5	40.2	2.773	0.025	0.025	0.001	0.630	0.54	
593	4/23/2004	12:21:36 PM		24.559	24.747	24.767	25.431	24.384		46.012	47.652	12.365	33.688	-1.218	-5.905		51.143	0.156	14.643	0.003		1177.0	19.6161	46.2	12.5	39.9	2.748	0.023	0.023	0.001	0.587	0.50	
594	4/23/2004	12:22:36 PM		24.476	24.724	24.75	25.398	24.401		46.485	47.851	12.362	34.226	-1.218	-5.83		52.19	0.128	14.643	0.004		1178.0	19.6328	46.4	12.8	40.4	2.782	0.019	0.019	0.000	0.476	0.41	
595	4/23/2004	12:23:36 PM		24.434	24.703	24.738	25.387	24.415		46.207	47.82	12.434	33.848	-1.218	-5.665		50.236	0.174	14.643	0.003		1179.0	19.6494	46.3	12.3	40.0	2.760	0.026	0.026	0.001	0.653	0.56	
596	4/23/2004	12:24:36 PM		24.479	24.703	24.743	25.417	24.47		46.495	47.741	12.441	34.078	-1.221	-5.995		51.689	0.165	14.643	0.003		1180.0	19.6661	46.3	12.7	40.3	2.778	0.025	0.025	0.001	0.615	0.52	
597	4/23/2004	12:25:36 PM		24.464	24.698	24.748	25.422	24.475		46.439	47.913	12.528	33.943	-1.218	-5.789		51.241	0.182	14.643	0.003		1181.0	19.6828	46.4	12.6	40.2	2.771	0.027	0.027	0.001	0.680	0.58	
598	4/23/2004	12:26:36 PM		24.491	24.705	24.75	25.444	24.472		45.821	47.746	12.366	33.497	-1.218	-5.602		50.35	0.189	14.643	0.003		1182.0	19.6994	46.3	12.3	39.7	2.734	0.028	0.028	0.001	0.716	0.61	
599	4/23/2004	12:27:36 PM		24.458	24.702	24.762	25.496	24.509		46.483	48.081	12.462	34.13	-1.221	-6.006		50.231	0.163	14.643	0.003		1183.0	19.7161	46.6	12.3	40.3	2.779	0.024	0.024	0.001	0.607	0.52	
600	4/23/2004	12:28:36 PM		24.459	24.693	24.748	25.517	24.535		46.115	47.77	12.405	33.742	-1.218	-5.804		50.578	0.158	14.643	0.003		1184.0	19.7328	46.3	12.4	39.9	2.753	0.024	0.024	0.001	0.594	0.51	
601	4/23/2004	12:29:36 PM		24.511	24.699	24.74	25.528	24.566		46.727	47.93	12.459	34.343	-1.224	-5.815		49.695	0.147	14.643	0.003		1185.0	19.7494	46.5	12.2	40.5	2.795	0.022	0.022	0.001	0.545	0.46	
602	4/23/2004	12:30:36 PM		24.502	24.696	24.751	25.57	24.618		46.341	47.797	12.398	34.008	-1.221	-5.781		49.086	0.176	14.643	0.003		1186.0	19.7661	46.3	12.0	40.2	2.770	0.026	0.026	0.001	0.658	0.56	
603	4/23/2004	12:31:36 PM		24.502	24.691	24.731	25.58	24.638		46.163	47.694	12.407	33.781	-1.221	-5.974		49.858	0.166	14.643	0.003		1187.0	19.7828	46.2	12.2	40.0	2.756	0.025	0.025	0.001	0.624	0.53	
604	4/23/2004	12:32:36 PM		24.485	24.679	24.704	25.628	24.65		46.02	47.53	12.357	33.75	-1.221	-5.865		49.676	0.149	14.643	0.003		1188.0	19.7994	46.1	12.2	39.9	2.750	0.022	0.022	0.001	0.562	0.48	
605	4/23/2004	12:33:36 PM		24.489	24.683	24.698	25.637	24.675		46.171	47.677	12.434	33.746	-1.221	-5.885		49.021	0.14	14.643	0.003		1189.0	19.8161	46.2	12.0	40.0	2.755	0.021	0.021	0.001	0.527	0.45	
606	4/23/2004	12:34:36 PM		24.494	24.713	24.708	25.672	24.665		45.92	47.59	12.364	33.625	-1.221	-5.928		48.492	0.156	14.643	0.003		1190.0	19.8328	46.1	11.9	39.8	2.742	0.023	0.023	0.001	0.590	0.50	
607	4/23/2004	12:35:36 PM		24.5	24.709	24.709	25.663	24.69		46.107	47.797	12.374	33.705	-1.224	-6.018		49.466	0.158	14.643	0.003		1191.0	19.8494	46.3	12.1	39.9	2.751	0.024	0.024	0.001	0.595	0.51	
608	4/23/2004	12:36:36 PM		24.522	24.746	24.741	25.7	24.698		46.381	47.949	12.445	33.953	-1.218	-5.836		50.142	0.158	14.643	0.003		1192.0	19.8661	46.5	12.3	40.2	2.769	0.024	0.024	0.001	0.591	0.50	
609	4/23/2004	12:37:36 PM		24.488	24.737	24.707	25.706	24.723		45.186	47.866	12.376	32.722	-1.221	-4.754		51.174	0.205	14.643	0.003		1193.0	19.8828	46.4	12.5	39.0	2.686	0.031	0.031	0.001	0.791	0.67	
610	4/23/2004	12:38:36 PM		24.455	24.754	24.719	25.688	24.72		46.389	47.779	12.346	34.154	-1.224	-5.749		49.462	0.197	14.643	0.003		1194.0	19.8994	46.3	12.1	40.3	2.777	0.029	0.030	0.001	0.735	0.63	
611	4/23/2004	12:39:36 PM		24.456	24.77	24.73	25.724	24.722		45.458	47.327	12.284	33.21	-1.221	-5.367		49.036	0.19	14.643	0.003		1195.0	19.9161	45.9	12.0	39.3	2.712	0.028	0.029	0.001	0.726	0.62	
612	4/23/2004	12:40:36 PM		24.457	24.771	24.716	25.715	24.728		46.273	47.766	12.411	33.838	-1.218	-5.986		50.233	0.154	14.643	0.003		1196.0	19.9328	46.3	12.3	40.1	2.762	0.023	0.023	0.001	0.578	0.49	
613	4/23/2004	12:41:36 PM		24.444	24.778	24.713	25.732	24.755		45.533	47.46	12.302	33.214	-1.221	-5.269		48.832	0.178	14.643	0.003		1197.0	19.9494	46.0	12.0	39.4	2.715	0.027	0.027	0.001	0.679	0.58	
614	4/23/2004	12:42:36 PM		24.48	24.774	24.689	25.714	24.786		45.446	47.383	12.257	33.218	-1.224	-5.127		48.972	0.099	14.643	0.003		1198.0	19.9661	45.9	12.0	39.3	2.712	0.015	0.015	0.000	0.379	0.32	
615	4/23/2004	12:43:36 PM		24.498	24.797	24.707	25.741	24.839		46.306	47.667	12.33	34.011	-1.218	-6.015		51.389	0.158	14.643	0.003		1199.0	19.9828	46.2	12.6	40.2	2.769	0.024	0.024	0.001	0.591	0.50	
616	4/23/2004	12:44:36 PM		24.499	24.798	24.698	25.757	24.845		45.696	47.424	12.362	33.327	-1.224	-5.269		50.534	0.11	14.643	0.003		1200.0	19.9994	46.0	12.4	39.5	2.724	0.016	0.017	0.000	0.419	0.36	
617	4/23/2004	12:45:36 PM		24.495	24.834	24.719	25.844	24.856		46.033	47.684	12.383	33.676	-1.221	-5.876		50.634	0.121	14.643	0.003		1201.0	20.0161	46.2	12.4	39.9	2.748	0.018	0.018	0.000	0.456	0.39	
618	4/23/2004	12:46:36 PM		24.482	24.841	24.721	25.825	24.852		45.916	47.603	12.366	33.573	-1.218	-5.778		50.308	0.161	14.643	0.003		1202.0	20.0328	46.1	12.3	39.7	2.740	0.024	0.024	0.001	0.609	0.52	
619	4/23/2004	12:47:36 PM		24.442	24.842	24.707	25.861	24.863		46.089	47.891	12.423	33.674	-1.221	-5.974		49.568	0.156	14.643	0.003		1203.0	20.0494	46.4	12.1	39.9	2.750	0.023	0.023	0.001	0.588	0.50	
620	4/23/2004	12:48:36 PM		24.453	24.847	24.712	25.836	24.809		45.979	47.889	12.465	33.499	-1.218	-5.763		48.565	0.152	14.643	0.003		1204.0	20.0661	46.4	11.9	39.7	2.740	0.023	0.023	0.001	0.575	0.49	
621	4/23/2004	12:49:36 PM		24.47	24.849	24.709	25.768	24.69		46.18	48.133	12.382	33.764	-1.224	-5.856		48.004	0.145	14.643	0.003		1205.0	20.0828	46.7	11.8	40.0	2.756	0.022	0.022	0.001	0.545	0.46	
622	4/23/2004	12:50:36 PM		24.496	24.875	24.715	25.734	24.732		45.358	47.632	12.411	32.919	-1.221	-5.208		51.958	0.135	14.643	0.003		1206.0	20.0994	46.2	12.7	39.1	2.698	0.020	0.020	0.001	0.518	0.44	
623	4/23/2004	12:51:36 PM		24.485	24.875	24.694	25.698	24.661		45.398	47.764	12.426	32.898	-1.224	-5.142		49.514	0.153	14.643	0.003		1207.0	20.1161	46.3	12.1	39.1	2.699	0.023	0.023	0.001	0.588	0.50	
624	4/23/2004	12:52:36 PM		24.505	24.864	24.699	25.598	24.546		45.597	48.023	12.492	33.05	-1.221	-5.194		49.679	0.153	14.643	0.003		1208.0	20.1328	46.6	12.2	39.3	2.711	0.023	0.023	0.001	0.585	0.50	
625	4/23/2004	12:53:36 PM		24.5	24.864	24.704	25.548	24.456		45.36	47.799	12.396	32.931	-1.224	-5.165		49.366	0.161	14.643	0.003		1209.0	20.1494	46.3	12.1	39.1	2.699	0.024	0.024	0.001	0.618	0.53	
626	4/23/2004	12:54:36 PM		24.497	24.831	24.701	25.49	24.437		45.197	47.727	12.387	32.775	-1.221	-5.081		50.434	0.152	14.643	0.003		1210.0	20.1661	46.3	12.4	39.0	2.688	0.023	0.023	0.001	0.586	0.50	
627	4/23/2004	12:55:36 PM		24.514	24.833	24.688	25.492	24.474		45.313	47.926	12.439	32.793	-1.221	-5.044		48.984	0.143	14.643	0.003		1211.0	20.1828	46.5	12.0	39.1	2.693	0.021	0.022	0.001	0.551	0.47	
628	4/23/2004	12:56:36 PM		24.527	24.816	24.696	25.535	24.532		45.626	48.106	12.329	33.294	-1.221	-5.061		49.385	0.158	14.643	0.003		1212.0	20.1994	46.6	12.1	39.5	2.721	0.024	0.024	0.001	0.602	0.51	
629	4/23/2004	12:57:36 PM		24.554	24.823	24.698	25.587	24.59		44.772	47.99	12.502	32.151	-1.221	-3.572		51.669	0.067	14.643	0.003		1213.0	20.2161	46.5	12.7	38.5	2.652	0.010	0.010	0.000	0.262	0.22	
630	4/23/2004	12:58:36 PM		24.538	24.812	24.707	25.606	24.624		45.979	47.94	12.48	33.522	-1.221	-4.948		49.666	0.17	14.643	0.003		1214.0	20.2328	46.5	12.2	39.8	2.741	0.025	0.026	0.001	0.643	0.55	

RUN # WASH1 & WASH2; CAMPAIGN II SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	4/23/2004	12:59:36 PM		24.517	24.806	24.706	25.65	24.678		45.676	47.858	12.556	33.097	-1.221	-5.075		51.954	0.155	14.643	0.003		1215.0	20.2494	46.4	12.7	39.4	2.716	0.023	0.023	0.001	0.592	0.50	
632	4/23/2004	1:00:36 PM		24.553	24.832	24.742	25.766	24.653		45.927	48.183	12.548	33.313	-1.218	-4.937		50.298	0.147	14.643	0.003		1216.0	20.2661	46.7	12.3	39.6	2.732	0.022	0.022	0.001	0.557	0.47	
633	4/23/2004	1:01:36 PM		24.563	24.817	24.737	25.706	24.669		45.294	47.659	12.403	32.828	-1.221	-4.607		48.702	0.096	14.643	0.003		1217.0	20.2828	46.2	11.9	39.1	2.693	0.014	0.014	0.000	0.369	0.31	
634	4/23/2004	1:02:36 PM		24.573	24.817	24.752	25.716	24.689		46.07	47.967	12.453	33.543	-1.218	-5.096		51.558	0.158	14.643	0.003		1218.0	20.2994	46.5	12.6	39.8	2.745	0.024	0.024	0.001	0.596	0.51	
635	4/23/2004	1:03:36 PM		24.534	24.813	24.728	25.692	24.675		45.775	48.025	12.459	33.227	-1.224	-5.006		52.15	0.161	14.643	0.003		1219.0	20.3161	46.6	12.8	39.5	2.723	0.024	0.024	0.001	0.612	0.52	
636	4/23/2004	1:04:36 PM		24.524	24.808	24.733	25.697	24.67		45.431	47.764	12.531	32.88	-1.221	-5.075		50.797	0.162	14.643	0.003		1220.0	20.3328	46.3	12.4	39.2	2.700	0.024	0.024	0.001	0.622	0.53	
637	4/23/2004	1:05:36 PM		24.515	24.819	24.744	25.698	24.686		45.51	47.947	12.469	32.993	-1.221	-5.191		49.937	0.153	14.643	0.003		1221.0	20.3494	46.5	12.2	39.3	2.706	0.023	0.023	0.001	0.585	0.50	
638	4/23/2004	1:06:36 PM		24.518	24.822	24.747	25.751	24.743		45.612	48.135	12.443	33.12	-1.224	-5.197		48.392	0.15	14.643	0.003		1222.0	20.3661	46.7	11.9	39.4	2.714	0.022	0.023	0.001	0.572	0.49	
639	4/23/2004	1:07:36 PM		24.529	24.833	24.748	25.807	24.795		45.591	48.191	12.442	33.077	-1.221	-5.145		50.261	0.156	14.643	0.003		1223.0	20.3828	46.7	12.3	39.3	2.712	0.023	0.023	0.001	0.596	0.51	
640	4/23/2004	1:08:36 PM		24.546	24.845	24.76	25.839	24.847		45.383	48.013	12.245	33.064	-1.221	-5.044		49.537	0.156	14.643	0.003		1224.0	20.3994	46.5	12.1	39.2	2.704	0.023	0.023	0.001	0.597	0.51	
641	4/23/2004	1:09:36 PM		24.54	24.834	24.739	25.828	24.895		45.375	47.955	12.268	32.984	-1.221	-5.177		47.83	0.151	14.643	0.003		1225.0	20.4161	46.5	11.7	39.2	2.701	0.023	0.023	0.001	0.579	0.49	
642	4/23/2004	1:10:36 PM		24.561	24.865	24.75	25.894	24.942		45.502	48.208	12.243	33.159	-1.221	-5.142		50.402	0.145	14.643	0.003		1226.0	20.4328	46.7	12.4	39.3	2.712	0.022	0.022	0.001	0.554	0.47	
643	4/23/2004	1:11:36 PM		24.56	24.865	24.729	25.964	24.966		45.331	48.083	12.335	32.8	-1.221	-5.127		48.298	0.162	14.643	0.003		1227.0	20.4494	46.6	11.8	39.1	2.693	0.024	0.024	0.001	0.623	0.53	
644	4/23/2004	1:12:36 PM		24.57	24.884	24.734	25.988	24.88		45.188	48.017	12.384	32.687	-1.221	-5.07		48.803	0.153	14.643	0.003		1228.0	20.4661	46.5	12.0	38.9	2.685	0.023	0.023	0.001	0.590	0.50	
645																																	
646	Wash 1 and 2																																
647		Averages		24.600	24.832	24.473	25.550	24.630		46.860	50.135	14.023	32.963	-1.163	-6.294		49.244	0.117	14.643	0.003				48.66	12.07	39.911	2.752	0.018	0.018	0.000	0.444	0.378	
648		Maximum		25.255	25.672	25.031	26.809	27.374		51.350	53.591	17.448	37.243	1.501	0.594		53.306	0.215	14.643	0.004				52.12	13.06	43.230	2.981	0.032	0.032	0.001	0.791	0.673	
649		Median		24.548	24.995	24.723	25.548	24.663		46.827	50.469	13.610	33.121	-1.221	-6.375		49.262	0.117	14.643	0.003				49.00	12.07	39.932	2.753	0.017	0.018	0.000	0.441	0.376	
650		Minimum		22.761	21.901	22.820	22.929	22.175		43.253	47.327	11.997	28.371	-1.227	-7.640		43.755	0.020	14.643	0.003				45.85	10.72	36.360	2.507	0.003	0.003	0.000	0.078	0.066	
651		2 x Std Dev		0.836	1.684	1.021	1.414	1.497		1.699	2.594	2.837	2.276	0.504	2.369		3.322	0.063	0.000	0.000				2.59	0.81	1.512	0.104	0.009	0.009	0.000	0.230	0.195	
652	Number of Points Used*			622	622	622	622	622		622	622	622	622	622	622		622	622	622	622				622	622	622	622	622	622	622	622	622	
653		* Backpulse points in box are not included																															
654																																	
655	Wash 1																																
656		Averages		24.766	25.343	24.290	25.891	24.991		47.136	50.944	14.835	32.451	-1.138	-6.596		49.024	0.099	14.643	0.003				49.47	12.01	39.793	2.744	0.015	0.015	0.000	0.376	0.320	
657		Maximum		25.255	25.672	25.031	26.809	27.374		51.350	53.591	17.448	35.090	1.501	0.594		53.306	0.150	14.643	0.004				52.12	13.06	42.771	2.949	0.022	0.023	0.001	0.620	0.528	
658		Median		24.808	25.509	24.465	25.976	24.950		47.059	50.877	14.970	32.289	-1.221	-6.891		49.076	0.100	14.643	0.003				49.40	12.03	39.809	2.745	0.015	0.015	0.000	0.381	0.324	
659		Minimum		23.690	24.511	22.820	24.959	24.097		44.324	49.843	13.120	28.371	-1.227	-7.640		43.755	0.020	14.643	0.003				48.37	10.72	36.360	2.507	0.003	0.003	0.000	0.078	0.066	
660		2 x Std Dev		0.726	0.670	1.156	0.940	1.158		1.667	1.280	2.475	2.054	0.590	2.663		3.456	0.040	0.000	0.000				1.28	0.85	1.509	0.104	0.006	0.006	0.000	0.144	0.123	
661	Number of Points Used*			375	375	375	375	375		375	375	375	375	375	375		375	375	375	375				375	375	375	375	375	375	375	375	375	
662		* Backpulse points in box are not included																															
663																																	
664	Wash 2																																
665		Averages		24.348	24.058	24.751	25.034	24.082		46.441	48.906	12.789	33.739	-1.201	-5.837		49.579	0.146	14.643	0.003				47.43	12.15	40.090	2.764	0.022	0.022	0.001	0.548	0.466	
666		Maximum		24.631	24.884	24.915	25.988	24.966		49.216	51.004	14.443	37.243	1.116	-0.875		52.471	0.215	14.643	0.004				49.53	12.86	43.230	2.981	0.032	0.032	0.001	0.791	0.673	
667		Median		24.485	24.331	24.787	25.266	24.258		46.437	48.483	12.623	33.838	-1.221	-6.024		49.695	0.147	14.643	0.003				47.01	12.18	40.079	2.763	0.022	0.022	0.001	0.545	0.464	
668		Minimum		22.761	21.901	24.057	22.929	22.175		43.253	47.327	11.997	30.507	-1.224	-6.625		44.821	0.053	14.643	0.003				45.85	10.98	37.046	2.554	0.008	0.008	0.000	0.196	0.166	
669		2 x Std Dev		0.734	1.573	0.292	1.387	1.271		1.374	2.107	0.935	1.624	0.317	1.406		2.987	0.047	0.000	0.000				2.11	0.73	1.444	0.100	0.007	0.007	0.000	0.174	0.148	
670	Number of Points Used*			247	247	247	247	247		247	247	247	247	247	247		247	247	247	247				247	247	247	247	247	247	247	247	247	
671		* Backpulse points in box are not included																															

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING



RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	4/14/2004	1:30:58 PM		24.687	21.862	24.835	24.226	22.583		0.054	0.02	-0.021	-0.005	-0.179	0.099		-0.08	0.003	0.086	0.005				Filter Surface A		6.707	FT2						
8	4/19/2004	7:37:13 AM		22.595	22.228	23.926	21.772	22.175		0.046	0.082	-0.025	-0.009	-0.179	0.143		-0.086	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	4/19/2004	8:21:39 AM		22.248	22.333	22.324	22.194	22.199		-0.008	0.059	0.002	0.007	-0.132	0.131		-0.084	0.003	14.643	0.005													
10	4/20/2004	12:41:36 PM		22.772	22.767	22.049	23.603	24.746		-0.004	0.045	-0.009	-0.007	-0.176	0.108		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	4/22/2004	8:40:43 AM		22.558	21.446	24.471	22.716	22.489		0.01	0.028	0.001	0.001	-0.205	0.096		46.562	0.043	14.643	0.004													
12	4/23/2004	8:53:20 AM		21.548	21.737	22.041	21.89	21.369		-0.004	0.026	0.003	-0.005	-0.196	0.082		-0.082	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	4/26/2004	9:00:47 AM		22.379	22.907	23.455	22.416	21.819		-0.012	0.08	0	-0.009	-0.205	0.044		-0.08	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>		
14	4/27/2004	9:14:59 AM		20.374	19.305	19.368	20.841	19.777		-0.002	0.02	-0.001	0.005	-0.193	0.111		-0.084	0.003	14.643	0.006								at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	4/26/2004	12:36:30 PM		21.273	23.163	22.179	23.658	22.602		23.558	26.778	5.483	18.137	-1.218	-2.925		45.06	0.457	14.643	0.003		0.0	0	25.3	11.0	20.8	1.437	0.068	0.074	0.004	3.541	3.01	
18	4/26/2004	12:37:31 PM		21.386	23.171	22.318	23.72	22.639		23.721	26.886	5.519	18.28	-1.215	-2.939		44.257	0.455	14.643	0.003		1.0	0.01694	25.4	10.8	21.0	1.448	0.068	0.073	0.003	3.486	2.97	
19	4/26/2004	12:38:31 PM		21.434	23.178	22.405	23.767	22.762		3.859	26.671	5.479	-1.641	17.898	3.967		43.947	0.003	14.643	0.003		2.0	0.03361	25.2	10.8	1.1	0.076	0.000	0.000	0.000	0.434	0.37	
20	4/26/2004	12:39:31 PM		21.486	23.17	22.492	23.805	22.824		4.054	26.874	5.453	-1.43	17.843	19.627		46.873	0.003	14.643	0.003		3.0	0.05028	25.4	11.5	1.3	0.090	2.183	2.344	1.787	1786.784	1520.58	
21	4/26/2004	12:40:31 PM		21.558	23.171	22.554	23.826	22.905		4.102	26.992	5.48	-1.421	17.895	64.773		44.827	0.003	14.643	0.003		4.0	0.06694	25.5	11.0	1.3	0.092	2.183	2.340	1.746	1745.695	1485.61	
22	4/26/2004	12:41:31 PM		21.83	23.187	22.666	23.913	23.007		4.484	26.899	5.468	-0.949	17.502	30.323		40.905	0.003	14.643	0.005		5.0	0.08361	25.4	10.0	1.8	0.122	0.000	0.000	0.000	0.270	0.23	
23	4/26/2004	12:42:31 PM		21.837	23.194	22.768	23.979	23.003		20.403	26.911	5.26	15.187	1.133	0.475		44.994	0.445	14.643	0.003		6.0	0.10028	25.4	11.0	17.8	1.227	0.066	0.071	0.004	3.972	3.38	
24	4/26/2004	12:43:31 PM		21.924	23.211	22.85	24.001	23.045		20.496	27.029	5.282	15.222	1.24	0.585		45.991	0.436	14.643	0.003		7.0	0.11694	25.6	11.3	17.9	1.231	0.065	0.069	0.004	3.869	3.29	
25	4/26/2004	12:44:31 PM		22.02	23.211	22.921	24.037	22.996		22.931	26.712	5.182	17.831	-1.218	-2.5		45.924	0.502	14.643	0.003		8.0	0.13361	25.2	11.3	20.4	1.405	0.075	0.079	0.004	3.895	3.31	
26	4/26/2004	12:45:31 PM		22.087	23.223	22.983	24.078	23.002		23.159	26.861	5.172	18.022	-1.218	-2.531		44.351	0.496	14.643	0.003		9.0	0.15028	25.4	10.9	20.6	1.420	0.074	0.078	0.004	3.803	3.24	
27	4/26/2004	12:46:31 PM		22.163	23.219	23.024	24.07	23.043		23.109	26.747	5.093	18.095	-1.224	-2.572		43.83	0.492	14.643	0.003		10.0	0.16694	25.3	10.7	20.6	1.420	0.073	0.078	0.004	3.766	3.20	
28	4/26/2004	12:47:31 PM		22.236	23.241	23.101	24.117	23.07		23.178	26.801	5.098	18.175	-1.218	-2.604		45.086	0.489	14.643	0.003		11.0	0.18361	25.3	11.0	20.7	1.426	0.073	0.077	0.004	3.721	3.17	
29	4/26/2004	12:48:31 PM		22.302	23.257	23.178	24.148	23.137		23.253	26.791	5.008	18.329	-1.215	-2.609		45.968	0.488	14.643	0.003		12.0	0.20028	25.3	11.3	20.8	1.433	0.073	0.077	0.004	3.685	3.14	
30	4/26/2004	12:49:31 PM		22.375	23.284	23.255	24.175	23.159		23.319	26.903	5.044	18.334	-1.218	-2.633		45.28	0.486	14.643	0.003		13.0	0.21694	25.4	11.1	20.8	1.436	0.072	0.076	0.004	3.655	3.11	
31	4/26/2004	12:50:31 PM		22.422	23.281	23.312	24.177	23.256		23.033	26.461	5.009	18.077	-1.218	-2.673		46.646	0.486	14.643	0.003		14.0	0.23361	25.0	11.4	20.6	1.417	0.072	0.076	0.004	3.698	3.15	
32	4/26/2004	12:51:31 PM		22.464	23.283	23.37	24.179	23.248		23.17	26.602	4.916	18.329	-1.215	-2.662		43.742	0.484	14.643	0.003		15.0	0.25028	25.1	10.7	20.7	1.431	0.072	0.076	0.004	3.642	3.10	
33	4/26/2004	12:52:31 PM		22.516	23.295	23.412	24.186	23.25		23.477	27.013	4.996	18.59	-1.215	-2.664		43.974	0.483	14.643	0.003		16.0	0.26694	25.5	10.8	21.0	1.450	0.072	0.075	0.004	3.581	3.05	
34	4/26/2004	12:53:31 PM		22.573	23.312	23.454	24.233	23.217		23.387	26.847	4.939	18.533	-1.218	-2.679		43.175	0.482	14.643	0.003		17.0	0.28361	25.4	10.6	21.0	1.445	0.072	0.075	0.004	3.582	3.05	
35	4/26/2004	12:54:31 PM		22.62	23.324	23.49	24.24	23.208		23.481	26.907	4.932	18.623	-1.218	-2.69		44.627	0.481	14.643	0.003		18.0	0.30028	25.4	10.9	21.1	1.451	0.072	0.075	0.004	3.555	3.03	
36	4/26/2004	12:55:31 PM		22.656	23.32	23.522	24.241	23.27		23.311	26.71	4.929	18.471	-1.221	-2.708		42.983	0.479	14.643	0.003		19.0	0.31694	25.2	10.5	20.9	1.440	0.071	0.074	0.004	3.564	3.03	
37	4/26/2004	12:56:31 PM		22.693	23.322	23.544	24.263	23.387		23.344	26.791	4.865	18.541	-1.221	-2.714		43.6	0.479	14.643	0.003		20.0	0.33361	25.3	10.7	20.9	1.444	0.071	0.074	0.004	3.553	3.02	
38	4/26/2004	12:57:31 PM		22.756	23.354	23.636	24.28	23.399		23.599	27.062	4.902	18.756	-1.215	-2.714		43.988	0.478	14.643	0.003		21.0	0.35028	25.6	10.8	21.2	1.460	0.071	0.074	0.003	3.498	2.98	
39	4/26/2004	12:58:31 PM		22.786	23.35	23.627	24.19	23.319		23.721	27.087	4.86	18.945	-1.218	-2.728		43.926	0.477	14.643	0.003		22.0	0.36694	25.6	10.8	21.3	1.471	0.071	0.074	0.003	3.466	2.95	
40	4/26/2004	12:59:31 PM		22.813	23.361	23.663	24.151	23.21		23.632	27.029	4.921	18.754	-1.221	-2.737		43.936	0.477	14.643	0.003		23.0	0.38361	25.6	10.8	21.2	1.461	0.071	0.074	0.003	3.485	2.97	
41	4/26/2004	1:00:31 PM		22.859	23.372	23.724	24.142	23.126		23.551	26.973	4.854	18.791	-1.218	-2.74		44.779	0.477	14.643	0.003		24.0	0.40028	25.5	11.0	21.2	1.460	0.071	0.074	0.003	3.483	2.96	
42	4/26/2004	1:01:31 PM		22.884	23.372	23.734	24.117	23.086		23.443	26.814	4.793	18.736	-1.218	-2.728		44.316	0.476	14.643	0.003		25.0	0.41694	25.3	10.9	21.1	1.454	0.071	0.074	0.003	3.488	2.97	
43	4/26/2004	1:02:31 PM		22.935	23.382	23.79	24.183	23.132		23.317	26.582	5.087	18.286	-1.218	-2.849		44.818	0.465	14.643	0.003		26.0	0.43361	25.1	11.0	20.8	1.434	0.069	0.072	0.003	3.449	2.93	
44	4/26/2004	1:03:31 PM		22.96	23.393	23.811	24.229	23.157		23.375	26.66	4.972	18.452	-1.218	-2.832		44.089	0.467	14.643	0.003		27.0	0.45028	25.2	10.8	20.9	1.442	0.070	0.072	0.003	3.443	2.93	
45	4/26/2004	1:04:31 PM		23.002	23.394	23.837	24.235	23.189		23.435	26.64	4.966	18.569	-1.218	-2.838		45.211	0.466	14.643	0.003		28.0	0.46694	25.2	11.1	21.0	1.448	0.069	0.072	0.003	3.419	2.91	
46	4/26/2004	1:05:31 PM		23.033	23.416	23.868	24.246	23.19		23.244	26.488	5.017	18.309	-1.215	-2.844		45.594	0.465	14.643	0.003		29.0	0.48361	25.0	11.2	20.8	1.432	0.069	0.072	0.003	3.445	2.93	
47	4/26/2004	1:06:31 PM		23.053	23.421	23.903	24.241	23.215		23.522	26.731	5.019	18.551	-1.215	-2.847		46.218	0.465	14.643	0.003		30.0	0.50028	25.3	11.3	21.0	1.450	0.069	0.072	0.003	3.399	2.89	
48	4/26/2004	1:07:31 PM		23.085	23.422	23.905	24.258	23.292		23.572	26.776	5.003	18.59	-1.218	-2.861		46.245	0.463	14.643	0.003		31.0	0.51694	25.3	11.3	21.1	1.453	0.069	0.071	0.003	3.377	2.87	
49	4/26/2004	1:08:31 PM		23.116	23.429	23.941	24.289	23.313		23.539	26.797	5.002	18.6	-1.218	-2.864		44.862	0.463	14.643	0.003		32.0	0.53361	25.3	11.0	21.1	1.453	0.069	0.071	0.003	3.376	2.87	
50	4/26/2004	1:09:31 PM		23.142	23.444	23.972	24.305	23.309		23.483	26.667	5.036	18.508	-1.218	-2.873		47.059	0.463	14.643	0.003		33.0	0.55028	25.2	11.5	21.0	1.448	0.069	0.071	0.003	3.385	2.88	
51	4/26/2004	1:10:31 PM		23.173	23.451	23.998	24.346	23.35		23.833	27.077	4.807	19.107	-1.221	-2.841		45.211	0.466	14.643	0.003		34.0	0.56694	25.6	11.1	21.5	1.480	0.069	0.071	0.003	3.329	2.83	
52	4/26/2004	2:12:39 PM		24.908	23.04	25.686	24.077	23.195		42.385	42.833	4.302	38.308	-1.221	-4.263		45.229	0.003	0.801	0.003		96.2	1.6025	41.4	11.1	40.3	2.782	0.119	0.117	0.003	2.903	2.47	
53	4/26/2004	2:13:39 PM		24.944	23.061	25.732	24.108	23.197		37.88	42.748	4.19	33.822	-0.477	-1.54		44.681	0.533	-0.012	0.003		97.2	1.61917	41.3	10.9	35.9	2.472	-0.002	-0.002	0.000	-0.049	-0.04	
54	4/26/2004	2:14:39 PM		24.911	23.058	25.734	24.095	23.269		2.684	43.202	4.11	-1.36	35.61	20.462		43.594	0.003	-0.013	0.003		98.2	1.63583	41.7	10.7	0.7	0.046	-0.002	-0.002	-0.003	-2.868	-2.44	
55	4/26/2004	2:15:39 PM		24.863	23.106	25.792	24.142	23.321		2.87	43.536	4.028	-1.025	35.752	19.89		42.879	0.003	-0.013	0.003		99.2	1.6525	42.1	10.5	0.9	0.064	-0.002	-0.002	-0.002	-2.055	-1.75	
56	4/26/2004	2:16:39 PM		24.375	23.118	25.804	24.164	23.333		2.663	43.372	4.002	-1.233	36.036	39.672		41.769	0.003	14.643	0.235		100.2	1.66917	41.9	10.2	0.7	0.049	2.183	2.134	2.985	2985.196	2540.45	
57	4/26/2004	2:17:39 PM		24.964	23.131	25.827	24.233	23.326		35.717	43.291	4.001	32.547	4.213	0.602		41.037	0.901	1.668	0.003		101.2	1.68583	41.8	10.1	34.1	2.353	0.249	0.243	0.007	7.119	6.06	
58	4/26/2004	2:18:39 PM		25.095	23.127	25.823	24.224	23.267		42.048	42.56	4.3	37.891	-1.215	0.747		43.087	0.003	0.906	0.003		102.2	1.7025	41.1	10.6	40.0	2.756	0.135	0.132	0.003	3.302	2.81	
59	4/26/2004	2:19:39 PM		25.142	23.159	25.87	24.206	23.304		42.254	42.711	4.103	38.308	-1.215	0.689		44.059	0.003	0.875	0.003		103.2	1.71917	41.2	10.8	40.3	2.777	0.130	0.127	0.003	3.160	2.69	
60	4/26/2004	2:20:39 PM		25.153	23.15	25.846	24.151	23.28		42.582	42.985	3.988	38.776	-1.218	0.683		42.078	0.003	0.867	0.003		104.2	1.73583	41.5	10.3	40.7	2.805	0.129	0.126	0.003	3.103	2.64	
61	4/26/2004	2:21:39 PM		25.173	23.155	25.856	24.131	23.265		42.949	43.478	3.99	39.17	-1.218	0.692		42.372	0.003	0.854	0.003		105.2	1.7525	42.0	10.4	41.1	2.831	0.127	0.124	0.003	3.027	2.58	
62	4/26/2004	2:22:39 PM		25.199	23.171	25.877	24.143	23.231		42.378	42.943	4.19	38.33	-1.221	0.692		43.029	0.003	0.835	0.004		106.2	1.76917	41.5	10.5	40.4	2.782	0.124	0.121	0.003	3.010	2.56	
63	4/26/2004	2:23:39 PM		25.208	23.181	25.887	24.182	23.231		42.078	42.46	4.093	38.176	-1.218	0.692		42.989	0.003	0.842	0.005		107.2	1.78583	41.0	10.5	40.1	2.767	0.126	0.122	0.003	3.052	2.60	
64	4/26/2004	2:24:39 PM		25.228	23.196	25.907	24.217	23.216		42.592	43.097	4.108	38.644	-1.218	0.706		43.955	0.003	0.849	0.006		108.2	1.8025	41.6	10.8	40.6	2.800	0.127	0.123	0.003	3.038	2.59	
65	4/26/2004	2:25:39 PM		25.248	23.2	25.916	24.182	23.205		42.611	43.068	4.056	38.687	-1.221	0.706		41.984	0.003	0.854	0.005		109.2	1.81917	41.6	10.3	40.6	2.803	0.127	0.124	0.003	3.053	2.60	
66	4/26/2004	2:26:39 PM		25.257	23.21	25.94	24.141	23.21		42.696	43.233	3.961	38.924	-1.218	0.715		39.75	0.003	0.855	0.004		110.2	1.83583	41.8	9.7	40.8	2.814	0.127	0.124	0.003	3.042	2.59	
67	4/26/2004	2:27:39 PM		25.277	23.219	25.95	24.16	23.204		42.681	43.277	3.971	38.919	-1.218	0.715		42.764	0.003	0.858	0.004		111.2	1.8525	41.8	10.5	40.8	2.813	0.128	0.125	0.003	3.053	2.60	
68	4/26/2004	2:28:39 PM		25.282	23.219	25.955	24.16	23.189		42.791	43.383	3.911	39.098	-1.218	0.718		42.489	0.003	0.863	0.005		112.2	1.86917	41.9	10.4	40.9	2.823	0.129	0.125	0.003	3.059	2.60	
69	4/26/2004	2:29:39 PM		25.312	23.24	25.98	24.151	23.19		42.845	43.397	3.86	39.231	-1.218	0.724		41.318	0.003	0.866	0.007		113.2	1.88583	41.9	10.1	41.0	2.829	0.129	0.126	0.003	3.061	2.60	
70	4/26/2004	2:30:39 PM		25.292	23.229	25.95	24.12	23.209		42.737	43.432	3.831	39.129	-1.221	0.724		41.106	0.003	0.869	0.004		114.2	1.9025	42.0	10.1	40.9	2.822	0.130	0.126	0.003	3.082	2.62	

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	4/26/2004	2:31:39 PM		25.322	23.235	25.965	24.171	23.26		43.094	43.77	3.822	39.5	-1.218	0.729		41.663	0.003	0.869	0.005		115.2	1.91917	42.3	10.2	41.3	2.847	0.130	0.126	0.003	3.053	2.60	
72	4/26/2004	2:32:39 PM		25.335	23.263	25.978	24.193	23.282		42.333	42.804	4.16	38.398	-1.218	0.729		43.967	0.003	0.856	0.005		116.2	1.93583	41.3	10.8	40.4	2.783	0.128	0.124	0.003	3.076	2.62	
73	4/26/2004	2:33:39 PM		25.343	23.276	26.001	24.216	23.325		41.777	42.398	4.255	37.715	-1.218	0.732		42.993	0.003	0.859	0.005		117.2	1.9525	40.9	10.5	39.7	2.740	0.128	0.125	0.003	3.133	2.67	
74	4/26/2004	2:34:39 PM		25.354	23.287	26.012	24.278	23.241		42.268	42.827	4.219	38.285	-1.218	0.738		42.922	0.003	0.863	0.005		118.2	1.96917	41.4	10.5	40.3	2.777	0.129	0.125	0.003	3.105	2.64	
75	4/26/2004	2:35:39 PM		25.345	23.273	26.003	24.244	23.262		42.181	42.821	4.239	38.17	-1.218	0.735		44.011	0.003	0.872	0.005		119.2	1.98583	41.3	10.8	40.2	2.770	0.130	0.126	0.003	3.146	2.68	
76	4/26/2004	2:36:39 PM		25.352	23.285	25.986	24.322	23.375		41.912	42.533	4.173	37.961	-1.218	0.741		43.851	0.003	0.877	0.006		120.2	2.0025	41.1	10.7	39.9	2.753	0.131	0.127	0.003	3.185	2.71	
77	4/26/2004	2:37:39 PM		25.364	23.317	25.962	24.323	23.507		41.746	42.334	4.176	37.828	-1.218	0.741		43	0.003	0.882	0.006		121.2	2.01917	40.9	10.5	39.8	2.743	0.131	0.128	0.003	3.217	2.74	
78	4/26/2004	2:38:39 PM		25.32	23.319	25.914	24.305	23.549		42.007	42.568	4.187	38.043	-1.218	0.75		44.721	0.003	0.885	0.004		122.2	2.03583	41.1	11.0	40.0	2.760	0.132	0.129	0.003	3.213	2.73	
79	4/26/2004	2:39:39 PM		25.266	23.32	25.845	24.26	23.565		42.395	42.985	4.153	38.49	-1.218	0.747		44.691	0.003	0.892	0.004		123.2	2.0525	41.5	11.0	40.4	2.788	0.133	0.130	0.003	3.211	2.73	
80	4/26/2004	2:40:39 PM		25.224	23.322	25.792	24.288	23.577		42.179	42.846	4.189	38.211	-1.212	0.755		43.413	0.003	0.894	0.005		124.2	2.06917	41.4	10.6	40.2	2.771	0.133	0.130	0.003	3.243	2.76	
81	4/26/2004	2:41:39 PM		25.15	23.303	25.684	24.244	23.619		42.009	42.678	4.124	38.129	-1.224	0.747		42.318	0.003	0.9	0.004		125.2	2.08583	41.2	10.4	40.1	2.763	0.134	0.132	0.003	3.285	2.80	
82	4/26/2004	2:42:39 PM		25.101	23.315	25.65	24.245	23.6		42.017	42.657	4.127	38.103	-1.218	0.755		42.249	0.003	0.902	0.005		126.2	2.1025	41.2	10.4	40.1	2.762	0.134	0.132	0.003	3.296	2.81	
83	4/26/2004	2:43:39 PM		25.068	23.341	25.621	24.216	23.556		42.053	42.672	4.081	38.197	-1.212	0.761		42.543	0.003	0.907	0.005		127.2	2.11917	41.2	10.4	40.1	2.766	0.135	0.133	0.003	3.312	2.82	
84	4/26/2004	2:44:39 PM		24.997	23.316	25.551	24.146	23.581		42.453	43.016	4.059	38.64	-1.224	0.755		43.949	0.003	0.911	0.005		128.2	2.13583	41.5	10.8	40.5	2.796	0.136	0.134	0.003	3.298	2.81	
85	4/26/2004	2:45:39 PM		24.963	23.331	25.517	24.177	23.541		42.424	43.107	4.059	38.593	-1.218	0.761		43.753	0.003	0.913	0.005		129.2	2.1525	41.6	10.7	40.5	2.793	0.136	0.134	0.003	3.312	2.82	
86	4/26/2004	2:46:39 PM		24.922	23.336	25.471	24.196	23.551		42.216	42.686	3.998	38.447	-1.218	0.761		43.851	0.003	0.916	0.004		130.2	2.16917	41.2	10.7	40.3	2.781	0.137	0.135	0.003	3.342	2.84	
87	4/26/2004	2:47:39 PM		24.882	23.345	25.425	24.145	23.545		42.268	42.989	4.04	38.445	-1.218	0.764		43.517	0.003	0.922	0.005		131.2	2.18583	41.5	10.7	40.4	2.782	0.137	0.136	0.003	3.366	2.86	
88	4/26/2004	2:48:39 PM		24.862	23.355	25.4	24.14	23.545		42.513	43.238	4.043	38.722	-1.218	0.767		42.895	0.003	0.922	0.005		132.2	2.2025	41.8	10.5	40.6	2.800	0.137	0.136	0.003	3.346	2.85	
89	4/26/2004	2:49:39 PM		24.825	23.359	25.369	24.114	23.504		41.889	42.624	4.293	37.813	-1.218	0.764		43.392	0.003	0.91	0.005		133.2	2.21917	41.2	10.6	39.9	2.748	0.136	0.134	0.003	3.369	2.87	
90	4/26/2004	2:50:39 PM		24.785	23.358	25.348	24.179	23.543		41.901	42.761	4.184	37.916	-1.218	0.773		44.585	0.003	0.922	0.005		134.2	2.23583	41.3	10.9	39.9	2.752	0.137	0.136	0.003	3.411	2.90	
91	4/26/2004	2:51:39 PM		24.758	23.367	25.342	24.192	23.552		42.105	42.97	4.191	38.172	-1.218	0.77		45.154	0.003	0.928	0.005		135.2	2.2525	41.5	11.1	40.1	2.767	0.138	0.137	0.003	3.414	2.91	
92	4/26/2004	2:52:39 PM		24.732	23.361	25.306	24.196	23.551		41.839	42.587	4.11	37.953	-1.218	0.773		44.351	0.003	0.937	0.006		136.2	2.26917	41.1	10.9	39.9	2.751	0.140	0.139	0.003	3.472	2.95	
93	4/26/2004	2:53:39 PM		24.7	23.364	25.269	24.164	23.524		42.289	42.956	4.103	38.433	-1.218	0.776		43.36	0.003	0.941	0.006		137.2	2.28583	41.5	10.6	40.4	2.783	0.140	0.139	0.003	3.450	2.94	
94	4/26/2004	2:54:39 PM		24.668	23.361	25.227	24.162	23.521		42.214	42.767	4.132	38.343	-1.218	0.776		42.268	0.003	0.95	0.006		138.2	2.3025	41.3	10.4	40.3	2.777	0.142	0.141	0.003	3.494	2.97	
95	4/26/2004	2:55:39 PM		24.635	23.359	25.189	24.164	23.519		42.442	43.248	4.091	38.564	-1.224	0.776		43.194	0.003	0.954	0.006		139.2	2.31917	41.8	10.6	40.5	2.793	0.142	0.141	0.003	3.493	2.97	
96	4/26/2004	2:56:39 PM		24.628	23.377	25.187	24.153	23.517		42.021	42.726	4.094	38.148	-1.218	0.779		43.035	0.003	0.959	0.005		140.2	2.33583	41.3	10.5	40.1	2.764	0.143	0.142	0.004	3.548	3.02	
97	4/26/2004	2:57:39 PM		24.6	23.374	25.164	24.18	23.514		42.138	42.815	4.064	38.316	-1.218	0.782		42.382	0.003	0.966	0.004		141.2	2.3525	41.3	10.4	40.2	2.774	0.144	0.143	0.004	3.564	3.03	
98	4/26/2004	2:58:39 PM		24.578	23.372	25.147	24.167	23.517		42.084	42.852	4.054	38.281	-1.218	0.784		42.38	0.003	0.977	0.006		142.2	2.36917	41.4	10.4	40.2	2.770	0.146	0.145	0.004	3.610	3.07	
99	4/26/2004	2:59:39 PM		24.575	23.394	25.169	24.2	23.499		41.97	42.875	4.089	38.092	-1.215	0.787		43.144	0.003	0.983	0.005		143.2	2.38583	41.4	10.6	40.0	2.760	0.147	0.146	0.004	3.644	3.10	
100	4/26/2004	3:00:39 PM		24.552	23.391	25.131	24.182	23.516		42.046	43.049	4.061	38.215	-1.218	0.79		42.459	0.003	0.99	0.006		144.2	2.4025	41.6	10.4	40.1	2.767	0.148	0.147	0.004	3.664	3.12	
101	4/26/2004	3:01:39 PM		24.529	23.378	25.108	24.123	23.523		42.312	43.219	4.183	38.378	-1.221	0.79		44.593	0.003	0.997	0.004		145.2	2.41917	41.7	10.9	40.3	2.782	0.149	0.148	0.004	3.673	3.13	
102	4/26/2004	3:02:39 PM		24.512	23.381	25.101	24.061	23.536		42.571	43.333	4.128	38.671	-1.215	0.793		42.336	0.003	1.005	0.005		146.2	2.43583	41.9	10.4	40.6	2.801	0.150	0.149	0.004	3.678	3.13	
103	4/26/2004	3:03:39 PM		24.499	23.378	25.078	24.052	23.528		42.088	43.036	4.086	38.259	-1.215	0.796		42.791	0.003	1.013	0.005		147.2	2.4525	41.6	10.5	40.2	2.770	0.151	0.151	0.004	3.751	3.19	
104	4/26/2004	3:04:39 PM		24.486	23.375	25.07	24.08	23.485		42.194	43.121	4.098	38.343	-1.215	0.799		43.365	0.003	1.019	0.004		148.2	2.46917	41.6	10.6	40.3	2.776	0.152	0.152	0.004	3.765	3.20	
105	4/26/2004	3:05:39 PM		24.493	23.382	25.097	24.102	23.512		42.588	43.575	4.101	38.765	-1.215	0.802		41.5	0.003	1.028	0.004		149.2	2.48583	42.1	10.2	40.7	2.805	0.153	0.153	0.004	3.758	3.20	
106	4/26/2004	3:06:39 PM		24.47	23.379	25.084	24.104	23.509		42.376	43.105	4.083	38.587	-1.221	0.802		42.739	0.003	1.039	0.004		150.2	2.5025	41.6	10.5	40.5	2.791	0.155	0.155	0.004	3.818	3.25	
107	4/26/2004	3:07:39 PM		24.458	23.366	25.042	24.102	23.507		42.067	43.227	4.022	38.269	-1.224	0.799		42.624	0.003	1.047	0.005		151.2	2.51917	41.8	10.4	40.2	2.769	0.156	0.156	0.004	3.882	3.30	
108	4/26/2004	3:08:39 PM		24.459	23.373	25.038	24.098	23.503		42.136	43.171	4.048	38.345	-1.221	0.805		42.987	0.003	1.054	0.004		152.2	2.53583	41.7	10.5	40.2	2.774	0.157	0.157	0.004	3.901	3.32	
109	4/26/2004	3:09:39 PM		24.455	23.364	25.034	24.134	23.474		42.302	43.349	4.048	38.493	-1.218	0.808		42.322	0.003	1.063	0.005		153.2	2.5525	41.9	10.4	40.4	2.785	0.158	0.158	0.004	3.919	3.34	
110	4/26/2004	3:10:39 PM		24.452	23.376	25.026	24.161	23.486		42.272	43.339	3.965	38.614	-1.218	0.81		43.233	0.003	1.072	0.005		154.2	2.56917	41.9	10.6	40.4	2.788	0.160	0.160	0.004	3.949	3.36	
111	4/26/2004	3:11:39 PM		24.443	23.372	25.027	24.148	23.492		42.505	43.65	4.001	38.8	-1.215	0.813		42.336	0.003	1.08	0.005		155.2	2.58583	42.2	10.4	40.7	2.803	0.161	0.161	0.004	3.958	3.37	
112	4/26/2004	3:12:39 PM		24.419	23.348	25.003	24.078	23.483		42.301	43.521	3.99	38.591	-1.221	0.81		42.968	0.003	1.084	0.006		156.2	2.6025	42.0	10.5	40.4	2.789	0.162	0.162	0.004	3.995	3.40	
113	4/26/2004	3:13:39 PM		24.42	23.359	25.004	24.074	23.489		42.16	43.298	4.015	38.412	-1.221	0.813		41.953	0.003	1.094	0.005		157.2	2.61917	41.8	10.3	40.3	2.778	0.163	0.163	0.004	4.048	3.45	
114	4/26/2004	3:14:39 PM		24.411	23.35	24.995	24.045	23.485		42.133	43.242	3.999	38.388	-1.218	0.816		45.718	0.003	1.102	0.004		158.2	2.63583	41.8	11.2	40.3	2.776	0.164	0.164	0.004	4.081	3.47	
115	4/26/2004	3:15:39 PM		24.406	23.355	24.99	24.04	23.5		42.223	43.468	3.976	38.517	-1.218	0.819		41.273	0.003	1.108	0.005		159.2	2.6525	42.0	10.1	40.4	2.783	0.165	0.165	0.004	4.093	3.48	
116	4/26/2004	3:16:39 PM		24.397	23.356	24.981	24.046	23.471		42.14	43.455	4.009	38.38	-1.218	0.819		42.138	0.003	1.112	0.004		160.2	2.66917	42.0	10.3	40.3	2.776	0.166	0.166	0.004	4.120	3.51	
117	4/26/2004	3:17:39 PM		24.392	23.351	24.971	24.046	23.451		42.252	43.374	3.978	38.56	-1.221	0.825		43.327	0.004	1.122	0.005		161.2	2.68583	41.9	10.6	40.4	2.786	0.167	0.167	0.004	4.143	3.53	
118	4/26/2004	3:18:39 PM		24.383	23.342	24.947	23.992	23.442		41.961	43.028	3.956	38.277	-1.221	0.822		43.166	0.003	1.128	0.005		162.2	2.7025	41.6	10.6	40.1	2.766	0.168	0.168	0.004	4.198	3.57	
119	4/26/2004	3:19:39 PM		24.379	23.347	24.963	23.947	23.458		42.119	43.124	3.972	38.452	-1.218	0.825		43.538	0.004	1.134	0.005		163.2	2.71917	41.7	10.7	40.3	2.778	0.169	0.169	0.004	4.201	3.58	
120	4/26/2004	3:20:39 PM		24.374	23.333	24.963	23.998	23.423		42.239	43.387	3.984	38.521	-1.221	0.828		43.208	0.003	1.141	0.005		164.2	2.73583	41.9	10.6	40.4	2.784	0.170	0.170	0.004	4.217	3.59	
121	4/26/2004	3:21:39 PM		24.38	23.349	24.979	23.989	23.414		42.021	43.254	3.972	38.316	-1.215	0.836		41.569	0.003	1.145	0.006		165.2	2.7525	41.8	10.2	40.2	2.769	0.171	0.171	0.004	4.252	3.62	
122	4/26/2004	3:22:39 PM		24.37	23.334	24.964	23.989	23.414		41.789	43.003	3.94	38.137	-1.218	0.831		41.731	0.003	1.153	0.006		166.2	2.76917	41.5	10.2	40.0	2.755	0.172	0.172	0.004	4.306	3.66	
123	4/26/2004	3:23:39 PM		24.365	23.329	24.96	23.989	23.414		42.102	43.414	3.964	38.437	-1.218	0.834		41.708	0.003	1.158	0.005		167.2	2.78583	41.9	10.2	40.3	2.776	0.173	0.173	0.004	4.292	3.65	
124	4/26/2004	3:24:39 PM		24.366	23.33	24.945	24.01	23.43		42.358	43.445	4.024	38.626	-1.221	0.836		41.976	0.003	1.174	0.005		168.2	2.8025	42.0	10.3	40.5	2.792	0.175	0.175	0.004	4.329	3.68	
125	4/26/2004	3:25:39 PM		24.352	23.316	24.946	24.006	23.426		41.992	43.271	4.171	38.09	-1.218	0.834		44.954	0.003	1.164	0.006		169.2	2.81917	41.8	11.0	40.0	2.761	0.174	0.174	0.004	4.341	3.69	
126	4/26/2004	3:26:39 PM		24.362	23.311	24.951	23.981	23.406		42.144	43.472	4.199	38.238	-1.218	0.839		44.866	0.003	1.173	0.005		170.2	2.83583	42.0	11.0	40.2	2.771	0.175	0.175	0.004	4.357	3.71	
127	4/26/2004	3:27:39 PM		24.358	23.317	24.962	23.992	23.407		41.885	43.285	4.136	38.062	-1.218	0.839		41.965	0.003	1.18	0.006		171.2	2.8525	41.8	10.3	40.0	2.756	0.176	0.176	0.004	4.406	3.75	
128	4/26/2004	3:28:39 PM		24.374	23.312	24.988	23.998	23.363		42.04	43.546	4.163	38.156	-1.212	0.845		44.445	0.003	1.184	0.006		172.2	2.86917	42.1	10.9	40.1	2.765	0.177	0.177	0.004	4.404	3.75	
129	4/26/2004	3:29:39 PM		24.366	23.304	24.97	23.964	23.365		42.042	43.271	4.132	38.201	-1.224	0.839		44.42	0.003	1.188	0.004		173.2	2.88583	41.8	10.9	40.1	2.766	0.177	0.177	0.004	4.418	3.76	
130	4/26/2004	3:30:39 PM		24.376	23.315	24.99	23.965	23.4		42.424	43.72	4.152	38.571	-1.221	0.845		44.481	0.003	1.193	0.004		174.2	2.9025	42.2	10.9	40.5	2.792	0.178	0.178	0.004	4.393	3.74	
131	4/26/2004	3:31:39 PM		24.373	23.311	24.992	24.007	23.487		42.204	43.486	4.14	38.365	-1.221	0.845		44.136	0.003	1.204	0.006		175.2	2.91917	42.0	10.8	40.3	2.777	0.180	0.180	0.004	4.457	3.79	
132	4/26/2004	3:32:39 PM		24.385	23.313	24.994	24.109	23.524		42.117	43.403	4.121	38.304	-1.218	0.851		41.934	0.003	1.209	0.005		176.2	2.93583	41.9	10.3	40.2	2.772	0.180	0.180	0.004	4.483	3.82	
133	4/26/2004	3:33:39 PM		24.382	23.32	24.986	24.166	23.621		42.131	43.665	4.105	38.3	-1.218	0.848		43.158	0.003	1.211	0.006		177.2	2.9525	42.2	10.6	40.2	2.773	0.181	0.181	0.004	4.491	3.82	
134	4/26/2004	3:34:39 PM		24.383	23.322	24.977	24.218	23.672		42.061	43.611	4.121	38.226	-1.221	0.851		43.135	0.003	1.219	0.005		178.2	2.96917	42.1	10.6	40.1	2.768	0.182	0.182	0.005	4.530	3.86	
135	4/26/2004	3:35:39 PM		24.379	23.328	24.983	24.289	23.699		42.067	43.793	4.135	38.189	-1.218	0.854		43.423	0.003	1.224	0.004		179.2	2.98583	42.3	10.6	40.1	2.767	0.182	0.183	0.005	4.550	3.87	
136	4/26/2004	3:36:39 PM		24.397	23.351	25.011	24.312	23.706		41.997	43.625	4.063	38.255	-1.218	0.857		44.038	0.003	1.227	0.005		180.2	3.0025	42.2	10.8	40.1	2.767	0.183	0.183	0.005	4.558	3.88	
137	4/26/2004	3:37:39 PM		24.393	23.352	25.012	24.288	23.623		41.756	43.177	4.064	37.971	-1.218	0.857		43.118	0.003	1.232	0.006		181.2	3.01917	41.7	10.6	39.9	2.748	0.184	0.184	0.005	4.606	3.92	
138	4/26/2004	3:38:39 PM		24.396	23.365	25.015	24.291	23.64		41.936	43.366	4.058	38.199	-1.218	0.857		43.198	0.003	1.241	0.006		182.2	3.03583	41.9	10.6	40.1	2.763	0.185	0.185	0.005	4.616	3.93	
139	4/26/2004	3:39:39 PM		24.397	23.381	25.016	24.292	23.612		41.768	43.37	4.083	37.965	-1.221	0.862		42.897	0.003	1.246	0.005		183.2	3.0525	41.9	10.5	39.9	2.749	0.186	0.186	0.005	4.658	3.96	
140	4/26/2004	3:40:39 PM		24.409	23.388	25.018	24.268	23.603		41.841	43.426	4.066	38.088	-1.218	0.862		42.937	0.003	1.249	0.005		184.2	3.06917	42.0	10.5	40.0	2.755	0.186	0.186	0.005	4.657	3.96	

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	4/26/2004	3:41:39 PM		24.405	23.384	24.999	24.23	23.604		42.302	43.969	4.077	38.513	-1.221	0.86		42.693	0.003	1.252	0.005		185.2	3.08583	42.5	10.5	40.4	2.786	0.187	0.187	0.005	4.620	3.93	
142	4/26/2004	3:42:39 PM		24.406	23.39	25.005	24.226	23.586		41.932	43.358	4.05	38.209	-1.221	0.862		43.803	0.003	1.254	0.006		186.2	3.1025	41.9	10.7	40.1	2.763	0.187	0.187	0.005	4.665	3.97	
143	4/26/2004	3:43:39 PM		24.397	23.386	25.006	24.176	23.541		41.756	43.362	4.06	37.986	-1.221	0.865		44.917	0.003	1.26	0.006		187.2	3.11917	41.9	11.0	39.9	2.749	0.188	0.188	0.005	4.711	4.01	
144	4/26/2004	3:44:39 PM		24.413	23.397	25.027	24.173	23.547		41.526	43.115	4.063	37.754	-1.218	0.868		43.536	0.003	1.264	0.006		188.2	3.13583	41.6	10.7	39.6	2.733	0.188	0.188	0.005	4.750	4.04	
145	4/26/2004	3:45:39 PM		24.414	23.403	25.028	24.178	23.548		41.775	43.492	4.122	37.941	-1.221	0.871		43.738	0.003	1.268	0.005		189.2	3.1525	42.0	10.7	39.9	2.748	0.189	0.189	0.005	4.739	4.03	
146	4/26/2004	3:46:39 PM		24.409	23.393	25.023	24.143	23.538		41.868	43.544	4.065	38.103	-1.221	0.871		44.614	0.003	1.271	0.006		190.2	3.16917	42.1	10.9	40.0	2.757	0.189	0.189	0.005	4.736	4.03	
147	4/26/2004	3:47:39 PM		24.425	23.409	25.034	24.184	23.544		41.916	43.49	4.057	38.207	-1.218	0.874		42.086	0.003	1.278	0.006		191.2	3.18583	42.0	10.3	40.1	2.762	0.191	0.190	0.005	4.752	4.04	
148	4/26/2004	4:44:13 PM		23.43	23.039	24.159	23.84	23.36		41.918	45.215	4.26	38.123	-1.215	-4.798		42.076	0.003	1.766	0.005		247.7	4.12861	43.7	10.3	40.0	2.759	0.263	0.270	0.007	6.737	5.73	
149	4/26/2004	4:45:13 PM		23.551	23.05	24.301	23.806	23.352		31.716	45.039	4.23	27.741	7.346	2.808		44.205	0.942	-0.009	0.003		248.7	4.14528	43.6	10.8	29.7	2.050	-0.001	-0.001	0.000	-0.046	-0.04	
150	4/26/2004	4:46:13 PM		23.608	23.072	24.447	23.848	23.363		3.022	45.184	4.211	-1.056	37.46	-3.633		43.602	0.003	-0.013	0.003		249.7	4.16194	43.7	10.7	1.0	0.068	-0.002	-0.002	-0.002	-2.003	-1.70	
151	4/26/2004	4:47:13 PM		23.588	23.067	24.593	23.848	23.299		3.314	45.768	4.243	-0.787	37.567	20.249		43.273	0.003	-0.012	0.003		250.7	4.17861	44.3	10.6	1.3	0.087	-0.002	-0.002	-0.001	-1.432	-1.22	
152	4/26/2004	4:48:13 PM		23.57	23.084	24.705	23.834	23.295		3.306	45.746	4.181	-0.711	37.587	21.087		43.093	0.003	-0.013	0.003		251.7	4.19528	44.3	10.6	1.3	0.089	-0.002	-0.002	-0.002	-1.506	-1.28	
153	4/26/2004	4:49:13 PM		23.56	23.095	24.826	23.845	23.311		2.937	45.176	4.17	-1.079	37.437	84.538		43.471	0.003	14.643	0.003		252.7	4.21194	43.7	10.7	0.9	0.064	2.183	2.194	2.362	2361.539	2009.70	
154	4/26/2004	4:50:13 PM		23.586	23.11	24.952	23.861	23.311		2.941	45.59	4.222	-1.14	37.88	42.459		43.281	0.003	14.643	0.006		253.7	4.22861	44.1	10.6	0.9	0.062	2.183	2.186	2.428	2427.647	2065.96	
155	4/26/2004	4:51:13 PM		23.566	23.105	25.037	23.846	23.311		2.924	45.81	4.174	-1.122	37.871	0.377		42.86	0.003	-0.009	0.005		254.7	4.24528	44.3	10.5	0.9	0.062	-0.001	-0.001	-0.001	-1.488	-1.27	
156	4/26/2004	4:52:13 PM		24.148	23.126	25.148	23.857	23.332		25.096	44.869	4.211	21.315	14.731	0.611		45.49	1.205	14.643	0.003		255.7	4.26194	43.4	11.1	23.2	1.600	2.183	2.174	0.094	93.688	79.73	
157	4/26/2004	4:53:13 PM		24.398	23.121	25.203	23.826	23.297		40.132	45.057	4.254	36.512	-0.882	-3.615		45.355	0.004	2.158	0.003		256.7	4.27861	43.6	11.1	38.3	2.642	0.322	0.320	0.008	8.348	7.10	
158	4/26/2004	4:54:13 PM		24.543	23.131	25.293	23.867	23.312		41.08	46.044	3.916	37.817	-0.87	-3.532		43.692	0.003	2.179	0.003		257.7	4.29528	44.6	10.7	39.4	2.720	0.325	0.322	0.008	8.168	6.95	
159	4/26/2004	4:55:13 PM		24.644	23.126	25.348	23.841	23.317		42.109	47.194	3.873	38.899	-0.763	-3.491		42.9	0.003	2.204	0.003		258.7	4.31194	45.7	10.5	40.5	2.793	0.329	0.325	0.008	8.034	6.84	
160	4/26/2004	4:56:13 PM		24.764	23.136	25.468	23.851	23.277		42.716	47.582	4.044	39.385	-0.74	-3.468		44.418	0.003	2.204	0.003		259.7	4.32861	46.1	10.9	41.1	2.830	0.329	0.324	0.008	7.900	6.72	
161	4/26/2004	4:57:13 PM		24.864	23.141	25.563	23.791	23.237		42.086	46.958	4.445	38.318	-0.841	-3.462		44.595	0.003	2.182	0.003		260.7	4.34528	45.5	10.9	40.2	2.772	0.325	0.320	0.008	7.965	6.78	
162	4/26/2004	4:58:13 PM		24.949	23.146	25.658	23.761	23.217		41.723	46.253	4.27	38.101	-1.096	-3.48		46.448	0.003	2.12	0.004		261.7	4.36194	44.8	11.4	39.9	2.752	0.316	0.310	0.008	7.774	6.62	
163	4/26/2004	4:59:13 PM		25.033	23.14	25.742	23.75	23.221		42.086	46.803	4.195	38.554	-1.096	-3.474		44.186	0.003	2.113	0.006		262.7	4.37861	45.3	10.8	40.3	2.780	0.315	0.309	0.008	7.652	6.51	
164	4/26/2004	5:00:13 PM		25.128	23.15	25.832	23.755	23.246		43.1	48.05	4.227	39.562	-0.882	-3.454		45.056	0.003	2.169	0.006		263.7	4.39528	46.6	11.0	41.3	2.850	0.323	0.316	0.008	7.643	6.50	
165	4/26/2004	5:01:13 PM		25.289	23.151	25.948	23.816	23.297		43.571	48.343	4.176	40.028	-0.882	-3.445		45.657	0.003	2.171	0.004		264.7	4.41194	46.9	11.2	41.8	2.882	0.324	0.315	0.008	7.540	6.42	
166	4/26/2004	5:02:13 PM		25.389	23.151	26.028	23.821	23.332		43.019	47.706	4.128	39.552	-0.882	-3.436		45.571	0.003	2.168	0.006		265.7	4.42861	46.2	11.2	41.3	2.846	0.323	0.314	0.008	7.607	6.47	
167	4/26/2004	5:03:13 PM		25.484	23.156	26.108	23.897	23.317		43.608	48.428	4.172	40.101	-0.885	-3.43		45.19	0.003	2.167	0.005		266.7	4.44528	47.0	11.1	41.9	2.886	0.323	0.313	0.007	7.483	6.37	
168	4/26/2004	5:04:13 PM		25.549	23.161	26.173	23.902	23.337		42.484	47.143	4.659	38.456	-1.154	-3.454		48.223	0.003	2.097	0.005		267.7	4.46194	45.7	11.8	40.5	2.790	0.313	0.303	0.007	7.475	6.36	
169	4/26/2004	5:05:13 PM		25.609	23.166	26.233	23.947	23.357		43.073	47.542	4.472	39.276	-1.111	-3.347		46.986	0.003	2.114	0.006		268.7	4.47861	46.1	11.5	41.2	2.839	0.315	0.304	0.007	7.395	6.29	
170	4/26/2004	5:06:13 PM		25.68	23.172	26.288	23.958	23.318		42.92	47.603	4.432	39.159	-1.096	-3.254		47.62	0.003	2.127	0.005		269.7	4.49528	46.1	11.7	41.0	2.830	0.317	0.306	0.007	7.453	6.34	
171	4/26/2004	5:07:13 PM		25.719	23.171	26.338	23.962	23.327		43.146	47.866	4.424	39.404	-1.096	-3.251		46.558	0.003	2.12	0.005		270.7	4.51194	46.4	11.4	41.3	2.846	0.316	0.304	0.007	7.376	6.28	
172	4/26/2004	5:08:13 PM		25.774	23.176	26.398	23.962	23.347		43.054	47.737	4.39	39.318	-1.09	-3.243		46.529	0.003	2.134	0.005		271.7	4.52861	46.3	11.4	41.2	2.840	0.318	0.306	0.007	7.428	6.32	
173	4/26/2004	5:09:13 PM		25.828	23.171	26.442	23.931	23.401		42.725	47.58	4.345	39.071	-1.009	-3.24		46.702	0.003	2.134	0.006		272.7	4.54528	46.1	11.4	40.9	2.820	0.318	0.306	0.007	7.471	6.36	
174	4/26/2004	5:10:13 PM		25.882	23.184	26.486	23.965	23.375		43.013	47.829	4.382	39.305	-1.024	-3.231		45.365	0.003	2.133	0.006		273.7	4.56194	46.4	11.1	41.2	2.838	0.318	0.305	0.007	7.411	6.31	
175	4/26/2004	5:11:13 PM		25.932	23.189	26.516	23.965	23.43		42.934	47.532	4.313	39.33	-1.096	-3.231		44.977	0.003	2.121	0.006		274.7	4.57861	46.1	11.0	41.1	2.836	0.316	0.303	0.007	7.368	6.27	
176	4/26/2004	5:12:13 PM		25.961	23.194	26.55	23.964	23.389		41.995	46.705	4.252	38.415	-1.111	-3.231		46.166	0.003	2.107	0.006		275.7	4.59528	45.2	11.3	40.2	2.772	0.314	0.301	0.007	7.481	6.37	
177	4/26/2004	5:13:13 PM		25.975	23.188	26.569	23.959	23.369		42.353	47.028	4.313	38.694	-1.131	-3.228		44.793	0.003	2.112	0.004		276.7	4.61194	45.6	11.0	40.5	2.794	0.315	0.301	0.007	7.436	6.33	
178	4/26/2004	5:14:13 PM		26.006	23.199	26.605	23.999	23.415		42.229	46.993	4.282	38.607	-1.125	-3.219		44.96	0.003	2.114	0.005		277.7	4.62861	45.5	11.0	40.4	2.787	0.315	0.301	0.007	7.455	6.34	
179	4/26/2004	5:15:13 PM		26.031	23.204	26.62	24.014	23.389		42.073	46.859	4.238	38.515	-1.099	-3.217		45.063	0.003	2.113	0.005		278.7	4.64528	45.4	11.0	40.3	2.778	0.315	0.301	0.007	7.472	6.36	
180	4/26/2004	5:16:13 PM		26.061	23.209	26.65	24.045	23.384		42.416	47.024	4.252	38.813	-1.137	-3.208		45.626	0.003	2.116	0.005		279.7	4.66194	45.6	11.2	40.6	2.800	0.315	0.301	0.007	7.417	6.31	
181	4/26/2004	5:17:13 PM		26.071	23.204	26.64	24.02	23.384		42.208	46.857	4.265	38.605	-1.099	-3.211		44.912	0.003	2.111	0.004		280.7	4.67861	45.4	11.0	40.4	2.786	0.315	0.301	0.007	7.440	6.33	
182	4/26/2004	5:18:13 PM		26.086	23.204	26.665	23.999	23.394		42.299	47.101	4.247	38.704	-1.099	-3.205		45.302	0.003	2.111	0.005		281.7	4.69528	45.6	11.1	40.5	2.792	0.315	0.300	0.007	7.417	6.31	
183	4/26/2004	5:19:13 PM		26.106	23.214	26.685	23.979	23.435		42.337	46.944	4.19	38.8	-1.128	-3.196		45.213	0.003	2.117	0.006		282.7	4.71194	45.5	11.1	40.6	2.797	0.316	0.301	0.007	7.422	6.32	
184	4/26/2004	5:20:13 PM		26.105	23.203	26.689	23.979	23.439		42.277	47.029	4.221	38.735	-1.143	-3.193		45.417	0.003	2.118	0.005		283.7	4.72861	45.6	11.1	40.5	2.793	0.316	0.301	0.007	7.436	6.33	
185	4/26/2004	5:21:13 PM		26.131	23.209	26.675	23.974	23.45		42.31	46.954	4.199	38.78	-1.099	-3.191		45.269	0.003	2.121	0.004		284.7	4.74528	45.5	11.1	40.5	2.795	0.316	0.302	0.007	7.442	6.33	
186	4/26/2004	5:22:13 PM		26.146	23.214	26.71	24.009	23.41		42.532	47.221	4.252	38.981	-1.096	-3.185		45.192	0.003	2.118	0.004		285.7	4.76194	45.7	11.1	40.8	2.810	0.316	0.301	0.007	7.386	6.29	
187	4/26/2004	5:23:13 PM		26.161	23.239	26.735	24.03	23.43		42.339	47.227	4.203	38.794	-1.093	-3.182		44.971	0.003	2.119	0.003		286.7	4.77861	45.8	11.0	40.6	2.797	0.316	0.301	0.007	7.419	6.31	
188	4/26/2004	5:24:13 PM		26.161	23.219	26.725	24.014	23.51		42.426	47.333	4.217	38.868	-1.096	-3.179		44.141	0.003	2.118	0.005		287.7	4.79528	45.9	10.8	40.6	2.802	0.316	0.301	0.007	7.403	6.30	
189	4/26/2004	5:25:13 PM		26.171	23.22	26.75	24.065	23.581		42.341	46.952	4.212	38.802	-1.134	-3.176		45.061	0.003	2.116	0.004		288.7	4.81194	45.5	11.0	40.6	2.797	0.315	0.300	0.007	7.404	6.30	
190	4/26/2004	5:26:13 PM		26.193	23.241	26.767	24.167	23.647		42.374	47.107	4.205	38.876	-1.09	-3.17		45.061	0.003	2.119	0.005		289.7	4.82861	45.6	11.0	40.6	2.801	0.316	0.301	0.007	7.401	6.30	
191	4/26/2004	5:27:13 PM		26.198	23.252	26.762	24.228	23.718		42.521	47.281	4.194	38.989	-1.131	-3.165		44.925	0.003	2.116	0.004		290.7	4.84528	45.8	11.0	40.8	2.810	0.315	0.300	0.007	7.368	6.27	
192	4/26/2004	5:28:13 PM		26.209	23.267	26.778	24.289	23.754		42.326	46.985	4.128	38.868	-1.102	-3.162		44.629	0.003	2.116	0.005		291.7	4.86194	45.5	10.9	40.6	2.799	0.315	0.300	0.007	7.394	6.29	
193	4/26/2004	5:29:13 PM		26.23	23.289	26.799	24.33	23.795		42.469	47.107	4.156	38.965	-1.096	-3.156		44.762	0.003	2.12	0.004		292.7	4.87861	45.6	11.0	40.7	2.807	0.316	0.301	0.007	7.382	6.28	
194	4/26/2004	5:30:13 PM		26.231	23.305	26.825	24.376	23.841		42.638	47.331	4.136	39.182	-1.096	-3.153		44.366	0.003	2.122	0.004		293.7	4.89528	45.9	10.9	40.9	2.821	0.316	0.301	0.007	7.348	6.25	
195	4/26/2004	5:31:13 PM		26.253	23.327	26.832	24.418	23.808		42.764	47.246	4.134	39.291	-1.088	-3.141		45.069	0.003	2.126	0.004		294.7	4.91194	45.8	11.0	41.0	2.829	0.317	0.301	0.007	7.340	6.25	
196	4/26/2004	5:32:13 PM		26.254	23.332	26.823	24.374	23.783		42.693	47.358	4.097	39.277	-1.093	-3.138		44.466	0.003	2.125	0.005		295.7	4.92861	45.9	10.9	41.0	2.826	0.317	0.301	0.007	7.346	6.25	
197	4/26/2004	5:33:13 PM		26.265	23.354	26.834	24.415	23.77		42.723	47.516	4.145	39.211	-1.093	-3.136		44.556	0.003	2.123	0.006		296.7	4.94528	46.0	10.9	41.0	2.825	0.317	0.301	0.007	7.340	6.25	
198	4/26/2004	5:34:13 PM		26.251	23.364	26.825	24.346	23.75		42.111	47.035	4.08	38.708	-1.099	-3.138		44.746	0.003	2.122	0.005		297.7	4.96194	45.6	11.0	40.4	2.786	0.316	0.301	0.007	7.439	6.33	
199	4/26/2004	5:35:13 PM		26.267	23.386	26.851	24.317	23.751		42.53	47.259	4.12	39.102	-1.088	-3.127		44.931	0.003	2.127	0.004		298.7	4.97861	45.8	11.0	40.8	2.814	0.317	0.301	0.007	7.377	6.28	
200	4/26/2004	5:36:13 PM		26.278	23.397	26.851	24.323	23.732		42.208	46.753	4.079	38.796	-1.096	-3.124		42.645	0.003	2.123	0.005		299.7	4.99528	45.3	10.5	40.5	2.792	0.317	0.301	0.007	7.421	6.31	
201	4/26/2004	5:37:13 PM		26.284	23.413	26.858	24.309	23.708		42.652	47.368	4.118	39.182	-1.093	-3.121		45.025	0.003	2.124	0.004		300.7	5.01194	45.9	11.0	40.9	2.821	0.317	0.301	0.007	7.347	6.25	
202	4/26/2004	5:38:13 PM		26.295	23.429	26.864	24.315	23.71		42.75	47.524	4.16	39.229	-1.059	-3.115		44.67	0.003	2.126	0.005		301.7	5.02861	46.1	10.9	41.0	2.826	0.317	0.301	0.007	7.340	6.25	
203	4/26/2004	5:39:13 PM		26.302	23.441	26.88	24.266	23.701		42.565	47.424	4.109	39.079	-1.093	-3.115		44.7	0.003	2.115	0.006		302.7	5.04528	46.0	11.0	40.8	2.815	0.315	0.299	0.007	7.329	6.24	
204	4/26/2004	5:40:13 PM		26.302	23.436	26.886	24.232	23.672		42.662	47.414	4.029	39.324	-1.096	-3.11		44.332	0.003	2.122	0.005		303.7	5.06194	45.9	10.9	41.0	2.826	0.316	0.300	0.007	7.321	6.23	
205	4/26/2004	5:41:13 PM		26.309	23.443	26.882	24.273	23.688		42.231	47.101	4.093	38.815	-1.096	-3.11		44.581	0.003	2.125	0.004		304.7	5.07861	45.6	10.9	40.5	2.794	0.317	0.301	0.007	7.417	6.31	
206	4/26/2004	5:42:13 PM		26.309	23.444	26.878	24.284	23.684		42.602	47.298	4.063	39.205	-1.096	-3.104		43.92	0.003	2.12	0.005		305.7	5.09528	45.8	10.8	40.9	2.820	0.316	0.300	0.007	7.332	6.24	
207	4/26/2004	5:43:13 PM		26.321	23.455	26.889	24.265	23.645		42.511	47.165	4.091	39.096	-1.096	-3.098		44.783	0.003	2.126	0.005		306.7	5.11194	45.7	11.0	40.8	2.813	0.317	0.301	0.007	7.368	6.27	
208	4/26/2004	5:44:13 PM		26.311	23.451	26.89	24.241	23.666		42.507	47.354	4.116	39.051	-1.096	-3.095		44.201	0.003	2.124	0.005		307.7	5.12861	45.9	10.8	40.8	2.812	0.317	0.300	0.007	7.366	6.27	
209	4/26/2004	5:45:13 PM		26.327	23.451	26.911	24.262	23.666		42.75	47.509	4.09	39.371	-1.056	-3.092		44.332	0.003	2.129	0.006		308.7	5.14528	46.0	10.9	41.1	2.831	0.317	0.301	0.007	7.328	6.24	
210	4/26/2004	5:46:13 PM		26.316	23.446	26.885	24.221	23.671		42.571	47.086	4.085	39.159	-1.053	-3.089		43.909	0.003	2.129	0.004		309.7	5.16194	45.6	10.8	40.9	2.817	0.317	0.301	0.007	7.368	6.27	

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	4/26/2004	5:47:13 PM		26.333	23.457	26.887	24.262	23.672		42.482	47.055	4.066	39.092	-1.096	-3.086		43.59	0.003	2.127	0.006		310.7	5.17861	45.6	10.7	40.8	2.812	0.317	0.301	0.007	7.375	6.28	
212	4/26/2004	5:48:13 PM		26.323	23.447	26.872	24.232	23.642		42.841	47.59	4.085	39.398	-1.096	-3.084		45.156	0.003	2.132	0.005		311.7	5.19528	46.1	11.1	41.1	2.835	0.318	0.302	0.007	7.336	6.24	
213	4/26/2004	5:49:13 PM		26.338	23.463	26.907	24.283	23.668		42.496	47.424	4.084	39.057	-1.096	-3.078		43.39	0.003	2.128	0.006		312.7	5.21194	46.0	10.6	40.8	2.811	0.317	0.301	0.007	7.376	6.28	
214	4/26/2004	5:50:13 PM		26.323	23.448	26.862	24.308	23.673		42.59	47.395	4.066	39.194	-1.096	-3.075		44.289	0.003	2.127	0.005		313.7	5.22861	45.9	10.9	40.9	2.819	0.317	0.301	0.007	7.361	6.26	
215	4/26/2004	5:51:13 PM		26.283	23.468	26.757	24.449	23.688		42.337	46.997	4.068	38.919	-1.122	-3.072		44.454	0.003	2.118	0.005		314.7	5.24528	45.5	10.9	40.6	2.801	0.316	0.301	0.007	7.399	6.30	
216	4/26/2004	5:52:13 PM		26.189	23.463	26.633	24.439	23.713		42.581	47.143	4.051	39.213	-1.102	-3.072		43.869	0.003	2.12	0.004		315.7	5.26194	45.7	10.8	40.9	2.820	0.316	0.302	0.007	7.383	6.28	
217	4/26/2004	5:53:13 PM		26.075	23.469	26.519	24.455	23.754		42.613	47.207	4.052	39.238	-1.137	-3.069		43.926	0.003	2.117	0.006		316.7	5.27861	45.7	10.8	40.9	2.822	0.316	0.302	0.007	7.391	6.29	
218	4/26/2004	5:54:13 PM		25.971	23.47	26.415	24.451	23.69		42.776	47.385	4.046	39.381	-1.154	-3.066		43.999	0.003	2.113	0.004		317.7	5.29528	45.9	10.8	41.1	2.832	0.315	0.303	0.007	7.371	6.27	
219	4/26/2004	5:55:13 PM		25.891	23.49	26.351	24.466	23.726		42.874	47.441	4.045	39.496	-1.151	-3.06		44.837	0.003	2.107	0.005		318.7	5.31194	46.0	11.0	41.2	2.840	0.314	0.302	0.007	7.344	6.25	
220	4/26/2004	5:56:13 PM		25.808	23.482	26.242	24.468	23.697		42.492	47.308	4.095	39.057	-1.154	-3.063		43.692	0.003	2.106	0.005		319.7	5.32861	45.8	10.7	40.8	2.811	0.314	0.303	0.007	7.437	6.33	
221	4/26/2004	5:57:13 PM		25.714	23.492	26.158	24.463	23.697		42.498	46.904	4.038	39.096	-1.154	-3.058		44.476	0.003	2.105	0.004		320.7	5.34528	45.4	10.9	40.8	2.813	0.314	0.304	0.007	7.447	6.34	
222	4/26/2004	5:58:13 PM		25.634	23.488	26.078	24.444	23.668		42.787	47.362	4.034	39.424	-1.154	-3.055		45.34	0.003	2.11	0.006		321.7	5.36194	45.9	11.1	41.1	2.834	0.315	0.305	0.007	7.425	6.32	
223	4/26/2004	5:59:13 PM		25.56	23.494	26.014	24.46	23.734		43.085	47.889	4.061	39.697	-1.154	-3.055		44.011	0.003	2.097	0.006		322.7	5.37861	46.4	10.8	41.4	2.854	0.313	0.304	0.007	7.342	6.25	
224	4/26/2004	6:00:13 PM		25.486	23.51	25.955	24.476	23.73		42.814	47.273	4.07	39.406	-1.209	-3.055		44.685	0.003	2.1	0.005		323.7	5.39528	45.8	11.0	41.1	2.834	0.313	0.305	0.007	7.415	6.31	
225	4/26/2004	6:01:13 PM		25.416	23.505	25.87	24.451	23.745		42.532	47.19	4.022	39.188	-1.177	-3.058		44.495	0.003	2.091	0.004		324.7	5.41194	45.7	10.9	40.9	2.817	0.312	0.304	0.007	7.446	6.34	
226	4/26/2004	6:02:13 PM		25.357	23.511	25.811	24.422	23.716		43.013	47.592	4.093	39.552	-1.218	-3.049		44.122	0.003	2.093	0.006		325.7	5.42861	46.1	10.8	41.3	2.846	0.312	0.305	0.007	7.389	6.29	
227	4/26/2004	6:03:13 PM		25.298	23.517	25.767	24.398	23.707		42.608	47.286	4.075	39.19	-1.195	-3.046		44.272	0.003	2.092	0.005		326.7	5.44528	45.8	10.8	40.9	2.820	0.312	0.305	0.007	7.464	6.35	
228	4/26/2004	6:04:13 PM		25.243	23.517	25.712	24.413	23.707		42.65	47.12	4.016	39.34	-1.218	-3.043		44.118	0.003	2.095	0.006		327.7	5.46194	45.6	10.8	41.0	2.826	0.312	0.306	0.007	7.468	6.36	
229	4/26/2004	6:05:13 PM		25.189	23.518	25.648	24.434	23.733		43.009	47.688	4.081	39.572	-1.218	-3.046		44.159	0.003	2.088	0.005		328.7	5.47861	46.2	10.8	41.3	2.847	0.311	0.306	0.007	7.403	6.30	
230	4/26/2004	6:06:13 PM		25.15	23.524	25.614	24.445	23.714		42.582	47.163	4.036	39.194	-1.16	-3.04		44.42	0.003	2.089	0.005		329.7	5.49528	45.7	10.9	40.9	2.819	0.311	0.306	0.007	7.487	6.37	
231	4/26/2004	6:07:13 PM		25.116	23.54	25.595	24.431	23.73		42.743	47.163	4.074	39.338	-1.203	-3.034		45.063	0.003	2.088	0.005		330.7	5.51194	45.7	11.0	41.0	2.830	0.311	0.306	0.007	7.460	6.35	
232	4/26/2004	6:08:13 PM		25.056	23.52	25.535	24.401	23.67		43.063	47.733	4.087	39.638	-1.218	-3.034		44.011	0.003	2.084	0.004		331.7	5.52861	46.3	10.8	41.4	2.851	0.311	0.306	0.007	7.402	6.30	
233	4/26/2004	6:09:13 PM		25.022	23.526	25.496	24.416	23.686		42.776	47.304	4.096	39.387	-1.221	-3.032		43.592	0.003	2.083	0.006		332.7	5.54528	45.8	10.7	41.1	2.832	0.311	0.306	0.007	7.455	6.34	
234	4/26/2004	6:10:13 PM		24.987	23.541	25.451	24.426	23.746		42.772	47.269	4.077	39.342	-1.218	-3.029		43.137	0.003	2.087	0.005		333.7	5.56194	45.8	10.6	41.1	2.831	0.311	0.307	0.007	7.483	6.37	
235	4/26/2004	6:11:13 PM		24.947	23.541	25.411	24.431	23.781		42.874	47.723	4.072	39.441	-1.177	-3.029		44.589	0.003	2.087	0.006		334.7	5.57861	46.3	10.9	41.2	2.838	0.311	0.308	0.007	7.473	6.36	
236	4/26/2004	6:12:13 PM		24.917	23.546	25.401	24.487	23.811		42.778	47.039	4.075	39.357	-1.221	-3.026		44.212	0.003	2.081	0.005		335.7	5.59528	45.6	10.8	41.1	2.831	0.310	0.307	0.007	7.470	6.36	
237	4/26/2004	6:13:13 PM		24.877	23.551	25.371	24.537	23.877		43.087	47.65	4.106	39.619	-1.221	-3.023		44.139	0.003	2.079	0.005		336.7	5.61194	46.2	10.8	41.4	2.851	0.310	0.307	0.007	7.418	6.31	
238	4/26/2004	6:14:13 PM		24.852	23.567	25.336	24.628	23.922		42.77	47.298	4.108	39.299	-1.218	-3.02		43.959	0.003	2.08	0.005		337.7	5.62861	45.8	10.8	41.0	2.829	0.310	0.307	0.007	7.486	6.37	
239	4/26/2004	6:15:13 PM		24.829	23.579	25.313	24.675	24.019		42.965	47.431	4.113	39.488	-1.221	-3.017		44.109	0.003	2.078	0.007		338.7	5.64528	46.0	10.8	41.2	2.842	0.310	0.307	0.007	7.449	6.34	
240	4/26/2004	6:16:13 PM		24.816	23.6	25.3	24.716	24.055		43.11	47.683	4.087	39.703	-1.221	-3.014		44.725	0.003	2.081	0.006		339.7	5.66194	46.2	11.0	41.4	2.855	0.310	0.308	0.007	7.430	6.32	
241	4/26/2004	6:17:13 PM		24.792	23.622	25.286	24.763	24.102		42.87	47.489	4.072	39.449	-1.221	-3.008		44.249	0.003	2.079	0.006		340.7	5.67861	46.0	10.8	41.2	2.838	0.310	0.307	0.007	7.470	6.36	
242	4/26/2004	6:18:13 PM		24.768	23.638	25.262	24.774	24.053		42.93	47.542	4.097	39.502	-1.218	-3.008		43.871	0.003	2.079	0.006		341.7	5.69528	46.1	10.8	41.2	2.842	0.310	0.308	0.007	7.465	6.35	
243	4/26/2004	6:19:13 PM		24.735	23.649	25.234	24.745	24.024		42.484	47.02	4.083	39.034	-1.221	-3.006		43.884	0.003	2.075	0.005		342.7	5.71194	45.5	10.8	40.8	2.810	0.309	0.307	0.008	7.540	6.42	
244	4/26/2004	7:00:42 PM		22.796	23.415	23.401	24.165	23.429		41.992	47.041	4.245	38.369	-0.723	-4.74		44.631	0.003	2.197	0.007		384.2	6.40333	45.6	10.9	40.2	2.770	0.328	0.343	0.009	8.529	7.26	
245	4/26/2004	7:01:42 PM		22.867	23.405	23.477	24.14	23.455		24.816	47.771	4.141	20.888	17.701	9.191		43.753	1.205	-0.011	0.003		385.2	6.42	46.3	10.7	22.9	1.576	-0.002	-0.002	0.000	-0.075	-0.06	
246	4/26/2004	7:02:42 PM		22.898	23.406	23.578	24.146	23.466		3.115	47.889	4.104	-0.859	39.924	19.5		43.204	0.003	-0.01	0.003		386.2	6.43667	46.4	10.6	1.1	0.078	-0.001	-0.002	-0.001	-1.376	-1.17	
247	4/26/2004	7:03:42 PM		22.923	23.421	23.673	24.171	23.461		2.626	47.107	4.072	-1.257	40.118	19.384		42.639	0.003	-0.012	0.003		387.2	6.45333	45.6	10.4	0.7	0.047	-0.002	-0.002	-0.003	-2.714	-2.31	
248	4/26/2004	7:04:42 PM		22.938	23.401	23.708	24.156	23.441		2.926	47.949	4.065	-0.978	40.019	22.362		42.359	0.003	-0.013	0.003		388.2	6.47	46.5	10.4	1.0	0.067	-0.002	-0.002	-0.002	-2.064	-1.76	
249	4/26/2004	7:05:42 PM		23.228	23.39	23.732	24.145	23.465		2.543	47.69	4	-1.214	40.477	27.175		42.389	0.003	14.643	0.005		389.2	6.48667	46.2	10.4	0.7	0.046	2.183	2.263	3.405	3405.308	2897.97	
250	4/26/2004	7:06:42 PM		23.182	23.399	23.802	24.16	23.454		37.697	46.894	4.053	34.718	3.162	-1.843		44.161	0.005	3.021	0.003		390.2	6.50333	45.4	10.8	36.2	2.496	0.450	0.466	0.013	12.868	10.95	
251	4/26/2004	7:07:42 PM		23.263	23.389	23.857	24.155	23.459		41.845	47.445	4.063	38.462	-0.092	-2.144		44.011	0.003	2.33	0.003		391.2	6.52	46.0	10.8	40.2	2.768	0.347	0.359	0.009	8.935	7.60	
252	4/26/2004	7:08:43 PM		23.333	23.389	23.932	24.17	23.464		42.073	47.435	4.132	38.665	-0.425	-2.158		44.408	0.003	2.28	0.003		392.2	6.53694	46.0	10.9	40.4	2.783	0.340	0.350	0.009	8.678	7.39	
253	4/26/2004	7:09:43 PM		23.393	23.399	23.988	24.17	23.449		42.835	48.081	4.19	39.344	-0.506	-2.164		44.42	0.003	2.257	0.003		393.2	6.55361	46.6	10.9	41.1	2.833	0.336	0.346	0.008	8.427	7.17	
254	4/26/2004	7:10:43 PM		23.443	23.384	24.043	24.175	23.464		42.239	47.263	4.329	38.581	-0.691	-2.127		45.492	0.003	2.22	0.003		394.2	6.57028	45.8	11.1	40.4	2.786	0.331	0.340	0.008	8.415	7.16	
255	4/26/2004	7:11:43 PM		23.489	23.37	24.063	24.14	23.455		42.806	47.901	4.3	39.157	-0.705	-2.132		44.731	0.003	2.211	0.006		395.2	6.58694	46.4	11.0	41.0	2.826	0.330	0.338	0.008	8.259	7.03	
256	4/26/2004	7:12:43 PM		23.549	23.384	24.143	24.165	23.409		42.206	47.358	4.215	38.722	-0.703	-2.112		44.881	0.003	2.204	0.005		396.2	6.60361	45.9	11.0	40.5	2.790	0.329	0.337	0.008	8.320	7.08	
257	4/26/2004	7:13:43 PM		23.604	23.379	24.213	24.17	23.409		42.698	47.708	4.198	39.155	-0.72	-2.106		45.029	0.003	2.205	0.006		397.2	6.62028	46.2	11.0	40.9	2.822	0.329	0.336	0.008	8.213	6.99	
258	4/26/2004	7:14:43 PM		23.633	23.364	24.222	24.139	23.414		42.546	47.574	4.229	38.991	-0.763	-2.104		44.937	0.003	2.198	0.005		398.2	6.63694	46.1	11.0	40.8	2.811	0.328	0.335	0.008	8.217	6.99	
259	4/26/2004	7:15:43 PM		23.678	23.358	24.252	24.143	23.388		42.816	47.76	4.226	39.256	-0.775	-2.109		44.99	0.003	2.196	0.005		399.2	6.65361	46.3	11.0	41.0	2.829	0.327	0.334	0.008	8.149	6.93	
260	4/26/2004	7:16:43 PM		23.712	23.352	24.296	24.118	23.407		42.928	47.953	4.199	39.428	-0.763	-2.104		44.647	0.003	2.193	0.006		400.2	6.67028	46.5	10.9	41.2	2.839	0.327	0.334	0.008	8.099	6.89	
261	4/26/2004	7:17:43 PM		23.741	23.336	24.326	24.102	23.417		42.362	47.259	4.122	38.883	-0.795	-2.109		45.023	0.003	2.185	0.005		401.2	6.68694	45.8	11.0	40.6	2.801	0.326	0.332	0.008	8.173	6.96	
262	4/26/2004	7:18:43 PM		23.78	23.33	24.354	24.111	23.47		42.818	47.953	4.195	39.295	-0.83	-2.104		43.477	0.003	2.177	0.004		402.2	6.70361	46.5	10.7	41.1	2.831	0.325	0.331	0.008	8.051	6.85	
263	4/26/2004	7:19:43 PM		23.815	23.339	24.384	24.16	23.53		42.756	47.887	4.207	39.262	-0.818	-2.101		44.77	0.003	2.184	0.005		403.2	6.72028	46.4	11.0	41.0	2.827	0.326	0.331	0.008	8.079	6.88	
264	4/26/2004	7:20:43 PM		23.844	23.334	24.398	24.21	23.564		42.735	47.456	4.149	39.276	-0.83	-2.104		42.034	0.003	2.176	0.007		404.2	6.73694	46.0	10.3	41.0	2.827	0.324	0.330	0.008	8.047	6.85	
265	4/26/2004	7:21:43 PM		23.88	23.344	24.429	24.26	23.605		43.158	48.168	4.166	39.689	-0.865	-2.104		44.449	0.003	2.172	0.004		405.2	6.75361	46.7	10.9	41.4	2.856	0.324	0.329	0.008	7.944	6.76	
266	4/26/2004	7:22:43 PM		23.899	23.354	24.463	24.295	23.664		41.495	46.108	4.212	37.955	-1.154	-2.127		44.195	0.003	2.1	0.007		406.2	6.77028	44.6	10.8	39.7	2.739	0.313	0.318	0.008	8.002	6.81	
267	4/26/2004	7:23:43 PM		23.91	23.355	24.47	24.366	23.756		42.449	47.116	4.165	38.934	-1.001	-2.109		44.46	0.003	2.139	0.006		407.2	6.78694	45.6	10.9	40.7	2.806	0.319	0.324	0.008	7.955	6.77	
268	4/26/2004	7:24:43 PM		23.926	23.371	24.485	24.412	23.707		42.461	47.344	4.152	39.018	-0.995	-2.104		44.301	0.003	2.141	0.005		408.2	6.80361	45.9	10.9	40.7	2.809	0.319	0.324	0.008	7.950	6.77	
269	4/26/2004	7:25:43 PM		23.953	23.392	24.497	24.449	23.773		42.27	47.134	4.004	38.963	-0.969	-2.101		44.608	0.003	2.15	0.004		409.2	6.82028	45.7	10.9	40.6	2.800	0.321	0.325	0.008	8.005	6.81	
270	4/26/2004	7:26:43 PM		23.968	23.403	24.517	24.525	23.779		42.198	46.939	4.029	38.846	-0.934	-2.095		42.708	0.003	2.153	0.005		410.2	6.83694	45.5	10.5	40.5	2.794	0.321	0.325	0.008	8.030	6.83	
271	4/26/2004	7:27:43 PM		23.99	23.425	24.534	24.501	23.71		42.521	47.507	3.895	39.354	-0.934	-2.092		44.718	0.003	2.155	0.004		411.2	6.85361	46.0	11.0	40.9	2.822	0.321	0.326	0.008	7.952	6.77	
272	4/26/2004	7:28:43 PM		23.99	23.43	24.54	24.446	23.696		42.499	47.275	3.921	39.26	-0.891	-2.092		43.221	0.003	2.158	0.005		412.2	6.87028	45.8	10.6	40.9	2.818	0.322	0.326	0.008	7.973	6.79	
273	4/26/2004	7:29:43 PM		24.012	23.437	24.546	24.413	23.647		42.26	47.207	3.944	38.983	-0.92	-2.089		43.31	0.003	2.159	0.004		413.2	6.88694	45.7	10.6	40.6	2.801	0.322	0.326	0.008	8.026	6.83	
274	4/26/2004	7:30:43 PM		24.027	23.447	24.557	24.418	23.638		42.355	47.219	3.903	39.127	-0.902	-2.089		42.806	0.003	2.155	0.005		414.2	6.90361	45.7	10.5	40.7	2.809	0.321	0.325	0.008	7.985	6.80	
275	4/26/2004	7:31:43 PM		24.022	23.442	24.562	24.358	23.622		42.581	47.281	3.909	39.363	-0.888	-2.089		43.141	0.003	2.159	0.006		415.2	6.92028	45.8	10.6	41.0	2.825	0.322	0.326	0.008	7.954	6.77	
276	4/26/2004	7:32:43 PM		24.012	23.437	24.547	24.328	23.627		42.472	47.29	3.894	39.277	-0.885	-2.092		43.033	0.003	2.16	0.004		416.2	6.93694	45.8	10.5	40.9	2.818	0.322	0.326	0.008	7.980	6.79	
277	4/26/2004	7:33:43 PM		24.037	23.452	24.567	24.318	23.592		42.561	47.464	3.86	39.387	-0.899	-2.089		42.672	0.003	2.158	0.005		417.2	6.95361	46.0	10.5	41.0	2.825	0.322	0.326	0.008	7.949	6.76	
278	4/26/2004	7:34:43 PM		24.047	23.447	24.557	24.288	23.542		43.102	48.069	3.876	39.909	-0.934	-2.086		42.966	0.003	2.157	0.005		418.2	6.97028	46.6	10.5	41.5	2.862	0.322	0.326	0.008	7.846	6.68	
279	4/26/2004	7:35:43 PM		24.047	23.452	24.571	24.247	23.522		42.552	47.443	3.861	39.377	-0.934	-2.086		42.9	0.003	2.162	0.004		419.2	6.98694	46.0	10.5	41.0	2.824	0.322	0.326	0.008	7.964	6.78	
280	4/26/2004	7:36:43 PM		24.057	23.447	24.581	24.227	23.527		42.416	47.153	3.852	39.281	-0.894	-2.083		42.678	0.003	2.16	0.006		420.2	7.00361	45.7	10.5	40.8	2.816	0.322	0.326	0.008	7.977	6.79	

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	4/26/2004	7:37:43 PM		24.061	23.446	24.59	24.251	23.511		42.596	47.53	3.896	39.41	-0.894	-2.08		43.075	0.003	2.162	0.004		421.2	7.02028	46.1	10.6	41.0	2.827	0.322	0.326	0.008	7.953	6.77	
282	4/26/2004	7:38:43 PM		24.056	23.436	24.585	24.246	23.511		42.105	46.772	4.199	38.579	-1.143	-2.098		45.083	0.003	2.115	0.006		422.2	7.03694	45.3	11.0	40.3	2.781	0.315	0.319	0.008	7.908	6.73	
283	4/26/2004	7:39:43 PM		24.054	23.419	24.588	24.189	23.464		42.532	47.198	4.118	39.11	-1.093	-2.092		45.173	0.003	2.128	0.005		423.2	7.05361	45.7	11.1	40.8	2.814	0.317	0.321	0.008	7.863	6.69	
284	4/26/2004	7:40:43 PM		24.064	23.424	24.603	24.164	23.479		42.343	47.055	4.038	38.991	-1.033	-2.092		44.041	0.003	2.134	0.005		424.2	7.07028	45.6	10.8	40.7	2.804	0.318	0.322	0.008	7.912	6.73	
285	4/26/2004	7:41:43 PM		24.063	23.408	24.608	24.138	23.458		42.158	46.794	3.966	38.891	-0.995	-2.089		43.713	0.003	2.139	0.005		425.2	7.08694	45.3	10.7	40.5	2.794	0.319	0.322	0.008	7.957	6.77	
286	4/26/2004	7:42:43 PM		24.073	23.398	24.608	24.108	23.458		42.231	47.116	3.957	38.985	-0.978	-2.086		43.721	0.003	2.142	0.005		426.2	7.10361	45.6	10.7	40.6	2.800	0.319	0.323	0.008	7.952	6.77	
287	4/26/2004	7:43:43 PM		24.081	23.401	24.611	24.126	23.441		42.88	47.549	3.926	39.669	-0.934	-2.08		43.346	0.003	2.148	0.006		427.2	7.12028	46.1	10.6	41.3	2.846	0.320	0.324	0.008	7.845	6.68	
288	4/26/2004	7:44:43 PM		24.091	23.39	24.61	24.126	23.395		42.98	47.684	3.92	39.755	-0.98	-2.08		42.549	0.003	2.15	0.006		428.2	7.13694	46.2	10.4	41.4	2.852	0.321	0.324	0.008	7.834	6.67	
289	4/26/2004	7:45:43 PM		24.09	23.38	24.634	24.11	23.38		41.953	46.753	4.1	38.511	-1.096	-2.089		44.134	0.003	2.119	0.005		429.2	7.15361	45.3	10.8	40.2	2.774	0.316	0.319	0.008	7.934	6.75	
290	4/26/2004	7:46:43 PM		24.09	23.375	24.639	24.085	23.39		42.418	47.302	4.041	39.038	-1.024	-2.011		43.801	0.003	2.132	0.004		430.2	7.17028	45.8	10.7	40.7	2.808	0.318	0.321	0.008	7.884	6.71	
291	4/26/2004	7:47:43 PM		24.105	23.37	24.639	24.095	23.425		42.227	46.997	4.099	38.833	-1.096	-1.973		44.18	0.003	2.124	0.006		431.2	7.18694	45.5	10.8	40.5	2.794	0.317	0.320	0.008	7.893	6.72	
292	4/26/2004	7:48:43 PM		24.121	23.365	24.645	24.111	23.49		42.2	47.068	4.079	38.813	-1.05	-1.971		44.147	0.003	2.125	0.003		432.2	7.20361	45.6	10.8	40.5	2.793	0.317	0.320	0.008	7.900	6.72	
293	4/26/2004	7:49:43 PM		24.112	23.371	24.646	24.171	23.521		42.328	46.943	4.051	38.938	-1.021	-1.968		43.734	0.003	2.134	0.005		433.2	7.22028	45.5	10.7	40.6	2.802	0.318	0.321	0.008	7.909	6.73	
294	4/26/2004	7:50:43 PM		24.122	23.367	24.661	24.152	23.587		42.407	47.074	4.012	39.125	-1.021	-1.965		43.454	0.003	2.138	0.004		434.2	7.23694	45.6	10.6	40.8	2.811	0.319	0.322	0.008	7.894	6.72	
295	4/26/2004	7:51:43 PM		24.118	23.367	24.672	24.223	23.568		41.984	46.676	4.196	38.462	-1.099	-1.976		45.657	0.003	2.114	0.004		435.2	7.25361	45.2	11.2	40.2	2.773	0.315	0.318	0.008	7.909	6.73	
296	4/26/2004	7:52:43 PM		24.129	23.374	24.683	24.295	23.624		42.038	47	4.196	38.546	-1.131	-1.973		44.585	0.003	2.12	0.005		436.2	7.27028	45.5	10.9	40.3	2.778	0.316	0.319	0.008	7.915	6.74	
297	4/26/2004	7:53:43 PM		24.141	23.386	24.696	24.357	23.676		41.903	46.425	4.131	38.451	-1.119	-1.971		44.685	0.003	2.123	0.006		437.2	7.28694	45.0	11.0	40.2	2.770	0.317	0.319	0.008	7.946	6.76	
298	4/26/2004	7:54:43 PM		24.153	23.398	24.703	24.434	23.723		42.042	46.805	4.127	38.587	-1.093	-1.968		44.149	0.003	2.122	0.005		438.2	7.30361	45.3	10.8	40.3	2.780	0.316	0.319	0.008	7.914	6.73	
299	4/26/2004	7:55:43 PM		24.15	23.399	24.704	24.481	23.75		42.241	46.977	4.154	38.755	-1.096	-1.971		44.545	0.003	2.126	0.005		439.2	7.32028	45.5	10.9	40.5	2.792	0.317	0.320	0.008	7.892	6.72	
300	4/26/2004	7:56:43 PM		24.167	23.422	24.712	24.498	23.773		42.21	46.883	4.066	38.821	-1.096	-1.965		44.093	0.003	2.127	0.005		440.2	7.33694	45.4	10.8	40.5	2.793	0.317	0.320	0.008	7.891	6.72	
301	4/26/2004	7:57:43 PM		24.164	23.429	24.694	24.49	23.805		42.314	47.045	4.085	38.923	-1.03	-1.965		44.003	0.003	2.128	0.005		441.2	7.35361	45.6	10.8	40.6	2.801	0.317	0.320	0.008	7.879	6.70	
302	4/26/2004	7:58:43 PM		24.166	23.44	24.71	24.452	23.776		42.376	47.188	4.089	38.995	-1.038	-1.959		43.836	0.003	2.133	0.006		442.2	7.37028	45.7	10.7	40.7	2.805	0.318	0.321	0.008	7.880	6.71	
303	4/26/2004	7:59:43 PM		24.177	23.452	24.726	24.448	23.712		42.722	47.603	4.111	39.281	-1.088	-1.962		43.832	0.003	2.127	0.005		443.2	7.38694	46.1	10.7	41.0	2.827	0.317	0.320	0.008	7.794	6.63	
304	4/26/2004	8:00:43 PM		24.183	23.473	24.737	24.414	23.608		42.312	47.07	4.065	38.965	-1.027	-1.959		44.324	0.003	2.132	0.004		444.2	7.40361	45.6	10.9	40.6	2.802	0.318	0.320	0.008	7.880	6.71	
305	4/26/2004	8:01:43 PM		24.174	23.459	24.698	24.335	23.559		41.98	46.485	4.285	38.384	-1.157	-1.971		45.019	0.003	2.12	0.004		445.2	7.42028	45.0	11.0	40.2	2.770	0.316	0.319	0.008	7.933	6.75	
306	4/26/2004	8:02:43 PM		24.175	23.47	24.719	24.325	23.53		42.183	46.78	4.285	38.591	-1.099	-1.965		45.582	0.003	2.116	0.006		446.2	7.43694	45.3	11.2	40.4	2.785	0.315	0.318	0.008	7.873	6.70	
307	4/26/2004	8:03:43 PM		24.17	23.455	24.724	24.27	23.515		42.492	47.174	4.235	38.948	-1.096	-1.968		45.154	0.003	2.115	0.005		447.2	7.45361	45.7	11.1	40.7	2.808	0.315	0.318	0.008	7.804	6.64	
308	4/26/2004	8:04:43 PM		24.175	23.445	24.734	24.245	23.489		41.779	46.531	4.187	38.255	-1.099	-1.965		44.977	0.003	2.121	0.005		448.2	7.47028	45.1	11.0	40.0	2.759	0.316	0.319	0.008	7.962	6.78	
309	4/26/2004	8:05:43 PM		24.174	23.449	24.724	24.214	23.459		41.966	46.678	4.218	38.398	-1.105	-1.962		44.81	0.003	2.117	0.007		449.2	7.48694	45.2	11.0	40.2	2.770	0.316	0.318	0.008	7.916	6.74	
310	4/26/2004	8:06:43 PM		24.174	23.428	24.703	24.143	23.378		41.833	46.655	4.18	38.345	-1.096	-1.962		45.213	0.003	2.12	0.006		450.2	7.50361	45.2	11.1	40.1	2.764	0.316	0.319	0.008	7.951	6.77	
311	4/26/2004	8:07:43 PM		24.184	23.433	24.723	24.138	23.423		41.99	46.695	4.18	38.48	-1.079	-1.959		44.604	0.003	2.127	0.006		451.2	7.52028	45.2	10.9	40.2	2.774	0.317	0.320	0.008	7.943	6.76	
312	4/26/2004	8:08:43 PM		24.193	23.427	24.742	24.092	23.357		41.968	46.786	4.165	38.493	-1.093	-1.959		44.8	0.003	2.125	0.006		452.2	7.53694	45.3	11.0	40.2	2.774	0.317	0.319	0.008	7.933	6.75	
313	4/26/2004	8:09:43 PM		24.187	23.407	24.737	24.062	23.311		41.912	46.678	4.189	38.38	-1.096	-1.956		44.7	0.003	2.131	0.005		453.2	7.55361	45.2	11.0	40.1	2.768	0.318	0.320	0.008	7.973	6.78	
314	4/26/2004	8:10:43 PM		24.192	23.396	24.721	24.051	23.321		42.171	46.753	4.147	38.688	-1.03	-1.959		44.141	0.003	2.131	0.004		454.2	7.57028	45.3	10.8	40.4	2.787	0.318	0.320	0.008	7.920	6.74	
315	4/26/2004	8:11:43 PM		24.196	23.385	24.72	24.035	23.31		42.455	47.46	4.196	38.889	-1.093	-1.959		44.466	0.003	2.132	0.006		455.2	7.58694	46.0	10.9	40.7	2.804	0.318	0.320	0.008	7.877	6.70	
316	4/26/2004	8:12:43 PM		24.195	23.369	24.729	24.05	23.289		42.358	47.118	4.11	38.95	-1.053	-1.959		44.656	0.003	2.13	0.006		456.2	7.60361	45.6	10.9	40.7	2.803	0.318	0.320	0.008	7.871	6.70	
317	4/26/2004	8:13:43 PM		24.2	23.354	24.739	24.019	23.299		42.401	47.145	4.106	38.95	-1.015	-1.953		44.166	0.003	2.139	0.005		457.2	7.62028	45.7	10.8	40.7	2.804	0.319	0.321	0.008	7.898	6.72	
318	4/26/2004	8:14:43 PM		24.199	23.338	24.733	24.023	23.303		42.055	47.012	4.064	38.694	-1.015	-1.953		44.347	0.003	2.141	0.006		458.2	7.63694	45.5	10.9	40.4	2.784	0.319	0.322	0.008	7.966	6.78	
319	4/26/2004	8:15:43 PM		24.203	23.337	24.732	24.037	23.352		42.414	47.41	4.077	39.071	-1.012	-1.956		44.053	0.003	2.139	0.004		459.2	7.65361	45.9	10.8	40.7	2.809	0.319	0.321	0.008	7.887	6.71	
320	4/26/2004	8:16:43 PM		24.197	23.316	24.717	24.062	23.427		42.185	46.838	4.047	38.827	-0.983	-1.953		44.437	0.003	2.138	0.006		460.2	7.67028	45.4	10.9	40.5	2.793	0.319	0.321	0.008	7.932	6.75	
321	4/26/2004	8:17:43 PM		24.197	23.316	24.722	24.117	23.472		41.988	46.886	4.043	38.638	-1.027	-1.953		44.67	0.003	2.139	0.004		461.2	7.68694	45.4	10.9	40.3	2.779	0.319	0.321	0.008	7.973	6.79	
322	4/26/2004	8:18:43 PM		24.218	23.332	24.762	24.238	23.558		42.063	46.829	4.001	38.784	-0.957	-1.945		44.197	0.003	2.144	0.006		462.2	7.70361	45.4	10.8	40.4	2.787	0.320	0.322	0.008	7.961	6.77	
323	4/26/2004	8:19:43 PM		24.203	23.311	24.732	24.283	23.562		42.339	47.109	4.029	39.006	-1.009	-1.95		43.892	0.003	2.141	0.006		463.2	7.72028	45.6	10.8	40.7	2.804	0.319	0.322	0.008	7.908	6.73	
324	4/26/2004	8:20:43 PM		24.193	23.307	24.707	24.293	23.598		41.881	46.61	4.053	38.521	-0.957	-1.953		43.909	0.003	2.141	0.006		464.2	7.73694	45.1	10.8	40.2	2.772	0.319	0.322	0.008	8.006	6.81	
325	4/26/2004	8:21:43 PM		24.209	23.328	24.733	24.334	23.644		42.283	46.95	4.105	38.891	-0.98	-1.95		44.374	0.003	2.141	0.006		465.2	7.75361	45.5	10.9	40.6	2.798	0.319	0.322	0.008	7.924	6.74	
326	4/26/2004	8:22:43 PM		24.205	23.334	24.734	24.365	23.719		42.353	47.105	4.048	39.028	-1.012	-1.945		43.926	0.003	2.143	0.006		466.2	7.77028	45.6	10.8	40.7	2.805	0.320	0.322	0.008	7.911	6.73	
327	4/26/2004	8:23:43 PM		24.205	23.354	24.739	24.386	23.715		42.295	47.151	4.02	39.006	-0.986	-1.942		44.366	0.003	2.149	0.004		467.2	7.78694	45.7	10.9	40.7	2.803	0.320	0.323	0.008	7.940	6.76	
328	4/26/2004	8:24:43 PM		24.205	23.364	24.744	24.441	23.725		42.14	46.885	4.067	38.772	-0.966	-1.945		44.134	0.003	2.146	0.006		468.2	7.80361	45.4	10.8	40.5	2.789	0.320	0.322	0.008	7.966	6.78	
329	4/26/2004	8:25:43 PM		24.202	23.386	24.736	24.452	23.727		42.442	47.337	4.088	39.084	-1.009	-1.95		44.084	0.003	2.14	0.005		469.2	7.82028	45.9	10.8	40.8	2.810	0.319	0.321	0.008	7.886	6.71	
330	4/26/2004	8:26:43 PM		24.207	23.392	24.742	24.433	23.652		42.229	47.039	4.115	38.768	-0.995	-1.942		44.155	0.003	2.139	0.007		470.2	7.83694	45.6	10.8	40.5	2.792	0.319	0.321	0.008	7.932	6.75	
331	4/26/2004	8:27:43 PM		24.207	23.387	24.747	24.408	23.572		42.09	46.827	4.057	38.716	-0.96	-1.942		43.872	0.003	2.139	0.006		471.2	7.85361	45.4	10.8	40.4	2.786	0.319	0.321	0.008	7.950	6.77	
332	4/26/2004	8:28:43 PM		24.203	23.392	24.737	24.363	23.538		42.523	47.337	4.108	39.082	-0.957	-1.947		44.172	0.003	2.144	0.005		472.2	7.87028	45.9	10.8	40.8	2.813	0.320	0.322	0.008	7.892	6.72	
333	4/26/2004	8:29:43 PM		24.198	23.397	24.727	24.338	23.538		42.08	46.687	3.986	38.866	-1.024	-1.945		44.255	0.003	2.146	0.006		473.2	7.88694	45.2	10.8	40.5	2.790	0.320	0.322	0.008	7.966	6.78	
334	4/26/2004	8:30:43 PM		24.209	23.403	24.738	24.254	23.503		42.061	46.772	4.069	38.661	-0.954	-1.939		43.903	0.003	2.142	0.005		474.2	7.90361	45.3	10.8	40.4	2.783	0.319	0.322	0.008	7.971	6.78	
335	4/26/2004	8:31:43 PM		24.203	23.402	24.747	24.198	23.467		42.312	47.296	4.051	38.979	-0.952	-1.939		44.262	0.003	2.143	0.005		475.2	7.92028	45.8	10.8	40.6	2.802	0.320	0.322	0.008	7.917	6.74	
336	4/26/2004	8:32:43 PM		24.202	23.397	24.737	24.127	23.412		42.063	46.657	4.032	38.733	-0.937	-1.939		44.051	0.003	2.153	0.005		476.2	7.93694	45.2	10.8	40.4	2.785	0.321	0.323	0.008	8.005	6.81	
337	4/26/2004	8:33:43 PM		24.207	23.386	24.726	24.091	23.391		42.077	46.798	4.022	38.776	-0.937	-1.939		44.013	0.003	2.151	0.006		477.2	7.95361	45.3	10.8	40.4	2.787	0.321	0.323	0.008	7.994	6.80	
338	4/26/2004	8:34:43 PM		24.211	23.38	24.74	24.115	23.38		42.194	47.049	4.049	38.844	-0.934	-1.939		44.37	0.003	2.152	0.006		478.2	7.97028	45.6	10.9	40.5	2.794	0.321	0.323	0.008	7.977	6.79	
339	4/26/2004	9:36:47 PM		23.806	22.472	24.385	23.474	22.89		22.129	23.377	3.955	18.321	-1.218	-1.696		44.351	0.003	1.161	0.003		540.3	9.00472	21.9	10.9	20.2	1.394	0.173	0.176	0.009	8.708	7.41	
340	4/26/2004	9:37:47 PM		23.692	22.482	24.326	23.369	22.886		12.074	23.512	3.857	8.273	4.775	-2.893		43.803	0.616	-0.013	0.003		541.3	9.02139	22.0	10.7	10.2	0.701	-0.002	-0.002	0.000	-0.194	-0.17	
341	4/26/2004	9:38:47 PM		23.698	22.524	24.252	23.426	22.927		2.99	23.879	3.78	-0.709	15.909	20.887		42.81	0.003	-0.013	0.003		542.3	9.03806	22.4	10.5	1.1	0.079	-0.002	-0.002	-0.002	-1.736	-1.48	
342	4/26/2004	9:39:47 PM		23.693	22.544	24.177	23.496	22.977		2.85	23.831	3.785	-0.879	16.031	19.633		42.947	0.003	-0.01	0.003		543.3	9.05472	22.4	10.5	1.0	0.068	-0.001	-0.002	-0.002	-1.548	-1.32	
343	4/26/2004	9:40:47 PM		23.644	22.56	24.097	23.527	23.003		4.71	23.557	3.777	1.009	13.923	0.302		43.296	0.59	-0.006	0.003		544.3	9.07139	22.1	10.6	2.9	0.197	-0.001	-0.001	0.000	-0.321	-0.27	
344	4/26/2004	9:41:47 PM		23.348	22.581	24.028	23.578	23.009		19.798	23.394	3.82	16.4	-1.218	1.036		44.454	0.003	1.922	0.003		545.3	9.08806	21.9	10.9	18.1	1.248	0.287	0.295	0.016	16.273	13.85	
345	4/26/2004	9:42:47 PM		23.269	22.611	23.988	23.624	23.009		21.898	23.528	3.762	18.418	-1.218	0.865		43.638	0.003	1.298	0.003		546.3	9.10472	22.1	10.7	20.2	1.390	0.194	0.199	0.010	9.879	8.41	
346	4/26/2004	9:43:47 PM		23.194	22.622	23.914	23.594	23.01		22.185	23.367	3.89	18.59	-1.221	0.712		44.082	0.003	1.177	0.003		547.3	9.12139	21.9	10.8	20.4	1.406	0.175	0.181	0.009	8.875	7.55	
347	4/26/2004	9:44:47 PM		23.135	22.648	23.859	23.55	22.945		22.274	23.412	3.859	18.613	-1.218	0.712		44.013	0.003	1.13	0.003		548.3	9.13806	21.9	10.8	20.4	1.410	0.168	0.174	0.009	8.511	7.24	
348	4/26/2004	9:45:47 PM		23.075	22.649	23.8	23.465	22.901		21.817	22.886	4.162	17.859	-1.221	0.698		46.141	0.003	1.071	0.003		549.3	9.15472	21.4	11.3	19.8	1.368	0.160	0.165	0.008	8.327	7.09	
349	4/26/2004	9:46:47 PM		23.03	22.664	23.77	23.395	22.851		22.183	23.211	4.179	18.202	-1.215	0.703		45.288	0.003	1.065	0.003		550.3	9.17139	21.7	11.1	20.2	1.392	0.159	0.164	0.008	8.142	6.93	
350	4/26/2004	9:47:47 PM		22.98	22.664	23.724	23.4	22.806		22.176	23.178	4.063	18.303	-1.218	0.706		45.419	0.003	1.061	0.005		551.3	9.18806	21.7	11.1	20.2	1.395	0.158	0.164	0.008	8.103	6.90	

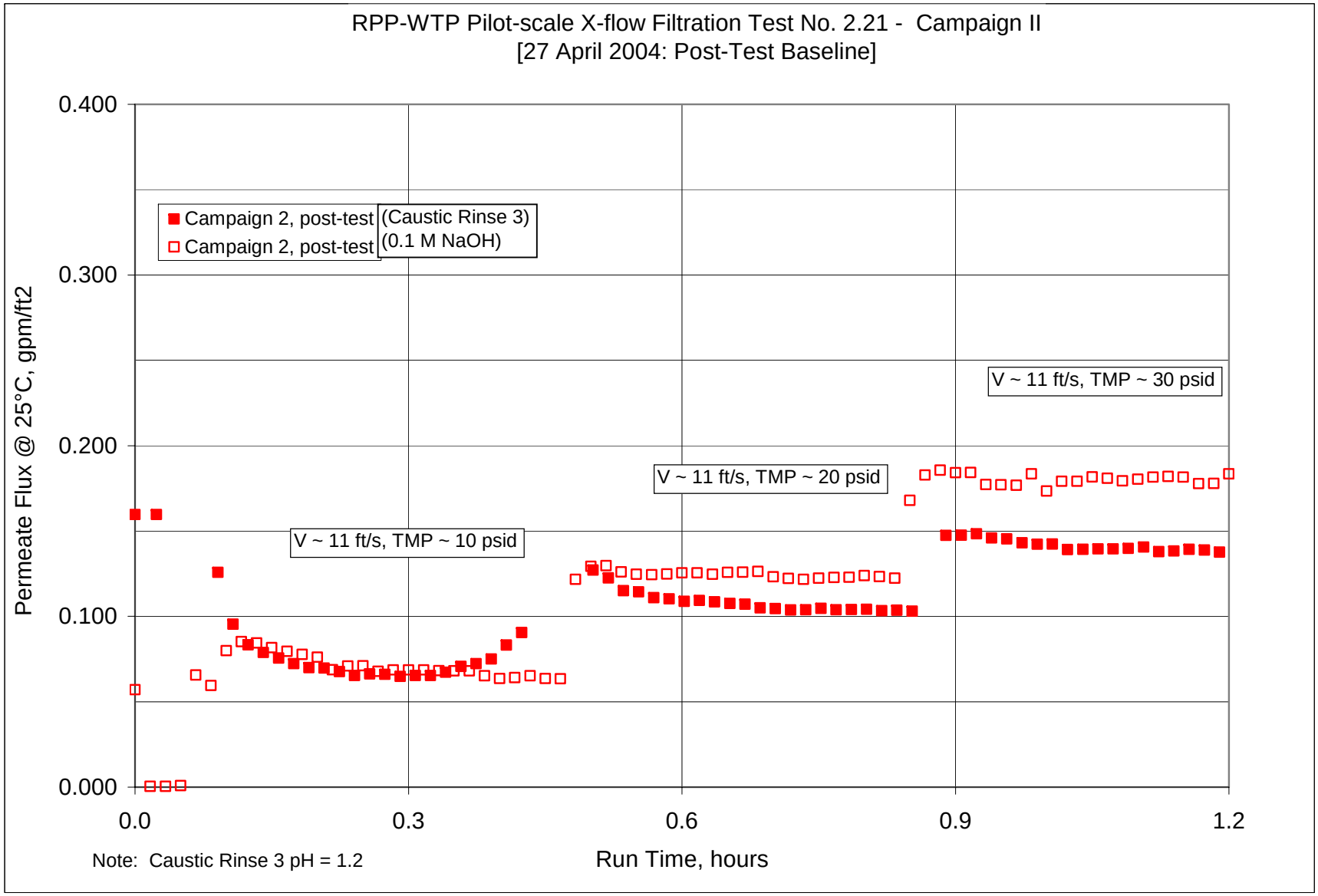
RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	4/26/2004	9:48:47 PM		22.935	22.684	23.684	23.395	22.816		22.18	23.253	3.988	18.373	-1.218	0.703		44.639	0.003	1.068	0.003		552.3	9.20472	21.8	10.9	20.3	1.398	0.159	0.165	0.008	8.151	6.94	
352	4/26/2004	9:49:47 PM		22.904	22.689	23.659	23.405	22.78		22.336	23.373	3.984	18.576	-1.215	0.703		44.962	0.003	1.06	0.005		553.3	9.22139	21.9	11.0	20.5	1.410	0.158	0.164	0.008	8.024	6.83	
353	4/26/2004	9:50:47 PM		22.859	22.684	23.619	23.344	22.74		22.214	23.211	3.957	18.45	-1.218	0.703		44.946	0.003	1.061	0.004		554.3	9.23806	21.7	11.0	20.3	1.402	0.158	0.164	0.008	8.090	6.88	
354	4/26/2004	9:51:47 PM		22.818	22.678	23.573	23.303	22.745		22.35	23.305	3.862	18.695	-1.218	0.701		43.968	0.003	1.068	0.005		555.3	9.25472	21.8	10.8	20.5	1.415	0.159	0.166	0.008	8.078	6.87	
355	4/26/2004	9:52:47 PM		22.789	22.684	23.554	23.314	22.74		22.444	23.472	4	18.645	-1.218	0.701		44.426	0.003	1.047	0.004		556.3	9.27139	22.0	10.9	20.5	1.416	0.156	0.163	0.008	7.915	6.74	
356	4/26/2004	9:53:47 PM		22.764	22.669	23.514	23.329	22.66		22.253	23.199	3.967	18.489	-1.218	0.701		44.577	0.003	1.045	0.005		557.3	9.28806	21.7	10.9	20.4	1.405	0.156	0.162	0.008	7.977	6.79	
357	4/26/2004	9:54:47 PM		22.712	22.652	23.467	23.283	22.649		22.373	23.416	3.995	18.557	-1.218	0.701		44.627	0.003	1.041	0.005		558.3	9.30472	21.9	10.9	20.5	1.411	0.155	0.162	0.008	7.920	6.74	
358	4/26/2004	9:55:47 PM		22.692	22.652	23.442	23.237	22.644		22.386	23.383	3.905	18.666	-1.221	0.698		44.378	0.003	1.046	0.006		559.3	9.32139	21.9	10.9	20.5	1.415	0.156	0.163	0.008	7.940	6.76	
359	4/26/2004	9:56:47 PM		22.667	22.652	23.432	23.243	22.563		22.554	23.533	3.961	18.867	-1.218	0.698		44.414	0.003	1.043	0.006		560.3	9.33806	22.1	10.9	20.7	1.428	0.156	0.163	0.008	7.849	6.68	
360	4/26/2004	9:57:47 PM		22.631	22.631	23.386	23.217	22.593		22.373	23.35	3.957	18.578	-1.218	0.701		44.234	0.003	1.037	0.004		561.3	9.35472	21.9	10.8	20.5	1.412	0.155	0.162	0.008	7.904	6.73	
361	4/26/2004	9:58:47 PM		22.611	22.631	23.356	23.242	22.663		22.303	23.309	3.933	18.531	-1.218	0.701		44.149	0.003	1.036	0.004		562.3	9.37139	21.8	10.8	20.4	1.408	0.154	0.162	0.008	7.926	6.74	
362	4/26/2004	9:59:47 PM		22.591	22.621	23.336	23.261	22.678		22.334	23.265	3.912	18.631	-1.218	0.698		43.993	0.003	1.036	0.005		563.3	9.38806	21.8	10.8	20.5	1.412	0.154	0.162	0.008	7.905	6.73	
363	4/26/2004	10:00:47 PM		22.571	22.626	23.315	23.286	22.728		22.357	23.354	3.959	18.592	-1.218	0.698		44.111	0.003	1.033	0.004		564.3	9.40472	21.9	10.8	20.5	1.412	0.154	0.162	0.008	7.890	6.71	
364	4/26/2004	10:01:47 PM		22.535	22.61	23.28	23.291	22.742		22.552	23.512	3.964	18.81	-1.221	0.698		44.101	0.003	1.028	0.006		565.3	9.42139	22.0	10.8	20.7	1.426	0.153	0.161	0.008	7.781	6.62	
365	4/26/2004	10:02:47 PM		22.529	22.614	23.264	23.355	22.797		22.531	23.533	3.945	18.773	-1.218	0.701		44.122	0.003	1.026	0.005		566.3	9.43806	22.1	10.8	20.7	1.424	0.153	0.161	0.008	7.780	6.62	
366	4/26/2004	10:03:47 PM		22.508	22.629	23.253	23.385	22.851		22.367	23.334	3.957	18.645	-1.218	0.701		44.105	0.003	1.026	0.005		567.3	9.45472	21.9	10.8	20.5	1.414	0.153	0.161	0.008	7.838	6.67	
367	4/26/2004	10:04:47 PM		22.509	22.645	23.244	23.451	22.867		22.357	23.342	3.93	18.504	-1.218	0.703		44.093	0.003	1.026	0.004		568.3	9.47139	21.9	10.8	20.4	1.409	0.153	0.161	0.008	7.869	6.70	
368	4/26/2004	10:05:47 PM		22.478	22.644	23.223	23.501	22.861		22.545	23.489	3.926	18.847	-1.218	0.701		43.711	0.003	1.029	0.005		569.3	9.48806	22.0	10.7	20.7	1.427	0.153	0.161	0.008	7.795	6.63	
369	4/26/2004	10:06:47 PM		22.469	22.66	23.214	23.511	22.907		22.579	23.553	3.997	18.762	-1.218	0.701		43.986	0.003	1.024	0.005		570.3	9.50472	22.1	10.8	20.7	1.425	0.153	0.161	0.008	7.769	6.61	
370	4/26/2004	10:07:47 PM		22.453	22.674	23.203	23.551	22.977		22.666	23.512	3.964	18.937	-1.215	0.706		44.445	0.003	1.025	0.005		571.3	9.52139	22.0	10.9	20.8	1.434	0.153	0.161	0.008	7.730	6.58	
371	4/26/2004	10:08:47 PM		22.449	22.69	23.199	23.566	23.002		22.344	23.205	3.909	18.604	-1.218	0.701		44.368	0.003	1.018	0.005		572.3	9.53806	21.7	10.9	20.5	1.412	0.152	0.160	0.008	7.801	6.64	
372	4/26/2004	10:09:47 PM		22.424	22.706	23.184	23.587	23.033		22.483	23.373	3.918	18.787	-1.218	0.703		44.074	0.003	1.022	0.005		573.3	9.55472	21.9	10.8	20.6	1.423	0.152	0.160	0.008	7.774	6.62	
373	4/26/2004	10:43:49 PM		23.853	22.685	24.562	23.144	22.736		21.801	22.693	3.912	18.075	-1.224	-4.679		43.882	0.003	0.984	0.003		607.3	10.1219	21.2	10.8	19.9	1.375	0.147	0.149	0.007	7.450	6.34	
374	4/26/2004	10:44:49 PM		23.803	22.695	24.467	23.164	22.736		2.569	23.429	3.558	-1.095	15.967	20.465		41.715	0.003	-0.013	0.003		608.3	10.1386	22.0	10.2	0.7	0.051	-0.002	-0.002	-0.003	-2.670	-2.27	
375	4/26/2004	10:45:49 PM		23.788	22.69	24.362	23.144	22.666		2.686	23.522	3.534	-0.857	15.967	24.01		41.617	0.003	-0.013	0.003		609.3	10.1553	22.0	10.2	0.9	0.063	-0.002	-0.002	-0.002	-2.158	-1.84	
376	4/26/2004	10:46:49 PM		23.779	22.7	24.277	23.2	22.717		2.503	23.649	3.421	-0.904	16.28	19.777		40.695	0.003	-0.013	0.003		610.3	10.1719	22.2	10.0	0.8	0.055	-0.002	-0.002	-0.002	-2.474	-2.11	
377	4/26/2004	10:47:49 PM		23.739	22.691	24.188	23.226	22.707		2.443	23.68	3.439	-1.052	16.245	19.757		41.018	0.003	-0.013	0.003		611.3	10.1886	22.2	10.1	0.7	0.048	-0.002	-0.002	-0.003	-2.851	-2.43	
378	4/26/2004	10:48:49 PM		23.714	22.686	24.123	23.241	22.707		2.603	23.827	3.376	-0.773	16.352	18.32		40.613	0.003	14.643	0.003		612.3	10.2053	22.4	10.0	0.9	0.063	2.183	2.238	2.446	2445.768	2081.38	
379	4/26/2004	10:49:49 PM		23.489	22.676	24.038	23.297	22.773		7.64	23.659	3.316	4.516	10.918	0.322		40.785	1.191	14.643	0.003		613.3	10.2219	22.2	10.0	6.1	0.419	2.183	2.243	0.369	369.081	314.09	
380	4/26/2004	10:50:49 PM		23.309	22.666	23.943	23.277	22.768		20.93	24.244	2.844	18.473	-1.215	0.649		38.288	0.003	1.845	0.003		614.3	10.2386	22.8	9.4	19.7	1.358	0.275	0.283	0.014	14.385	12.24	
381	4/26/2004	10:51:49 PM		23.244	22.667	23.903	23.348	22.834		21.678	22.963	3.615	18.305	-1.218	0.602		42.601	0.003	1.179	0.003		615.3	10.2553	21.5	10.4	20.0	1.378	0.176	0.181	0.009	9.069	7.72	
382	4/26/2004	10:52:49 PM		23.174	22.678	23.864	23.363	22.845		21.805	22.894	3.814	18.134	-1.221	0.591		43.807	0.003	1.069	0.003		616.3	10.2719	21.4	10.7	20.0	1.377	0.159	0.165	0.008	8.241	7.01	
383	4/26/2004	10:53:49 PM		23.125	22.678	23.809	23.384	22.87		22.035	23.01	3.819	18.372	-1.218	0.588		43.821	0.003	1.044	0.003		617.3	10.2886	21.5	10.7	20.2	1.393	0.156	0.161	0.008	7.968	6.78	
384	4/26/2004	10:54:49 PM		23.091	22.69	23.811	23.456	22.902		22.002	22.911	3.974	18.167	-1.215	0.588		44.77	0.003	1.004	0.003		618.3	10.3053	21.4	11.0	20.1	1.385	0.150	0.155	0.008	7.708	6.56	
385	4/26/2004	10:55:49 PM		23.026	22.675	23.74	23.466	22.927		22.05	22.969	3.816	18.372	-1.218	0.585		44.253	0.003	0.987	0.005		619.3	10.3219	21.5	10.8	20.2	1.393	0.147	0.152	0.008	7.545	6.42	
386	4/26/2004	10:56:49 PM		22.991	22.69	23.711	23.477	22.887		22.324	23.16	3.703	18.791	-1.215	0.588		43.909	0.003	0.988	0.004		620.3	10.3386	21.7	10.8	20.6	1.417	0.147	0.153	0.007	7.431	6.32	
387	4/26/2004	10:57:49 PM		22.952	22.696	23.666	23.457	22.898		22.085	22.961	3.796	18.459	-1.221	0.582		44.174	0.003	0.97	0.006		621.3	10.3553	21.5	10.8	20.3	1.398	0.145	0.150	0.007	7.408	6.30	
388	4/26/2004	10:58:49 PM		22.922	22.712	23.647	23.473	22.899		22.359	23.124	3.715	18.826	-1.218	0.585		43.482	0.003	0.969	0.004		622.3	10.3719	21.7	10.7	20.6	1.420	0.144	0.150	0.007	7.289	6.20	
389	4/26/2004	10:59:49 PM		22.883	22.717	23.618	23.448	22.844		22.365	23.164	3.735	18.764	-1.215	0.582		43.652	0.003	0.961	0.005		623.3	10.3886	21.7	10.7	20.6	1.418	0.143	0.149	0.007	7.245	6.17	
390	4/26/2004	11:00:49 PM		22.848	22.718	23.583	23.394	22.75		22.583	23.446	3.674	19.048	-1.218	0.588		43.277	0.003	0.966	0.005		624.3	10.4053	22.0	10.6	20.8	1.435	0.144	0.150	0.007	7.202	6.13	
391	4/26/2004	11:01:49 PM		22.824	22.719	23.559	23.344	22.675		22.409	23.278	3.656	18.9	-1.221	0.585		43.058	0.003	0.961	0.006		625.3	10.4219	21.8	10.6	20.7	1.424	0.143	0.149	0.007	7.225	6.15	
392	4/26/2004	11:02:49 PM		22.784	22.704	23.514	23.264	22.665		22.78	23.626	3.662	19.259	-1.221	0.582		43.139	0.003	0.953	0.006		626.3	10.4386	22.2	10.6	21.0	1.449	0.142	0.148	0.007	7.050	6.00	
393	4/26/2004	11:03:49 PM		22.754	22.699	23.493	23.249	22.645		22.425	23.205	3.647	18.927	-1.218	0.582		43.043	0.003	0.944	0.005		627.3	10.4553	21.7	10.5	20.7	1.426	0.141	0.147	0.007	7.104	6.05	
394	4/26/2004	11:04:49 PM		22.729	22.694	23.488	23.203	22.635		21.873	22.633	3.956	18.059	-1.215	0.582		45.1	0.003	0.91	0.004		628.3	10.4719	21.2	11.1	20.0	1.377	0.136	0.142	0.007	7.092	6.04	
395	4/26/2004	11:05:49 PM		22.693	22.668	23.453	23.142	22.579		22.137	22.832	4.14	18.163	-1.218	0.576		45.557	0.003	0.892	0.004		629.3	10.4886	21.4	11.2	20.2	1.389	0.133	0.139	0.007	6.895	5.87	
396	4/26/2004	11:06:49 PM		22.667	22.652	23.442	23.076	22.538		22.029	22.687	4.192	17.976	-1.218	0.579		45.797	0.003	0.886	0.004		630.3	10.5053	21.2	11.2	20.0	1.379	0.132	0.138	0.007	6.902	5.87	
397	4/26/2004	11:07:49 PM		22.646	22.631	23.426	23.061	22.537		22.039	22.581	4.003	18.194	-1.215	0.579		45.086	0.003	0.893	0.006		631.3	10.5219	21.1	11.0	20.1	1.387	0.133	0.139	0.007	6.920	5.89	
398	4/26/2004	11:08:49 PM		22.636	22.626	23.411	23.081	22.542		22.207	22.909	4.018	18.338	-1.218	0.579		44.875	0.003	0.894	0.005		632.3	10.5386	21.4	11.0	20.3	1.398	0.133	0.139	0.007	6.877	5.85	
399	4/26/2004	11:09:49 PM		22.624	22.624	23.404	23.119	22.591		22.155	22.944	3.927	18.307	-1.212	0.585		44.697	0.003	0.897	0.005		633.3	10.5553	21.5	11.0	20.2	1.395	0.134	0.140	0.007	6.916	5.89	
400	4/26/2004	11:10:49 PM		22.606	22.606	23.366	23.111	22.582		22.382	23.048	3.87	18.668	-1.215	0.585		43.976	0.003	0.904	0.005		634.3	10.5719	21.6	10.8	20.5	1.415	0.135	0.141	0.007	6.877	5.85	
401	4/26/2004	11:11:49 PM		22.597	22.602	23.347	23.132	22.609		22.355	23.019	3.859	18.647	-1.215	0.582		43.502	0.003	0.897	0.005		635.3	10.5886	21.5	10.7	20.5	1.413	0.134	0.140	0.007	6.836	5.82	
402	4/26/2004	11:12:49 PM		22.589	22.61	23.329	23.155	22.601		22.348	23.064	3.951	18.473	-1.218	0.582		44.6	0.003	0.89	0.004		636.3	10.6053	21.6	10.9	20.4	1.407	0.133	0.139	0.007	6.816	5.80	
403	4/26/2004	11:13:49 PM		22.583	22.623	23.333	23.224	22.655		22.12	22.871	3.992	18.264	-1.215	0.582		45.104	0.003	0.886	0.005		637.3	10.6219	21.4	11.1	20.2	1.392	0.132	0.138	0.007	6.858	5.84	
404	4/26/2004	11:14:49 PM		22.557	22.628	23.327	23.283	22.715		22.278	22.9	3.873	18.533	-1.218	0.582		44.952	0.003	0.881	0.006		638.3	10.6386	21.4	11.0	20.4	1.407	0.131	0.138	0.007	6.749	5.74	
405	4/26/2004	11:15:49 PM		22.553	22.638	23.308	23.304	22.74		22.33	22.927	4.048	18.512	-1.218	0.579		45.054	0.003	0.874	0.006		639.3	10.6553	21.5	11.0	20.4	1.408	0.130	0.137	0.007	6.694	5.70	
406	4/26/2004	11:16:49 PM		22.543	22.644	23.313	23.369	22.745		22.342	23.021	3.973	18.533	-1.215	0.582		44.441	0.003	0.883	0.005		640.3	10.6719	21.5	10.9	20.4	1.409	0.132	0.138	0.007	6.757	5.75	
407	4/26/2004	11:17:49 PM		22.508	22.624	23.263	23.385	22.786		22.57	23.303	3.961	18.793	-1.221	0.582		44.42	0.003	0.883	0.005		641.3	10.6886	21.8	10.9	20.7	1.426	0.132	0.138	0.007	6.686	5.69	
408	4/26/2004	11:18:49 PM		22.509	22.645	23.269	23.391	22.797		22.344	22.961	3.756	18.73	-1.221	0.582		43.945	0.003	0.882	0.005		642.3	10.7053	21.5	10.8	20.5	1.416	0.131	0.138	0.007	6.725	5.72	
409																																	
410	Rinse/Clean/Rinse																																
411		Averages		24.209	23.216	24.849	24.032	23.351		34.934	40.082	4.148	31.196	0.906	0.407		44.000	0.059	2.940	0.005				38.609	10.783	33.07	2.280	0.260	0.261	0.051	50.780	43.214	
412		Maximum		26.338	23.649	26.911	24.774	24.102		43.608	48.428	5.519	40.101	40.477	84.538		48.223	1.205	14.643	0.235				46.956	11.818	41.85	2.886	2.183	2.344	3.405	3405.308	#######	
413		Median		24.203	23.334	24.739	24.143	23.424		42.104	43.658	4.086	38.435	-1.206	-1.950		44.122	0.003	2.103	0.005				42.185	10.813	40.28	2.777	0.187	0.187	0.007	7.392	6.291	
414		Minimum		21.273	22.472	22.179	23.061	22.537		2.443	22.581	2.844	-1.641	-1.224	-4.798		38.288	0.003	-0.013	0.003				21.108	9.383	0.66	0.046	-0.002	-0.002	-0.003	-2.868	-2.441	
415		2 x Std Dev		2.325	0.570	2.180	0.739	0.672		23.828	19.282	0.684	24.276	15.305	15.752		2.411	0.359	8.206	0.023				19.283	0.591	24.05	1.658	0.625	0.639	0.665	665.094	566.005	
416	Number of Points Used*			392	392	392	392	392		392	392	392	392	392	392		392	392	392	392				392	392	392	392	392	392	392	392	392	

RUN # 2.18 & 2.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	D	E	F	G	H	J	K	L	M	N	O	Q	R	S	T	X	Y	Z	AA	AB	AC	AD	AE	AF
419	Caustic Rinse 1																									
420		Averages	22.637	23.329	23.503	24.184	23.192	23.183	26.809	4.999	18.252	-1.052	-2.499	44.842	0.475	14.643	0.003	25.34	10.99	20.72	1.428	0.071	0.074	0.004	3.572	3.040
421		Maximum	23.173	23.451	23.998	24.346	23.399	23.833	27.087	5.282	19.107	1.240	0.585	47.059	0.502	14.643	0.003	25.61	11.53	21.47	1.480	0.075	0.079	0.004	3.972	3.380
422		Median	22.693	23.324	23.544	24.186	23.208	23.375	26.797	5.002	18.508	-1.218	-2.714	44.818	0.477	14.643	0.003	25.32	10.98	20.94	1.444	0.071	0.074	0.004	3.553	3.024
423		Minimum	21.837	23.194	22.768	23.979	22.996	20.403	26.461	4.793	15.187	-1.224	-2.873	42.983	0.436	14.643	0.003	24.99	10.53	17.80	1.227	0.065	0.069	0.003	3.329	2.833
424		2 x Std Dev	0.770	0.153	0.720	0.177	0.227	1.541	0.339	0.240	1.747	1.219	1.662	2.074	0.028	0.000	0.000	0.34	0.51	1.64	0.113	0.004	0.005	0.000	0.336	0.286
425		Number of Points Used*	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
426		* Backpulse points in box are not included																								
427																										
428	Acid Clean 1, 2, and 3																									
429		Averages	24.817	23.357	25.386	24.204	23.532	42.361	45.832	4.105	38.788	-1.094	-1.442	43.988	0.003	1.760	0.005	44.36	10.78	40.574	2.797	0.262	0.260	0.006	6.391	5.439
430		Maximum	26.338	23.649	26.911	24.774	24.102	43.608	48.428	4.659	40.101	-0.092	0.874	48.223	0.004	2.330	0.007	46.96	11.82	41.855	2.886	0.347	0.359	0.009	8.935	7.604
431		Median	24.493	23.367	25.097	24.182	23.521	42.333	46.958	4.093	38.802	-1.111	-1.971	44.134	0.003	2.116	0.005	45.49	10.82	40.547	2.796	0.315	0.302	0.007	7.418	6.313
432		Minimum	23.263	23.121	23.857	23.750	23.189	40.132	42.334	3.822	36.512	-1.224	-3.615	39.750	0.003	0.835	0.003	40.86	9.74	38.322	2.642	0.124	0.121	0.003	3.010	2.562
433		2 x Std Dev	1.595	0.210	1.605	0.367	0.347	0.790	3.919	0.229	1.003	0.307	3.342	2.273	0.000	1.058	0.002	3.92	0.56	0.875	0.060	0.158	0.157	0.004	3.817	3.249
434		Number of Points Used*	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
435		* Backpulse points in box are not included																								
436																										
437	Acid Clean 1																									
438		Averages	24.715	23.323	25.319	24.147	23.463	42.186	43.157	4.076	38.360	-1.219	0.791	43.095	0.003	1.032	0.005	41.68	10.56	40.273	2.777	0.154	0.153	0.004	3.795	3.230
439		Maximum	25.364	23.409	26.012	24.323	23.706	43.094	43.969	4.300	39.500	-1.212	0.874	45.718	0.004	1.278	0.007	42.50	11.20	41.297	2.847	0.191	0.190	0.005	4.752	4.044
440		Median	24.506	23.344	25.099	24.161	23.504	42.137	43.230	4.079	38.312	-1.218	0.795	43.061	0.003	1.009	0.005	41.76	10.55	40.234	2.774	0.150	0.150	0.004	3.715	3.161
441		Minimum	24.352	23.127	24.945	23.947	23.189	41.526	42.334	3.822	37.715	-1.224	0.683	39.750	0.003	0.835	0.003	40.86	9.74	39.640	2.733	0.124	0.121	0.003	3.010	2.562
442		2 x Std Dev	0.741	0.131	0.782	0.189	0.258	0.582	0.702	0.183	0.664	0.005	0.104	2.094	0.000	0.287	0.002	0.70	0.51	0.615	0.042	0.043	0.045	0.001	1.149	0.978
443		Number of Points Used*	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
444		* Backpulse points in box are not included																								
445																										
446	Acid Clean 2																									
447		Averages	25.708	23.356	26.266	24.224	23.605	42.583	47.270	4.152	39.096	-1.102	-3.167	44.731	0.003	2.117	0.005	45.80	10.96	40.840	2.816	0.316	0.305	0.007	7.463	6.351
448		Maximum	26.338	23.649	26.911	24.774	24.102	43.608	48.428	4.659	40.101	-0.740	-3.006	48.223	0.004	2.204	0.007	46.96	11.82	41.855	2.886	0.329	0.325	0.008	8.348	7.104
449		Median	25.932	23.397	26.486	24.273	23.672	42.602	47.281	4.108	39.188	-1.099	-3.124	44.629	0.003	2.118	0.005	45.81	10.94	40.898	2.820	0.316	0.303	0.007	7.419	6.313
450		Minimum	24.398	23.121	25.203	23.750	23.217	40.132	45.057	3.873	36.512	-1.221	-3.615	42.645	0.003	2.075	0.003	43.58	10.45	38.322	2.642	0.309	0.299	0.007	7.321	6.230
451		2 x Std Dev	1.147	0.316	1.150	0.525	0.429	0.910	0.874	0.251	0.949	0.203	0.290	1.862	0.000	0.053	0.002	0.87	0.46	0.921	0.063	0.008	0.011	0.000	0.348	0.296
452		Number of Points Used*	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
453		* Backpulse points in box are not included																								
454																										
455	Acid Clean 3																									
456		Averages	24.039	23.392	24.585	24.244	23.531	42.319	47.145	4.087	38.922	-0.958	-2.022	44.166	0.003	2.150	0.005	45.67	10.82	40.620	2.801	0.321	0.324	0.008	7.986	6.797
457		Maximum	24.218	23.473	24.762	24.525	23.805	43.158	48.168	4.329	39.909	-0.092	-1.939	45.657	0.003	2.330	0.007	46.70	11.19	41.506	2.862	0.347	0.359	0.009	8.935	7.604
458		Median	24.122	23.390	24.667	24.225	23.518	42.304	47.116	4.089	38.936	-0.991	-1.971	44.188	0.003	2.141	0.005	45.64	10.83	40.622	2.801	0.319	0.322	0.008	7.949	6.765
459		Minimum	23.263	23.307	23.857	24.019	23.289	41.495	46.108	3.852	37.955	-1.157	-2.164	42.034	0.003	2.100	0.003	44.64	10.30	39.725	2.739	0.313	0.318	0.008	7.794	6.633
460		2 x Std Dev	0.445	0.082	0.411	0.276	0.267	0.621	0.803	0.220	0.701	0.324	0.148	1.444	0.000	0.071	0.002	0.80	0.35	0.651	0.045	0.011	0.014	0.000	0.341	0.290
461		Number of Points Used*	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
462		* Backpulse points in box are not included																								
463																										
464	Caustic Rinse 2 and 3																									
465		Averages	22.745	22.659	23.488	23.339	22.761	22.290	23.177	3.913	18.553	-1.218	0.642	44.318	0.003	0.994	0.005	21.70	10.86	20.421	1.408	0.148	0.155	0.008	7.577	6.448
466		Maximum	23.244	22.719	23.914	23.594	23.033	22.780	23.626	4.192	19.259	-1.212	0.712	46.141	0.003	1.179	0.006	22.15	11.31	21.020	1.449	0.176	0.181	0.009	9.069	7.718
467		Median	22.692	22.652	23.442	23.348	22.745	22.342	23.205	3.945	18.578	-1.218	0.602	44.234	0.003	1.024	0.005	21.73	10.84	20.456	1.410	0.153	0.161	0.008	7.774	6.616
468		Minimum	22.424	22.602	23.184	23.061	22.537	21.678	22.581	3.615	17.859	-1.221	0.576	42.601	0.003	0.874	0.003	21.11	10.44	19.838	1.368	0.130	0.137	0.007	6.686	5.690
469		2 x Std Dev	0.444	0.064	0.414	0.271	0.265	0.434	0.500	0.261	0.549	0.004	0.118	1.386	0.000	0.155	0.002	0.50	0.34	0.477	0.033	0.023	0.023	0.001	1.156	0.984
470		Number of Points Used*	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
471		* Backpulse points in box are not included																								
472																										
473	Caustic Rinse 2																									
474		Averages	22.715	22.655	23.462	23.387	22.798	22.352	23.346	3.965	18.588	-1.218	0.702	44.421	0.003	1.050	0.005	21.87	10.89	20.470	1.411	0.157	0.163	0.008	7.988	6.798
475		Maximum	23.194	22.706	23.914	23.594	23.033	22.666	23.553	4.179	18.937	-1.215	0.712	46.141	0.003	1.177	0.006	22.08	11.31	20.802	1.434	0.175	0.181	0.009	8.875	7.553
476		Median	22.667	22.652	23.432	23.385	22.797	22.357	23.354	3.957	18.604	-1.218	0.701	44.234	0.003	1.041	0.005	21.88	10.84	20.475	1.412	0.155	0.162	0.008	7.915	6.736
477		Minimum	22.424	22.610	23.184	23.217	22.563	21.817	22.886	3.859	17.859	-1.221	0.698	43.711	0.003	1.018	0.003	21.41	10.71	19.838	1.368	0.152	0.160	0.008	7.730	6.578
478		2 x Std Dev	0.452	0.051	0.443	0.233	0.257	0.338	0.286	0.145	0.438	0.003	0.007	1.053	0.000	0.068	0.002	0.29	0.26	0.382	0.026	0.010	0.009	0.000	0.498	0.424
479		Number of Points Used*	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
480		* Backpulse points in box are not included																								
481																										
482	Caustic Rinse 3																									
483		Averages	22.774	22.663	23.514	23.291	22.725	22.229	23.015	3.862	18.518	-1.217	0.584	44.218	0.003	0.941	0.005	21.54	10.84	20.374	1.405	0.140	0.146	0.007	7.182	6.112
484		Maximum	23.244	22.719	23.903	23.477	22.927	22.780	23.626	4.192	19.259	-1.212	0.602	45.797	0.003	1.179	0.006	22.15	11.22	21.020	1.449	0.176	0.181	0.009	9.069	7.718
485		Median	22.711	22.668	23.471	23.324	22.728	22.301	22.966	3.865	18.493	-1.218	0.582	44.214	0.003	0.907	0.005	21.49	10.84	20.408	1.407	0.135	0.141	0.007	6.985	5.944
486		Minimum	22.508	22.602	23.263	23.061	22.537	21.678	22.581	3.615	17.976	-1.221	0.576	42.601	0.003	0.874	0.003	21.11	10.44	19.966	1.377	0.130	0.137	0.007	6.686	5.690
487		2 x Std Dev	0.429	0.074	0.377	0.272	0.253	0.479	0.443	0.304	0.630	0.005	0.010	1.620	0.000	0.139	0.002	0.44	0.40	0.536	0.037	0.021	0.020	0.001	1.054	0.897
488		Number of Points Used*	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
489		* Backpulse points in box are not included																								

RUN # 2.21A, B, AND C; POST-TEST BASELINE, CAUSTIC RINSE 3 SOLUTION AND 0.1 M NAOH



RUN # 2.21A, B, AND C; POST-TEST BASELINE WITH CAUSTIC RINSE 3 SOLUTION – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	4/14/2004	1:30:58 PM		24.687	21.862	24.835	24.226	22.583		0.054	0.02	-0.021	-0.005	-0.179	0.099		-0.08	0.003	0.086	0.005				Filter Surface A		6.707	FT2						
8	4/19/2004	7:37:13 AM		22.595	22.228	23.926	21.772	22.175		0.046	0.082	-0.025	-0.009	-0.179	0.143		-0.086	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	4/19/2004	8:21:39 AM		22.248	22.333	22.324	22.194	22.199		-0.008	0.059	0.002	0.007	-0.132	0.131		-0.084	0.003	14.643	0.005													
10	4/20/2004	12:41:36 PM		22.772	22.767	22.049	23.603	24.746		-0.004	0.045	-0.009	-0.007	-0.176	0.108		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	4/22/2004	8:40:43 AM		22.558	21.446	24.471	22.716	22.489		0.01	0.028	0.001	0.001	-0.205	0.096		46.562	0.043	14.643	0.004													
12	4/23/2004	8:53:20 AM		21.548	21.737	22.041	21.89	21.369		-0.004	0.026	0.003	-0.005	-0.196	0.082		-0.082	0.003	14.643	0.005				Pressure P1is corrected for 40.88 inches of water tubing									
13	4/26/2004	9:00:47 AM		22.379	22.907	23.455	22.416	21.819		-0.012	0.08	0	-0.009	-0.205	0.044		-0.08	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	4/27/2004	9:14:59 AM		20.374	19.305	19.368	20.841	19.777		-0.002	0.02	-0.001	0.005	-0.193	0.111		-0.084	0.003	14.643	0.006									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Baseline 1A																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
121	Baseline 2A																																
122	4/27/2004	9:23:51 AM		21.162	19.444	22.273	20.97	20.192		11.904	11.834	4.008	8.046	-1.215	0.631		44.988	0.003	0.991	0.005		0.00	0	10.4	11.0	10.0	0.688	0.148	0.160	0.016	16.005	13.62	
123	4/27/2004	9:25:16 AM		21.162	19.444	22.273	20.97	20.192		11.904	11.834	4.008	8.046	-1.215	0.631		44.988	0.003	0.991	0.005		1.42	0.02361	10.4	11.0	10.0	0.688	0.148	0.160	0.016	16.005	13.62	
124	4/27/2004	9:25:18 AM		21.204	19.456	22.34	21.032	20.214		2.974	11.816	4.065	-1.14	3.961	13.672		44.458	0.003	-0.013	0.003		1.45	0.02417	10.3	10.9	0.9	0.063	-0.002	-0.002	-0.002	-2.280	-1.94	
125	4/27/2004	9:26:18 AM		21.171	19.473	22.428	21.06	20.257		3.256	12.123	4.163	-0.955	3.892	19.763		44.683	0.003	14.643	0.003		2.45	0.04083	10.6	11.0	1.2	0.079	2.183	2.349	2.041	######	######	
126	4/27/2004	9:27:18 AM		21.144	19.481	22.441	21.103	20.491		3.204	11.992	4.208	-1.042	3.889	19.636		44.527	0.003	14.643	0.003		3.45	0.0575	10.5	10.9	1.1	0.075	2.183	2.348	2.172	######	######	
127	4/27/2004	9:28:18 AM		21.087	19.515	22.46	21.147	20.707		5.494	11.677	3.935	1.624	1.13	0.307		45.033	0.485	14.643	0.003		4.45	0.07417	10.2	11.0	3.6	0.245	2.183	2.346	0.659	659.289	561.06	
128	4/27/2004	9:29:18 AM		21.413	19.575	22.554	21.156	20.852		11.4	11.743	4.047	7.617	-1.215	0.432		45.158	0.003	0.787	0.003		5.45	0.09083	10.3	11.1	9.5	0.656	0.117	0.126	0.013	13.227	11.26	
129	4/27/2004	9:30:18 AM		21.478	19.615	22.573	21.186	20.926		11.925	11.988	4.082	8.039	-1.215	0.437		45.033	0.003	0.597	0.003		6.45	0.1075	10.5	11.0	10.0	0.688	0.089	0.095	0.010	9.553	8.13	
130	4/27/2004	9:31:18 AM		21.553	19.67	22.589	21.221	20.982		12.016	11.975	4.006	8.224	-1.215	0.435		44.723	0.003	0.522	0.003		7.45	0.12417	10.5	11.0	10.1	0.698	0.078	0.083	0.008	8.235	7.01	
131	4/27/2004	9:32:18 AM		21.578	19.736	22.639	21.266	21.032		11.973	11.926	4.027	8.081	-1.215	0.435		44.831	0.003	0.494	0.003		8.45	0.14083	10.5	11.0	10.0	0.691	0.074	0.079	0.008	7.854	6.68	
132	4/27/2004	9:33:18 AM		21.593	19.796	22.683	21.311	20.971		12.08	11.952	3.972	8.3	-1.212	0.435		44.535	0.003	0.474	0.005		9.45	0.1575	10.5	10.9	10.2	0.703	0.071	0.075	0.007	7.406	6.30	
133	4/27/2004	9:34:18 AM		21.628	19.862	22.694	21.331	21.097		12.103	12.048	4.081	8.085	-1.218	0.435		44.483	0.003	0.454	0.005		10.45	0.17417	10.6	10.9	10.1	0.696	0.068	0.072	0.007	7.159	6.09	
134	4/27/2004	9:35:18 AM		21.673	19.931	22.738	21.381	21.136		12.265	12.197	4.063	8.302	-1.215	0.435		44.572	0.003	0.44	0.005		11.45	0.19083	10.7	10.9	10.3	0.709	0.066	0.070	0.007	6.802	5.79	
135	4/27/2004	9:36:18 AM		21.687	19.982	22.733	21.391	21.186		12.333	12.162	3.879	8.62	-1.215	0.435		44.426	0.003	0.438	0.005		12.45	0.2075	10.7	10.9	10.5	0.722	0.065	0.070	0.007	6.647	5.66	
136	4/27/2004	9:37:18 AM		21.697	20.032	22.768	21.395	21.292		12.244	12.098	4.04	8.308	-1.215	0.435		44.604	0.003	0.426	0.005		13.45	0.22417	10.6	10.9	10.3	0.708	0.064	0.068	0.007	6.585	5.60	
137	4/27/2004	9:38:18 AM		21.732	20.092	22.797	21.415	21.427		12.149	12.052	4.073	8.189	-1.212	0.435		44.656	0.003	0.412	0.005		14.45	0.24083	10.6	10.9	10.2	0.701	0.061	0.065	0.006	6.430	5.47	
138	4/27/2004	9:39:18 AM		21.772	20.167	22.827	21.44	21.436		12.114	12.05	4.049	8.089	-1.212	0.437		44.368	0.003	0.418	0.004		15.45	0.2575	10.6	10.9	10.1	0.696	0.062	0.066	0.007	6.562	5.58	
139	4/27/2004	9:40:18 AM		21.781	20.212	22.831	21.439	21.456		12.234	12.085	3.962	8.399	-1.215	0.435		44.164	0.003	0.416	0.006		16.45	0.27417	10.6	10.8	10.3	0.711	0.062	0.066	0.006	6.393	5.44	
140	4/27/2004	9:41:18 AM		21.805	20.261	22.861	21.418	21.324		12.288	12.127	4.159	8.243	-1.218	0.435		44.66	0.003	0.409	0.005		17.45	0.29083	10.7	10.9	10.3	0.708	0.061	0.065	0.006	6.312	5.37	
141	4/27/2004	9:42:18 AM		21.804	20.295	22.884	21.366	21.167		12.321	12.112	4.107	8.37	-1.218	0.435		44.775	0.003	0.413	0.005		18.45	0.3075	10.6	11.0	10.3	0.713	0.062	0.065	0.006	6.320	5.38	
142	4/27/2004	9:43:18 AM		21.833	20.33	22.884	21.305	21.161		12.317	12.116	4.047	8.432	-1.215	0.435		45.058	0.003	0.413	0.007		19.45	0.32417	10.6	11.0	10.4	0.715	0.062	0.065	0.006	6.302	5.36	
143	4/27/2004	9:44:18 AM		21.857	20.353	22.887	21.283	21.059		12.018	11.878	3.983	8.181	-1.218	0.435		44.848	0.003	0.425	0.006		20.45	0.34083	10.4	11.0	10.1	0.696	0.063	0.067	0.007	6.661	5.67	
144	4/27/2004	9:45:18 AM		21.88	20.387	22.931	21.246	20.987		12.321	12.141	4.056	8.436	-1.215	0.437		44.831	0.003	0.447	0.004		21.45	0.3575	10.7	11.0	10.4	0.716	0.067	0.071	0.007	6.809	5.79	
145	4/27/2004	9:46:18 AM		21.894	20.411	22.954	21.219	20.99		12.114	11.979	4.132	8.087	-1.212	0.435		44.685	0.003	0.457	0.005		22.45	0.37417	10.5	11.0	10.1	0.696	0.068	0.072	0.007	7.148	6.08	
146	4/27/2004	9:47:18 AM		21.902	20.429	22.967	21.248	21.109		12.159	12.031	4.027	8.218	-1.212	0.44		44.624	0.003	0.475	0.005		23.45	0.39083	10.6	10.9	10.2	0.702	0.071	0.075	0.007	7.363	6.27	
147	4/27/2004	9:48:18 AM		21.915	20.438	22.951	21.246	21.118		12.147	11.982	4.043	8.208	-1.215	0.437		44.687	0.003	0.526	0.004		24.45	0.4075	10.5	11.0	10.2	0.702	0.078	0.083	0.008	8.166	6.95	
148	4/27/2004	9:49:18 AM		21.934	20.462	22.975	21.25	21.187		12.28	12.112	4.032	8.356	-1.218	0.435		44.891	0.003	0.573	0.004		25.45	0.42417	10.6	11.0	10.3	0.711	0.085	0.090	0.009	8.769	7.46	
149																																	
150																																	
151		Averages		21.7	20.1	22.8	21.3	21.2		12.2	12.1	4.0	8.3	-1.2	0.4		44.7	0.0	0.5	0.0				10.6	10.9	10.2	0.704	0.069	0.073	0.007	7.2	6.1	
152		Maximum		21.9	20.5	23.0	21.4	21.5		12.3	12.2	4.2	8.6	-1.2	0.4		45.1	0.0	0.6	0.0				10.7	11.0	10.5	0.722	0.089	0.095	0.010	9.6	8.1	
153		Median		21.8	20.2	22.8	21.3	21.1		12.2	12.1	4.0	8.2	-1.2	0.4		44.7	0.0	0.4	0.0				10.6	10.9	10.2	0.703	0.066	0.070	0.007	6.8	5.8	
154		Minimum		21.5	19.6	22.6	21.2	20.9		11.9	11.9	3.9	8.0	-1.2	0.4		44.2	0.0	0.4	0.0				10.4	10.8	10.0	0.688	0.061	0.065	0.006	6.3	5.4	
155		2 x Std Dev		0.262	0.542	0.247	0.160	0.315		0.247	0.166	0.122	0.291	0.004	0.003		0.425	0.000	0.107	0.002				0.166	0.104	0.256	0.018	0.016	0.017	0.002	1.777	1.513	
156		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
157		* Backpulse points in box are not included																															

RUN # 2.21A, B, AND C; POST-TEST BASELINE WITH CAUSTIC RINSE 3 SOLUTION – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
160	Baseline 2B																																
161	4/27/2004	9:54:00 AM		22.245	20.562	23.351	21.497	21.327		22.344	22.65	4.016	18.399	-1.218	0.446		44.819	0.003	0.814	0.005		30.15	0.5025	21.2	11.0	20.4	1.405	0.121	0.127	0.006	6.242	5.31	
162	4/27/2004	9:55:00 AM		22.354	20.581	23.47	21.535	21.411		22.197	22.436	3.989	18.321	-1.218	0.446		44.639	0.003	0.787	0.006		31.15	0.51917	21.0	10.9	20.3	1.397	0.117	0.123	0.006	6.048	5.15	
163	4/27/2004	9:56:00 AM		22.467	20.608	23.643	21.533	21.57		22.131	22.349	4.203	18.108	-1.218	0.446		45.39	0.003	0.742	0.004		32.15	0.53583	20.9	11.1	20.1	1.387	0.111	0.115	0.006	5.714	4.86	
164	4/27/2004	9:57:00 AM		22.61	20.651	23.876	21.585	21.783		22.214	22.395	4.033	18.338	-1.215	0.449		44.948	0.003	0.743	0.006		33.15	0.5525	20.9	11.0	20.3	1.398	0.111	0.114	0.006	5.640	4.80	
165	4/27/2004	9:58:00 AM		22.779	20.68	24.02	21.604	21.721		22.104	22.415	4.179	18.009	-1.215	0.446		45.348	0.003	0.724	0.004		34.15	0.56917	20.9	11.1	20.1	1.383	0.108	0.111	0.006	5.533	4.71	
166	4/27/2004	9:59:00 AM		22.912	20.702	24.157	21.611	21.688		21.674	21.945	4.282	17.394	-1.218	0.443		45.791	0.003	0.722	0.005		35.15	0.58583	20.5	11.2	19.5	1.347	0.108	0.110	0.006	5.643	4.80	
167	4/27/2004	10:00:00 AM		23.055	20.74	24.335	21.623	21.911		21.878	22.009	4.196	17.784	-1.218	0.446		45.809	0.003	0.716	0.004		36.15	0.6025	20.5	11.2	19.8	1.367	0.107	0.109	0.005	5.485	4.67	
168	4/27/2004	10:01:00 AM		23.228	20.768	24.478	21.631	21.829		22.155	22.335	4.086	18.153	-1.215	0.446		45.544	0.003	0.722	0.004		37.15	0.61917	20.9	11.2	20.2	1.390	0.108	0.109	0.005	5.420	4.61	
169	4/27/2004	10:02:00 AM		23.386	20.801	24.571	21.654	21.716		22.037	22.142	4.072	18.085	-1.218	0.446		45.498	0.003	0.719	0.005		38.15	0.63583	20.7	11.1	20.1	1.383	0.107	0.109	0.005	5.409	4.60	
170	4/27/2004	10:03:00 AM		23.475	20.834	24.74	21.658	21.649		21.766	21.916	4.031	17.808	-1.215	0.449		45.617	0.003	0.716	0.005		39.15	0.6525	20.4	11.2	19.8	1.364	0.107	0.108	0.005	5.435	4.62	
171	4/27/2004	10:04:00 AM		23.608	20.847	24.827	21.66	21.576		22.409	22.585	4.082	18.45	-1.221	0.446		45.204	0.003	0.715	0.005		40.15	0.66917	21.1	11.1	20.4	1.409	0.107	0.107	0.005	5.243	4.46	
172	4/27/2004	10:05:00 AM		23.726	20.88	24.925	21.698	21.494		22.247	22.428	4.1	18.233	-1.218	0.446		45.499	0.003	0.702	0.006		41.15	0.68583	21.0	11.2	20.2	1.395	0.105	0.105	0.005	5.182	4.41	
173	4/27/2004	10:06:00 AM		23.844	20.898	25.028	21.706	21.441		22.355	22.542	4.016	18.475	-1.212	0.452		45.136	0.003	0.702	0.004		42.15	0.7025	21.1	11.1	20.4	1.408	0.105	0.105	0.005	5.123	4.36	
174	4/27/2004	10:07:00 AM		23.922	20.916	25.131	21.684	21.449		22.031	22.237	4.124	17.966	-1.215	0.452		45.665	0.003	0.698	0.006		43.15	0.71917	20.8	11.2	20.0	1.379	0.104	0.104	0.005	5.185	4.41	
175	4/27/2004	10:08:00 AM		24.03	20.944	25.239	21.651	21.437		22.189	22.372	4.049	18.284	-1.212	0.449		45.48	0.003	0.701	0.005		44.15	0.73583	20.9	11.1	20.2	1.395	0.105	0.104	0.005	5.130	4.37	
176	4/27/2004	10:09:00 AM		24.097	20.916	25.256	21.608	21.408		22.299	22.463	3.995	18.438	-1.218	0.449		45.079	0.003	0.707	0.005		45.15	0.7525	21.0	11.0	20.4	1.404	0.105	0.105	0.005	5.138	4.37	
177	4/27/2004	10:10:00 AM		24.19	20.943	25.318	21.671	21.396		22.182	22.38	3.937	18.385	-1.215	0.449		44.877	0.003	0.703	0.005		46.15	0.76917	20.9	11.0	20.3	1.398	0.105	0.104	0.005	5.121	4.36	
178	4/27/2004	10:11:00 AM		24.257	20.966	25.346	21.719	21.479		22.45	22.656	3.998	18.522	-1.212	0.455		44.802	0.003	0.704	0.005		47.15	0.78583	21.2	11.0	20.5	1.412	0.105	0.104	0.005	5.074	4.32	
179	4/27/2004	10:12:00 AM		24.31	20.983	25.373	21.837	21.556		22.367	22.606	4.052	18.375	-1.212	0.452		44.643	0.003	0.706	0.005		48.15	0.8025	21.1	10.9	20.4	1.405	0.105	0.104	0.005	5.113	4.35	
180	4/27/2004	10:13:00 AM		24.323	20.992	25.372	21.85	21.55		22.471	22.712	4.091	18.45	-1.215	0.452		44.912	0.003	0.7	0.004		49.15	0.81917	21.2	11.0	20.5	1.411	0.104	0.103	0.005	5.048	4.30	
181	4/27/2004	10:14:00 AM		24.371	21.01	25.42	21.939	21.608		22.444	22.643	4.027	18.491	-1.218	0.452		44.823	0.003	0.703	0.006		50.15	0.83583	21.2	11.0	20.5	1.411	0.105	0.104	0.005	5.061	4.31	
182	4/27/2004	10:15:00 AM		24.425	21.034	25.468	21.957	21.652		22.326	22.625	4.026	18.334	-1.215	0.452		44.954	0.003	0.7	0.006		51.15	0.8525	21.2	11.0	20.3	1.402	0.104	0.103	0.005	5.066	4.31	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
185		Averages		23.5	20.8	24.7	21.7	21.6		22.2	22.4	4.1	18.2	-1.2	0.4		45.2	0.0	0.7	0.0				20.9	11.1	20.2	1.393	0.107	0.108	0.005	5.4	4.6	
186		Maximum		24.4	21.0	25.5	22.0	21.9		22.5	22.7	4.3	18.5	-1.2	0.5		45.8	0.0	0.8	0.0				21.2	11.2	20.5	1.412	0.121	0.127	0.006	6.2	5.3	
187		Median		23.7	20.9	24.9	21.7	21.6		22.2	22.4	4.1	18.3	-1.2	0.4		45.2	0.0	0.7	0.0				20.9	11.1	20.3	1.397	0.106	0.106	0.005	5.2	4.4	
188		Minimum		22.2	20.6	23.4	21.5	21.3		21.7	21.9	3.9	17.4	-1.2	0.4		44.6	0.0	0.7	0.0				20.4	10.9	19.5	1.347	0.104	0.103	0.005	5.0	4.3	
189		2 x Std Dev		1.406	0.288	1.339	0.237	0.303		0.422	0.454	0.161	0.555	0.005	0.006		0.732	0.000	0.057	0.001				0.454	0.179	0.483	0.033	0.009	0.013	0.001	0.646	0.550	
190	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
191		* Backpulse points in box are not included																															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
194	Baseline 2C																																
195	4/27/2004	10:17:14 AM		24.612	21.056	25.68	21.959	21.87	#	31.928	32.713	3.961	28.043	-1.215	0.464		44.875	0.003	1.008	0.006		53.38	0.88972	31.2	11.0	30.0	2.067	0.150	0.147	0.005	4.917	4.18	
196	4/27/2004	10:18:14 AM		24.74	21.079	25.834	21.963	21.888	#	32.542	33.268	3.811	28.859	-1.218	0.464		44.643	0.003	1.013	0.005		54.38	0.90639	31.8	10.9	30.7	2.117	0.151	0.148	0.005	4.806	4.09	
197	4/27/2004	10:19:14 AM		24.868	21.102	25.967	21.996	21.881	#	32.817	33.651	3.644	29.282	-1.215	0.466		42.572	0.003	1.022	0.005		55.38	0.92306	32.2	10.4	31.0	2.141	0.152	0.148	0.005	4.776	4.06	
198	4/27/2004	10:20:14 AM		25.007	21.147	26.096	22.07	21.91	#	32.766	33.496	3.811	29.061	-1.215	0.464		43.573	0.003	1.009	0.005		56.38	0.93972	32.0	10.7	30.9	2.131	0.150	0.146	0.005	4.719	4.02	
199	4/27/2004	10:21:14 AM		25.115	21.139	26.163	22.078	22.013	#	32.836	33.608	3.813	29.132	-1.224	0.461		43.542	0.003	1.007	0.006		57.38	0.95639	32.1	10.7	31.0	2.136	0.150	0.145	0.005	4.690	3.99	
200	4/27/2004	10:22:14 AM		25.228	21.188	26.311	22.187	22.062	#	32.419	33.241	3.926	28.562	-1.215	0.464		44.547	0.003	0.995	0.006		58.38	0.97306	31.8	10.9	30.5	2.102	0.148	0.143	0.005	4.690	3.99	
201	4/27/2004	10:23:14 AM		25.327	21.206	26.39	22.165	22.135	#	32.067	32.901	3.859	28.279	-1.218	0.466		44.145	0.003	0.992	0.005		59.38	0.98972	31.4	10.8	30.2	2.080	0.148	0.142	0.005	4.714	4.01	
202	4/27/2004	10:24:14 AM		25.434	21.239	26.497	22.178	22.153	#	32.121	32.853	3.839	28.365	-1.212	0.469		44.554	0.003	0.996	0.004		60.38	1.00639	31.4	10.9	30.2	2.085	0.148	0.142	0.005	4.708	4.01	
203	4/27/2004	10:25:14 AM		25.512	21.237	26.55	22.09	22.07	#	31.863	32.495	4.074	27.909	-1.221	0.464		45.899	0.003	0.974	0.006		61.38	1.02306	31.0	11.2	29.9	2.061	0.145	0.139	0.005	4.653	3.96	
204	4/27/2004	10:26:14 AM		25.62	21.265	26.673	22.098	22.013	#	32	32.795	4.093	27.981	-1.218	0.466		45.576	0.003	0.979	0.006		62.38	1.03972	31.3	11.2	30.0	2.068	0.146	0.139	0.005	4.644	3.95	
205	4/27/2004	10:27:14 AM		25.702	21.292	26.749	22.12	21.975	#	32.488	33.254	3.87	28.652	-1.215	0.469		45.33	0.003	0.983	0.004		63.38	1.05639	31.8	11.1	30.6	2.108	0.147	0.140	0.005	4.565	3.88	
206	4/27/2004	10:28:14 AM		25.793	21.299	26.826	22.101	21.901	#	32.415	33.291	4.059	28.377	-1.215	0.466		45.352	0.003	0.985	0.004		64.38	1.07306	31.8	11.1	30.4	2.096	0.147	0.140	0.005	4.591	3.91	
207	4/27/2004	10:29:14 AM		25.876	21.311	26.903	22.064	21.888	#	32.587	33.291	3.938	28.74	-1.215	0.469		44.624	0.003	0.989	0.006		65.38	1.08972	31.8	10.9	30.7	2.114	0.147	0.140	0.005	4.559	3.88	
208	4/27/2004	10:30:14 AM		25.967	21.333	26.994	22.08	21.804	#	32.67	33.405	3.771	29.044	-1.212	0.472		43.79	0.003	0.997	0.006		66.38	1.10639	31.9	10.7	30.9	2.127	0.149	0.141	0.005	4.556	3.88	
209	4/27/2004	10:31:14 AM		26.019	21.325	27.031	22.022	21.807	#	32.233	32.866	3.967	28.398	-1.218	0.466		45.184	0.003	0.979	0.004		67.38	1.12306	31.4	11.1	30.3	2.090	0.146	0.138	0.005	4.549	3.87	
210	4/27/2004	10:32:14 AM		26.08	21.336	27.038	22.008	21.853	#	32.081	32.781	4.029	28.119	-1.215	0.466		45.275	0.003	0.982	0.005		68.38	1.13972	31.3	11.1	30.1	2.075	0.146	0.138	0.005	4.595	3.91	
211	4/27/2004	10:33:14 AM		26.091	21.337	26.969	22.074	21.904	#	32.676	33.455	3.956	28.818	-1.215	0.466		44.282	0.003	0.987	0.005		69.38	1.15639	32.0	10.9	30.7	2.120	0.147	0.139	0.005	4.530	3.85	
212	4/27/2004	10:34:14 AM		26.067	21.349	26.895	22.202	21.951	#	32.378	33.088	3.821	28.693	-1.215	0.466		44.612	0.003	0.982	0.005		70.38	1.17306	31.6	10.9	30.5	2.105	0.146	0.139	0.005	4.547	3.87	
213	4/27/2004	10:35:14 AM		26.025	21.356	26.833	22.274	22.003	#	32.548	33.347	3.934	28.689	-1.218	0.469		45.029	0.003	0.971	0.006		71.38	1.18972	31.9	11.0	30.6	2.111	0.145	0.138	0.004	4.492	3.82	
214	4/27/2004	10:36:14 AM		25.997	21.373	26.785	22.352	22.096	#	32.452	33.243	3.983	28.586	-1.218	0.469		45.106	0.003	0.968	0.005		72.38	1.20639	31.8	11.1	30.5	2.104	0.144	0.137	0.004	4.498	3.83	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
217		Averages		25.6	21.2	26.6	22.1	22.0		32.4	33.2	3.9	28.6	-1.2	0.5		44.6	0.0	1.0	0.0				31.7	10.9	30.5	2.102	0.148	0.141	0.005	4.6	3.9	
218		Maximum		26.1	21.4	27.0	22.4	22.2		32.8	33.7	4.1	29.3	-1.2	0.5		45.9	0.0	1.0	0.0				32.2	11.2	31.0	2.141	0.152	0.148	0.005	4.9	4.2	
219		Median		25.7	21.3	26.7	22.1	21.9		32.4	33.2	3.9	28.6	-1.2	0.5		44.6	0.0	1.0	0.0				31.8	10.9	30.5	2.105	0.147	0.140	0.005	4.6	3.9	
220		Minimum		24.6	21.1	25.7	22.0	21.8		31.9	32.5	3.6	27.9	-1.2	0.5		42.6	0.0	1.0	0.0				31.0	10.4	29.9	2.061	0.144	0.137	0.004	4.5	3.8	
221		2 x Std Dev		0.949	0.195	0.825	0.195	0.205		0.587	0.629	0.223	0.769	0.006	0.005		1.568	0.000	0.029	0.001				0.629	0.384	0.672	0.046	0.004	0.007	0.000	0.219	0.186	
222	Number of Points Used*			20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
223		* Backpulse points in box are not included																															
224																																	
225	All																																
226		Averages		23.6	20.7	24.7	21.7	21.6		22.3	22.5	4.0	18.3	-1.2	0.5		44.8	0.0	0.7	0.0				21.1	11.0	20.3	1.400	0.108	0.108	0.006	5.7	4.9	
227		Maximum		26.1	21.4	27.0	22.4	22.2		32.8	33.7	4.3	29.3	-1.2	0.5		45.9	0.0	1.0	0.0				32.2	11.2	31.0	2.141	0.152	0.148	0.010	9.6	8.1	
228		Median		23.7	20.9	24.9	21.7	21.6		22.2	22.4	4.0	18.3	-1.2	0.4		44.8	0.0	0.7	0.0				20.9	11.0	20.3	1.397	0.106	0.106	0.005	5.2	4.4	
229		Minimum		21.5	19.6	22.6	21.2	20.9		11.9	11.9	3.6	8.0	-1.2	0.4		42.6	0.0	0.4	0.0				10.4	10.4	10.0	0.688	0.061	0.065	0.004	4.5	3.8	
230		2 x Std Dev		3.220	0.986	3.155	0.663	0.706		16.251	16.956	0.224	16.333	0.005	0.025		1.151	0.000	0.431	0.002				16.958	0.282	####	1.123	0.064	0.056	0.002	2.365	2.013	
231	Number of Points Used*			62	62	62	62	62		62	62	62	62	62	62		62	62	62	62				62	62	62	62	62	62	62	62	62	
232		* Backpulse points in box are not included																															

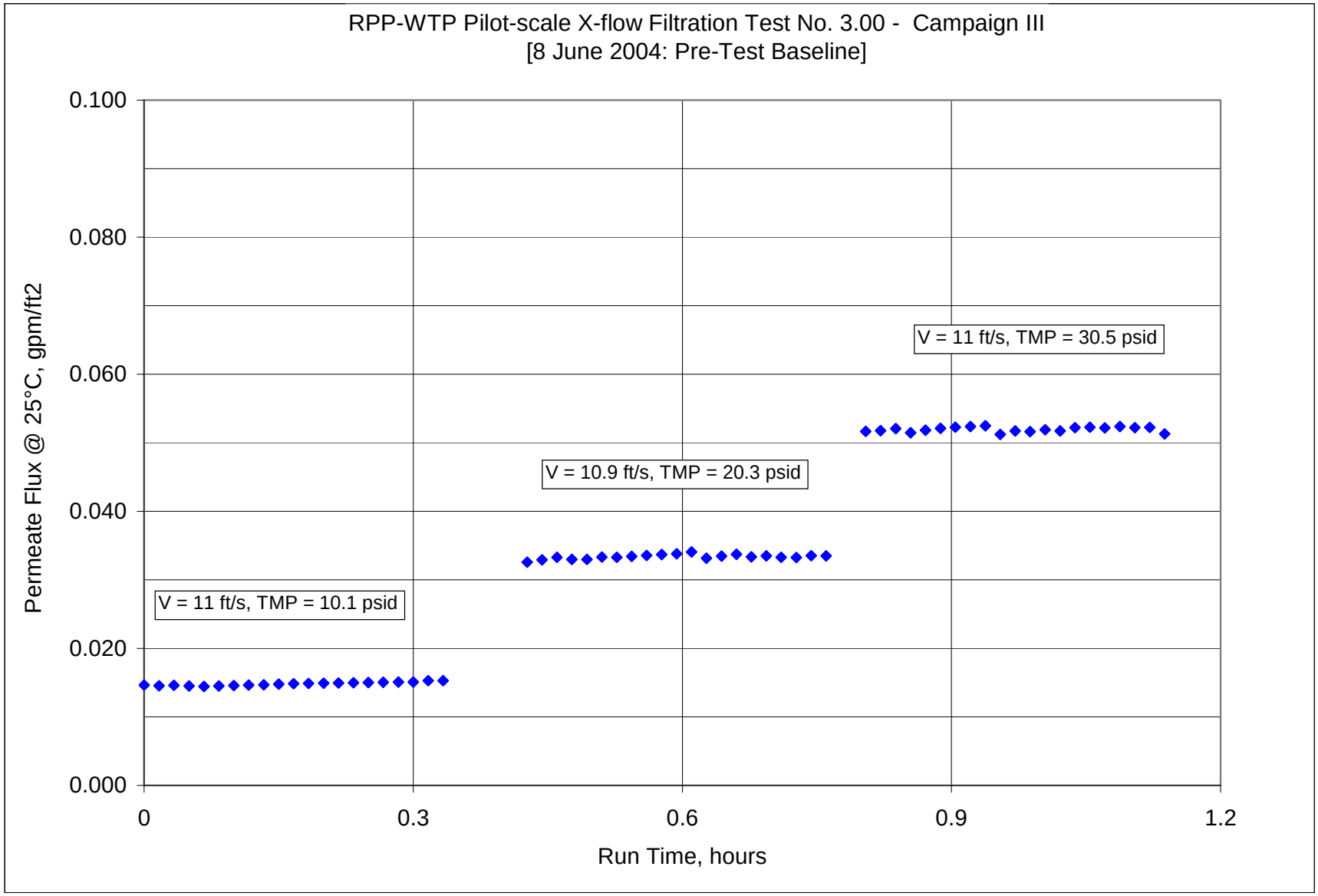
RUN # 2.21A, B, AND C; POST-TEST BASELINE WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
235	REPEATED BASELINE with fresn 0.1 M NaOH**********																																
236	DATE	TIME	S	FLTRT(d	CL LOOP	SL LOO	UP AMB(	BOT AME	T	BOT DP(p	FLTR(ps	FLTR DP	TOP DP(p	FLTRAT	PBCKPLSE(		SLFLOW	FLTR FLO	HI FLTR F	BACKPULSE FLOW(gpm)		QBP											
237	4/27/2004	2:08:20 PM		23.594	22.53	24.423	23.281	22.557	#	12.041	13.963	3.992	8.146	-1.218	-3.642		44.768	0.376	14.643	0.003		0	0	12.5	11.0	10.1	0.696	0.056	0.057	0.006	5.645	4.80	
238	4/27/2004	2:09:20 PM		23.6	22.536	24.445	23.232	22.668	#	3.482	14.021	3.994	-0.838	5.658	20.087		44.541	0.003	14.643	0.003		1.00	0.01667	12.5	10.9	1.3	0.091	0.000	0.000	0.000	0.344	0.29	
239	4/27/2004	2:10:20 PM		23.561	22.532	24.495	23.187	22.814	#	2.825	14.029	4	-1.559	6.347	19.676		44.501	0.003	14.643	0.003		2.00	0.03333	12.6	10.9	0.6	0.044	0.000	0.000	0.001	0.717	0.61	
240	4/27/2004	2:11:20 PM		23.552	22.563	24.567	23.269	22.886	#	0.568	14.216	4.024	-3.761	9.129	24.267		44.051	0.005	14.643	0.159		3.00	0.05	12.7	10.8	-1.6	-0.110	0.001	0.001	0.000	-0.473	-0.40	
241	4/27/2004	2:12:20 PM		23.633	22.57	24.588	23.406	22.927	#	7.777	13.951	3.968	3.678	1.052	0.388		44.62	0.435	14.643	0.003		4.00	0.06667	12.5	10.9	5.7	0.395	0.065	0.066	0.011	11.456	9.75	
242	4/27/2004	2:13:20 PM		23.71	22.601	24.629	23.443	23.029	#	7.864	13.971	3.984	3.771	1	0.495		44.381	0.395	14.643	0.003		5.00	0.08333	12.5	10.9	5.8	0.401	0.059	0.060	0.010	10.230	8.71	
243	4/27/2004	2:14:20 PM		23.752	22.624	24.687	23.556	23.112	#	10.137	14.129	4.031	6.158	-1.218	-2.26		44.9	0.531	14.643	0.003		6.00	0.1	12.7	11.0	8.1	0.562	0.079	0.080	0.010	9.803	8.34	
244	4/27/2004	2:15:20 PM		23.784	22.646	24.719	23.638	23.234	#	11.591	16.079	4.138	7.512	-0.703	-1.924		45.267	0.567	14.643	0.003		7.00	0.11667	14.6	11.1	9.6	0.659	0.085	0.085	0.009	8.921	7.59	
245	4/27/2004	2:16:20 PM		23.821	22.668	24.761	23.655	23.261	#	12.002	16.411	4.021	7.988	-0.813	-1.979		44.885	0.562	14.643	0.003		8.00	0.13333	14.9	11.0	10.0	0.689	0.084	0.084	0.008	8.440	7.18	
246	4/27/2004	2:17:20 PM		23.874	22.695	24.804	23.698	23.248	#	12.342	16.473	3.898	8.542	-1.09	-2.156		44.556	0.545	14.643	0.003		9.00	0.15	15.0	10.9	10.4	0.720	0.081	0.082	0.008	7.825	6.66	
247	4/27/2004	2:18:20 PM		23.921	22.717	24.861	23.634	23.185	#	12.738	16.734	3.982	8.809	-1.218	-2.277		44.495	0.531	14.643	0.003		10.00	0.16667	15.3	10.9	10.8	0.743	0.079	0.079	0.007	7.377	6.28	
248	4/27/2004	2:19:20 PM		23.954	22.735	24.903	23.637	23.057	#	12.651	16.405	3.796	8.967	-1.215	-2.39		44.502	0.52	14.643	0.003		11.00	0.18333	14.9	10.9	10.8	0.745	0.078	0.078	0.007	7.192	6.12	
249	4/27/2004	2:20:20 PM		23.985	22.736	24.924	23.658	23.038	#	12.829	16.556	3.923	8.922	-1.218	-2.488		44.456	0.509	14.643	0.003		12.00	0.2	15.1	10.9	10.9	0.750	0.076	0.076	0.007	6.993	5.95	
250	4/27/2004	2:21:20 PM		24.028	22.769	24.972	23.636	22.996	#	12.53	15.574	4.21	8.356	-1.218	-2.904		45.876	0.461	14.643	0.003		13.00	0.21667	14.1	11.2	10.4	0.720	0.069	0.069	0.007	6.587	5.61	
251	4/27/2004	2:22:20 PM		24.08	22.791	24.999	23.627	23.008	#	12.46	15.687	3.809	8.639	-1.218	-2.797		43.54	0.476	14.643	0.003		14.00	0.23333	14.2	10.7	10.5	0.727	0.071	0.071	0.007	6.727	5.73	
252	4/27/2004	2:23:20 PM		24.101	22.797	25.005	23.604	22.989	#	12.39	15.615	3.674	8.737	-1.218	-2.771		42.956	0.477	14.643	0.003		15.00	0.25	14.1	10.5	10.6	0.728	0.071	0.071	0.007	6.731	5.73	
253	4/27/2004	2:24:20 PM		24.112	22.803	25.031	23.604	22.95	#	12.255	15.174	4.011	8.323	-1.221	-2.953		44.794	0.455	14.643	0.003		16.00	0.26667	13.7	11.0	10.3	0.709	0.068	0.068	0.007	6.587	5.61	
254	4/27/2004	2:25:20 PM		24.133	22.814	25.047	23.58	22.926	#	12.454	15.476	3.827	8.676	-1.221	-2.901		43.913	0.461	14.643	0.003		17.00	0.28333	14.0	10.8	10.6	0.728	0.069	0.069	0.006	6.497	5.53	
255	4/27/2004	2:26:20 PM		24.154	22.82	25.063	23.571	22.861	#	12.53	15.561	3.822	8.741	-1.218	-2.899		43.696	0.461	14.643	0.003		18.00	0.3	14.1	10.7	10.6	0.733	0.069	0.069	0.006	6.451	5.49	
256	4/27/2004	2:27:20 PM		24.194	22.831	25.079	23.521	22.857	#	12.555	15.534	3.747	8.869	-1.218	-2.907		43.575	0.461	14.643	0.003		19.00	0.31667	14.1	10.7	10.7	0.739	0.069	0.069	0.006	6.402	5.45	
257	4/27/2004	2:28:20 PM		24.199	22.831	25.084	23.526	22.842	#	12.591	15.588	3.817	8.791	-1.218	-2.922		43.711	0.458	14.643	0.003		20.00	0.33333	14.1	10.7	10.7	0.737	0.068	0.068	0.006	6.372	5.42	
258	4/27/2004	2:29:20 PM		24.22	22.831	25.109	23.552	22.978	#	12.653	15.656	3.83	8.782	-1.218	-2.93		43.88	0.458	14.643	0.003		21.00	0.35	14.2	10.8	10.7	0.739	0.068	0.068	0.006	6.352	5.41	
259	4/27/2004	2:30:20 PM		24.236	22.837	25.135	23.558	23.054	#	12.663	15.607	3.962	8.803	-1.215	-2.927		43.684	0.458	14.643	0.003		22.00	0.36667	14.1	10.7	10.7	0.740	0.068	0.068	0.006	6.338	5.39	
260	4/27/2004	2:31:20 PM		24.247	22.849	25.146	23.609	23.17	#	12.504	15.219	4.181	8.372	-1.218	-3.101		45.43	0.439	14.643	0.003		23.00	0.38333	13.7	11.1	10.4	0.720	0.065	0.065	0.006	6.245	5.31	
261	4/27/2004	2:32:20 PM		24.264	22.866	25.153	23.657	23.278	#	12.091	14.753	4.019	8.079	-1.218	-3.141		44.933	0.428	14.643	0.003		24.00	0.4	13.3	11.0	10.1	0.695	0.064	0.064	0.006	6.300	5.36	
262	4/27/2004	2:33:20 PM		24.296	22.888	25.175	23.749	23.345	#	12.168	14.807	3.946	8.276	-1.218	-3.162		44.894	0.432	14.643	0.003		25.00	0.41667	13.3	11.0	10.2	0.705	0.064	0.064	0.006	6.270	5.34	
263	4/27/2004	2:34:20 PM		24.288	22.885	25.152	23.786	23.392	#	12.192	14.96	3.856	8.392	-1.221	-3.092		44.241	0.439	14.643	0.003		26.00	0.43333	13.5	10.8	10.3	0.710	0.065	0.065	0.006	6.332	5.39	
264	4/27/2004	2:35:20 PM		24.311	22.913	25.2	23.895	23.4	#	12.143	14.809	4.025	8.146	-1.218	-3.188		45.11	0.429	14.643	0.003		27.00	0.45	13.3	11.1	10.1	0.699	0.064	0.064	0.006	6.270	5.34	
265	4/27/2004	2:36:20 PM		24.319	22.941	25.233	23.957	23.408	#	12.053	14.635	4.081	7.982	-1.218	-3.191		45.121	0.428	14.643	0.003		28.00	0.46667	13.2	11.1	10.0	0.691	0.064	0.063	0.006	6.328	5.39	
266																																	
267		Averages		24.1	22.8	25.0	23.6	23.1		11.9	15.4	3.9	8.0	-1.0	-2.5		44.5	0.5	14.6	0.0				13.9	10.9	10.0	0.687	0.070	0.071	0.007	7.2	6.2	
268		Maximum		24.3	22.9	25.2	24.0	23.4		12.8	16.7	4.2	9.0	1.1	0.5		45.9	0.6	14.6	0.0				15.3	11.2	10.9	0.750	0.085	0.085	0.011	11.5	9.7	
269		Median		24.1	22.8	25.0	23.6	23.1		12.4	15.6	4.0	8.4	-1.2	-2.9		44.5	0.5	14.6	0.0				14.1	10.9	10.4	0.720	0.069	0.069	0.007	6.6	5.6	
270		Minimum		23.6	22.6	24.6	23.4	22.8		7.8	14.0	3.7	3.7	-1.2	-3.2		43.0	0.4	14.6	0.0				12.5	10.5	5.7	0.395	0.059	0.060	0.006	6.2	5.3	
271		2 x Std Dev		0.406	0.196	0.368	0.238	0.350		2.632	1.541	0.264	2.776	1.219	1.886		1.369	0.091	0.000	0.000				1.541	0.336	2.701	0.186	0.014	0.014	0.003	2.800	2.382	
272	Number of Points Used*			25	25	25	25	25		25	25	25	25	25	25		25	25	25	25				25	25	25	25	25	25	25	25	25	
273																																	
274																																	
275	4/27/2004	2:37:20 PM		24.385	22.962	25.299	23.904	23.444	#	21.43	30.449	3.935	17.316	4.115	1.027		45.154	0.823	14.643	0.003		29.00	0.48333	29.0	11.1	19.4	1.336	0.123	0.122	0.006	6.281	5.34	
276	4/27/2004	2:38:20 PM		24.473	22.97	25.427	23.851	23.457	#	22.603	32.959	3.872	18.518	5.406	1.814		44.614	0.878	14.643	0.003		30.00	0.5	31.5	10.9	20.6	1.418	0.131	0.129	0.006	6.291	5.35	
277	4/27/2004	2:39:20 PM		24.649	22.996	25.609	23.782	23.358	#	22.604	33.108	3.764	18.635	5.531	1.897		43.429	0.885	14.643	0.003		31.00	0.51667	31.6	10.6	20.6	1.422	0.132	0.130	0.006	6.291	5.35	
278	4/27/2004	2:40:20 PM		24.811	23.018	25.771	23.749	23.305	#	22.367	32.225	4.116	18.151	5.099	1.603		45.995	0.864	14.643	0.003		32.00	0.53333	30.8	11.3	20.3	1.397	0.129	0.126	0.006	6.222	5.30	
279	4/27/2004	2:41:20 PM		24.917	23.014	25.841	23.785	23.25	#	22.249	32.049	3.995	18.112	4.87	1.49		45.311	0.856	14.643	0.003		33.00	0.55	30.6	11.1	20.2	1.391	0.128	0.125	0.006	6.176	5.26	
280	4/27/2004	2:42:20 PM		25.004	23.025	25.897	23.866	23.221	#	22.015	31.886	4.074	17.64	4.911	1.49		45.265	0.856	14.643	0.003		34.00	0.56667	30.4	11.1	19.8	1.367	0.128	0.124	0.006	6.277	5.34	
281	4/27/2004	2:43:20 PM		25.075	23.026	25.934	23.888	23.193	#	22.048	32.012	3.954	17.814	4.914	1.53		45.05	0.859	14.643	0.003		35.00	0.58333	30.5	11.0	19.9	1.374	0.128	0.125	0.006	6.259	5.33	
282	4/27/2004	2:44:20 PM		25.151	23.037	25.979	23.913	23.198	#	22.216	32.288	3.754	18.309	5.14	1.623		43.899	0.865	14.643	0.003		36.00	0.6	30.8	10.8	20.3	1.397	0.129	0.125	0.006	6.192	5.27	
283	4/27/2004	2:45:20 PM		25.197	23.044	26.021	23.97	23.2	#	22.027	32.043	3.977	17.862	5.096	1.605		45.127	0.866	14.643	0.003		37.00	0.61667	30.6	11.1	19.9	1.375	0.129	0.125	0.006	6.291	5.35	
284	4/27/2004	2:46:20 PM		25.263	23.045	26.047	23.951	23.141	#	22.17	32.064	3.812	18.219	4.995	1.562		44.631	0.861	14.643	0.003		38.00	0.63333	30.6	10.9	20.2	1.392	0.128	0.125	0.006	6.173	5.25	
285	4/27/2004	2:47:20 PM		25.284	23.045	26.068	23.987	23.156	#	22.404	32.501	3.751	18.485	5.18	1.678		44.013	0.869	14.643	0.003		39.00	0.65	31.0	10.8	20.4	1.410	0.130	0.126	0.006	6.150	5.23	
286	4/27/2004	2:48:20 PM		25.33	23.057	26.114	23.948	23.138	#	22.226	32.47	3.787	18.225	5.238	1.698		43.949	0.871	14.643	0.003		40.00	0.66667	31.0	10.8	20.2	1.394	0.130	0.126	0.006	6.223	5.30	
287	4/27/2004	2:49:20 PM		25.346	23.058	26.115	23.924	23.274	#	22.05	32.205	3.679	18.143	5.334	1.735		43.703	0.874	14.643	0.003		41.00	0.68333	30.7	10.7	20.1	1.386	0.130	0.126	0.006	6.284	5.35	
288	4/27/2004	2:50:20 PM		25.391	23.073	26.165	24.015	23.37	#	21.988	31.823	4.049	17.589	4.87	1.446		45.799	0.854	14.643	0.003		42.00	0.7	30.4	11.2	19.8	1.364	0.127	0.123	0.006	6.227	5.30	
289	4/27/2004	2:51:20 PM		25.443	23.105	26.202	24.131	23.531	#	22.083	31.743	4.364	17.545	4.639	1.351		47.188	0.848	14.643	0.003		43.00	0.71667	30.3	11.6	19.8	1.366	0.126	0.122	0.006	6.169	5.25	
290	4/27/2004	2:52:20 PM		25.439	23.096	26.223	24.168	23.623	#	21.963	31.658	4.216	17.41	4.63	1.322		45.578	0.845	14.643	0.003		44.00	0.73333	30.2	11.2	19.7	1.357	0.126	0.122	0.006	6.184	5.26	
291	4/27/2004	2:53:20 PM		25.487	23.129	26.256	24.306	23.67	#	21.913	31.604	3.974	17.777	4.746	1.38		45.279	0.85	14.643	0.003		45.00	0.75	30.1	11.1	19.8	1.368	0.127	0.122	0.006	6.165	5.25	
292	4/27/2004	2:54:20 PM		25.529	23.161	26.292	24.373	23.788	#	21.591	31.305	3.903	17.455	4.824	1.444		44.735	0.854	14.643	0.003		46.00	0.76667	29.8	11.0	19.5	1.346	0.127	0.123	0.006	6.290	5.35	
293	4/27/2004	2:55:20 PM		25.546	23.179	26.295	24.416	23.875	#	21.917	31.684	3.912	17.747	4.868	1.464		44.451	0.855	14.643	0.003		47.00	0.78333	30.2	10.9	19.8	1.367	0.127	0.123	0.006	6.199	5.28	
294	4/27/2004	2:56:20 PM		25.559	23.196	26.303	24.544	23.858	#	21.637	31.458	3.814	17.533	4.972	1.542		43.821	0.862	14.643	0.003		48.00	0.8	30.0	10.7	19.6	1.350	0.129	0.124	0.006	6.327	5.38	
295	4/27/2004	2:57:20 PM		25.597	23.234	26.335	24.557	23.871	#	21.753	31.718	3.84	17.615	4.911	1.501		43.942	0.859	14.643	0.003		49.00	0.81667	30.2	10.8	19.7	1.357	0.128	0.123	0.006	6.267	5.33	
296	4/27/2004	2:58:20 PM		25.62	23.263	26.359	24.545	23.799	#	21.795	31.583	3.86	17.708	4.804	1.415		44.356	0.853	14.643	0.003		50.00	0.83333	30.1	10.9	19.8	1.362	0.127	0.122	0.006	6.198	5.27	
297																																	
298		Averages		25.2	23.1	26.0	24.1	23.4		22.0	31.9	3.9	17.9	5.0	1.5		44.8	0.9	14.6	0.0				30.5	11.0	20.0	1.377	0.128	0.125	0.006	6.2	5.3	
299		Maximum		25.6	23.3	26.4	24.6	23.9		22.6	33.1	4.4	18.6	5.5	1.9		47.2	0.9	14.6	0.0				31.6	11.6	20.6	1.422	0.132	0.130	0.006	6.3	5.4	
300		Median		25.3	23.1	26.1	24.0	23.4		22.0	31.9	3.9	17.8	4.9	1.5		44.7	0.9	14.6	0.0				30.5	11.0	19.9	1.371	0.128	0.125	0.006	6.2	5.3	
301		Minimum		24.4	23.0	25.3	23.7	23.1		21.4	30.4	3.7	17.3	4.1	1.0		43.4	0.8	14.6	0.0				29.0	10.6	19.4	1.336	0.123	0.122	0.006	6.2	5.2	
302		2 x Std Dev		0.708	0.162	0.568	0.519	0.518		0.591	1.101	0.321	0.760	0.589	0.361		1.761	0.025	0.000	0.000				1.100	0.431	0.656	0.045	0.004	0.004	0.000	0.104	0.089	
303	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	

RUN # 2.21A, B, AND C; POST-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
306	4/27/2004	2:59:20 PM		25.632	23.275	26.356	24.532	23.706	#	30.227	31.531	3.915	26.497	-1.221	-5.018		45.138	0.003	1.17	0.003		51.00	0.85	30.1	11.1	28.4	1.955	0.174	0.168	0.006	5.921	5.04	
307	4/27/2004	3:00:20 PM		25.675	23.297	26.403	24.54	23.643	#	31.546	32.965	3.998	27.69	-1.218	-4.997		45.221	0.003	1.275	0.003		52.00	0.86667	31.5	11.1	29.6	2.042	0.190	0.183	0.006	6.171	5.25	
308	4/27/2004	3:01:20 PM		25.706	23.299	26.41	24.481	23.534	#	31.801	33.341	3.807	28.18	-1.218	-4.997		44.211	0.003	1.295	0.003		53.00	0.88333	31.9	10.8	30.0	2.068	0.193	0.186	0.006	6.188	5.27	
309	4/27/2004	3:02:20 PM		25.752	23.32	26.431	24.407	23.621	#	31.847	33.452	3.84	28.176	-1.221	-5.003		43.876	0.003	1.286	0.003		54.00	0.9	32.0	10.8	30.0	2.069	0.192	0.184	0.006	6.138	5.22	
310	4/27/2004	3:03:20 PM		25.764	23.347	26.388	24.454	23.528	#	31.496	32.972	3.865	27.763	-1.218	-5.015		44.424	0.003	1.285	0.003		55.00	0.91667	31.5	10.9	29.6	2.043	0.192	0.184	0.006	6.219	5.29	
311	4/27/2004	3:04:20 PM		25.731	23.364	26.335	24.556	23.545	#	31.443	32.899	4.023	27.552	-1.218	-5.023		45.517	0.003	1.234	0.003		56.00	0.93333	31.4	11.2	29.5	2.034	0.184	0.177	0.006	6.008	5.11	
312	4/27/2004	3:05:20 PM		25.698	23.381	26.287	24.578	23.581	#	31.681	33.11	3.997	27.901	-1.215	-5.026		45.315	0.003	1.231	0.003		57.00	0.95	31.6	11.1	29.8	2.054	0.184	0.177	0.006	5.942	5.06	
313	4/27/2004	3:06:20 PM		25.629	23.377	26.183	24.529	23.603	#	31.6	33.021	3.975	27.858	-1.221	-5.038		45.415	0.003	1.226	0.003		58.00	0.96667	31.5	11.1	29.7	2.050	0.183	0.177	0.006	5.948	5.06	
314	4/27/2004	3:07:20 PM		25.585	23.388	26.154	24.464	23.633	#	32.06	33.496	3.768	28.521	-1.221	-5.026		44.001	0.003	1.271	0.003		59.00	0.98333	32.0	10.8	30.3	2.088	0.189	0.183	0.006	6.057	5.15	
315	4/27/2004	3:08:20 PM		25.546	23.404	26.115	24.461	23.585	#	31.494	32.895	4.16	27.411	-1.218	-5.078		46.347	0.003	1.2	0.003		60.00	1	31.4	11.4	29.5	2.031	0.179	0.173	0.006	5.887	5.01	
316	4/27/2004	3:09:20 PM		25.508	23.416	26.072	24.503	23.531	#	31.793	33.266	3.725	28.281	-1.221	-5.064		44.091	0.003	1.238	0.003		61.00	1.01667	31.8	10.8	30.0	2.071	0.185	0.179	0.006	5.963	5.07	
317	4/27/2004	3:10:20 PM		25.464	23.422	26.023	24.378	23.507	#	31.61	33.028	3.966	27.8	-1.218	-5.07		45.315	0.003	1.236	0.003		62.00	1.03333	31.6	11.1	29.7	2.048	0.184	0.179	0.006	6.028	5.13	
318	4/27/2004	3:11:20 PM		25.409	23.412	25.963	24.433	23.507	#	32.108	33.745	3.887	28.297	-1.218	-5.064		44.201	0.003	1.252	0.003		63.00	1.05	32.3	10.8	30.2	2.082	0.187	0.182	0.006	6.016	5.12	
319	4/27/2004	3:12:20 PM		25.369	23.427	25.918	24.478	23.567	#	31.874	33.394	3.82	28.209	-1.218	-5.064		44.47	0.003	1.245	0.003		64.00	1.06667	31.9	10.9	30.0	2.071	0.186	0.181	0.006	6.022	5.12	
320	4/27/2004	3:13:20 PM		25.345	23.444	25.904	24.505	23.604	#	32.266	33.724	3.912	28.55	-1.221	-5.061		44.308	0.003	1.234	0.003		65.00	1.08333	32.3	10.9	30.4	2.097	0.184	0.179	0.006	5.899	5.02	
321	4/27/2004	3:14:20 PM		25.306	23.449	25.855	24.566	23.72	#	31.847	33.247	3.838	28.194	-1.218	-5.061		44.478	0.003	1.239	0.003		66.00	1.1	31.8	10.9	30.0	2.070	0.185	0.180	0.006	6.007	5.11	
322	4/27/2004	3:15:20 PM		25.271	23.47	25.835	24.586	23.87	#	32.019	33.438	3.749	28.449	-1.218	-5.061		44.088	0.003	1.247	0.003		67.00	1.11667	32.0	10.8	30.2	2.085	0.186	0.182	0.006	6.007	5.11	
323	4/27/2004	3:16:20 PM		25.238	23.476	25.797	24.673	24.022	#	31.969	33.513	3.706	28.42	-1.218	-5.055		43.536	0.003	1.248	0.003		68.00	1.13333	32.0	10.7	30.2	2.082	0.186	0.182	0.006	6.026	5.13	
324	4/27/2004	3:17:20 PM		25.205	23.504	25.759	24.76	24.114	#	32.173	33.654	3.718	28.636	-1.218	-5.058		43.542	0.003	1.244	0.003		69.00	1.15	32.2	10.7	30.4	2.096	0.185	0.182	0.006	5.971	5.08	
325	4/27/2004	3:18:20 PM		25.172	23.536	25.736	24.903	24.156	#	31.664	33.133	4.042	27.692	-1.218	-5.067		45.628	0.003	1.217	0.003		70.00	1.16667	31.7	11.2	29.7	2.046	0.181	0.178	0.006	5.989	5.10	
326	4/27/2004	3:19:20 PM		25.149	23.558	25.718	24.955	24.233	#	31.706	33.191	4.074	27.809	-1.218	-5.064		43.698	0.003	1.217	0.003		71.00	1.18333	31.7	10.7	29.8	2.052	0.181	0.178	0.006	5.976	5.09	
327	4/27/2004	3:20:20 PM		25.11	23.564	25.669	25.006	24.225	#	32.355	33.801	3.549	28.989	-1.221	-5.055		42.85	0.003	1.254	0.003		72.00	1.2	32.3	10.5	30.7	2.115	0.187	0.183	0.006	5.982	5.09	
328																																	
329																																	
330		Averages		25.5	23.4	26.1	24.6	23.7		31.8	33.2	3.9	28.0	-1.2	-5.0		44.5	0.0	1.2	0.0				31.7	10.9	29.9	2.061	0.185	0.180	0.006	6.0	5.1	
331		Maximum		25.8	23.6	26.4	25.0	24.2		32.4	33.8	4.2	29.0	-1.2	-5.0		46.3	0.0	1.3	0.0				32.3	11.4	30.7	2.115	0.193	0.186	0.006	6.2	5.3	
332		Median		25.5	23.4	26.0	24.5	23.6		31.8	33.3	3.9	28.2	-1.2	-5.1		44.4	0.0	1.2	0.0				31.8	10.9	30.0	2.068	0.185	0.181	0.006	6.0	5.1	
333		Minimum		25.1	23.3	25.7	24.4	23.5		30.2	31.5	3.5	26.5	-1.2	-5.1		42.9	0.0	1.2	0.0				30.1	10.5	28.4	1.955	0.174	0.168	0.006	5.9	5.0	
334		2 x Std Dev		0.426	0.160	0.506	0.342	0.489		0.835	0.920	0.283	1.024	0.003	0.050		1.662	0.000	0.057	0.000				0.920	0.407	0.920	0.063	0.008	0.008	0.000	0.176	0.149	
335	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
336																																	
337																																	
338	All																																
339		Averages		24.9	23.1	25.7	24.1	23.4		21.5	26.4	3.9	17.6	0.8	-2.0		44.6	0.4	10.4	0.0				24.9	10.9	19.5	1.345	0.125	0.123	0.007	6.5	5.6	
340		Maximum		25.8	23.6	26.4	25.0	24.2		32.4	33.8	4.4	29.0	5.5	1.9		47.2	0.9	14.6	0.0				32.3	11.6	30.7	2.115	0.193	0.186	0.011	11.5	9.7	
341		Median		25.2	23.0	25.8	24.0	23.4		22.0	31.7	3.9	17.7	-1.2	-2.9		44.5	0.5	14.6	0.0				30.3	10.9	19.8	1.367	0.128	0.124	0.006	6.2	5.3	
342		Minimum		23.6	22.6	24.6	23.4	22.8		7.8	14.0	3.5	3.7	-1.2	-5.1		42.9	0.0	1.2	0.0				12.5	10.5	5.7	0.395	0.059	0.060	0.006	5.9	5.0	
343		2 x Std Dev		1.347	0.553	1.132	0.869	0.689		16.436	16.582	0.295	16.602	5.708	5.420		1.621	0.687	12.490	0.000				16.582	0.397	####	1.139	0.095	0.091	0.002	2.008	1.709	
344	Number of Points Used*			69	69	69	69	69		69	69	69	69	69	69		69	69	69	69				69	69	69	69	69	69	69	69	69	

PRE-TEST BASELINE WITH 0.1 M NAOH, BEFORE ACID CLEANING



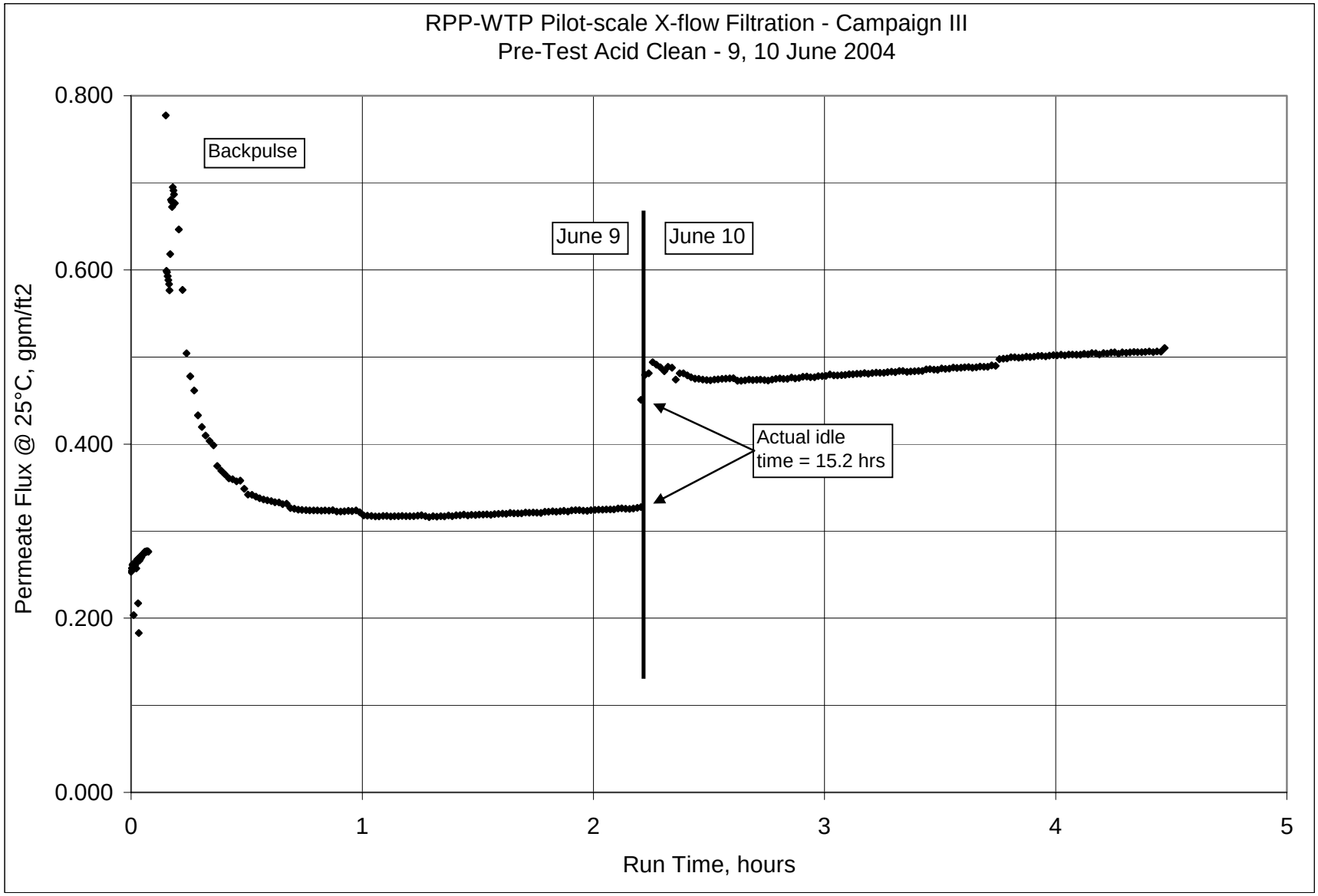
PRE-TEST BASELINE WITH 0.1 M NAOH, BEFORE ACID CLEANING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A		6.707	FT2						
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Baseline 1A																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	6/8/2004	12:44:40 PM		23.04	25.389	25.033	26.807	25.504		12.242	12.628	4.059	8.21	-1.212	-5.052		45.14	0.093	14.643	0.003		0	0	11.2	11.1	10.2	0.705	0.014	0.014	0.001	1.355	1.15	
18	6/8/2004	12:45:40 PM		22.921	25.405	24.558	26.808	25.45		11.767	12.054	4.1	7.617	-1.215	-5.058		45.152	0.092	14.643	0.003		1.00	0.01667	10.6	11.1	9.7	0.668	0.014	0.014	0.001	1.433	1.22	
19	6/8/2004	12:46:40 PM		22.795	25.43	24.223	26.758	25.38		12.25	12.576	4.026	8.239	-1.212	-5.055		44.969	0.092	14.643	0.003		2.00	0.03333	11.1	11.0	10.2	0.706	0.014	0.014	0.001	1.369	1.16	
20	6/8/2004	12:47:40 PM		22.628	25.444	23.855	26.667	25.349		12.151	12.421	4.041	8.148	-1.212	-5.055		44.9	0.091	14.643	0.003		3.00	0.05	10.9	11.0	10.1	0.700	0.014	0.014	0.001	1.381	1.18	
21	6/8/2004	12:48:40 PM		22.44	25.461	23.643	26.63	25.317		12.294	12.636	4.1	8.261	-1.212	-5.058		44.969	0.09	14.643	0.003		4.00	0.06667	11.2	11.0	10.3	0.709	0.013	0.014	0.001	1.357	1.15	
22	6/8/2004	12:49:40 PM		22.263	25.455	23.44	26.523	25.28		12.11	12.359	4.122	7.992	-1.215	-5.061		44.99	0.09	14.643	0.003		5.00	0.08333	10.9	11.0	10.1	0.693	0.013	0.014	0.001	1.395	1.19	
23	6/8/2004	12:50:40 PM		22.12	25.478	23.423	26.596	25.293		12.116	12.408	4.118	8.029	-1.206	-5.055		44.877	0.09	14.643	0.004		6.00	0.1	10.9	11.0	10.1	0.694	0.013	0.014	0.001	1.393	1.19	
24	6/8/2004	12:51:40 PM		21.962	25.49	23.33	26.618	25.28		12.221	12.458	4.057	8.214	-1.215	-5.055		44.816	0.09	14.643	0.003		7.00	0.11667	11.0	11.0	10.2	0.704	0.013	0.014	0.001	1.377	1.17	
25	6/8/2004	12:52:40 PM		21.809	25.499	23.264	26.627	25.304		12.155	12.299	4.08	8.072	-1.212	-5.055		44.923	0.09	14.643	0.003		8.00	0.13333	10.8	11.0	10.1	0.697	0.013	0.014	0.001	1.394	1.19	
26	6/8/2004	12:53:40 PM		21.611	25.502	23.196	26.605	25.382		12.076	12.305	4.113	8.009	-1.215	-5.058		44.85	0.09	14.643	0.003		9.00	0.15	10.8	11.0	10.0	0.692	0.013	0.014	0.001	1.406	1.20	
27	6/8/2004	12:54:40 PM		21.482	25.518	23.233	26.646	25.423		12.068	12.286	4.022	8.066	-1.215	-5.055		44.731	0.09	14.643	0.003		10.00	0.16667	10.8	11.0	10.1	0.694	0.013	0.014	0.001	1.401	1.19	
28	6/8/2004	12:55:40 PM		21.363	25.515	23.285	26.653	25.455		12.008	12.185	4.046	7.959	-1.212	-5.055		44.787	0.09	14.643	0.003		11.00	0.18333	10.7	11.0	10.0	0.688	0.013	0.014	0.001	1.411	1.20	
29	6/8/2004	12:56:40 PM		21.285	25.548	23.343	26.641	25.458		11.906	12.21	4.095	7.765	-1.212	-5.055		44.864	0.09	14.643	0.003		12.00	0.2	10.7	11.0	9.8	0.678	0.013	0.014	0.001	1.430	1.22	
30	6/8/2004	12:57:40 PM		21.198	25.566	23.382	26.665	25.516		12.29	12.554	4.175	8.097	-1.212	-5.052		44.912	0.09	14.643	0.003		13.00	0.21667	11.1	11.0	10.2	0.703	0.013	0.014	0.001	1.378	1.17	
31	6/8/2004	12:58:40 PM		21.116	25.569	23.415	26.702	25.529		12.08	12.317	4.084	7.98	-1.215	-5.052		45.017	0.09	14.643	0.003		14.00	0.23333	10.8	11.0	10.0	0.692	0.013	0.014	0.001	1.399	1.19	
32	6/8/2004	12:59:40 PM		21.055	25.599	23.444	26.727	25.564		12.221	12.485	4.066	8.156	-1.215	-5.052		44.825	0.09	14.643	0.003		15.00	0.25	11.0	11.0	10.2	0.702	0.013	0.014	0.001	1.376	1.17	
33	6/8/2004	1:00:40 PM		20.998	25.612	23.483	26.786	25.592		12.197	12.502	4.053	8.171	-1.215	-5.055		44.952	0.09	14.643	0.003		16.00	0.26667	11.0	11.0	10.2	0.702	0.013	0.014	0.001	1.375	1.17	
34	6/8/2004	1:01:40 PM		20.931	25.63	23.506	26.798	25.625		12.103	12.357	4.13	7.994	-1.212	-5.049		44.954	0.09	14.643	0.003		17.00	0.28333	10.9	11.0	10.0	0.693	0.013	0.014	0.001	1.393	1.19	
35	6/8/2004	1:02:40 PM		20.874	25.644	23.515	26.817	25.654		12.056	12.334	4.053	7.994	-1.215	-5.055		44.424	0.09	14.643	0.003		18.00	0.3	10.9	10.9	10.0	0.691	0.013	0.014	0.001	1.396	1.19	
36	6/8/2004	1:03:40 PM		20.832	25.668	23.544	26.851	25.603		12.08	12.425	4.081	7.951	-1.218	-5.058		44.964	0.091	14.643	0.003		19.00	0.31667	11.0	11.0	10.0	0.691	0.014	0.014	0.001	1.412	1.20	
37	6/8/2004	1:04:40 PM		20.791	25.662	23.552	26.79	25.542		11.981	12.284	4.059	7.914	-1.215	-5.055		44.952	0.091	14.643	0.003		20.00	0.33333	10.8	11.0	9.9	0.686	0.014	0.014	0.001	1.421	1.21	
38	6/8/2004	1:05:40 PM		20.774	25.68	23.571	26.758	25.445		12.184	12.489	4.037	8.109	-1.212	-5.055		44.835	0.091	14.643	0.003		21.00	0.35	11.0	11.0	10.1	0.700	0.014	0.014	0.001	1.392	1.18	
39	6/8/2004	1:06:40 PM		20.746	25.697	23.568	26.705	25.432		12.205	12.467	4.052	8.138	-1.212	-5.052		44.775	0.091	14.643	0.003		22.00	0.36667	11.0	11.0	10.2	0.701	0.014	0.014	0.001	1.389	1.18	
40	6/8/2004	1:07:40 PM		20.713	25.684	23.6	26.672	25.374		12.203	12.551	4.021	8.193	-1.218	-5.055		44.885	0.091	14.643	0.003		23.00	0.38333	11.1	11.0	10.2	0.703	0.014	0.014	0.001	1.384	1.18	
41																																	
42		Averages		21.6	25.5	23.6	26.7	25.4		12.1	12.4	4.1	8.1	-1.2	-5.1		44.9	0.1	14.6	0.0				10.9	11.0	10.1	0.696	0.013	0.014	0.001	1.392	1.185	
43		Maximum		23.0	25.7	25.0	26.9	25.7		12.3	12.6	4.2	8.3	-1.2	-5.0		45.2	0.1	14.6	0.0				11.2	11.1	10.3	0.709	0.014	0.014	0.001	1.433	1.219	
44		Median		21.3	25.5	23.5	26.7	25.4		12.1	12.4	4.1	8.1	-1.2	-5.1		44.9	0.1	14.6	0.0				10.9	11.0	10.1	0.696	0.013	0.014	0.001	1.393	1.185	
45		Minimum		20.7	25.4	23.2	26.5	25.3		11.8	12.1	4.0	7.6	-1.2	-5.1		44.4	0.1	14.6	0.0				10.6	10.9	9.7	0.668	0.013	0.014	0.001	1.355	1.153	
46		2 x Std Dev		1.501	0.187	0.844	0.169	0.223		0.242	0.283	0.076	0.296	0.005	0.005		0.280	0.002	0.000	0.000				0.284	0.069	0.266	0.018	0.000	0.000	0.000	0.040	0.034	
47		Number of Points Used*		24	24	24	24	24		24	24	24	24	24	24		24	24	24	24				24	24	24	24	24	24	24	24	24	
48		* Backpulse points in box are not included																															

PRE-TEST BASELINE WITH 0.1 M NAOH, BEFORE ACID CLEANING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
51	Baseline 1B																																
52	6/8/2004	1:10:17 PM		20.134	25.699	23.997	26.562	25.26		22.29	22.946	4.108	18.147	-1.215	-4.781		45.144	0.19	14.643	0.003		25.62	0.42694	21.5	11.1	20.2	1.394	0.028	0.029	0.001	1.441	1.23	
53	6/8/2004	1:11:17 PM		20.307	25.697	24.154	26.555	25.277		22.386	23.193	4.064	18.292	-1.212	-4.766		44.806	0.193	14.643	0.003		26.62	0.44361	21.7	11.0	20.3	1.402	0.029	0.029	0.001	1.449	1.23	
54	6/8/2004	1:12:17 PM		20.255	25.695	24.303	26.533	25.26		22.444	23.269	4.036	18.377	-1.212	-4.754		44.376	0.195	14.643	0.003		27.62	0.46028	21.8	10.9	20.4	1.407	0.029	0.030	0.001	1.453	1.24	
55	6/8/2004	1:13:17 PM		20.23	25.69	24.414	26.518	25.226		22.28	23.019	3.983	18.305	-1.212	-4.743		44.629	0.193	14.643	0.003		28.62	0.47694	21.5	10.9	20.3	1.399	0.029	0.029	0.001	1.442	1.23	
56	6/8/2004	1:14:17 PM		20.225	25.68	24.534	26.488	25.221		22.07	22.913	4.097	17.933	-1.212	-4.763		45.142	0.193	14.643	0.003		29.62	0.49361	21.4	11.1	20.0	1.379	0.029	0.029	0.001	1.458	1.24	
57	6/8/2004	1:15:17 PM		20.235	25.66	24.624	26.413	25.141		22.514	23.309	4.027	18.459	-1.215	-4.754		44.777	0.195	14.643	0.003		30.62	0.51028	21.8	11.0	20.5	1.412	0.029	0.029	0.001	1.434	1.22	
58	6/8/2004	1:16:17 PM		20.266	25.661	24.74	26.419	25.166		22.178	23.031	4.008	18.108	-1.212	-4.754		44.756	0.195	14.643	0.003		31.62	0.52694	21.6	11.0	20.1	1.389	0.029	0.029	0.001	1.454	1.24	
59	6/8/2004	1:17:17 PM		20.287	25.642	24.811	26.39	25.197		22.348	23.122	3.93	18.383	-1.212	-4.749		44.664	0.196	14.643	0.003		32.62	0.54361	21.6	10.9	20.4	1.404	0.029	0.029	0.001	1.443	1.23	
60	6/8/2004	1:18:17 PM		20.344	25.643	24.908	26.446	25.289		22.463	23.257	4.008	18.413	-1.212	-4.746		44.428	0.197	14.643	0.003		33.62	0.56028	21.8	10.9	20.4	1.409	0.029	0.029	0.001	1.441	1.23	
61	6/8/2004	1:19:17 PM		20.388	25.627	24.976	26.47	25.297		22.593	23.414	3.997	18.592	-1.212	-4.743		44.412	0.198	14.643	0.003		34.62	0.57694	21.9	10.9	20.6	1.420	0.030	0.030	0.001	1.435	1.22	
62	6/8/2004	1:20:17 PM		20.46	25.628	25.198	26.456	25.399		22.485	23.34	3.895	18.528	-1.215	-4.743		44.211	0.199	14.643	0.003		35.62	0.59361	21.9	10.8	20.5	1.414	0.030	0.030	0.001	1.439	1.22	
63	6/8/2004	1:21:17 PM		20.516	25.628	25.203	26.516	25.389		22.477	23.253	3.94	18.557	-1.215	-4.714		44.366	0.201	14.643	0.003		36.62	0.61028	21.8	10.9	20.5	1.415	0.030	0.030	0.001	1.452	1.24	
64	6/8/2004	1:22:17 PM		20.588	25.641	25.31	26.594	25.426		22.214	23.066	4.202	17.966	-1.212	-4.746		45.288	0.196	14.643	0.003		37.62	0.62694	21.6	11.1	20.1	1.385	0.029	0.029	0.001	1.442	1.23	
65	6/8/2004	1:23:17 PM		20.635	25.637	25.322	26.61	25.457		22.268	23.135	4.051	18.202	-1.215	-4.743		45.094	0.198	14.643	0.003		38.62	0.64361	21.7	11.1	20.2	1.395	0.030	0.029	0.001	1.446	1.23	
66	6/8/2004	1:24:17 PM		20.677	25.629	25.313	26.672	25.499		22.149	23.031	3.969	18.159	-1.212	-4.728		44.677	0.2	14.643	0.003		39.62	0.66028	21.6	10.9	20.2	1.390	0.030	0.030	0.001	1.467	1.25	
67	6/8/2004	1:25:17 PM		20.736	25.637	25.266	26.72	25.567		22.373	23.263	3.957	18.411	-1.215	-4.743		44.643	0.198	14.643	0.003		40.62	0.67694	21.8	10.9	20.4	1.406	0.030	0.029	0.001	1.437	1.22	
68	6/8/2004	1:26:17 PM		20.762	25.648	25.248	26.751	25.663		22.247	23.068	4.044	18.169	-1.209	-4.737		44.624	0.199	14.643	0.004		41.62	0.69361	21.6	10.9	20.2	1.393	0.030	0.029	0.001	1.458	1.24	
69	6/8/2004	1:27:17 PM		20.785	25.656	25.195	26.729	25.7		22.442	23.23	4.004	18.381	-1.212	-4.746		44.741	0.198	14.643	0.003		42.62	0.71028	21.8	11.0	20.4	1.407	0.030	0.029	0.001	1.438	1.22	
70	6/8/2004	1:28:17 PM		20.837	25.678	25.167	26.766	25.738		22.375	23.188	3.998	18.348	-1.212	-4.746		44.743	0.198	14.643	0.003		43.62	0.72694	21.7	11.0	20.4	1.404	0.030	0.029	0.001	1.443	1.23	
71	6/8/2004	1:29:17 PM		20.882	25.692	25.102	26.81	25.767		22.268	23.016	3.921	18.282	-1.218	-4.74		44.406	0.2	14.643	0.003		44.62	0.74361	21.5	10.9	20.3	1.398	0.030	0.030	0.001	1.466	1.25	
72	6/8/2004	1:30:17 PM		20.916	25.716	25.1	26.849	25.73		22.587	23.535	3.953	18.613	-1.212	-4.74		44.266	0.2	14.643	0.003		45.62	0.76028	22.1	10.8	20.6	1.420	0.030	0.030	0.001	1.443	1.23	
73																																	
74																																	
75		Averages		20.5	25.7	24.9	26.6	25.4		22.4	23.2	4.0	18.3	-1.2	-4.7		44.7	0.2	14.6	0.0				21.7	10.9	20.3	1.402	0.029	0.029	0.001	1.447	1.231	
76		Maximum		20.9	25.7	25.3	26.8	25.8		22.6	23.5	4.2	18.6	-1.2	-4.7		45.3	0.2	14.6	0.0				22.1	11.1	20.6	1.420	0.030	0.030	0.001	1.467	1.248	
77		Median		20.5	25.7	25.1	26.6	25.4		22.4	23.2	4.0	18.3	-1.2	-4.7		44.7	0.2	14.6	0.0				21.7	10.9	20.4	1.404	0.030	0.029	0.001	1.443	1.228	
78		Minimum		20.1	25.6	24.0	26.4	25.1		22.1	22.9	3.9	17.9	-1.2	-4.8		44.2	0.2	14.6	0.0				21.4	10.8	20.0	1.379	0.028	0.029	0.001	1.434	1.221	
79		2 x Std Dev		0.495	0.055	0.805	0.274	0.404		0.279	0.310	0.139	0.371	0.004	0.026		0.587	0.006	0.000	0.000				0.310	0.144	0.319	0.022	0.001	0.000	0.000	0.019	0.016	
80	Number of Points Used*			21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
81		* Backpulse po	ts in box are not included																														
82																																	
83	Baseline 1C																																
84	6/8/2004	1:32:56 PM		20.3	25.755	25.264	26.898	25.844		32.494	33.996	4.003	28.445	-1.218	-4.113		45.031	0.303	14.643	0.003		48.27	0.80444	32.5	11.0	30.5	2.101	0.045	0.045	0.001	1.472	1.25	
85	6/8/2004	1:33:56 PM		20.364	25.768	25.358	26.876	25.768		32.621	34.269	4.008	28.552	-1.212	-4.098		45.038	0.304	14.643	0.003		49.27	0.82111	32.8	11.0	30.6	2.109	0.045	0.045	0.001	1.467	1.25	
86	6/8/2004	1:34:56 PM		20.376	25.78	25.425	26.843	25.745		32.668	34.248	4.026	28.586	-1.212	-4.087		44.921	0.306	14.643	0.003		50.27	0.83778	32.8	11.0	30.6	2.112	0.046	0.045	0.001	1.472	1.25	
87	6/8/2004	1:35:56 PM		20.445	25.808	25.493	26.821	25.638		32.386	34.002	3.995	28.328	-1.215	-4.046		44.389	0.303	14.643	0.003		51.27	0.85444	32.5	10.9	30.4	2.093	0.045	0.045	0.001	1.468	1.25	
88	6/8/2004	1:36:56 PM		20.541	25.799	25.539	26.777	25.544		32.681	34.238	3.988	28.634	-1.215	-4.09		44.967	0.306	14.643	0.003		52.27	0.87111	32.8	11.0	30.7	2.114	0.046	0.045	0.001	1.466	1.25	
89	6/8/2004	1:37:56 PM		20.57	25.827	25.612	26.79	25.557		32.703	34.221	4.008	28.613	-1.212	-4.072		44.729	0.308	14.643	0.003		53.27	0.88778	32.7	11.0	30.7	2.114	0.046	0.045	0.001	1.472	1.25	
90	6/8/2004	1:38:56 PM		20.573	25.81	25.625	26.733	25.53		32.861	34.369	3.975	28.808	-1.215	-4.072		44.535	0.309	14.643	0.003		54.27	0.90444	32.9	10.9	30.8	2.126	0.046	0.045	0.001	1.468	1.25	
91	6/8/2004	1:39:56 PM		20.634	25.811	25.661	26.709	25.501		32.724	34.126	3.937	28.72	-1.218	-4.066		44.387	0.31	14.643	0.003		55.27	0.92111	32.7	10.9	30.7	2.118	0.046	0.045	0.001	1.477	1.26	
92	6/8/2004	1:40:56 PM		20.677	25.809	25.703	26.661	25.494		32.664	34.308	3.92	28.685	-1.212	-4.058		44.26	0.311	14.643	0.003		56.27	0.93778	32.8	10.8	30.7	2.115	0.046	0.045	0.001	1.482	1.26	
93	6/8/2004	1:41:56 PM		20.707	25.793	25.708	26.696	25.484		32.405	33.921	4.113	28.17	-1.215	-4.104		45.718	0.304	14.643	0.003		57.27	0.95444	32.4	11.2	30.3	2.088	0.045	0.044	0.001	1.467	1.25	
94	6/8/2004	1:42:56 PM		20.713	25.804	25.744	26.672	25.454		32.415	34.06	4.056	28.322	-1.212	-4.087		45.619	0.307	14.643	0.003		58.27	0.97111	32.6	11.2	30.4	2.094	0.046	0.045	0.001	1.476	1.26	
95	6/8/2004	1:43:56 PM		20.775	25.806	25.771	26.639	25.476		32.26	33.602	4.081	28.131	-1.212	-4.081		45.647	0.307	14.643	0.003		59.27	0.98778	32.1	11.2	30.2	2.082	0.046	0.045	0.001	1.483	1.26	
96	6/8/2004	1:44:56 PM		20.71	25.797	25.787	26.645	25.492		32.43	33.95	4.079	28.283	-1.212	-4.081		45.403	0.308	14.643	0.003		60.27	1.00444	32.5	11.1	30.4	2.093	0.046	0.045	0.001	1.480	1.26	
97	6/8/2004	1:45:56 PM		20.817	25.782	25.797	26.63	25.492		32.453	33.884	4.094	28.295	-1.215	-4.069		45.328	0.308	14.643	0.003		61.27	1.02111	32.4	11.1	30.4	2.094	0.046	0.045	0.001	1.478	1.26	
98	6/8/2004	1:46:56 PM		20.733	25.789	25.824	26.652	25.544		32.351	33.61	4.076	28.205	-1.215	-4.069		45.25	0.31	14.643	0.003		62.27	1.03778	32.1	11.1	30.3	2.088	0.046	0.045	0.001	1.492	1.27	
99	6/8/2004	1:47:56 PM		20.92	25.785	25.825	26.683	25.58		32.492	34.089	4.071	28.328	-1.215	-4.046		45.255	0.312	14.643	0.003		63.27	1.05444	32.6	11.1	30.4	2.097	0.047	0.045	0.001	1.495	1.27	
100	6/8/2004	1:48:56 PM		20.977	25.781	25.856	26.729	25.591		32.614	34.217	4.04	28.472	-1.212	-4.049		45.259	0.312	14.643	0.003		64.27	1.07111	32.7	11.1	30.5	2.106	0.047	0.045	0.001	1.487	1.27	
101	6/8/2004	1:49:56 PM		20.847	25.788	25.873	26.771	25.623		32.378	33.683	4.073	28.205	-1.212	-4.061		45.221	0.312	14.643	0.003		65.27	1.08778	32.2	11.1	30.3	2.088	0.047	0.045	0.001	1.498	1.28	
102	6/8/2004	1:50:56 PM		20.84	25.79	25.885	26.808	25.685		32.639	34.172	4.029	28.547	-1.215	-4.061		45.181	0.311	14.643	0.003		66.27	1.10444	32.7	11.1	30.6	2.109	0.046	0.045	0.001	1.478	1.26	
103	6/8/2004	1:51:56 PM		20.926	25.786	25.891	26.879	25.701		32.475	33.809	3.973	28.465	-1.212	-4.049		45.088	0.312	14.643	0.004		67.27	1.12111	32.3	11.0	30.5	2.101	0.047	0.045	0.001	1.489	1.27	
104	6/8/2004	1:52:56 PM		20.903	25.803	25.898	26.906	25.768		32.459	33.96	4.054	28.33	-1.212	-3.991		45.14	0.306	14.643	0.003		68.27	1.13778	32.5	11.1	30.4	2.096	0.046	0.044	0.001	1.464	1.25	
105	6/8/2004	1:53:56 PM		20.929	25.814	25.914	26.922	25.799		32.737	34.298	4.068	28.56	-1.215	-4.049		45.077	0.312	14.643	0.003		69.27	1.15444	32.8	11.0	30.6	2.113	0.047	0.045	0.001	1.479	1.26	
106	6/8/2004	1:54:56 PM		20.942	25.827	25.937	26.994	25.856		32.494	33.966	4.013	28.424	-1.212	-4.043		45.077	0.314	14.643	0.003		70.27	1.17111	32.5	11.0	30.5	2.100	0.047	0.046	0.001	1.497	1.27	
107	6/8/2004	1:55:56 PM		20.968	25.843	25.938	27.031	25.958		32.573	34.081	4.032	28.498	-1.215	-4.046		45.133	0.314	14.643	0.003		71.27	1.18778	32.6	11.1	30.5	2.105	0.047	0.046	0.001	1.493	1.27	
108	6/8/2004	1:56:56 PM		20.996	25.851	25.951	27.073	25.985		32.579	34.045	3.998	28.511	-1.215	-4.038		45.073	0.315	14.643	0.003		72.27	1.20444	32.6	11.0	30.5	2.106	0.047	0.046	0.001	1.497	1.27	
109																																	
110		Averages		20.7	25.8	25.7	26.8	25.6		32.5	34.0	4.0	28.4	-1.2	-4.1		45.1	0.3	14.6	0.0				32.6	11.0	30.5	2.1	0.046	0.045	0.001	1.480	1.259	
111		Maximum		21.0	25.9	26.0	27.1	26.0		32.9	34.4	4.1	28.8	-1.2	-4.0		45.7	0.3	14.6	0.0				32.9	11.2	30.8	2.1	0.047	0.046	0.001	1.498	1.275	
112		Median		20.7	25.8	25.8	26.8	25.6		32.5	34.1	4.0	28.5	-1.2	-4.1		45.1	0.3	14.6	0.0				32.6	11.0	30.5	2.1	0.046	0.045	0.001	1.478	1.258	
113		Minimum		20.3	25.8	25.3	26.6	25.5		32.3	33.6	3.9	28.1	-1.2	-4.1		44.3	0.3	14.6	0.0				32.1	10.8	30.2	2.1	0.045	0.044	0.001	1.464	1.246	
114		2 x Std Dev		0.407	0.043	0.376	0.251	0.309		0.287	0.418	0.096	0.355	0.004	0.050		0.738	0.007	0.000	0.000				0.418	0.181	0.317	0.022	0.001	0.001	0.000	0.022	0.018	
115	Number of Points Used*			25	25	25	25	25		25	25	25	25	25	25		25	25	25	25				25	25	25	25	25	25	25	25	25	
116		* Backpulse points in box are not included																															

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR



PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A		6.707	FT2						
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Acid Clean 1																					Min.	Hour	psig	ft/s	psi	bar	/ft2	/ft2	ft2/psi	ft2/psi	day/bar	
17	6/9/2004	1:17:48 PM		21.939	24.651	32.266	25.33	24.758		43.658	46.999	4.158	39.437	-1.218	-2.575		46.285	0.486	14.643	0.003		0	0	45.5	11.3	41.5	2.865	0.072	0.059	0.001	1.428	1.22	
18	6/9/2004	1:18:05 PM		21.939	24.651	32.266	25.33	24.758		43.658	46.999	4.158	39.437	-1.218	-2.575		46.285	0.486	14.643	0.003		0.28	0.00472	45.5	11.3	41.5	2.865	0.072	0.059	0.001	1.428	1.22	
19	6/9/2004	1:18:16 PM		21.934	24.666	32.192	25.375	24.723		43.262	46.519	4.167	39.001	-1.215	-2.581		46.418	0.487	14.643	0.003		0.47	0.00778	45.0	11.4	41.1	2.836	0.073	0.060	0.001	1.449	1.23	
20	6/9/2004	1:18:26 PM		21.929	24.666	32.187	25.36	24.698		43.502	47.035	4.142	39.268	-1.215	-2.586		46.341	0.484	14.643	0.003		0.63	0.01056	45.6	11.4	41.4	2.853	0.072	0.059	0.001	1.431	1.22	
21	6/9/2004	1:18:36 PM		21.903	24.665	32.226	25.354	24.687		43.569	47.13	4.171	39.318	-1.212	-2.604		46.431	0.484	14.643	0.003		0.80	0.01333	45.7	11.4	41.4	2.857	0.072	0.059	0.001	1.428	1.21	
22	6/9/2004	1:18:46 PM		21.929	24.651	34.254	25.315	24.678		44.813	48.03	4.22	40.518	-1.215	-2.792		46.181	0.461	14.643	0.003		0.97	0.01611	46.6	11.3	42.7	2.942	0.069	0.053	0.001	1.251	1.06	
23	6/9/2004	1:18:56 PM		21.949	24.666	34.175	25.34	24.673		44.232	47.897	4.236	39.888	-1.218	-2.546		46.128	0.493	14.643	0.003		1.13	0.01889	46.4	11.3	42.1	2.900	0.074	0.057	0.001	1.360	1.16	
24	6/9/2004	1:19:06 PM		22.109	24.665	34.924	25.339	24.692		43.005	48.357	4.258	38.63	0.062	-1.358		46.445	0.58	14.643	0.003		1.30	0.02167	46.9	11.4	40.8	2.814	0.086	0.066	0.002	1.617	1.38	
25	6/9/2004	1:19:16 PM		22.275	24.665	34.49	25.324	24.737		40.311	48.094	4.245	35.97	2.653	0.287		47.032	0.74	14.643	0.003		1.47	0.02444	46.6	11.5	38.1	2.630	0.110	0.085	0.002	2.233	1.90	
26	6/9/2004	1:19:26 PM		22.556	24.675	35.057	25.344	24.712		38.994	48.656	4.328	34.581	4.445	1.316		46.587	0.834	14.643	0.003		1.63	0.02722	47.2	11.4	36.8	2.536	0.124	0.095	0.003	2.570	2.19	
27	6/9/2004	1:19:36 PM		22.807	24.67	35.131	25.339	24.707		37.588	48.533	4.35	33.183	5.765	2.097		46.767	0.889	14.643	0.003		1.80	0.03	47.1	11.5	35.4	2.440	0.133	0.101	0.003	2.843	2.42	
28	6/9/2004	1:19:46 PM		23.053	24.67	35.614	25.339	24.732		36.582	48.654	4.376	32.12	6.773	2.718		46.852	0.929	14.643	0.003		1.97	0.03278	47.2	11.5	34.4	2.368	0.139	0.104	0.003	3.022	2.57	
29	6/9/2004	1:19:56 PM		23.243	24.664	34.726	25.298	24.736		35.597	48.295	4.41	31.146	7.58	3.207		46.69	0.961	14.643	0.003		2.13	0.03556	46.8	11.4	33.4	2.301	0.143	0.110	0.003	3.293	2.80	
30	6/9/2004	1:20:06 PM		23.514	24.655	34.79	25.293	24.752		35.651	48.765	4.392	31.244	7.881	3.334		46.915	0.971	14.643	0.003		2.30	0.03833	47.3	11.5	33.4	2.306	0.145	0.111	0.003	3.315	2.82	
31	6/9/2004	1:20:16 PM		23.624	24.67	35.899	25.313	24.742		35.511	48.854	4.423	31.084	8.269	3.6		46.982	0.985	14.643	0.003		2.47	0.04111	47.4	11.5	33.3	2.296	0.147	0.109	0.003	3.280	2.79	
32	6/9/2004	1:20:26 PM		23.804	24.674	34.928	25.308	24.751		34.495	48.434	4.337	30.249	8.877	3.918		46.831	1.005	14.643	0.003		2.63	0.04389	47.0	11.5	32.4	2.232	0.150	0.114	0.004	3.532	3.01	
33	6/9/2004	1:20:36 PM		23.93	24.67	34.933	25.288	24.742		34.736	48.869	4.395	30.417	8.924	3.944		46.827	1.007	14.643	0.003		2.80	0.04667	47.4	11.5	32.6	2.246	0.150	0.115	0.004	3.516	2.99	
34	6/9/2004	1:20:46 PM		24.005	24.679	34.849	25.303	24.736		34.379	48.622	4.394	30.023	8.987	4.013		46.846	1.01	14.643	0.003		2.97	0.04944	47.2	11.5	32.2	2.220	0.151	0.115	0.004	3.576	3.04	
35	6/9/2004	1:20:56 PM		24.05	24.674	34.76	25.298	24.726		34.41	48.579	4.415	30.039	9.057	4.054		46.802	1.012	14.643	0.003		3.13	0.05222	47.1	11.5	32.2	2.222	0.151	0.116	0.004	3.588	3.05	
36	6/9/2004	1:21:06 PM		24.08	24.669	35.677	25.263	24.756		34.329	48.571	4.375	29.992	9.12	4.089		46.756	1.015	14.643	0.003		3.30	0.055	47.1	11.5	32.2	2.217	0.151	0.113	0.004	3.520	3.00	
37	6/9/2004	1:21:16 PM		24.115	24.68	34.859	25.278	24.762		34.276	49.024	4.44	29.906	9.491	4.288		46.616	1.027	14.643	0.003		3.47	0.05778	47.6	11.4	32.1	2.213	0.153	0.117	0.004	3.647	3.10	
38	6/9/2004	1:21:26 PM		24.2	24.684	34.79	25.293	24.746		34.205	49.053	4.43	29.83	9.508	4.314		46.644	1.029	14.643	0.003		3.63	0.06056	47.6	11.4	32.0	2.207	0.153	0.117	0.004	3.669	3.12	
39	6/9/2004	1:21:36 PM		24.214	24.673	34.725	25.287	24.73		34.041	48.803	4.361	29.771	9.526	4.3		46.608	1.028	14.643	0.003		3.80	0.06333	47.3	11.4	31.9	2.200	0.153	0.118	0.004	3.685	3.14	
40	6/9/2004	1:21:46 PM		24.234	24.678	34.666	25.292	24.735		33.998	48.834	4.397	29.689	9.534	4.314		46.648	1.029	14.643	0.003		3.97	0.06611	47.4	11.4	31.8	2.195	0.153	0.118	0.004	3.702	3.15	
41	6/9/2004	1:21:56 PM		24.224	24.688	34.587	25.282	24.74		33.933	48.593	4.352	29.711	9.624	4.352		46.387	1.029	14.643	0.003		4.13	0.06889	47.1	11.4	31.8	2.194	0.153	0.118	0.004	3.712	3.16	
42	6/9/2004	1:22:06 PM		24.208	24.673	34.472	25.281	24.745		33.989	48.759	4.344	29.711	9.618	4.337		46.521	1.029	14.643	0.003		4.30	0.07167	47.3	11.4	31.9	2.196	0.153	0.118	0.004	3.720	3.17	
43	6/9/2004	1:22:16 PM		24.199	24.683	34.567	25.287	24.775		33.989	48.703	4.298	29.808	9.691	4.415		46.446	1.032	14.643	0.004		4.47	0.07444	47.2	11.4	31.9	2.199	0.154	0.119	0.004	3.716	3.16	
44	6/9/2004	1:22:26 PM		24.188	24.688	34.566	25.286	24.775		33.603	48.396	4.266	29.424	9.697	4.395		46.47	1.033	14.643	0.003		4.63	0.07722	46.9	11.4	31.5	2.173	0.154	0.119	0.004	3.765	3.20	
45	6/9/2004	1:22:36 PM		24.153	24.673	34.941	25.251	24.775		33.948	48.838	4.378	29.705	9.821	4.493		46.589	1.036	14.643	0.003		4.80	0.08	47.4	11.4	31.8	2.194	0.154	0.118	0.004	3.702	3.15	
46	6/9/2004	1:22:46 PM		24.183	24.678	34.66	25.266	24.755		33.844	48.869	4.335	29.649	9.96	4.566		46.733	1.041	14.643	0.003		4.97	0.08278	47.4	11.5	31.7	2.189	0.155	0.119	0.004	3.757	3.20	
47	6/9/2004	1:22:56 PM		24.193	24.683	34.616	25.271	24.755		33.703	48.635	4.376	29.461	9.96	4.537		46.268	1.039	14.643	0.003		5.13	0.08556	47.2	11.3	31.6	2.177	0.155	0.119	0.004	3.773	3.21	
48	6/9/2004	1:23:06 PM		24.188	24.693	34.512	25.276	24.78		33.807	48.778	4.309	29.635	9.96	4.571		46.462	1.042	14.643	0.003		5.30	0.08833	47.3	11.4	31.7	2.187	0.155	0.120	0.004	3.778	3.22	
49	6/9/2004	1:23:16 PM		24.163	24.677	34.467	25.266	24.789		33.63	48.593	4.289	29.493	10.029	4.557		46.395	1.042	14.643	0.003		5.47	0.09111	47.1	11.4	31.6	2.176	0.155	0.120	0.004	3.802	3.24	
50	6/9/2004	1:23:26 PM		24.148	24.688	34.398	25.266	24.815		33.672	48.995	4.345	29.467	10.029	4.58		46.433	1.042	14.643	0.003		5.63	0.09389	47.5	11.4	31.6	2.177	0.155	0.120	0.004	3.808	3.24	
51	6/9/2004	1:23:36 PM		24.112	24.681	34.308	25.255	24.818		33.852	49.17	4.336	29.627	10.027	4.557		46.393	1.041	14.643	0.003		5.80	0.09667	47.7	11.4	31.7	2.188	0.155	0.120	0.004	3.793	3.23	
52	6/9/2004	1:23:46 PM		24.093	24.682	34.269	25.246	24.829		33.66	48.834	4.351	29.428	9.957	4.551		46.377	1.04	14.643	0.003		5.97	0.09944	47.4	11.4	31.5	2.175	0.155	0.120	0.004	3.816	3.25	
53	6/9/2004	1:23:56 PM		24.047	24.671	34.254	25.245	24.833		33.512	48.558	4.357	29.27	10.027	4.583		46.425	1.042	14.643	0.003		6.13	0.10222	47.1	11.4	31.4	2.164	0.155	0.121	0.004	3.844	3.27	
54	6/9/2004	1:24:06 PM		24.022	24.691	34.214	25.245	24.823		33.328	48.483	4.336	29.071	10.029	4.58		46.189	1.041	14.643	0.003		6.30	0.105	47.0	11.3	31.2	2.151	0.155	0.121	0.004	3.868	3.29	
55	6/9/2004	1:24:16 PM		24.003	24.683	34.181	25.236	24.825		33.548	48.55	4.339	29.36	9.98	4.569		46.325	1.041	14.643	0.003		6.47	0.10778	47.1	11.4	31.5	2.169	0.155	0.121	0.004	3.840	3.27	
56	6/9/2004	1:24:26 PM		23.972	24.707	34.047	25.261	24.819		33.718	49.012	4.365	29.444	10.032	4.589		46.377	1.041	14.643	0.003		6.63	0.11056	47.5	11.4	31.6	2.177	0.155	0.121	0.004	3.838	3.27	
57	6/9/2004	1:24:36 PM		23.916	24.681	34.061	25.23	24.803		33.332	48.44	4.288	29.188	10.029	4.603		46.408	1.041	14.643	0.003		6.80	0.11333	47.0	11.4	31.3	2.155	0.155	0.121	0.004	3.876	3.30	
58	6/9/2004	1:24:46 PM		23.866	24.685	33.967	25.214	24.792		33.643	48.765	4.352	29.403	10.027	4.569		46.4	1.041	14.643	0.003		6.97	0.11611	47.3	11.4	31.5	2.173	0.155	0.121	0.004	3.853	3.28	
59	6/9/2004	1:24:56 PM		23.841	24.685	33.932	25.209	24.787		33.9	49.118	4.371	29.693	10.076	4.612		46.397	1.042	14.643	0.003		7.13	0.11889	47.6	11.4	31.8	2.192	0.155	0.122	0.004	3.827	3.26	
60	6/9/2004	1:25:06 PM		23.785	24.68	33.867	25.203	24.772		33.593	48.923	4.32	29.413	10.076	4.626		46.222	1.043	14.643	0.003		7.30	0.12167	47.5	11.3	31.5	2.172	0.156	0.122	0.004	3.874	3.30	
61	6/9/2004	1:25:16 PM		23.75	24.685	33.843	25.204	24.777		33.324	48.51	4.316	29.169	10.076	4.623		46.299	1.043	14.643	0.003		7.47	0.12444	47.0	11.3	31.2	2.154	0.156	0.122	0.004	3.908	3.33	
62	6/9/2004	1:25:26 PM		23.715	24.695	33.823	25.214	24.777		33.378	48.483	4.314	29.194	10.076	4.609		46.368	1.043	14.643	0.003		7.63	0.12722	47.0	11.4	31.3	2.157	0.156	0.122	0.004	3.905	3.32	
63	6/9/2004	1:25:36 PM		23.69	24.69	33.784	25.219	24.777		33.311	48.645	4.338	29.1	10.139	4.629		46.324	1.043	14.643	0.003		7.80	0.13	47.2	11.4	31.2	2.152	0.156	0.122	0.004	3.919	3.34	
64	6/9/2004	1:25:46 PM		23.645	24.705	33.739	25.229	24.777		33.446	48.598	4.328	29.258	10.139	4.67		46.251	1.045	14.643	0.003		7.97	0.13278	47.1	11.3	31.4	2.162	0.156	0.123	0.004	3.913	3.33	
65	6/9/2004	1:25:56 PM		23.615	24.695	33.695	25.224	24.767		33.409	48.747	4.315	29.241	10.139	4.67		46.281	1.045	14.643	0.003		8.13	0.13556	47.3	11.3	31.3	2.160	0.156	0.123	0.004	3.921	3.34	
66	6/9/2004	1:26:06 PM		23.57	24.695	33.646	25.234	24.767		33.492	48.83	4.337	29.333	10.183	4.681		46.276	1.046	14.643	0.003		8.30	0.13833	47.4	11.3	31.4	2.166	0.156	0.123	0.004	3.919	3.33	
67	6/9/2004	1:26:16 PM		23.529	24.695	33.61	25.238	24.757		33.367	48.479	4.291	29.225	10.194	4.684		46.216	1.046	14.643	0.003		8.47	0.14111	47.0	11.3	31.3	2.158	0.156	0.123	0.004	3.937	3.35	
68	6/9/2004	1:26:26 PM		23.495	24.7	33.581	25.254	24.767		33.253	48.74	4.333	29.052	10.197	4.704		46.191	1.046	14.643	0.003		8.63	0.14389	47.3	11.3	31.2	2.148	0.156	0.123	0.004	3.958	3.37	
69	6/9/2004	1:26:36 PM		23.459	24.695	33.551	25.248	24.772		33.185	48.712	4.349	28.983	10.221	4.733		46.247	1.048	14.643	0.003		8.80	0.14667	47.2	11.3	31.1	2.143	0.156	0.124	0.004	3.978	3.39	
70	6/9/2004	1:26:46 PM		23.408	24.684	33.501	25.218	24.766		33.037	48.504	4.331	28.831	10.302	4.751		46.26	1.049	14.643	0.003		8.97	0.14944	47.0	11.3	30.9	2.133	0.156	0.124	0.004	4.006	3.41	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	6/9/2004	1:26:56 PM		23.403	24.694	33.461	25.248	24.746		33.166	48.544	4.333	29.001	10.302	4.754		46.176	1.05	14.643	0.003		9.13	0.15222	47.1	11.3	31.1	2.143	0.157	0.124	0.004	3.995	3.40	
72	6/9/2004	1:27:06 PM		23.358	24.694	33.422	25.248	24.736		33.249	48.828	4.298	29.11	10.368	4.797		46.149	1.051	14.643	0.003		9.30	0.155	47.4	11.3	31.2	2.150	0.157	0.124	0.004	3.991	3.40	
73	6/9/2004	1:27:16 PM		23.312	24.703	33.372	25.257	24.71		32.892	48.438	4.285	28.759	10.365	4.826		46.166	1.052	14.643	0.003		9.47	0.15778	47.0	11.3	30.8	2.125	0.157	0.125	0.004	4.046	3.44	
74	6/9/2004	1:27:26 PM		23.276	24.688	33.331	25.241	24.665		33.172	48.533	4.354	28.962	10.406	4.788		46.243	1.051	14.643	0.003		9.63	0.16056	47.1	11.3	31.1	2.142	0.157	0.125	0.004	4.015	3.42	
75	6/9/2004	1:27:36 PM		23.241	24.698	33.307	25.236	24.645		32.952	48.282	4.257	28.896	10.417	4.814		46.158	1.052	14.643	0.004		9.80	0.16333	46.8	11.3	30.9	2.132	0.157	0.125	0.004	4.040	3.44	
76	6/9/2004	1:27:46 PM		23.231	24.708	33.287	25.256	24.65		33.294	49.008	4.358	29.075	10.443	4.881		46.354	1.055	14.643	0.003		9.97	0.16611	47.5	11.4	31.2	2.150	0.157	0.125	0.004	4.020	3.42	
77	6/9/2004	1:27:56 PM		23.182	24.703	33.228	25.247	24.64		32.894	48.283	4.35	28.693	10.487	4.881		46.356	1.055	14.643	0.003		10.13	0.16889	46.8	11.4	30.8	2.123	0.157	0.126	0.004	4.077	3.47	
78	6/9/2004	1:28:06 PM		23.141	24.703	33.223	25.236	24.625		33.226	48.925	4.27	29.132	10.533	4.933		46.208	1.058	14.643	0.003		10.30	0.17167	47.5	11.3	31.2	2.150	0.158	0.126	0.004	4.039	3.44	
79	6/9/2004	1:28:16 PM		23.115	24.697	33.217	25.246	24.629		32.998	48.915	4.315	28.825	10.655	4.979		45.939	1.061	14.643	0.003		10.47	0.17444	47.4	11.3	30.9	2.131	0.158	0.126	0.004	4.086	3.48	
80	6/9/2004	1:28:26 PM		23.08	24.697	33.128	25.231	24.629		32.925	48.753	4.361	28.675	10.597	4.956		46.364	1.059	14.643	0.003		10.63	0.17722	47.3	11.4	30.8	2.124	0.158	0.126	0.004	4.103	3.49	
81	6/9/2004	1:28:36 PM		23.05	24.693	33.104	25.216	24.625		32.822	48.66	4.392	28.541	10.6	4.976		46.481	1.061	14.643	0.003		10.80	0.18	47.2	11.4	30.7	2.115	0.158	0.127	0.004	4.129	3.51	
82	6/9/2004	1:28:46 PM		23.015	24.708	33.094	25.226	24.675		32.768	48.813	4.376	28.537	10.649	4.967		46.508	1.06	14.643	0.003		10.97	0.18278	47.3	11.4	30.7	2.113	0.158	0.127	0.004	4.130	3.51	
83	6/9/2004	1:28:56 PM		23	24.702	33.049	25.231	24.629		32.687	48.5	4.345	28.504	10.608	4.985		46.356	1.061	14.643	0.003		11.13	0.18556	47.0	11.4	30.6	2.109	0.158	0.127	0.004	4.147	3.53	
84	6/9/2004	1:29:06 PM		22.949	24.711	33.009	25.24	24.618		32.745	48.649	4.379	28.502	10.724	5.017		46.366	1.063	14.643	0.003		11.30	0.18833	47.2	11.4	30.6	2.111	0.158	0.127	0.004	4.155	3.54	
85	6/9/2004	1:29:16 PM		22.944	24.712	33.034	25.251	24.574		32.77	48.506	4.331	28.634	10.745	5.04		46.433	1.064	14.643	0.003		11.47	0.19111	47.0	11.4	30.7	2.117	0.159	0.127	0.004	4.146	3.53	
86	6/9/2004	1:29:26 PM		22.924	24.712	32.975	25.251	24.569		32.654	48.511	4.376	28.41	10.733	5.034		46.393	1.064	14.643	0.003		11.63	0.19389	47.0	11.4	30.5	2.105	0.159	0.127	0.004	4.175	3.55	
87	6/9/2004	1:29:36 PM		22.873	24.706	32.934	25.234	24.552		32.48	48.471	4.376	28.26	10.811	5.077		46.385	1.066	14.643	0.003		11.80	0.19667	47.0	11.4	30.4	2.094	0.159	0.128	0.004	4.210	3.58	
88	6/9/2004	1:29:46 PM		22.863	24.716	32.924	25.245	24.563		32.511	48.442	4.402	28.223	10.811	5.095		46.337	1.065	14.643	0.003		11.97	0.19944	47.0	11.4	30.4	2.094	0.159	0.128	0.004	4.208	3.58	
89	6/9/2004	1:29:56 PM		22.813	24.716	32.905	25.25	24.568		32.751	48.776	4.386	28.547	10.863	5.126		46.458	1.068	14.643	0.003		12.13	0.20222	47.3	11.4	30.6	2.113	0.159	0.128	0.004	4.183	3.56	
90	6/9/2004	1:30:06 PM		22.768	24.716	32.85	25.245	24.573		32.508	48.575	4.336	28.316	10.866	5.129		46.412	1.068	14.643	0.003		12.30	0.205	47.1	11.4	30.4	2.097	0.159	0.128	0.004	4.221	3.59	
91	6/9/2004	1:30:16 PM		22.769	24.712	32.826	25.236	24.589		32.604	48.813	4.345	28.414	10.933	5.173		46.302	1.071	14.643	0.003		12.47	0.20778	47.3	11.3	30.5	2.103	0.160	0.129	0.004	4.223	3.59	
92	6/9/2004	1:30:26 PM		22.713	24.717	32.777	25.256	24.614		32.396	48.533	4.376	28.186	10.976	5.207		46.458	1.072	14.643	0.003		12.63	0.21056	47.1	11.4	30.3	2.088	0.160	0.129	0.004	4.263	3.63	
93	6/9/2004	1:30:36 PM		22.683	24.707	32.767	25.236	24.619		32.662	48.678	4.363	28.486	10.976	5.216		46.291	1.072	14.643	0.003		12.80	0.21333	47.2	11.3	30.6	2.108	0.160	0.129	0.004	4.224	3.59	
94	6/9/2004	1:30:46 PM		22.665	24.728	32.739	25.267	24.61		32.359	48.483	4.322	28.19	11.069	5.242		46.187	1.073	14.643	0.003		12.97	0.21611	47.0	11.3	30.3	2.087	0.160	0.129	0.004	4.273	3.64	
95	6/9/2004	1:30:56 PM		22.64	24.733	32.744	25.287	24.595		32.291	48.498	4.318	28.135	11.101	5.271		46.281	1.076	14.643	0.003		13.13	0.21889	47.0	11.3	30.2	2.083	0.160	0.130	0.004	4.293	3.65	
96	6/9/2004	1:31:06 PM		22.594	24.728	32.674	25.271	24.57		32.243	48.569	4.309	28.096	11.167	5.3		46.216	1.077	14.643	0.003		13.30	0.22167	47.1	11.3	30.2	2.080	0.161	0.130	0.004	4.312	3.67	
97	6/9/2004	1:31:16 PM		22.548	24.717	32.638	25.251	24.559		32.266	48.486	4.318	28.135	11.19	5.335		46.099	1.079	14.643	0.003		13.47	0.22444	47.0	11.3	30.2	2.082	0.161	0.130	0.004	4.319	3.68	
98	6/9/2004	1:31:26 PM		22.538	24.713	32.609	25.241	24.565		31.864	48.214	4.28	27.694	11.202	5.311		46.032	1.079	14.643	0.003		13.63	0.22722	46.7	11.3	29.8	2.053	0.161	0.131	0.004	4.384	3.73	
99	6/9/2004	1:31:36 PM		22.503	24.728	32.589	25.241	24.575		32.195	48.502	4.279	28.094	11.219	5.352		46.057	1.08	14.643	0.003		13.80	0.23	47.0	11.3	30.1	2.078	0.161	0.131	0.004	4.337	3.69	
100	6/9/2004	1:31:46 PM		22.472	24.722	32.539	25.231	24.589		32.32	48.857	4.321	28.201	11.234	5.352		46.072	1.081	14.643	0.003		13.97	0.23278	47.4	11.3	30.3	2.086	0.161	0.131	0.004	4.330	3.69	
101	6/9/2004	1:31:56 PM		22.447	24.716	32.543	25.225	24.563		32.139	48.629	4.3	27.985	11.269	5.398		46.099	1.081	14.643	0.003		14.13	0.23556	47.2	11.3	30.1	2.073	0.161	0.131	0.004	4.358	3.71	
102	6/9/2004	1:32:06 PM		22.412	24.702	32.49	25.18	24.579		32.065	48.37	4.284	27.942	11.266	5.384		46.089	1.082	14.643	0.003		14.30	0.23833	46.9	11.3	30.0	2.069	0.161	0.131	0.004	4.377	3.72	
103	6/9/2004	1:32:16 PM		22.382	24.722	32.5	25.21	24.579		32.164	48.699	4.302	28.034	11.295	5.41		46.093	1.083	14.643	0.003		14.47	0.24111	47.2	11.3	30.1	2.075	0.161	0.131	0.004	4.366	3.72	
104	6/9/2004	1:32:26 PM		22.357	24.722	32.475	25.215	24.569		32.11	48.614	4.341	27.94	11.289	5.418		45.895	1.082	14.643	0.003		14.63	0.24389	47.1	11.2	30.0	2.070	0.161	0.131	0.004	4.376	3.72	
105	6/9/2004	1:32:36 PM		22.332	24.707	32.455	25.205	24.549		31.774	48.187	4.271	27.663	11.324	5.407		46.12	1.083	14.643	0.003		14.80	0.24667	46.7	11.3	29.7	2.049	0.161	0.132	0.004	4.427	3.77	
106	6/9/2004	1:32:46 PM		22.316	24.731	32.459	25.23	24.533		32.071	48.709	4.351	27.872	11.39	5.424		46.016	1.083	14.643	0.003		14.97	0.24944	47.2	11.3	30.0	2.066	0.161	0.132	0.004	4.389	3.74	
107	6/9/2004	1:32:56 PM		22.271	24.721	32.37	25.205	24.533		31.818	48.048	4.274	27.727	11.379	5.418		46.093	1.082	14.643	0.003		15.13	0.25222	46.6	11.3	29.8	2.053	0.161	0.132	0.004	4.425	3.77	
108	6/9/2004	1:33:06 PM		22.256	24.726	32.345	25.21	24.533		31.888	48.241	4.286	27.729	11.39	5.433		46.097	1.084	14.643	0.003		15.30	0.255	46.8	11.3	29.8	2.055	0.162	0.132	0.004	4.431	3.77	
109	6/9/2004	1:33:16 PM		22.252	24.733	32.337	25.206	24.565		32.299	48.952	4.32	28.18	11.387	5.459		46.072	1.084	14.643	0.003		15.47	0.25778	47.5	11.3	30.2	2.085	0.162	0.132	0.004	4.369	3.72	
110	6/9/2004	1:33:26 PM		22.201	24.732	32.292	25.21	24.589		32.052	48.571	4.354	27.854	11.39	5.468		46.139	1.085	14.643	0.003		15.63	0.26056	47.1	11.3	30.0	2.065	0.162	0.132	0.004	4.420	3.76	
111	6/9/2004	1:33:36 PM		22.181	24.717	32.272	25.19	24.589		32.399	48.923	4.366	28.192	11.387	5.453		46.087	1.085	14.643	0.003		15.80	0.26333	47.5	11.3	30.3	2.089	0.162	0.132	0.004	4.372	3.72	
112	6/9/2004	1:33:46 PM		22.166	24.737	32.257	25.22	24.579		31.849	48.276	4.28	27.753	11.39	5.459		46.043	1.085	14.643	0.003		15.97	0.26611	46.8	11.3	29.8	2.055	0.162	0.133	0.004	4.447	3.78	
113	6/9/2004	1:33:56 PM		22.126	24.732	32.227	25.226	24.579		31.845	48.206	4.307	27.696	11.39	5.442		46.103	1.085	14.643	0.003		16.13	0.26889	46.7	11.3	29.8	2.053	0.162	0.133	0.004	4.455	3.79	
114	6/9/2004	1:34:06 PM		22.137	24.728	32.203	25.216	24.605		32.013	48.624	4.278	27.934	11.387	5.447		46.072	1.085	14.643	0.003		16.30	0.27167	47.2	11.3	30.0	2.067	0.162	0.133	0.004	4.427	3.77	
115	6/9/2004	1:34:16 PM		22.101	24.728	32.188	25.226	24.58		32.146	48.732	4.331	27.977	11.405	5.47		46.039	1.086	14.643	0.003		16.47	0.27444	47.3	11.3	30.1	2.073	0.162	0.133	0.004	4.420	3.76	
116	6/9/2004	1:34:26 PM		22.077	24.733	32.169	25.222	24.585		31.872	48.432	4.258	27.764	11.41	5.459		45.968	1.086	14.643	0.003		16.63	0.27722	47.0	11.3	29.8	2.056	0.162	0.133	0.004	4.459	3.79	
117	6/9/2004	1:34:36 PM		22.063	24.734	32.125	25.223	24.581		32.17	48.817	4.313	28.01	11.41	5.468		46.118	1.085	14.643	0.003		16.80	0.28	47.3	11.3	30.1	2.075	0.162	0.133	0.004	4.420	3.76	
118	6/9/2004	1:34:46 PM		22.032	24.733	32.095	25.242	24.58		32.054	48.772	4.294	27.96	11.407	5.442		46.018	1.085	14.643	0.003		16.97	0.28278	47.3	11.3	30.0	2.069	0.162	0.133	0.004	4.435	3.77	
119	6/9/2004	1:34:56 PM		22.007	24.733	32.09	25.237	24.58		32.191	48.709	4.331	28.028	11.434	5.476		46.081	1.085	14.643	0.003		17.13	0.28556	47.2	11.3	30.1	2.076	0.162	0.133	0.004	4.421	3.76	
120	6/9/2004	1:35:06 PM		22.012	24.754	32.116	25.258	24.591		31.975	48.392	4.263	27.876	11.393	5.465		45.985	1.086	14.643	0.003		17.30	0.28833	46.9	11.3	29.9	2.063	0.162	0.133	0.004	4.449	3.79	
121	6/9/2004	1:35:16 PM		21.961	24.738	32.06	25.242	24.58		31.756	48.243	4.29	27.628	11.393	5.462		46.08	1.084	14.643	0.004		17.47	0.29111	46.8	11.3	29.7	2.047	0.162	0.133	0.004	4.483	3.81	
122	6/9/2004	1:35:26 PM		21.962	24.754	32.076	25.268	24.561		31.934	48.417	4.331	27.729	11.413	5.473		46.022	1.085	14.643	0.003		17.63	0.29389	46.9	11.3	29.8	2.057	0.162	0.133	0.004	4.464	3.80	
123	6/9/2004	1:35:36 PM		21.927	24.744	32.041	25.253	24.581		32.218	48.767	4.298	28.1	11.39	5.433		46.016	1.084	14.643	0.003		17.80	0.29667	47.3	11.3	30.2	2.079	0.162	0.133	0.004	4.415	3.76	
124	6/9/2004	1:35:46 PM		21.881	24.733	32.026	25.247	24.57		32.027	48.303	4.307	27.901	11.39	5.453		46.012	1.084	14.643	0.003		17.97	0.29944	46.8	11.3	30.0	2.066	0.162	0.133	0.004	4.446	3.78	
125	6/9/2004	1:35:56 PM		21.871	24.743	32.011	25.242	24.575		32.15	48.875	4.33	27.963	11.324	5.427		46.02	1.083	14.643	0.003		18.13	0.30222	47.4	11.3	30.1	2.072	0.161	0.133	0.004	4.430	3.77	
126	6/9/2004	1:36:06 PM		21.856	24.743	31.996	25.247	24.585		32.098	48.819	4.286	27.991	11.387	5.43		45.928	1.083	14.643	0.003		18.30	0.305	47.3	11.3	30.0	2.071	0.161	0.133	0.004	4.433	3.77	
127	6/9/2004	1:36:16 PM		21.821	24.743	31.966	25.237	24.59		32.137	48.697	4.261	28.03	11.341	5.442		45.807	1.083	14.643	0.003		18.47	0.30778	47.2	11.2	30.1	2.074	0.161	0.133	0.004	4.431	3.77	
128	6/9/2004	1:36:26 PM		21.816	24.749	31.987	25.238	24.621		31.886	48.208	4.291	27.761	11.326	5.421		45.889	1.083	14.643	0.003		18.63	0.31056	46.7	11.2	29.8	2.056	0.161	0.133	0.004	4.467	3.80	
129	6/9/2004	1:36:36 PM		21.78	24.748	31.932	25.207	24.64		31.957	48.237	4.279	27.839	11.269	5.407		45.822	1.081	14.643	0.003		18.80	0.31333	46.8	11.2	29.9	2.061	0.161	0.133	0.004	4.455	3.79	
130	6/9/2004	1:36:46 PM		21.756	24.754	31.992	25.213	24.586		32.108	48.426	4.269	28.002	11.269	5.384		45.895	1.081	14.643	0.003		18.97	0.31611	47.0	11.2	30.1	2.072	0.161	0.133	0.004	4.424	3.77	
131	6/9/2004	1:36:56 PM		21.745	24.743	31.985	25.201	24.555		32.367	48.927	4.317	28.227	11.245	5.401		45.853	1.081	14.643	0.003		19.13	0.31889	47.5	11.2	30.3	2.089	0.161	0.133	0.004	4.390	3.74	
132	6/9/2004	1:37:06 PM		21.714	24.727	31.93	25.195	24.544		45.292	48.568	4.294	41.296	-1.215	-4.934		46.414	0.005	7.3	0.003		19.30	0.32167	47.1	11.4	43.3	2.985	1.088	0.899	0.021	20.775	17.68	
133	6/9/2004	1:37:16 PM		21.643	24.726	31.939	25.23	24.533		45.095	48.444	4.358	41.017	-1.218	-4.856		46.494	0.004	1.772	0.003		19.47	0.32444	47.0	11.4	43.1	2.969	0.264	0.218	0.005	5.070	4.31	
134	6/9/2004	1:37:26 PM		21.597	24.731	31.9	25.24	24.563		44.921	48.446	4.272	41.011	-1.218	-4.815		46.352	0.003	1.842	0.003		19.63	0.32722	47.0	11.4	43.0	2.962	0.275	0.227	0.005	5.286	4.50	
135	6/9/2004	1:37:36 PM		21.536	24.731	31.909	25.259	24.592		44.85	48.299	4.332	40.834	-1.215	-4.792		46.464	0.003	1.872	0.003		19.80	0.33	46.8	11.4	42.8	2.954	0.279	0.231	0.005	5.387	4.58	
136	6/9/2004	1:37:46 PM		21.505	24.72	31.873	25.268	24.572		44.664	48.533	4.307	40.697	-1.218	-4.781		46.587	0.004	1.893	0.003		19.97	0.33278	47.1	11.4	42.7	2.943	0.282	0.234	0.005	5.473	4.66	
137	6/9/2004	1:37:56 PM		21.459	24.729	31.863	25.298	24.601		44.388	48.168	4.296	40.422	-1.212	-4.769		46.537	0.003	1.907	0.003		20.13	0.33556	46.7	11.4	42.4	2.924	0.284	0.235	0.006	5.551	4.72	
138	6/9/2004	1:38:06 PM		21.464	24.729	31.853	25.308	24.616		43.009	46.488	4.177	39.176	-1.215	-4.844		45.717	0.003	1.857	0.003		20.30	0.33833	45.0	11.2	41.1	2.833	0.277	0.229	0.006	5.580	4.75	
139	6/9/2004	1:38:16 PM		21.434	24.723	31.832	25.317	24.66		41.974	45.368	4.116	38.137	-1.215	-4.89		45.227	0.003	1.807	0.003		20.47	0.34111	43.9	11.1	40.1	2.762	0.269	0.223	0.006	5.573	4.74	
140	6/9/2004	1:38:26 PM		21.397	24.722	31.806	25.331	24.664		42.169	45.229	4.096	38.374	-1.212	-4.899		45.146	0.003	1.771	0.003		20.63	0.34389	43.8	11.1	40.3	2.777	0.264	0.219	0.005	5.437	4.63	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	6/9/2004	1:38:36 PM		21.371	24.706	31.811	25.34	24.698		42.235	45.462	4.104	38.464	-1.215	-4.931		45.092	0.003	1.759	0.003		20.80	0.34667	44.0	11.1	40.3	2.782	0.262	0.217	0.005	5.389	4.59	
142	6/9/2004	1:38:46 PM		21.344	24.7	31.804	25.384	24.652		42.148	45.176	4.1	38.339	-1.215	-4.925		45.075	0.003	1.756	0.003		20.97	0.34944	43.7	11.0	40.2	2.775	0.262	0.217	0.005	5.394	4.59	
143	6/9/2004	1:38:56 PM		21.309	24.709	31.774	25.423	24.596		42.378	45.42	4.131	38.53	-1.212	-4.916		45.01	0.003	1.744	0.003		21.13	0.35222	44.0	11.0	40.5	2.789	0.260	0.216	0.005	5.334	4.54	
144	6/9/2004	1:39:06 PM		21.298	24.698	31.748	25.467	24.61		42.248	45.279	4.076	38.478	-1.218	-4.931		45.023	0.003	1.737	0.003		21.30	0.355	43.8	11.0	40.4	2.783	0.259	0.215	0.005	5.328	4.53	
145	6/9/2004	1:39:16 PM		21.276	24.712	31.796	25.541	24.609		42.347	45.553	4.103	38.495	-1.212	-4.954		45	0.003	1.725	0.003		21.47	0.35778	44.1	11.0	40.4	2.787	0.257	0.213	0.005	5.277	4.49	
146	6/9/2004	1:39:26 PM		21.26	24.711	31.766	25.555	24.598		42.453	45.547	4.057	38.677	-1.212	-4.937		45.002	0.003	1.722	0.003		21.63	0.36056	44.1	11.0	40.6	2.797	0.257	0.213	0.005	5.253	4.47	
147	6/9/2004	1:39:36 PM		21.219	24.706	31.691	25.545	24.602		42.519	45.994	4.107	38.696	-1.215	-4.951		45.085	0.003	1.709	0.003		21.80	0.36333	44.5	11.0	40.6	2.800	0.255	0.212	0.005	5.219	4.44	
148	6/9/2004	1:39:46 PM		21.184	24.711	31.696	25.575	24.638		42.401	45.225	4.053	38.648	-1.215	-4.966		45.019	0.003	1.701	0.003		21.97	0.36611	43.8	11.0	40.5	2.794	0.254	0.211	0.005	5.204	4.43	
149	6/9/2004	1:39:56 PM		21.168	24.699	31.685	25.588	24.636		42.49	45.238	4.11	38.675	-1.212	-4.963		45.037	0.003	1.699	0.003		22.13	0.36889	43.8	11.0	40.6	2.798	0.253	0.211	0.005	5.192	4.42	
150	6/9/2004	1:40:06 PM		21.158	24.709	31.66	25.588	24.661		42.604	45.464	4.087	38.804	-1.212	-4.963		44.912	0.003	1.695	0.003		22.30	0.37167	44.0	11.0	40.7	2.806	0.253	0.210	0.005	5.168	4.40	
151	6/9/2004	1:40:16 PM		21.117	24.693	31.639	25.583	24.7		42.341	45.302	4.032	38.608	-1.218	-4.968		44.946	0.003	1.684	0.003		22.47	0.37444	43.8	11.0	40.5	2.791	0.251	0.209	0.005	5.167	4.40	
152	6/9/2004	1:40:26 PM		21.097	24.709	31.644	25.613	24.745		42.526	45.358	4.083	38.737	-1.218	-4.971		44.86	0.003	1.683	0.003		22.63	0.37722	43.9	11.0	40.6	2.801	0.251	0.209	0.005	5.143	4.38	
153	6/9/2004	1:40:36 PM		21.066	24.698	31.589	25.602	24.755		42.637	45.745	4.097	38.829	-1.215	-4.974		44.917	0.003	1.678	0.003		22.80	0.38	44.3	11.0	40.7	2.808	0.250	0.209	0.005	5.123	4.36	
154	6/9/2004	1:40:46 PM		21.039	24.706	31.578	25.636	24.773		42.627	45.551	4.074	38.846	-1.218	-4.994		44.996	0.003	1.668	0.003		22.97	0.38278	44.1	11.0	40.7	2.809	0.249	0.207	0.005	5.093	4.33	
155	6/9/2004	1:40:56 PM		21.043	24.705	31.542	25.634	24.752		42.743	45.397	4.053	38.965	-1.215	-4.994		45.038	0.003	1.661	0.003		23.13	0.38556	43.9	11.0	40.9	2.817	0.248	0.207	0.005	5.062	4.31	
156	6/9/2004	1:41:06 PM		20.987	24.704	31.541	25.644	24.706		42.552	45.418	4.064	38.804	-1.215	-4.997		44.86	0.003	1.66	0.003		23.30	0.38833	43.9	11.0	40.7	2.805	0.247	0.207	0.005	5.081	4.32	
157	6/9/2004	1:41:16 PM		20.97	24.708	31.5	25.667	24.705		42.683	45.544	4.037	38.952	-1.215	-4.994		45.056	0.003	1.655	0.003		23.47	0.39111	44.1	11.0	40.8	2.814	0.247	0.206	0.005	5.054	4.30	
158	6/9/2004	1:41:26 PM		20.954	24.702	31.503	25.661	24.718		42.976	46.002	4.099	39.155	-1.218	-5.003		45.015	0.003	1.647	0.003		23.63	0.39389	44.5	11.0	41.1	2.831	0.246	0.205	0.005	4.999	4.25	
159	6/9/2004	1:41:36 PM		20.924	24.712	31.474	25.682	24.784		42.579	45.393	4.029	38.809	-1.218	-5.006		44.864	0.003	1.641	0.003		23.80	0.39667	43.9	11.0	40.7	2.806	0.245	0.205	0.005	5.030	4.28	
160	6/9/2004	1:41:46 PM		20.928	24.726	31.483	25.705	24.808		42.845	45.762	4.067	39.073	-1.215	-5.003		44.937	0.003	1.635	0.003		23.97	0.39944	44.3	11.0	41.0	2.824	0.244	0.204	0.005	4.978	4.24	
161	6/9/2004	1:41:56 PM		20.896	24.709	31.467	25.719	24.786		42.347	45.024	4.011	38.601	-1.212	-5.003		44.846	0.003	1.633	0.003		24.13	0.40222	43.6	11.0	40.5	2.791	0.243	0.204	0.005	5.034	4.28	
162	6/9/2004	1:42:06 PM		20.864	24.697	31.425	25.697	24.784		42.745	45.422	4.071	38.979	-1.212	-5.003		44.885	0.003	1.626	0.003		24.30	0.405	44.0	11.0	40.9	2.817	0.242	0.203	0.005	4.970	4.23	
163	6/9/2004	1:42:16 PM		20.844	24.712	31.435	25.722	24.839		42.834	45.814	4.103	39.001	-1.215	-5.006		44.825	0.003	1.621	0.003		24.47	0.40778	44.3	11.0	40.9	2.821	0.242	0.202	0.005	4.947	4.21	
164	6/9/2004	1:42:26 PM		20.829	24.727	31.415	25.737	24.869		43.032	45.66	4.091	39.248	-1.215	-5.009		44.892	0.003	1.618	0.003		24.63	0.41056	44.2	11.0	41.1	2.836	0.241	0.202	0.005	4.913	4.18	
165	6/9/2004	1:42:36 PM		20.808	24.727	31.389	25.736	24.878		42.722	45.447	4.055	38.928	-1.215	-5.012		44.837	0.003	1.612	0.003		24.80	0.41333	44.0	11.0	40.8	2.815	0.240	0.202	0.005	4.936	4.20	
166	6/9/2004	1:42:46 PM		20.829	24.722	31.39	25.757	24.899		43.289	46.075	4.126	39.457	-1.215	-5.012		44.881	0.003	1.609	0.003		24.97	0.41611	44.6	11.0	41.4	2.853	0.240	0.201	0.005	4.862	4.14	
167	6/9/2004	1:42:56 PM		20.797	24.736	31.359	25.765	24.858		41.447	43.994	3.955	37.75	-1.218	-5.023		44.36	0.003	1.582	0.003		25.13	0.41889	42.5	10.9	39.6	2.730	0.236	0.198	0.005	4.999	4.25	
168	6/9/2004	1:43:06 PM		20.796	24.73	31.358	25.785	24.812		32.384	33.666	4.718	27.864	-1.215	-5.191		50.901	0.003	1.083	0.003		25.30	0.42167	32.2	12.5	30.1	2.077	0.161	0.136	0.004	4.498	3.83	
169	6/9/2004	1:43:16 PM		20.781	24.72	31.299	25.725	24.772		32.925	34.358	4.444	28.63	-1.218	-5.174		46.792	0.003	1.125	0.003		25.47	0.42444	32.9	11.5	30.8	2.122	0.168	0.141	0.005	4.581	3.90	
170	6/9/2004	1:43:26 PM		20.755	24.735	31.258	25.724	24.706		32.108	33.108	4.389	27.928	-1.221	-5.182		46.226	0.003	1.084	0.003		25.63	0.42722	31.6	11.3	30.0	2.070	0.162	0.136	0.005	4.531	3.86	
171	6/9/2004	1:43:36 PM		20.755	24.72	31.248	25.714	24.686		31.65	32.754	4.335	27.468	-1.215	-5.191		45.953	0.003	1.041	0.003		25.80	0.43	31.3	11.3	29.6	2.038	0.155	0.131	0.004	4.420	3.76	
172	6/9/2004	1:43:46 PM		20.745	24.735	31.209	25.709	24.726		31.978	32.831	4.135	28.032	-1.215	-5.191		44.906	0.003	1.041	0.003		25.97	0.43278	31.4	11.0	30.0	2.069	0.155	0.131	0.004	4.359	3.71	
173	6/9/2004	1:43:56 PM		20.745	24.745	31.174	25.724	24.726		31.982	32.943	4.175	27.981	-1.212	-5.191		44.862	0.003	1.033	0.004		26.13	0.43556	31.5	11.0	30.0	2.067	0.154	0.130	0.004	4.333	3.69	
174	6/9/2004	1:44:06 PM		20.679	24.749	31.114	25.698	24.716		31.992	32.959	4.11	28.018	-1.215	-5.197		44.923	0.003	1.017	0.003		26.30	0.43833	31.5	11.0	30.0	2.069	0.152	0.128	0.004	4.269	3.63	
175	6/9/2004	1:44:16 PM		20.674	24.754	31.089	25.698	24.641		32.141	32.949	4.166	28.131	-1.212	-5.194		44.835	0.003	1.017	0.003		26.47	0.44111	31.5	11.0	30.1	2.078	0.152	0.128	0.004	4.253	3.62	
176	6/9/2004	1:44:26 PM		20.669	24.759	31.054	25.688	24.616		32.312	33.251	4.159	28.316	-1.215	-5.2		44.812	0.003	1.004	0.003		26.63	0.44389	31.8	11.0	30.3	2.090	0.150	0.127	0.004	4.178	3.56	
177	6/9/2004	1:44:36 PM		20.658	24.728	30.949	25.642	24.565		32.502	33.396	4.186	28.467	-1.218	-5.203		44.86	0.003	0.994	0.003		26.80	0.44667	31.9	11.0	30.5	2.102	0.148	0.126	0.004	4.125	3.51	
178	6/9/2004	1:44:46 PM		20.606	24.747	30.898	25.611	24.544		32.417	33.347	4.207	28.377	-1.215	-5.203		44.866	0.003	0.985	0.003		26.97	0.44944	31.9	11.0	30.4	2.096	0.147	0.125	0.004	4.105	3.49	
179	6/9/2004	1:44:56 PM		20.581	24.742	30.879	25.576	24.599		32.338	33.202	4.212	28.287	-1.215	-5.203		44.794	0.003	0.978	0.004		27.13	0.45222	31.7	11.0	30.3	2.090	0.146	0.124	0.004	4.090	3.48	
180	6/9/2004	1:45:06 PM		20.575	24.741	30.853	25.555	24.578		32.1	33.023	4.09	28.17	-1.215	-5.203		44.775	0.003	0.971	0.004		27.30	0.455	31.6	11.0	30.1	2.078	0.145	0.123	0.004	4.087	3.48	
181	6/9/2004	1:45:16 PM		20.535	24.741	30.803	25.535	24.643		32.519	33.475	4.157	28.519	-1.218	-5.205		44.825	0.003	0.964	0.004		27.47	0.45778	32.0	11.0	30.5	2.104	0.144	0.122	0.004	4.012	3.41	
182	6/9/2004	1:45:26 PM		20.48	24.746	30.759	25.535	24.708		32.284	33.065	4.143	28.258	-1.218	-5.205		44.712	0.003	0.955	0.005		27.63	0.46056	31.6	11.0	30.3	2.087	0.142	0.121	0.004	4.012	3.41	
183	6/9/2004	1:45:36 PM		20.444	24.746	30.724	25.545	24.683		32.34	33.212	4.173	28.279	-1.215	-5.208		44.762	0.003	0.952	0.004		27.80	0.46333	31.7	11.0	30.3	2.090	0.142	0.121	0.004	3.998	3.40	
184	6/9/2004	1:45:46 PM		20.444	24.746	30.684	25.565	24.713		32.341	33.046	4.236	28.227	-1.215	-5.208		44.988	0.003	0.941	0.005		27.97	0.46611	31.6	11.0	30.3	2.088	0.140	0.120	0.004	3.959	3.37	
185	6/9/2004	1:45:56 PM		20.434	24.776	30.689	25.62	24.658		32.299	33.266	4.151	28.299	-1.212	-5.208		44.939	0.003	0.934	0.005		28.13	0.46889	31.8	11.0	30.3	2.089	0.139	0.119	0.004	3.928	3.34	
186	6/9/2004	1:46:06 PM		20.404	24.761	30.595	25.63	24.668		32.314	33.162	4.178	28.275	-1.215	-5.205		44.952	0.003	0.936	0.005		28.30	0.47167	31.7	11.0	30.3	2.089	0.140	0.120	0.004	3.947	3.36	
187	6/9/2004	1:46:16 PM		20.368	24.761	30.535	25.65	24.627		32.314	32.926	4.168	28.313	-1.212	-5.208		44.921	0.003	0.923	0.005		28.47	0.47444	31.5	11.0	30.3	2.090	0.138	0.118	0.004	3.896	3.32	
188	6/9/2004	1:46:26 PM		20.311	24.744	30.583	25.663	24.616		32.488	33.133	4.184	28.459	-1.215	-5.208		44.852	0.003	0.927	0.004		28.63	0.47722	31.7	11.0	30.5	2.101	0.138	0.118	0.004	3.887	3.31	
189	6/9/2004	1:46:36 PM		20.301	24.754	30.548	25.658	24.621		32.444	33.272	4.157	28.432	-1.215	-5.211		44.906	0.003	0.922	0.005		28.80	0.48	31.8	11.0	30.4	2.099	0.137	0.118	0.004	3.874	3.30	
190	6/9/2004	1:46:46 PM		20.259	24.752	30.457	25.651	24.619		32.272	32.965	4.187	28.223	-1.215	-5.211		44.723	0.003	0.915	0.004		28.97	0.48278	31.5	11.0	30.2	2.085	0.136	0.117	0.004	3.879	3.30	
191	6/9/2004	1:46:56 PM		20.234	24.747	30.417	25.646	24.654		32.276	33.046	4.244	28.129	-1.215	-5.214		45.319	0.003	0.905	0.004		29.13	0.48556	31.6	11.1	30.2	2.082	0.135	0.116	0.004	3.846	3.27	
192	6/9/2004	1:47:06 PM		20.224	24.748	30.388	25.637	24.584		32.15	32.727	4.21	28.1	-1.218	-5.217		45.311	0.003	0.901	0.004		29.30	0.48833	31.3	11.1	30.1	2.077	0.134	0.116	0.004	3.842	3.27	
193	6/9/2004	1:47:16 PM		20.173	24.746	30.372	25.635	24.553		32.436	33.054	4.266	28.32	-1.215	-5.214		45.169	0.003	0.902	0.005		29.47	0.49111	31.6	11.1	30.4	2.094	0.134	0.116	0.004	3.816	3.25	
194	6/9/2004	1:47:26 PM		20.154	24.768	30.363	25.637	24.544		32.44	33.212	4.219	28.344	-1.215	-5.217		45.25	0.003	0.902	0.004		29.63	0.49389	31.7	11.1	30.4	2.095	0.134	0.116	0.004	3.815	3.25	
195	6/9/2004	1:47:36 PM		20.127	24.751	30.118	25.625	24.473		32.146	32.723	4.19	28.119	-1.212	-5.214		45.181	0.003	0.898	0.004		29.80	0.49667	31.3	11.1	30.1	2.078	0.134	0.116	0.004	3.856	3.28	
196	6/9/2004	1:47:46 PM		20.057	24.756	30.297	25.645	24.438		32.527	33.295	4.286	28.367	-1.215	-5.214		45.294	0.003	0.893	0.004		29.97	0.49944	31.8	11.1	30.4	2.099	0.133	0.115	0.004	3.777	3.21	
197	6/9/2004	1:47:56 PM		20.102	24.771	30.238	25.655	24.478		32.216	32.808	4.201	28.166	-1.212	-5.217		45.207	0.003	0.896	0.004		30.13	0.50222	31.3	11.1	30.2	2.082	0.134	0.116	0.004	3.828	3.26	
198	6/9/2004	1:48:06 PM		20.046	24.751	30.178	25.635	24.458		32.239	32.76	4.215	28.184	-1.215	-5.217		45.179	0.003	0.888	0.004		30.30	0.505	31.3	11.1	30.2	2.083	0.132	0.115	0.004	3.797	3.23	
199	6/9/2004	1:48:16 PM		19.93	24.746	30.093	25.62	24.472		32.49	33.071	4.26	28.363	-1.218	-5.223		45.179	0.003	0.887	0.006		30.47	0.50778	31.6	11.1	30.4	2.098	0.132	0.115	0.004	3.775	3.21	
200	6/9/2004	1:48:26 PM		19.935	24.751	30.088	25.66	24.462		32.324	33.052	4.24	28.211	-1.215	-5.214		45.159	0.003	0.889	0.005		30.63	0.51056	31.6	11.1	30.3	2.087	0.133	0.115	0.004	3.804	3.24	
201	6/9/2004	1:48:36 PM		19.914	24.74	30.018	25.624	24.426		32.537	33.169	4.19	28.537	-1.215	-5.22		45.196	0.003	0.882	0.004		30.80	0.51333	31.7	11.1	30.5	2.105	0.131	0.114	0.004	3.748	3.19	
202	6/9/2004	1:48:46 PM		19.919	24.74	29.958	25.659	24.457		32.123	32.567	4.209	28.055	-1.218	-5.22		45.173	0.003	0.878	0.004		30.97	0.51611	31.1	11.1	30.1	2.075	0.131	0.114	0.004	3.792	3.23	
203	6/9/2004	1:48:56 PM		19.884	24.751	29.929	25.675	24.472		32.444	32.916	4.255	28.346	-1.215	-5.214		45.138	0.003	0.881	0.004		31.13	0.51889	31.4	11.1	30.4	2.096	0.131	0.115	0.004	3.770	3.21	
204	6/9/2004	1:49:06 PM		19.808	24.75	29.893	25.674	24.462		40.634	41.64	5.113	35.667	-1.212	-5.2		48.99	0.003	0.969	0.005		31.30	0.52167	40.2	12.0	38.2	2.630	0.144	0.126	0.003	3.307	2.81	
205	6/9/2004	1:49:16 PM		19.712	24.745	29.864	25.664	24.441		44.411	46.007	5.624	39.038	-1.215	-5.119		53.502	0.003	1.278	0.003		31.47	0.52444	44.5	13.1	41.7	2.877	0.191	0.167	0.004	3.991	3.40	
206	6/9/2004	1:49:26 PM		19.687	24.74	29.958	25.689	24.436		43.73	45.503	5.57	38.406	-1.212	-5.101		53.312	0.003	1.322	0.005		31.63	0.52722	44.0	13.1	41.1	2.831	0.197	0.172	0.004	4.184	3.56	
207	6/9/2004	1:49:36 PM		19.683	24.751	30.043	25.705	24.442		43.239	45.059	5.553	37.879	-1.215	-5.101		52.993	0.003	1.316	0.004		31.80	0.53	43.6	13.0	40.6	2.796	0.196	0.171	0.004	4.207	3.58	
208	6/9/2004	1:49:46 PM		19.637	24.74	30.013	25.689	24.447		41.65	43.179	5.306	36.578	-1.218	-5.104		51.902	0.003	1.305	0.004		31.97	0.53278	41.7	12.7	39.1	2.697	0.195	0.169	0.004	4.330	3.68	
209	6/9/2004	1:49:56 PM		19.57	24.734	30.062	25.678	24.506		42.582	44.218	4.927	37.86	-1.215	-5.101		49.524	0.003	1.325	0.004		32.13	0.53556	42.7	12.1	40.2	2.773	0.198	0.172	0.004	4.269	3.63	
210	6/9/2004	1:50:06 PM		19.539	24.739	30.036	25.678	24.535		42.449	44.002	4.879	37.719	-1.215	-5.096		48.519	0.003	1.346	0.005		32.30	0.53833	42.5	11.9	40.1	2.764	0.201	0.175	0.004	4.355	3.71	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	6/9/2004	1:50:16 PM		19.51	24.729	30.027	25.688	24.556		42.185	43.882	4.976	37.454	-1.215	-5.096		50.017	0.003	1.331	0.003		32.47	0.54111	42.4	12.3	39.8	2.745	0.198	0.173	0.004	4.336	3.69	
212	6/9/2004	1:50:26 PM		19.499	24.744	29.967	25.688	24.515		42.355	44.234	4.987	37.581	-1.215	-5.093		50.004	0.003	1.336	0.004		32.63	0.54389	42.8	12.3	40.0	2.756	0.199	0.174	0.004	4.343	3.70	
213	6/9/2004	1:50:36 PM		19.484	24.739	29.937	25.683	24.555		42.428	44.398	5.047	37.596	-1.215	-5.096		50.025	0.003	1.34	0.005		32.80	0.54667	42.9	12.3	40.0	2.759	0.200	0.174	0.004	4.355	3.71	
214	6/9/2004	1:50:46 PM		19.474	24.739	29.967	25.713	24.51		42.333	43.907	4.944	37.639	-1.218	-5.09		49.699	0.003	1.351	0.005		32.97	0.54944	42.4	12.2	40.0	2.757	0.201	0.176	0.004	4.390	3.74	
215	6/9/2004	1:50:56 PM		19.468	24.738	29.966	25.722	24.534		42.474	44.423	4.945	37.778	-1.218	-5.09		49.576	0.003	1.354	0.003		33.13	0.55222	43.0	12.1	40.1	2.767	0.202	0.176	0.004	4.385	3.73	
216	6/9/2004	1:51:06 PM		19.402	24.727	29.965	25.711	24.519		42.096	43.832	4.926	37.351	-1.218	-5.09		49.541	0.003	1.355	0.005		33.30	0.555	42.4	12.1	39.7	2.739	0.202	0.176	0.004	4.432	3.77	
217	6/9/2004	1:51:16 PM		19.442	24.727	29.916	25.731	24.524		42.14	43.87	4.953	37.409	-1.215	-5.084		50.067	0.003	1.36	0.005		33.47	0.55778	42.4	12.3	39.8	2.742	0.203	0.177	0.004	4.449	3.79	
218	6/9/2004	1:51:26 PM		19.416	24.726	29.82	25.726	24.468		42.459	44.324	4.906	37.799	-1.215	-5.087		49.553	0.003	1.359	0.005		33.63	0.56056	42.9	12.1	40.1	2.767	0.203	0.177	0.004	4.418	3.76	
219	6/9/2004	1:51:36 PM		19.386	24.726	29.9	25.731	24.438		42.248	43.834	4.879	37.631	-1.215	-5.084		49.566	0.003	1.361	0.005		33.80	0.56333	42.4	12.1	39.9	2.754	0.203	0.177	0.004	4.436	3.77	
220	6/9/2004	1:51:46 PM		19.361	24.721	29.82	25.716	24.448		42.358	44.212	4.948	37.637	-1.218	-5.084		49.756	0.003	1.364	0.005		33.97	0.56611	42.7	12.2	40.0	2.758	0.203	0.178	0.004	4.449	3.79	
221	6/9/2004	1:51:56 PM		19.39	24.726	29.874	25.69	24.512		42.443	44.27	5.007	37.69	-1.215	-5.081		49.451	0.003	1.366	0.005		34.13	0.56889	42.8	12.1	40.1	2.762	0.204	0.178	0.004	4.441	3.78	
222	6/9/2004	1:52:06 PM		19.355	24.716	29.75	25.635	24.482		42.102	43.843	4.897	37.454	-1.218	-5.087		49.485	0.003	1.364	0.005		34.30	0.57167	42.4	12.1	39.8	2.743	0.203	0.178	0.004	4.482	3.81	
223	6/9/2004	1:52:16 PM		19.345	24.731	29.864	25.66	24.532		42.378	44.255	4.926	37.698	-1.215	-5.081		49.505	0.003	1.359	0.005		34.47	0.57444	42.8	12.1	40.0	2.760	0.203	0.177	0.004	4.423	3.76	
224	6/9/2004	1:52:26 PM		19.33	24.731	29.85	25.66	24.722		42.289	44.002	4.945	37.569	-1.215	-5.081		49.583	0.003	1.36	0.004		34.63	0.57722	42.5	12.2	39.9	2.753	0.203	0.177	0.004	4.440	3.78	
225	6/9/2004	1:52:36 PM		19.314	24.725	29.834	25.639	24.712		42.434	44.158	4.909	37.744	-1.215	-5.081		49.443	0.003	1.362	0.005		34.80	0.58	42.7	12.1	40.1	2.764	0.203	0.178	0.004	4.430	3.77	
226	6/9/2004	1:52:46 PM		19.309	24.725	29.744	25.644	24.712		42.416	44.38	4.951	37.67	-1.212	-5.078		49.551	0.003	1.36	0.005		34.97	0.58278	42.9	12.1	40.0	2.761	0.203	0.178	0.004	4.440	3.78	
227	6/9/2004	1:52:56 PM		19.293	24.719	29.813	25.639	24.671		41.949	43.706	4.905	37.263	-1.215	-5.078		49.407	0.003	1.363	0.005		35.13	0.58556	42.2	12.1	39.6	2.731	0.203	0.178	0.004	4.490	3.82	
228	6/9/2004	1:53:06 PM		19.282	24.723	29.757	25.642	24.68		42.519	44.342	4.931	37.824	-1.212	-5.075		49.441	0.003	1.365	0.005		35.30	0.58833	42.9	12.1	40.2	2.770	0.204	0.178	0.004	4.440	3.78	
229	6/9/2004	1:53:16 PM		19.28	24.712	29.766	25.636	24.403		42.581	44.519	4.972	37.865	-1.215	-5.081		49.443	0.003	1.365	0.004		35.47	0.59111	43.0	12.1	40.2	2.773	0.204	0.178	0.004	4.434	3.77	
230	6/9/2004	1:53:26 PM		19.265	24.717	29.756	25.646	24.398		42.308	44.054	4.929	37.598	-1.215	-5.081		49.474	0.003	1.363	0.004		35.63	0.59389	42.6	12.1	40.0	2.755	0.203	0.178	0.004	4.458	3.79	
231	6/9/2004	1:53:36 PM		19.235	24.707	29.726	25.626	24.348		42.358	44.272	4.901	37.713	-1.218	-5.081		49.426	0.003	1.362	0.005		35.80	0.59667	42.8	12.1	40.0	2.760	0.203	0.178	0.004	4.449	3.79	
232	6/9/2004	1:53:46 PM		19.223	24.7	29.675	25.639	24.307		42.214	44.135	4.993	37.444	-1.212	-5.078		49.412	0.003	1.364	0.004		35.97	0.59944	42.7	12.1	39.8	2.746	0.203	0.179	0.004	4.485	3.82	
233	6/9/2004	1:53:56 PM		19.243	24.71	29.715	25.639	24.377		42.586	44.319	4.892	37.979	-1.215	-5.078		49.33	0.003	1.361	0.005		36.13	0.60222	42.8	12.1	40.3	2.777	0.203	0.178	0.004	4.420	3.76	
234	6/9/2004	1:54:06 PM		19.243	24.71	29.789	25.584	24.427		42.569	44.662	4.904	37.877	-1.212	-5.075		49.334	0.003	1.363	0.006		36.30	0.605	43.2	12.1	40.2	2.773	0.203	0.178	0.004	4.424	3.77	
235	6/9/2004	1:54:16 PM		19.233	24.72	29.834	25.539	24.462		42.343	44.235	4.904	37.663	-1.212	-5.075		49.414	0.003	1.36	0.005		36.47	0.60778	42.8	12.1	40.0	2.758	0.203	0.177	0.004	4.433	3.77	
236	6/9/2004	1:54:26 PM		19.218	24.705	29.829	25.529	24.462		42.075	43.712	4.859	37.429	-1.215	-5.075		49.288	0.003	1.356	0.004		36.63	0.61056	42.2	12.1	39.8	2.741	0.202	0.177	0.004	4.449	3.79	
237	6/9/2004	1:54:36 PM		19.202	24.699	29.754	25.529	24.421		42.337	44.284	4.89	37.655	-1.218	-5.084		49.37	0.003	1.357	0.005		36.80	0.61333	42.8	12.1	40.0	2.758	0.202	0.177	0.004	4.434	3.77	
238	6/9/2004	1:54:46 PM		19.207	24.709	29.843	25.554	24.426		42.749	44.587	4.908	38.082	-1.212	-5.075		49.341	0.003	1.359	0.003		36.97	0.61611	43.1	12.1	40.4	2.787	0.203	0.177	0.004	4.384	3.73	
239	6/9/2004	1:54:56 PM		19.166	24.704	29.818	25.538	24.435		42.451	44.363	4.843	37.828	-1.215	-5.075		48.938	0.003	1.361	0.004		37.13	0.61889	42.9	12.0	40.1	2.767	0.203	0.178	0.004	4.424	3.76	
240	6/9/2004	1:55:06 PM		19.156	24.698	29.847	25.507	24.445		42.378	44.185	4.839	37.756	-1.212	-5.075		48.865	0.003	1.36	0.005		37.30	0.62167	42.7	12.0	40.1	2.762	0.203	0.177	0.004	4.425	3.77	
241	6/9/2004	1:55:16 PM		19.176	24.713	29.862	25.522	24.47		42.621	44.55	4.842	38.008	-1.212	-5.07		48.8	0.003	1.364	0.005		37.47	0.62444	43.1	12.0	40.3	2.780	0.203	0.178	0.004	4.409	3.75	
242	6/9/2004	1:55:26 PM		19.16	24.692	29.831	25.451	24.504		42.364	44.257	4.748	37.842	-1.218	-5.072		48.752	0.003	1.365	0.003		37.63	0.62722	42.8	11.9	40.1	2.765	0.204	0.178	0.004	4.439	3.78	
243	6/9/2004	1:55:36 PM		19.149	24.687	29.816	25.441	24.528		42.594	44.541	4.787	38.035	-1.218	-5.075		48.75	0.003	1.359	0.004		37.80	0.63	43.1	11.9	40.3	2.780	0.203	0.177	0.004	4.398	3.74	
244	6/9/2004	1:55:46 PM		19.114	24.687	29.771	25.436	24.894		42.596	44.473	4.779	38.057	-1.218	-5.075		48.713	0.003	1.359	0.006		37.97	0.63278	43.0	11.9	40.3	2.780	0.203	0.178	0.004	4.402	3.75	
245	6/9/2004	1:55:56 PM		19.134	24.682	29.806	25.456	24.734		42.438	44.291	4.77	37.885	-1.215	-5.075		48.717	0.003	1.359	0.004		38.13	0.63556	42.8	11.9	40.2	2.769	0.203	0.177	0.004	4.416	3.76	
246	6/9/2004	1:56:06 PM		19.113	24.686	29.775	25.475	24.608		42.631	44.405	4.773	38.068	-1.215	-5.072		48.661	0.003	1.358	0.005		38.30	0.63833	42.9	11.9	40.3	2.782	0.202	0.177	0.004	4.396	3.74	
247	6/9/2004	1:56:16 PM		19.118	24.691	29.795	25.47	24.583		42.629	44.438	4.785	38.045	-1.215	-5.07		48.769	0.003	1.356	0.004		38.47	0.64111	43.0	12.0	40.3	2.781	0.202	0.177	0.004	4.388	3.73	
248	6/9/2004	1:56:26 PM		19.092	24.69	29.804	25.444	24.632		42.511	44.288	4.777	37.914	-1.215	-5.075		48.75	0.003	1.354	0.005		38.63	0.64389	42.8	11.9	40.2	2.773	0.202	0.177	0.004	4.394	3.74	
249	6/9/2004	1:56:36 PM		19.076	24.69	29.709	25.489	24.501		42.76	44.662	4.781	38.218	-1.215	-5.072		48.504	0.003	1.357	0.005		38.80	0.64667	43.2	11.9	40.5	2.792	0.202	0.178	0.004	4.385	3.73	
250	6/9/2004	1:56:46 PM		19.112	24.69	29.794	25.519	24.441		42.61	44.235	4.74	38.068	-1.215	-5.07		48.429	0.003	1.357	0.005		38.97	0.64944	42.8	11.9	40.3	2.781	0.202	0.177	0.004	4.392	3.74	
251	6/9/2004	1:56:56 PM		19.092	24.695	29.784	25.489	24.501		42.552	44.299	4.687	38.072	-1.215	-5.072		48.268	0.003	1.354	0.005		39.13	0.65222	42.8	11.8	40.3	2.779	0.202	0.177	0.004	4.386	3.73	
252	6/9/2004	1:57:06 PM		19.096	24.694	30.414	25.488	24.506		42.922	44.999	4.704	38.421	-1.215	-5.07		48.175	0.003	1.362	0.005		39.30	0.655	43.5	11.8	40.7	2.804	0.203	0.175	0.004	4.299	3.66	
253	6/9/2004	1:57:16 PM		19.101	24.699	32.422	25.498	24.486		43.463	45.493	4.838	38.872	-1.215	-5.061		48.546	0.003	1.397	0.005		39.47	0.65778	44.0	11.9	41.2	2.838	0.208	0.170	0.004	4.126	3.51	
254	6/9/2004	1:57:26 PM		19.258	24.69	32.423	25.499	24.516		43.598	45.756	4.882	38.993	-1.215	-5.046		48.498	0.003	1.441	0.005		39.63	0.66056	44.3	11.9	41.3	2.847	0.215	0.175	0.004	4.243	3.61	
255	6/9/2004	1:57:36 PM		19.611	24.694	32.957	25.508	24.506		43.631	45.787	4.936	38.96	-1.215	-5.035		48.6	0.003	1.479	0.004		39.80	0.66333	44.3	11.9	41.3	2.847	0.221	0.177	0.004	4.293	3.65	
256	6/9/2004	1:57:46 PM		20.044	24.699	33.965	25.528	24.581		43.747	46.172	4.943	39.026	-1.215	-5.018		48.563	0.003	1.52	0.004		39.97	0.66611	44.7	11.9	41.4	2.853	0.227	0.177	0.004	4.286	3.65	
257	6/9/2004	1:57:56 PM		20.467	24.693	33.628	25.537	24.62		42.455	44.825	4.851	37.924	-1.215	-5.009		48.095	0.003	1.545	0.005		40.13	0.66889	43.4	11.8	40.2	2.771	0.230	0.182	0.005	4.526	3.85	
258	6/9/2004	1:58:06 PM		20.85	24.693	32.911	25.527	24.59		33.041	34.592	3.735	29.493	-1.218	-5.116		41.437	0.003	1.212	0.004		40.30	0.67167	33.1	10.2	31.3	2.156	0.181	0.145	0.005	4.652	3.96	
259	6/9/2004	1:58:16 PM		21.076	24.708	32.649	25.532	24.54		43.774	46.429	4.815	39.231	-1.218	-5.006		47.678	0.003	1.547	0.003		40.47	0.67444	45.0	11.7	41.5	2.861	0.231	0.187	0.005	4.505	3.83	
260	6/9/2004	1:58:26 PM		21.18	24.692	32.593	25.511	24.489		43.533	45.837	4.896	38.997	-1.218	-5		48.469	0.003	1.567	0.005		40.63	0.67722	44.4	11.9	41.3	2.845	0.234	0.190	0.005	4.596	3.91	
261	6/9/2004	1:58:36 PM		21.257	24.698	32.525	25.512	24.479		43.488	46.038	4.886	38.903	-1.212	-4.992		48.608	0.003	1.583	0.004		40.80	0.68	44.6	11.9	41.2	2.840	0.236	0.192	0.005	4.660	3.97	
262	6/9/2004	1:58:46 PM		21.302	24.693	32.921	25.472	24.464		42.038	44.429	4.679	37.659	-1.212	-5.003		47.351	0.003	1.552	0.004		40.97	0.68278	43.0	11.6	39.8	2.747	0.231	0.186	0.005	4.673	3.98	
263	6/9/2004	1:58:56 PM		21.362	24.698	32.743	25.477	24.464		43.32	45.928	4.876	38.786	-1.212	-4.98		48.496	0.003	1.615	0.004		41.13	0.68556	44.5	11.9	41.1	2.830	0.241	0.195	0.005	4.743	4.04	
264	6/9/2004	1:59:06 PM		21.443	24.698	32.649	25.477	24.49		43.023	45.594	4.879	38.495	-1.215	-4.977		48.581	0.003	1.623	0.005		41.30	0.68833	44.1	11.9	40.8	2.810	0.242	0.196	0.005	4.812	4.10	
265	6/9/2004	1:59:16 PM		21.494	24.703	32.605	25.457	24.505		32.005	33.498	3.63	28.673	-1.215	-5.09		41.725	0.003	1.318	0.004		41.47	0.69111	32.0	10.2	30.3	2.092	0.197	0.159	0.005	5.257	4.47	
266	6/9/2004	1:59:26 PM		21.504	24.698	32.516	25.457	24.55		38.832	40.406	4.039	35.028	-1.215	-5.13		41.565	0.003	1.111	0.005		41.63	0.69389	38.9	10.2	36.9	2.546	0.166	0.135	0.004	3.649	3.11	
267	6/9/2004	1:59:36 PM		21.524	24.698	32.471	25.487	24.565		43.399	45.793	4.807	39.004	-1.215	-4.977		48.077	0.003	1.618	0.005		41.80	0.69667	44.3	11.8	41.2	2.841	0.241	0.196	0.005	4.769	4.06	
268	6/9/2004	1:59:46 PM		21.534	24.703	32.412	25.502	24.55		43.647	46.168	4.893	39.151	-1.215	-4.974		48.529	0.003	1.629	0.005		41.97	0.69944	44.7	11.9	41.4	2.854	0.243	0.198	0.005	4.786	4.07	
269	6/9/2004	1:59:56 PM		21.517	24.702	32.331	25.506	24.554		43.405	46.148	4.901	38.872	-1.212	-4.966		47.63	0.003	1.648	0.004		42.13	0.70222	44.7	11.7	41.1	2.836	0.246	0.201	0.005	4.883	4.16	
270	6/9/2004	2:00:06 PM		21.508	24.703	32.381	25.517	24.564		43.552	46.342	4.944	38.985	-1.215	-4.968		48.586	0.003	1.639	0.004		42.30	0.705	44.9	11.9	41.3	2.845	0.244	0.200	0.005	4.835	4.11	
271	6/9/2004	2:00:16 PM		21.477	24.681	32.306	25.52	24.553		43.177	46.003	4.871	38.679	-1.218	-4.966		48.588	0.003	1.65	0.004		42.47	0.70778	44.5	11.9	40.9	2.822	0.246	0.201	0.005	4.917	4.18	
272	6/9/2004	2:00:26 PM		21.462	24.697	32.197	25.536	24.519		43.133	45.922	4.889	38.577	-1.215	-4.963		48.598	0.003	1.657	0.004		42.63	0.71056	44.5	11.9	40.9	2.817	0.247	0.203	0.005	4.961	4.22	
273	6/9/2004	2:00:36 PM		21.437	24.682	32.098	25.496	24.509		43.276	45.866	4.917	38.768	-1.215	-4.963		48.544	0.003	1.659	0.005		42.80	0.71333	44.4	11.9	41.0	2.828	0.247	0.203	0.005	4.960	4.22	
274	6/9/2004	2:00:46 PM		21.431	24.691	32.068	25.515	24.483		43.32	46.239	4.938	38.726	-1.215	-4.957		48.619	0.003	1.663	0.006		42.97	0.71611	44.8	11.9	41.0	2.828	0.248	0.204	0.005	4.976	4.23	
275	6/9/2004	2:00:56 PM		21.39	24.696	32.052	25.5	24.497		43.038	45.733	4.926	38.476	-1.215	-4.957		48.677	0.003	1.67	0.004		43.13	0.71889	44.3	11.9	40.8	2.810	0.249	0.205	0.005	5.032	4.28	
276	6/9/2004	2:01:06 PM		21.349	24.674	32.051	25.483	24.466		43.123	45.955	4.943	38.503	-1.218	-4.957		48.634	0.003	1.67	0.004		43.30	0.72167	44.5	11.9	40.8	2.814	0.249	0.205	0.005	5.025	4.28	
277	6/9/2004	2:01:16 PM		21.354	24.675	32.007	25.514	24.502		43.139	45.766	4.909	38.599	-1.215	-4.957		48.552	0.003	1.668	0.005		43.47	0.72444	44.3	11.9	40.9	2.818	0.249	0.205	0.005	5.018	4.27	
278	6/9/2004	2:01:26 PM		21.329	24.689	32.145	25.523	24.536		43.034	45.961	4.916	38.458	-1.215	-4.954		48.65	0.003	1.672	0.004		43.63	0.72722	44.5	11.9	40.7	2.809	0.249	0.205	0.005	5.027	4.28	
279	6/9/2004	2:01:36 PM		21.293	24.689	32.091	25.553	24.581		43.245	46.025	4.878	38.765	-1.215	-4.954		48.623	0.003	1.671	0.005		43.80	0.73	44.6	11.9	41.0	2.827	0.249	0.205	0.005	4.999	4.25	
280	6/9/2004	2:01:46 PM		21.288	24.699	32.035	25.583	24.64		43.318	46.239	4.902	38.796	-1.212	-4.954		48.579	0.003	1.671	0.005		43.97	0.73278	44.8	11.9	41.1	2.831	0.249	0.205	0.005	5.001	4.26	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	6/9/2004	2:01:56 PM		21.242	24.683	31.971	25.578	24.62		42.816	45.607	4.815	38.382	-1.218	-4.954		48.513	0.003	1.665	0.005		44.13	0.73556	44.1	11.9	40.6	2.799	0.248	0.205	0.005	5.047	4.30	
282	6/9/2004	2:02:06 PM		21.222	24.698	31.911	25.572	24.545		35.895	46.204	4.87	31.222	4.37	1.186		48.333	0.831	-0.01	0.003		44.30	0.73833	44.7	11.8	33.6	2.314	-0.001	-0.001	0.000	-0.037	-0.03	
283	6/9/2004	2:02:16 PM		21.216	24.682	31.955	25.591	24.549		29.993	46.286	4.903	25.344	11.164	5.248		47.878	1.072	-0.012	0.003		44.47	0.74111	44.8	11.7	27.7	1.908	-0.002	-0.001	0.000	-0.053	-0.05	
284	6/9/2004	2:02:26 PM		21.191	24.687	31.989	25.596	24.519		29.835	45.967	4.944	25.114	11.04	5.15		47.968	1.067	-0.012	0.003		44.63	0.74389	44.5	11.8	27.5	1.894	-0.002	-0.001	0.000	-0.054	-0.05	
285	6/9/2004	2:02:36 PM		21.19	24.686	31.934	25.641	24.518		30.289	46.4	4.924	25.619	10.747	4.988		47.962	1.059	-0.012	0.003		44.80	0.74667	44.9	11.8	28.0	1.927	-0.002	-0.001	0.000	-0.053	-0.05	
286	6/9/2004	2:02:46 PM		21.189	24.681	31.889	25.645	24.673		3.414	46.479	4.858	-1.267	38.161	26.715		47.05	0.004	-0.011	0.003		44.97	0.74944	45.0	11.5	1.1	0.074	-0.002	-0.001	-0.001	-1.264	-1.08	
287	6/9/2004	2:02:56 PM		21.219	24.69	31.829	25.629	24.557		3.246	46.506	4.847	-1.464	38.3	18.635		47.052	0.004	-0.013	0.003		45.13	0.75222	45.0	11.5	0.9	0.061	-0.002	-0.002	-0.002	-1.803	-1.53	
288	6/9/2004	2:03:06 PM		21.253	24.684	31.784	25.619	24.656		3.196	46.454	4.836	-1.489	38.294	18.508		47.163	0.003	-0.013	0.003		45.30	0.755	45.0	11.6	0.9	0.059	-0.002	-0.002	-0.002	-1.884	-1.60	
289	6/9/2004	2:03:16 PM		21.303	24.669	31.748	25.618	24.55		3.26	46.49	4.881	-1.448	38.303	18.419		46.986	0.003	-0.013	0.003		45.47	0.75778	45.0	11.5	0.9	0.062	-0.002	-0.002	-0.002	-1.777	-1.51	
290	6/9/2004	2:03:26 PM		21.358	24.689	31.743	25.598	24.465		3.047	46.125	4.828	-1.622	38.401	18.41		46.99	0.003	-0.009	0.003		45.63	0.76056	44.7	11.5	0.7	0.049	-0.001	-0.001	-0.002	-1.564	-1.33	
291	6/9/2004	2:03:36 PM		21.429	24.704	31.739	25.604	24.421		3.32	46.384	4.825	-1.341	38.213	18.442		47.105	0.003	-0.013	0.003		45.80	0.76333	44.9	11.5	1.0	0.068	-0.002	-0.002	-0.002	-1.627	-1.38	
292	6/9/2004	2:03:46 PM		21.509	24.709	31.803	25.613	24.41		3.08	46.257	4.828	-1.577	38.3	18.482		46.896	0.003	-0.012	0.003		45.97	0.76611	44.8	11.5	0.8	0.052	-0.002	-0.001	-0.002	-1.974	-1.68	
293	6/9/2004	2:03:56 PM		21.57	24.694	31.719	25.589	24.421		3.237	46.533	4.816	-1.407	38.303	18.505		47.034	0.003	-0.013	0.003		46.13	0.76889	45.1	11.5	0.9	0.063	-0.002	-0.002	-0.002	-1.761	-1.50	
294	6/9/2004	2:04:06 PM		21.621	24.699	31.714	25.543	24.436		3.474	46.829	4.866	-1.245	38.236	18.511		47.073	0.003	-0.013	0.003		46.30	0.77167	45.4	11.5	1.1	0.077	-0.002	-0.002	-0.001	-1.446	-1.23	
295	6/9/2004	2:04:16 PM		21.682	24.7	31.685	25.529	24.442		3.215	46.5	4.838	-1.51	38.3	18.459		47.036	0.003	-0.011	0.003		46.47	0.77444	45.0	11.5	0.9	0.059	-0.002	-0.001	-0.002	-1.600	-1.36	
296	6/9/2004	2:04:26 PM		21.722	24.715	31.72	25.534	24.472		3.281	46.523	4.864	-1.45	38.236	20.83		46.984	0.003	-0.011	0.003		46.63	0.77722	45.1	11.5	0.9	0.063	-0.002	-0.001	-0.001	-1.489	-1.27	
297	6/9/2004	2:04:36 PM		21.751	24.694	31.66	25.498	24.446		3.161	46.133	4.806	-1.503	38.19	20.971		46.994	0.003	-0.013	0.003		46.80	0.78	44.7	11.5	0.8	0.057	-0.002	-0.002	-0.002	-1.946	-1.66	
298	6/9/2004	2:04:46 PM		21.792	24.7	31.631	25.484	24.462		3.434	46.483	4.803	-1.146	38.178	20.5		47.017	0.003	-0.013	0.003		46.97	0.78278	45.0	11.5	1.1	0.079	-0.002	-0.002	-0.001	-1.411	-1.20	
299	6/9/2004	2:04:56 PM		21.822	24.699	31.65	25.458	24.456		3.627	46.742	4.846	-1.017	38.187	20.416		47.013	0.003	-0.013	0.003		47.13	0.78556	45.3	11.5	1.3	0.090	-0.002	-0.002	-0.001	-1.237	-1.05	
300	6/9/2004	2:05:06 PM		21.861	24.694	31.595	25.443	24.49		3.144	46.191	4.797	-1.491	38.184	20.786		47.136	0.003	-0.013	0.003		47.30	0.78833	44.7	11.6	0.8	0.057	-0.002	-0.002	-0.002	-1.956	-1.66	
301	6/9/2004	2:05:16 PM		21.901	24.704	31.585	25.463	24.525		3.329	46.539	4.836	-1.384	38.216	66.913		47.027	0.003	-0.013	0.003		47.47	0.79111	45.1	11.5	1.0	0.067	-0.002	-0.002	-0.002	-1.662	-1.41	
302	6/9/2004	2:05:26 PM		21.926	24.693	31.599	25.452	24.53		3.322	46.388	4.853	-1.356	38.23	86.38		46.998	0.003	14.643	0.003		47.63	0.79389	44.9	11.5	1.0	0.068	2.183	1.820	1.852	######	######	
303	6/9/2004	2:05:36 PM		21.972	24.694	31.605	25.438	24.58		3.524	46.861	4.872	-1.157	38.227	86.273		46.952	0.003	14.643	0.003		47.80	0.79667	45.4	11.5	1.2	0.082	2.183	1.820	1.538	######	######	
304	6/9/2004	2:05:46 PM		22.945	24.687	31.568	25.431	24.539		-3.746	46.836	4.831	-8.45	45.974	47.313		45.968	0.003	14.643	1.148		47.97	0.79944	45.4	11.3	-6.1	-0.420	2.183	1.822	-0.299	######	-254.25	
305	6/9/2004	2:05:56 PM		22.894	24.697	31.538	25.431	24.603		3.171	46.077	4.763	-1.417	38.091	43.107		46.961	0.003	14.643	0.006		48.13	0.80222	44.6	11.5	0.9	0.060	2.183	1.823	2.079	######	######	
306	6/9/2004	2:06:06 PM		22.316	24.691	31.527	25.415	24.563		20.608	46.467	4.983	16.08	20.278	0.64		48.437	1.205	14.643	0.003		48.30	0.805	45.0	11.9	18.3	1.265	2.183	1.824	0.099	99.426	84.61	
307	6/9/2004	2:06:16 PM		21.441	24.706	31.532	25.435	24.543		20.024	45.777	4.874	15.623	20.376	0.703		48.56	1.205	14.643	0.003		48.47	0.80778	44.3	11.9	17.8	1.229	2.183	1.824	0.102	102.315	87.07	
308	6/9/2004	2:06:26 PM		21.029	24.686	31.458	25.4	24.513		32.436	44.987	4.885	28.849	6.338	1.299		49.887	0.391	4.655	0.003		48.63	0.81056	43.5	12.2	30.6	2.113	0.694	0.581	0.019	18.957	16.13	
309	6/9/2004	2:06:36 PM		20.793	24.707	31.469	25.421	24.523		32.465	45.403	4.938	28.841	6.709	1.296		49.86	0.004	3.562	0.003		48.80	0.81333	43.9	12.2	30.7	2.113	0.531	0.444	0.014	14.496	12.34	
310	6/9/2004	2:06:46 PM		20.631	24.707	31.444	25.426	24.553		32.367	45.153	4.941	28.822	6.683	1.302		50.183	0.004	3.536	0.003		48.97	0.81611	43.7	12.3	30.6	2.109	0.527	0.441	0.014	14.428	12.28	
311	6/9/2004	2:06:56 PM		20.572	24.717	31.504	25.491	24.579		32.647	45.296	4.914	29.095	6.399	1.299		49.925	0.004	3.503	0.003		49.13	0.81889	43.8	12.2	30.9	2.128	0.522	0.437	0.014	14.142	12.04	
312	6/9/2004	2:07:06 PM		20.522	24.718	31.44	25.517	24.585		33.149	45.631	4.947	29.481	6.222	1.296		49.827	0.003	3.472	0.003		49.30	0.82167	44.2	12.2	31.3	2.159	0.518	0.433	0.014	13.842	11.78	
313	6/9/2004	2:07:16 PM		20.472	24.709	31.381	25.538	24.625		32.965	45.192	4.933	29.301	5.976	1.29		49.812	0.003	3.439	0.003		49.47	0.82444	43.7	12.2	31.1	2.147	0.513	0.430	0.014	13.813	11.75	
314	6/9/2004	2:07:26 PM		20.468	24.724	31.442	25.584	24.631		34.176	46.156	4.564	30.979	5.704	1.279		49.747	0.003	3.396	0.003		49.63	0.82722	44.7	12.2	32.6	2.246	0.506	0.424	0.013	13.014	11.08	
315	6/9/2004	2:07:36 PM		20.413	24.719	31.362	25.589	24.626		35.016	48.421	3.526	32.9	7.227	1.337		41.318	0.003	3.636	0.004		49.80	0.83	47.0	10.1	34.0	2.341	0.542	0.455	0.013	13.396	11.40	
316	6/9/2004	2:07:46 PM		20.399	24.721	31.349	25.595	24.628		39.164	55.386	3.942	36.937	9.812	1.435		44.08	0.004	4.001	0.003		49.97	0.83278	53.9	10.8	38.1	2.623	0.597	0.501	0.013	13.160	11.20	
317	6/9/2004	2:07:56 PM		20.4	24.727	31.3	25.611	24.643		38.722	54.646	3.875	36.535	9.743	1.42		44.105	0.004	3.989	0.003		50.13	0.83556	53.2	10.8	37.6	2.594	0.595	0.500	0.013	13.285	11.31	
318	6/9/2004	2:08:06 PM		20.39	24.722	31.345	25.616	24.644		39.348	55.259	3.872	37.009	9.462	1.412		43.938	0.003	3.952	0.003		50.30	0.83833	53.8	10.8	38.2	2.632	0.589	0.495	0.013	12.957	11.03	
319	6/9/2004	2:08:16 PM		20.381	24.718	31.331	25.622	24.64		41.194	58.173	4.07	38.843	10.377	1.444		45.09	0.003	4.084	0.003		50.47	0.84111	56.7	11.1	40.0	2.759	0.609	0.511	0.013	12.779	10.87	
320	6/9/2004	2:08:26 PM		20.377	24.724	31.357	25.658	24.656		41.551	58.389	4.031	39.209	10.276	1.438		44.96	0.003	4.061	0.003		50.63	0.84389	56.9	11.0	40.4	2.784	0.605	0.508	0.013	12.584	10.71	
321	6/9/2004	2:08:34 PM		20.372	24.719	31.317	25.663	24.666		41.692	58.08	4.042	39.276	10.038	1.435		45.067	0.003	4.034	0.003		50.77	0.84611	56.6	11.0	40.5	2.791	0.601	0.505	0.012	12.482	10.62	
322	6/9/2004	2:08:48 PM		20.383	24.736	31.363	25.715	24.657		42.163	58.198	4.035	39.744	9.633	1.423		45.027	0.003	3.977	0.003		51.00	0.85	56.7	11.0	41.0	2.824	0.593	0.498	0.012	12.149	10.34	
323	6/9/2004	2:09:48 PM		20.353	24.705	31.398	25.76	24.742		43.668	58.198	3.802	41.329	8.316	1.38		43.542	0.003	3.796	0.003		52.00	0.86667	56.7	10.7	42.5	2.930	0.566	0.474	0.011	11.164	9.50	
324	6/9/2004	2:10:48 PM		20.318	24.695	31.304	25.795	24.727		43.027	54.677	4.095	40.161	5.638	1.287		45.106	0.003	3.385	0.003		53.00	0.88333	53.2	11.1	41.6	2.868	0.505	0.424	0.010	10.198	8.68	
325	6/9/2004	2:11:48 PM		20.268	24.696	31.319	25.825	24.752		41.648	50.622	4.07	38.575	3.096	1.206		44.251	0.003	2.953	0.006		54.00	0.9	49.2	10.8	40.1	2.766	0.440	0.370	0.009	9.221	7.85	
326	6/9/2004	2:12:48 PM		20.18	24.678	31.168	25.843	24.73		42.499	50.546	4.183	39.219	2.245	1.178		45.311	0.003	2.792	0.004		55.00	0.91667	49.1	11.1	40.9	2.817	0.416	0.351	0.009	8.594	7.31	
327	6/9/2004	2:13:48 PM		20.093	24.662	31.067	25.841	24.759		42.538	49.854	4.272	39.145	1.715	1.16		45.69	0.003	2.69	0.004		56.00	0.93333	48.4	11.2	40.8	2.816	0.401	0.339	0.008	8.306	7.07	
328	6/9/2004	2:14:48 PM		20.011	24.651	30.962	25.831	24.728		42.123	48.838	4.185	38.714	0.829	1.134		44.837	0.003	2.517	0.005		57.00	0.95	47.4	11.0	40.4	2.787	0.375	0.318	0.008	7.876	6.70	
329	6/9/2004	2:15:48 PM		19.904	24.639	30.827	25.924	24.666		42.378	48.517	4.278	38.823	0.441	1.126		45.473	0.003	2.432	0.005		58.00	0.96667	47.0	11.1	40.6	2.799	0.363	0.309	0.008	7.603	6.47	
330	6/9/2004	2:16:48 PM		19.812	24.629	30.722	25.993	24.681		42.573	48.386	4.348	38.883	0.143	1.12		45.603	0.003	2.369	0.006		59.00	0.98333	46.9	11.2	40.7	2.808	0.353	0.302	0.007	7.404	6.30	
331	6/9/2004	2:17:48 PM		19.69	24.597	30.591	25.972	24.689		42.841	48.682	4.318	39.199	-0.086	1.111		45.561	0.003	2.325	0.005		60.00	1	47.2	11.2	41.0	2.828	0.347	0.297	0.007	7.241	6.16	
332	6/9/2004	2:18:48 PM		19.609	24.587	30.517	26.002	24.684		42.857	48.326	4.326	39.123	-0.173	1.114		45.442	0.003	2.291	0.006		61.00	1.01667	46.9	11.1	41.0	2.826	0.342	0.293	0.007	7.154	6.09	
333	6/9/2004	2:19:48 PM		19.508	24.557	30.358	26.012	24.404		41.225	46.152	4.504	37.284	-0.813	1.088		46.665	0.003	2.147	0.005		62.00	1.03333	44.7	11.4	39.3	2.706	0.320	0.276	0.007	7.031	5.98	
334	6/9/2004	2:20:48 PM		19.413	24.542	30.214	25.987	24.364		41.903	46.786	4.355	38.158	-0.952	1.088		45.499	0.003	2.111	0.004		63.00	1.05	45.3	11.2	40.0	2.760	0.315	0.272	0.007	6.806	5.79	
335	6/9/2004	2:21:48 PM		19.296	24.507	30.095	26.007	24.444		41.86	46.558	4.4	37.996	-1.102	1.082		45.442	0.003	2.08	0.005		64.00	1.06667	45.1	11.1	39.9	2.753	0.310	0.269	0.007	6.745	5.74	
336	6/9/2004	2:22:48 PM		19.195	24.487	30.001	25.982	24.464		41.876	46.247	4.355	38.035	-1.212	1.085		45.494	0.003	2.048	0.005		65.00	1.08333	44.8	11.1	40.0	2.755	0.305	0.266	0.007	6.654	5.66	
337	6/9/2004	2:23:48 PM		19.094	24.456	29.881	25.997	24.499		42.046	46.533	4.27	38.316	-1.212	1.082		45.021	0.003	2.035	0.005		66.00	1.1	45.1	11.0	40.2	2.770	0.303	0.265	0.007	6.596	5.61	
338	6/9/2004	2:24:48 PM		18.986	24.444	29.74	26.024	24.627		42.385	46.78	4.313	38.595	-1.212	1.082		45.038	0.003	2.015	0.004		67.00	1.11667	45.3	11.0	40.5	2.792	0.300	0.263	0.007	6.506	5.54	
339	6/9/2004	2:25:48 PM		18.905	24.429	29.625	26.044	24.722		42.853	47.24	4.183	39.168	-1.212	1.082		43.963	0.003	2.016	0.005		68.00	1.13333	45.8	10.8	41.0	2.828	0.301	0.264	0.006	6.447	5.49	
340	6/9/2004	2:26:48 PM		18.797	24.402	29.534	26.097	24.765		42.455	46.743	4.492	38.468	-1.212	1.079		46.064	0.003	1.956	0.005		69.00	1.15	45.3	11.3	40.5	2.790	0.292	0.257	0.006	6.356	5.41	
341	6/9/2004	2:27:48 PM		18.699	24.385	29.433	26.066	24.818		42.094	46.063	4.261	38.343	-1.215	1.073		44.919	0.003	1.914	0.005		70.00	1.16667	44.6	11.0	40.2	2.773	0.285	0.252	0.006	6.274	5.34	
342	6/9/2004	2:28:48 PM		18.632	24.384	29.148	26.095	24.842		42.024	45.87	4.274	38.234	-1.212	1.076		44.81	0.003	1.908	0.004		71.00	1.18333	44.4	11.0	40.1	2.767	0.284	0.254	0.006	6.318	5.38	
343	6/9/2004	2:29:48 PM		18.541	24.384	29.088	26.12	24.892		42.231	46.301	4.294	38.371	-1.212	1.076		44.8	0.003	1.891	0.005		72.00	1.2	44.8	11.0	40.3	2.779	0.282	0.252	0.006	6.245	5.31	
344	6/9/2004	2:30:48 PM		18.45	24.378	29.013	26.129	24.881		42.185	45.909	4.294	38.341	-1.215	1.076		44.764	0.003	1.876	0.004		73.00	1.21667	44.4	11.0	40.3	2.776	0.280	0.250	0.006	6.214	5.29	
345	6/9/2004	2:31:48 PM		18.373	24.388	28.968	26.168	24.916		42.469	46.367	4.3	38.632	-1.212	1.079		44.721	0.003	1.864	0.005		74.00	1.23333	44.9	11.0	40.6	2.796	0.278	0.249	0.006	6.138	5.22	
346	6/9/2004	2:32:48 PM		18.297	24.372	28.858	26.153	24.945		42.455	46.222	4.271	38.63	-1.215	1.076		44.458	0.003	1.854	0.005		75.00	1.25	44.8	10.9	40.5	2.795	0.276	0.248	0.006	6.125	5.21	
347	6/9/2004	2:33:48 PM		18.22	24.386	28.812	26.242	24.964		42.685	46.585	4.267	38.885	-1.218	1.073		44.474	0.003	1.846	0.006		76.00	1.26667	45.1	10.9	40.8	2.812	0.275	0.248	0.006	6.070	5.17	
348	6/9/2004	2:34:48 PM		18.148	24.39	28.756	26.256	24.898		42.716	46.49	4.272	38.963	-1.209	1.082		44.541	0.003	1.835	0.007		77.00	1.28333	45.0	10.9	40.8	2.816	0.274	0.246	0.006	6.035	5.14	
349	6/9/2004	2:35:48 PM		18.083	24.405	28.682	26.241	24.918		42.413	46.143	4.333	38.464	-1.212	1.079		44.541	0.003	1.829	0.005		78.00	1.3	44.7	10.9	40.4	2.788	0.273	0.246	0.006	6.087	5.18	
350	6/9/2004	2:36:48 PM		18.032	24.421	28.587	26.266	24.959		42.316	45.812	4.208	38.56	-1.212	1.079		44.431	0.003	1.816	0.005		79.00	1.31667	44.3	10.9	40.4	2.788	0.271	0.245	0.006	6.060	5.16	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	6/9/2004	2:37:48 PM		17.945	24.429	28.521	26.285	24.967		42.944	46.548	4.269	39.141	-1.215	1.082		44.41	0.003	1.814	0.006		80.00	1.33333	45.1	10.9	41.0	2.830	0.270	0.245	0.006	5.975	5.08	
352	6/9/2004	2:38:48 PM		17.929	24.439	28.431	26.334	24.997		42.302	45.828	4.388	38.374	-1.215	1.076		45.534	0.003	1.786	0.004		81.00	1.35	44.4	11.2	40.3	2.781	0.266	0.242	0.006	6.000	5.11	
353	6/9/2004	2:39:48 PM		17.883	24.448	28.286	26.294	25.031		42.447	45.988	4.424	38.449	-1.215	1.076		45.492	0.003	1.779	0.005		82.00	1.36667	44.5	11.1	40.4	2.789	0.265	0.242	0.006	5.984	5.09	
354	6/9/2004	2:40:48 PM		17.847	24.468	28.166	26.353	25.011		42.453	45.745	4.43	38.482	-1.209	1.082		45.344	0.003	1.771	0.004		83.00	1.38333	44.3	11.1	40.5	2.790	0.264	0.242	0.006	5.974	5.08	
355	6/9/2004	2:41:48 PM		17.806	24.477	27.996	26.308	25.055		42.316	45.644	4.388	38.386	-1.212	1.082		45.444	0.003	1.768	0.005		84.00	1.4	44.2	11.1	40.4	2.782	0.264	0.242	0.006	6.009	5.11	
356	6/9/2004	2:42:48 PM		17.77	24.486	27.865	26.297	25.034		42.685	46.233	4.423	38.687	-1.215	1.079		45.486	0.003	1.765	0.004		85.00	1.41667	44.8	11.1	40.7	2.805	0.263	0.243	0.006	5.971	5.08	
357	6/9/2004	2:43:48 PM		17.753	24.489	27.709	26.335	25.037		42.393	45.712	4.394	38.421	-1.212	1.082		45.361	0.003	1.762	0.005		86.00	1.43333	44.2	11.1	40.4	2.786	0.263	0.244	0.006	6.028	5.13	
358	6/9/2004	2:44:48 PM		17.73	24.497	27.542	26.398	25.035		42.469	45.688	4.401	38.49	-1.215	1.082		45.355	0.003	1.761	0.006		87.00	1.45	44.2	11.1	40.5	2.791	0.263	0.245	0.006	6.042	5.14	
359	6/9/2004	2:45:48 PM		17.699	24.516	27.431	26.391	25.049		42.61	45.889	4.361	38.696	-1.206	1.088		45.15	0.003	1.76	0.005		88.00	1.46667	44.4	11.1	40.7	2.803	0.262	0.245	0.006	6.031	5.13	
360	6/9/2004	2:46:48 PM		17.672	24.53	27.38	26.375	25.048		42.812	46.061	4.428	38.831	-1.212	1.085		45.159	0.003	1.756	0.006		89.00	1.48333	44.6	11.1	40.8	2.814	0.262	0.245	0.006	6.001	5.11	
361	6/9/2004	2:47:48 PM		17.665	24.523	27.289	26.328	25.031		42.579	45.822	4.333	38.663	-1.215	1.088		45.123	0.003	1.757	0.006		90.00	1.5	44.4	11.1	40.6	2.801	0.262	0.246	0.006	6.049	5.15	
362	6/9/2004	2:48:48 PM		17.634	24.547	27.252	26.337	25.044		42.747	46.025	4.372	38.811	-1.212	1.088		45.11	0.003	1.754	0.004		91.00	1.51667	44.6	11.1	40.8	2.812	0.262	0.246	0.006	6.022	5.12	
363	6/9/2004	2:49:48 PM		17.598	24.546	27.162	26.332	25.039		42.648	45.868	4.349	38.757	-1.215	1.085		44.96	0.003	1.755	0.004		92.00	1.53333	44.4	11.0	40.7	2.806	0.262	0.246	0.006	6.052	5.15	
364	6/9/2004	2:50:48 PM		17.586	24.555	27.176	26.315	25.053		42.658	45.81	4.387	38.702	-1.212	1.088		45.058	0.003	1.746	0.005		93.00	1.55	44.3	11.0	40.7	2.805	0.260	0.245	0.006	6.021	5.12	
365	6/9/2004	2:51:48 PM		17.569	24.553	27.099	26.329	25.051		42.806	45.965	4.364	38.862	-1.218	1.082		45.154	0.003	1.746	0.005		94.00	1.56667	44.5	11.1	40.8	2.815	0.260	0.245	0.006	6.012	5.12	
366	6/9/2004	2:52:48 PM		17.553	24.567	27.118	26.312	25.045		42.731	45.855	4.319	38.883	-1.215	1.085		44.954	0.003	1.746	0.005		95.00	1.58333	44.4	11.0	40.8	2.813	0.260	0.245	0.006	6.012	5.12	
367	6/9/2004	2:53:48 PM		17.521	24.58	27.096	26.29	25.068		42.708	46.019	4.328	38.802	-1.215	1.088		44.965	0.003	1.747	0.005		96.00	1.6	44.5	11.0	40.8	2.810	0.260	0.246	0.006	6.027	5.13	
368	6/9/2004	2:54:48 PM		17.534	24.583	27.094	26.319	25.031		42.741	45.945	4.36	38.817	-1.218	1.085		44.96	0.003	1.746	0.004		97.00	1.61667	44.5	11.0	40.8	2.812	0.260	0.246	0.006	6.021	5.12	
369	6/9/2004	2:55:48 PM		17.521	24.586	27.092	26.331	25.028		42.571	45.611	4.327	38.708	-1.212	1.091		44.935	0.003	1.75	0.005		98.00	1.63333	44.1	11.0	40.6	2.802	0.261	0.246	0.006	6.055	5.15	
370	6/9/2004	2:56:48 PM		17.481	24.591	27.042	26.386	24.988		42.615	46.015	4.445	38.573	-1.215	1.091		45.353	0.003	1.736	0.005		99.00	1.65	44.5	11.1	40.6	2.799	0.259	0.244	0.006	6.022	5.12	
371	6/9/2004	2:57:48 PM		17.481	24.601	27.082	26.347	24.974		42.223	45.424	4.391	38.254	-1.212	1.091		45.065	0.003	1.717	0.005		100.00	1.66667	44.0	11.0	40.2	2.774	0.256	0.242	0.006	6.002	5.11	
372	6/9/2004	2:58:48 PM		17.474	24.604	27.055	26.329	25.006		42.434	45.418	4.378	38.488	-1.212	1.088		45.159	0.003	1.715	0.006		101.00	1.68333	43.9	11.1	40.5	2.790	0.256	0.241	0.006	5.967	5.08	
373	6/9/2004	2:59:48 PM		17.44	24.6	27.061	26.351	25.003		42.113	45.312	4.368	38.119	-1.212	1.091		45.148	0.003	1.711	0.004		102.00	1.7	43.8	11.1	40.1	2.766	0.255	0.241	0.006	6.003	5.11	
374	6/9/2004	3:00:48 PM		17.422	24.603	27.049	26.388	24.96		42.403	45.553	4.381	38.445	-1.215	1.091		45.05	0.003	1.707	0.003		103.00	1.71667	44.1	11.0	40.4	2.787	0.254	0.240	0.006	5.945	5.06	
375	6/9/2004	3:01:48 PM		17.408	24.604	27.025	26.344	25.002		42.451	45.64	4.408	38.497	-1.212	1.094		45.131	0.003	1.707	0.004		104.00	1.73333	44.2	11.1	40.5	2.791	0.254	0.240	0.006	5.942	5.06	
376	6/9/2004	3:02:48 PM		17.4	24.606	27.038	26.352	24.999		42.376	45.59	4.385	38.39	-1.215	1.094		45.083	0.003	1.71	0.004		105.00	1.75	44.1	11.0	40.4	2.784	0.255	0.241	0.006	5.964	5.08	
377	6/9/2004	3:03:48 PM		17.388	24.614	27.1	26.374	24.986		42.693	45.721	4.416	38.733	-1.209	1.097		44.992	0.003	1.709	0.005		106.00	1.76667	44.2	11.0	40.7	2.807	0.255	0.240	0.006	5.902	5.02	
378	6/9/2004	3:04:48 PM		17.379	24.61	27.106	26.356	25.008		42.418	45.449	4.425	38.429	-1.215	1.097		44.946	0.003	1.705	0.005		107.00	1.78333	44.0	11.0	40.4	2.787	0.254	0.240	0.006	5.929	5.05	
379	6/9/2004	3:05:48 PM		17.36	24.612	27.098	26.377	25.01		42.467	45.681	4.417	38.433	-1.212	1.102		45.035	0.003	1.706	0.005		108.00	1.8	44.2	11.0	40.5	2.789	0.254	0.240	0.006	5.930	5.05	
380	6/9/2004	3:06:48 PM		17.341	24.608	27.119	26.363	24.975		42.416	45.46	4.359	38.499	-1.212	1.099		45.117	0.003	1.705	0.005		109.00	1.81667	44.0	11.1	40.5	2.789	0.254	0.240	0.006	5.922	5.04	
381	6/9/2004	3:07:48 PM		17.337	24.599	27.125	26.32	25.007		42.37	45.372	4.366	38.443	-1.215	1.099		45	0.003	1.706	0.004		110.00	1.83333	43.9	11.0	40.4	2.786	0.254	0.240	0.006	5.932	5.05	
382	6/9/2004	3:08:48 PM		17.334	24.606	27.157	26.296	24.959		42.436	45.518	4.379	38.482	-1.212	1.102		44.971	0.003	1.705	0.005		111.00	1.85	44.0	11.0	40.5	2.790	0.254	0.239	0.006	5.915	5.03	
383	6/9/2004	3:09:48 PM		17.33	24.597	27.198	26.332	24.984		42.362	45.372	4.365	38.445	-1.212	1.102		44.967	0.003	1.705	0.004		112.00	1.86667	43.9	11.0	40.4	2.786	0.254	0.239	0.006	5.917	5.04	
384	6/9/2004	3:10:48 PM		17.311	24.598	27.234	26.358	24.956		42.47	45.621	4.39	38.501	-1.215	1.105		44.996	0.003	1.704	0.005		113.00	1.88333	44.1	11.0	40.5	2.791	0.254	0.239	0.006	5.895	5.02	
385	6/9/2004	3:11:48 PM		17.296	24.583	27.224	26.338	24.976		42.208	45.36	4.319	38.31	-1.215	1.105		45.029	0.003	1.705	0.005		114.00	1.9	43.9	11.0	40.3	2.776	0.254	0.239	0.006	5.934	5.05	
386	6/9/2004	3:12:48 PM		17.297	24.584	27.26	26.359	24.672		42.48	45.451	4.375	38.558	-1.212	1.108		44.981	0.003	1.708	0.006		115.00	1.91667	44.0	11.0	40.5	2.794	0.255	0.239	0.006	5.900	5.02	
387	6/9/2004	3:13:48 PM		17.283	24.585	27.251	26.381	24.773		42.063	45.171	4.35	38.096	-1.212	1.105		44.971	0.003	1.702	0.005		116.00	1.93333	43.7	11.0	40.1	2.763	0.254	0.238	0.006	5.945	5.06	
388	6/9/2004	3:14:48 PM		17.264	24.566	27.257	26.312	24.959		42.154	45.294	4.388	38.183	-1.215	1.102		45.146	0.003	1.696	0.007		117.00	1.95	43.8	11.1	40.2	2.769	0.253	0.237	0.006	5.910	5.03	
389	6/9/2004	3:15:48 PM		17.268	24.585	27.286	26.331	24.903		42.214	45.422	4.362	38.279	-1.209	1.111		45.234	0.003	1.701	0.005		118.00	1.96667	44.0	11.1	40.2	2.775	0.254	0.238	0.006	5.911	5.03	
390	6/9/2004	3:16:48 PM		17.278	24.585	27.251	26.306	24.873		42.279	45.3	4.346	38.351	-1.212	1.108		45.158	0.003	1.699	0.004		119.00	1.98333	43.8	11.1	40.3	2.780	0.253	0.238	0.006	5.900	5.02	
391	6/9/2004	3:17:48 PM		17.253	24.561	27.257	26.287	24.854		42.474	45.787	4.426	38.46	-1.215	1.105		45.142	0.003	1.7	0.005		120.00	2	44.3	11.1	40.5	2.790	0.253	0.238	0.006	5.880	5.00	
392	6/9/2004	3:18:48 PM		17.237	24.56	27.231	26.281	24.893		42.243	45.346	4.376	38.3	-1.218	1.105		45.207	0.003	1.698	0.005		121.00	2.01667	43.9	11.1	40.3	2.777	0.253	0.238	0.006	5.906	5.03	
393	6/9/2004	3:19:48 PM		17.237	24.56	27.266	26.286	24.823		42.351	45.497	4.404	38.374	-1.212	1.114		45.046	0.003	1.704	0.005		122.00	2.03333	44.0	11.0	40.4	2.783	0.254	0.238	0.006	5.908	5.03	
394	6/9/2004	3:20:48 PM		17.237	24.555	27.286	26.226	24.778		42.358	45.433	4.378	38.445	-1.212	1.111		45.073	0.003	1.7	0.004		123.00	2.05	44.0	11.0	40.4	2.786	0.253	0.238	0.006	5.885	5.01	
395	6/9/2004	3:21:48 PM		17.241	24.544	27.265	26.244	24.782		42.189	45.294	4.348	38.23	-1.212	1.111		45.019	0.003	1.705	0.003		124.00	2.06667	43.8	11.0	40.2	2.772	0.254	0.239	0.006	5.934	5.05	
396	6/9/2004	3:22:48 PM		17.22	24.523	27.239	26.223	24.781		42.136	45.107	4.334	38.246	-1.215	1.111		45.075	0.003	1.704	0.005		125.00	2.08333	43.6	11.0	40.2	2.771	0.254	0.239	0.006	5.938	5.05	
397	6/9/2004	3:23:48 PM		17.229	24.527	27.253	26.233	24.71		42.302	45.345	4.362	38.417	-1.212	1.114		45.019	0.003	1.71	0.005		126.00	2.1	43.9	11.0	40.4	2.783	0.255	0.239	0.006	5.931	5.05	
398	6/9/2004	3:24:48 PM		17.244	24.527	27.238	26.243	24.705		42.256	45.41	4.329	38.373	-1.212	1.117		44.902	0.003	1.705	0.006		127.00	2.11667	43.9	11.0	40.3	2.780	0.254	0.239	0.006	5.923	5.04	
399	6/9/2004	3:25:48 PM		17.224	24.512	27.283	26.188	24.72		42.283	45.468	4.355	38.332	-1.215	1.114		44.958	0.003	1.707	0.006		128.00	2.13333	44.0	11.0	40.3	2.779	0.254	0.239	0.006	5.924	5.04	
400	6/9/2004	3:26:48 PM		17.23	24.503	27.289	26.203	24.711		42.32	45.509	4.384	38.339	-1.215	1.117		45.079	0.003	1.706	0.005		129.00	2.15	44.0	11.0	40.3	2.781	0.254	0.239	0.006	5.916	5.03	
401	6/9/2004	3:27:48 PM		17.234	24.502	27.273	26.118	24.645		42.455	45.497	4.383	38.507	-1.215	1.117		44.988	0.003	1.71	0.005		130.00	2.16667	44.0	11.0	40.5	2.791	0.255	0.239	0.006	5.910	5.03	
402	6/9/2004	3:28:48 PM		17.234	24.482	27.288	26.093	24.63		42.229	45.472	4.362	38.261	-1.212	1.12		45.054	0.003	1.709	0.005		131.00	2.18333	44.0	11.0	40.2	2.775	0.255	0.239	0.006	5.939	5.05	
403	6/9/2004	3:29:48 PM		17.244	24.467	27.253	26.148	24.67		42.019	45.14	4.357	38.096	-1.215	1.117		45.113	0.003	1.711	0.005		132.00	2.2	43.7	11.1	40.1	2.762	0.255	0.240	0.006	5.980	5.09	
404	6/9/2004	3:30:48 PM		17.25	24.468	27.304	26.213	24.711		42.175	45.341	4.373	38.203	-1.206	1.123		45.117	0.003	1.709	0.005		133.00	2.21667	43.9	11.1	40.2	2.771	0.255	0.239	0.006	5.945	5.06	
405	6/9/2004	3:31:48 PM		17.235	24.433	27.264	26.223	24.741		42.326	45.598	4.404	38.328	-1.212	1.12		45.119	0.003	1.712	0.005		134.00	2.23333	44.1	11.1	40.3	2.780	0.255	0.240	0.006	5.941	5.06	
406	6/9/2004	3:32:48 PM		17.23	24.413	27.244	26.228	24.726		42.445	45.638	4.415	38.46	-1.212	1.126		45.006	0.003	1.714	0.005		135.00	2.25	44.2	11.0	40.5	2.789	0.256	0.240	0.006	5.933	5.05	
407	6/9/2004	3:33:48 PM		17.235	24.398	27.249	26.193	24.696		42.478	45.831	4.396	38.476	-1.215	1.12		44.923	0.003	1.715	0.004		136.00	2.26667	44.4	11.0	40.5	2.791	0.256	0.240	0.006	5.932	5.05	
408	6/9/2004	3:34:48 PM		17.235	24.398	27.254	26.228	24.706		42.156	45.366	4.341	38.236	-1.215	1.123		44.973	0.003	1.714	0.004		137.00	2.28333	43.9	11.0	40.2	2.771	0.256	0.240	0.006	5.969	5.08	
409	6/9/2004	3:35:48 PM		17.224	24.387	27.248	26.163	24.71		42.233	45.318	4.36	38.298	-1.212	1.126		45.056	0.003	1.719	0.005		138.00	2.3	43.8	11.0	40.3	2.776	0.256	0.241	0.006	5.977	5.09	
410	6/9/2004	3:36:48 PM		17.229	24.367	27.253	26.178	24.505		42.171	45.321	4.353	38.246	-1.215	1.126		45.088	0.003	1.717	0.005		139.00	2.31667	43.8	11.0	40.2	2.772	0.256	0.240	0.006	5.978	5.09	
411	6/9/2004	3:37:48 PM		17.239	24.362	27.283	26.183	24.605		42.231	45.289	4.34	38.349	-1.218	1.123		44.981	0.003	1.717	0.004		140.00	2.33333	43.8	11.0	40.3	2.778	0.256	0.240	0.006	5.961	5.07	
412	6/9/2004	3:38:48 PM		17.235	24.357	27.334	26.233	24.771		42.042	45.061	4.357	38.131	-1.212	1.128		44.996	0.003	1.717	0.005		141.00	2.35	43.6	11.0	40.1	2.764	0.256	0.240	0.006	5.983	5.09	
413	6/9/2004	3:39:48 PM		17.229	24.347	27.323	26.323	24.79		42.073	45.236	4.316	38.224	-1.215	1.128		45.129	0.003	1.722	0.005		142.00	2.36667	43.8	11.1	40.1	2.768	0.257	0.241	0.006	5.993	5.10	
414	6/9/2004	3:40:48 PM		17.208	24.321	27.297	26.247	24.874		42.017	45.182	4.341	38.099	-1.215	1.128		44.994	0.003	1.72	0.004		143.00	2.38333	43.7	11.0	40.1	2.762	0.256	0.240	0.006	6.004	5.11	
415	6/9/2004	3:41:48 PM		17.244	24.332	27.323	26.318	24.69		42.075	45.18	4.345	38.185	-1.212	1.134		44.985	0.003	1.723	0.005		144.00	2.4	43.7	11.0	40.1	2.767	0.257	0.241	0.006	5.999	5.11	
416	6/9/2004	3:42:48 PM		17.24	24.327	27.304	26.248	24.636		42.067	45.2	4.35	38.135	-1.212	1.131		44.914	0.003	1.721	0.004		145.00	2.41667	43.7	11.0	40.1	2.765	0.257	0.241	0.006	6.000	5.11	
417	6/9/2004	3:43:48 PM		17.235	24.322	27.289	26.273	24.696		42.14	45.169	4.322	38.275	-1.215	1.137		44.885	0.003	1.72	0.004		146.00	2.43333	43.7	11.0	40.2	2.772	0.256	0.241	0.006	5.983	5.09	
418	6/9/2004	3:44:48 PM		17.225	24.327	27.299	26.258	24.781		42.131	45.329	4.35	38.234	-1.212	1.134		44.954	0.003	1.726	0.005		147.00	2.45	43.9	11.0	40.2	2.770	0.257	0.241	0.006	6.006	5.11	
419	6/9/2004	3:45:48 PM		17.226	24.323	27.285	26.299	24.752		41.941	45.256	4.337	38.004	-1.215	1.134		44.96	0.003	1.726	0.005		148.00	2.46667	43.8	11.0	40.0	2.756	0.257	0.241	0.006	6.040	5.14	
420	6/9/2004	3:46:48 PM		17.211	24.324	27.305	26.38	24.767		42.086	45.205	4.312	38.176	-1.215	1.137		44.931	0.003	1.729	0.003		149.00	2.48333	43.7	11.0	40.1	2.767	0.258	0.242	0.006	6.023	5.13	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	6/9/2004	3:47:48 PM		17.244	24.336	27.323	26.372	24.865		42.131	45.331	4.351	38.191	-1.209	1.143		44.998	0.003	1.728	0.006		150.00	2.5	43.9	11.0	40.2	2.769	0.258	0.241	0.006	6.012	5.12	
422	6/9/2004	3:48:48 PM		17.226	24.354	27.325	26.32	24.812		42.131	45.343	4.31	38.281	-1.212	1.14		44.842	0.003	1.729	0.005		151.00	2.51667	43.9	11.0	40.2	2.772	0.258	0.242	0.006	6.008	5.11	
423	6/9/2004	3:49:48 PM		17.234	24.361	27.337	26.362	24.9		42.059	45.375	4.328	38.158	-1.212	1.146		44.841	0.003	1.733	0.005		152.00	2.53333	43.9	11.0	40.1	2.765	0.258	0.242	0.006	6.035	5.14	
424	6/9/2004	3:50:48 PM		17.24	24.347	27.313	26.318	24.68		42.08	45.354	4.377	38.07	-1.212	1.143		44.921	0.003	1.728	0.005		153.00	2.55	43.9	11.0	40.1	2.763	0.258	0.242	0.006	6.026	5.13	
425	6/9/2004	3:51:48 PM		17.212	24.349	27.316	26.395	23.12		42.189	45.298	4.334	38.3	-1.215	1.143		44.946	0.003	1.734	0.005		154.00	2.56667	43.8	11.0	40.2	2.775	0.259	0.242	0.006	6.021	5.12	
426	6/9/2004	3:52:48 PM		17.249	24.371	27.347	26.427	23.533		42.49	45.694	4.342	38.587	-1.215	1.143		44.844	0.003	1.737	0.004		155.00	2.58333	44.2	11.0	40.5	2.795	0.259	0.243	0.006	5.983	5.09	
427	6/9/2004	3:53:48 PM		17.23	24.362	27.324	26.398	23.795		42.237	45.505	4.331	38.339	-1.212	1.146		44.837	0.003	1.737	0.005		156.00	2.6	44.0	11.0	40.3	2.778	0.259	0.243	0.006	6.024	5.13	
428	6/9/2004	3:54:48 PM		17.242	24.379	27.37	26.46	24.017		42.142	45.321	4.294	38.306	-1.212	1.152		44.896	0.003	1.735	0.004		157.00	2.61667	43.8	11.0	40.2	2.773	0.259	0.242	0.006	6.019	5.12	
429	6/9/2004	3:55:48 PM		17.238	24.376	27.352	26.502	24.349		42.357	45.603	4.354	38.454	-1.215	1.149		44.835	0.003	1.733	0.005		158.00	2.63333	44.1	11.0	40.4	2.786	0.258	0.242	0.006	5.988	5.10	
430	6/9/2004	3:56:48 PM		17.225	24.387	27.374	26.508	24.696		42.113	45.341	4.275	38.296	-1.212	1.152		44.912	0.003	1.737	0.006		159.00	2.65	43.9	11.0	40.2	2.772	0.259	0.242	0.006	6.028	5.13	
431	6/9/2004	3:57:48 PM		17.233	24.39	27.397	26.531	25.039		42.088	45.277	4.32	38.222	-1.215	1.154		44.879	0.003	1.738	0.003		160.00	2.66667	43.8	11.0	40.2	2.769	0.259	0.242	0.006	6.035	5.14	
432	6/9/2004	3:58:48 PM		17.225	24.403	27.384	26.604	25.201		42.14	45.327	4.379	38.213	-1.212	1.154		44.818	0.003	1.739	0.005		161.00	2.68333	43.9	11.0	40.2	2.770	0.259	0.243	0.006	6.038	5.14	
433	6/9/2004	3:59:48 PM		17.223	24.411	27.397	26.572	25.204		42.389	45.783	4.399	38.394	-1.212	1.157		44.864	0.003	1.739	0.005		162.00	2.7	44.3	11.0	40.4	2.785	0.259	0.242	0.006	6.003	5.11	
434	6/9/2004	4:00:48 PM		17.235	24.423	27.389	26.614	25.186		42.243	45.52	4.35	38.322	-1.215	1.157		44.869	0.003	1.741	0.004		163.00	2.71667	44.0	11.0	40.3	2.777	0.260	0.243	0.006	6.028	5.13	
435	6/9/2004	4:01:48 PM		17.21	24.418	27.384	26.559	25.231		42.308	45.619	4.36	38.386	-1.212	1.16		44.904	0.003	1.74	0.004		164.00	2.73333	44.1	11.0	40.3	2.782	0.259	0.243	0.006	6.016	5.12	
436	6/9/2004	4:02:48 PM		17.213	24.436	27.402	26.627	25.229		42.161	45.418	4.323	38.283	-1.215	1.157		44.875	0.003	1.74	0.004		165.00	2.75	43.9	11.0	40.2	2.773	0.259	0.243	0.006	6.031	5.13	
437	6/9/2004	4:03:48 PM		17.231	24.468	27.404	26.649	23.886		42.299	45.658	4.368	38.326	-1.209	1.166		44.891	0.003	1.747	0.005		166.00	2.76667	44.2	11.0	40.3	2.779	0.260	0.244	0.006	6.042	5.14	
438	6/9/2004	4:04:48 PM		17.198	24.491	27.387	26.652	23.813		42.163	45.457	4.317	38.298	-1.215	1.16		44.75	0.003	1.746	0.004		167.00	2.78333	44.0	11.0	40.2	2.774	0.260	0.244	0.006	6.053	5.15	
439	6/9/2004	4:05:48 PM		17.21	24.478	27.374	26.714	23.931		42.256	45.607	4.338	38.341	-1.215	1.163		44.892	0.003	1.744	0.004		168.00	2.8	44.1	11.0	40.3	2.778	0.260	0.243	0.006	6.038	5.14	
440	6/9/2004	4:06:48 PM		17.214	24.481	27.373	26.707	24.169		42.084	45.433	4.328	38.16	-1.215	1.163		44.723	0.003	1.743	0.004		169.00	2.81667	44.0	11.0	40.1	2.766	0.260	0.243	0.006	6.062	5.16	
441	6/9/2004	4:07:48 PM		17.206	24.479	27.405	26.705	24.572		42.161	45.426	4.367	38.259	-1.212	1.166		44.9	0.003	1.745	0.005		170.00	2.83333	44.0	11.0	40.2	2.772	0.260	0.243	0.006	6.050	5.15	
442	6/9/2004	4:08:48 PM		17.213	24.481	19.306	26.666	24.824		42.154	45.364	4.279	38.324	-1.215	1.169		44.91	0.003	1.75	0.004		171.00	2.85	43.9	11.0	40.2	2.774	0.261	0.307	0.008	7.635	6.50	
443	6/9/2004	4:09:48 PM		17.266	24.479	18.966	26.604	25.127		42.565	46.03	4.368	38.614	-1.215	1.169		44.929	0.003	1.757	0.005		172.00	2.86667	44.6	11.0	40.6	2.799	0.262	0.312	0.008	7.676	6.53	
444																																	
445																																	
446																																	
447		Averages		20.4	24.6	30.8	25.7	24.7		37.0	45.5	4.4	32.9	4.1	1.2		46.3	0.3	5.3	0.0				44.1	11.3	35.0	2.4	0.243	0.209	0.017	17.4	14.8	
448		Maximum		24.2	24.8	35.9	26.7	25.2		45.3	58.4	5.6	41.3	46.0	86.4		53.5	1.2	14.6	1.1				56.9	13.1	43.3	3.0	2.183	1.824	2.079	2079.0	1769.3	
449		Median		20.6	24.7	31.4	25.6	24.6		42.1	45.9	4.4	37.8	-1.2	1.1		46.1	0.0	1.7	0.0				44.4	11.3	40.1	2.8	0.203	0.178	0.004	4.5	3.8	
450		Minimum		17.2	24.3	19.0	25.2	23.1		-3.7	32.6	3.5	-8.5	-1.2	-5.2		41.3	0.0	0.0	0.0				31.1	10.1	-6.1	-0.4	-0.002	-0.002	-0.299	-298.8	-254.3	
451		2 x Std Dev		4.249	0.231	4.832	0.829	0.430		17.949	8.873	0.604	18.191	18.578	18.216		3.465	0.924	11.824	0.111				8.873	0.849	####	1.246	0.513	0.430	0.308	307.734	######	
452		Number of Points Used*		427	427	427	427	427		427	427	427	427	427	427		427	427	427	427				427	427	427	427	427	427	427	427	427	
453		* Backpulse points in box are not included																															

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
457	Acid Clean 2																																
458	6/10/2004	7:20:45 AM		23.262	23.73	23.536	23.803	23.514		37.648	45.92	4.119	34.376	2.607	1.021		45.169	0.003	2.878	0.005		1082.95	18.0492	44.4	11.1	36.0	2.483	0.429	0.447	0.012	12.419	10.57	
459	6/10/2004	7:21:45 AM		23.734	23.736	24.068	23.819	23.55		40.949	50.809	4.056	37.895	3.848	1.073		45.601	0.003	3.102	0.006		1083.95	18.0658	49.3	11.2	39.4	2.718	0.462	0.475	0.012	12.044	10.25	
460	6/10/2004	7:22:45 AM		24.335	23.736	24.709	23.808	23.635		40.572	50.784	4.207	37.306	4.161	1.079		45.872	0.003	3.168	0.006		1084.95	18.0825	49.3	11.2	38.9	2.685	0.472	0.476	0.012	12.230	10.41	
461	6/10/2004	7:23:45 AM		24.797	23.748	24.981	24.046	23.717		41.099	51.866	3.755	38.454	4.879	1.102		43.6	0.003	3.294	0.003		1085.95	18.0992	50.4	10.7	39.8	2.742	0.491	0.491	0.012	12.353	10.51	
462	6/10/2004	7:24:45 AM		25.009	23.744	25.053	24.434	23.818		41.518	52.475	3.782	38.757	4.917	1.102		43.394	0.003	3.295	0.004		1086.95	18.1158	51.0	10.6	40.1	2.767	0.491	0.491	0.012	12.221	10.40	
463	6/10/2004	7:25:45 AM		25.096	23.746	25.005	24.637	23.986		41.544	52.241	3.701	38.952	4.818	1.099		43.361	0.003	3.284	0.004		1087.95	18.1325	50.8	10.6	40.2	2.775	0.490	0.490	0.012	12.163	10.35	
464	6/10/2004	7:26:45 AM		25.074	23.744	24.902	24.774	24.128		41.404	51.727	3.897	38.566	4.575	1.088		44.211	0.003	3.251	0.004		1088.95	18.1492	50.3	10.8	40.0	2.757	0.485	0.486	0.012	12.155	10.34	
465	6/10/2004	7:27:45 AM		24.998	23.778	24.761	24.989	24.218		41.489	52.517	3.69	38.856	4.804	1.099		43.137	0.003	3.278	0.005		1089.95	18.1658	51.0	10.6	40.2	2.770	0.489	0.492	0.012	12.248	10.42	
466	6/10/2004	7:28:45 AM		24.869	23.804	24.662	25.06	24.333		41.708	52.364	3.688	39.057	4.746	1.099		43.033	0.003	3.259	0.004		1090.95	18.1825	50.9	10.5	40.4	2.784	0.486	0.491	0.012	12.147	10.34	
467	6/10/2004	7:29:45 AM		24.724	23.83	24.497	25.111	24.404		41.26	51.213	4.345	37.93	4.106	1.071		46.982	0.003	3.155	0.005		1091.95	18.1992	49.7	11.5	39.6	2.730	0.470	0.477	0.012	12.050	10.25	
468	6/10/2004	7:30:45 AM		24.63	23.866	24.539	25.172	24.481		41.905	52.032	3.991	38.923	4.297	1.082		44.99	0.003	3.195	0.004		1092.95	18.2158	50.6	11.0	40.4	2.786	0.476	0.483	0.012	11.941	10.16	
469	6/10/2004	7:31:45 AM		24.602	23.893	24.535	25.184	24.507		41.943	52.042	3.948	38.96	4.219	1.085		44.485	0.003	3.192	0.003		1093.95	18.2325	50.6	10.9	40.5	2.789	0.476	0.482	0.012	11.920	10.14	
470	6/10/2004	7:32:45 AM		24.585	23.936	24.498	25.292	24.55		42.301	52.438	3.91	39.293	4.187	1.079		44.468	0.003	3.175	0.004		1094.95	18.2492	51.0	10.9	40.8	2.813	0.473	0.480	0.012	11.768	10.02	
471	6/10/2004	7:33:45 AM		24.577	23.973	24.52	25.299	24.607		42.237	52.393	3.962	39.274	4.176	1.079		44.387	0.003	3.16	0.004		1095.95	18.2658	50.9	10.9	40.8	2.810	0.471	0.478	0.012	11.717	9.97	
472	6/10/2004	7:34:45 AM		24.575	24.021	24.513	25.382	24.66		42.407	52.623	3.985	39.318	4.089	1.079		44.618	0.003	3.149	0.003		1096.95	18.2825	51.2	10.9	40.9	2.817	0.469	0.476	0.012	11.648	9.91	
473	6/10/2004	7:35:45 AM		24.558	24.044	24.531	25.435	24.673		42.368	52.384	3.975	39.322	4.005	1.079		44.56	0.003	3.146	0.005		1097.95	18.2992	50.9	10.9	40.8	2.816	0.469	0.475	0.012	11.636	9.90	
474	6/10/2004	7:36:45 AM		24.54	24.077	24.474	25.463	24.626		42.096	52.109	3.947	39.131	4.051	1.079		44.62	0.003	3.138	0.004		1098.95	18.3158	50.6	10.9	40.6	2.800	0.468	0.475	0.012	11.692	9.95	
475	6/10/2004	7:37:45 AM		24.538	24.11	24.476	25.406	24.613		42.405	52.478	3.957	39.437	3.999	1.076		44.493	0.003	3.135	0.004		1099.95	18.3325	51.0	10.9	40.9	2.821	0.467	0.474	0.012	11.592	9.87	
476	6/10/2004	7:38:45 AM		24.541	24.148	24.53	25.414	24.602		42.302	52.276	3.951	39.287	4.048	1.079		44.574	0.003	3.134	0.005		1100.95	18.3492	50.8	10.9	40.8	2.813	0.467	0.473	0.012	11.607	9.88	
477	6/10/2004	7:39:45 AM		24.529	24.161	24.482	25.406	24.544		42.133	52.053	3.941	39.157	4.037	1.082		44.57	0.003	3.138	0.004		1101.95	18.3658	50.6	10.9	40.6	2.802	0.468	0.475	0.012	11.680	9.94	
478	6/10/2004	7:40:45 AM		24.527	24.199	24.465	25.395	24.547		41.992	51.694	3.938	39.082	4.011	1.076		44.516	0.003	3.139	0.004		1102.95	18.3825	50.2	10.9	40.5	2.795	0.468	0.475	0.012	11.720	9.97	
479	6/10/2004	7:41:45 AM		24.514	24.221	24.452	25.422	24.539		42.254	52.119	3.966	39.309	4.031	1.079		44.429	0.003	3.141	0.004		1103.95	18.3992	50.6	10.9	40.8	2.812	0.468	0.476	0.012	11.662	9.92	
480	6/10/2004	7:42:45 AM		24.506	24.233	24.464	25.374	24.527		42.223	52.028	3.968	39.254	4.002	1.082		44.541	0.003	3.142	0.003		1104.95	18.4158	50.6	10.9	40.7	2.809	0.468	0.476	0.012	11.674	9.93	
481	6/10/2004	7:43:45 AM		24.509	24.261	24.437	25.401	24.529		42.393	52.167	3.983	39.416	4.074	1.088		44.577	0.003	3.144	0.003		1105.95	18.4325	50.7	10.9	40.9	2.820	0.469	0.476	0.012	11.643	9.91	
482	6/10/2004	7:44:45 AM		24.527	24.295	24.466	25.455	24.538		42.017	51.964	3.896	39.055	4.069	1.088		44.508	0.003	3.148	0.003		1106.95	18.4492	50.5	10.9	40.5	2.795	0.469	0.476	0.012	11.754	10.00	
483	6/10/2004	7:45:45 AM		24.515	24.313	24.474	25.423	24.531		42.225	51.953	4.016	39.205	3.895	1.082		45.092	0.003	3.128	0.003		1107.95	18.4658	50.5	11.1	40.7	2.807	0.466	0.473	0.012	11.625	9.89	
484	6/10/2004	7:46:45 AM		24.507	24.32	24.481	25.44	24.538		42.005	51.644	4.047	38.923	3.915	1.091		45.121	0.003	3.127	0.004		1108.95	18.4825	50.2	11.1	40.5	2.790	0.466	0.473	0.012	11.691	9.95	
485	6/10/2004	7:47:45 AM		24.51	24.328	24.478	25.453	24.53		42.053	51.974	4.013	38.989	3.976	1.085		45.133	0.003	3.13	0.003		1109.95	18.4992	50.5	11.1	40.5	2.794	0.467	0.474	0.012	11.687	9.95	
486	6/10/2004	7:48:45 AM		24.512	24.34	24.501	25.465	24.593		42.223	52.291	4.046	39.145	4.005	1.088		45.008	0.003	3.136	0.005		1110.95	18.5158	50.8	11.0	40.7	2.805	0.468	0.474	0.012	11.655	9.92	
487	6/10/2004	7:49:45 AM		24.549	24.347	24.528	25.477	24.62		42.31	52.355	4.079	39.176	4.022	1.091		45.071	0.003	3.136	0.005		1111.95	18.5325	50.9	11.0	40.7	2.809	0.468	0.474	0.012	11.629	9.90	
488	6/10/2004	7:50:45 AM		24.638	24.39	24.717	25.5	24.693		41.968	52.036	4.003	38.93	4.034	1.094		45.144	0.003	3.146	0.004		1112.95	18.5492	50.6	11.1	40.4	2.789	0.469	0.473	0.012	11.689	9.95	
489	6/10/2004	7:51:45 AM		24.686	24.403	24.649	25.528	24.726		41.924	51.845	4.049	38.829	4.074	1.094		45.038	0.003	3.152	0.004		1113.95	18.5658	50.4	11.0	40.4	2.784	0.470	0.475	0.012	11.755	10.00	
490	6/10/2004	7:52:45 AM		24.734	24.416	24.722	25.561	24.789		41.843	51.76	4.009	38.78	4.063	1.097		44.981	0.003	3.153	0.003		1114.95	18.5825	50.3	11.0	40.3	2.779	0.470	0.474	0.012	11.753	10.00	
491	6/10/2004	7:53:45 AM		24.786	24.428	24.785	25.618	24.836		41.768	51.835	4.031	38.718	4.141	1.097		44.983	0.003	3.153	0.004		1115.95	18.5992	50.4	11.0	40.2	2.775	0.470	0.473	0.012	11.752	10.00	
492	6/10/2004	7:54:45 AM		24.855	24.468	24.834	25.728	24.89		41.683	51.698	4.014	38.642	4.124	1.099		44.946	0.003	3.166	0.004		1116.95	18.6158	50.2	11.0	40.2	2.769	0.472	0.474	0.012	11.808	10.05	
493	6/10/2004	7:55:45 AM		24.915	24.508	24.904	25.753	24.96		41.912	51.914	3.976	38.979	4.176	1.105		44.935	0.003	3.177	0.004		1117.95	18.6325	50.4	11.0	40.4	2.789	0.474	0.475	0.012	11.743	9.99	
494	6/10/2004	7:56:45 AM		24.939	24.501	24.948	25.796	24.999		41.663	51.935	4.022	38.64	4.196	1.105		44.915	0.003	3.183	0.004		1118.95	18.6492	50.5	11.0	40.2	2.768	0.475	0.475	0.012	11.836	10.07	
495	6/10/2004	7:57:45 AM		24.992	24.535	24.951	25.88	24.962		41.576	51.765	3.927	38.607	4.231	1.108		44.829	0.003	3.184	0.004		1119.95	18.6658	50.3	11.0	40.1	2.764	0.475	0.475	0.012	11.857	10.09	
496	6/10/2004	7:58:45 AM		25.021	24.554	24.99	25.849	24.946		41.721	51.933	3.948	38.796	4.294	1.105		44.844	0.003	3.186	0.004		1120.95	18.6825	50.5	11.0	40.3	2.776	0.475	0.475	0.012	11.802	10.04	
497	6/10/2004	7:59:45 AM		25.074	24.597	25.053	25.827	24.945		41.903	52.233	3.975	38.915	4.326	1.114		44.935	0.003	3.203	0.004		1121.95	18.6992	50.8	11.0	40.4	2.786	0.478	0.477	0.012	11.800	10.04	
498	6/10/2004	8:00:45 AM		25.113	24.621	25.077	25.826	24.943		41.932	52.318	4.012	38.928	4.364	1.114		44.706	0.003	3.199	0.005		1122.95	18.7158	50.8	11.0	40.4	2.788	0.477	0.476	0.012	11.771	10.02	
499	6/10/2004	8:01:45 AM		25.152	24.635	25.111	25.804	24.912		41.52	52.022	3.986	38.497	4.41	1.117		44.77	0.003	3.206	0.005		1123.95	18.7325	50.5	11.0	40.0	2.758	0.478	0.476	0.012	11.910	10.14	
500	6/10/2004	8:02:45 AM		25.195	24.668	25.154	25.858	24.92		41.729	52.015	3.963	38.727	4.451	1.117		44.729	0.003	3.218	0.004		1124.95	18.7492	50.5	11.0	40.2	2.774	0.480	0.478	0.012	11.875	10.11	
501	6/10/2004	8:03:45 AM		25.209	24.672	25.158	25.786	24.949		41.673	52.04	3.998	38.714	4.439	1.114		44.841	0.003	3.221	0.003		1125.95	18.7658	50.6	11.0	40.2	2.771	0.480	0.478	0.012	11.895	10.12	
502	6/10/2004	8:04:45 AM		25.243	24.696	25.207	25.91	24.913		41.321	51.729	3.951	38.337	4.433	1.12		44.806	0.003	3.22	0.005		1126.95	18.7825	50.3	11.0	39.8	2.746	0.480	0.477	0.012	11.983	10.20	
503	6/10/2004	8:05:45 AM		25.271	24.704	25.25	25.904	24.926		41.495	52.175	3.977	38.427	4.456	1.123		44.885	0.003	3.221	0.004		1127.95	18.7992	50.7	11.0	40.0	2.755	0.480	0.477	0.012	11.933	10.16	
504	6/10/2004	8:06:45 AM		25.3	24.723	25.274	25.903	24.97		41.385	52.067	3.971	38.415	4.569	1.126		44.791	0.003	3.234	0.005		1128.95	18.8158	50.6	11.0	39.9	2.751	0.482	0.478	0.012	11.991	10.20	
505	6/10/2004	8:07:45 AM		25.323	24.747	25.253	25.891	24.969		41.474	52.156	3.997	38.491	4.572	1.128		44.835	0.003	3.235	0.003		1129.95	18.8325	50.7	11.0	40.0	2.757	0.482	0.479	0.012	11.977	10.19	
506	6/10/2004	8:08:45 AM		25.331	24.745	25.241	25.894	24.967		41.372	51.932	3.953	38.478	4.607	1.128		44.818	0.003	3.238	0.005		1130.95	18.8492	50.5	11.0	39.9	2.753	0.483	0.479	0.012	12.010	10.22	
507	6/10/2004	8:09:45 AM		25.365	24.763	25.284	25.933	24.975		41.395	52.03	3.989	38.394	4.604	1.131		44.743	0.003	3.252	0.005		1131.95	18.8658	50.6	11.0	39.9	2.751	0.485	0.481	0.012	12.056	10.26	
508	6/10/2004	8:10:45 AM		25.384	24.777	25.283	25.871	25.064		41.331	51.922	3.912	38.486	4.636	1.131		44.766	0.003	3.246	0.005		1132.95	18.8825	50.4	11.0	39.9	2.752	0.484	0.480	0.012	12.030	10.24	
509	6/10/2004	8:11:45 AM		25.397	24.791	25.342	25.965	25.113		41.283	51.864	3.945	38.369	4.636	1.134		44.743	0.003	3.248	0.003		1133.95	18.8992	50.4	11.0	39.8	2.746	0.484	0.480	0.012	12.043	10.25	
510	6/10/2004	8:12:45 AM		25.416	24.804	25.336	25.989	25.181		41.337	51.947	3.946	38.454	4.656	1.128		44.814	0.003	3.251	0.004		1134.95	18.9158	50.5	11.0	39.9	2.751	0.485	0.480	0.012	12.035	10.24	
511	6/10/2004	8:13:45 AM		25.439	24.832	25.414	26.027	25.224		41.036	51.644	3.923	38.111	4.645	1.134		44.816	0.003	3.256	0.004		1135.95	18.9325	50.2	11.0	39.6	2.728	0.485	0.480	0.012	12.125	10.32	
512	6/10/2004	8:14:45 AM		25.452	24.85	25.382	26.185	25.267		41.229	51.852	3.956	38.32	4.726	1.134		44.771	0.003	3.262	0.005		1136.95	18.9492	50.4	11.0	39.8	2.742	0.486	0.481	0.012	12.097	10.29	
513	6/10/2004	8:15:45 AM		25.475	24.868	25.505	26.178	25.31		41.003	51.719	3.968	38.053	4.691	1.134		44.773	0.003	3.264	0.004		1137.95	18.9658	50.2	11.0	39.5	2.725	0.487	0.480	0.012	12.138	10.33	
514	6/10/2004	8:16:45 AM		25.489	24.897	25.448	26.217	25.409		41.294	52.119	3.98	38.333	4.752	1.14		44.831	0.003	3.269	0.003		1138.95	18.9825	50.6	11.0	39.8	2.745	0.487	0.481	0.012	12.088	10.29	
515	6/10/2004	8:17:45 AM		25.503	24.927	25.463	26.231	25.433		41.279	51.872	3.998	38.373	4.746	1.14		44.827	0.003	3.27	0.004		1139.95	18.9992	50.4	11.0	39.8	2.746	0.488	0.481	0.012	12.083	10.28	
516	6/10/2004	8:18:45 AM		25.516	24.95	25.471	26.224	25.416		41.358	52.295	3.991	38.373	4.807	1.137		44.954	0.003	3.276	0.004		1140.95	19.0158	50.8	11.0	39.9	2.749	0.488	0.482	0.012	12.091	10.29	
517	6/10/2004	8:19:45 AM		25.529	24.983	25.514	26.302	25.379		41.177	52.086	4.007	38.179	4.795	1.146		44.873	0.003	3.272	0.004		1141.95	19.0325	50.6	11.0	39.7	2.736	0.488	0.481	0.012	12.118	10.31	
518	6/10/2004	8:20:45 AM		25.548	25.012	25.508	26.261	25.358		40.829	51.416	3.928	37.943	4.789	1.146		44.979	0.003	3.279	0.004		1142.95	19.0492	49.9	11.0	39.4	2.716	0.489	0.482	0.012	12.236	10.41	
519	6/10/2004	8:21:45 AM		25.555	25.029	25.5	26.288	25.335		41.138	52.094	3.958	38.218	4.879	1.143		44.944	0.003	3.284	0.005		1143.95	19.0658	50.6	11.0	39.7	2.736	0.490	0.483	0.012	12.168	10.35	
520	6/10/2004	8:22:45 AM		25.568	25.047	25.533	26.291	25.303		41.067	51.835	3.964	38.14	4.824	1.146		44.889	0.003	3.284	0.005		1144.95	19.0825	50.4	11.0	39.6	2.731	0.490	0.482	0.012	12.179	10.36	
521	6/10/2004	8:23:45 AM		25.571	25.055	25.546	26.194	25.271		41.084	51.883	3.959	38.207	4.804	1.149		44.977	0.003	3.284	0.003		1145.95	19.0992	50.4	11.0	39.6	2.733	0.490	0.482	0.012	12.162	10.35	
522	6/10/2004	8:24:45 AM		25.593	25.087	25.543	26.216	25.259		41.281	52.102	3.979	38.376	4.865	1.152		44.958	0.003	3.291	0.003		1146.95	19.1158	50.6	11.0	39.8	2.746	0.491	0.483	0.012	12.133	10.33	
523	6/10/2004	8:25:45 AM		25.606	25.095	25.576	26.234	25.242		41.167	52.005	4.01	38.218	4.873	1.154		44.912	0.003	3.296	0.003		1147.95	19.1325	50.5	11.0	39.7	2.737	0.491	0.484	0.012	12.182	10.37	
524	6/10/2004	8:26:45 AM		25.635	25.129	25.604	26.298	25.235		40.947	51.808	4.008	38.039	4.905	1.157		44.923	0.003	3.295	0.004		1148.95	19.1492	50.3	11.0	39.5	2.723	0.491	0.483	0.012	12.230	10.41	
525	6/10/2004	8:27:45 AM		25.637	25.131	25.587	26.215	25.247		41.086	51.947	3.959	38.244	4.882	1.154		45.033	0.003	3.304	0.004		1149.95	19.1658	50.5	11.0	39.7	2.735	0.493	0.485	0.012	12.216	10.40	
526	6/10/2004	8:28:45 AM		25.655	25.139	25.655	26.188	25.255		40.781	51.814	3.99	37.823	4.914	1.157		44.987	0.003	3.305	0.004		1150.95	19.1825	50.3	11.0	39.3	2.710	0.493	0.484	0.012	12.309	10.48	
527	6/10/2004	8:29:45 AM		25.667	25.151	25.652	26.165	25.242		41.111	52.102	4.01	38.215	4.923	1.16		44.967	0.003	3.299	0.004		1151.95	19.1992	50.6	11.0	39.7	2.735	0.492	0.483	0.012	12.176	10.36	

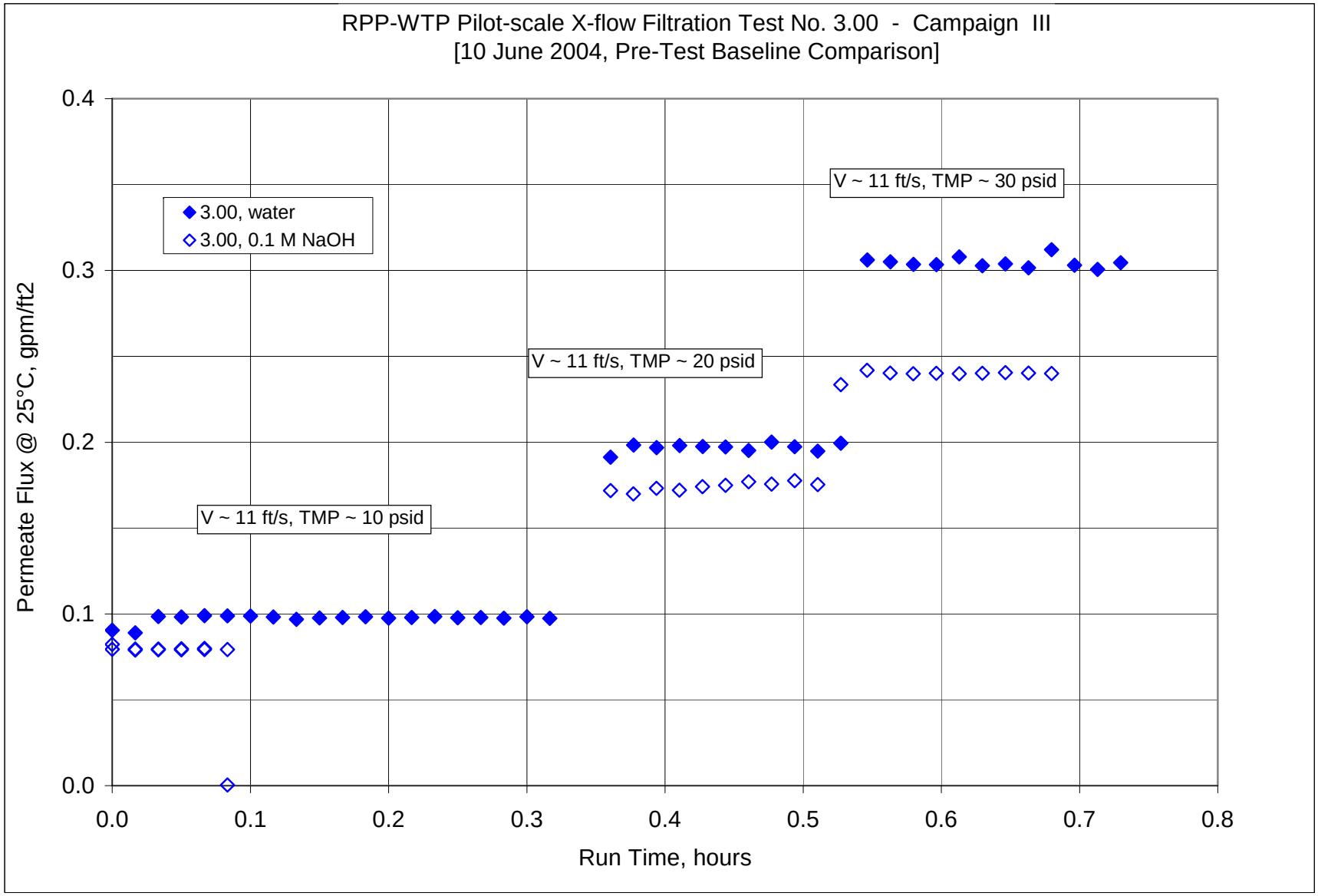
PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
528	6/10/2004	8:30:45 AM		25.67	25.159	25.68	26.123	25.245		40.908	51.781	3.973	38.064	4.975	1.157		44.965	0.003	3.304	0.005		1152.95	19.2158	50.3	11.0	39.5	2.722	0.493	0.483	0.012	12.239	10.42	
529	6/10/2004	8:31:45 AM		25.672	25.162	25.597	26.22	25.293		40.786	51.505	3.959	37.936	4.975	1.16		44.988	0.003	3.305	0.004		1153.95	19.2325	50.0	11.0	39.4	2.714	0.493	0.485	0.012	12.310	10.48	
530	6/10/2004	8:32:45 AM		25.649	25.168	25.559	26.307	25.254		40.985	51.974	4.027	38.014	4.937	1.16		45.029	0.003	3.305	0.004		1154.95	19.2492	50.5	11.0	39.5	2.723	0.493	0.485	0.012	12.280	10.45	
531	6/10/2004	8:33:45 AM		25.611	25.17	25.5	26.289	25.246		40.929	51.945	4.035	37.938	4.925	1.163		44.956	0.003	3.301	0.005		1155.95	19.2658	50.5	11.0	39.4	2.719	0.492	0.485	0.012	12.306	10.47	
532	6/10/2004	8:34:45 AM		25.589	25.193	25.488	26.242	25.289		40.842	51.603	3.976	37.901	4.946	1.163		44.939	0.003	3.312	0.003		1156.95	19.2825	50.1	11.0	39.4	2.715	0.494	0.487	0.012	12.371	10.53	
533	6/10/2004	8:35:45 AM		25.551	25.185	25.441	26.194	25.331		40.81	51.804	4.002	37.846	4.966	1.169		44.987	0.003	3.31	0.004		1157.95	19.2992	50.3	11.0	39.3	2.712	0.493	0.487	0.012	12.394	10.55	
534	6/10/2004	8:36:45 AM		25.512	25.192	25.412	26.265	25.378		40.885	51.794	4.013	37.992	4.975	1.163		45.108	0.003	3.303	0.005		1158.95	19.3158	50.3	11.1	39.4	2.719	0.492	0.487	0.012	12.343	10.50	
535	6/10/2004	8:37:45 AM		25.495	25.214	25.405	26.328	25.445		40.814	51.642	3.958	37.916	4.946	1.166		45.052	0.003	3.301	0.004		1159.95	19.3325	50.2	11.0	39.4	2.714	0.492	0.487	0.012	12.361	10.52	
536	6/10/2004	8:38:45 AM		25.467	25.221	25.377	26.41	25.492		40.738	51.715	4.009	37.789	4.92	1.166		44.923	0.003	3.308	0.005		1160.95	19.3492	50.2	11.0	39.3	2.707	0.493	0.488	0.012	12.429	10.58	
537	6/10/2004	8:39:45 AM		25.454	25.243	25.348	26.462	25.544		41.059	51.854	4.013	38.117	4.923	1.169		44.915	0.003	3.304	0.005		1161.95	19.3658	50.4	11.0	39.6	2.729	0.493	0.488	0.012	12.322	10.49	
538	6/10/2004	8:40:45 AM		25.442	25.271	25.332	26.515	25.627		41.163	51.982	3.983	38.302	4.96	1.169		44.979	0.003	3.304	0.005		1162.95	19.3825	50.5	11.0	39.7	2.739	0.493	0.488	0.012	12.283	10.45	
539	6/10/2004	8:41:45 AM		25.414	25.278	25.309	26.532	25.674		40.97	51.995	3.999	38.076	4.925	1.172		44.99	0.003	3.31	0.004		1163.95	19.3992	50.5	11.0	39.5	2.725	0.493	0.489	0.012	12.378	10.53	
540	6/10/2004	8:42:45 AM		25.401	25.296	25.301	26.584	25.731		40.866	51.877	4.034	37.94	4.986	1.172		44.973	0.003	3.306	0.005		1164.95	19.4158	50.4	11.0	39.4	2.717	0.493	0.489	0.012	12.404	10.56	
541	6/10/2004	8:43:45 AM		25.385	25.33	25.275	26.648	25.72		40.968	51.935	4.024	38.016	4.972	1.172		45.077	0.003	3.306	0.004		1165.95	19.4325	50.5	11.0	39.5	2.723	0.493	0.489	0.012	12.385	10.54	
542	6/10/2004	8:44:45 AM		25.378	25.362	25.282	26.666	25.693		41.034	51.926	4.012	38.135	4.94	1.178		44.9	0.003	3.309	0.003		1166.95	19.4492	50.5	11.0	39.6	2.729	0.493	0.489	0.012	12.365	10.52	
543	6/10/2004	8:45:45 AM		25.362	25.376	25.241	26.605	25.701		40.711	51.678	3.991	37.797	5.004	1.172		45.008	0.003	3.31	0.004		1167.95	19.4658	50.2	11.0	39.3	2.706	0.493	0.490	0.012	12.487	10.63	
544	6/10/2004	8:46:45 AM		25.36	25.414	25.239	26.628	25.67		41.084	51.895	4.01	38.189	4.96	1.178		44.992	0.003	3.304	0.005		1168.95	19.4825	50.4	11.0	39.6	2.733	0.493	0.489	0.012	12.345	10.51	
545	6/10/2004	8:47:45 AM		25.339	25.418	25.263	26.647	25.679		40.667	51.659	3.952	37.78	5.041	1.178		44.95	0.003	3.306	0.003		1169.95	19.4992	50.2	11.0	39.2	2.704	0.493	0.489	0.012	12.474	10.62	
546	6/10/2004	8:48:45 AM		25.332	25.446	25.302	26.625	25.662		40.794	51.829	4.033	37.83	4.966	1.178		44.971	0.003	3.311	0.004		1170.95	19.5158	50.4	11.0	39.3	2.710	0.494	0.489	0.012	12.451	10.60	
547	6/10/2004	8:49:45 AM		25.326	25.47	25.281	26.604	25.681		40.848	51.837	3.952	37.953	4.98	1.183		45.056	0.003	3.308	0.005		1171.95	19.5325	50.4	11.0	39.4	2.717	0.493	0.489	0.012	12.419	10.57	
548	6/10/2004	8:50:45 AM		25.302	25.482	25.252	26.57	25.697		40.841	51.951	3.972	37.953	4.969	1.18		44.937	0.003	3.305	0.005		1172.95	19.5492	50.5	11.0	39.4	2.716	0.493	0.489	0.012	12.419	10.57	
549	6/10/2004	8:51:45 AM		25.295	25.485	25.245	26.563	25.725		40.881	52.028	4.015	37.924	4.983	1.18		45.002	0.003	3.316	0.004		1173.95	19.5658	50.6	11.0	39.4	2.717	0.494	0.491	0.012	12.461	10.60	
550	6/10/2004	8:52:45 AM		25.294	25.513	25.198	26.572	25.709		40.974	52.036	4.01	37.945	4.946	1.18		44.898	0.003	3.313	0.004		1174.95	19.5825	50.6	11.0	39.5	2.721	0.494	0.491	0.012	12.448	10.59	
551	6/10/2004	8:53:45 AM		25.28	25.515	25.19	26.653	25.695		41.474	52.944	4.015	38.566	5.339	1.195		45.115	0.003	3.363	0.006		1175.95	19.5992	51.5	11.1	40.0	2.759	0.501	0.499	0.012	12.462	10.61	
552	6/10/2004	8:54:45 AM		25.283	25.522	25.152	26.606	25.673		41.188	52.77	3.995	38.285	5.331	1.192		45.096	0.003	3.367	0.005		1176.95	19.6158	51.3	11.1	39.7	2.740	0.502	0.500	0.013	12.579	10.70	
553	6/10/2004	8:55:45 AM		25.296	25.555	25.201	26.634	25.711		41.549	52.911	4.015	38.665	5.394	1.198		44.985	0.003	3.371	0.003		1177.95	19.6325	51.4	11.0	40.1	2.765	0.503	0.500	0.012	12.460	10.60	
554	6/10/2004	8:56:45 AM		25.292	25.557	25.202	26.58	25.707		41.435	52.931	3.992	38.601	5.426	1.201		45.11	0.003	3.378	0.004		1178.95	19.6492	51.5	11.1	40.0	2.759	0.504	0.501	0.013	12.514	10.65	
555	6/10/2004	8:57:45 AM		25.294	25.564	25.214	26.612	25.714		41.289	52.681	4.002	38.392	5.412	1.201		45.008	0.003	3.379	0.003		1179.95	19.6658	51.2	11.0	39.8	2.747	0.504	0.501	0.013	12.569	10.70	
556	6/10/2004	8:58:45 AM		25.296	25.576	25.201	26.599	25.686		41.235	52.648	4.015	38.304	5.383	1.201		45.06	0.003	3.376	0.003		1180.95	19.6825	51.2	11.0	39.8	2.742	0.503	0.500	0.013	12.585	10.71	
557	6/10/2004	8:59:45 AM		25.303	25.588	25.218	26.591	25.693		41.211	52.824	4.03	38.273	5.397	1.204		45.025	0.003	3.378	0.005		1181.95	19.6992	51.4	11.0	39.7	2.740	0.504	0.501	0.013	12.595	10.72	
558	6/10/2004	9:00:45 AM		25.295	25.584	25.184	26.638	25.724		41.117	52.714	3.986	38.316	5.458	1.201		45.096	0.003	3.384	0.005		1182.95	19.7158	51.2	11.1	39.7	2.738	0.505	0.502	0.013	12.638	10.75	
559	6/10/2004	9:01:45 AM		25.323	25.618	25.208	26.726	25.728		41.163	52.675	4.005	38.246	5.4	1.206		45.061	0.003	3.384	0.005		1183.95	19.7325	51.2	11.0	39.7	2.737	0.505	0.502	0.013	12.633	10.75	
560	6/10/2004	9:02:45 AM		25.324	25.619	25.214	26.712	25.734		41.428	52.954	4.029	38.571	5.452	1.209		45.133	0.003	3.388	0.003		1184.95	19.7492	51.5	11.1	40.0	2.758	0.505	0.502	0.013	12.552	10.68	
561	6/10/2004	9:03:45 AM		25.316	25.631	25.196	26.749	25.751		41.177	52.755	4.02	38.255	5.449	1.212		45.121	0.003	3.392	0.004		1185.95	19.7658	51.3	11.1	39.7	2.738	0.506	0.503	0.013	12.663	10.78	
562	6/10/2004	9:04:45 AM		25.323	25.642	25.197	26.711	25.842		41.177	52.807	3.957	38.367	5.452	1.209		45	0.003	3.392	0.004		1186.95	19.7825	51.3	11.0	39.8	2.742	0.506	0.503	0.013	12.645	10.76	
563	6/10/2004	9:05:45 AM		25.331	25.661	25.231	26.729	25.925		41.265	52.809	4.017	38.392	5.536	1.212		45.175	0.003	3.39	0.004		1187.95	19.7992	51.3	11.1	39.8	2.746	0.505	0.502	0.013	12.608	10.73	
564	6/10/2004	9:06:45 AM		25.323	25.668	25.213	26.831	25.973		41.14	52.666	3.955	38.31	5.441	1.209		45.063	0.003	3.395	0.005		1188.95	19.8158	51.2	11.0	39.7	2.739	0.506	0.503	0.013	12.666	10.78	
565	6/10/2004	9:07:45 AM		25.33	25.69	25.24	26.843	26.054		40.995	52.596	3.947	38.224	5.531	1.215		45.159	0.003	3.399	0.004		1189.95	19.8325	51.1	11.1	39.6	2.731	0.507	0.503	0.013	12.708	10.81	
566	6/10/2004	9:08:45 AM		25.343	25.718	25.243	26.906	26.097		41.119	52.745	4.006	38.246	5.516	1.215		45.161	0.003	3.398	0.004		1190.95	19.8492	51.3	11.1	39.7	2.736	0.507	0.503	0.013	12.680	10.79	
567	6/10/2004	9:09:45 AM		25.34	25.745	25.205	26.988	26.18		40.97	52.403	3.953	38.144	5.522	1.221		45.086	0.003	3.404	0.005		1191.95	19.8658	50.9	11.0	39.6	2.727	0.508	0.505	0.013	12.756	10.86	
568	6/10/2004	9:10:45 AM		25.349	25.774	25.224	27.062	26.153		41.337	53.176	4.025	38.447	5.49	1.221		45.104	0.003	3.399	0.005		1192.95	19.8825	51.7	11.1	39.9	2.750	0.507	0.504	0.013	12.624	10.74	
569	6/10/2004	9:11:45 AM		25.352	25.802	25.267	27.075	26.161		41.123	52.648	3.983	38.365	5.562	1.224		45.163	0.003	3.407	0.005		1193.95	19.8992	51.2	11.1	39.7	2.740	0.508	0.504	0.013	12.685	10.80	
570	6/10/2004	9:12:45 AM		25.34	25.815	25.235	26.993	26.165		41.094	52.917	4.034	38.137	5.559	1.221		45.065	0.003	3.405	0.004		1194.95	19.9158	51.4	11.0	39.6	2.731	0.508	0.504	0.013	12.730	10.83	
571	6/10/2004	9:13:45 AM		25.354	25.844	25.243	26.996	26.128		41.036	52.728	3.996	38.156	5.519	1.224		45.136	0.003	3.405	0.003		1195.95	19.9325	51.3	11.1	39.6	2.730	0.508	0.504	0.013	12.734	10.84	
572	6/10/2004	9:14:45 AM		25.362	25.867	25.252	27.005	26.111		40.788	52.507	3.996	37.928	5.557	1.224		45.175	0.003	3.405	0.005		1196.95	19.9492	51.0	11.1	39.4	2.714	0.508	0.504	0.013	12.807	10.90	
573	6/10/2004	9:15:45 AM		25.363	25.878	25.268	27.031	26.073		41.041	52.511	3.984	38.261	5.562	1.227		45.05	0.003	3.413	0.004		1197.95	19.9658	51.0	11.0	39.7	2.734	0.509	0.505	0.013	12.737	10.84	
574	6/10/2004	9:16:45 AM		25.361	25.906	25.276	27.019	26.1		41.074	52.722	4.012	38.199	5.562	1.227		45.167	0.003	3.409	0.005		1198.95	19.9825	51.2	11.1	39.6	2.733	0.508	0.504	0.013	12.724	10.83	
575	6/10/2004	9:17:45 AM		25.359	25.914	25.269	26.987	26.084		41.072	52.846	4.007	38.224	5.614	1.23		45.094	0.003	3.418	0.004		1199.95	19.9992	51.4	11.1	39.6	2.734	0.510	0.506	0.013	12.756	10.86	
576	6/10/2004	9:18:45 AM		25.377	25.938	25.298	27.01	26.107		40.937	52.579	4.007	38.066	5.591	1.23		45.09	0.003	3.417	0.003		1200.95	20.0158	51.1	11.1	39.5	2.723	0.509	0.505	0.013	12.789	10.88	
577	6/10/2004	9:19:45 AM		25.369	25.949	25.269	27.032	26.094		41.012	52.606	3.963	38.259	5.632	1.23		45.085	0.003	3.408	0.003		1201.95	20.0325	51.1	11.0	39.6	2.733	0.508	0.504	0.013	12.723	10.83	
578	6/10/2004	9:20:45 AM		25.377	25.962	25.282	27.044	26.096		41.103	52.917	4	38.283	5.649	1.23		45.142	0.003	3.419	0.004		1202.95	20.0492	51.4	11.1	39.7	2.737	0.510	0.506	0.013	12.741	10.84	
579	6/10/2004	9:21:45 AM		25.383	25.978	25.273	27.036	26.083		41.103	52.73	3.988	38.328	5.583	1.232		45.146	0.003	3.417	0.004		1203.95	20.0658	51.3	11.1	39.7	2.738	0.509	0.506	0.013	12.729	10.83	
580	6/10/2004	9:22:45 AM		25.37	25.98	25.245	27.028	26.079		41.072	52.743	3.986	38.293	5.641	1.235		45.025	0.003	3.423	0.003		1204.95	20.0825	51.3	11.0	39.7	2.736	0.510	0.507	0.013	12.772	10.87	

PRE-TEST ACID CLEAN WITH 2 M HNO3, FOLLOWING PUMP REPAIR – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
581	6/10/2004	9:23:40 AM		25.387	26.002	25.257	27.034	26.141		40.972	52.65	3.978	38.234	5.655	1.238		45.146	0.003	3.426	0.004		1205.87	20.0978	51.2	11.1	39.6	2.730	0.511	0.507	0.013	12.805	10.90	
582	6/10/2004	9:24:40 AM		25.393	26.013	25.258	27.076	26.113		41.038	52.718	3.985	38.209	5.6	1.235		45.06	0.003	3.415	0.003		1206.87	20.1144	51.2	11.0	39.6	2.732	0.509	0.505	0.013	12.757	10.86	
583	6/10/2004	9:25:40 AM		25.373	26.003	25.233	27.031	26.123		40.814	52.627	3.962	37.988	5.669	1.238		45.181	0.003	3.425	0.004		1207.87	20.1311	51.2	11.1	39.4	2.717	0.511	0.507	0.013	12.875	10.96	
584	6/10/2004	9:26:40 AM		25.401	26.046	25.291	27.068	26.135		40.788	52.61	3.926	37.957	5.646	1.244		45.156	0.003	3.423	0.004		1208.87	20.1478	51.1	11.1	39.4	2.715	0.510	0.506	0.013	12.856	10.94	
585	6/10/2004	9:27:40 AM		25.402	26.043	25.292	27.095	26.172		41.186	52.971	4.022	38.347	5.69	1.244		45.11	0.003	3.427	0.004		1209.87	20.1644	51.5	11.1	39.8	2.742	0.511	0.507	0.013	12.743	10.84	
586	6/10/2004	9:28:40 AM		25.388	26.043	25.268	27.116	26.167		41.043	52.853	3.994	38.179	5.678	1.244		45.056	0.003	3.429	0.004		1210.87	20.1811	51.4	11.0	39.6	2.731	0.511	0.507	0.013	12.809	10.90	
587	6/10/2004	9:29:40 AM		25.4	26.065	25.28	27.133	26.144		41.111	53.081	4.019	38.24	5.704	1.244		45.098	0.003	3.429	0.004		1211.87	20.1978	51.6	11.1	39.7	2.735	0.511	0.507	0.013	12.784	10.88	
588	6/10/2004	9:30:40 AM		25.386	26.067	25.257	27.129	26.161		40.949	52.708	4.042	38.039	5.672	1.241		45.017	0.003	3.427	0.005		1212.87	20.2144	51.2	11.0	39.5	2.723	0.511	0.507	0.013	12.844	10.93	
589	6/10/2004	9:31:40 AM		25.408	26.088	25.283	27.176	26.162		41.049	52.818	3.986	38.22	5.684	1.244		45.073	0.003	3.431	0.005		1213.87	20.2311	51.3	11.0	39.6	2.733	0.512	0.507	0.013	12.804	10.90	
590	6/10/2004	9:32:40 AM		25.404	26.094	25.274	27.167	26.178		40.87	52.59	3.98	38.055	5.713	1.25		45.146	0.003	3.434	0.004		1214.87	20.2478	51.1	11.1	39.5	2.721	0.512	0.508	0.013	12.874	10.96	
591	6/10/2004	9:33:40 AM		25.4	26.105	25.265	27.178	26.209		40.572	52.418	3.987	37.729	5.626	1.25		45.079	0.003	3.428	0.005		1215.87	20.2644	50.9	11.0	39.2	2.699	0.511	0.507	0.013	12.957	11.03	
592	6/10/2004	9:34:40 AM		25.406	26.112	25.267	27.189	26.236		40.702	52.482	3.951	37.877	5.696	1.25		45.088	0.003	3.435	0.004		1216.87	20.2811	51.0	11.0	39.3	2.709	0.512	0.508	0.013	12.937	11.01	
593	6/10/2004	9:35:40 AM		25.408	26.133	25.268	27.211	26.242		40.862	52.629	3.977	37.953	5.681	1.25		45.108	0.003	3.433	0.003		1217.87	20.2978	51.2	11.1	39.4	2.717	0.512	0.508	0.013	12.891	10.97	
594	6/10/2004	9:36:40 AM		25.404	26.134	25.259	27.267	26.213		41.051	52.631	4.015	38.189	5.568	1.178		45.148	0.003	3.461	0.004		1218.87	20.3144	51.2	11.1	39.6	2.732	0.516	0.512	0.013	12.929	11.00	
595																																	
596																																	
597		Averages		25.2	25.0	25.1	26.2	25.3		41.3	52.2	4.0	38.4	4.9	1.2		44.9	0.0	3.3	0.0				50.7	11.0	39.8	2.7	0.490	0.488	0.012	12.3	10.4	
598		Maximum		25.7	26.1	25.7	27.3	26.2		42.4	53.2	4.3	39.4	5.7	1.3		47.0	0.0	3.5	0.0				51.7	11.5	40.9	2.8	0.516	0.512	0.013	13.0	11.0	
599		Median		25.3	25.1	25.2	26.2	25.3		41.2	52.1	4.0	38.3	4.9	1.2		45.0	0.0	3.3	0.0				50.6	11.0	39.7	2.7	0.492	0.486	0.012	12.3	10.5	
600		Minimum		23.3	23.7	23.5	23.8	23.5		37.6	45.9	3.7	34.4	2.6	1.0		43.0	0.0	2.9	0.0				44.4	10.5	36.0	2.5	0.429	0.447	0.012	11.6	9.9	
601		2 x Std Dev		0.810	1.422	0.742	1.515	1.325		1.121	1.399	0.142	1.111	1.194	0.112		0.836	0.000	0.209	0.002				1.399	0.205	1.111	0.077	0.031	0.025	0.001	0.780	0.664	
602		Number of Points Used*		137	137	137	137	137		137	137	137	137	137	137		137	137	137	137				137	137	137	137	137	137	137	137	137	
603		* Backpulse points in box are not included																															

RUN # 3.00A, B, AND C; PRE-TEST BASELINE, DIF WATER AND 0.1 M NAOH



RUN # 3.00A, B, AND C; PRE-TEST BASELINE WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A		6.707	FT2						
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux >< PERMIABILITY >>					
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Baseline wA1																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	6/10/2004	2:35:47 PM		25.097	26.618	24.872	27.555	26.471		11.12	18.394	3.832	7.35	1.923	0.464		44.766	0.605	14.643	0.003		0	0	16.9	11.0	9.2	0.637	0.090	0.091	0.010	9.802	8.34	
18	6/10/2004	2:36:47 PM		24.802	26.613	24.897	27.525	26.416		10.861	18.104	3.814	7.136	2.019	0.637		44.781	0.595	14.643	0.003		1.00	0.01667	16.6	11.0	9.0	0.620	0.089	0.089	0.010	9.887	8.41	
19	6/10/2004	2:37:47 PM		24.793	26.619	24.938	27.516	26.467		11.85	18.351	3.785	8.118	1.116	-0.707		44.925	0.659	14.643	0.003		2.00	0.03333	16.9	11.0	10.0	0.688	0.098	0.098	0.010	9.858	8.39	
20	6/10/2004	2:38:47 PM		24.8	26.61	24.95	27.542	26.519		11.873	18.224	3.904	8.025	1.098	-0.716		44.862	0.658	14.643	0.003		3.00	0.05	16.8	11.0	9.9	0.686	0.098	0.098	0.010	9.874	8.40	
21	6/10/2004	2:39:47 PM		24.817	26.612	24.957	27.544	26.565		11.798	18.187	3.922	7.904	1.055	-0.73		44.818	0.663	14.643	0.003		4.00	0.06667	16.7	11.0	9.9	0.679	0.099	0.099	0.010	10.046	8.55	
22	6/10/2004	2:40:47 PM		24.835	26.625	24.98	27.557	26.554		11.825	18.282	3.894	7.925	1.052	-0.728		44.971	0.663	14.643	0.003		5.00	0.08333	16.8	11.0	9.9	0.681	0.099	0.099	0.010	10.016	8.52	
23	6/10/2004	2:41:47 PM		24.852	26.628	24.988	27.575	26.571		11.715	18.1	3.905	7.875	1.055	-0.73		44.718	0.662	14.643	0.003		6.00	0.1	16.6	11.0	9.8	0.675	0.099	0.099	0.010	10.080	8.58	
24	6/10/2004	2:42:47 PM		24.855	26.605	24.975	27.537	26.579		12.051	18.492	3.847	8.294	1.052	-0.736		44.994	0.658	14.643	0.003		7.00	0.11667	17.0	11.0	10.2	0.701	0.098	0.098	0.010	9.651	8.21	
25	6/10/2004	2:43:47 PM		24.876	26.611	25.016	27.573	26.629		11.798	18.185	3.788	8.05	1.043	-0.745		44.773	0.65	14.643	0.003		8.00	0.13333	16.7	11.0	9.9	0.684	0.097	0.097	0.010	9.761	8.31	
26	6/10/2004	2:44:47 PM		24.888	26.633	25.038	27.605	26.676		12.06	18.508	3.87	8.22	1.055	-0.745		44.833	0.656	14.643	0.003		9.00	0.15	17.0	11.0	10.1	0.699	0.098	0.098	0.010	9.635	8.20	
27	6/10/2004	2:45:47 PM		24.9	26.631	25.05	27.642	26.693		11.954	18.226	3.828	8.236	1.014	-0.745		45.094	0.658	14.643	0.003		10.00	0.16667	16.8	11.1	10.1	0.696	0.098	0.098	0.010	9.704	8.26	
28	6/10/2004	2:46:47 PM		24.908	26.648	25.068	27.655	26.721		11.803	18.171	3.766	8.204	1.052	-0.742		44.802	0.661	14.643	0.003		11.00	0.18333	16.7	11.0	10.0	0.690	0.099	0.098	0.010	9.833	8.37	
29	6/10/2004	2:47:47 PM		24.93	26.656	25.086	27.732	26.758		11.745	18.224	3.929	7.867	1.055	-0.728		45.142	0.656	14.643	0.003		12.00	0.2	16.8	11.1	9.8	0.676	0.098	0.098	0.010	9.950	8.47	
30	6/10/2004	2:48:47 PM		24.932	26.662	25.077	27.739	26.775		12.062	18.446	3.822	8.327	1.032	-0.745		44.889	0.658	14.643	0.003		13.00	0.21667	17.0	11.0	10.2	0.703	0.098	0.098	0.010	9.602	8.17	
31	6/10/2004	2:49:47 PM		24.945	26.67	25.075	27.762	26.793		12.01	18.426	3.918	8.175	1.043	-0.73		45.1	0.662	14.643	0.003		14.00	0.23333	17.0	11.1	10.1	0.696	0.099	0.098	0.010	9.759	8.30	
32	6/10/2004	2:50:47 PM		24.973	26.703	25.113	27.795	26.871		11.962	18.314	3.826	8.117	1.006	-0.754		44.942	0.658	14.643	0.003		15.00	0.25	16.8	11.0	10.0	0.692	0.098	0.098	0.010	9.741	8.29	
33	6/10/2004	2:51:47 PM		24.971	26.706	25.096	27.798	26.863		11.827	18.21	3.847	8.064	1.052	-0.739		44.697	0.659	14.643	0.003		16.00	0.26667	16.7	11.0	9.9	0.686	0.098	0.098	0.010	9.852	8.38	
34	6/10/2004	2:52:47 PM		24.979	26.719	25.119	27.781	26.827		11.9	18.297	3.773	8.177	1.035	-0.745		44.99	0.656	14.643	0.003		17.00	0.28333	16.8	11.0	10.0	0.692	0.098	0.097	0.010	9.710	8.26	
35	6/10/2004	2:53:47 PM		24.998	26.743	25.133	27.765	26.766		11.917	18.312	3.817	8.161	1.069	-0.707		44.406	0.662	14.643	0.003		18.00	0.3	16.8	10.9	10.0	0.692	0.099	0.098	0.010	9.795	8.34	
36	6/10/2004	2:54:47 PM		25.004	26.74	25.14	27.736	26.737		11.859	18.311	3.763	8.15	1.055	-0.722		44.593	0.656	14.643	0.003		19.00	0.31667	16.8	10.9	10.0	0.690	0.098	0.097	0.010	9.738	8.29	
37																																	
38																																	
39		Averages		24.9	26.7	25.0	27.6	26.7		11.8	18.3	3.8	8.0	1.1	-0.6		44.9	0.7	14.6	0.0				16.8	11.0	9.9	0.7	0.1	0.1	0.0	9.8	8.4	
40		Maximum		25.1	26.7	25.1	27.8	26.9		12.1	18.5	3.9	8.3	2.0	0.6		45.1	0.7	14.6	0.0				17.0	11.1	10.2	0.7	0.1	0.1	0.0	10.1	8.6	
41		Median		24.9	26.6	25.0	27.6	26.7		11.9	18.3	3.8	8.1	1.1	-0.7		44.8	0.7	14.6	0.0				16.8	11.0	10.0	0.7	0.1	0.1	0.0	9.8	8.3	
42		Minimum		24.8	26.6	24.9	27.5	26.4		10.9	18.1	3.8	7.1	1.0	-0.8		44.4	0.6	14.6	0.0				16.6	10.9	9.0	0.6	0.1	0.1	0.0	9.6	8.2	
43		2 x Std Dev		0.159	0.089	0.156	0.204	0.270		0.580	0.234	0.106	0.582	0.554	0.772		0.347	0.036	0.000	0.000				0.234	0.085	0.576	0.040	0.005	0.005	0.000	0.261	0.222	
44	Number of Points Used*			20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
45																																	
46																																	
47																																	
48	Baseline wB1																																
49	6/10/2004	2:57:25 PM		25.016	26.731	25.146	27.593	26.35		21.45	23.215	3.739	17.903	-1.215	-4.902		44.785	0.003	1.288	0.003		21.63	0.36056	21.7	11.0	19.7	1.357	0.192	0.191	0.010	9.719	8.27	
50	6/10/2004	2:58:25 PM		25.051	26.726	25.181	27.558	26.28		21.629	23.433	3.837	17.933	-1.215	-4.893		44.983	0.003	1.337	0.003		22.63	0.37722	22.0	11.0	19.8	1.364	0.199	0.198	0.010	10.026	8.53	
51	6/10/2004	2:59:25 PM		25.086	26.711	25.211	27.503	26.36		21.452	23.28	3.729	17.874	-1.221	-4.89		44.988	0.003	1.328	0.003		23.63	0.39389	21.8	11.0	19.7	1.356	0.198	0.197	0.010	10.010	8.52	
52	6/10/2004	3:00:25 PM		25.094	26.705	25.155	27.552	26.408		21.469	23.282	3.749	17.886	-1.215	-4.885		44.835	0.003	1.334	0.003		24.63	0.41056	21.8	11.0	19.7	1.357	0.199	0.198	0.010	10.063	8.56	
53	6/10/2004	3:01:25 PM		25.073	26.693	25.093	27.565	26.586		21.755	23.506	3.774	18.184	-1.215	-4.882		45.035	0.003	1.328	0.003		25.63	0.42722	22.0	11.0	20.0	1.377	0.198	0.197	0.010	9.889	8.42	
54	6/10/2004	3:02:25 PM		25.038	26.708	25.048	27.64	26.636		21.637	23.458	3.785	18.022	-1.215	-4.879		44.921	0.003	1.325	0.003		26.63	0.44389	22.0	11.0	19.8	1.367	0.198	0.197	0.010	9.949	8.47	
55	6/10/2004	3:03:25 PM		25.002	26.712	25.002	27.694	26.63		21.761	23.558	3.801	18.104	-1.215	-4.873		45.081	0.003	1.309	0.003		27.63	0.46056	22.1	11.0	19.9	1.374	0.195	0.195	0.010	9.791	8.33	
56	6/10/2004	3:04:25 PM		24.946	26.696	24.946	27.718	26.724		21.799	23.589	3.8	18.204	-1.215	-4.873		45.113	0.003	1.34	0.003		28.63	0.47722	22.1	11.1	20.0	1.379	0.200	0.200	0.010	10.004	8.51	
57	6/10/2004	3:05:25 PM		24.901	26.711	24.901	27.798	26.764		21.795	23.572	3.83	18.137	-1.212	-4.87		45.292	0.003	1.32	0.003		29.63	0.49389	22.1	11.1	20.0	1.377	0.197	0.197	0.010	9.884	8.41	
58	6/10/2004	3:06:25 PM		24.866	26.716	24.876	27.828	26.834		21.656	23.497	3.769	18.013	-1.215	-4.87		45.353	0.003	1.302	0.003		30.63	0.51056	22.0	11.1	19.8	1.368	0.194	0.195	0.010	9.821	8.36	
59	6/10/2004	3:07:25 PM		24.822	26.733	24.832	27.884	26.885		21.832	23.649	3.792	18.198	-1.215	-4.87		45.031	0.003	1.331	0.003		31.63	0.52722	22.2	11.0	20.0	1.380	0.198	0.199	0.010	9.962	8.48	
60	6/10/2004	3:08:25 PM		24.819	26.745	24.864	27.901	26.862		32.034	36.222	3.672	28.724	-1.215	-4.607		45.279	0.003	2.048	0.003		32.63	0.54389	34.7	11.1	30.4	2.095	0.305	0.307	0.010	10.090	8.59	
61																																	
62																																	
63		Averages		25.0	26.7	25.1	27.6	26.6		21.6	23.4	3.8	18.0	-1.2	-4.9		45.0	0.0	1.3	0.0				22.0	11.0	19.8	1.4	0.197	0.197	0.010	9.9	8.4	
64		Maximum		25.1	26.7	25.2	27.8	26.8		21.8	23.6	3.8	18.2	-1.2	-4.9		45.4	0.0	1.3	0.0				22.1	11.1	20.0	1.4	0.200	0.200	0.010	10.1	8.6	
65		Median		25.0	26.7	25.1	27.6	26.6		21.6	23.5	3.8	18.0	-1.2	-4.9		45.0	0.0	1.3	0.0				22.0	11.0	19.8	1.4	0.198	0.197	0.010	9.9	8.4	
66		Minimum		24.9	26.7	24.9	27.5	26.3		21.5	23.2	3.7	17.9	-1.2	-4.9		44.8	0.0	1.3	0.0				21.7	11.0	19.7	1.4	0.192	0.191	0.010	9.7	8.3	
67		2 x Std Dev		0.150	0.022	0.228	0.210	0.369		0.267	0.255	0.069	0.238	0.004	0.021		0.344	0.000	0.032	0.000				0.255	0.084	0.249	0.017	0.005	0.005	0.000	0.216	0.184	
68	Number of Points Used*			10	10	10	10	10		10	10	10	10	10	10		10	10	10	10				10	10	10	10	10	10	10	10	10	
69		* Backpulse po		s in box are not included																													

RUN # 3.00A, B, AND C; PRE-TEST BASELINE WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
72	Baseline wC1																																
73	6/10/2004	3:08:34 PM		24.845	26.755	24.905	27.927	26.873		32.372	36.733	3.759	28.964	-1.215	-4.607		44.935	0.003	2.048	0.003		32.78	0.54639	35.3	11.0	30.7	2.114	0.305	0.306	0.010	9.983	8.50	
74	6/10/2004	3:09:34 PM		24.908	26.758	24.988	27.879	26.915		32.278	36.746	3.779	28.81	-1.218	-4.607		45.071	0.003	2.045	0.003		33.78	0.56306	35.3	11.0	30.5	2.106	0.305	0.305	0.010	9.985	8.50	
75	6/10/2004	3:10:34 PM		25.009	26.779	25.109	27.945	26.926		32.386	36.506	3.71	29.134	-1.215	-4.601		45.104	0.003	2.042	0.005		34.78	0.57972	35.0	11.1	30.8	2.121	0.304	0.304	0.010	9.867	8.40	
76	6/10/2004	3:11:34 PM		25.1	26.791	25.201	28.002	26.828		32.332	36.709	3.682	29.044	-1.209	-4.595		45.127	0.003	2.047	0.005		35.78	0.59639	35.2	11.1	30.7	2.116	0.305	0.303	0.010	9.889	8.42	
77	6/10/2004	3:12:34 PM		25.192	26.797	25.273	27.919	26.7		32.282	36.63	3.67	28.987	-1.215	-4.595		44.967	0.003	2.081	0.005		36.78	0.61306	35.2	11.0	30.6	2.112	0.310	0.308	0.010	10.050	8.55	
78	6/10/2004	3:13:34 PM		25.274	26.804	25.339	27.911	26.672		32.417	36.866	3.755	28.989	-1.221	-4.595		44.992	0.003	2.05	0.005		37.78	0.62972	35.4	11.0	30.7	2.117	0.306	0.303	0.010	9.860	8.39	
79	6/10/2004	3:14:34 PM		25.346	26.811	25.416	27.967	26.639		32.681	37.011	3.673	29.395	-1.215	-4.593		44.906	0.003	2.062	0.004		38.78	0.64639	35.5	11.0	31.0	2.140	0.307	0.304	0.010	9.790	8.33	
80	6/10/2004	3:15:34 PM		25.417	26.802	25.467	27.838	26.61		32.083	36.354	3.724	28.666	-1.212	-4.59		44.975	0.003	2.049	0.005		39.78	0.66306	34.9	11.0	30.4	2.094	0.305	0.302	0.010	9.926	8.45	
81	6/10/2004	3:16:34 PM		25.471	26.786	25.506	27.783	26.584		32.316	36.539	3.648	29.065	-1.218	-4.59		44.958	0.003	2.123	0.004		40.78	0.67972	35.1	11.0	30.7	2.116	0.317	0.312	0.010	10.168	8.65	
82	6/10/2004	3:17:34 PM		25.527	26.792	25.583	27.784	26.561		32.351	36.767	3.691	29.005	-1.212	-4.584		45.181	0.003	2.066	0.005		41.78	0.69639	35.3	11.1	30.7	2.115	0.308	0.303	0.010	9.877	8.41	
83	6/10/2004	3:18:34 PM		25.592	26.802	25.648	27.759	26.571		31.878	36.13	3.685	28.568	-1.212	-4.59		44.894	0.003	2.053	0.005		42.78	0.71306	34.7	11.0	30.2	2.084	0.306	0.301	0.010	9.945	8.46	
84	6/10/2004	3:19:34 PM		25.635	26.775	25.685	27.707	26.513		31.733	35.923	3.75	28.369	-1.215	-4.598		45.012	0.003	2.082	0.003		43.78	0.72972	34.5	11.0	30.1	2.072	0.310	0.304	0.010	10.133	8.62	
85																																	
86																																	
87		Averages		25.3	26.8	25.3	27.9	26.7		32.3	36.6	3.7	28.9	-1.2	-4.6		45.0	0.0	2.1	0.0				35.1	11.0	30.6	2.1	0.3	0.3	0.0	10.0	8.5	
88		Maximum		25.6	26.8	25.7	28.0	26.9		32.7	37.0	3.8	29.4	-1.2	-4.6		45.2	0.0	2.1	0.0				35.5	11.1	31.0	2.1	0.3	0.3	0.0	10.2	8.7	
89		Median		25.3	26.8	25.4	27.9	26.7		32.3	36.7	3.7	29.0	-1.2	-4.6		45.0	0.0	2.1	0.0				35.2	11.0	30.7	2.1	0.3	0.3	0.0	9.9	8.5	
90		Minimum		24.8	26.8	24.9	27.7	26.5		31.7	35.9	3.6	28.4	-1.2	-4.6		44.9	0.0	2.0	0.0				34.5	11.0	30.1	2.1	0.3	0.3	0.0	9.8	8.3	
91		2 x Std Dev		0.512	0.034	0.487	0.178	0.283		0.484	0.596	0.081	0.526	0.006	0.013		0.175	0.000	0.045	0.002				0.596	0.043	0.501	0.035	0.007	0.006	0.000	0.218	0.186	
92	Number of Points Used*			12	12	12	12	12		12	12	12	12	12	12		12	12	12	12				12	12	12	12	12	12	12	12	12	

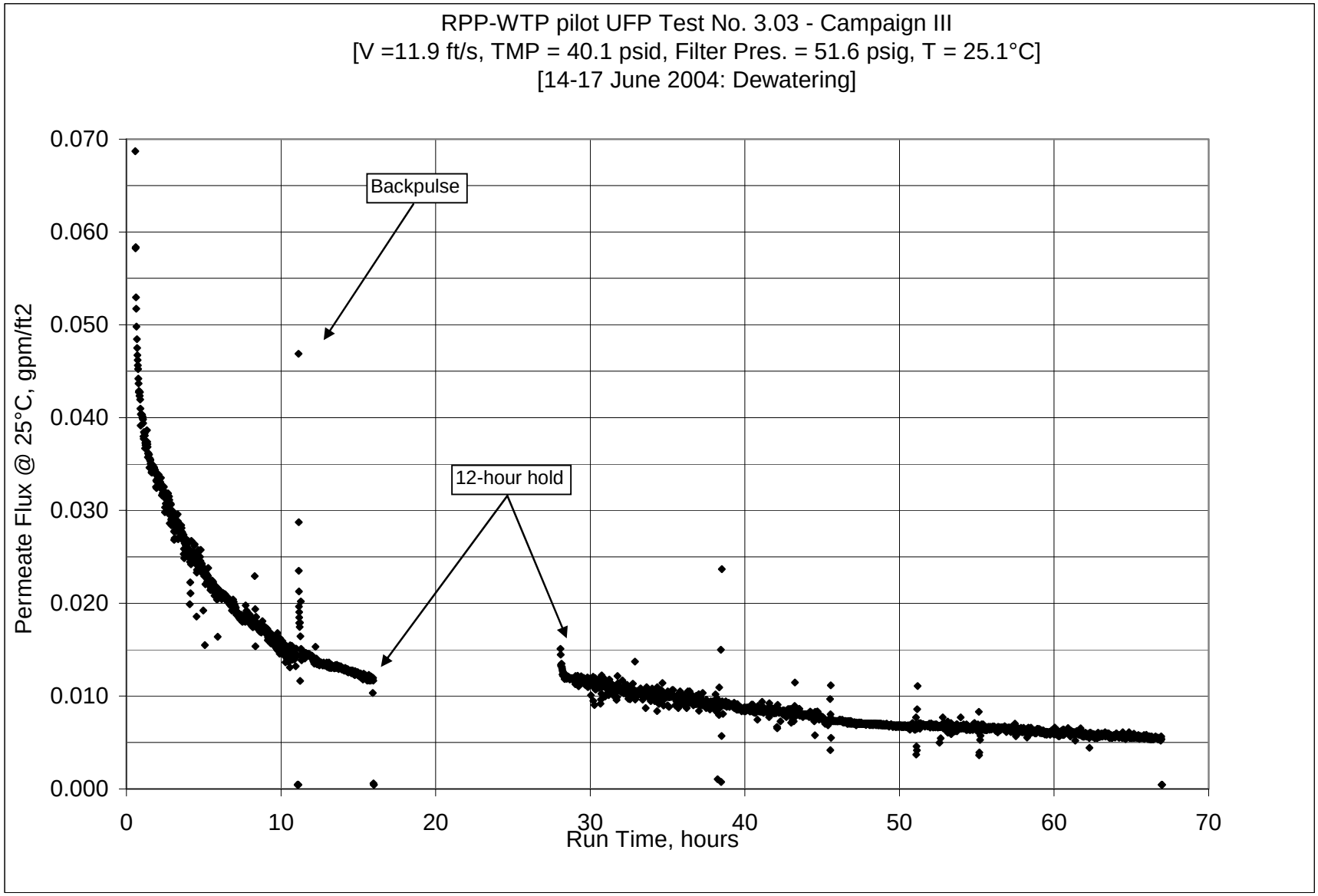
RUN # 3.00A, B, AND C; PRE-TEST BASELINE WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
97	Baseline wA2																																
98	6/10/2004	3:30:13 PM		25.937	26.783	25.388	27.914	26.87		11.187	15.725	3.806	7.364	-0.786	-1.93		44.892	0.558	14.643	0.003		0.00	0	14.3	11.0	9.3	0.640	0.083	0.082	0.009	8.872	7.55	
99	6/10/2004	3:31:13 PM		25.735	26.805	25.286	27.977	26.928		11.765	15.916	3.842	7.97	-1.218	-2.231		44.892	0.534	14.643	0.003		1.00	0.01667	14.4	11.0	9.9	0.680	0.080	0.079	0.008	8.004	6.81	
100	6/10/2004	3:32:13 PM		25.577	26.822	25.167	28.018	26.979		11.83	15.882	3.815	8.035	-1.215	-2.237		44.842	0.533	14.643	0.003		2.00	0.03333	14.4	11.0	9.9	0.685	0.079	0.079	0.008	7.963	6.78	
101	6/10/2004	3:33:13 PM		25.471	26.827	25.057	28.058	27.019		11.836	15.971	3.888	8.021	-1.215	-2.239		44.904	0.532	14.643	0.003		3.00	0.05	14.5	11.0	9.9	0.685	0.079	0.079	0.008	7.976	6.79	
102	6/10/2004	3:34:13 PM		25.294	26.839	24.939	28.06	27.056		11.825	15.94	3.861	8.007	-1.218	-2.254		44.758	0.531	14.643	0.003		4.00	0.06667	14.5	11.0	9.9	0.684	0.079	0.079	0.008	7.998	6.81	
103	6/10/2004	3:35:13 PM		25.217	26.862	24.872	28.063	26.924		11.854	15.899	3.813	8.128	-1.215	-2.26		44.914	0.53	14.643	0.003		5.00	0.08333	14.4	11.0	10.0	0.689	0.079	0.079	0.008	7.938	6.75	
104	6/10/2004	3:36:13 PM		25.094	26.879	24.784	28.041	26.872		11.817	15.806	3.839	7.968	-1.215	-2.271		44.727	0.529	14.643	0.003		0.00	0	14.3	11.0	9.9	0.682	0.079	0.079	0.008	8.021	6.83	
105	6/10/2004	3:37:13 PM		24.991	26.876	24.686	27.993	26.754		11.811	15.996	3.923	7.957	-1.215	-2.265		44.745	0.529	14.643	0.003		1.00	0.01667	14.5	11.0	9.9	0.681	0.079	0.080	0.008	8.050	6.85	
106	6/10/2004	3:38:13 PM		24.928	26.893	24.617	27.924	26.751		11.699	15.617	3.757	8.048	-1.215	-2.277		44.908	0.528	14.643	0.003		2.00	0.03333	14.1	11.0	9.9	0.681	0.079	0.080	0.008	8.059	6.86	
107	6/10/2004	3:39:13 PM		24.829	26.895	24.544	27.846	26.718		11.635	15.702	3.849	7.765	-1.215	-2.277		44.816	0.528	14.643	0.003		3.00	0.05	14.2	11.0	9.7	0.669	0.079	0.080	0.008	8.220	7.00	
108	6/10/2004	3:40:13 PM		24.781	26.897	24.481	27.863	26.65		12.002	16.121	3.885	8.206	-1.212	-2.283		44.743	0.528	14.643	0.003		4.00	0.06667	14.6	11.0	10.1	0.697	0.079	0.080	0.008	7.906	6.73	
109	6/10/2004	3:41:13 PM		24.598	26.888	24.402	27.825	26.637		22.8	24.069	3.955	19.042	-1.218	-5.116		45.845	0.003	1.26	0.003		5.00	0.08333	22.6	11.2	20.9	1.442	0.000	0.000	0.000	0.022	0.02	
110																																	
111																																	
112		Averages		25.2	26.9	24.9	28.0	26.8		12.7	16.6	3.9	8.9	-1.2	-2.5		44.9	0.5	13.5	0.0				15.1	11.0	10.8	0.7	0.1	0.1	0.0	7.4	6.3	
113		Maximum		25.9	26.9	25.4	28.1	27.1		22.8	24.1	4.0	19.0	-0.8	-1.9		45.8	0.6	14.6	0.0				22.6	11.2	20.9	1.4	0.1	0.1	0.0	8.9	7.6	
114		Median		25.2	26.9	24.8	28.0	26.9		11.8	15.9	3.8	8.0	-1.2	-2.3		44.9	0.5	14.6	0.0				14.4	11.0	9.9	0.7	0.1	0.1	0.0	8.0	6.8	
115		Minimum		24.6	26.8	24.4	27.8	26.6		11.2	15.6	3.8	7.4	-1.2	-5.1		44.7	0.0	1.3	0.0				14.1	11.0	9.3	0.6	0.0	0.0	0.0	0.0	0.0	
116		2 x Std Dev		0.787	0.075	0.618	0.169	0.272		6.119	4.540	0.104	6.144	0.237	1.606		0.577	0.293	7.398	0.000				4.540	0.141	6.131	0.423	0.044	0.044	0.004	4.488	3.820	
117	Number of Points Used*			12	12	12	12	12		12	12	12	12	12	12		12	12	12	12				12	12	12	12	12	12	12	12	12	
118		* Backpulse points in box are not included																															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
123	Baseline wB2																																
124	6/10/2004	3:41:33 PM		24.542	26.877	24.406	27.844	26.666		22.236	23.346	3.732	18.705	-1.218	-5.133		45.023	0.003	1.133	0.003		21.63	0.3605	21.9	11.0	20.5	1.411	0.169	0.172	0.008	8.391	7.14	
125	6/10/2004	3:42:33 PM		24.479	26.879	24.408	27.836	26.647		22.075	23.276	3.799	18.42	-1.215	-5.127		44.871	0.003	1.121	0.003		22.63	0.37717	21.8	11.0	20.2	1.396	0.167	0.170	0.008	8.393	7.14	
126	6/10/2004	3:43:33 PM		24.448	26.869	24.393	27.831	26.598		21.936	23.155	3.853	18.177	-1.215	-5.127		44.622	0.003	1.142	0.003		23.63	0.39383	21.7	10.9	20.1	1.383	0.170	0.173	0.009	8.636	7.35	
127	6/10/2004	3:44:33 PM		24.413	26.854	24.383	27.776	26.568		21.857	22.948	3.876	18.042	-1.215	-5.127		44.962	0.003	1.134	0.003		24.63	0.4105	21.5	11.0	19.9	1.375	0.169	0.172	0.009	8.624	7.34	
128	6/10/2004	3:45:33 PM		24.399	26.85	24.364	27.772	26.574		21.886	22.985	3.851	18.147	-1.218	-5.125		44.833	0.003	1.147	0.003		25.63	0.42717	21.5	11.0	20.0	1.380	0.171	0.174	0.009	8.698	7.40	
129	6/10/2004	3:46:33 PM		24.375	26.836	24.365	27.823	26.629		22.083	23.269	3.699	18.6	-1.218	-5.127		44.821	0.003	1.152	0.005		26.63	0.44383	21.8	11.0	20.3	1.402	0.172	0.175	0.009	8.596	7.32	
130	6/10/2004	3:47:33 PM		24.391	26.852	24.436	27.799	26.715		21.963	23.11	3.751	18.368	-1.215	-5.125		44.904	0.003	1.168	0.004		27.63	0.4605	21.6	11.0	20.2	1.390	0.174	0.177	0.009	8.774	7.47	
131	6/10/2004	3:48:33 PM		24.4	26.841	24.535	27.813	26.734		22.093	23.346	3.858	18.372	-1.215	-5.122		44.7	0.003	1.162	0.004		28.63	0.47717	21.9	11.0	20.2	1.395	0.173	0.176	0.009	8.676	7.38	
132	6/10/2004	3:49:33 PM		24.442	26.853	24.602	27.859	26.791		22.004	23.006	3.83	18.338	-1.215	-5.119		44.929	0.003	1.178	0.005		29.63	0.49383	21.5	11.0	20.2	1.391	0.176	0.178	0.009	8.805	7.49	
133	6/10/2004	3:50:33 PM		24.473	26.854	24.643	27.89	26.861		21.878	23.019	3.82	18.167	-1.215	-5.119		44.768	0.003	1.164	0.003		30.63	0.5105	21.5	11.0	20.0	1.380	0.174	0.175	0.009	8.755	7.45	
134	6/10/2004	3:51:33 PM		24.493	26.849	24.683	27.965	26.916		30.777	33.214	3.576	27.435	-1.215	-4.939		43.98	0.003	1.552	0.003		31.63	0.52717	31.7	10.8	29.1	2.007	0.231	0.233	0.008	8.021	6.83	
135																																	
136																																	
137		Averages		24.4	26.9	24.5	27.8	26.7		22.8	24.1	3.8	19.2	-1.2	-5.1		44.8	0.0	1.2	0.0				22.6	11.0	21.0	1.4	0.2	0.2	0.0	8.6	7.3	
138		Maximum		24.5	26.9	24.7	28.0	26.9		30.8	33.2	3.9	27.4	-1.2	-4.9		45.0	0.0	1.6	0.0				31.7	11.0	29.1	2.0	0.2	0.2	0.0	8.8	7.5	
139		Median		24.4	26.9	24.4	27.8	26.7		22.0	23.2	3.8	18.4	-1.2	-5.1		44.8	0.0	1.2	0.0				21.7	11.0	20.2	1.4	0.2	0.2	0.0	8.6	7.3	
140		Minimum		24.4	26.8	24.4	27.8	26.6		21.9	22.9	3.6	18.0	-1.2	-5.1		44.0	0.0	1.1	0.0				21.5	10.8	19.9	1.4	0.2	0.2	0.0	8.0	6.8	
141		2 x Std Dev		0.098	0.026	0.227	0.104	0.222		5.050	5.795	0.172	5.247	0.003	0.107		0.543	0.000	0.233	0.002				5.795	0.133	5.148	0.355	0.035	0.034	0.000	0.439	0.374	
142	Number of Points Used*			11	11	11	11	11		11	11	11	11	11	11		11	11	11	11				11	11	11	11	11	11	11	11	11	
143		* Backpulse points in box are not included																															

RUN # 3.00A, B, AND C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
147	Baseline wC2																																
148	6/10/2004	3:52:04 PM		24.554	26.855	24.734	28.026	26.962		32.075	34.748	3.735	28.556	-1.212	-4.911		44.914	0.003	1.61	0.006		32.78	0.54633	33.3	11.0	30.3	2.090	0.240	0.242	0.008	7.978	6.79	
149	6/10/2004	3:53:04 PM		24.669	26.865	24.889	28.056	26.982		31.984	34.652	3.721	28.508	-1.215	-4.908		44.996	0.003	1.606	0.004		33.78	0.563	33.2	11.0	30.2	2.085	0.239	0.240	0.008	7.941	6.76	
150	6/10/2004	3:54:04 PM		24.836	26.891	25.077	28.102	26.974		31.988	34.785	3.762	28.467	-1.215	-4.905		44.819	0.003	1.612	0.004		34.78	0.57967	33.3	11.0	30.2	2.084	0.240	0.240	0.008	7.934	6.75	
151	6/10/2004	3:55:04 PM		24.963	26.893	25.188	28.064	27.025		31.853	34.462	3.73	28.381	-1.218	-4.908		44.908	0.003	1.619	0.005		35.78	0.59633	33.0	11.0	30.1	2.076	0.241	0.240	0.008	7.972	6.78	
152	6/10/2004	3:56:04 PM		25.099	26.909	25.314	28.07	26.931		31.893	34.677	3.79	28.307	-1.215	-4.908		44.965	0.003	1.623	0.004		36.78	0.613	33.2	11.0	30.1	2.075	0.242	0.240	0.008	7.968	6.78	
153	6/10/2004	3:57:04 PM		25.224	26.924	25.435	28.075	26.892		31.808	34.518	3.787	28.209	-1.215	-4.905		44.877	0.003	1.63	0.004		37.78	0.62967	33.0	11.0	30.0	2.069	0.243	0.240	0.008	8.000	6.81	
154	6/10/2004	3:58:04 PM		25.34	26.935	25.545	28.041	26.878		31.866	34.667	3.724	28.316	-1.209	-4.896		44.944	0.003	1.638	0.004		38.78	0.64633	33.2	11.0	30.1	2.075	0.244	0.240	0.008	7.992	6.80	
155	6/10/2004	3:59:04 PM		25.445	26.93	25.631	28.011	26.838		32.056	34.692	3.768	28.584	-1.218	-4.905		44.875	0.003	1.64	0.005		39.78	0.663	33.2	11.0	30.3	2.090	0.245	0.240	0.008	7.923	6.74	
156	6/10/2004	4:00:04 PM		25.547	26.942	25.732	28.013	26.834		32.002	34.862	3.784	28.393	-1.215	-4.902		44.896	0.003	1.643	0.005		40.78	0.67967	33.4	11.0	30.2	2.082	0.245	0.240	0.008	7.947	6.76	
157																																	
158																																	
159		Averages		25.1	26.9	25.3	28.1	26.9		31.9	34.7	3.8	28.4	-1.2	-4.9		44.9	0.0	1.6	0.0				33.2	11.0	30.2	2.1	0.2	0.2	0.0	8.0	6.8	
160		Maximum		25.5	26.9	25.7	28.1	27.0		32.1	34.9	3.8	28.6	-1.2	-4.9		45.0	0.0	1.6	0.0				33.4	11.0	30.3	2.1	0.2	0.2	0.0	8.0	6.8	
161		Median		25.1	26.9	25.3	28.1	26.9		32.0	34.7	3.8	28.4	-1.2	-4.9		44.9	0.0	1.6	0.0				33.2	11.0	30.2	2.1	0.2	0.2	0.0	8.0	6.8	
162		Minimum		24.6	26.9	24.7	28.0	26.8		31.8	34.5	3.7	28.2	-1.2	-4.9		44.8	0.0	1.6	0.0				33.0	11.0	30.0	2.1	0.2	0.2	0.0	7.9	6.7	
163		2 x Std Dev		0.653	0.059	0.641	0.058	0.127		0.179	0.234	0.054	0.236	0.005	0.008		0.100	0.000	0.026	0.001				0.234	0.024	0.203	0.014	0.004	0.001	0.000	0.051	0.043	
164	Number of Points Used*			9	9	9	9	9		9	9	9	9	9	9		9	9	9	9				9	9	9	9	9	9	9	9	9	
165		* Backpulse points in box are not included																															

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING



RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>										
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface	6.707	FT2							
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux		<< PERMIABILITY		>>	
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	6/14/2004	9:14:41 AM		26.805	24.863	79.051	26.343	25.614		45.463	47.021	8.649	37.509	-1.219	-4.955		47.527	0.281	14.643	0.004		0	0	45.6	11.6	41.5	2.860	0.042	0.040	0.001	0.960	0.82	
18	6/14/2004	9:15:54 AM		26.805	24.863	79.051	26.343	25.614		45.463	47.021	8.649	37.509	-1.219	-4.955		47.527	0.281	14.643	0.004		1.22	0.02028	45.6	11.6	41.5	2.860	0.042	0.040	0.001	0.960	0.82	
19	6/14/2004	9:16:54 AM		27.274	24.914	80.155	26.419	25.659		45.68	47.222	8.445	37.993	-1.222	-4.955		46.676	0.282	14.643	0.004		2.22	0.03694	45.8	11.4	41.8	2.884	0.042	0.039	0.001	0.943	0.80	
20	6/14/2004	9:17:54 AM		27.32	24.9	80.642	26.395	25.75		45.116	46.662	8.996	36.823	-1.222	-5.007		48.638	0.274	14.643	0.004		3.22	0.05361	45.2	11.9	41.0	2.825	0.041	0.038	0.001	0.935	0.80	
21	6/14/2004	9:18:54 AM		27.56	24.915	80.92	26.42	25.81		45.459	47.01	8.903	37.27	-1.214	-4.993		43.991	0.276	14.643	0.004		4.22	0.07028	45.6	10.8	41.4	2.852	0.041	0.038	0.001	0.926	0.79	
22	6/14/2004	9:19:54 AM		27.738	24.944	176.14	26.459	25.759		45.143	46.683	8.789	37.037	-1.219	-5.025		45.299	0.276	14.643	0.004		5.22	0.08694	45.4	11.1	41.1	2.833	0.041	0.038	0.001	0.928	0.79	
23	6/14/2004	9:20:54 AM		27.997	24.989	176.18	26.499	25.784		45.318	46.938	8.576	37.453	-1.219	-4.99		51.617	0.276	14.643	0.004		6.22	0.10361	45.7	12.6	41.4	2.853	0.041	0.038	0.001	0.915	0.78	
24	6/14/2004	9:21:54 AM		28.131	24.989	176.21	26.534	25.834		45.116	46.691	8.641	37.162	-1.219	-5.016		50.09	0.277	14.643	0.004		7.22	0.12028	45.4	12.3	41.1	2.836	0.041	0.038	0.001	0.920	0.78	
25	6/14/2004	9:22:54 AM		28.228	24.996	28.988	26.521	25.866		45.305	46.785	8.668	37.336	-1.222	-5.022		45.739	0.277	14.643	0.004		8.22	0.13694	45.3	11.2	41.3	2.849	0.041	0.038	0.001	0.914	0.78	
26	6/14/2004	9:23:54 AM		28.392	24.996	176.22	26.536	25.916		45.612	47.145	8.644	37.701	-1.219	-5.001		45.652	0.279	14.643	0.004		9.22	0.15361	45.9	11.2	41.7	2.872	0.042	0.038	0.001	0.909	0.77	
27	6/14/2004	9:24:54 AM		28.476	25.021	176.22	26.576	25.961		45.164	46.656	8.513	37.396	-1.219	-5.016		45.403	0.279	14.643	0.004		10.22	0.17028	45.4	11.1	41.3	2.846	0.042	0.038	0.001	0.915	0.78	
28	6/14/2004	9:25:54 AM		28.593	25.043	28.815	26.573	25.997		45.351	47.147	8.587	37.412	-1.219	-4.978		50.426	0.273	14.643	0.003		11.22	0.18694	45.7	12.4	41.4	2.853	0.041	0.037	0.001	0.885	0.75	
29	6/14/2004	9:26:54 AM		28.665	25.06	28.837	26.67	26.024		45.185	46.53	8.504	37.42	-1.219	-5.048		49.419	0.278	14.643	0.003		12.22	0.20361	45.1	12.1	41.3	2.848	0.041	0.037	0.001	0.902	0.77	
30	6/14/2004	9:27:54 AM		28.583	25.102	28.819	26.857	25.957		43.559	45.122	9.579	34.619	-1.222	-5.175		48.966	0.261	14.643	0.003		13.22	0.22028	43.7	12.0	39.1	2.695	0.039	0.035	0.001	0.895	0.76	
31	6/14/2004	9:28:54 AM		28.582	25.101	28.724	26.896	26.011		44.175	45.425	9.387	35.477	-1.222	-5.684		45.775	0.292	14.643	0.003		14.22	0.23694	44.0	11.2	39.8	2.746	0.044	0.039	0.001	0.986	0.84	
32	6/14/2004	9:29:54 AM		28.754	25.119	28.637	26.899	26.074		44.264	45.288	9.287	35.719	-1.216	-5.75		52.212	0.256	14.643	0.004		15.22	0.25361	43.8	12.8	40.0	2.757	0.038	0.034	0.001	0.863	0.73	
33	6/14/2004	9:30:54 AM		28.631	25.136	28.549	26.936	26.111		44.231	45.155	9.13	35.789	-1.219	-6.213		44.494	0.263	14.643	0.004		16.22	0.27028	43.7	10.9	40.0	2.759	0.039	0.036	0.001	0.888	0.76	
34	6/14/2004	9:31:54 AM		28.892	25.153	28.442	26.948	26.128		41.74	45.13	9.161	33.166	-1.222	-6.025		53.59	0.19	14.643	0.004		17.22	0.28694	43.7	13.1	37.5	2.582	0.028	0.026	0.001	0.687	0.58	
35	6/14/2004	9:32:54 AM		28.589	25.184	28.393	26.954	26.148		42.149	45.419	9.039	33.73	-1.219	-4.921		51.953	0.294	14.643	0.004		18.22	0.30361	43.9	12.7	37.9	2.616	0.044	0.040	0.001	1.051	0.89	
36	6/14/2004	9:33:54 AM		28.503	25.218	28.342	26.968	26.028		42.202	44.88	9.008	33.862	-1.219	-5.155		46.365	0.125	0.705	0.004		19.22	0.32028	43.4	11.4	38.0	2.622	0.019	0.017	0.000	0.446	0.38	
37	6/14/2004	9:34:54 AM		28.329	25.203	28.242	26.923	26.117		40.375	45.077	8.949	32.056	-1.196	-7.774		53.25	0.004	14.643	0.004		20.22	0.33694	43.6	13.0	36.2	2.497	0.001	0.001	0.000	0.015	0.01	
38	6/14/2004	9:35:54 AM		28.589	25.204	28.164	26.914	26.179		6.162	45.284	8.937	-2.344	33.73	12.159		45.08	0.003	14.643	0.004		21.22	0.35361	43.8	11.0	1.9	0.132	0.000	0.000	0.000	0.215	0.18	
39	6/14/2004	9:36:54 AM		28.525	25.25	28.125	27	26.149		6.042	44.95	8.751	-2.245	33.672	9.143		50.071	0.003	14.643	0.004		22.22	0.37028	43.5	12.3	1.9	0.131	0.000	0.000	0.000	0.216	0.18	
40	6/14/2004	9:37:54 AM		28.444	25.264	28.068	26.983	26.178		6.342	45.472	8.848	-2.102	33.605	19.42		47.22	0.003	14.643	0.004		23.22	0.38694	44.0	11.6	2.1	0.146	0.000	0.000	0.000	0.194	0.16	
41	6/14/2004	9:38:54 AM		28.38	25.274	28.024	26.979	26.213		6.282	45.216	8.714	-1.974	33.689	21.441		48.589	0.003	14.643	0.004		24.22	0.40361	43.7	11.9	2.2	0.149	0.000	0.000	0.000	0.191	0.16	
42	6/14/2004	9:39:54 AM		28.313	25.287	27.982	27.007	26.246		6.114	45.083	8.654	-2.058	33.698	28.952		46.063	0.003	14.643	0.003		25.22	0.42028	43.6	11.3	2.0	0.140	0.000	0.000	0.000	0.203	0.17	
43	6/14/2004	9:40:54 AM		28.254	25.308	27.948	27.057	26.317		6.239	45.487	8.617	-1.907	33.837	58.158		48.148	0.003	14.643	0.004		26.22	0.43694	44.0	11.8	2.2	0.149	0.000	0.000	0.000	0.190	0.16	
44	6/14/2004	9:41:54 AM		28.205	25.339	27.899	27.148	26.382		6.222	45.336	8.562	-1.851	33.788	78.94		48.313	0.003	14.643	0.004		27.22	0.45361	43.9	11.8	2.2	0.151	0.000	0.000	0.000	0.189	0.16	
45	6/14/2004	9:42:54 AM		28.178	25.372	27.907	27.286	26.45		6.347	45.572	8.618	-1.818	33.73	88.168		52.341	0.003	14.643	0.005		28.22	0.47028	44.1	12.8	2.3	0.156	0.000	0.000	0.000	0.182	0.16	
46	6/14/2004	9:43:54 AM		28.115	25.389	27.859	27.288	26.502		6.189	45.493	8.586	-1.962	33.793	87.593		46.686	0.003	14.643	0.006		29.22	0.48694	44.0	11.4	2.1	0.146	0.000	0.000	0.000	0.195	0.17	
47	6/14/2004	9:44:54 AM		28.083	25.421	27.841	27.36	26.519		6.278	45.39	8.568	-1.826	33.817	87.561		54.635	0.003	14.643	0.004		30.22	0.50361	43.9	13.4	2.2	0.153	0.000	0.000	0.000	0.186	0.16	
48	6/14/2004	9:45:54 AM		27.83	25.442	27.818	27.456	26.59		5.384	45.073	8.162	-2.268	34.294	50.7		51.655	0.003	14.643	0.004		31.22	0.52028	43.6	12.7	1.6	0.107	0.000	0.000	0.000	0.265	0.23	
49	6/14/2004	9:46:54 AM		27.809	25.456	27.766	27.415	26.649		5.977	45.738	8.231	-1.716	34.338	34.152		48.757	0.003	14.643	0.004		32.22	0.53694	44.3	11.9	2.1	0.147	0.000	0.000	0.000	0.194	0.17	
50	6/14/2004	9:47:54 AM		27.775	25.467	27.712	27.45	26.595		6.038	45.928	8.232	-1.669	34.372	0.341		42.083	0.003	14.643	0.006		33.22	0.55361	44.5	10.3	2.2	0.151	0.000	0.000	0.000	0.190	0.16	
51	6/14/2004	9:48:54 AM		28.098	25.502	27.717	27.46	26.575		37.238	45.404	8.37	29.478	2.139	0.471		43.958	0.497	14.643	0.004		34.22	0.57028	43.9	10.8	33.4	2.300	0.074	0.069	0.002	2.059	1.75	
52	6/14/2004	9:49:54 AM		28.205	25.524	27.68	27.422	26.567		37.603	45.678	8.481	29.792	2.017	0.809		46.747	0.421	14.643	0.004		35.22	0.58694	44.2	11.5	33.7	2.323	0.063	0.058	0.002	1.728	1.47	
53	6/14/2004	9:50:54 AM		28.205	25.539	27.605	27.437	26.572		42.13	45.244	8.581	34.295	-1.222	-4.021		52.556	0.421	14.643	0.004		36.22	0.60361	43.8	12.9	38.2	2.635	0.063	0.058	0.002	1.527	1.30	
54	6/14/2004	9:51:54 AM		28.192	25.565	27.606	27.479	26.598		42.806	45.137	8.476	35.025	-1.214	-4.811		48.29	0.382	14.643	0.004		37.22	0.62028	43.7	11.8	38.9	2.683	0.057	0.053	0.001	1.361	1.16	
55	6/14/2004	9:52:54 AM		28.195	25.599	27.6	27.472	26.572		43.356	45.605	8.594	35.442	-1.219	-4.819		47.919	0.373	14.643	0.004		38.22	0.63694	44.1	11.7	39.4	2.716	0.056	0.052	0.001	1.313	1.12	
56	6/14/2004	9:53:54 AM		28.162	25.616	27.587	27.445	26.599		43.613	45.533	8.484	35.818	-1.222	-5.094		54.669	0.359	14.643	0.003		39.22	0.65361	44.1	13.4	39.7	2.738	0.054	0.050	0.001	1.254	1.07	
57	6/14/2004	9:54:54 AM		28.079	25.628	27.558	27.451	26.6		43.743	45.489	8.473	35.937	-1.222	-5.201		50.126	0.349	14.643	0.004		40.22	0.67028	44.0	12.3	39.8	2.747	0.052	0.048	0.001	1.216	1.03	
58	6/14/2004	9:55:54 AM		28.12	25.649	27.54	27.472	26.627		44.258	45.796	8.472	36.474	-1.222	-5.328		41.707	0.342	14.643	0.004		41.22	0.68694	44.3	10.2	40.4	2.783	0.051	0.047	0.001	1.177	1.00	
59	6/14/2004	9:56:54 AM		28.086	25.66	27.486	27.468	26.612		44.312	45.715	8.504	36.499	-1.219	-5.325		46.87	0.336	14.643	0.004		42.22	0.70361	44.2	11.5	40.4	2.786	0.050	0.047	0.001	1.157	0.98	
60	6/14/2004	9:57:54 AM		28.072	25.681	27.477	27.434	26.618		44.37	45.688	8.482	36.54	-1.222	-5.467		46.619	0.332	14.643	0.004		43.22	0.72028	44.2	11.4	40.5	2.789	0.049	0.046	0.001	1.142	0.97	
61	6/14/2004	9:58:54 AM		28.037	25.685	27.486	27.443	26.617		44.772	46.086	8.396	36.993	-1.219	-5.473		44.867	0.328	14.643	0.004		44.22	0.73694	44.6	11.0	40.9	2.819	0.049	0.046	0.001	1.116	0.95	
62	6/14/2004	9:59:54 AM		27.986	25.704	27.475	27.462	26.632		44.558	45.676	8.403	36.842	-1.219	-5.588		49.258	0.325	14.643	0.004		45.22	0.75361	44.2	12.1	40.7	2.806	0.048	0.045	0.001	1.111	0.95	
63	6/14/2004	10:00:54 AM		27.944	25.752	27.513	27.485	26.654		44.56	45.703	8.304	36.924	-1.219	-5.646		45.879	0.318	14.643	0.004		46.22	0.77028	44.2	11.2	40.7	2.809	0.047	0.044	0.001	1.085	0.92	
64	6/14/2004	10:01:54 AM		27.891	25.754	27.48	27.477	26.672		44.755	45.92	8.412	36.913	-1.219	-5.689		44.736	0.314	14.643	0.004		47.22	0.78694	44.4	11.0	40.8	2.815	0.047	0.044	0.001	1.070	0.91	
65	6/14/2004	10:02:54 AM		27.848	25.766	27.447	27.454	26.673		44.924	45.802	8.4	37.205	-1.219	-5.681		50.831	0.307	14.643	0.004		48.22	0.80361	44.3	12.5	41.1	2.831	0.046	0.043	0.001	1.041	0.89	
66	6/14/2004	10:03:54 AM		27.831	25.779	27.455	27.482	26.686		45.235	46.076	8.383	37.478	-1.222	-5.782		45.591	0.308	14.643	0.004		49.22	0.82028	44.6	11.2	41.4	2.851	0.046	0.043	0.001	1.037	0.88	
67	6/14/2004	10:04:54 AM		27.807	25.789	27.44	27.453	26.667		44.88	45.686	8.656	36.885	-1.222	-5.825		46.004	0.304	14.643	0.004		50.22	0.83694	44.2	11.3	40.9	2.819	0.045	0.042	0.001	1.036	0.88	
68	6/14/2004	10:05:54 AM		27.799	25.812	27.428	27.47	26.674		44.836	45.64	8.521	37.004	-1.225	-5.846		44.421	0.304	14.643	0.003		51.22	0.85361	44.2	10.9	40.9	2.821	0.045	0.042	0.001	1.035	0.88	
69	6/14/2004	10:06:54 AM		27.794	25.837	27.453	27.475	26.699		45.747	46.61	8.304	38.102	-1.219	-5.817		50.455	0.307	14.643	0.004		52.22	0.87028	45.1	12.4	41.9	2.891	0.046	0.043	0.001	1.019	0.87	
70	6/14/2004	10:07:54 AM		27.774	25.837	27.428	27.435	26.704		45.558	46.432	8.278	37.942	-1.219	-5.857		43.578	0.301	14.643	0.004		53.22	0.88694	45.0	10.7	41.8	2.879	0.045	0.042	0.001	1.004	0.85	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	6/14/2004	10:08:54 AM		27.758	25.851	27.422	27.409	26.693		45.237	45.943	8.277	37.632	-1.219	-5.869		51.83	0.294	14.643	0.004		54.22	0.90361	44.5	12.7	41.4	2.857	0.044	0.041	0.001	0.989	0.84	
72	6/14/2004	10:09:54 AM		27.744	25.872	27.433	27.41	26.714		44.343	44.797	9.097	35.957	-1.225	-6.028		51.598	0.281	14.643	0.004		55.22	0.92028	43.3	12.6	40.2	2.768	0.042	0.039	0.001	0.975	0.83	
73	6/14/2004	10:10:54 AM		27.751	25.908	27.469	27.466	26.71		44.892	45.574	8.646	36.883	-1.219	-5.987		45.789	0.29	14.643	0.004		56.22	0.93694	44.1	11.2	40.9	2.819	0.043	0.040	0.001	0.987	0.84	
74	6/14/2004	10:11:54 AM		27.736	25.909	27.46	27.552	26.731		44.996	45.557	8.591	37.067	-1.219	-5.993		52.116	0.29	14.643	0.004		57.22	0.95361	44.1	12.8	41.0	2.829	0.043	0.040	0.001	0.984	0.84	
75	6/14/2004	10:12:54 AM		27.744	25.941	27.462	27.604	26.733		45.249	45.719	8.523	37.396	-1.219	-6.002		44.189	0.29	14.643	0.004		58.22	0.97028	44.2	10.8	41.3	2.849	0.043	0.040	0.001	0.977	0.83	
76	6/14/2004	10:13:54 AM		27.745	25.952	27.493	27.645	26.769		45.384	45.879	8.367	37.751	-1.216	-5.99		43.349	0.29	14.643	0.004		59.22	0.98694	44.4	10.6	41.6	2.866	0.043	0.040	0.001	0.970	0.83	
77	6/14/2004	10:14:54 AM		27.749	25.972	27.518	27.675	26.824		45.757	46.3	8.372	38.089	-1.219	-5.973		50.272	0.29	14.643	0.004		60.22	1.00361	44.8	12.3	41.9	2.890	0.043	0.040	0.001	0.961	0.82	
78	6/14/2004	10:15:54 AM		27.835	25.998	27.548	27.705	26.874		45.564	45.947	8.365	37.882	-1.222	-6.013		39.004	0.288	14.643	0.004		61.22	1.02028	44.5	9.6	41.7	2.877	0.043	0.040	0.001	0.958	0.82	
79	6/14/2004	10:16:54 AM		27.852	25.995	27.561	27.733	26.907		45.699	46.345	8.174	38.196	-1.219	-5.987		44.715	0.289	14.643	0.004		62.22	1.03694	44.9	11.0	41.9	2.892	0.043	0.040	0.001	0.956	0.81	
80	6/14/2004	10:17:54 AM		27.871	26.019	27.599	27.761	26.885		45.523	46.206	8.072	38.124	-1.219	-6.042		44.337	0.288	14.643	0.004		63.22	1.05361	44.7	10.9	41.8	2.884	0.043	0.040	0.001	0.955	0.81	
81	6/14/2004	10:18:54 AM		27.934	26.027	27.597	27.764	26.883		45.67	46.293	8.066	38.276	-1.219	-6.054		41.914	0.287	14.643	0.004		64.22	1.07028	44.8	10.3	42.0	2.894	0.043	0.040	0.001	0.948	0.81	
82	6/14/2004	10:19:54 AM		27.924	26.032	27.593	27.785	26.904		45.687	46.273	8.134	38.276	-1.219	-6.08		50.841	0.284	14.643	0.004		65.22	1.08694	44.8	12.5	42.0	2.894	0.042	0.039	0.001	0.938	0.80	
83	6/14/2004	10:20:54 AM		27.937	26.05	27.631	27.808	26.897		44.911	45.649	8.803	36.712	-1.222	-6.207		51.342	0.274	14.643	0.004		66.22	1.10361	44.2	12.6	40.8	2.814	0.041	0.038	0.001	0.930	0.79	
84	6/14/2004	10:21:54 AM		27.959	26.068	27.608	27.915	26.909		44.718	45.259	8.889	36.476	-1.222	-6.227		46.847	0.272	14.643	0.004		67.22	1.12028	43.8	11.5	40.6	2.799	0.041	0.038	0.001	0.929	0.79	
85	6/14/2004	10:22:54 AM		27.975	26.083	27.569	27.901	26.935		45.065	45.634	8.549	37.193	-1.222	-6.146		49.861	0.277	14.643	0.004		68.22	1.13694	44.2	12.2	41.1	2.836	0.041	0.038	0.001	0.935	0.80	
86	6/14/2004	10:23:54 AM		27.991	26.114	27.585	27.951	26.941		45.284	45.792	8.332	37.679	-1.216	-6.138		46.336	0.277	14.643	0.004		69.22	1.15361	44.3	11.4	41.5	2.860	0.041	0.038	0.001	0.926	0.79	
87	6/14/2004	10:24:54 AM		28.014	26.133	27.564	27.935	26.929		45.666	46.391	8.38	37.96	-1.222	-6.158		45.462	0.276	14.643	0.004		70.22	1.17028	44.9	11.1	41.8	2.883	0.041	0.038	0.001	0.916	0.78	
88	6/14/2004	10:25:54 AM		28.008	26.152	27.527	27.984	26.858		45.68	46.474	8.319	38.02	-1.222	-6.158		48.253	0.274	14.643	0.004		71.22	1.18694	45.0	11.8	41.9	2.885	0.041	0.038	0.001	0.910	0.77	
89	6/14/2004	10:26:54 AM		27.984	26.162	27.508	27.964	26.794		44.482	45.199	9.011	36.156	-1.222	-6.282		52.844	0.264	14.643	0.004		72.22	1.20361	43.7	13.0	40.3	2.780	0.039	0.037	0.001	0.910	0.77	
90	6/14/2004	10:27:54 AM		27.996	26.18	27.491	27.942	26.782		44.841	45.586	8.634	36.905	-1.219	-6.239		47.085	0.268	14.643	0.004		73.22	1.22028	44.1	11.5	40.9	2.818	0.040	0.037	0.001	0.912	0.78	
91	6/14/2004	10:28:54 AM		27.977	26.2	27.471	27.908	26.777		44.616	45.269	8.821	36.484	-1.222	-6.259		54.437	0.266	14.643	0.004		74.22	1.23694	43.8	13.3	40.6	2.796	0.040	0.037	0.001	0.913	0.78	
92	6/14/2004	10:29:54 AM		27.983	26.227	27.473	27.959	26.784		45.288	46.221	8.757	37.232	-1.219	-6.227		43.601	0.267	14.643	0.004		75.22	1.25361	44.7	10.7	41.3	2.845	0.040	0.037	0.001	0.900	0.77	
93	6/14/2004	10:30:54 AM		27.983	26.242	27.453	27.934	26.759		45.083	45.746	8.562	37.229	-1.219	-6.207		46.455	0.269	14.643	0.004		76.22	1.27028	44.3	11.4	41.2	2.838	0.040	0.037	0.001	0.910	0.77	
94	6/14/2004	10:31:54 AM		27.994	26.268	27.449	27.975	26.78		45.177	46.042	8.466	37.377	-1.216	-6.207		48.712	0.268	14.643	0.004		77.22	1.28694	44.6	11.9	41.3	2.846	0.040	0.037	0.001	0.904	0.77	
95	6/14/2004	10:32:54 AM		27.98	26.283	27.424	27.881	26.691		45.38	46.333	8.508	37.541	-1.219	-6.181		47.575	0.264	14.643	0.004		78.22	1.30361	44.9	11.7	41.5	2.859	0.039	0.037	0.001	0.887	0.76	
96	6/14/2004	10:33:54 AM		27.976	26.299	27.385	27.871	26.686		45.233	46.339	8.545	37.332	-1.222	-6.042		49.043	0.277	14.643	0.004		79.22	1.32028	44.9	12.0	41.3	2.846	0.041	0.039	0.001	0.936	0.80	
97	6/14/2004	10:34:54 AM		27.955	26.313	27.37	27.881	26.686		45.326	46.316	8.407	37.587	-1.222	-6.138		46.747	0.268	14.643	0.004		80.22	1.33694	44.8	11.5	41.5	2.858	0.040	0.037	0.001	0.902	0.77	
98	6/14/2004	10:35:54 AM		27.951	26.334	27.355	27.826	26.617		45.189	46.237	8.343	37.515	-1.222	-6.187		49.335	0.266	14.643	0.004		81.22	1.35361	44.8	12.1	41.4	2.851	0.040	0.037	0.001	0.898	0.76	
99	6/14/2004	10:36:54 AM		27.947	26.345	27.361	27.742	26.582		45.425	46.499	8.382	37.716	-1.219	-6.187		46.012	0.264	14.643	0.004		82.22	1.37028	45.0	11.3	41.6	2.866	0.039	0.037	0.001	0.886	0.75	
100	6/14/2004	10:37:54 AM		27.932	26.346	27.362	27.748	26.508		44.67	45.725	8.967	36.419	-1.219	-6.299		43.908	0.256	14.643	0.004		83.22	1.38694	44.3	10.8	40.5	2.795	0.038	0.036	0.001	0.881	0.75	
101	6/14/2004	10:38:54 AM		27.922	26.345	27.346	27.677	26.463		45.139	46.246	8.711	37.115	-1.222	-6.276		47.593	0.259	14.643	0.004		84.22	1.40361	44.8	11.7	41.1	2.836	0.039	0.036	0.001	0.879	0.75	
102	6/14/2004	10:39:54 AM		27.925	26.358	27.35	27.701	26.441		45.019	46.028	8.745	36.983	-1.222	-6.256		48.194	0.259	14.643	0.004		85.22	1.42028	44.6	11.8	41.0	2.827	0.039	0.036	0.001	0.882	0.75	
103	6/14/2004	10:40:54 AM		27.922	26.361	27.332	27.683	26.588		44.7	45.74	8.633	36.743	-1.222	-6.262		48.684	0.258	14.643	0.004		86.22	1.43694	44.3	11.9	40.7	2.808	0.038	0.036	0.001	0.885	0.75	
104	6/14/2004	10:41:54 AM		27.946	26.395	27.366	27.727	26.722		44.926	46.042	8.733	36.922	-1.222	-6.253		44.54	0.258	14.643	0.004		87.22	1.45361	44.6	10.9	40.9	2.822	0.038	0.036	0.001	0.880	0.75	
105	6/14/2004	10:42:54 AM		27.916	26.39	27.346	27.732	26.801		44.612	45.705	8.777	36.534	-1.225	-6.291		48.148	0.255	14.643	0.003		88.22	1.47028	44.2	11.8	40.6	2.797	0.038	0.036	0.001	0.878	0.75	
106	6/14/2004	10:43:54 AM		27.921	26.409	27.366	27.767	26.826		44.467	45.483	8.766	36.415	-1.219	-6.242		49.362	0.248	14.643	0.004		89.22	1.48694	44.0	12.1	40.4	2.788	0.037	0.035	0.001	0.856	0.73	
107	6/14/2004	10:44:54 AM		27.912	26.41	27.357	27.763	26.847		45.108	46.25	8.642	37.223	-1.222	-6.262		45.153	0.255	14.643	0.004		90.22	1.50361	44.8	11.1	41.2	2.838	0.038	0.036	0.001	0.865	0.74	
108	6/14/2004	10:45:54 AM		27.901	26.414	27.351	27.782	26.876		44.741	46.013	8.666	36.757	-1.219	-6.262		47.07	0.254	14.643	0.004		91.22	1.52028	44.5	11.5	40.7	2.810	0.038	0.035	0.001	0.870	0.74	
109	6/14/2004	10:46:54 AM		27.901	26.424	27.325	27.776	26.876		44.857	46.214	8.732	36.747	-1.225	-6.262		47.702	0.253	14.643	0.003		92.22	1.53694	44.7	11.7	40.8	2.813	0.038	0.035	0.001	0.866	0.74	
110	6/14/2004	10:47:54 AM		27.895	26.438	27.34	27.825	26.885		44.693	45.999	8.782	36.519	-1.222	-6.268		47.917	0.254	14.643	0.004		93.22	1.55361	44.5	11.7	40.6	2.800	0.038	0.035	0.001	0.874	0.74	
111	6/14/2004	10:48:54 AM		27.884	26.438	27.319	27.815	26.884		44.664	45.835	8.798	36.491	-1.222	-6.259		47.078	0.251	14.643	0.004		94.22	1.57028	44.4	11.5	40.6	2.798	0.037	0.035	0.001	0.864	0.74	
112	6/14/2004	10:49:54 AM		27.887	26.455	27.332	27.853	26.902		44.426	45.57	8.767	36.31	-1.219	-6.253		46.012	0.251	14.643	0.004		95.22	1.58694	44.1	11.3	40.4	2.783	0.037	0.035	0.001	0.869	0.74	
113	6/14/2004	10:50:54 AM		27.896	26.474	27.341	27.856	26.921		44.509	45.576	8.715	36.511	-1.219	-6.25		43.244	0.25	14.643	0.004		96.22	1.60361	44.1	10.6	40.5	2.793	0.037	0.035	0.001	0.862	0.73	
114	6/14/2004	10:51:54 AM		27.874	26.477	27.334	27.864	26.954		43.721	44.9	9.351	35.058	-1.219	-6.325		53.19	0.244	14.643	0.004		97.22	1.62028	43.4	13.0	39.4	2.716	0.036	0.034	0.001	0.865	0.74	
115	6/14/2004	10:52:54 AM		27.891	26.504	27.366	27.867	26.936		43.955	45.182	9.249	35.399	-1.219	-6.311		52.049	0.245	14.643	0.004		98.22	1.63694	43.7	12.8	39.7	2.736	0.037	0.034	0.001	0.862	0.73	
116	6/14/2004	10:53:54 AM		27.903	26.517	27.348	27.889	26.943		44.086	45.383	9.125	35.649	-1.222	-6.216		51.915	0.244	14.643	0.004		99.22	1.65361	43.9	12.7	39.9	2.749	0.036	0.034	0.001	0.855	0.73	
117	6/14/2004	10:54:54 AM		27.894	26.522	27.329	27.87	26.924		44.052	45.354	8.94	35.762	-1.225	-6.216		48.365	0.25	14.643	0.003		100.22	1.67028	43.9	11.9	39.9	2.751	0.037	0.035	0.001	0.875	0.74	
118	6/14/2004	10:55:54 AM		27.896	26.529	27.34	27.886	26.935		44.422	45.663	8.854	36.259	-1.222	-6.276		50.948	0.248	14.643	0.003		101.22	1.68694	44.2	12.5	40.3	2.781	0.037	0.035	0.001	0.859	0.73	
119	6/14/2004	10:56:54 AM		27.897	26.545	27.297	27.907	26.962		44.397	45.468	8.903	36.265	-1.222	-6.276		42.414	0.248	14.643	0.004		102.22	1.70361	44.0	10.4	40.3	2.781	0.037	0.035	0.001	0.860	0.73	
120	6/14/2004	10:57:54 AM		27.898	26.566	27.283	27.918	26.978		44.702	45.86	8.905	36.482	-1.222	-6.213		49.074	0.249	14.643	0.004		103.22	1.72028	44.4	12.0	40.6	2.799	0.037	0.035	0.001	0.858	0.73	
121	6/14/2004	10:58:54 AM		27.893	26.571	27.258	27.938	26.977		44.542	45.758	8.743	36.523	-1.219	-6.239		42.719	0.247	14.643	0.004		104.22	1.73694	44.3	10.5	40.5	2.795	0.037	0.035	0.001	0.853	0.73	
122	6/14/2004	10:59:54 AM		27.884	26.587	27.234	27.999	26.968		44.594	45.843	8.774	36.495	-1.222	-6.259		48.543	0.247	14.643	0.004		105.22	1.75361	44.4	11.9	40.5	2.795	0.037	0.035	0.001	0.853	0.73	
123	6/14/2004	11:00:02 AM		27.884	26.582	27.22	27.994	26.964		44.942	46.128	8.851	36.799	-1.222	-6.213		40.969	0.246	14.643	0.004		105.35	1.75583	44.7	10.0	40.9	2.818	0.037	0.034	0.001	0.843	0.72	
124	6/14/2004	11:01:02 AM		27.869	26.602	27.174	27.984	27.003		44.596	45.584	8.78	36.542	-1.219	-6.216		44.65	0.247	14.643	0.004		106.35	1.7725	44.1	10.9	40.6	2.797	0.037	0.035	0.001	0.854	0.73	
125	6/14/2004	11:02:02 AM		27.833	26.596	27.123	27.968	27.022		44.739	46.022	8.779	36.665	-1.222	-6.25		41.002	0.246	14.643	0.004		107.35	1.78917	44.6	10.0	40.7	2.806	0.037	0.035	0.001	0.849	0.72	
126	6/14/2004	11:03:02 AM		27.833	26.616	27.118	27.978	27.017		44.571	45.889	8.704	36.482	-1.222	-6.195		55.349	0.244	14.643	0.004		108.35	1.80583	44.4	13.6	40.5	2.794	0.036	0.034	0.001	0.846	0.72	
127	6/14/2004	11:04:02 AM		27.816	26.629	27.101	27.986	26.981		44.434	45.688	8.756	36.347	-1.222	-6.169		44.01	0.244	14.643	0.004		109.35	1.8225	44.2	10.8	40.4	2.785	0.036	0.034	0.001	0.849	0.72	
128	6/14/2004	11:05:02 AM		27.79	26.638	27.076	27.955	27.01		44.602	45.738	8.79	36.472	-1.225	-6.262		46.421	0.243	14.643	0.004		110.35	1.83917	44.3	11.4	40.5	2.795	0.036	0.034	0.001	0.843	0.72	
129	6/14/2004	11:06:02 AM		27.775	26.652	27.045	27.969	27.034		44.867	46.154	8.788	36.774	-1.225	-6.219		48.584	0.244	14.643	0.004		111.35	1.85583	44.7	11.9	40.8	2.814	0.036	0.034	0.001	0.842	0.72	
130	6/14/2004	11:07:02 AM		27.766	26.683	27.046	27.97	27.055		44.631	45.817	8.765	36.569	-1.225	-6.245		49.029	0.242	14.643	0.003		112.35	1.8725	44.3	12.0	40.6	2.799	0.036	0.034	0.001	0.839	0.71	
131	6/14/2004	11:08:02 AM		27.754	26.691	27.074	27.989	27.058		44.664	45.748	8.798	36.577	-1.222	-6.227		42.834	0.242	14.643	0.004		113.35	1.88917	44.3	10.5	40.6	2.801	0.036	0.034	0.001	0.838	0.71	
132	6/14/2004	11:09:02 AM		27.733	26.696	27.033	28.003	27.112		43.918	45.104	9.504	35.159	-1.222	-6.349		58.113	0.231	14.643	0.004		114.35	1.90583	43.6	14.2	39.5	2.726	0.034	0.033	0.001	0.823	0.70	
133	6/14/2004	11:10:02 AM		27.728	26.716	27.028	28.028	27.102		44.119	45.315	9.343	35.483	-1.222	-6.265		44.836	0.236	14.643	0.004		115.35	1.9225	43.8	11.0	39.8	2.744	0.035	0.033	0.001	0.835	0.71	
134	6/14/2004	11:11:02 AM		27.709	26.721	27.014	28.023	27.102		44.077	45.348	9.265	35.485	-1.225	-6.282		51.58	0.23	14.643	0.004		116.35	1.93917	43.9	12.6	39.8	2.743	0.034	0.032	0.001	0.815	0.69	
135	6/14/2004	11:12:02 AM		27.696	26.723	26.991	28.005	27.08		44.438	45.609	9.125	36.025	-1.225	-6.233		46.415	0.235	14.643	0.004		117.35	1.95583	44.1	11.4	40.2	2.774	0.035	0.033	0.001	0.824	0.70	
136	6/14/2004	11:13:02 AM		27.705	26.753	27.015	28.06	27.124		44.409	45.605	9.074	36.047	-1.219	-6.216		50.983	0.235	14.643	0.004		118.35	1.9725	44.1	12.5	40.2	2.774	0.035	0.033	0.001	0.823	0.70	
137	6/14/2004	11:14:02 AM		27.692	26.754	26.992	28.066	27.101		44.328	45.543	9.03	35.965	-1.219	-6.262		43.282	0.239	14.643	0.004		119.35	1.98917	44.1	10.6	40.1	2.768	0.036	0.034	0.001	0.839	0.71	
138	6/14/2004	11:15:02 AM		27.686	26.763	26.981	28.06	27.139		44.44	45.754	9.113	36.056	-1.222	-6.213		55.58	0.236	14.643	0.004		120.35	2.00583	44.3	13.6	40.2	2.775	0.035	0.033	0.001	0.827	0.70	
139	6/14/2004	11:16:02 AM		27.683	26.785	26.978	28.077	27.161		44.558	45.835	9.102	36.166	-1.225	-6.23		49.037	0.237	14.643	0.003		121.35	2.0225	44.4	12.0	40.4	2.783	0.035	0.033	0.001	0.828	0.70	
140	6/14/2004	11:17:02 AM		27.671	26.798	26.981	28.085	27.159		44.436	45.553	8.967	36.15	-1.225	-6.247		46.271	0.236	14.643	0.003		122.35	2.03917	44.1	11.3	40.3	2.778	0.035	0.033	0.001	0.826	0.70	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	6/14/2004	11:18:02 AM		27.67	26.822	26.98	28.099	27.178		44.886	46.347	8.906	36.638	-1.222	-6.227		51.602	0.238	14.643	0.004		123.35	2.05583	44.9	12.6	40.8	2.810	0.035	0.034	0.001	0.824	0.70	
142	6/14/2004	11:19:02 AM		27.669	26.826	26.974	28.133	27.178		44.249	45.4	8.792	36.119	-1.219	-6.221		42.986	0.24	14.643	0.004		124.35	2.0725	43.9	10.5	40.2	2.771	0.036	0.034	0.001	0.843	0.72	
143	6/14/2004	11:20:02 AM		27.661	26.828	26.951	28.115	27.174		44.556	46.036	8.903	36.308	-1.222	-6.112		49.548	0.233	14.643	0.004		125.35	2.08917	44.6	12.1	40.4	2.788	0.035	0.033	0.001	0.814	0.69	
144	6/14/2004	11:21:02 AM		27.654	26.841	26.944	28.128	27.197		44.811	46.418	8.835	36.597	-1.222	-6.198		51.786	0.237	14.643	0.003		126.35	2.10583	44.9	12.7	40.7	2.806	0.035	0.033	0.001	0.822	0.70	
145	6/14/2004	11:22:02 AM		27.651	26.853	26.931	28.155	27.209		44.84	46.04	8.84	36.692	-1.219	-6.166		48.83	0.236	14.643	0.004		127.35	2.1225	44.6	12.0	40.8	2.811	0.035	0.033	0.001	0.818	0.70	
146	6/14/2004	11:23:02 AM		27.644	26.866	26.929	28.163	27.222		45.004	46.2	8.824	36.889	-1.222	-6.239		41.179	0.236	14.643	0.004		128.35	2.13917	44.7	10.1	40.9	2.823	0.035	0.033	0.001	0.814	0.69	
147	6/14/2004	11:24:02 AM		27.641	26.873	26.917	28.15	27.249		44.608	45.761	8.866	36.38	-1.222	-6.23		45.992	0.234	14.643	0.003		129.35	2.15583	44.3	11.3	40.5	2.792	0.035	0.033	0.001	0.817	0.69	
148	6/14/2004	11:25:02 AM		27.649	26.911	26.939	28.228	27.257		44.643	45.978	8.803	36.485	-1.222	-6.195		47.923	0.237	14.643	0.003		130.35	2.1725	44.5	11.7	40.6	2.797	0.035	0.033	0.001	0.825	0.70	
149	6/14/2004	11:26:02 AM		27.647	26.909	26.932	28.245	27.27		44.785	46.013	8.848	36.636	-1.219	-6.245		51.171	0.234	14.643	0.004		131.35	2.18917	44.5	12.5	40.7	2.807	0.035	0.033	0.001	0.812	0.69	
150	6/14/2004	11:27:02 AM		27.633	26.91	26.894	28.237	27.306		45.031	46.279	8.811	36.95	-1.225	-6.245		49.577	0.233	14.643	0.004		132.35	2.20583	44.8	12.1	41.0	2.826	0.035	0.033	0.001	0.804	0.68	
151	6/14/2004	11:28:02 AM		27.641	26.933	26.906	28.274	27.344		44.942	46.179	8.878	36.757	-1.222	-6.158		48.816	0.237	14.643	0.004		133.35	2.2225	44.7	12.0	40.8	2.816	0.035	0.034	0.001	0.820	0.70	
152	6/14/2004	11:29:02 AM		27.633	26.945	26.873	28.296	27.355		44.536	45.655	8.827	36.376	-1.222	-6.169		52.51	0.229	14.643	0.004		134.35	2.23917	44.2	12.9	40.5	2.789	0.034	0.032	0.001	0.801	0.68	
153	6/14/2004	11:30:02 AM		27.62	26.951	26.805	28.353	27.377		44.625	45.9	8.938	36.327	-1.225	-6.123		43.015	0.23	14.643	0.003		135.35	2.25583	44.4	10.5	40.5	2.791	0.034	0.033	0.001	0.805	0.69	
154	6/14/2004	11:31:02 AM		27.632	26.984	26.792	28.465	27.38		44.677	46.013	8.883	36.468	-1.222	-6.195		41.242	0.229	14.643	0.004		136.35	2.2725	44.5	10.1	40.6	2.797	0.034	0.032	0.001	0.800	0.68	
155	6/14/2004	11:32:02 AM		27.624	27.001	26.769	28.512	27.416		44.708	46.016	8.874	36.519	-1.219	-6.109		50.167	0.223	14.643	0.004		137.35	2.28917	44.5	12.3	40.6	2.800	0.033	0.032	0.001	0.779	0.66	
156	6/14/2004	11:33:02 AM		27.611	27.017	26.736	28.518	27.428		44.708	46.117	8.9	36.482	-1.222	-6.135		51.463	0.227	14.643	0.003		138.35	2.30583	44.6	12.6	40.6	2.799	0.034	0.032	0.001	0.794	0.68	
157	6/14/2004	11:34:02 AM		27.592	27.029	26.703	28.565	27.479		44.836	46.078	8.899	36.643	-1.222	-6.161		49.871	0.228	14.643	0.003		139.35	2.3225	44.6	12.2	40.7	2.809	0.034	0.032	0.001	0.796	0.68	
158	6/14/2004	11:35:02 AM		27.581	27.048	26.686	28.573	27.518		44.301	45.493	9.208	35.772	-1.225	-6.224		46.25	0.224	14.643	0.004		140.35	2.33917	44.0	11.3	40.0	2.760	0.033	0.032	0.001	0.796	0.68	
159	6/14/2004	11:36:02 AM		27.549	27.06	26.649	28.586	27.481		44.552	45.858	9.099	36.132	-1.222	-6.227		43.706	0.223	14.643	0.004		141.35	2.35583	44.4	10.7	40.3	2.781	0.033	0.032	0.001	0.787	0.67	
160	6/14/2004	11:37:02 AM		27.558	27.085	26.668	28.6	27.425		44.183	45.645	9.247	35.6	-1.219	-6.091		48.797	0.229	14.643	0.004		142.35	2.3725	44.2	12.0	39.9	2.750	0.034	0.033	0.001	0.817	0.70	
161	6/14/2004	11:38:02 AM		27.516	27.097	26.626	28.538	27.388		44.393	45.601	9.166	35.957	-1.228	-6.227		49.398	0.224	14.643	0.003		143.35	2.38917	44.1	12.1	40.2	2.770	0.033	0.032	0.001	0.794	0.68	
162	6/14/2004	11:39:02 AM		27.514	27.11	26.614	28.501	27.336		44.585	45.73	9.095	36.17	-1.222	-6.161		44.605	0.222	14.643	0.003		144.35	2.40583	44.3	10.9	40.4	2.784	0.033	0.032	0.001	0.783	0.67	
163	6/14/2004	11:40:02 AM		27.467	27.078	26.562	28.455	27.285		44.7	46.13	9.099	36.302	-1.225	-6.126		52.476	0.228	14.643	0.003		145.35	2.4225	44.7	12.9	40.5	2.792	0.034	0.033	0.001	0.803	0.68	
164	6/14/2004	11:41:02 AM		27.43	27.071	26.53	28.447	27.247		44.575	45.891	8.903	36.329	-1.225	-6.184		52.385	0.224	14.643	0.003		146.35	2.43917	44.4	12.8	40.5	2.789	0.033	0.032	0.001	0.791	0.67	
165	6/14/2004	11:42:02 AM		27.431	27.087	26.516	28.448	27.183		44.882	46.157	8.866	36.647	-1.222	-6.21		50.159	0.224	14.643	0.004		147.35	2.45583	44.7	12.3	40.8	2.811	0.033	0.032	0.001	0.785	0.67	
166	6/14/2004	11:43:02 AM		27.427	27.098	26.437	28.484	27.195		42.045	43.317	10.446	32.247	-1.219	-6.175		52.009	0.219	14.643	0.004		148.35	2.4725	41.8	12.7	37.1	2.561	0.033	0.031	0.001	0.844	0.72	
167	6/14/2004	11:44:02 AM		27.446	27.127	26.411	28.523	27.228		42.762	43.906	10.364	33.072	-1.219	-6.343		52.816	0.208	14.643	0.004		149.35	2.48917	42.4	12.9	37.9	2.614	0.031	0.030	0.001	0.786	0.67	
168	6/14/2004	11:45:02 AM		27.429	27.135	26.314	28.541	27.256		43.959	45.338	9.627	34.951	-1.222	-6.276		44.129	0.211	14.643	0.004		150.35	2.50583	43.9	10.8	39.5	2.720	0.031	0.030	0.001	0.768	0.65	
169	6/14/2004	11:46:02 AM		27.418	27.159	26.208	28.585	27.29		44.307	45.545	9.462	35.567	-1.219	-6.213		51.963	0.219	14.643	0.004		151.35	2.5225	44.1	12.7	39.9	2.754	0.033	0.032	0.001	0.790	0.67	
170	6/14/2004	11:47:02 AM		27.364	27.175	26.159	28.641	27.291		44.548	45.924	9.359	35.883	-1.222	-6.123		46.482	0.213	14.643	0.004		152.35	2.53917	44.5	11.4	40.2	2.773	0.032	0.031	0.001	0.764	0.65	
171	6/14/2004	11:48:02 AM		27.338	27.194	26.078	28.729	27.344		44.784	46.128	9.09	36.341	-1.222	-6.155		48.766	0.218	14.643	0.004		153.35	2.55583	44.7	12.0	40.6	2.797	0.033	0.032	0.001	0.777	0.66	
172	6/14/2004	11:49:02 AM		27.312	27.198	26.017	28.763	27.364		45.145	46.438	8.88	36.948	-1.222	-6.129		45.301	0.22	14.643	0.004		154.35	2.5725	45.0	11.1	41.0	2.830	0.033	0.032	0.001	0.777	0.66	
173	6/14/2004	11:50:02 AM		27.232	27.207	25.926	28.767	27.398		44.181	45.456	9.655	35.192	-1.222	-6.216		49.761	0.209	14.643	0.004		155.35	2.58917	44.0	12.2	39.7	2.736	0.031	0.030	0.001	0.765	0.65	
174	6/14/2004	11:51:02 AM		27.193	27.219	25.853	28.804	27.439		44.212	45.437	9.351	35.569	-1.222	-6.216		42.863	0.216	14.643	0.004		156.35	2.60583	44.0	10.5	39.9	2.750	0.032	0.031	0.001	0.788	0.67	
175	6/14/2004	11:52:02 AM		27.135	27.221	25.799	28.821	27.456		44.654	45.821	9.095	36.277	-1.222	-6.219		44.765	0.215	14.643	0.003		157.35	2.6225	44.3	11.0	40.5	2.790	0.032	0.031	0.001	0.775	0.66	
176	6/14/2004	11:53:02 AM		27.123	27.238	25.732	28.868	27.468		44.565	45.783	9.097	36.189	-1.222	-6.216		41.459	0.205	14.643	0.004		158.35	2.63917	44.3	10.2	40.4	2.784	0.031	0.030	0.001	0.742	0.63	
177	6/14/2004	11:54:02 AM		27.066	27.231	25.66	28.871	27.496		44.946	46.424	9.093	36.511	-1.222	-6.227		51.275	0.213	14.643	0.004		159.35	2.65583	45.0	12.6	40.7	2.808	0.032	0.031	0.001	0.765	0.65	
178	6/14/2004	11:55:02 AM		27.019	27.254	25.613	28.909	27.504		44.903	46.049	8.994	36.647	-1.222	-6.268		50.845	0.212	14.643	0.004		160.35	2.6725	44.6	12.5	40.8	2.811	0.032	0.031	0.001	0.762	0.65	
179	6/14/2004	11:56:02 AM		27.023	27.267	25.576	28.917	27.483		45.091	46.391	8.903	36.854	-1.225	-6.216		45.787	0.217	14.643	0.003		161.35	2.68917	44.9	11.2	41.0	2.825	0.032	0.032	0.001	0.777	0.66	
180	6/14/2004	11:57:02 AM		26.931	27.276	25.55	28.911	27.471		43.663	44.869	9.911	34.471	-1.222	-6.32		47.998	0.202	14.643	0.004		162.35	2.70583	43.4	11.8	39.1	2.694	0.030	0.030	0.001	0.759	0.65	
181	6/14/2004	11:58:02 AM		26.9	27.284	25.523	28.894	27.4		44.378	45.862	9.618	35.424	-1.222	-6.317		52.612	0.205	14.643	0.004		163.35	2.7225	44.4	12.9	39.9	2.751	0.031	0.030	0.001	0.755	0.64	
182	6/14/2004	11:59:02 AM		26.806	27.28	25.449	28.85	27.341		44.693	45.779	9.333	36.142	-1.225	-6.317		51.262	0.205	14.643	0.003		164.35	2.73917	44.3	12.6	40.4	2.787	0.031	0.030	0.001	0.747	0.64	
183	6/14/2004	12:00:02 PM		26.822	27.292	25.451	28.822	27.288		44.428	45.499	9.255	35.93	-1.222	-6.239		44.315	0.214	14.643	0.004		165.35	2.75583	44.0	10.9	40.2	2.770	0.032	0.032	0.001	0.784	0.67	
184	6/14/2004	12:01:02 PM		26.729	27.298	25.371	28.818	27.244		45.106	46.283	9.172	36.614	-1.225	-6.236		45.161	0.211	14.643	0.004		166.35	2.7725	44.8	11.1	40.9	2.817	0.031	0.031	0.001	0.762	0.65	
185	6/14/2004	12:02:02 PM		26.69	27.304	25.358	28.76	27.226		45.216	46.469	9.116	36.846	-1.222	-6.236		47.581	0.208	14.643	0.004		167.35	2.78917	45.0	11.7	41.0	2.829	0.031	0.031	0.001	0.748	0.64	
186	6/14/2004	12:03:02 PM		26.666	27.31	25.388	28.705	27.176		43.955	45.058	9.776	34.869	-1.219	-6.279		52.675	0.194	14.643	0.004		168.35	2.80583	43.6	12.9	39.4	2.717	0.029	0.029	0.001	0.726	0.62	
187	6/14/2004	12:04:02 PM		26.638	27.307	25.341	28.718	27.204		44.569	45.663	9.576	35.707	-1.225	-6.302		46.294	0.204	14.643	0.004		169.35	2.8225	44.2	11.3	40.1	2.767	0.030	0.030	0.001	0.751	0.64	
188	6/14/2004	12:05:02 PM		26.626	27.33	25.364	28.725	27.231		44.612	45.9	9.46	35.873	-1.219	-6.268		51.096	0.203	14.643	0.004		170.35	2.83917	44.4	12.5	40.2	2.775	0.030	0.030	0.001	0.744	0.63	
189	6/14/2004	12:06:02 PM		26.604	27.322	25.331	28.708	27.268		44.529	45.895	9.419	35.727	-1.222	-6.216		54.287	0.208	14.643	0.004		171.35	2.85583	44.4	13.3	40.1	2.767	0.031	0.031	0.001	0.766	0.65	
190	6/14/2004	12:07:02 PM		26.581	27.315	25.279	28.731	27.291		44.602	45.848	9.257	36.033	-1.222	-6.19		41.476	0.207	14.643	0.004		172.35	2.8725	44.4	10.2	40.3	2.780	0.031	0.031	0.001	0.759	0.65	
191	6/14/2004	12:08:02 PM		26.575	27.314	25.278	28.76	27.335		43.777	44.938	9.867	34.623	-1.222	-6.184		53.423	0.196	14.643	0.004		173.35	2.88917	43.5	13.1	39.2	2.703	0.029	0.029	0.001	0.740	0.63	
192	6/14/2004	12:09:02 PM		26.54	27.333	25.277	28.804	27.359		44.498	45.75	9.799	35.329	-1.219	-6.273		55.42	0.192	14.643	0.004		174.35	2.90583	44.3	13.6	39.9	2.752	0.029	0.028	0.001	0.712	0.61	
193	6/14/2004	12:10:02 PM		26.512	27.325	25.249	28.81	27.391		44.195	45.537	9.594	35.288	-1.222	-6.239		51.294	0.197	14.643	0.003		175.35	2.9225	44.1	12.6	39.7	2.740	0.029	0.029	0.001	0.734	0.62	
194	6/14/2004	12:11:02 PM		26.492	27.345	25.249	28.85	27.431		44.254	45.388	9.523	35.479	-1.222	-6.14		49.79	0.199	14.643	0.004		176.35	2.93917	43.9	12.2	39.9	2.749	0.030	0.029	0.001	0.739	0.63	
195	6/14/2004	12:12:02 PM		26.472	27.356	25.265	28.866	27.456		44.407	45.634	9.42	35.662	-1.222	-6.242		50.768	0.196	14.643	0.004		177.35	2.95583	44.2	12.4	40.0	2.760	0.029	0.029	0.001	0.724	0.62	
196	6/14/2004	12:13:02 PM		26.462	27.345	25.234	28.875	27.471		44.71	45.97	9.522	35.883	-1.222	-6.256		50.47	0.193	14.643	0.004		178.35	2.9725	44.5	12.4	40.3	2.778	0.029	0.029	0.001	0.709	0.60	
197	6/14/2004	12:14:02 PM		26.471	27.359	25.233	28.899	27.475		44.7	45.891	9.353	36.086	-1.219	-6.242		47.604	0.202	14.643	0.004		179.35	2.98917	44.4	11.7	40.4	2.785	0.030	0.030	0.001	0.741	0.63	
198	6/14/2004	12:15:02 PM		26.441	27.364	25.203	28.939	27.51		44.44	45.613	9.34	35.785	-1.222	-6.253		48.173	0.195	14.643	0.004		180.35	3.00583	44.1	11.8	40.1	2.766	0.029	0.029	0.001	0.721	0.61	
199	6/14/2004	12:16:02 PM		26.45	27.374	25.187	28.943	27.514		44.984	46.074	9.263	36.48	-1.222	-6.19		46.29	0.192	14.643	0.004		181.35	3.0225	44.6	11.3	40.7	2.808	0.029	0.028	0.001	0.699	0.59	
200	6/14/2004	12:17:02 PM		26.424	27.378	25.196	28.943	27.533		43.683	44.737	10.086	34.262	-1.219	-6.282		47.546	0.195	14.643	0.004		182.35	3.03917	43.3	11.7	39.0	2.687	0.029	0.029	0.001	0.742	0.63	
201	6/14/2004	12:18:02 PM		26.44	27.384	25.142	28.958	27.534		44.494	45.817	9.729	35.501	-1.225	-6.221		62.363	0.2	14.643	0.003		183.35	3.05583	44.3	15.3	40.0	2.758	0.030	0.030	0.001	0.743	0.63	
202	6/14/2004	12:19:02 PM		26.421	27.394	25.193	28.959	27.564		44.264	45.616	9.71	35.251	-1.219	-6.227		48.691	0.187	14.643	0.004		184.35	3.0725	44.1	11.9	39.8	2.741	0.028	0.028	0.001	0.697	0.59	
203	6/14/2004	12:20:02 PM		26.407	27.405	25.199	28.97	27.555		44.446	45.603	9.608	35.575	-1.222	-6.169		47.195	0.181	14.643	0.004		185.35	3.08917	44.1	11.6	40.0	2.759	0.027	0.027	0.001	0.671	0.57	
204	6/14/2004	12:21:02 PM		26.408	27.426	25.215	28.976	27.551		44.704	45.85	9.487	35.896	-1.219	-6.276		47.641	0.195	14.643	0.004		186.35	3.10583	44.4	11.7	40.3	2.779	0.029	0.029	0.001	0.717	0.61	
205	6/14/2004	12:22:02 PM		26.388	27.421	25.165	28.956	27.531		44.693	46.047	9.491	35.935	-1.219	-6.083		47.429	0.182	14.643	0.004		187.35	3.1225	44.6	11.6	40.3	2.780	0.027	0.027	0.001	0.670	0.57	
206	6/14/2004	12:23:02 PM		26.403	27.437	25.165	28.942	27.532		44.428	45.86	9.427	35.61	-1.219	-6.282		45.843	0.194	14.643	0.004		188.35	3.13917	44.4	11.2	40.0	2.759	0.029	0.029	0.001	0.719	0.61	
207	6/14/2004	12:24:02 PM		26.378	27.426	25.17	28.896	27.511		44.865	45.843	9.445	36.181	-1.225	-6.207		53.459	0.188	14.643	0.004		189.35	3.15583	44.4	13.1	40.5	2.794	0.028	0.028	0.001	0.688	0.59	
208	6/14/2004	12:25:02 PM		26.373	27.436	25.16	28.901	27.461		44.967	46.115	9.481	36.193	-1.222	-6.23		49.955	0.194	14.643	0.004		190.35	3.1725	44.6	12.2	40.6	2.798	0.029	0.029	0.001	0.710	0.60	
209	6/14/2004	12:26:02 PM		26.353	27.446	25.15	28.886	27.417		44.625	46.018	9.446	35.867	-1.219	-6.207		52.088	0.192	14.643	0.004		191.35	3.18917	44.5	12.8	40.2	2.775	0.029	0.029	0.001	0.708	0.60	
210	6/14/2004	12:27:02 PM		26.382	27.45	25.149	28.83	27.331		45.288	46.347	9.412	36.665	-1.222	-6.233		47.737	0.198	14.643	0.004		192.35	3.20583	44.9	11.7	41.0	2.825	0.030	0.029	0.001	0.717	0.61	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	6/14/2004	12:28:02 PM		26.374	27.443	25.176	28.773	27.304		44.955	46.169	9.286	36.4	-1.219	-6.103		46.275	0.187	14.643	0.004		193.35	3.2225	44.7	11.3	40.7	2.805	0.028	0.028	0.001	0.682	0.58	
212	6/14/2004	12:29:02 PM		26.398	27.467	25.175	28.742	27.248		44.824	46.304	9.385	36.129	-1.222	-6.195		43.985	0.194	14.643	0.004		194.35	3.23917	44.8	10.8	40.5	2.791	0.029	0.029	0.001	0.711	0.61	
213	6/14/2004	12:30:02 PM		26.353	27.456	25.125	28.677	27.203		44.614	45.688	9.299	36.037	-1.222	-6.247		49.604	0.188	14.643	0.004		195.35	3.25583	44.2	12.2	40.3	2.780	0.028	0.028	0.001	0.693	0.59	
214	6/14/2004	12:31:02 PM		26.365	27.463	25.142	28.574	27.184		45.052	46.287	9.489	36.294	-1.219	-6.114		52.032	0.193	14.643	0.004		196.35	3.2725	44.8	12.8	40.7	2.804	0.029	0.029	0.001	0.705	0.60	
215	6/14/2004	12:32:02 PM		26.314	27.438	25.126	28.479	27.134		44.878	46.14	9.377	36.162	-1.219	-6.25		51.625	0.192	14.643	0.004		197.35	3.28917	44.7	12.7	40.5	2.794	0.029	0.029	0.001	0.704	0.60	
216	6/14/2004	12:33:02 PM		26.305	27.423	25.117	28.435	27.105		45.125	46.511	9.348	36.484	-1.219	-6.129		53.753	0.199	14.643	0.004		198.35	3.30583	45.0	13.2	40.8	2.813	0.030	0.030	0.001	0.725	0.62	
217	6/14/2004	12:34:02 PM		26.377	27.425	25.109	28.456	27.097		45.05	46.391	9.357	36.402	-1.219	-6.175		44.123	0.194	14.643	0.004		199.35	3.3225	44.9	10.8	40.7	2.808	0.029	0.029	0.001	0.708	0.60	
218	6/14/2004	12:35:02 PM		26.366	27.409	25.093	28.465	27.121		44.415	45.999	9.289	35.787	-1.222	-5.713		49.585	0.181	14.643	0.004		200.35	3.33917	44.5	12.2	40.1	2.765	0.027	0.027	0.001	0.671	0.57	
219	6/14/2004	12:36:02 PM		26.37	27.398	25.097	28.494	27.13		44.446	45.966	9.296	35.789	-1.222	-5.695		45.526	0.19	14.643	0.004		201.35	3.35583	44.5	11.2	40.1	2.766	0.028	0.028	0.001	0.704	0.60	
220	6/14/2004	12:37:02 PM		26.409	27.392	25.091	28.513	27.139		44.795	46.449	9.286	36.209	-1.222	-5.655		56.287	0.182	14.643	0.003		202.35	3.3725	45.0	13.8	40.5	2.792	0.027	0.027	0.001	0.668	0.57	
221	6/14/2004	12:38:02 PM		26.498	27.381	25.08	28.463	27.168		44.633	46.275	9.235	36.09	-1.222	-5.724		48.301	0.189	14.643	0.004		203.35	3.38917	44.8	11.8	40.4	2.783	0.028	0.028	0.001	0.697	0.59	
222	6/14/2004	12:39:02 PM		26.468	27.387	25.066	28.403	27.188		44.629	46.051	9.273	36.074	-1.222	-5.718		45.155	0.188	14.643	0.004		204.35	3.40583	44.6	11.1	40.4	2.782	0.028	0.028	0.001	0.693	0.59	
223	6/14/2004	12:40:02 PM		26.452	27.38	25.084	28.447	27.172		44.61	46.243	9.273	35.996	-1.222	-5.73		48.891	0.188	14.643	0.004		205.35	3.4225	44.8	12.0	40.3	2.779	0.028	0.028	0.001	0.694	0.59	
224	6/14/2004	12:41:02 PM		26.438	27.362	25.091	28.498	27.183		44.677	46.297	9.28	36.127	-1.222	-5.736		39.586	0.187	14.643	0.003		206.35	3.43917	44.8	9.7	40.4	2.786	0.028	0.028	0.001	0.688	0.59	
225	6/14/2004	12:42:02 PM		26.437	27.37	25.094	28.566	27.237		44.811	46.471	9.375	36.099	-1.222	-5.739		43.605	0.187	14.643	0.004		207.35	3.45583	45.0	10.7	40.5	2.789	0.028	0.028	0.001	0.687	0.58	
226	6/14/2004	12:43:02 PM		26.43	27.373	25.082	28.589	27.255		44.807	46.329	9.376	36.09	-1.222	-5.733		51.386	0.187	14.643	0.004		208.35	3.4725	44.9	12.6	40.4	2.789	0.028	0.028	0.001	0.688	0.59	
227	6/14/2004	12:44:02 PM		26.536	27.37	25.099	28.641	27.271		45.1	46.339	9.237	36.552	-1.222	-6.606		54.744	0.183	14.643	0.004		209.35	3.48917	44.9	13.4	40.8	2.815	0.027	0.027	0.001	0.666	0.57	
228	6/14/2004	12:45:02 PM		26.358	27.367	25.101	28.648	27.253		45.546	46.689	9.369	36.876	-1.222	-6.924		43.119	0.187	14.643	0.004		210.35	3.50583	45.2	10.6	41.2	2.841	0.028	0.028	0.001	0.675	0.57	
229	6/14/2004	12:46:02 PM		26.357	27.375	25.084	28.676	27.276		45.216	46.519	9.303	36.565	-1.222	-6.811		44.206	0.185	14.643	0.004		211.35	3.5225	45.0	10.8	40.9	2.819	0.028	0.028	0.001	0.673	0.57	
230	6/14/2004	12:47:02 PM		26.373	27.376	25.075	28.717	27.297		44.988	46.026	9.24	36.427	-1.222	-6.898		46.79	0.191	14.643	0.004		212.35	3.53917	44.6	11.5	40.7	2.807	0.028	0.028	0.001	0.698	0.59	
231	6/14/2004	12:48:02 PM		26.294	27.388	25.101	28.718	27.304		45.318	46.353	9.289	36.743	-1.222	-6.924		39.963	0.186	14.643	0.004		213.35	3.55583	44.9	9.8	41.0	2.829	0.028	0.028	0.001	0.674	0.57	
232	6/14/2004	12:49:02 PM		26.297	27.375	25.089	28.711	27.321		45.357	46.604	9.355	36.718	-1.225	-6.886		50.941	0.189	14.643	0.004		214.35	3.5725	45.1	12.5	41.0	2.829	0.028	0.028	0.001	0.685	0.58	
233	6/14/2004	12:50:02 PM		26.314	27.382	25.081	28.743	27.324		45.195	46.212	9.33	36.581	-1.225	-6.938		47.272	0.185	14.643	0.003		215.35	3.58917	44.7	11.6	40.9	2.819	0.028	0.028	0.001	0.673	0.57	
234	6/14/2004	12:51:02 PM		26.275	27.373	25.062	28.759	27.324		45.369	46.586	9.341	36.741	-1.222	-6.953		45.795	0.186	14.643	0.004		216.35	3.60583	45.1	11.2	41.1	2.831	0.028	0.028	0.001	0.674	0.57	
235	6/14/2004	12:52:02 PM		26.313	27.376	25.075	28.781	27.332		45.062	46.013	9.3	36.505	-1.219	-6.999		55.052	0.185	14.643	0.004		217.35	3.6225	44.5	13.5	40.8	2.812	0.028	0.028	0.001	0.675	0.57	
236	6/14/2004	12:53:02 PM		26.31	27.393	25.077	28.789	27.349		45.176	46.31	9.335	36.526	-1.222	-6.999		47.858	0.183	14.643	0.004		218.35	3.63917	44.8	11.7	40.9	2.817	0.027	0.027	0.001	0.666	0.57	
237	6/14/2004	12:54:02 PM		26.302	27.395	25.084	28.815	27.376		45.114	46.403	9.285	36.521	-1.222	-6.93		46.265	0.18	14.643	0.004		219.35	3.65583	44.9	11.3	40.8	2.814	0.027	0.027	0.001	0.656	0.56	
238	6/14/2004	12:55:02 PM		26.304	27.388	25.046	28.828	27.349		45.006	46.208	9.357	36.335	-1.222	-6.95		51.131	0.18	14.643	0.004		220.35	3.6725	44.7	12.5	40.7	2.804	0.027	0.027	0.001	0.659	0.56	
239	6/14/2004	12:56:02 PM		26.321	27.389	25.063	28.8	27.271		45.442	46.849	9.19	36.924	-1.222	-6.875		40.178	0.184	14.643	0.004		221.35	3.68917	45.4	9.8	41.2	2.839	0.027	0.027	0.001	0.665	0.57	
240	6/14/2004	12:57:02 PM		26.345	27.373	25.072	28.714	27.215		43.945	45.095	10.189	34.502	-1.222	-7.068		44.715	0.17	14.643	0.004		222.35	3.70583	43.6	11.0	39.2	2.704	0.025	0.025	0.001	0.645	0.55	
241	6/14/2004	12:58:02 PM		26.312	27.4	25.109	28.716	27.177		44.432	45.665	9.859	35.274	-1.219	-7.031		51.817	0.174	14.643	0.004		223.35	3.7225	44.2	12.7	39.9	2.748	0.026	0.026	0.001	0.649	0.55	
242	6/14/2004	12:59:02 PM		26.291	27.384	25.078	28.65	27.131		44.305	45.502	9.726	35.245	-1.219	-6.933		48.638	0.167	14.643	0.004		224.35	3.73917	44.0	11.9	39.8	2.742	0.025	0.025	0.001	0.625	0.53	
243	6/14/2004	1:00:02 PM		26.345	27.388	25.147	28.624	27.095		44.374	45.775	9.728	35.309	-1.216	-6.953		45.967	0.17	14.643	0.004		225.35	3.75583	44.3	11.3	39.8	2.747	0.025	0.025	0.001	0.634	0.54	
244	6/14/2004	1:01:02 PM		26.349	27.373	25.126	28.589	27.075		44.741	46.059	9.668	35.756	-1.222	-7.022		51.999	0.178	14.643	0.004		226.35	3.7725	44.6	12.7	40.2	2.775	0.027	0.026	0.001	0.657	0.56	
245	6/14/2004	1:02:02 PM		26.378	27.377	25.151	28.618	27.134		45.085	46.285	9.668	36.154	-1.225	-7.008		47.402	0.179	14.643	0.004		227.35	3.78917	44.8	11.6	40.6	2.801	0.027	0.027	0.001	0.654	0.56	
246	6/14/2004	1:03:02 PM		26.397	27.355	25.174	28.631	27.182		45.011	46.538	9.517	36.15	-1.225	-6.976		45.973	0.182	14.643	0.003		228.35	3.80583	45.1	11.3	40.6	2.798	0.027	0.027	0.001	0.665	0.57	
247	6/14/2004	1:04:02 PM		26.417	27.37	25.209	28.686	27.222		44.818	46.136	9.481	36.015	-1.222	-7.037		48.634	0.179	14.643	0.004		229.35	3.8225	44.7	11.9	40.4	2.787	0.027	0.027	0.001	0.656	0.56	
248	6/14/2004	1:05:02 PM		26.427	27.35	25.199	28.721	27.246		44.853	46.291	9.51	35.961	-1.222	-7.057		46.428	0.177	14.643	0.004		230.35	3.83917	44.8	11.4	40.4	2.786	0.026	0.026	0.001	0.649	0.55	
249	6/14/2004	1:06:02 PM		26.463	27.382	25.231	28.792	27.273		44.915	46.074	9.427	36.242	-1.216	-7.008		41.457	0.177	14.643	0.004		231.35	3.85583	44.6	10.2	40.6	2.798	0.026	0.026	0.001	0.646	0.55	
250	6/14/2004	1:07:02 PM		26.48	27.373	25.272	28.779	27.315		44.635	46.02	9.479	35.855	-1.222	-6.935		45.424	0.181	14.643	0.004		232.35	3.8725	44.5	11.1	40.2	2.775	0.027	0.027	0.001	0.665	0.57	
251	6/14/2004	1:08:02 PM		26.497	27.371	25.285	28.821	27.312		44.915	46.26	9.566	36.033	-1.222	-7.019		47.114	0.179	14.643	0.004		233.35	3.88917	44.8	11.5	40.5	2.791	0.027	0.026	0.001	0.654	0.56	
252	6/14/2004	1:09:02 PM		26.509	27.368	25.267	28.843	27.339		45.168	46.501	9.505	36.392	-1.225	-7.057		46.619	0.176	14.643	0.004		234.35	3.90583	45.0	11.4	40.8	2.812	0.026	0.026	0.001	0.639	0.54	
253	6/14/2004	1:10:02 PM		26.526	27.379	25.288	28.864	27.375		44.836	46.181	9.474	36.047	-1.222	-7.054		47.969	0.175	14.643	0.003		235.35	3.9225	44.7	11.8	40.4	2.788	0.026	0.026	0.001	0.640	0.54	
254	6/14/2004	1:11:02 PM		26.557	27.39	25.349	28.89	27.391		44.853	46.121	9.523	36.064	-1.219	-6.967		46.957	0.173	14.643	0.004		236.35	3.93917	44.6	11.5	40.5	2.789	0.026	0.026	0.001	0.631	0.54	
255	6/14/2004	1:12:02 PM		26.553	27.382	25.341	28.887	27.438		44.801	46.31	9.581	35.887	-1.225	-7.025		45.967	0.175	14.643	0.004		237.35	3.95583	44.8	11.3	40.3	2.782	0.026	0.026	0.001	0.641	0.55	
256	6/14/2004	1:13:02 PM		26.57	27.388	25.348	28.943	27.474		44.832	46.256	9.485	36.031	-1.222	-7.04		47.051	0.175	14.643	0.004		238.35	3.9725	44.8	11.5	40.4	2.788	0.026	0.026	0.001	0.639	0.54	
257	6/14/2004	1:14:02 PM		26.587	27.401	25.375	28.966	27.502		45.141	46.588	9.606	36.183	-1.222	-7.008		50.505	0.181	14.643	0.004		239.35	3.98917	45.1	12.4	40.7	2.804	0.027	0.027	0.001	0.657	0.56	
258	6/14/2004	1:14:37 PM		26.602	27.411	25.4	29.011	27.521		45.206	46.364	9.567	36.404	-1.216	-6.99		47.181	0.17	14.643	0.004		239.93	3.99889	44.9	11.6	40.8	2.813	0.025	0.025	0.001	0.614	0.52	
259	6/14/2004	1:15:37 PM		26.609	27.408	25.377	29.037	27.543		44.969	46.387	9.49	36.144	-1.228	-7.008		42.859	0.169	14.643	0.004		240.93	4.01556	44.9	10.5	40.6	2.796	0.025	0.025	0.001	0.615	0.52	
260	6/14/2004	1:16:37 PM		26.64	27.418	25.378	29.073	27.539		44.801	46.161	9.462	36.06	-1.219	-6.907		43.543	0.18	14.643	0.004		241.93	4.03222	44.7	10.7	40.4	2.788	0.027	0.027	0.001	0.657	0.56	
261	6/14/2004	1:17:37 PM		26.651	27.434	25.424	29.044	27.53		44.99	46.567	9.491	36.148	-1.225	-7.057		49.631	0.174	14.643	0.004		242.93	4.04889	45.1	12.2	40.6	2.797	0.026	0.026	0.001	0.632	0.54	
262	6/14/2004	1:18:37 PM		26.658	27.452	25.426	29.037	27.542		44.784	46.071	9.507	35.99	-1.225	-7.063		48.315	0.173	14.643	0.004		243.93	4.06556	44.6	11.8	40.4	2.785	0.026	0.025	0.001	0.631	0.54	
263	6/14/2004	1:19:37 PM		26.676	27.46	25.444	29.039	27.53		45.023	46.59	9.522	36.115	-1.222	-7.008		47.623	0.175	14.643	0.004		244.93	4.08222	45.1	11.7	40.6	2.797	0.026	0.026	0.001	0.635	0.54	
264	6/14/2004	1:20:37 PM		26.683	27.462	25.416	28.996	27.462		43.895	45.24	10.25	34.348	-1.222	-6.912		48.117	0.135	14.643	0.004		245.93	4.09889	43.8	11.8	39.1	2.697	0.020	0.020	0.001	0.509	0.43	
265	6/14/2004	1:21:37 PM		26.691	27.465	25.415	28.965	27.436		44.009	45.251	10.166	34.519	-1.228	-7.086		42.306	0.166	14.643	0.003		246.93	4.11556	43.8	10.4	39.3	2.707	0.025	0.024	0.001	0.623	0.53	
266	6/14/2004	1:22:37 PM		26.683	27.466	25.406	28.921	27.422		44.488	45.732	10.005	35.222	-1.219	-7.037		50.574	0.151	14.643	0.004		247.93	4.13222	44.3	12.4	39.9	2.748	0.023	0.022	0.001	0.558	0.48	
267	6/14/2004	1:23:37 PM		26.666	27.45	25.399	28.855	27.361		44.189	45.591	9.929	34.978	-1.222	-6.933		45.408	0.143	14.643	0.004		248.93	4.14889	44.1	11.1	39.6	2.729	0.021	0.021	0.001	0.533	0.45	
268	6/14/2004	1:24:37 PM		26.676	27.44	25.364	28.786	27.301		44.631	45.986	9.905	35.391	-1.225	-7.054		46.59	0.164	14.643	0.004		249.93	4.16556	44.5	11.4	40.0	2.759	0.024	0.024	0.001	0.605	0.51	
269	6/14/2004	1:25:37 PM		26.696	27.455	25.36	28.766	27.287		44.312	45.56	9.825	35.218	-1.225	-7.12		53.23	0.167	14.643	0.004		250.93	4.18222	44.1	13.0	39.8	2.742	0.025	0.025	0.001	0.620	0.53	
270	6/14/2004	1:26:37 PM		26.67	27.438	25.338	28.699	27.225		44.548	45.995	9.853	35.36	-1.222	-6.999		48.762	0.181	14.643	0.004		251.93	4.19889	44.5	11.9	40.0	2.755	0.027	0.027	0.001	0.669	0.57	
271	6/14/2004	1:27:37 PM		26.686	27.435	25.31	28.681	27.237		44.612	45.914	9.82	35.489	-1.222	-7.094		51.298	0.166	14.643	0.004		252.93	4.21556	44.4	12.6	40.1	2.761	0.025	0.025	0.001	0.613	0.52	
272	6/14/2004	1:28:37 PM		26.716	27.435	25.335	28.731	27.292		44.94	46.161	9.882	35.787	-1.222	-7.141		47.185	0.167	14.643	0.004		253.93	4.23222	44.7	11.6	40.4	2.783	0.025	0.025	0.001	0.611	0.52	
273	6/14/2004	1:29:37 PM		26.747	27.451	25.351	28.747	27.322		44.133	45.663	9.807	34.993	-1.219	-6.73		48.918	0.173	14.643	0.004		254.93	4.24889	44.2	12.0	39.6	2.728	0.026	0.026	0.001	0.646	0.55	
274	6/14/2004	1:30:37 PM		26.757	27.46	25.35	28.736	27.407		44.465	45.87	9.786	35.335	-1.225	-7.051		47.589	0.169	14.643	0.003		255.93	4.26556	44.4	11.7	39.9	2.751	0.025	0.025	0.001	0.625	0.53	
275	6/14/2004	1:31:37 PM		26.7	27.464	25.328	28.824	27.455		44.714	45.91	9.864	35.506	-1.222	-7.071		54.977	0.168	14.643	0.004		256.93	4.28222	44.4	13.5	40.1	2.765	0.025	0.025	0.001	0.619	0.53	
276	6/14/2004	1:32:37 PM		26.72	27.463	25.323	28.869	27.499		44.397	45.649	9.775	35.315	-1.222	-7.08		47.533	0.167	14.643	0.004		257.93	4.29889	44.2	11.6	39.9	2.748	0.025	0.025	0.001	0.619	0.53	
277	6/14/2004	1:33:37 PM		26.718	27.467	25.306	28.912	27.488		45.094	46.515	9.814	35.982	-1.222	-7.042		51.772	0.169	14.643	0.004		258.93	4.31556	45.0	12.7	40.5	2.795	0.025	0.025	0.001	0.616	0.52	
278	6/14/2004	1:34:37 PM		26.728	27.492	25.307	28.962	27.533		44.755	46.055	9.711	35.791	-1.219	-7.063		48.232	0.168	14.643	0.004		259.93	4.33222	44.6	11.8	40.3	2.777	0.025	0.025	0.001	0.617	0.52	
279	6/14/2004	1:35:37 PM		26.717	27.476	25.28	28.971	27.586		44.364	45.657	9.662	35.45	-1.222	-7.06		54.598	0.168	14.643	0.004		260.93	4.34889	44.2	13.4	39.9	2.751	0.025	0.025	0.001	0.623	0.53	
280	6/14/2004	1:36:37 PM		26.717	27.481	25.266	28.966	27.552		44.658	46.032	9.776	35.569	-1.225	-7.089		48.676	0.165	14.643	0.003		261.93	4.36556	44.6	11.9	40.1	2.766	0.025	0.024	0.001	0.609	0.52	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	6/14/2004	1:37:37 PM		26.717	27.49	25.265	28.965	27.521		44.446	45.989	9.698	35.462	-1.225	-6.843		49.095	0.177	14.643	0.004		262.93	4.38222	44.5	12.0	40.0	2.755	0.026	0.026	0.001	0.656	0.56	
282	6/14/2004	1:38:37 PM		26.73	27.494	25.249	28.939	27.465		44.639	46.117	9.594	35.776	-1.219	-6.794		49.402	0.172	14.643	0.004		263.93	4.39889	44.6	12.1	40.2	2.772	0.026	0.025	0.001	0.633	0.54	
283	6/14/2004	1:39:37 PM		26.719	27.492	25.232	28.923	27.449		44.811	46.018	9.702	35.848	-1.222	-7.008		50.676	0.178	14.643	0.004		264.93	4.41556	44.5	12.4	40.3	2.781	0.027	0.026	0.001	0.654	0.56	
284	6/14/2004	1:40:37 PM		26.702	27.5	25.22	28.9	27.397		44.785	45.943	9.601	35.965	-1.219	-7.129		44.083	0.166	14.643	0.004		265.93	4.43222	44.5	10.8	40.4	2.784	0.025	0.025	0.001	0.609	0.52	
285	6/14/2004	1:41:37 PM		26.668	27.487	25.182	28.857	27.368		45.351	46.61	9.656	36.388	-1.222	-7.08		47.533	0.169	14.643	0.004		266.93	4.44889	45.1	11.6	40.9	2.818	0.025	0.025	0.001	0.613	0.52	
286	6/14/2004	1:42:37 PM		26.662	27.491	25.16	28.806	27.342		45.12	46.548	9.675	36.129	-1.228	-7.097		45.115	0.166	14.643	0.003		267.93	4.46556	45.1	11.1	40.6	2.801	0.025	0.025	0.001	0.606	0.52	
287	6/14/2004	1:43:37 PM		26.671	27.499	25.164	28.79	27.306		44.969	46.387	9.58	36.088	-1.225	-7.118		43.499	0.165	14.643	0.004		268.93	4.48222	44.9	10.7	40.5	2.794	0.025	0.024	0.001	0.604	0.51	
288	6/14/2004	1:44:37 PM		26.663	27.497	25.172	28.768	27.309		45.212	46.615	9.658	36.209	-1.219	-7.071		50.015	0.167	14.643	0.004		269.93	4.49889	45.1	12.3	40.7	2.807	0.025	0.025	0.001	0.609	0.52	
289	6/14/2004	1:45:37 PM		26.646	27.5	25.164	28.735	27.281		44.886	46.185	9.63	35.93	-1.222	-7.109		54.627	0.164	14.643	0.004		270.93	4.51556	44.7	13.4	40.4	2.786	0.024	0.024	0.001	0.602	0.51	
290	6/14/2004	1:46:37 PM		26.633	27.491	25.146	28.702	27.278		45.127	46.519	9.678	36.117	-1.225	-6.881		46.265	0.125	14.643	0.003		271.93	4.53222	45.0	11.3	40.6	2.801	0.019	0.019	0.000	0.457	0.39	
291	6/14/2004	1:47:37 PM		26.655	27.503	25.148	28.744	27.235		44.93	46.322	9.565	36.062	-1.222	-6.901		46.088	0.157	14.643	0.004		272.93	4.54889	44.8	11.3	40.5	2.792	0.023	0.023	0.001	0.576	0.49	
292	6/14/2004	1:48:37 PM		26.641	27.495	25.15	28.751	27.237		45.154	46.608	9.648	36.166	-1.219	-7.048		43.839	0.159	14.643	0.004		273.93	4.56556	45.1	10.7	40.7	2.803	0.024	0.024	0.001	0.581	0.49	
293	6/14/2004	1:49:37 PM		26.643	27.487	25.131	28.768	27.249		45.176	46.368	9.597	36.312	-1.219	-7.123		50.428	0.162	14.643	0.004		274.93	4.58222	44.9	12.4	40.7	2.809	0.024	0.024	0.001	0.591	0.50	
294	6/14/2004	1:50:37 PM		26.61	27.474	25.093	28.725	27.221		45.106	46.341	9.524	36.368	-1.225	-6.947		44.164	0.171	14.643	0.003		275.93	4.59889	44.9	10.8	40.7	2.809	0.025	0.025	0.001	0.624	0.53	
295	6/14/2004	1:51:37 PM		26.616	27.48	25.114	28.705	27.182		45.081	46.37	9.605	36.138	-1.222	-7.063		45.103	0.164	14.643	0.004		276.93	4.61556	44.9	11.1	40.6	2.800	0.024	0.024	0.001	0.600	0.51	
296	6/14/2004	1:52:37 PM		26.623	27.496	25.121	28.737	27.179		45.261	46.453	9.627	36.366	-1.219	-7.106		47.429	0.163	14.643	0.004		277.93	4.63222	45.0	11.6	40.8	2.814	0.024	0.024	0.001	0.593	0.51	
297	6/14/2004	1:53:37 PM		26.594	27.467	25.097	28.673	27.09		45.181	46.55	9.656	36.183	-1.222	-7.04		50.843	0.173	14.643	0.003		278.93	4.64889	45.1	12.5	40.7	2.805	0.026	0.026	0.001	0.632	0.54	
298	6/14/2004	1:54:37 PM		26.595	27.473	25.083	28.594	26.961		44.832	46.461	9.631	35.896	-1.225	-6.739		45.871	0.172	14.643	0.003		279.93	4.66556	45.0	11.2	40.4	2.783	0.026	0.026	0.001	0.634	0.54	
299	6/14/2004	1:55:37 PM		26.591	27.469	25.094	28.556	26.907		44.971	46.527	9.667	35.945	-1.219	-6.996		50.902	0.163	14.643	0.004		280.93	4.68222	45.1	12.5	40.5	2.789	0.024	0.024	0.001	0.599	0.51	
300	6/14/2004	1:56:37 PM		26.591	27.459	25.089	28.556	26.787		45.378	46.619	9.695	36.382	-1.222	-7.063		45.67	0.161	14.643	0.004		281.93	4.69889	45.1	11.2	40.9	2.819	0.024	0.024	0.001	0.586	0.50	
301	6/14/2004	1:57:37 PM		26.58	27.448	25.078	28.44	26.821		44.894	46.339	9.708	35.883	-1.222	-6.73		37.325	0.163	14.643	0.004		282.93	4.71556	44.9	9.1	40.4	2.785	0.024	0.024	0.001	0.600	0.51	
302	6/14/2004	1:58:37 PM		26.576	27.459	25.094	28.446	26.877		45.077	46.382	9.671	36.051	-1.222	-7.063		54.894	0.163	14.643	0.003		283.93	4.73222	44.9	13.5	40.6	2.797	0.024	0.024	0.001	0.598	0.51	
303	6/14/2004	1:59:37 PM		26.561	27.449	25.084	28.381	26.917		45.087	46.329	9.609	36.209	-1.222	-7.086		49.974	0.162	14.643	0.004		284.93	4.74889	44.9	12.2	40.6	2.803	0.024	0.024	0.001	0.593	0.50	
304	6/14/2004	2:00:37 PM		26.567	27.45	25.07	28.322	26.938		45.197	46.447	9.615	36.333	-1.222	-6.99		57.439	0.168	14.643	0.004		285.93	4.76556	45.0	14.1	40.8	2.811	0.025	0.025	0.001	0.613	0.52	
305	6/14/2004	2:01:37 PM		26.542	27.44	25.07	28.262	26.903		45.413	46.706	9.59	36.499	-1.222	-6.973		48.248	0.165	14.643	0.004		286.93	4.78222	45.2	11.8	41.0	2.824	0.025	0.025	0.001	0.599	0.51	
306	6/14/2004	2:02:37 PM		26.551	27.429	25.049	28.286	26.862		44.88	46.461	9.442	36.107	-1.222	-6.8		48.749	0.173	14.643	0.004		287.93	4.79889	45.0	11.9	40.5	2.792	0.026	0.026	0.001	0.636	0.54	
307	6/14/2004	2:03:37 PM		26.546	27.434	25.049	28.256	26.797		45.583	46.909	9.535	36.78	-1.219	-7.008		48.042	0.157	14.643	0.004		288.93	4.81556	45.4	11.8	41.2	2.839	0.023	0.023	0.001	0.568	0.48	
308	6/14/2004	2:04:37 PM		26.525	27.413	25.018	28.24	26.831		45.562	46.706	9.521	36.762	-1.222	-7.083		45.049	0.162	14.643	0.003		289.93	4.83222	45.2	11.0	41.2	2.838	0.024	0.024	0.001	0.586	0.50	
309	6/14/2004	2:05:37 PM		26.51	27.413	25.018	28.245	26.812		45.78	47.021	9.504	36.975	-1.219	-7.068		41.19	0.162	14.643	0.004		290.93	4.84889	45.5	10.1	41.4	2.853	0.024	0.024	0.001	0.583	0.50	
310	6/14/2004	2:06:37 PM		26.51	27.413	25.018	28.221	26.841		45.606	46.915	9.547	36.757	-1.222	-7.031		52.791	0.161	14.643	0.004		291.93	4.86556	45.4	12.9	41.2	2.839	0.024	0.024	0.001	0.583	0.50	
311	6/14/2004	2:07:37 PM		26.51	27.413	25.048	28.28	26.901		45.311	46.571	9.446	36.55	-1.219	-6.979		49.127	0.163	14.643	0.004		292.93	4.88222	45.1	12.0	40.9	2.822	0.024	0.024	0.001	0.593	0.50	
312	6/14/2004	2:08:37 PM		26.489	27.392	25.012	28.265	26.846		45.253	46.604	9.519	36.413	-1.222	-7.063		42.352	0.16	14.643	0.003		293.93	4.89889	45.1	10.4	40.8	2.815	0.024	0.024	0.001	0.584	0.50	
313	6/14/2004	2:09:37 PM		26.474	27.382	25.027	28.379	26.855		45.315	46.53	9.535	36.509	-1.222	-7.092		47.6	0.161	14.643	0.004		294.93	4.91556	45.1	11.7	40.9	2.821	0.024	0.024	0.001	0.586	0.50	
314	6/14/2004	2:10:37 PM		26.478	27.376	25.026	28.368	26.959		45.293	46.656	9.617	36.343	-1.222	-7.066		54.012	0.16	14.643	0.004		295.93	4.93222	45.2	13.2	40.8	2.814	0.024	0.024	0.001	0.584	0.50	
315	6/14/2004	2:11:37 PM		26.494	27.387	25.022	28.459	27.075		45.062	46.239	9.48	36.345	-1.222	-7.074		50.968	0.159	14.643	0.004		296.93	4.94889	44.8	12.5	40.7	2.806	0.024	0.024	0.001	0.582	0.50	
316	6/14/2004	2:12:37 PM		26.491	27.374	25.034	28.506	27.131		45.307	46.7	9.635	36.365	-1.225	-6.776		44.498	0.129	14.643	0.004		297.93	4.96556	45.2	10.9	40.8	2.815	0.019	0.019	0.000	0.471	0.40	
317	6/14/2004	2:13:37 PM		26.471	27.359	25.009	28.496	27.141		45.235	46.561	9.583	36.314	-1.225	-7.051		41.307	0.159	14.643	0.003		298.93	4.98222	45.1	10.1	40.8	2.811	0.024	0.024	0.001	0.581	0.49	
318	6/14/2004	2:14:37 PM		26.503	27.386	25.045	28.537	27.118		45.338	46.745	9.613	36.378	-1.219	-7.071		48.113	0.156	14.643	0.004		299.93	4.99889	45.3	11.8	40.9	2.817	0.023	0.023	0.001	0.569	0.48	
319	6/14/2004	2:15:37 PM		26.52	27.384	25.038	28.525	27.096		45.494	46.94	9.632	36.544	-1.225	-7.04		42.387	0.156	14.643	0.004		300.93	5.01556	45.5	10.4	41.0	2.828	0.023	0.023	0.001	0.566	0.48	
320	6/14/2004	2:16:37 PM		26.517	27.381	25.04	28.502	27.108		45.212	46.581	9.595	36.326	-1.222	-7.037		46.369	0.154	14.643	0.004		301.93	5.03222	45.1	11.4	40.8	2.811	0.023	0.023	0.001	0.563	0.48	
321	6/14/2004	2:17:37 PM		26.508	27.366	25.026	28.488	27.074		45.253	46.613	9.501	36.445	-1.225	-7.051		49.704	0.158	14.643	0.003		302.93	5.04889	45.1	12.2	40.8	2.816	0.024	0.024	0.001	0.576	0.49	
322	6/14/2004	2:18:37 PM		26.515	27.378	25.043	28.455	27.056		45.286	46.718	9.589	36.349	-1.222	-7.06		47.731	0.156	14.643	0.004		303.93	5.06556	45.2	11.7	40.8	2.814	0.023	0.023	0.001	0.569	0.48	
323	6/14/2004	2:19:37 PM		26.541	27.359	25.039	28.381	27.022		45.324	46.772	9.493	36.515	-1.219	-6.649		46.997	0.104	14.643	0.004		304.93	5.08222	45.3	11.5	40.9	2.821	0.016	0.015	0.000	0.379	0.32	
324	6/14/2004	2:20:37 PM		26.487	27.35	25.03	28.352	27.013		45.243	46.571	9.502	36.499	-1.222	-6.863		46.792	0.148	14.643	0.003		305.93	5.09889	45.1	11.5	40.9	2.818	0.022	0.022	0.001	0.539	0.46	
325	6/14/2004	2:21:37 PM		26.487	27.345	25.025	28.312	26.998		45.434	46.83	9.538	36.595	-1.222	-7.016		43.061	0.156	14.643	0.004		306.93	5.11556	45.4	10.6	41.0	2.828	0.023	0.023	0.001	0.567	0.48	
326	6/14/2004	2:22:37 PM		26.495	27.343	25.042	28.315	26.966		45.349	46.76	9.498	36.544	-1.222	-7.013		51.982	0.156	14.643	0.004		307.93	5.13222	45.3	12.7	40.9	2.823	0.023	0.023	0.001	0.567	0.48	
327	6/14/2004	2:23:37 PM		26.554	27.348	25.032	28.31	26.946		45.396	46.727	9.573	36.54	-1.225	-7.045		46.402	0.156	14.643	0.004		308.93	5.14889	45.3	11.4	41.0	2.825	0.023	0.023	0.001	0.567	0.48	
328	6/14/2004	2:24:37 PM		26.493	27.316	25.01	28.288	26.944		45.411	46.793	9.553	36.571	-1.225	-7.042		40.055	0.154	14.643	0.003		309.93	5.16556	45.3	9.8	41.0	2.826	0.023	0.023	0.001	0.560	0.48	
329	6/14/2004	2:25:37 PM		26.503	27.326	25.031	28.233	26.894		45.589	47.017	9.577	36.737	-1.219	-7.04		47.001	0.155	14.643	0.004		310.93	5.18222	45.5	11.5	41.2	2.838	0.023	0.023	0.001	0.561	0.48	
330	6/14/2004	2:26:37 PM		26.493	27.316	25.021	28.208	26.849		45.502	47.126	9.568	36.562	-1.222	-6.99		43.641	0.152	14.643	0.004		311.93	5.19889	45.7	10.7	41.0	2.829	0.023	0.023	0.001	0.552	0.47	
331	6/14/2004	2:27:37 PM		26.514	27.322	25.031	28.234	26.885		45.43	47.091	9.567	36.528	-1.222	-7.028		50.983	0.155	14.643	0.003		312.93	5.21556	45.6	12.5	41.0	2.825	0.023	0.023	0.001	0.563	0.48	
332	6/14/2004	2:28:37 PM		26.499	27.317	25.016	28.269	26.98		45.16	46.554	9.485	36.425	-1.222	-6.999		46.173	0.15	14.643	0.004		313.93	5.23222	45.1	11.3	40.8	2.813	0.022	0.022	0.001	0.548	0.47	
333	6/14/2004	2:29:37 PM		26.499	27.317	25.026	28.319	27.025		45.394	47.048	9.556	36.538	-1.219	-7.048		47.018	0.152	14.643	0.004		314.93	5.24889	45.6	11.5	41.0	2.824	0.023	0.023	0.001	0.553	0.47	
334	6/14/2004	2:30:37 PM		26.479	27.302	25.026	28.369	27.015		46.085	47.713	9.645	37.125	-1.219	-7.031		40.485	0.154	14.643	0.004		315.93	5.26556	46.2	9.9	41.6	2.869	0.023	0.023	0.001	0.551	0.47	
335	6/14/2004	2:31:37 PM		26.48	27.308	25.062	28.41	27.075		47.143	48.913	9.849	37.94	-1.222	-6.99		49.21	0.16	14.643	0.004		316.93	5.28222	47.4	12.1	42.5	2.933	0.024	0.024	0.001	0.560	0.48	
336	6/14/2004	2:32:37 PM		26.474	27.307	25.117	28.419	27.059		45.093	46.527	11.117	34.697	-1.222	-7.063		49.477	0.149	14.643	0.004		317.93	5.29889	45.1	12.1	39.9	2.751	0.022	0.022	0.001	0.555	0.47	
337	6/14/2004	2:33:37 PM		26.485	27.298	25.168	28.405	27.09		45.861	47.643	11.105	35.415	-1.222	-7.011		57.66	0.151	14.643	0.003		318.93	5.31556	46.2	14.1	40.6	2.802	0.023	0.022	0.001	0.551	0.47	
338	6/14/2004	2:34:37 PM		26.49	27.303	25.223	28.41	27.125		45.591	47.126	10.855	35.411	-1.222	-7.025		50.495	0.151	14.643	0.004		319.93	5.33222	45.7	12.4	40.5	2.792	0.023	0.022	0.001	0.552	0.47	
339	6/14/2004	2:35:37 PM		26.505	27.298	25.258	28.405	27.185		44.675	46.194	10.592	34.835	-1.216	-7.016		53.517	0.149	14.643	0.004		320.93	5.34889	44.7	13.1	39.8	2.741	0.022	0.022	0.001	0.555	0.47	
340	6/14/2004	2:36:37 PM		26.53	27.304	25.279	28.445	27.201		44.938	46.581	10.541	35.083	-1.222	-7.042		57.013	0.148	14.643	0.004		321.93	5.36556	45.1	14.0	40.0	2.759	0.022	0.022	0.001	0.547	0.47	
341	6/14/2004	2:37:37 PM		26.536	27.305	25.274	28.431	27.227		45.166	46.579	10.51	35.399	-1.219	-7.019		48.513	0.151	14.643	0.004		322.93	5.38222	45.1	11.9	40.3	2.777	0.023	0.022	0.001	0.555	0.47	
342	6/14/2004	2:38:37 PM		26.558	27.302	25.281	28.428	27.253		44.77	46.528	10.453	34.951	-1.225	-6.97		48.067	0.148	14.643	0.004		323.93	5.39889	45.1	11.8	39.9	2.748	0.022	0.022	0.001	0.549	0.47	
343	6/14/2004	2:39:37 PM		26.582	27.315	25.3	28.472	27.292		45.069	46.787	10.547	35.196	-1.222	-7.034		41.999	0.15	14.643	0.004		324.93	5.41556	45.3	10.3	40.1	2.767	0.022	0.022	0.001	0.553	0.47	
344	6/14/2004	2:40:37 PM		26.594	27.313	25.308	28.47	27.32		44.278	46.171	10.391	34.529	-1.225	-6.979		53.809	0.145	14.643	0.003		325.93	5.43222	44.7	13.2	39.4	2.717	0.022	0.021	0.001	0.544	0.46	
345	6/14/2004	2:41:37 PM		26.615	27.314	25.314	28.466	27.266		44.366	46.082	10.428	34.621	-1.222	-7.002		48.067	0.147	14.643	0.003		326.93	5.44889	44.6	11.8	39.5	2.723	0.022	0.022	0.001	0.550	0.47	
346	6/14/2004	2:42:37 PM		26.637	27.316	25.326	28.457	27.258		44.16	45.881	10.367	34.492	-1.225	-7.042		52.869	0.146	14.643	0.004		327.93	5.46556	44.4	13.0	39.3	2.711	0.022	0.022	0.001	0.548	0.47	
347	6/14/2004	2:43:37 PM		26.655	27.329	25.338	28.4	27.23		44.42	46.256	10.416	34.662	-1.225	-6.99		49.041	0.15	14.643	0.004		328.93	5.48222	44.8	12.0	39.5	2.726	0.022	0.022	0.001	0.560	0.48	
348	6/14/2004	2:44:37 PM		26.665	27.329	25.338	28.345	27.176		44.299	45.972	10.188	34.834	-1.225	-7.011		48.584	0.148	14.643	0.003		329.93	5.49889	44.5	11.9	39.6	2.728	0.022	0.022	0.001	0.552	0.47	
349	6/14/2004	2:45:37 PM		26.676	27.31	25.324	28.311	27.112		44.571	46.279	10.249	34.99	-1.228	-6.987		50.489	0.148	14.643	0.003		330.93	5.51556	44.8	12.4	39.8	2.743	0.022	0.022	0.001	0.550	0.47	
350	6/14/2004	2:46:37 PM		26.686	27.324	25.339	28.277	27.047		44.664	46.53	10.228	35.136	-1.225	-6.941		43.23	0.145	14.643	0.004		331.93	5.53222	45.1	10.6	39.9	2.751	0.022	0.021	0.001	0.537	0.46	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	6/14/2004	2:47:37 PM		26.695	27.324	25.353	28.296	26.991		44.475	46.476	10.144	34.988	-1.219	-6.979		48.322	0.152	14.643	0.004		332.93	5.54889	45.0	11.8	39.7	2.739	0.023	0.022	0.001	0.565	0.48	
352	6/14/2004	2:48:37 PM		26.674	27.303	25.322	28.27	26.945		44.424	46.181	10.102	35.105	-1.225	-6.99		44.563	0.151	14.643	0.004		333.93	5.56556	44.7	10.9	39.8	2.742	0.023	0.022	0.001	0.561	0.48	
353	6/14/2004	2:49:37 PM		26.672	27.306	25.316	28.298	26.899		44.631	46.623	10.259	35.023	-1.219	-6.993		47.646	0.15	14.643	0.004		334.93	5.58222	45.2	11.7	39.8	2.746	0.022	0.022	0.001	0.557	0.47	
354	6/14/2004	2:50:37 PM		26.68	27.304	25.324	28.331	26.947		44.482	46.447	10.13	35.03	-1.222	-6.967		50.47	0.151	14.643	0.004		335.93	5.59889	45.0	12.4	39.8	2.741	0.023	0.022	0.001	0.561	0.48	
355	6/14/2004	2:51:37 PM		26.674	27.293	25.328	28.295	26.966		44.473	46.38	10.188	34.958	-1.222	-6.979		46.544	0.149	14.643	0.003		336.93	5.61556	44.9	11.4	39.7	2.738	0.022	0.022	0.001	0.554	0.47	
356	6/14/2004	2:52:37 PM		26.657	27.291	25.341	28.313	26.979		44.606	46.488	10.283	35.079	-1.222	-6.979		51.408	0.148	14.643	0.004		337.93	5.63222	45.0	12.6	39.8	2.747	0.022	0.022	0.001	0.549	0.47	
357	6/14/2004	2:53:37 PM		26.652	27.285	25.335	28.347	26.993		44.532	46.519	10.227	34.993	-1.222	-6.97		48.951	0.144	14.643	0.003		338.93	5.64889	45.0	12.0	39.8	2.741	0.021	0.021	0.001	0.535	0.46	
358	6/14/2004	2:54:37 PM		26.662	27.285	25.345	28.257	26.998		44.689	46.789	10.233	35.069	-1.225	-6.97		44.143	0.147	14.643	0.004		339.93	5.66556	45.3	10.8	39.9	2.750	0.022	0.022	0.001	0.544	0.46	
359	6/14/2004	2:55:37 PM		26.648	27.281	25.341	28.263	27.009		44.328	46.374	10.194	34.761	-1.225	-7.008		44.479	0.144	14.643	0.004		340.93	5.68222	44.9	10.9	39.5	2.726	0.021	0.021	0.001	0.538	0.46	
360	6/14/2004	2:56:37 PM		26.648	27.276	25.356	28.258	27.009		44.44	46.53	10.198	34.91	-1.222	-6.967		47.374	0.141	14.643	0.003		341.93	5.69889	45.1	11.6	39.7	2.735	0.021	0.021	0.001	0.525	0.45	
361	6/14/2004	2:57:37 PM		26.633	27.266	25.336	28.218	27.009		44.146	46.312	10.109	34.685	-1.222	-6.938		43.628	0.146	14.643	0.003		342.93	5.71556	44.8	10.7	39.4	2.718	0.022	0.022	0.001	0.547	0.47	
362	6/14/2004	2:58:37 PM		26.633	27.267	25.342	28.214	27.005		44.552	46.59	10.188	35.05	-1.219	-6.97		60.14	0.147	14.643	0.004		343.93	5.73222	45.1	14.7	39.8	2.744	0.022	0.022	0.001	0.545	0.46	
363	6/14/2004	2:59:37 PM		26.628	27.251	25.336	28.223	26.989		44.285	45.978	10.105	35.005	-1.222	-6.967		50.195	0.146	14.643	0.004		344.93	5.74889	44.5	12.3	39.6	2.733	0.022	0.022	0.001	0.544	0.46	
364	6/14/2004	3:00:37 PM		26.622	27.24	25.335	28.237	27.003		44.65	46.801	10.191	35.112	-1.225	-6.967		48.795	0.148	14.643	0.004		345.93	5.76556	45.3	12.0	39.9	2.750	0.022	0.022	0.001	0.548	0.47	
365	6/14/2004	3:01:37 PM		26.63	27.244	25.333	28.261	27.001		44.137	46.291	10.056	34.74	-1.222	-6.918		53.35	0.146	14.643	0.004		346.93	5.78222	44.8	13.1	39.4	2.719	0.022	0.022	0.001	0.547	0.47	
366	6/14/2004	3:02:37 PM		26.624	27.228	25.337	28.275	27.01		44.809	46.903	10.278	35.229	-1.222	-6.97		50.541	0.146	14.643	0.004		347.93	5.79889	45.4	12.4	40.0	2.759	0.022	0.022	0.001	0.539	0.46	
367	6/14/2004	3:03:37 PM		26.629	27.233	25.357	28.314	27.025		44.233	46.355	10.126	34.802	-1.222	-6.912		49.319	0.146	14.643	0.004		348.93	5.81556	44.9	12.1	39.5	2.725	0.022	0.022	0.001	0.545	0.46	
368	6/14/2004	3:04:37 PM		26.63	27.234	25.353	28.295	27.031		44.339	46.374	10.072	34.939	-1.222	-6.961		46.196	0.144	14.643	0.004		349.93	5.83222	44.9	11.3	39.6	2.733	0.021	0.021	0.001	0.536	0.46	
369	6/14/2004	3:05:37 PM		26.628	27.222	25.341	28.254	27.019		44.212	46.459	10.029	34.855	-1.225	-6.878		53.075	0.142	14.643	0.003		350.93	5.84889	45.0	13.0	39.5	2.726	0.021	0.021	0.001	0.530	0.45	
370	6/14/2004	3:06:37 PM		26.623	27.222	25.326	28.269	27.044		44.44	46.525	10.098	35.032	-1.222	-6.904		49.481	0.138	14.643	0.003		351.93	5.86556	45.1	12.1	39.7	2.740	0.021	0.020	0.001	0.513	0.44	
371	6/14/2004	3:07:37 PM		26.628	27.222	25.331	28.259	27.029		44.353	46.527	10.101	34.923	-1.222	-6.953		48.755	0.141	14.643	0.004		352.93	5.88222	45.1	11.9	39.6	2.733	0.021	0.021	0.001	0.525	0.45	
372	6/14/2004	3:08:37 PM		26.618	27.227	25.336	28.249	27.029		44.845	46.554	10.124	35.409	-1.228	-6.294		45.739	0.111	14.643	0.003		353.93	5.89889	45.1	11.2	40.1	2.767	0.017	0.016	0.000	0.409	0.35	
373	6/14/2004	3:09:37 PM		26.61	27.229	25.348	28.271	27.046		44.718	46.569	10.109	35.321	-1.222	-6.591		50.887	0.14	14.643	0.004		354.93	5.91556	45.1	12.5	40.0	2.759	0.021	0.021	0.001	0.516	0.44	
374	6/14/2004	3:10:37 PM		26.62	27.234	25.378	28.251	27.041		45.017	46.639	10.102	35.662	-1.219	-6.927		50.14	0.146	14.643	0.004		355.93	5.93222	45.2	12.3	40.3	2.781	0.022	0.022	0.001	0.534	0.45	
375	6/14/2004	3:11:37 PM		26.572	27.196	25.335	28.198	27.013		44.946	46.6	10.112	35.538	-1.225	-6.964		45.981	0.144	14.643	0.004		356.93	5.94889	45.1	11.3	40.2	2.775	0.021	0.021	0.001	0.528	0.45	
376	6/14/2004	3:12:37 PM		26.561	27.195	25.284	28.217	27.007		44.982	46.718	10.15	35.553	-1.222	-6.912		53.859	0.139	14.643	0.004		357.93	5.96556	45.2	13.2	40.3	2.776	0.021	0.021	0.001	0.511	0.43	
377	6/14/2004	3:13:37 PM		26.57	27.209	25.244	28.276	27.016		44.861	46.606	10.144	35.428	-1.222	-6.964		51.767	0.145	14.643	0.004		358.93	5.98222	45.1	12.7	40.1	2.768	0.022	0.021	0.001	0.535	0.46	
378	6/14/2004	3:14:37 PM		26.554	27.198	25.213	28.255	27.05		44.95	46.932	10.103	35.506	-1.222	-6.961		46.098	0.143	14.643	0.004		359.93	5.99889	45.5	11.3	40.2	2.774	0.021	0.021	0.001	0.527	0.45	
379	6/14/2004	3:15:37 PM		26.56	27.209	25.198	28.261	27.076		45.189	47.182	10.129	35.721	-1.225	-6.901		53.517	0.143	14.643	0.004		360.93	6.01556	45.7	13.1	40.5	2.789	0.021	0.021	0.001	0.524	0.45	
380	6/14/2004	3:16:37 PM		26.535	27.194	25.163	28.231	27.041		44.853	46.774	10.086	35.456	-1.225	-6.956		53.578	0.143	14.643	0.003		361.93	6.03222	45.3	13.1	40.2	2.769	0.021	0.021	0.001	0.529	0.45	
381	6/14/2004	3:17:37 PM		26.519	27.202	25.117	28.249	26.96		44.596	46.364	10.086	35.204	-1.222	-6.895		47.9	0.142	14.643	0.004		362.93	6.04889	44.9	11.7	39.9	2.751	0.021	0.021	0.001	0.529	0.45	
382	6/14/2004	3:18:37 PM		26.496	27.184	25.079	28.187	26.887		44.849	46.59	10.036	35.534	-1.225	-6.961		49.485	0.142	14.643	0.003		363.93	6.06556	45.1	12.1	40.2	2.771	0.021	0.021	0.001	0.526	0.45	
383	6/14/2004	3:19:37 PM		26.482	27.17	25.055	28.187	26.818		44.683	46.557	10.073	35.298	-1.225	-6.959		51.477	0.142	14.643	0.004		364.93	6.08222	45.1	12.6	40.0	2.757	0.021	0.021	0.001	0.529	0.45	
384	6/14/2004	3:20:37 PM		26.469	27.178	25.042	28.215	26.781		44.787	46.642	10.113	35.397	-1.219	-6.947		47.133	0.142	14.643	0.004		365.93	6.09889	45.2	11.6	40.1	2.764	0.021	0.021	0.001	0.527	0.45	
385	6/14/2004	3:21:37 PM		26.468	27.187	25.046	28.229	26.77		44.774	46.82	10.095	35.341	-1.219	-6.944		49.314	0.141	14.643	0.004		366.93	6.11556	45.3	12.1	40.1	2.762	0.021	0.021	0.001	0.524	0.45	
386	6/14/2004	3:22:37 PM		26.43	27.159	24.968	28.136	26.737		44.884	46.899	10.16	35.409	-1.225	-6.904		45.923	0.14	14.643	0.004		367.93	6.13222	45.4	11.3	40.1	2.768	0.021	0.021	0.001	0.520	0.44	
387	6/14/2004	3:23:37 PM		26.425	27.153	24.952	28.12	26.681		44.88	46.899	10.161	35.393	-1.225	-6.953		52.798	0.141	14.643	0.004		368.93	6.14889	45.4	12.9	40.1	2.767	0.021	0.021	0.001	0.524	0.45	
388	6/14/2004	3:24:37 PM		26.405	27.158	24.967	28.06	26.652		44.739	46.743	10.127	35.298	-1.222	-6.892		49.565	0.137	14.643	0.004		369.93	6.16556	45.3	12.1	40.0	2.759	0.020	0.020	0.001	0.511	0.43	
389	6/14/2004	3:25:37 PM		26.399	27.152	24.961	27.995	26.676		44.716	46.741	10.122	35.268	-1.222	-6.944		38.556	0.14	14.643	0.004		370.93	6.18222	45.3	9.4	40.0	2.757	0.021	0.021	0.001	0.522	0.44	
390	6/14/2004	3:26:37 PM		26.384	27.142	24.946	28.025	26.705		44.502	46.569	10.075	35.128	-1.219	-6.938		49.719	0.14	14.643	0.004		371.93	6.19889	45.1	12.2	39.8	2.745	0.021	0.021	0.001	0.525	0.45	
391	6/14/2004	3:27:37 PM		26.356	27.119	24.893	27.997	26.688		44.683	46.724	10.112	35.263	-1.225	-6.941		46.961	0.139	14.643	0.004		372.93	6.21556	45.3	11.5	40.0	2.756	0.021	0.021	0.001	0.520	0.44	
392	6/14/2004	3:28:37 PM		26.34	27.109	24.872	28.006	26.722		44.59	46.397	10.126	35.268	-1.225	-6.941		47.352	0.14	14.643	0.004		373.93	6.23222	44.9	11.6	39.9	2.753	0.021	0.021	0.001	0.525	0.45	
393	6/14/2004	3:29:37 PM		26.333	27.107	24.876	28.014	26.72		44.5	46.443	10.062	35.14	-1.219	-6.933		48.367	0.141	14.643	0.004		374.93	6.24889	45.0	11.9	39.8	2.745	0.021	0.021	0.001	0.530	0.45	
394	6/14/2004	3:30:37 PM		26.328	27.102	24.861	28.064	26.77		44.745	47.085	10.153	35.21	-1.222	-6.938		48.858	0.14	14.643	0.004		375.93	6.26556	45.6	12.0	40.0	2.756	0.021	0.021	0.001	0.524	0.45	
395	6/14/2004	3:31:37 PM		26.327	27.106	24.865	28.093	26.824		44.737	47.124	10.152	35.235	-1.222	-6.93		45.328	0.138	14.643	0.004		376.93	6.28222	45.7	11.1	40.0	2.757	0.021	0.021	0.001	0.517	0.44	
396	6/14/2004	3:32:37 PM		26.307	27.096	24.835	28.083	26.814		44.774	47.017	10.176	35.216	-1.219	-6.881		46.761	0.14	14.643	0.004		377.90	6.29833	45.5	11.5	40.0	2.758	0.021	0.021	0.001	0.524	0.45	
397	6/14/2004	3:33:37 PM		26.302	27.085	24.834	28.117	26.828		44.747	47.046	10.18	35.233	-1.222	-6.93		46.352	0.139	14.643	0.004		378.90	6.315	45.6	11.4	40.0	2.757	0.021	0.021	0.001	0.521	0.44	
398	6/14/2004	3:34:37 PM		26.286	27.079	24.818	28.121	26.832		44.426	46.583	10.145	34.982	-1.225	-6.921		51.436	0.14	14.643	0.003		379.90	6.33167	45.1	12.6	39.7	2.737	0.021	0.021	0.001	0.528	0.45	
399	6/14/2004	3:35:37 PM		26.287	27.085	24.849	28.097	26.838		44.681	46.712	10.188	35.192	-1.222	-6.933		53.878	0.138	14.643	0.004		380.90	6.34833	45.2	13.2	39.9	2.753	0.021	0.021	0.001	0.517	0.44	
400	6/14/2004	3:36:37 PM		26.29	27.088	24.857	28.085	26.836		44.621	46.666	10.14	35.196	-1.219	-6.924		49.677	0.138	14.643	0.004		381.90	6.365	45.2	12.2	39.9	2.752	0.021	0.021	0.001	0.518	0.44	
401	6/14/2004	3:37:37 PM		26.275	27.083	24.822	28.1	26.886		44.457	46.635	10.108	35.062	-1.222	-6.843		43.789	0.14	14.643	0.004		382.90	6.38167	45.2	10.7	39.8	2.741	0.021	0.021	0.001	0.528	0.45	
402	6/14/2004	3:38:37 PM		26.281	27.089	24.823	28.141	26.902		44.463	46.627	10.136	35.029	-1.216	-6.904		52.454	0.138	14.643	0.004		383.90	6.39833	45.2	12.9	39.7	2.740	0.021	0.021	0.001	0.520	0.44	
403	6/14/2004	3:39:37 PM		26.255	27.078	24.797	28.135	26.901		44.677	47.178	10.22	35.085	-1.222	-6.886		52.356	0.136	14.643	0.004		384.90	6.415	45.7	12.8	39.9	2.750	0.020	0.020	0.001	0.511	0.44	
404	6/14/2004	3:40:37 PM		26.255	27.078	24.792	28.11	26.906		44.44	46.799	10.131	34.954	-1.219	-6.857		48.749	0.136	14.643	0.004		385.90	6.43167	45.3	11.9	39.7	2.737	0.020	0.020	0.001	0.514	0.44	
405	6/14/2004	3:41:37 PM		26.251	27.079	24.798	28.141	26.902		44.502	46.84	10.169	34.993	-1.222	-6.909		48.478	0.137	14.643	0.004		386.90	6.44833	45.4	11.9	39.7	2.740	0.020	0.021	0.001	0.517	0.44	
406	6/14/2004	3:42:37 PM		26.235	27.073	24.777	28.165	26.916		44.822	47.205	10.279	35.188	-1.225	-6.907		46.964	0.137	14.643	0.003		387.90	6.465	45.7	11.5	40.0	2.758	0.020	0.021	0.001	0.514	0.44	
407	6/14/2004	3:43:37 PM		26.23	27.073	24.762	28.2	26.946		44.42	46.758	10.177	34.939	-1.222	-6.895		48.211	0.137	14.643	0.003		388.90	6.48167	45.3	11.8	39.7	2.736	0.020	0.021	0.001	0.518	0.44	
408	6/14/2004	3:44:37 PM		26.231	27.084	24.793	28.251	27.001		45.058	47.516	10.257	35.465	-1.225	-6.912		47.514	0.136	14.643	0.003		389.90	6.49833	46.0	11.6	40.3	2.776	0.020	0.020	0.001	0.507	0.43	
409	6/14/2004	3:45:37 PM		26.232	27.085	24.814	28.267	27.027		44.683	46.832	10.158	35.274	-1.222	-6.895		41.872	0.136	14.643	0.004		390.90	6.515	45.4	10.3	40.0	2.756	0.020	0.020	0.001	0.510	0.43	
410	6/14/2004	3:46:37 PM		26.229	27.087	24.801	28.279	27.049		44.554	46.668	10.176	35.118	-1.222	-6.909		43.126	0.135	14.643	0.004		391.90	6.53167	45.2	10.6	39.8	2.747	0.020	0.020	0.001	0.508	0.43	
411	6/14/2004	3:47:37 PM		26.22	27.089	24.787	28.295	27.061		44.343	46.712	10.097	34.966	-1.225	-6.883		53.229	0.135	14.643	0.004		392.90	6.54833	45.2	13.0	39.7	2.734	0.020	0.020	0.001	0.511	0.43	
412	6/14/2004	3:48:37 PM		26.228	27.101	24.775	28.303	27.118		44.465	46.876	10.199	34.913	-1.225	-6.82		48.616	0.134	14.643	0.004		393.90	6.565	45.4	11.9	39.7	2.736	0.020	0.020	0.001	0.507	0.43	
413	6/14/2004	3:49:37 PM		26.22	27.098	24.777	28.32	27.13		44.403	46.571	10.148	34.925	-1.222	-6.901		51.129	0.135	14.643	0.004		394.90	6.58167	45.1	12.5	39.7	2.735	0.020	0.020	0.001	0.511	0.43	
414	6/14/2004	3:50:37 PM		26.212	27.1	24.784	28.327	27.142		44.399	46.874	10.202	34.859	-1.222	-6.904		47.327	0.134	14.643	0.004		395.90	6.59833	45.4	11.6	39.6	2.732	0.020	0.020	0.001	0.507	0.43	
415	6/14/2004	3:51:37 PM		26.214	27.107	24.781	28.358	27.149		44.281	46.731	10.193	34.738	-1.222	-6.84		52.234	0.137	14.643	0.004		396.90	6.615	45.3	12.8	39.5	2.724	0.020	0.021	0.001	0.520	0.44	
416	6/14/2004	3:52:37 PM		26.22	27.114	24.772	28.36	27.126		44.496	47.126	10.17	34.986	-1.219	-6.872		46.995	0.136	14.643	0.004		397.90	6.63167	45.7	11.5	39.7	2.740	0.020	0.020	0.001	0.514	0.44	
417	6/14/2004	3:53:37 PM		26.226	27.115	24.763	28.391	27.052		44.517	46.861	10.126	35.12	-1.219	-6.892		49.863	0.133	14.643	0.004		398.90	6.64833	45.4	12.2	39.8	2.745	0.020	0.020	0.001	0.501	0.43	
418	6/14/2004	3:54:37 PM		26.212	27.11	24.744	28.357	27.003		44.764	47.419	10.137	35.274	-1.222	-6.854		45.923	0.134	14.643	0.004		399.90	6.665	45.9	11.3	40.0	2.759	0.020	0.020	0.001	0.503	0.43	
419	6/14/2004	3:55:37 PM		26.207	27.105	24.774	28.347	26.948		44.561	46.973	10.106	35.171	-1.222	-6.895		48.407	0.133	14.643	0.004		400.90	6.68167	45.5	11.9	39.9	2.749	0.020	0.020	0.001	0.501	0.43	
420	6/14/2004	3:56:37 PM		26.202	27.1	24.764	28.272	26.888		44.577	46.998	10.106	35.198	-1.228	-6.866		51.459	0.132	14.643	0.003		401.90	6.69833	45.5	12.6	39.9	2.750	0.020	0.020	0.000	0.497	0.42	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	6/14/2004	3:57:37 PM		26.196	27.105	24.758	28.202	26.852		44.335	46.7	10.121	34.919	-1.222	-6.872		53.736	0.135	14.643	0.004		402.90	6.715	45.2	13.2	39.6	2.732	0.020	0.020	0.001	0.511	0.44	
422	6/14/2004	3:58:37 PM		26.187	27.09	24.744	28.222	26.823		44.616	46.969	10.133	35.144	-1.222	-6.774		47.875	0.132	14.643	0.004		403.90	6.73167	45.5	11.7	39.9	2.750	0.020	0.020	0.000	0.497	0.42	
423	6/14/2004	3:59:37 PM		26.194	27.087	24.736	28.224	26.805		44.434	46.851	10.117	35.036	-1.219	-6.883		52.777	0.134	14.643	0.004		404.90	6.74833	45.4	12.9	39.7	2.740	0.020	0.020	0.001	0.507	0.43	
424	6/14/2004	4:00:37 PM		26.192	27.095	24.719	28.212	26.778		44.646	47.199	10.13	35.243	-1.225	-6.849		51.792	0.134	14.643	0.003		405.90	6.765	45.7	12.7	39.9	2.754	0.020	0.020	0.001	0.504	0.43	
425	6/14/2004	4:01:37 PM		26.2	27.099	24.727	28.181	26.831		44.502	46.95	10.149	35.071	-1.222	-6.782		45.443	0.131	14.643	0.004		406.90	6.78167	45.5	11.1	39.8	2.743	0.020	0.020	0.000	0.495	0.42	
426	6/14/2004	4:02:37 PM		26.2	27.114	24.742	28.221	26.901		44.227	46.65	10.066	34.908	-1.222	-6.866		47.75	0.132	14.643	0.004		407.90	6.79833	45.2	11.7	39.6	2.728	0.020	0.020	0.001	0.501	0.43	
427	6/14/2004	4:03:37 PM		26.206	27.114	24.748	28.206	26.907		44.113	46.702	10.07	34.759	-1.222	-6.831		51.023	0.128	14.643	0.004		408.90	6.815	45.2	12.5	39.4	2.719	0.019	0.019	0.000	0.487	0.41	
428	6/14/2004	4:04:37 PM		26.197	27.1	24.774	28.212	26.938		44.363	46.975	10.1	34.941	-1.222	-6.828		44.874	0.135	14.643	0.004		409.90	6.83167	45.5	11.0	39.7	2.734	0.020	0.020	0.001	0.511	0.43	
429	6/14/2004	4:05:37 PM		26.203	27.106	24.79	28.248	26.979		44.328	47.131	10.102	34.888	-1.219	-6.869		47.911	0.134	14.643	0.004		410.90	6.84833	45.7	11.7	39.6	2.731	0.020	0.020	0.001	0.507	0.43	
430	6/14/2004	4:06:37 PM		26.191	27.09	24.758	28.231	26.997		44.523	47.166	10.104	35.124	-1.222	-6.852		49.888	0.133	14.643	0.004		411.90	6.865	45.7	12.2	39.8	2.746	0.020	0.020	0.001	0.501	0.43	
431	6/14/2004	4:07:37 PM		26.186	27.1	24.768	28.246	27.037		44.561	47.346	10.101	35.132	-1.222	-6.875		47.347	0.131	14.643	0.004		412.90	6.88167	45.9	11.6	39.8	2.747	0.020	0.020	0.000	0.493	0.42	
432	6/14/2004	4:08:37 PM		26.196	27.114	24.788	28.281	27.062		44.33	46.973	10.083	34.937	-1.219	-6.805		54.731	0.136	14.643	0.004		413.90	6.89833	45.5	13.4	39.6	2.733	0.020	0.020	0.001	0.515	0.44	
433	6/14/2004	4:09:37 PM		26.173	27.091	24.75	28.253	27.023		44.492	47.269	10.101	35.048	-1.222	-6.857		44.575	0.132	14.643	0.004		414.90	6.915	45.8	10.9	39.8	2.742	0.020	0.020	0.000	0.498	0.42	
434	6/14/2004	4:10:37 PM		26.178	27.086	24.72	28.273	27.029		44.135	46.588	10.087	34.796	-1.222	-6.869		49.782	0.13	14.643	0.004		415.90	6.93167	45.1	12.2	39.5	2.721	0.019	0.020	0.000	0.495	0.42	
435	6/14/2004	4:11:37 PM		26.175	27.098	24.721	28.289	27.015		44.391	46.884	10.168	34.939	-1.222	-6.843		50.81	0.134	14.643	0.004		416.90	6.94833	45.4	12.5	39.7	2.735	0.020	0.020	0.001	0.508	0.43	
436	6/14/2004	4:12:37 PM		26.175	27.103	24.707	28.28	27.02		44.432	47.064	10.145	34.956	-1.225	-6.863		54.372	0.131	14.643	0.004		417.90	6.965	45.6	13.3	39.7	2.737	0.020	0.020	0.000	0.496	0.42	
437	6/14/2004	4:13:37 PM		26.187	27.11	24.719	28.307	27.038		44.189	46.874	10.08	34.847	-1.225	-6.817		49.606	0.131	14.643	0.003		418.90	6.98167	45.4	12.2	39.5	2.725	0.020	0.020	0.000	0.498	0.42	
438	6/14/2004	4:14:37 PM		26.195	27.129	24.727	28.34	27.076		44.345	47.126	10.151	34.837	-1.222	-6.86		48.467	0.132	14.643	0.004		419.90	6.99833	45.7	11.9	39.6	2.730	0.020	0.020	0.001	0.501	0.43	
439	6/14/2004	4:15:37 PM		26.203	27.136	24.73	28.363	27.118		44.075	46.988	10.095	34.666	-1.228	-6.857		47.195	0.131	14.643	0.003		420.90	7.015	45.5	11.6	39.4	2.714	0.020	0.020	0.000	0.500	0.43	
440	6/14/2004	4:16:37 PM		26.225	27.163	24.752	28.425	27.16		44.463	47.301	10.213	34.917	-1.219	-6.854		55.66	0.13	14.643	0.004		421.90	7.03167	45.8	13.6	39.7	2.736	0.019	0.020	0.000	0.492	0.42	
441	6/14/2004	4:17:37 PM		26.212	27.165	24.759	28.421	27.157		44.502	47.516	10.215	34.96	-1.219	-6.84		47.385	0.13	14.643	0.004		422.90	7.04833	46.0	11.6	39.7	2.739	0.019	0.020	0.000	0.491	0.42	
442	6/14/2004	4:18:37 PM		26.209	27.167	24.75	28.314	27.104		44.272	46.988	10.202	34.806	-1.225	-6.852		54.005	0.128	14.643	0.004		423.90	7.065	45.5	13.2	39.5	2.726	0.019	0.019	0.000	0.486	0.41	
443	6/14/2004	4:19:37 PM		26.191	27.149	24.753	28.271	27.036		44.326	47.282	10.236	34.744	-1.219	-6.84		48.751	0.13	14.643	0.004		424.90	7.08167	45.8	11.9	39.5	2.726	0.019	0.020	0.000	0.494	0.42	
444	6/14/2004	4:20:37 PM		26.18	27.153	24.747	28.25	26.996		44.594	47.562	10.18	35.087	-1.222	-6.854		51.607	0.127	14.643	0.004		425.90	7.09833	46.1	12.6	39.8	2.747	0.019	0.019	0.000	0.479	0.41	
445	6/14/2004	4:21:37 PM		26.189	27.157	24.736	28.234	26.935		44.281	47.164	10.179	34.808	-1.222	-6.794		51.778	0.125	14.643	0.004		426.90	7.115	45.7	12.7	39.5	2.726	0.019	0.019	0.000	0.475	0.40	
446	6/14/2004	4:22:37 PM		26.195	27.168	24.732	28.235	26.876		44.359	47.166	10.204	34.882	-1.222	-6.849		52.258	0.127	14.643	0.004		427.90	7.13167	45.7	12.8	39.6	2.732	0.019	0.019	0.000	0.482	0.41	
447	6/14/2004	4:23:37 PM		26.201	27.179	24.748	28.216	26.847		44.31	47.199	10.21	34.818	-1.222	-6.849		48.561	0.127	14.643	0.004		428.90	7.14833	45.7	11.9	39.6	2.728	0.019	0.019	0.000	0.482	0.41	
448	6/14/2004	4:24:37 PM		26.19	27.168	24.772	28.225	26.836		44.32	47.184	10.207	34.841	-1.219	-6.794		50.107	0.125	14.643	0.004		429.90	7.165	45.7	12.3	39.6	2.729	0.019	0.019	0.000	0.474	0.40	
449	6/14/2004	4:25:37 PM		26.191	27.169	24.783	28.171	26.847		44.193	47.015	10.166	34.777	-1.219	-6.909		48.334	0.127	14.643	0.004		430.90	7.18167	45.5	11.8	39.5	2.722	0.019	0.019	0.000	0.482	0.41	
450	6/14/2004	4:26:37 PM		26.169	27.142	24.761	28.124	26.855		44.206	46.988	10.202	34.783	-1.222	-6.912		54.45	0.126	14.643	0.004		431.90	7.19833	45.5	13.3	39.5	2.723	0.019	0.019	0.000	0.479	0.41	
451	6/14/2004	4:27:37 PM		26.171	27.144	24.743	28.091	26.887		44.633	47.616	10.344	34.966	-1.222	-6.904		42.068	0.124	14.643	0.004		432.90	7.215	46.1	10.3	39.8	2.744	0.018	0.019	0.000	0.468	0.40	
452	6/14/2004	4:28:37 PM		26.184	27.157	24.755	28.134	26.964		44.137	47.048	10.239	34.601	-1.222	-6.892		46.596	0.126	14.643	0.004		433.90	7.23167	45.6	11.4	39.4	2.714	0.019	0.019	0.000	0.480	0.41	
453	6/14/2004	4:29:37 PM		26.18	27.153	24.756	28.115	26.97		44.187	47.004	10.227	34.699	-1.219	-6.883		54.975	0.125	14.643	0.004		434.90	7.24833	45.5	13.5	39.4	2.719	0.019	0.019	0.000	0.476	0.40	
454	6/14/2004	4:30:37 PM		26.181	27.149	24.788	28.112	26.982		44.073	46.957	10.233	34.586	-1.222	-6.889		50.009	0.124	14.643	0.004		435.90	7.265	45.5	12.3	39.3	2.712	0.018	0.019	0.000	0.473	0.40	
455	6/14/2004	4:31:37 PM		26.185	27.153	24.827	28.105	27.035		44.121	47.1	10.245	34.601	-1.219	-6.886		49.894	0.123	14.643	0.004		436.90	7.28167	45.6	12.2	39.4	2.714	0.018	0.018	0.000	0.468	0.40	
456	6/14/2004	4:32:37 PM		26.191	27.144	24.888	28.141	27.041		44.196	47.216	10.183	34.75	-1.219	-6.863		45.378	0.125	14.643	0.004		437.90	7.29833	45.7	11.1	39.5	2.722	0.019	0.019	0.000	0.474	0.40	
457	6/14/2004	4:33:37 PM		26.208	27.161	24.885	28.163	27.013		44.179	47.29	10.266	34.574	-1.219	-6.875		41.974	0.123	14.643	0.004		438.90	7.315	45.8	10.3	39.4	2.715	0.018	0.018	0.000	0.467	0.40	
458	6/14/2004	4:34:37 PM		26.205	27.144	24.842	28.156	27.051		44.256	47.431	10.137	34.841	-1.222	-6.869		45.266	0.123	14.643	0.003		439.90	7.33167	46.0	11.1	39.5	2.727	0.018	0.018	0.000	0.466	0.40	
459	6/14/2004	4:35:37 PM		26.205	27.134	24.842	28.226	27.081		43.889	46.94	10.1	34.514	-1.225	-6.828		46.306	0.122	14.643	0.004		440.90	7.34833	45.5	11.3	39.2	2.703	0.018	0.018	0.000	0.466	0.40	
460	6/14/2004	4:36:37 PM		26.201	27.129	24.843	28.246	27.082		44.083	47.359	10.17	34.58	-1.219	-6.857		42.133	0.124	14.643	0.004		441.90	7.365	45.9	10.3	39.3	2.712	0.018	0.019	0.000	0.472	0.40	
461	6/14/2004	4:37:37 PM		26.218	27.146	24.845	28.213	27.073		44.38	47.682	10.183	34.867	-1.219	-6.846		48.15	0.124	14.643	0.004		442.90	7.38167	46.2	11.8	39.6	2.732	0.018	0.019	0.000	0.469	0.40	
462	6/14/2004	4:38:37 PM		26.219	27.147	24.821	28.234	27.104		43.816	47.116	10.145	34.342	-1.219	-6.846		48.52	0.123	14.643	0.004		443.90	7.39833	45.6	11.9	39.1	2.694	0.018	0.018	0.000	0.472	0.40	
463	6/14/2004	4:39:37 PM		26.222	27.145	24.804	28.272	27.132		44.347	47.728	10.172	34.818	-1.222	-6.843		51.346	0.125	14.643	0.003		444.90	7.415	46.3	12.6	39.6	2.729	0.019	0.019	0.000	0.473	0.40	
464	6/14/2004	4:40:37 PM		26.239	27.168	24.842	28.304	27.189		43.945	47.197	10.061	34.633	-1.219	-6.82		48.793	0.124	14.643	0.004		445.90	7.43167	45.7	12.0	39.3	2.709	0.018	0.019	0.000	0.473	0.40	
465	6/14/2004	4:41:37 PM		26.232	27.16	24.809	28.332	27.177		44.177	47.618	10.135	34.734	-1.225	-6.831		46.932	0.125	14.643	0.004		446.90	7.44833	46.1	11.5	39.5	2.720	0.019	0.019	0.000	0.475	0.40	
466	6/14/2004	4:42:37 PM		26.228	27.161	24.81	28.328	27.143		44.069	47.408	10.229	34.477	-1.225	-6.82		38.186	0.122	14.643	0.004		447.90	7.465	45.9	9.4	39.3	2.708	0.018	0.018	0.000	0.466	0.40	
467	6/14/2004	4:43:37 PM		26.237	27.17	24.799	28.337	27.182		44.492	47.676	10.059	35.173	-1.225	-6.826		51.667	0.123	14.643	0.003		448.90	7.48167	46.2	12.7	39.8	2.746	0.018	0.018	0.000	0.463	0.39	
468	6/14/2004	4:44:37 PM		26.249	27.183	24.817	28.369	27.244		44.486	47.879	10.12	35.062	-1.222	-6.791		49.394	0.12	14.643	0.004		449.90	7.49833	46.4	12.1	39.8	2.742	0.018	0.018	0.000	0.452	0.38	
469	6/14/2004	4:45:37 PM		26.238	27.181	24.8	28.398	27.228		44.305	47.529	10.061	34.972	-1.222	-6.823		41.244	0.123	14.643	0.003		450.90	7.515	46.1	10.1	39.6	2.733	0.018	0.018	0.000	0.465	0.40	
470	6/14/2004	4:46:37 PM		26.241	27.184	24.828	28.401	27.186		44.54	48.016	10.114	35.05	-1.219	-6.814		51.709	0.123	14.643	0.004		451.90	7.53167	46.5	12.7	39.8	2.744	0.018	0.018	0.000	0.463	0.39	
471	6/14/2004	4:47:37 PM		26.243	27.186	24.825	28.398	27.198		44.268	47.479	10.001	35.017	-1.222	-6.814		47.669	0.123	14.643	0.004		452.90	7.54833	46.0	11.7	39.6	2.733	0.018	0.018	0.000	0.465	0.40	
472	6/14/2004	4:48:37 PM		26.216	27.169	24.813	28.421	27.166		44.542	48.067	10.191	34.968	-1.222	-6.788		50.741	0.123	14.643	0.004		453.90	7.565	46.6	12.4	39.8	2.741	0.018	0.018	0.000	0.464	0.39	
473	6/14/2004	4:49:37 PM		26.237	27.19	24.844	28.456	27.192		43.963	47.278	9.972	34.726	-1.222	-6.817		49.221	0.121	14.643	0.004		454.90	7.58167	45.8	12.1	39.3	2.713	0.018	0.018	0.000	0.461	0.39	
474	6/14/2004	4:50:37 PM		26.238	27.196	24.84	28.497	27.218		44.374	47.806	10.13	34.898	-1.219	-6.808		47.769	0.122	14.643	0.004		455.90	7.59833	46.3	11.7	39.6	2.733	0.018	0.018	0.000	0.461	0.39	
475	6/14/2004	4:51:37 PM		26.245	27.208	24.842	28.499	27.225		44.357	47.585	10.147	35.001	-1.225	-6.808		48.021	0.122	14.643	0.003		456.90	7.615	46.1	11.8	39.7	2.736	0.018	0.018	0.000	0.460	0.39	
476	6/14/2004	4:52:37 PM		26.256	27.214	24.853	28.495	27.166		44.144	47.56	10.076	34.791	-1.216	-6.797		48.674	0.121	14.643	0.004		457.90	7.63167	46.1	11.9	39.5	2.721	0.018	0.018	0.000	0.459	0.39	
477	6/14/2004	4:53:37 PM		26.235	27.213	24.807	28.454	27.12		44.449	48.012	10.101	35.017	-1.228	-6.808		45.798	0.123	14.643	0.003		458.90	7.64833	46.5	11.2	39.7	2.739	0.018	0.018	0.000	0.464	0.39	
478	6/14/2004	4:54:37 PM		26.24	27.218	24.802	28.449	27.1		44.044	47.529	10.098	34.635	-1.222	-6.797		45.704	0.122	14.643	0.003		459.90	7.665	46.1	11.2	39.3	2.712	0.018	0.018	0.000	0.465	0.40	
479	6/14/2004	4:55:37 PM		26.256	27.245	24.814	28.431	27.052		44.428	47.953	10.205	34.923	-1.222	-6.805		46.311	0.12	14.643	0.003		460.90	7.68167	46.5	11.3	39.7	2.735	0.018	0.018	0.000	0.453	0.39	
480	6/14/2004	4:56:37 PM		26.245	27.233	24.817	28.374	27.05		44.556	48.123	10.147	35.062	-1.219	-6.8		53.084	0.122	14.643	0.004		461.90	7.69833	46.7	13.0	39.8	2.745	0.018	0.018	0.000	0.459	0.39	
481	6/14/2004	4:57:37 PM		26.227	27.23	24.844	28.327	27.022		48.491	52.03	10.764	38.43	-1.219	-6.713		53.121	0.132	14.643	0.004		462.90	7.715	50.6	13.0	43.5	2.996	0.020	0.020	0.000	0.455	0.39	
482	6/14/2004	4:58:37 PM		26.229	27.232	24.891	28.304	27.045		48.092	51.456	10.644	38.116	-1.222	-6.343		52.804	0.126	14.643	0.004		463.90	7.73167	50.0	12.9	43.1	2.972	0.019	0.019	0.000	0.437	0.37	
483	6/14/2004	4:59:37 PM		26.265	27.248	24.992	28.315	27.125		46.578	50.153	11.262	36	-1.222	-6.392		49.225	0.125	14.643	0.004		464.90	7.74833	48.7	12.1	41.3	2.847	0.019	0.019	0.000	0.451	0.38	
484	6/14/2004	5:00:37 PM		26.273	27.246	25.051	28.323	27.113		46.5	49.921	11.255	35.92	-1.222	-6.623		43.797	0.129	14.643	0.003		465.90	7.765	48.4	10.7	41.2	2.841	0.019	0.019	0.000	0.466	0.40	
485	6/14/2004	5:01:37 PM		26.298	27.256	25.116	28.328	27.128		46.73	49.883	11.011	36.466	-1.222	-6.667		46.943	0.128	14.643	0.004		466.90	7.78167	48.4	11.5	41.6	2.868	0.019	0.019	0.000	0.457	0.39	
486	6/14/2004	5:02:37 PM		26.323	27.261	25.201	28.373	27.208		45.931	49.282	11.8	34.789	-1.219	-6.762		54.948	0.122	14.643	0.004		467.90	7.79833	47.8	13.5	40.4	2.783	0.018	0.018	0.000	0.448	0.38	
487	6/14/2004	5:03:37 PM		26.332	27.24	25.21	28.367	27.172		45.815	49.321	10.722	35.795	-1.222	-6.756		48.976	0.125	14.643	0.003		468.90	7.815	47.8	12.0	40.8	2.813	0.019	0.019	0.000	0.454	0.39	
488	6/14/2004	5:04:37 PM		26.384	27.272	25.242	28.409	27.224		46.466	49.966	10.428	36.698	-1.222	-6.724		49.206	0.127	14.643	0.004		469.90	7.83167	48.5	12.1	41.6	2.867	0.019	0.019	0.000	0.452	0.38	
489	6/14/2004	5:05:37 PM		26.414	27.267	25.257	28.449	27.254		45.587	49.015	10.893	35.399	-1.222	-6.762		53.985	0.123	14.643	0.004		470.90	7.84833	47.5	13.2	40.5	2.792	0.018	0.018	0.000	0.450	0.38	
490	6/14/2004	5:06:37 PM		26.442	27.275	25.285	28.491	27.311		46.176	49.825	10.651	36.179	-1.219	-6.73		53.726	0.126	14.643	0.004		471.90	7.865	48.4	13.2	41.2	2.839	0.019	0.019	0.000	0.453	0.39	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	6/14/2004	5:07:37 PM		26.454	27.273	25.297	28.539	27.389		45.025	48.517	11.059	34.674	-1.222	-6.736		52.597	0.126	14.643	0.004		472.90	7.88167	47.0	12.9	39.8	2.747	0.019	0.019	0.000	0.467	0.40	
492	6/14/2004	5:08:37 PM		26.483	27.281	25.296	28.563	27.432		46.278	49.947	10.653	36.285	-1.222	-6.733		53.171	0.124	14.643	0.004		473.90	7.89833	48.5	13.0	41.3	2.846	0.018	0.018	0.000	0.444	0.38	
493	6/14/2004	5:09:37 PM		26.512	27.3	25.33	28.586	27.446		45.514	48.936	10.769	35.485	-1.222	-6.745		48.686	0.123	14.643	0.004		474.90	7.915	47.5	11.9	40.5	2.792	0.018	0.018	0.000	0.449	0.38	
494	6/14/2004	5:10:37 PM		26.508	27.282	25.317	28.553	27.463		45.875	49.135	10.277	36.335	-1.225	-6.678		51.427	0.125	14.643	0.003		475.90	7.93167	47.7	12.6	41.1	2.834	0.019	0.018	0.000	0.449	0.38	
495	6/14/2004	5:11:37 PM		26.547	27.306	25.32	28.642	27.477		46.166	49.763	10.268	36.626	-1.222	-6.719		48.497	0.126	14.643	0.004		476.90	7.94833	48.3	11.9	41.4	2.854	0.019	0.019	0.000	0.450	0.38	
496	6/14/2004	5:12:37 PM		26.554	27.303	25.317	28.658	27.518		46.211	49.974	10.279	36.583	-1.222	-6.675		47.458	0.125	14.643	0.004		477.90	7.965	48.5	11.6	41.4	2.854	0.019	0.018	0.000	0.446	0.38	
497	6/14/2004	5:13:37 PM		26.566	27.314	25.329	28.645	27.505		46.599	50.383	10.26	37.041	-1.222	-6.713		43.649	0.127	14.643	0.004		478.90	7.98167	48.9	10.7	41.8	2.883	0.019	0.019	0.000	0.449	0.38	
498	6/14/2004	5:14:37 PM		26.557	27.29	25.295	28.641	27.471		45.475	49.266	11.068	35.071	-1.225	-6.707		44.657	0.123	14.643	0.004		479.90	7.99833	47.8	10.9	40.3	2.777	0.018	0.018	0.000	0.452	0.38	
499	6/14/2004	5:15:37 PM		26.589	27.312	25.322	28.623	27.513		45.776	49.435	10.754	35.727	-1.225	-6.739		51.571	0.123	14.643	0.004		480.90	8.015	48.0	12.6	40.8	2.810	0.018	0.018	0.000	0.446	0.38	
500	6/14/2004	5:16:37 PM		26.594	27.328	25.358	28.594	27.459		45.135	49.021	11.059	34.718	-1.222	-6.742		51.144	0.12	14.643	0.004		481.90	8.03167	47.5	12.5	39.9	2.753	0.018	0.018	0.000	0.444	0.38	
501	6/14/2004	5:17:37 PM		26.6	27.319	25.349	28.545	27.425		45.687	49.239	10.802	35.619	-1.225	-6.724		48.123	0.122	14.643	0.003		482.90	8.04833	47.8	11.8	40.7	2.803	0.018	0.018	0.000	0.443	0.38	
502	6/14/2004	5:18:37 PM		26.612	27.326	25.366	28.537	27.337		45.759	49.516	10.661	35.777	-1.225	-6.727		56.865	0.123	14.643	0.004		483.90	8.065	48.0	13.9	40.8	2.811	0.018	0.018	0.000	0.445	0.38	
503	6/14/2004	5:19:37 PM		26.618	27.327	25.412	28.518	27.279		45.382	49.199	11.016	34.978	-1.225	-6.716		51.194	0.122	14.643	0.003		484.90	8.08167	47.7	12.5	40.2	2.770	0.018	0.018	0.000	0.447	0.38	
504	6/14/2004	5:20:37 PM		26.622	27.321	25.446	28.477	27.238		45.214	49.212	10.92	34.931	-1.228	-6.742		49.631	0.12	14.643	0.003		485.90	8.09833	47.7	12.2	40.1	2.763	0.018	0.018	0.000	0.441	0.38	
505	6/14/2004	5:21:37 PM		26.643	27.327	25.452	28.473	27.264		45.558	49.33	10.85	35.356	-1.222	-6.745		45.729	0.119	14.643	0.004		486.90	8.115	47.9	11.2	40.5	2.789	0.018	0.018	0.000	0.433	0.37	
506	6/14/2004	5:22:37 PM		26.653	27.332	25.447	28.508	27.308		45.753	49.574	10.787	35.619	-1.222	-6.719		55.125	0.122	14.643	0.004		487.90	8.13167	48.1	13.5	40.7	2.805	0.018	0.018	0.000	0.441	0.38	
507	6/14/2004	5:22:47 PM		26.652	27.326	25.431	28.517	27.298		45.44	49.195	10.622	35.528	-1.222	-6.722		51.5	0.122	14.643	0.004		488.07	8.13444	47.7	12.6	40.5	2.791	0.018	0.018	0.000	0.444	0.38	
508	6/14/2004	5:24:03 PM		26.652	27.326	25.431	28.517	27.298		45.44	49.195	10.622	35.528	-1.222	-6.722		51.5	0.122	14.643	0.004		489.33	8.15556	47.7	12.6	40.5	2.791	0.018	0.018	0.000	0.444	0.38	
509	6/14/2004	5:25:03 PM		26.666	27.34	25.335	28.646	27.371		45.098	48.921	11.08	34.728	-1.225	-6.742		52.979	0.118	14.643	0.004		490.33	8.17222	47.4	13.0	39.9	2.752	0.018	0.017	0.000	0.437	0.37	
510	6/14/2004	5:26:03 PM		26.675	27.334	25.274	28.71	27.4		44.708	48.293	10.881	34.539	-1.222	-6.742		45.201	0.118	14.643	0.004		491.33	8.18889	46.8	11.1	39.6	2.732	0.018	0.017	0.000	0.441	0.37	
511	6/14/2004	5:27:03 PM		26.691	27.345	25.25	28.721	27.441		44.824	48.552	10.666	34.861	-1.222	-6.713		48.574	0.12	14.643	0.004		492.33	8.20556	47.1	11.9	39.8	2.747	0.018	0.018	0.000	0.446	0.38	
512	6/14/2004	5:28:03 PM		26.691	27.36	25.205	28.716	27.451		44.482	48.271	10.626	34.537	-1.225	-6.722		52.001	0.119	14.643	0.004		493.33	8.22222	46.8	12.7	39.5	2.724	0.018	0.018	0.000	0.446	0.38	
513	6/14/2004	5:29:03 PM		26.69	27.354	25.149	28.76	27.45		45.04	49.079	10.712	35.019	-1.222	-6.73		54.627	0.119	14.643	0.004		494.33	8.23889	47.6	13.4	40.0	2.760	0.018	0.018	0.000	0.441	0.38	
514	6/14/2004	5:30:03 PM		26.684	27.363	25.098	28.759	27.514		44.662	48.77	10.676	34.638	-1.222	-6.724		51.567	0.118	14.643	0.004		495.33	8.25556	47.3	12.6	39.7	2.734	0.018	0.018	0.000	0.442	0.38	
515	6/14/2004	5:31:03 PM		26.674	27.368	25.058	28.759	27.534		45.338	49.093	10.699	35.333	-1.228	-6.727		45.81	0.119	14.643	0.003		496.33	8.27222	47.6	11.2	40.3	2.781	0.018	0.018	0.000	0.439	0.37	
516	6/14/2004	5:32:03 PM		26.681	27.39	25.029	28.83	27.61		45.052	48.776	10.599	35.188	-1.222	-6.719		49.892	0.119	14.643	0.004		497.33	8.28889	47.3	12.2	40.1	2.766	0.018	0.018	0.000	0.442	0.38	
517	6/14/2004	5:33:03 PM		26.684	27.423	25.047	28.903	27.668		44.438	47.873	11.118	34.092	-1.216	-7.068		51.046	0.154	14.643	0.004		498.33	8.30556	46.4	12.5	39.3	2.707	0.023	0.023	0.001	0.584	0.50	
518	6/14/2004	5:34:03 PM		26.678	27.441	25.026	28.941	27.712		44.708	48.213	11.026	34.385	-1.222	-7.988		53.511	0.13	14.643	0.004		499.33	8.32222	46.7	13.1	39.5	2.727	0.019	0.019	0.000	0.490	0.42	
519	6/14/2004	5:35:03 PM		26.661	27.444	24.974	28.974	27.684		44.446	48.449	10.859	34.287	-1.222	-6.12		51.377	0.103	14.643	0.004		500.33	8.33889	47.0	12.6	39.4	2.714	0.015	0.015	0.000	0.390	0.33	
520	6/14/2004	5:36:03 PM		26.649	27.463	24.983	28.938	27.728		44.7	48.83	10.964	34.369	-1.222	-6.513		44.49	0.121	14.643	0.003		501.33	8.35556	47.4	10.9	39.5	2.726	0.018	0.018	0.000	0.457	0.39	
521	6/14/2004	5:37:03 PM		26.628	27.467	24.936	28.937	27.687		45.571	49	10.743	35.545	-1.222	-7.277		46.271	0.124	14.643	0.004		502.33	8.37222	47.5	11.3	40.6	2.796	0.018	0.019	0.000	0.457	0.39	
522	6/14/2004	5:38:03 PM		26.638	27.501	24.936	28.907	27.697		45.525	49.475	10.754	35.405	-1.225	-7.245		44.949	0.124	14.643	0.004		503.33	8.38889	48.0	11.0	40.5	2.790	0.018	0.019	0.000	0.458	0.39	
523	6/14/2004	5:39:03 PM		26.632	27.51	24.905	28.905	27.7		45.369	49.162	10.821	35.21	-1.222	-7.349		50.017	0.118	14.643	0.004		504.33	8.40556	47.7	12.3	40.3	2.778	0.018	0.018	0.000	0.438	0.37	
524	6/14/2004	5:40:03 PM		26.616	27.514	24.869	28.869	27.684		45.683	49.11	10.73	35.699	-1.219	-7.467		53.861	0.116	14.643	0.004		505.33	8.42222	47.6	13.2	40.7	2.806	0.017	0.017	0.000	0.427	0.36	
525	6/14/2004	5:41:03 PM		26.597	27.521	24.86	28.871	27.676		45.278	48.762	10.716	35.296	-1.225	-7.447		43.067	0.117	14.643	0.003		506.33	8.43889	47.3	10.6	40.3	2.778	0.017	0.018	0.000	0.435	0.37	
526	6/14/2004	5:42:03 PM		26.59	27.539	24.828	28.844	27.604		45.446	48.917	10.733	35.415	-1.225	-7.453		49.064	0.116	14.643	0.004		507.33	8.45556	47.4	12.0	40.4	2.788	0.017	0.017	0.000	0.430	0.37	
527	6/14/2004	5:43:03 PM		26.591	27.554	24.859	28.825	27.561		45.266	48.938	10.665	35.278	-1.228	-7.43		46.202	0.118	14.643	0.004		508.33	8.47222	47.5	11.3	40.3	2.777	0.018	0.018	0.000	0.439	0.37	
528	6/14/2004	5:44:03 PM		26.589	27.567	24.882	28.863	27.534		45.228	48.764	10.617	35.317	-1.225	-7.456		41.945	0.119	14.643	0.003		509.33	8.48889	47.3	10.3	40.3	2.777	0.018	0.018	0.000	0.442	0.38	
529	6/14/2004	5:45:03 PM		26.601	27.594	24.929	28.87	27.516		45.299	49.015	10.569	35.44	-1.219	-7.453		47.773	0.117	14.643	0.004		510.33	8.50556	47.5	11.7	40.4	2.783	0.017	0.017	0.000	0.433	0.37	
530	6/14/2004	5:46:03 PM		26.577	27.59	24.905	28.781	27.516		45.332	49.156	10.533	35.491	-1.222	-7.412		45.658	0.118	14.643	0.004		511.33	8.52222	47.7	11.2	40.4	2.786	0.018	0.018	0.000	0.437	0.37	
531	6/14/2004	5:47:03 PM		26.594	27.607	24.917	28.798	27.528		45.56	49.183	10.449	35.809	-1.222	-7.464		46.442	0.117	14.643	0.004		512.33	8.53889	47.7	11.4	40.7	2.805	0.017	0.017	0.000	0.430	0.37	
532	6/14/2004	5:48:03 PM		26.595	27.598	24.928	28.764	27.624		45.384	49.067	10.381	35.647	-1.222	-7.459		47.435	0.118	14.643	0.004		513.33	8.55556	47.6	11.6	40.5	2.793	0.018	0.018	0.000	0.435	0.37	
533	6/14/2004	5:49:03 PM		26.623	27.636	24.931	28.852	27.701		44.944	48.615	10.762	34.913	-1.222	-7.476		48.609	0.115	14.643	0.004		514.33	8.57222	47.1	11.9	39.9	2.753	0.017	0.017	0.000	0.430	0.37	
534	6/14/2004	5:50:03 PM		26.624	27.647	24.887	28.897	27.747		44.967	48.888	10.622	35.04	-1.222	-7.462		52.962	0.117	14.643	0.004		515.33	8.58889	47.4	13.0	40.0	2.758	0.017	0.017	0.000	0.437	0.37	
535	6/14/2004	5:51:03 PM		26.616	27.654	24.849	28.904	27.779		45.311	48.876	10.465	35.571	-1.222	-7.464		54.75	0.115	14.643	0.004		516.33	8.60556	47.4	13.4	40.4	2.788	0.017	0.017	0.000	0.426	0.36	
536	6/14/2004	5:52:03 PM		26.617	27.661	24.805	28.941	27.851		45.349	49.011	10.582	35.463	-1.225	-7.421		53.567	0.113	14.643	0.003		517.33	8.62222	47.5	13.1	40.4	2.786	0.017	0.017	0.000	0.419	0.36	
537	6/14/2004	5:53:03 PM		26.624	27.682	24.807	28.988	27.892		45.114	48.946	10.462	35.343	-1.219	-7.462		50.232	0.115	14.643	0.004		518.33	8.63889	47.5	12.3	40.2	2.774	0.017	0.017	0.000	0.429	0.36	
538	6/14/2004	5:54:03 PM		26.622	27.7	24.775	29.011	27.915		45.239	49.299	10.53	35.362	-1.219	-7.415		45.61	0.113	14.643	0.004		519.33	8.65556	47.8	11.2	40.3	2.779	0.017	0.017	0.000	0.421	0.36	
539	6/14/2004	5:55:03 PM		26.608	27.701	24.726	29.061	27.906		45.38	49.18	10.463	35.582	-1.225	-7.47		60.809	0.115	14.643	0.003		520.33	8.67222	47.7	14.9	40.5	2.791	0.017	0.017	0.000	0.427	0.36	
540	6/14/2004	5:56:03 PM		26.6	27.723	24.733	29.033	28.008		45.116	48.696	10.301	35.536	-1.225	-7.462		54.11	0.117	14.643	0.004		521.33	8.68889	47.2	13.3	40.3	2.780	0.017	0.018	0.000	0.436	0.37	
541	6/14/2004	5:57:03 PM		26.593	27.746	24.701	29.091	27.996		45.367	49.336	10.261	35.74	-1.222	-7.418		48.023	0.117	14.643	0.004		522.33	8.70556	47.9	11.8	40.6	2.796	0.017	0.018	0.000	0.434	0.37	
542	6/14/2004	5:58:03 PM		26.595	27.758	24.713	29.088	28.037		43.735	47.69	11.63	32.708	-1.222	-7.493		38.447	0.112	14.643	0.004		523.33	8.72222	46.2	9.4	38.2	2.635	0.017	0.017	0.000	0.440	0.37	
543	6/14/2004	5:59:03 PM		26.587	27.775	24.69	29.145	27.994		45.112	49.299	10.569	35.146	-1.222	-7.467		51.513	0.115	14.643	0.004		524.33	8.73889	47.8	12.6	40.1	2.767	0.017	0.017	0.000	0.431	0.37	
544	6/14/2004	6:00:03 PM		26.569	27.782	24.642	29.092	27.981		45.452	49.365	10.287	35.846	-1.228	-7.473		52.41	0.116	14.643	0.003		525.33	8.75556	47.9	12.8	40.6	2.803	0.017	0.017	0.000	0.430	0.37	
545	6/14/2004	6:01:03 PM		26.565	27.808	24.673	29.108	27.977		45.448	49.239	10.179	35.996	-1.222	-7.45		55.97	0.118	14.643	0.004		526.33	8.77222	47.8	13.7	40.7	2.808	0.018	0.018	0.000	0.436	0.37	
546	6/14/2004	6:02:03 PM		26.571	27.824	24.644	29.074	27.899		45.614	49.686	10.227	36.047	-1.225	-7.467		55.238	0.12	14.643	0.003		527.33	8.78889	48.2	13.5	40.8	2.815	0.018	0.018	0.000	0.443	0.38	
547	6/14/2004	6:03:03 PM		26.567	27.834	24.635	29.01	27.87		45.95	49.968	10.236	36.417	-1.222	-7.43		50.768	0.116	14.643	0.004		528.33	8.80556	48.5	12.4	41.2	2.839	0.017	0.017	0.000	0.424	0.36	
548	6/14/2004	6:04:03 PM		26.557	27.844	24.62	28.99	27.87		45.656	49.552	10.191	36.162	-1.225	-7.462		49.999	0.117	14.643	0.004		529.33	8.82222	48.1	12.3	40.9	2.821	0.017	0.018	0.000	0.431	0.37	
549	6/14/2004	6:05:03 PM		26.551	27.858	24.583	29.024	27.819		45.799	49.63	10.227	36.327	-1.222	-7.436		45.693	0.114	14.643	0.003		530.33	8.83889	48.2	11.2	41.1	2.831	0.017	0.017	0.000	0.419	0.36	
550	6/14/2004	6:06:03 PM		26.542	27.879	24.599	28.99	27.82		45.763	49.759	10.239	36.181	-1.225	-7.47		50.065	0.114	14.643	0.003		531.33	8.85556	48.3	12.3	41.0	2.825	0.017	0.017	0.000	0.420	0.36	
551	6/14/2004	6:07:03 PM		26.547	27.899	24.589	28.965	27.711		45.973	49.987	10.263	36.439	-1.222	-7.467		50.17	0.115	14.643	0.004		532.33	8.87222	48.5	12.3	41.2	2.841	0.017	0.017	0.000	0.421	0.36	
552	6/14/2004	6:08:03 PM		26.506	27.883	24.538	28.84	27.685		45.759	49.86	10.271	36.132	-1.225	-7.485		45.917	0.114	14.643	0.004		533.33	8.88889	48.4	11.3	40.9	2.823	0.017	0.017	0.000	0.421	0.36	
553	6/14/2004	6:09:03 PM		26.495	27.887	24.527	28.769	27.649		45.772	49.794	10.27	36.154	-1.228	-7.473		47.47	0.114	14.643	0.003		534.33	8.90556	48.3	11.6	41.0	2.824	0.017	0.017	0.000	0.420	0.36	
554	6/14/2004	6:10:03 PM		26.489	27.906	24.506	28.828	27.633		46.023	49.974	10.012	36.721	-1.225	-7.47		46.986	0.115	14.643	0.004		535.33	8.92222	48.5	11.5	41.4	2.852	0.017	0.017	0.000	0.420	0.36	
555	6/14/2004	6:11:03 PM		26.482	27.904	24.514	28.791	27.626		45.587	49.493	10.239	36.025	-1.222	-7.476		47.683	0.115	14.643	0.004		536.33	8.93889	48.0	11.7	40.8	2.813	0.017	0.017	0.000	0.426	0.36	
556	6/14/2004	6:12:03 PM		26.48	27.908	24.502	28.734	27.639		45.075	49.342	10.463	35.198	-1.222	-7.49		50.927	0.113	14.643	0.004		537.33	8.95556	47.9	12.5	40.1	2.767	0.017	0.017	0.000	0.426	0.36	
557	6/14/2004	6:13:03 PM		26.47	27.923	24.512	28.759	27.669		45.432	49.581	10.142	36.008	-1.222	-7.433		46.419	0.115	14.643	0.004		538.33	8.97222	48.1	11.4	40.7	2.808	0.017	0.017	0.000	0.427	0.36	
558	6/14/2004	6:14:03 PM		26.475	27.937	24.507	28.844	27.739		46.06	50.466	10.167	36.521	-1.222	-7.473		53.175	0.114	14.643	0.004		539.33	8.98889	49.0	13.0	41.3	2.847	0.017	0.017	0.000	0.417	0.36	
559	6/14/2004	6:15:03 PM		26.461	27.948	24.534	28.88	27.794		45.676	49.896	10.577	35.752	-1.222	-7.441		41.789	0.113	14.643	0.004		540.33	9.00556	48.4	10.2	40.7	2.807	0.017	0.017	0.000	0.419	0.36	
560	6/14/2004	6:16:03 PM		26.463	27.965	24.53	28.961	27.866		46.215	50.549	10.059	36.798	-1.222	-7.485		45.287	0.115	14.643	0.004		541.33	9.02222	49.1	11.1	41.5	2.862	0.017	0.017	0.000	0.419	0.36	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	6/14/2004	6:17:03 PM		26.448	27.965	24.515	28.966	27.921		44.361	48.457	11.133	33.911	-1.222	-7.467		50.689	0.114	14.643	0.004		542.33	9.03889	47.0	12.4	39.1	2.698	0.017	0.017	0.000	0.440	0.37	
562	6/14/2004	6:18:03 PM		26.423	27.96	24.475	28.946	27.916		45.587	49.726	10.466	35.822	-1.225	-7.499		47.973	0.112	14.643	0.004		543.33	9.05556	48.3	11.8	40.7	2.806	0.017	0.017	0.000	0.416	0.35	
563	6/14/2004	6:19:03 PM		26.439	27.986	24.501	28.997	27.917		45.701	49.759	10.314	36.041	-1.225	-7.453		49.085	0.11	14.643	0.004		544.33	9.07222	48.3	12.0	40.9	2.818	0.016	0.017	0.000	0.407	0.35	
564	6/14/2004	6:20:03 PM		26.439	28.006	24.516	29.032	27.942		45.739	49.782	10.205	36.255	-1.225	-7.493		47.178	0.114	14.643	0.004		545.33	9.08889	48.3	11.6	41.0	2.827	0.017	0.017	0.000	0.420	0.36	
565	6/14/2004	6:21:03 PM		26.45	28.022	24.507	29.103	27.987		45.838	49.916	10.104	36.491	-1.222	-7.482		45.051	0.114	14.643	0.004		546.33	9.10556	48.4	11.0	41.2	2.838	0.017	0.017	0.000	0.419	0.36	
566	6/14/2004	6:22:03 PM		26.437	28.024	24.499	29.1	28.049		46.037	50.507	10.124	36.534	-1.225	-7.496		46.549	0.112	14.643	0.003		547.33	9.12222	49.0	11.4	41.3	2.846	0.017	0.017	0.000	0.410	0.35	
567	6/14/2004	6:23:03 PM		26.454	28.036	24.511	29.151	28.021		44.44	48.839	11.139	33.903	-1.219	-7.525		48.017	0.106	14.643	0.004		548.33	9.13889	47.4	11.8	39.2	2.701	0.016	0.016	0.000	0.409	0.35	
568	6/14/2004	6:24:03 PM		26.45	28.042	24.507	29.093	28.007		44.87	49.409	10.82	34.691	-1.225	-7.522		47.725	0.108	14.643	0.004		549.33	9.15556	47.9	11.7	39.8	2.743	0.016	0.016	0.000	0.410	0.35	
569	6/14/2004	6:25:03 PM		26.467	28.054	24.509	29.085	27.939		45.033	49.328	10.578	35.148	-1.225	-7.511		48.91	0.109	14.643	0.003		550.33	9.17222	47.9	12.0	40.1	2.764	0.016	0.016	0.000	0.411	0.35	
570	6/14/2004	6:26:03 PM		26.468	28.07	24.515	29.071	27.866		45.349	49.719	10.646	35.395	-1.225	-7.525		47.279	0.112	14.643	0.003		551.33	9.18889	48.2	11.6	40.4	2.784	0.017	0.017	0.000	0.419	0.36	
571	6/14/2004	6:27:03 PM		26.459	28.066	24.506	29.062	27.782		45.917	50.408	10.494	36.07	-1.219	-7.522		48.643	0.107	14.643	0.004		552.33	9.20556	48.9	11.9	41.0	2.826	0.016	0.016	0.000	0.395	0.34	
572	6/14/2004	6:28:03 PM		26.465	28.072	24.492	29.038	27.778		45.529	50.001	10.518	35.684	-1.219	-7.49		42.022	0.111	14.643	0.004		553.33	9.22222	48.5	10.3	40.6	2.800	0.017	0.017	0.000	0.413	0.35	
573	6/14/2004	6:29:03 PM		26.466	28.083	24.508	29.009	27.724		45.9	50.418	10.413	36.156	-1.219	-7.514		43.776	0.112	14.643	0.004		554.33	9.23889	48.9	10.7	41.0	2.829	0.017	0.017	0.000	0.413	0.35	
574	6/14/2004	6:30:03 PM		26.47	28.077	24.492	28.968	27.738		45.913	50.461	10.482	36.035	-1.219	-7.516		44.901	0.109	14.643	0.004		555.33	9.25556	49.0	11.0	41.0	2.825	0.016	0.016	0.000	0.402	0.34	
575	6/14/2004	6:31:03 PM		26.466	28.083	24.508	28.884	27.714		45.877	50.333	10.464	36.088	-1.222	-7.516		40.562	0.108	14.643	0.004		556.33	9.27222	48.9	9.9	41.0	2.826	0.016	0.016	0.000	0.398	0.34	
576	6/14/2004	6:32:03 PM		26.461	28.078	24.473	28.839	27.625		46.22	50.681	10.399	36.503	-1.225	-7.476		49.913	0.107	14.643	0.004		557.33	9.28889	49.2	12.2	41.4	2.852	0.016	0.016	0.000	0.391	0.33	
577	6/14/2004	6:33:03 PM		26.467	28.089	24.514	28.791	27.7		46.245	50.814	10.458	36.404	-1.216	-7.519		44.669	0.107	14.643	0.004		558.33	9.30556	49.3	10.9	41.3	2.849	0.016	0.016	0.000	0.391	0.33	
578	6/14/2004	6:34:03 PM		26.473	28.085	24.505	28.802	27.756		45.029	49.51	11.365	34.305	-1.219	-7.548		49.429	0.105	14.643	0.004		559.33	9.32222	48.0	12.1	39.7	2.735	0.016	0.016	0.000	0.400	0.34	
579	6/14/2004	6:35:03 PM		26.477	28.094	24.599	28.845	27.785		45.409	50.055	11.088	34.96	-1.222	-7.516		50.704	0.104	14.643	0.004		560.33	9.33889	48.6	12.4	40.2	2.771	0.016	0.016	0.000	0.390	0.33	
580	6/14/2004	6:36:03 PM		26.468	28.085	24.645	28.831	27.796		45.481	50.03	10.83	35.305	-1.222	-7.543		52.476	0.106	14.643	0.004		561.33	9.35556	48.6	12.9	40.4	2.785	0.016	0.016	0.000	0.395	0.34	
581	6/14/2004	6:37:03 PM		26.474	28.096	24.696	28.872	27.857		45.093	49.45	10.656	35.183	-1.222	-7.528		42.078	0.108	14.643	0.004		562.33	9.37222	48.0	10.3	40.1	2.767	0.016	0.016	0.000	0.405	0.34	
582	6/14/2004	6:38:03 PM		26.48	28.097	24.677	28.953	27.838		45.369	49.796	10.731	35.333	-1.219	-7.519		51.913	0.108	14.643	0.004		563.33	9.38889	48.3	12.7	40.4	2.782	0.016	0.016	0.000	0.403	0.34	
583	6/14/2004	6:39:03 PM		26.486	28.112	24.703	28.964	27.908		45.367	49.746	10.673	35.378	-1.219	-7.554		46.684	0.104	14.643	0.004		564.33	9.40556	48.3	11.4	40.4	2.784	0.016	0.016	0.000	0.387	0.33	
584	6/14/2004	6:40:03 PM		26.477	28.103	24.654	28.945	27.919		45.454	50.022	10.608	35.489	-1.225	-7.499		44.035	0.105	14.643	0.004		565.33	9.42222	48.5	10.8	40.5	2.790	0.016	0.016	0.000	0.391	0.33	
585	6/14/2004	6:41:03 PM		26.493	28.109	24.665	28.986	27.885		44.772	49.091	10.893	34.592	-1.222	-7.569		44.459	0.104	14.643	0.004		566.33	9.43889	47.6	10.9	39.7	2.736	0.016	0.016	0.000	0.394	0.34	
586	6/14/2004	6:42:03 PM		26.499	28.125	24.661	29.007	27.911		45.28	49.701	10.609	35.356	-1.219	-7.516		45.084	0.105	14.643	0.004		567.33	9.45556	48.2	11.0	40.3	2.780	0.016	0.016	0.000	0.392	0.33	
587	6/14/2004	6:43:03 PM		26.499	28.115	24.621	29.037	27.906		45.819	50.289	10.245	36.207	-1.222	-7.534		42.748	0.11	14.643	0.004		568.33	9.47222	48.8	10.5	41.0	2.828	0.016	0.017	0.000	0.404	0.34	
588	6/14/2004	6:44:03 PM		26.509	28.121	24.637	28.993	27.927		45.653	50.298	10.285	36.015	-1.222	-7.543		49.588	0.109	14.643	0.003		569.33	9.48889	48.8	12.2	40.8	2.815	0.016	0.016	0.000	0.402	0.34	
589	6/14/2004	6:45:03 PM		26.499	28.106	24.602	29.003	27.897		45.581	50.296	10.21	36.008	-1.225	-7.543		48.374	0.106	14.643	0.003		570.33	9.50556	48.8	11.9	40.8	2.813	0.016	0.016	0.000	0.392	0.33	
590	6/14/2004	6:46:03 PM		26.511	28.123	24.609	29.005	27.884		45.002	49.583	10.759	34.908	-1.225	-7.569		52.787	0.104	14.643	0.004		571.33	9.52222	48.1	12.9	40.0	2.755	0.016	0.016	0.000	0.392	0.33	
591	6/14/2004	6:47:03 PM		26.512	28.129	24.655	28.976	27.865		45.421	49.891	10.506	35.633	-1.225	-7.569		52.923	0.106	14.643	0.003		572.33	9.53889	48.4	13.0	40.5	2.794	0.016	0.016	0.000	0.394	0.34	
592	6/14/2004	6:48:03 PM		26.518	28.13	24.706	28.957	27.861		45.882	50.631	10.495	36.082	-1.225	-7.554		41.908	0.106	14.643	0.003		573.33	9.55556	49.2	10.3	41.0	2.826	0.016	0.016	0.000	0.389	0.33	
593	6/14/2004	6:49:03 PM		26.514	28.131	24.747	28.988	27.827		45.56	50.445	10.433	35.733	-1.222	-7.557		48.559	0.106	14.643	0.003		574.33	9.57222	49.0	11.9	40.6	2.802	0.016	0.016	0.000	0.392	0.33	
594	6/14/2004	6:50:03 PM		26.529	28.136	24.812	29.013	27.827		45.994	50.449	10.467	36.249	-1.219	-7.545		45.268	0.106	14.643	0.004		575.33	9.58889	49.0	11.1	41.1	2.835	0.016	0.016	0.000	0.386	0.33	
595	6/14/2004	6:51:03 PM		26.508	28.12	24.816	28.917	27.762		45.923	50.642	10.343	36.251	-1.222	-7.528		46.192	0.109	14.643	0.003		576.33	9.60556	49.2	11.3	41.1	2.833	0.016	0.016	0.000	0.398	0.34	
596	6/14/2004	6:52:03 PM		26.522	28.109	24.875	28.831	27.731		45.243	49.867	10.723	35.146	-1.225	-7.54		49.477	0.105	14.643	0.003		577.33	9.62222	48.4	12.1	40.2	2.771	0.016	0.016	0.000	0.391	0.33	
597	6/14/2004	6:53:03 PM		26.546	28.113	24.93	28.77	27.62		45.637	50.221	10.528	35.793	-1.222	-7.557		54.31	0.106	14.643	0.004		578.33	9.63889	48.7	13.3	40.7	2.807	0.016	0.016	0.000	0.389	0.33	
598	6/14/2004	6:54:03 PM		26.575	28.127	24.989	28.759	27.585		45.527	50.151	10.453	35.799	-1.222	-7.543		48.255	0.106	14.643	0.003		579.33	9.65556	48.7	11.8	40.7	2.804	0.016	0.016	0.000	0.389	0.33	
599	6/14/2004	6:55:03 PM		26.574	28.116	25.003	28.679	27.618		45.581	50.204	10.429	35.795	-1.225	-7.476		44.917	0.102	14.643	0.004		580.33	9.67222	48.7	11.0	40.7	2.805	0.015	0.015	0.000	0.374	0.32	
600	6/14/2004	6:56:03 PM		26.577	28.104	25.016	28.652	27.567		44.926	49.479	11.063	34.523	-1.225	-7.343		46.448	0.102	14.643	0.003		581.33	9.68889	48.0	11.4	39.7	2.739	0.015	0.015	0.000	0.383	0.33	
601	6/14/2004	6:57:03 PM		26.59	28.092	25.074	28.65	27.47		45.892	50.24	10.436	36.158	-1.222	-7.514		43.783	0.109	14.643	0.004		582.33	9.70556	48.8	10.7	41.0	2.829	0.016	0.016	0.000	0.395	0.34	
602	6/14/2004	6:58:03 PM		26.619	28.097	25.133	28.669	27.459		45.458	50.012	10.644	35.446	-1.225	-7.505		49.901	0.105	14.643	0.003		583.33	9.72222	48.5	12.2	40.5	2.789	0.016	0.016	0.000	0.386	0.33	
603	6/14/2004	6:59:03 PM		26.637	28.09	25.181	28.667	27.497		44.668	49.112	11.002	34.346	-1.222	-7.488		50.966	0.101	14.643	0.004		584.33	9.73889	47.6	12.5	39.5	2.724	0.015	0.015	0.000	0.379	0.32	
604	6/14/2004	7:00:03 PM		26.644	28.067	25.168	28.674	27.449		45.33	49.962	10.528	35.477	-1.225	-7.548		52.623	0.104	14.643	0.004		585.33	9.75556	48.5	12.9	40.4	2.786	0.016	0.015	0.000	0.382	0.33	
605	6/14/2004	7:01:03 PM		26.654	28.046	25.137	28.623	27.364		45.855	50.499	10.252	36.288	-1.225	-7.392		47.37	0.113	14.643	0.004		586.33	9.77222	49.0	11.6	41.1	2.832	0.017	0.017	0.000	0.409	0.35	
606	6/14/2004	7:02:03 PM		26.673	28.035	25.146	28.618	27.318		44.673	49.382	11.109	34.244	-1.222	-7.271		47.502	0.101	14.643	0.004		587.33	9.78889	47.9	11.6	39.5	2.721	0.015	0.015	0.000	0.380	0.32	
607	6/14/2004	7:03:03 PM		26.686	28.013	25.135	28.596	27.316		45.245	49.958	10.68	35.173	-1.222	-7.54		54.569	0.109	14.643	0.004		588.33	9.80556	48.5	13.4	40.2	2.772	0.016	0.016	0.000	0.403	0.34	
608	6/14/2004	7:03:15 PM		26.684	28.007	25.138	28.609	27.315		45.222	49.767	10.686	35.157	-1.225	-7.473		47.264	0.101	14.643	0.003		588.53	9.80889	48.3	11.6	40.2	2.771	0.015	0.015	0.000	0.373	0.32	
609	6/14/2004	7:04:15 PM		26.71	28.018	25.114	28.715	27.405		45.407	50.049	10.456	35.653	-1.222	-7.551		48.234	0.104	14.643	0.004		589.53	9.82556	48.6	11.8	40.5	2.794	0.016	0.015	0.000	0.381	0.32	
610	6/14/2004	7:05:15 PM		26.726	28.009	25.13	28.751	27.411		45.259	49.732	10.35	35.584	-1.225	-7.488		49.112	0.104	14.643	0.004		590.53	9.84222	48.3	12.0	40.4	2.787	0.016	0.015	0.000	0.382	0.33	
611	6/14/2004	7:06:15 PM		26.733	28.001	25.152	28.793	27.409		44.395	49.031	11.473	33.589	-1.219	-7.514		50.505	0.1	14.643	0.004		591.53	9.85889	47.6	12.4	39.0	2.688	0.015	0.015	0.000	0.381	0.32	
612	6/14/2004	7:07:15 PM		26.726	27.988	25.124	28.81	27.431		44.54	49.208	11.101	34.135	-1.222	-7.496		49.873	0.103	14.643	0.004		592.53	9.87556	47.7	12.2	39.3	2.712	0.015	0.015	0.000	0.389	0.33	
613	6/14/2004	7:08:15 PM		26.739	27.976	25.117	28.858	27.439		44.936	49.622	11.051	34.57	-1.219	-7.571		46.753	0.103	14.643	0.004		593.53	9.89222	48.1	11.5	39.8	2.741	0.015	0.015	0.000	0.385	0.33	
614	6/14/2004	7:09:15 PM		26.739	27.972	25.117	28.833	27.434		44.824	49.504	10.957	34.461	-1.222	-7.456		50.295	0.098	14.643	0.004		594.53	9.90889	48.0	12.3	39.6	2.733	0.015	0.015	0.000	0.367	0.31	
615	6/14/2004	7:10:15 PM		26.728	27.951	25.132	28.807	27.388		44.977	49.722	10.826	34.826	-1.225	-7.476		53.77	0.106	14.643	0.003		595.53	9.92556	48.2	13.2	39.9	2.751	0.016	0.016	0.000	0.395	0.34	
616	6/14/2004	7:11:15 PM		26.729	27.937	25.093	28.834	27.385		45.261	49.858	10.754	35.22	-1.225	-7.427		46.453	0.109	14.643	0.004		596.53	9.94222	48.4	11.4	40.2	2.774	0.016	0.016	0.000	0.403	0.34	
617	6/14/2004	7:12:15 PM		26.733	27.941	25.112	28.838	27.453		45.203	49.807	10.655	35.305	-1.222	-7.441		53.131	0.101	14.643	0.004		597.53	9.95889	48.3	13.0	40.3	2.775	0.015	0.015	0.000	0.373	0.32	
618	6/14/2004	7:13:15 PM		26.727	27.919	25.1	28.791	27.491		45.102	49.833	10.678	35.03	-1.228	-7.554		46.204	0.107	14.643	0.003		598.53	9.97556	48.4	11.3	40.1	2.762	0.016	0.016	0.000	0.397	0.34	
619	6/14/2004	7:14:15 PM		26.737	27.94	25.111	28.822	27.537		45.164	49.757	10.609	35.204	-1.225	-7.545		50.119	0.103	14.643	0.004		599.53	9.99222	48.3	12.3	40.2	2.771	0.015	0.015	0.000	0.381	0.32	
620	6/14/2004	7:15:15 PM		26.722	27.93	25.091	28.792	27.547		45.448	50.107	10.637	35.532	-1.225	-7.358		49.246	0.101	14.643	0.003		600.53	10.0089	48.6	12.1	40.5	2.792	0.015	0.015	0.000	0.371	0.32	
621	6/14/2004	7:16:15 PM		26.724	27.922	25.098	28.734	27.554		45.324	50.049	10.613	35.399	-1.225	-7.213		47.151	0.1	14.643	0.003		601.53	10.0256	48.6	11.6	40.4	2.783	0.015	0.015	0.000	0.368	0.31	
622	6/14/2004	7:17:15 PM		26.729	27.922	25.138	28.754	27.529		45.413	49.896	10.606	35.559	-1.219	-7.499		52.005	0.102	14.643	0.004		602.53	10.0422	48.4	12.7	40.5	2.791	0.015	0.015	0.000	0.374	0.32	
623	6/14/2004	7:18:15 PM		26.706	27.909	25.09	28.766	27.561		45.5	50.186	10.552	35.59	-1.225	-7.551		52.591	0.105	14.643	0.004		603.53	10.0589	48.7	12.9	40.5	2.795	0.016	0.016	0.000	0.385	0.33	
624	6/14/2004	7:19:15 PM		26.708	27.906	25.102	28.758	27.533		45.682	50.252	10.545	35.815	-1.222	-7.47		43.902	0.104	14.643	0.004		604.53	10.0756	48.8	10.8	40.7	2.809	0.016	0.015	0.000	0.379	0.32	
625	6/14/2004	7:20:15 PM		26.681	27.879	25.09	28.691	27.481		45.6	49.914	10.526	35.793	-1.225	-7.366		46.202	0.107	14.643	0.003		605.53	10.0922	48.4	11.3	40.7	2.806	0.016	0.016	0.000	0.391	0.33	
626	6/14/2004	7:21:15 PM		26.685	27.873	25.084	28.725	27.435		45.454	49.877	10.591	35.538	-1.225	-7.49		48.1	0.098	14.643	0.004		606.53	10.1089	48.4	11.8	40.5	2.792	0.015	0.015	0.000	0.360	0.31	
627	6/14/2004	7:22:15 PM		26.679	27.867	25.078	28.769	27.449		44.48	48.776	11.639	33.593	-1.222	-7.569		46.01	0.104	14.643	0.004		607.53	10.1256	47.3	11.3	39.0	2.691	0.016	0.015	0.000	0.396	0.34	
628	6/14/2004	7:23:15 PM		26.678	27.861	25.092	28.723	27.458		44.816	49.178	11.01	34.545	-1.222	-7.597		42.254	0.099	14.643	0.004		608.53	10.1422	47.7	10.4	39.7	2.736	0.015	0.015	0.000	0.371	0.32	
629	6/14/2004	7:24:15 PM		26.678	27.86	25.131	28.732	27.388		45.15	49.84	10.891	34.968	-1.222	-7.285		51.696	0.097	14.643	0.003		609.53	10.1589	48.4	12.7	40.1	2.762	0.014	0.014	0.000	0.360	0.31	
630	6/14/2004	7:25:15 PM		26.681	27.853	25.134	28.7	27.321		45.255	49.95	10.928	35.007	-1.222	-7.493		43.449	0.105	14.643	0.004		610.53	10.1756	48.5	10.6	40.1	2.767	0.016	0.016	0.000	0.389	0.33	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	6/14/2004	7:26:15 PM		26.663	27.816	25.106	28.638	27.248		45.033	49.931	10.943	34.699	-1.228	-7.369		46.582	0.099	14.643	0.003		611.53	10.1922	48.5	11.4	39.9	2.749	0.015	0.015	0.000	0.369	0.31	
632	6/14/2004	7:27:15 PM		26.682	27.83	25.165	28.612	27.108		45.145	49.96	10.833	34.935	-1.222	-7.583		43.084	0.103	14.643	0.004		612.53	10.2089	48.5	10.6	40.0	2.761	0.015	0.015	0.000	0.382	0.32	
633	6/14/2004	7:28:15 PM		26.681	27.819	25.154	28.636	26.948		45.724	50.312	10.879	35.448	-1.222	-7.592		45.96	0.1	14.643	0.004		613.53	10.2256	48.8	11.3	40.6	2.798	0.015	0.015	0.000	0.366	0.31	
634	6/14/2004	7:29:15 PM		26.686	27.819	25.174	28.621	27.057		45.295	49.788	10.8	35.126	-1.222	-7.569		51.584	0.103	14.643	0.004		614.53	10.2422	48.3	12.6	40.2	2.772	0.015	0.015	0.000	0.380	0.32	
635	6/14/2004	7:30:15 PM		26.69	27.798	25.174	28.565	27.151		45.11	49.827	10.665	35.109	-1.222	-7.589		48.88	0.101	14.643	0.003		615.53	10.2589	48.4	12.0	40.1	2.765	0.015	0.015	0.000	0.374	0.32	
636	6/14/2004	7:31:15 PM		26.689	27.792	25.188	28.519	27.155		45.463	50.555	10.779	35.325	-1.222	-7.36		44.073	0.102	14.643	0.004		616.53	10.2756	49.1	10.8	40.4	2.785	0.015	0.015	0.000	0.374	0.32	
637	6/14/2004	7:32:15 PM		26.684	27.777	25.193	28.509	27.215		45.456	50.165	10.776	35.348	-1.222	-7.349		46.371	0.092	14.643	0.004		617.53	10.2922	48.7	11.4	40.4	2.786	0.014	0.014	0.000	0.338	0.29	
638	6/14/2004	7:33:15 PM		26.689	27.767	25.213	28.524	27.255		45.701	50.227	10.702	35.69	-1.225	-7.566		46.778	0.103	14.643	0.004		618.53	10.3089	48.8	11.5	40.7	2.806	0.015	0.015	0.000	0.375	0.32	
639	6/14/2004	7:34:15 PM		26.69	27.763	25.224	28.495	27.285		45.512	50.298	10.618	35.506	-1.219	-7.505		45.243	0.101	14.643	0.004		619.53	10.3256	48.8	11.1	40.5	2.793	0.015	0.015	0.000	0.369	0.31	
640	6/14/2004	7:35:15 PM		26.692	27.765	25.19	28.522	27.282		45.562	50.186	10.622	35.58	-1.222	-7.554		42.625	0.104	14.643	0.004		620.53	10.3422	48.7	10.4	40.6	2.797	0.016	0.015	0.000	0.380	0.32	
641	6/14/2004	7:36:15 PM		26.698	27.751	25.196	28.488	27.288		45.264	49.978	10.573	35.325	-1.222	-7.537		52.85	0.1	14.643	0.004		621.53	10.3589	48.5	13.0	40.3	2.778	0.015	0.015	0.000	0.368	0.31	
642	6/14/2004	7:37:15 PM		26.694	27.737	25.177	28.449	27.294		45.687	50.731	10.638	35.688	-1.222	-7.418		54.936	0.099	14.643	0.004		622.53	10.3756	49.3	13.5	40.7	2.805	0.015	0.015	0.000	0.361	0.31	
643	6/14/2004	7:38:15 PM		26.68	27.733	25.153	28.455	27.27		45.695	50.399	10.633	35.776	-1.225	-7.418		45.376	0.094	14.643	0.003		623.53	10.3922	48.9	11.1	40.7	2.809	0.014	0.014	0.000	0.343	0.29	
644	6/14/2004	7:39:15 PM		26.68	27.728	25.128	28.48	27.22		45.527	50.155	10.597	35.592	-1.225	-7.554		47.934	0.101	14.643	0.003		624.53	10.4089	48.7	11.7	40.6	2.796	0.015	0.015	0.000	0.370	0.31	
645	6/14/2004	7:40:15 PM		26.675	27.713	25.143	28.465	27.181		44.915	49.757	11.027	34.516	-1.219	-7.545		51.048	0.097	14.643	0.004		625.53	10.4256	48.3	12.5	39.7	2.738	0.014	0.014	0.000	0.363	0.31	
646	6/14/2004	7:41:15 PM		26.671	27.694	25.149	28.431	27.167		45.27	49.833	10.95	35.009	-1.225	-7.485		48.209	0.095	14.643	0.004		626.53	10.4422	48.4	11.8	40.1	2.767	0.014	0.014	0.000	0.351	0.30	
647	6/14/2004	7:42:15 PM		26.66	27.673	25.108	28.44	27.161		45.761	50.316	10.63	35.842	-1.219	-7.473		51.724	0.099	14.643	0.004		627.53	10.4589	48.8	12.7	40.8	2.813	0.015	0.015	0.000	0.361	0.31	
648	6/14/2004	7:43:15 PM		26.65	27.678	25.108	28.435	27.161		45.454	50.177	10.544	35.631	-1.222	-7.251		46.695	0.101	14.643	0.004		628.53	10.4756	48.7	11.4	40.5	2.795	0.015	0.015	0.000	0.370	0.32	
649	6/14/2004	7:44:15 PM		26.651	27.674	25.144	28.436	27.172		45.062	49.643	11.198	34.541	-1.222	-7.329		41.628	0.092	14.643	0.004		629.53	10.4922	48.2	10.2	39.8	2.744	0.014	0.014	0.000	0.343	0.29	
650	6/14/2004	7:45:15 PM		26.646	27.649	25.099	28.436	27.182		45.141	49.576	10.941	34.912	-1.228	-7.528		50.339	0.099	14.643	0.003		630.53	10.5089	48.1	12.3	40.0	2.760	0.015	0.015	0.000	0.368	0.31	
651	6/14/2004	7:46:15 PM		26.651	27.669	25.149	28.451	27.187		45.374	50.198	10.91	35.103	-1.222	-7.47		40.741	0.098	14.643	0.004		631.53	10.5256	48.7	10.0	40.2	2.774	0.015	0.015	0.000	0.362	0.31	
652	6/14/2004	7:47:15 PM		26.65	27.658	25.138	28.415	27.201		45.606	50.507	10.776	35.462	-1.222	-7.543		50.414	0.101	14.643	0.004		632.53	10.5422	49.0	12.4	40.5	2.795	0.015	0.015	0.000	0.370	0.31	
653	6/14/2004	7:48:15 PM		26.623	27.631	25.111	28.423	27.179		45.606	50.314	10.551	35.686	-1.222	-7.548		52.07	0.099	14.643	0.004		633.53	10.5589	48.8	12.8	40.6	2.802	0.015	0.015	0.000	0.362	0.31	
654	6/14/2004	7:49:15 PM		26.627	27.625	25.105	28.427	27.193		45.909	50.656	10.588	36.006	-1.216	-7.175		44.417	0.088	14.643	0.004		634.53	10.5756	49.2	10.9	41.0	2.824	0.013	0.013	0.000	0.319	0.27	
655	6/14/2004	7:50:15 PM		26.618	27.626	25.086	28.408	27.248		45.817	50.395	10.588	35.934	-1.225	-7.502		50.954	0.104	14.643	0.003		635.53	10.5922	48.9	12.5	40.9	2.818	0.016	0.015	0.000	0.378	0.32	
656	6/14/2004	7:51:15 PM		26.622	27.615	25.115	28.402	27.233		44.162	48.94	11.602	33.258	-1.222	-7.459		47.272	0.099	14.643	0.004		636.53	10.6089	47.5	11.6	38.7	2.669	0.015	0.015	0.000	0.380	0.32	
657	6/14/2004	7:52:15 PM		26.617	27.615	25.105	28.422	27.233		45.28	49.833	11.298	34.697	-1.222	-7.496		48.013	0.099	14.643	0.004		637.53	10.6256	48.4	11.8	40.0	2.757	0.015	0.015	0.000	0.368	0.31	
658	6/14/2004	7:53:15 PM		26.61	27.598	25.133	28.405	27.171		45.651	50.482	11.275	34.937	-1.222	-7.545		46.884	0.098	14.643	0.004		638.53	10.6422	49.0	11.5	40.3	2.778	0.015	0.015	0.000	0.361	0.31	
659	6/14/2004	7:54:15 PM		26.614	27.592	25.273	28.385	27.16		45.792	50.493	10.96	35.485	-1.222	-7.528		45.349	0.101	14.643	0.004		639.53	10.6589	49.0	11.1	40.6	2.802	0.015	0.015	0.000	0.368	0.31	
660	6/14/2004	7:55:15 PM		26.607	27.581	25.236	28.393	27.153		45.112	49.972	11.124	34.601	-1.222	-7.54		51.417	0.097	14.643	0.004		640.53	10.6756	48.5	12.6	39.9	2.748	0.014	0.014	0.000	0.360	0.31	
661	6/14/2004	7:56:15 PM		26.594	27.568	25.203	28.375	27.14		45.486	50.142	10.922	35.204	-1.225	-7.534		45.854	0.104	14.643	0.003		641.53	10.6922	48.7	11.2	40.3	2.782	0.016	0.015	0.000	0.382	0.33	
662	6/14/2004	7:57:15 PM		26.612	27.555	25.22	28.357	27.138		46.417	51.034	10.923	36.127	-1.222	-7.349		46.158	0.094	14.643	0.003		642.53	10.7089	49.6	11.3	41.3	2.846	0.014	0.014	0.000	0.337	0.29	
663	6/14/2004	7:58:15 PM		26.614	27.562	25.242	28.364	27.12		45.676	50.528	11.325	34.995	-1.225	-7.438		50.407	0.098	14.643	0.004		643.53	10.7256	49.1	12.4	40.3	2.781	0.015	0.015	0.000	0.360	0.31	
664	6/14/2004	7:59:15 PM		26.609	27.542	25.218	28.355	27.09		45.815	50.459	11.163	35.36	-1.222	-7.236		47.548	0.094	14.643	0.004		644.53	10.7422	49.0	11.7	40.6	2.798	0.014	0.014	0.000	0.343	0.29	
665	6/14/2004	8:00:15 PM		26.614	27.542	25.237	28.354	27.09		46.13	50.922	11.091	35.709	-1.219	-7.479		46.795	0.097	14.643	0.004		645.53	10.7589	49.4	11.5	40.9	2.821	0.014	0.014	0.000	0.351	0.30	
666	6/14/2004	8:01:15 PM		26.631	27.539	25.234	28.411	27.077		44.936	49.682	11.592	33.993	-1.225	-7.528		44.694	0.096	14.643	0.003		646.53	10.7756	48.2	11.0	39.5	2.721	0.014	0.014	0.000	0.360	0.31	
667	6/14/2004	8:02:15 PM		26.633	27.531	25.196	28.418	27.054		45.45	49.949	11.361	34.72	-1.228	-7.505		59.694	0.1	14.643	0.003		647.53	10.7922	48.5	14.6	40.1	2.764	0.015	0.015	0.000	0.370	0.31	
668	6/14/2004	8:03:15 PM		26.629	27.523	25.203	28.415	27.075		45.751	50.374	11.299	35.048	-1.222	-7.508		56.582	0.1	14.643	0.004		648.53	10.8089	48.9	13.9	40.4	2.785	0.015	0.015	0.000	0.367	0.31	
669	6/14/2004	8:04:15 PM		26.642	27.536	25.186	28.383	27.019		45.989	50.849	11.249	35.393	-1.222	-7.456		52.172	0.096	14.643	0.004		649.53	10.8256	49.4	12.8	40.7	2.806	0.014	0.014	0.000	0.350	0.30	
670	6/14/2004	8:05:15 PM		26.635	27.534	25.159	28.336	26.992		45.834	50.557	11.114	35.389	-1.222	-7.346		59.185	0.101	14.643	0.004		650.53	10.8422	49.1	14.5	40.6	2.800	0.015	0.015	0.000	0.369	0.31	
671	6/14/2004	8:06:15 PM		26.635	27.523	25.183	28.335	26.936		45.344	50.126	11.722	34.266	-1.222	-7.366		51.212	0.094	14.643	0.004		651.53	10.8589	48.7	12.6	39.8	2.744	0.014	0.014	0.000	0.350	0.30	
672	6/14/2004	8:07:15 PM		26.634	27.517	25.172	28.289	26.865		45.237	50.061	11.678	34.192	-1.222	-7.485		52.846	0.096	14.643	0.003		652.53	10.8756	48.6	13.0	39.7	2.738	0.014	0.014	0.000	0.359	0.31	
673	6/14/2004	8:08:15 PM		26.63	27.508	25.188	28.23	26.821		45.342	49.794	11.641	34.381	-1.219	-7.531		43.439	0.097	14.643	0.004		653.53	10.8922	48.3	10.6	39.9	2.748	0.014	0.014	0.000	0.361	0.31	
674	6/14/2004	8:09:15 PM		26.603	27.476	25.156	28.164	26.795		45.653	50.383	11.576	34.746	-1.222	-7.519		55.72	0.099	14.643	0.003		654.53	10.9089	48.9	13.7	40.2	2.772	0.015	0.015	0.000	0.366	0.31	
675	6/14/2004	8:10:15 PM		26.609	27.477	25.147	28.13	26.791		45.556	50.182	11.437	34.781	-1.219	-7.386		48.253	0.095	14.643	0.004		655.53	10.9256	48.7	11.8	40.2	2.769	0.014	0.014	0.000	0.351	0.30	
676	6/14/2004	8:11:15 PM		26.605	27.473	25.173	28.121	26.806		44.957	49.738	11.82	33.788	-1.225	-7.349		54.792	0.089	14.643	0.004		656.53	10.9422	48.3	13.4	39.4	2.715	0.013	0.013	0.000	0.335	0.29	
677	6/14/2004	8:12:15 PM		26.584	27.452	25.177	28.115	26.825		45.143	49.952	11.669	34.102	-1.222	-7.49		48.255	0.097	14.643	0.004		657.53	10.9589	48.5	11.8	39.6	2.732	0.014	0.014	0.000	0.363	0.31	
678	6/14/2004	8:13:15 PM		26.571	27.424	25.239	28.072	26.783		45.222	49.889	11.505	34.323	-1.222	-7.415		51.429	0.102	14.643	0.004		658.53	10.9756	48.4	12.6	39.8	2.742	0.015	0.015	0.000	0.380	0.32	
679	6/14/2004	8:13:35 PM		26.57	27.413	25.233	28.066	26.777		45.284	49.564	11.451	34.578	-1.225	-7.404		50.739	0.097	14.643	0.003		658.87	10.9811	48.1	12.4	39.9	2.753	0.014	0.014	0.000	0.360	0.31	
680	6/14/2004	8:19:11 PM		26.323	27.356	25.141	28.109	26.789		7.983	50.178	10.899	-2.243	37.16	90.455		45.257	0.003	14.643	0.007		664.47	11.0744	48.7	11.1	2.9	0.198	0.000	0.000	0.000	0.155	0.13	
681	6/14/2004	8:19:30 PM		26.332	27.345	25.12	28.098	26.794		8.103	50.781	10.893	-2.145	37.16	90.946		48.359	0.003	14.643	0.007		664.78	11.0797	49.3	11.9	3.0	0.205	0.000	0.000	0.000	0.150	0.13	
682	6/14/2004	8:20:00 PM		26.665	27.353	25.138	28.121	26.762		-7.25	50.955	9.546	-18.462	74.012	88.122		49.197	0.003	14.643	2.406		665.28	11.0881	49.5	12.1	-12.9	-0.886	0.000	0.000	0.000	-0.035	-0.03	
683	6/14/2004	8:20:30 PM		26.634	27.328	25.082	28.09	26.806		7.091	50.41	9.937	-2.132	37.997	90.744		45.808	0.003	14.643	0.004		665.78	11.0964	48.9	11.2	2.5	0.171	0.000	0.000	0.000	0.180	0.15	
684	6/14/2004	8:21:00 PM		26.664	27.347	25.142	28.115	26.786		7.162	50.544	10.009	-2.122	37.951	55.131		49.644	0.003	14.643	0.006		666.28	11.1047	49.1	12.2	2.5	0.174	0.000	0.000	0.000	0.177	0.15	
685	6/14/2004	8:21:30 PM		26.664	27.347	25.117	28.085	26.796		7.218	50.843	9.982	-2.14	37.948	8.953		45.647	0.003	14.643	0.005		666.78	11.1131	49.4	11.2	2.5	0.175	0.000	0.000	0.000	0.176	0.15	
686	6/14/2004	8:22:00 PM		26.672	27.326	25.1	28.073	26.814		7.106	50.318	10.049	-2.286	37.768	0.283		48.974	0.003	14.643	0.004		667.28	11.1214	48.8	12.0	2.4	0.166	0.000	0.000	0.000	0.185	0.16	
687	6/14/2004	8:22:30 PM		26.436	27.324	25.073	28.096	26.802		42.972	50.321	10.767	32.899	1.259	0.358		45.908	0.315	14.643	0.004		667.78	11.1297	48.8	11.3	37.9	2.616	0.047	0.047	0.001	1.235	1.05	
688	6/14/2004	8:23:00 PM		26.397	27.325	25.064	28.092	26.823		44.191	51.311	11.649	33.195	0.72	0.393		52.283	0.193	14.643	0.004		668.28	11.1381	49.8	12.8	38.7	2.668	0.029	0.029	0.001	0.742	0.63	
689	6/14/2004	8:23:30 PM		26.316	27.329	25.078	28.046	26.797		44.249	50.93	11.886	32.965	0.657	0.422		52.865	0.158	14.643	0.004		668.78	11.1464	49.5	13.0	38.6	2.662	0.024	0.024	0.001	0.609	0.52	
690	6/14/2004	8:24:00 PM		26.331	27.314	25.063	28.032	26.782		44.1	50.922	12.12	32.647	0.607	0.442		47.706	0.143	14.643	0.004		669.28	11.1547	49.4	11.7	38.4	2.646	0.021	0.021	0.001	0.555	0.47	
691	6/14/2004	8:24:30 PM		26.315	27.318	25.062	28.036	26.771		44.527	51.32	12.406	32.788	0.654	0.465		52.804	0.132	14.643	0.003		669.78	11.1631	49.8	12.9	38.7	2.665	0.020	0.020	0.001	0.508	0.43	
692	6/14/2004	8:25:00 PM		26.314	27.317	25.051	28.045	26.765		44.612	51.027	12.31	33.059	0.654	0.491		51.396	0.128	14.643	0.004		670.28	11.1714	49.6	12.6	38.8	2.678	0.019	0.019	0.000	0.491	0.42	
693	6/14/2004	8:25:30 PM		26.278	27.306	25.036	28.034	26.784		44.305	51.23	12.276	32.674	0.657	0.509		43.739	0.124	14.643	0.004		670.78	11.1797	49.8	10.7	38.5	2.654	0.018	0.018	0.000	0.480	0.41	
694	6/14/2004	8:26:09 PM		26.239	27.297	25.041	27.975	26.82		44.554	51.597	12.35	32.803	0.657	0.535		52.641	0.12	14.643	0.004		671.43	11.1906	50.1	12.9	38.7	2.667	0.018	0.018	0.000	0.462	0.39	
695	6/14/2004	8:26:09 PM		26.243	27.301	25.041	27.969	26.814		44.488	51.164	12.285	32.879	0.657	0.54		47.504	0.12	14.643	0.004		671.43	11.1906	49.7	11.6	38.7	2.667	0.018	0.018	0.000	0.462	0.39	
696	6/14/2004	8:26:10 PM		26.238	27.306	25.046	27.969	26.814		44.471	50.924	12.333	32.903	0.654	0.537		44.217	0.12	14.643	0.004		671.45	11.1908	49.5	10.8	38.7	2.667	0.018	0.018	0.000	0.462	0.39	
697	6/14/2004	8:27:10 PM		26.201	27.289	25.019	27.942	26.822		44.675	51.355	12.375	32.996	0.715	0.581		40.268	0.117	14.643	0.004		672.45	11.2075	49.9	9.9	38.8	2.678	0.017	0.017	0.000	0.449	0.38	
698	6/14/2004	8:28:10 PM		26.15	27.263	24.952	27.93	26.776		46.041	53.092	11.494	35.216	0.775	0.615		47.869	0.12	14.643	0.004		673.45	11.2242	51.6	11.7	40.6	2.801	0.018	0.018	0.000	0.441	0.38	
699	6/14/2004	8:29:10 PM		26.104	27.262	24.971	27.924	26.765		44.855	52.723	11.219	34.293	1.786	1.835		44.219	0.078	14.643	0.004		674.45	11.2408	51.3	10.8	39.6	2.728	0.012	0.012	0.000	0.294	0.25	
700	6/14/2004	8:30:10 PM		26.081	27.254	24.903	27.932	26.787		46.043	52.889	11.284	35.448	0.778	0.699		38.831	0.11	14.643	0.004		675.45	11.2575	51.4	9.5	40.7	2.809	0.016	0.016	0.000	0.404	0.34	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
701	6/14/2004	8:31:10 PM		26.673	27.252	24.896	27.95	26.76		52.031	53.318	11.206	41.521	-1.225	-6.372		40.612	0.135	14.643	0.003		676.45	11.2742	51.8	10.0	46.8	3.225	0.020	0.020	0.000	0.432	0.37	
702	6/14/2004	8:32:10 PM		26.586	27.234	24.908	27.927	26.728		48.165	49.066	14.659	34.17	-1.228	-7.225		55.09	0.101	14.643	0.003		677.45	11.2908	47.6	13.5	41.2	2.838	0.015	0.015	0.000	0.367	0.31	
703	6/14/2004	8:33:10 PM		26.464	27.233	24.937	27.935	26.731		47.315	48.111	15.299	32.698	-1.222	-7.441		47.041	0.1	14.643	0.004		678.45	11.3075	46.6	11.5	40.0	2.758	0.015	0.015	0.000	0.373	0.32	
704	6/14/2004	8:34:10 PM		26.418	27.227	24.996	27.959	26.76		45.821	46.722	15.081	31.459	-1.222	-7.473		55.47	0.093	14.643	0.004		679.45	11.3242	45.2	13.6	38.6	2.664	0.014	0.014	0.000	0.359	0.31	
705	6/14/2004	8:35:10 PM		26.401	27.22	25.004	27.948	26.768		46.802	47.645	14.219	33.345	-1.222	-7.485		47.498	0.095	14.643	0.004		680.45	11.3408	46.2	11.6	40.1	2.763	0.014	0.014	0.000	0.353	0.30	
706	6/14/2004	8:36:10 PM		26.38	27.213	25.022	27.936	26.796		46.734	47.659	13.788	33.72	-1.222	-7.404		50.124	0.098	14.643	0.004		681.45	11.3575	46.2	12.3	40.2	2.774	0.015	0.015	0.000	0.363	0.31	
707	6/14/2004	8:37:10 PM		26.378	27.206	25.025	27.944	26.774		46.618	47.468	13.621	33.751	-1.222	-7.462		52.981	0.097	14.643	0.004		682.45	11.3742	46.0	13.0	40.2	2.771	0.014	0.014	0.000	0.360	0.31	
708	6/14/2004	8:38:10 PM		26.387	27.205	25.019	27.928	26.749		47.232	48.111	13.365	34.576	-1.222	-7.464		46.878	0.098	14.643	0.004		683.45	11.3908	46.6	11.5	40.9	2.820	0.015	0.015	0.000	0.357	0.30	
709	6/14/2004	8:39:10 PM		26.384	27.213	25.012	27.935	26.771		46.753	48.076	13.893	33.472	-1.222	-7.476		61.45	0.096	14.643	0.004		684.45	11.4075	46.6	15.1	40.1	2.766	0.014	0.014	0.000	0.357	0.30	
710	6/14/2004	8:40:10 PM		26.367	27.185	25.019	27.908	26.758		47.057	48.422	13.678	34.042	-1.222	-7.47		53.086	0.097	14.643	0.004		685.45	11.4242	46.9	13.0	40.5	2.796	0.014	0.014	0.000	0.356	0.30	
711	6/14/2004	8:41:10 PM		26.365	27.183	25.037	27.896	26.721		47.109	48.513	13.691	34.044	-1.222	-7.473		50.572	0.097	14.643	0.004		686.45	11.4408	47.0	12.4	40.6	2.798	0.014	0.014	0.000	0.356	0.30	
712	6/14/2004	8:42:10 PM		26.357	27.17	25.04	27.858	26.704		46.916	48.32	13.687	33.812	-1.219	-7.473		47.133	0.097	14.643	0.004		687.45	11.4575	46.8	11.6	40.4	2.783	0.014	0.014	0.000	0.358	0.30	
713	6/14/2004	8:43:10 PM		26.371	27.175	25.019	27.867	26.708		46.653	47.951	13.458	33.87	-1.222	-7.47		53.3	0.097	14.643	0.004		688.45	11.4742	46.5	13.1	40.3	2.776	0.014	0.014	0.000	0.359	0.31	
714	6/14/2004	8:44:10 PM		26.349	27.153	24.982	27.796	26.686		47.34	48.619	13.282	34.783	-1.222	-7.464		52.804	0.098	14.643	0.004		689.45	11.4908	47.1	12.9	41.1	2.831	0.015	0.015	0.000	0.356	0.30	
715	6/14/2004	8:45:10 PM		26.353	27.156	24.975	27.814	26.674		47.18	48.517	13.197	34.666	-1.222	-7.467		51.075	0.098	14.643	0.004		690.45	11.5075	47.0	12.5	40.9	2.821	0.015	0.015	0.000	0.357	0.30	
716	6/14/2004	8:46:10 PM		26.345	27.143	24.967	27.816	26.697		46.931	48.119	13.158	34.535	-1.222	-7.464		49.187	0.097	14.643	0.004		691.45	11.5242	46.6	12.1	40.7	2.808	0.014	0.014	0.000	0.355	0.30	
717	6/14/2004	8:47:10 PM		26.355	27.143	24.957	27.811	26.697		46.869	48.412	13.227	34.338	-1.222	-7.427		48.374	0.094	14.643	0.003		692.45	11.5408	46.9	11.9	40.6	2.799	0.014	0.014	0.000	0.346	0.29	
718	6/14/2004	8:48:10 PM		26.353	27.156	24.955	27.819	26.675		47.136	48.463	13.294	34.594	-1.216	-7.45		48.674	0.098	14.643	0.004		693.45	11.5575	47.0	11.9	40.9	2.817	0.015	0.015	0.000	0.358	0.30	
719	6/14/2004	8:49:10 PM		26.337	27.136	24.945	27.769	26.679		47.196	48.642	13.24	34.685	-1.225	-7.456		50.324	0.097	14.643	0.004		694.45	11.5742	47.2	12.3	40.9	2.823	0.014	0.014	0.000	0.354	0.30	
720	6/14/2004	8:50:10 PM		26.332	27.131	24.919	27.774	26.674		46.993	48.281	13.116	34.623	-1.225	-7.453		40.005	0.098	14.643	0.004		695.45	11.5908	46.8	9.8	40.8	2.814	0.015	0.015	0.000	0.359	0.31	
721	6/14/2004	8:51:10 PM		26.315	27.114	24.928	27.762	26.667		47.398	49.054	13.258	34.804	-1.222	-7.453		47.541	0.098	14.643	0.004		696.45	11.6075	47.6	11.7	41.1	2.834	0.015	0.015	0.000	0.356	0.30	
722	6/14/2004	8:52:10 PM		26.31	27.113	24.907	27.746	26.661		47.279	48.664	13.285	34.621	-1.225	-7.453		50.829	0.097	14.643	0.004		697.45	11.6242	47.2	12.5	41.0	2.823	0.014	0.014	0.000	0.354	0.30	
723	6/14/2004	8:53:10 PM		26.303	27.096	24.91	27.749	26.644		47.031	48.528	13.237	34.469	-1.225	-7.453		55.626	0.097	14.643	0.004		698.45	11.6408	47.1	13.6	40.8	2.810	0.014	0.014	0.000	0.356	0.30	
724	6/14/2004	8:54:10 PM		26.312	27.085	24.889	27.758	26.624		47.387	49.025	13.349	34.656	-1.219	-7.412		53.501	0.097	14.643	0.004		699.45	11.6575	47.6	13.1	41.0	2.828	0.014	0.015	0.000	0.354	0.30	
725	6/14/2004	8:55:10 PM		26.322	27.09	24.899	27.778	26.594		47.041	48.691	13.283	34.408	-1.222	-7.453		53.127	0.096	14.643	0.004		700.45	11.6742	47.2	13.0	40.7	2.808	0.014	0.014	0.000	0.352	0.30	
726	6/14/2004	8:56:10 PM		26.296	27.079	24.883	27.777	26.578		46.732	48.61	13.203	34.077	-1.225	-7.45		50.213	0.097	14.643	0.003		701.45	11.6908	47.1	12.3	40.4	2.786	0.014	0.015	0.000	0.359	0.31	
727	6/14/2004	8:57:10 PM		26.276	27.069	24.878	27.752	26.598		47.082	48.652	13.207	34.584	-1.222	-7.447		52.003	0.097	14.643	0.004		702.45	11.7075	47.2	12.7	40.8	2.815	0.014	0.015	0.000	0.355	0.30	
728	6/14/2004	8:58:10 PM		26.259	27.063	24.876	27.716	26.601		47.039	49.071	13.196	34.42	-1.222	-7.447		47.16	0.097	14.643	0.003		703.45	11.7242	47.6	11.6	40.7	2.808	0.014	0.015	0.000	0.356	0.30	
729	6/14/2004	8:59:10 PM		26.233	27.046	24.84	27.699	26.604		47.315	49.037	12.965	35.025	-1.222	-7.441		48.739	0.097	14.643	0.004		704.45	11.7408	47.6	11.9	41.2	2.839	0.014	0.015	0.000	0.353	0.30	
730	6/14/2004	9:00:10 PM		26.237	27.05	24.874	27.658	26.608		47.319	49.104	12.988	34.968	-1.222	-7.441		49.602	0.097	14.643	0.004		705.45	11.7575	47.6	12.2	41.1	2.837	0.014	0.015	0.000	0.353	0.30	
731	6/14/2004	9:01:10 PM		26.226	27.039	24.888	27.617	26.617		47.031	48.737	12.973	34.748	-1.222	-7.407		49.683	0.097	14.643	0.003		706.45	11.7742	47.3	12.2	40.9	2.819	0.014	0.015	0.000	0.355	0.30	
732	6/14/2004	9:02:10 PM		26.214	27.037	24.871	27.65	26.586		47.257	49.118	12.998	34.921	-1.222	-7.427		52.149	0.097	14.643	0.003		707.45	11.7908	47.6	12.8	41.1	2.833	0.014	0.015	0.000	0.353	0.30	
733	6/14/2004	9:03:10 PM		26.223	27.031	24.885	27.689	26.555		47.358	49.208	13.007	35.017	-1.222	-7.433		45.616	0.096	14.643	0.004		708.45	11.8075	47.7	11.2	41.2	2.840	0.014	0.014	0.000	0.349	0.30	
734	6/14/2004	9:04:10 PM		26.199	27.022	24.871	27.675	26.571		47.464	49.247	13.014	35.085	-1.225	-7.438		53.298	0.096	14.643	0.004		709.45	11.8242	47.8	13.1	41.3	2.846	0.014	0.014	0.000	0.348	0.30	
735	6/14/2004	9:05:10 PM		26.197	27.016	24.869	27.669	26.539		47.124	49.054	12.953	34.822	-1.222	-7.43		48.417	0.097	14.643	0.004		710.45	11.8408	47.6	11.9	41.0	2.825	0.014	0.015	0.000	0.354	0.30	
736	6/14/2004	9:06:10 PM		26.207	27.026	24.909	27.679	26.539		47.601	49.755	12.991	35.218	-1.219	-7.43		54.153	0.096	14.643	0.004		711.45	11.8575	48.3	13.3	41.4	2.855	0.014	0.014	0.000	0.347	0.29	
737	6/14/2004	9:07:10 PM		26.19	26.994	24.897	27.657	26.577		47.323	49.516	12.988	34.974	-1.222	-7.43		49.863	0.096	14.643	0.004		712.45	11.8742	48.0	12.2	41.1	2.837	0.014	0.014	0.000	0.349	0.30	
738	6/14/2004	9:08:10 PM		26.196	27	24.888	27.668	26.568		46.827	48.59	12.875	34.724	-1.222	-7.433		50.487	0.096	14.643	0.004		713.45	11.8908	47.1	12.4	40.8	2.811	0.014	0.014	0.000	0.352	0.30	
739	6/14/2004	9:09:10 PM		26.191	26.995	24.903	27.633	26.573		46.952	48.689	12.857	34.798	-1.222	-7.436		47.852	0.096	14.643	0.004		714.45	11.9075	47.2	11.7	40.9	2.818	0.014	0.014	0.000	0.351	0.30	
740	6/14/2004	9:10:10 PM		26.19	26.984	24.882	27.632	26.547		47.192	49.067	12.931	34.894	-1.222	-7.43		46.371	0.096	14.643	0.004		715.45	11.9242	47.6	11.4	41.0	2.830	0.014	0.014	0.000	0.350	0.30	
741	6/14/2004	9:11:10 PM		26.179	26.972	24.881	27.595	26.545		46.943	48.884	12.897	34.705	-1.219	-7.424		48.363	0.096	14.643	0.004		716.45	11.9408	47.4	11.9	40.8	2.815	0.014	0.014	0.000	0.352	0.30	
742	6/14/2004	9:12:10 PM		26.172	26.96	24.864	27.593	26.504		47.487	49.574	12.994	35.126	-1.225	-7.436		48.632	0.096	14.643	0.003		717.45	11.9575	48.1	11.9	41.3	2.848	0.014	0.014	0.000	0.348	0.30	
743	6/14/2004	9:13:10 PM		26.187	26.96	24.864	27.628	26.539		47.151	49.237	12.97	34.863	-1.222	-7.436		47.619	0.095	14.643	0.004		718.45	11.9742	47.8	11.7	41.0	2.827	0.014	0.014	0.000	0.347	0.30	
744	6/14/2004	9:14:10 PM		26.181	26.959	24.878	27.627	26.553		46.873	48.737	12.996	34.58	-1.222	-7.441		44.461	0.094	14.643	0.004		719.45	11.9908	47.3	10.9	40.7	2.808	0.014	0.014	0.000	0.345	0.29	
745	6/14/2004	9:15:10 PM		26.176	26.944	24.893	27.607	26.548		47.259	48.998	12.929	35.077	-1.225	-7.404		44.942	0.096	14.643	0.004		720.45	12.0075	47.5	11.0	41.2	2.838	0.014	0.014	0.000	0.349	0.30	
746	6/14/2004	9:16:10 PM		26.184	26.958	24.911	27.641	26.516		47.402	49.396	13.084	34.984	-1.222	-7.418		47.721	0.095	14.643	0.004		721.45	12.0242	47.9	11.7	41.2	2.840	0.014	0.014	0.000	0.345	0.29	
747	6/14/2004	9:17:10 PM		26.172	26.92	24.889	27.588	26.498		47.199	49.332	13.072	34.8	-1.225	-7.424		45.022	0.094	14.643	0.003		722.45	12.0408	47.9	11.0	41.0	2.827	0.014	0.014	0.000	0.343	0.29	
748	6/14/2004	9:18:10 PM		26.165	26.918	24.882	27.581	26.522		46.854	48.992	13.045	34.502	-1.222	-7.424		50.67	0.093	14.643	0.004		723.45	12.0575	47.5	12.4	40.7	2.805	0.014	0.014	0.000	0.342	0.29	
749	6/14/2004	9:19:10 PM		26.175	26.928	24.897	27.581	26.532		47.132	49.025	13.11	34.73	-1.222	-7.427		46.006	0.093	14.643	0.003		724.45	12.0742	47.6	11.3	40.9	2.822	0.014	0.014	0.000	0.340	0.29	
750	6/14/2004	9:20:10 PM		26.159	26.907	24.881	27.531	26.521		47.23	49.375	13.145	34.732	-1.225	-7.433		52.479	0.092	14.643	0.003		725.45	12.0908	47.9	12.9	41.0	2.825	0.014	0.014	0.000	0.336	0.29	
751	6/14/2004	9:21:10 PM		26.174	26.912	24.931	27.531	26.511		47.145	49.324	13.144	34.66	-1.222	-7.427		51.502	0.092	14.643	0.003		726.45	12.1075	47.9	12.6	40.9	2.820	0.014	0.014	0.000	0.336	0.29	
752	6/14/2004	9:22:10 PM		26.178	26.906	25.01	27.555	26.515		47.028	49.247	13.071	34.621	-1.222	-7.421		41.104	0.094	14.643	0.004		727.45	12.1242	47.8	10.1	40.8	2.815	0.014	0.014	0.000	0.343	0.29	
753	6/14/2004	9:23:10 PM		26.182	26.896	25.2	27.539	26.509		46.858	48.979	12.985	34.574	-1.222	-7.424		47.495	0.092	14.643	0.004		728.45	12.1408	47.5	11.6	40.7	2.807	0.014	0.014	0.000	0.335	0.29	
754	6/14/2004	9:24:10 PM		26.202	26.891	25.195	27.579	26.504		46.657	48.459	12.869	34.566	-1.225	-7.43		45.214	0.091	14.643	0.004		729.45	12.1575	47.0	11.1	40.6	2.800	0.014	0.013	0.000	0.332	0.28	
755	6/14/2004	9:25:10 PM		26.215	26.879	25.148	27.567	26.507		46.871	48.982	12.87	34.718	-1.222	-7.43		53.317	0.092	14.643	0.003		730.45	12.1742	47.5	13.1	40.8	2.813	0.014	0.014	0.000	0.335	0.28	
756	6/14/2004	9:26:10 PM		26.23	26.869	25.128	27.552	26.517		46.931	49.152	12.923	34.715	-1.222	-7.424		50.266	0.092	14.643	0.004		731.45	12.1908	47.7	12.3	40.8	2.815	0.014	0.014	0.000	0.335	0.28	
757	6/14/2004	9:27:10 PM		26.224	26.852	25.056	27.55	26.525		46.728	48.754	12.814	34.664	-1.222	-7.381		58.227	0.092	14.643	0.004		732.45	12.2075	47.3	14.3	40.7	2.806	0.014	0.014	0.000	0.337	0.29	
758	6/14/2004	9:28:10 PM		26.254	26.868	25.077	27.556	26.501		47.085	49.38	12.942	34.843	-1.222	-6.99		47.059	0.103	14.643	0.004		733.45	12.2242	47.9	11.5	41.0	2.824	0.015	0.015	0.000	0.374	0.32	
759	6/14/2004	9:29:10 PM		26.254	26.868	25.037	27.566	26.491		46.533	48.439	12.748	34.596	-1.222	-7.421		44.965	0.092	14.643	0.004		734.45	12.2408	47.0	11.0	40.6	2.797	0.014	0.014	0.000	0.338	0.29	
760	6/14/2004	9:30:10 PM		26.25	26.859	25.023	27.477	26.457		46.902	48.855	12.714	34.933	-1.222	-7.412		47.291	0.093	14.643	0.004		735.45	12.2575	47.4	11.6	40.9	2.821	0.014	0.014	0.000	0.339	0.29	
761	6/14/2004	9:31:10 PM		26.242	26.851	24.984	27.484	26.449		47.169	49.29	12.798	35.101	-1.222	-7.418		52.018	0.093	14.643	0.004		736.45	12.2742	47.8	12.7	41.1	2.836	0.014	0.014	0.000	0.337	0.29	
762	6/14/2004	9:32:10 PM		26.243	26.847	24.96	27.525	26.42		46.896	49.046	12.661	35.015	-1.222	-7.398		40.053	0.094	14.643	0.004		737.45	12.2908	47.6	9.8	41.0	2.824	0.014	0.014	0.000	0.343	0.29	
763	6/14/2004	9:33:10 PM		26.237	26.826	24.944	27.524	26.394		46.927	48.926	12.578	35.155	-1.222	-7.412		49.373	0.092	14.643	0.004		738.45	12.3075	47.5	12.1	41.0	2.830	0.014	0.014	0.000	0.335	0.28	
764	6/14/2004	9:34:10 PM		26.221	26.815	24.913	27.503	26.413		46.516	48.801	13.242	33.993	-1.219	-7.421		43.551	0.09	14.643	0.004		739.45	12.3242	47.3	10.7	40.3	2.775	0.013	0.013	0.000	0.334	0.28	
765	6/14/2004	9:35:10 PM		26.214	26.807	24.916	27.52	26.376		46.379	48.93	13.165	33.851	-1.222	-7.421		43.916	0.09	14.643	0.004		740.45	12.3408	47.5	10.8	40.1	2.766	0.013	0.013	0.000	0.335	0.29	
766	6/14/2004	9:36:10 PM		26.202	26.805	24.894	27.573	26.399		46.487	49.122	13.094	34.018	-1.219	-7.415		49.573	0.09	14.643	0.004		741.45	12.3575	47.6	12.1	40.3	2.775	0.013	0.013	0.000	0.334	0.28	
767	6/14/2004	9:37:10 PM		26.194	26.793	24.896	27.546	26.441		46.622	49.16	13.103	34.194	-1.222	-7.412		41.753	0.091	14.643	0.004		742.45	12.3742	47.7	10.2	40.4	2.786	0.014	0.014	0.000	0.337	0.29	
768	6/14/2004	9:38:10 PM		26.183	26.791	24.894	27.569	26.425		46.97	49.678	13.015	34.586	-1.225	-7.415		51.064	0.091	14.643	0.003		743.45	12.3908	48.2	12.5	40.8	2.812	0.014	0.014	0.000	0.334	0.28	
769	6/14/2004	9:39:10 PM		26.179	26.783	24.876	27.556	26.421		46.518	48.98	12.904	34.272	-1.222	-7.407		48.711	0.092	14.643	0.004		744.45	12.4075	47.5	11.9	40.4	2.785	0.014	0.014	0.000	0.341	0.29	
770	6/14/2004	9:40:10 PM		26.176	26.79	24.868	27.568	26.413		46.51	49.131	12.857	34.297	-1.222	-7.41		42.886	0.091	14.643	0.003		745.45	12.4242	47.7	10.5	40.4	2.786	0.014	0.014	0.000	0.337	0.29	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
771	6/14/2004	9:41:10 PM		26.175	26.783	24.867	27.561	26.412		46.336	49.048	13.206	33.718	-1.222	-7.404		46.002	0.092	14.643	0.004		746.45	12.4408	47.6	11.3	40.0	2.760	0.014	0.014	0.000	0.344	0.29	
772	6/14/2004	9:42:10 PM		26.162	26.776	24.889	27.534	26.414		46.207	48.617	13.227	33.661	-1.222	-7.415		49.944	0.09	14.643	0.004		747.45	12.4575	47.1	12.2	39.9	2.753	0.013	0.013	0.000	0.337	0.29	
773	6/14/2004	9:43:10 PM		26.159	26.768	24.866	27.526	26.406		46.172	48.513	13.15	33.759	-1.222	-7.421		50.007	0.089	14.643	0.004		748.45	12.4742	47.0	12.3	40.0	2.755	0.013	0.013	0.000	0.333	0.28	
774	6/14/2004	9:44:10 PM		26.153	26.771	24.875	27.524	26.395		46.272	48.538	13.082	33.958	-1.222	-7.415		58.15	0.089	14.643	0.004		749.45	12.4908	47.1	14.3	40.1	2.766	0.013	0.013	0.000	0.332	0.28	
775	6/14/2004	9:45:10 PM		26.161	26.774	24.888	27.572	26.398		46.265	48.534	13.104	33.899	-1.219	-7.415		45.053	0.09	14.643	0.004		750.45	12.5075	47.1	11.0	40.1	2.764	0.013	0.013	0.000	0.336	0.29	
776	6/14/2004	9:46:10 PM		26.154	26.773	24.886	27.521	26.411		46.502	48.859	13.06	34.176	-1.225	-7.41		56.663	0.091	14.643	0.003		751.45	12.5242	47.4	13.9	40.3	2.781	0.014	0.014	0.000	0.337	0.29	
777	6/14/2004	9:47:10 PM		26.148	26.762	24.86	27.495	26.405		46.605	49.187	13.028	34.231	-1.225	-7.407		49.992	0.091	14.643	0.003		752.45	12.5408	47.7	12.3	40.4	2.787	0.014	0.014	0.000	0.337	0.29	
778	6/14/2004	9:48:10 PM		26.142	26.765	24.883	27.533	26.394		46.384	48.992	13.002	34.087	-1.219	-7.41		51.663	0.09	14.643	0.004		753.45	12.5575	47.5	12.7	40.2	2.774	0.013	0.013	0.000	0.335	0.28	
779	6/14/2004	9:49:10 PM		26.138	26.752	24.855	27.525	26.39		46.425	48.924	12.996	34.174	-1.219	-7.41		40.777	0.09	14.643	0.004		754.45	12.5742	47.5	10.0	40.3	2.779	0.013	0.013	0.000	0.334	0.28	
780	6/14/2004	9:50:10 PM		26.127	26.746	24.839	27.494	26.414		46.589	49.379	13.014	34.26	-1.225	-7.404		51.784	0.091	14.643	0.004		755.45	12.5908	47.9	12.7	40.4	2.787	0.014	0.014	0.000	0.337	0.29	
781	6/14/2004	9:51:10 PM		26.122	26.74	24.848	27.538	26.428		46.433	48.899	12.955	34.239	-1.225	-7.41		52.72	0.09	14.643	0.003		756.45	12.6075	47.4	12.9	40.3	2.781	0.013	0.013	0.000	0.334	0.28	
782	6/14/2004	9:52:10 PM		26.127	26.745	24.868	27.573	26.508		46.406	48.623	12.908	34.33	-1.222	-7.412		57.679	0.09	14.643	0.004		757.45	12.6242	47.2	14.1	40.4	2.783	0.013	0.013	0.000	0.334	0.28	
783	6/14/2004	9:53:10 PM		26.136	26.755	24.893	27.653	26.573		46.533	48.865	12.956	34.346	-1.219	-7.404		54.786	0.09	14.643	0.004		758.45	12.6408	47.4	13.4	40.4	2.788	0.013	0.013	0.000	0.333	0.28	
784	6/14/2004	9:54:10 PM		26.147	26.761	25.009	27.639	26.644		46.479	48.992	12.838	34.342	-1.219	-7.401		46.609	0.09	14.643	0.004		759.45	12.6575	47.5	11.4	40.4	2.786	0.013	0.013	0.000	0.332	0.28	
785	6/14/2004	9:55:10 PM		26.154	26.763	24.971	27.66	26.69		46.182	48.644	12.76	34.207	-1.222	-7.401		41.98	0.09	14.643	0.004		760.45	12.6742	47.2	10.3	40.2	2.771	0.013	0.013	0.000	0.334	0.28	
786	6/14/2004	9:56:10 PM		26.166	26.764	24.978	27.637	26.707		46.796	49.29	12.873	34.672	-1.222	-7.407		52.583	0.089	14.643	0.004		761.45	12.6908	47.8	12.9	40.7	2.808	0.013	0.013	0.000	0.326	0.28	
787	6/14/2004	9:57:10 PM		26.173	26.777	24.96	27.655	26.665		46.367	48.838	12.758	34.369	-1.219	-7.386		46.231	0.09	14.643	0.004		762.45	12.7075	47.4	11.3	40.4	2.783	0.013	0.013	0.000	0.333	0.28	
788	6/14/2004	9:58:10 PM		26.175	26.764	24.922	27.612	26.637		46.301	48.816	12.731	34.284	-1.222	-7.398		48.186	0.09	14.643	0.004		763.45	12.7242	47.3	11.8	40.3	2.778	0.013	0.013	0.000	0.334	0.28	
789	6/14/2004	9:59:10 PM		26.178	26.776	24.925	27.604	26.594		46.512	49.294	12.828	34.375	-1.222	-7.392		48.257	0.09	14.643	0.004		764.45	12.7408	47.8	11.8	40.4	2.788	0.013	0.013	0.000	0.332	0.28	
790	6/14/2004	10:00:10 PM		26.184	26.772	24.9	27.59	26.595		46.386	49.203	12.87	34.139	-1.222	-7.389		48.86	0.091	14.643	0.004		765.45	12.7575	47.7	12.0	40.3	2.776	0.014	0.014	0.000	0.338	0.29	
791	6/14/2004	10:01:10 PM		26.179	26.768	24.901	27.536	26.546		46.643	49.494	12.944	34.356	-1.222	-7.392		45.42	0.09	14.643	0.004		766.45	12.7742	48.0	11.1	40.5	2.792	0.013	0.013	0.000	0.332	0.28	
792	6/14/2004	10:02:10 PM		26.162	26.745	24.854	27.543	26.484		46.128	48.727	12.767	34.129	-1.225	-7.401		41.419	0.089	14.643	0.003		767.45	12.7908	47.3	10.2	40.1	2.767	0.013	0.013	0.000	0.332	0.28	
793	6/14/2004	10:03:10 PM		26.165	26.759	24.867	27.547	26.487		46.489	49.147	12.802	34.379	-1.222	-7.395		47.074	0.089	14.643	0.004		768.45	12.8075	47.7	11.5	40.4	2.788	0.013	0.013	0.000	0.329	0.28	
794	6/14/2004	10:04:10 PM		26.181	26.779	24.863	27.523	26.493		46.238	48.853	12.875	34.075	-1.219	-7.392		49.156	0.09	14.643	0.004		769.45	12.8242	47.4	12.0	40.2	2.769	0.013	0.013	0.000	0.335	0.29	
795	6/14/2004	10:05:10 PM		26.172	26.765	24.854	27.478	26.449		46.444	49.299	12.83	34.285	-1.219	-7.395		46.357	0.089	14.643	0.004		770.45	12.8408	47.8	11.4	40.4	2.783	0.013	0.013	0.000	0.330	0.28	
796	6/14/2004	10:06:10 PM		26.173	26.771	24.854	27.454	26.425		46.431	49.139	12.83	34.342	-1.222	-7.392		49.039	0.089	14.643	0.004		771.45	12.8575	47.7	12.0	40.4	2.785	0.013	0.013	0.000	0.330	0.28	
797	6/14/2004	10:07:10 PM		26.162	26.76	24.869	27.419	26.409		46.216	48.965	12.806	34.133	-1.222	-7.389		45.576	0.09	14.643	0.003		772.45	12.8742	47.5	11.2	40.2	2.770	0.013	0.013	0.000	0.335	0.29	
798	6/14/2004	10:07:57 PM		26.157	26.755	24.849	27.404	26.409		46.661	49.777	12.917	34.358	-1.222	-7.389		48.647	0.09	14.643	0.003		773.23	12.8872	48.3	11.9	40.5	2.793	0.013	0.013	0.000	0.333	0.28	
799	6/14/2004	10:08:57 PM		26.163	26.761	24.854	27.404	26.41		46.664	49.624	12.837	34.479	-1.222	-7.395		45.562	0.089	14.643	0.004		774.23	12.9039	48.2	11.2	40.6	2.797	0.013	0.013	0.000	0.328	0.28	
800	6/14/2004	10:09:57 PM		26.149	26.752	24.83	27.38	26.376		46.255	48.917	12.825	34.139	-1.225	-7.392		48.103	0.09	14.643	0.003		775.23	12.9206	47.4	11.8	40.2	2.771	0.013	0.013	0.000	0.335	0.29	
801	6/14/2004	10:10:57 PM		26.176	26.78	24.868	27.408	26.408		46.249	48.913	12.779	34.227	-1.219	-7.389		45.433	0.089	14.643	0.004		776.23	12.9372	47.4	11.1	40.2	2.774	0.013	0.013	0.000	0.331	0.28	
802	6/14/2004	10:11:57 PM		26.157	26.756	24.859	27.349	26.384		46.618	49.469	12.848	34.473	-1.219	-7.384		49.608	0.091	14.643	0.004		777.23	12.9539	48.0	12.2	40.5	2.795	0.014	0.014	0.000	0.336	0.29	
803	6/14/2004	10:12:57 PM		26.149	26.747	24.836	27.341	26.391		46.672	49.788	12.87	34.434	-1.222	-7.398		44.905	0.088	14.643	0.004		778.23	12.9706	48.3	11.0	40.6	2.796	0.013	0.013	0.000	0.325	0.28	
804	6/14/2004	10:13:57 PM		26.127	26.726	24.909	27.304	26.364		46.313	49.226	12.763	34.282	-1.225	-7.398		50.165	0.089	14.643	0.003		779.23	12.9872	47.8	12.3	40.3	2.778	0.013	0.013	0.000	0.330	0.28	
805	6/14/2004	10:14:57 PM		26.127	26.726	24.964	27.329	26.364		46.471	49.241	12.862	34.301	-1.219	-7.392		45.873	0.088	14.643	0.004		780.23	13.0039	47.8	11.2	40.4	2.784	0.013	0.013	0.000	0.325	0.28	
806	6/14/2004	10:15:57 PM		26.132	26.711	24.949	27.314	26.349		46.153	48.861	12.771	34.065	-1.222	-7.395		51.242	0.089	14.643	0.003		781.23	13.0206	47.4	12.6	40.1	2.765	0.013	0.013	0.000	0.331	0.28	
807	6/14/2004	10:16:57 PM		26.141	26.705	24.918	27.303	26.368		46.464	49.27	12.756	34.43	-1.225	-7.386		55.192	0.09	14.643	0.003		782.23	13.0372	47.8	13.5	40.4	2.789	0.013	0.013	0.000	0.333	0.28	
808	6/14/2004	10:17:57 PM		26.141	26.7	24.898	27.288	26.388		46.62	49.417	12.76	34.584	-1.222	-7.392		49.69	0.089	14.643	0.003		783.23	13.0539	47.9	12.2	40.6	2.799	0.013	0.013	0.000	0.328	0.28	
809	6/14/2004	10:18:57 PM		26.157	26.711	24.909	27.304	26.359		46.607	49.487	12.743	34.557	-1.225	-7.389		50.301	0.089	14.643	0.004		784.23	13.0706	48.0	12.3	40.6	2.798	0.013	0.013	0.000	0.328	0.28	
810	6/14/2004	10:19:57 PM		26.142	26.696	24.884	27.314	26.279		46.527	49.62	12.841	34.299	-1.216	-7.384		41.801	0.09	14.643	0.004		785.23	13.0872	48.1	10.2	40.4	2.786	0.013	0.013	0.000	0.333	0.28	
811	6/14/2004	10:20:57 PM		26.132	26.686	24.869	27.244	26.284		46.377	49.458	12.714	34.323	-1.222	-7.386		49.928	0.091	14.643	0.004		786.23	13.1039	48.0	12.2	40.4	2.782	0.014	0.014	0.000	0.337	0.29	
812	6/14/2004	10:21:57 PM		26.129	26.673	24.841	27.251	26.272		46.282	49.471	12.717	34.231	-1.219	-7.392		45.161	0.087	14.643	0.004		787.23	13.1206	48.0	11.1	40.3	2.776	0.013	0.013	0.000	0.324	0.28	
813	6/14/2004	10:22:57 PM		26.133	26.681	24.87	27.245	26.275		46.128	49.12	12.725	34.102	-1.219	-7.363		41.082	0.09	14.643	0.004		788.23	13.1372	47.6	10.1	40.1	2.766	0.013	0.013	0.000	0.336	0.29	
814	6/14/2004	10:23:57 PM		26.11	26.659	24.822	27.242	26.267		46.23	49.149	12.726	34.221	-1.219	-7.378		44.907	0.088	14.643	0.004		789.23	13.1539	47.7	11.0	40.2	2.773	0.013	0.013	0.000	0.328	0.28	
815	6/14/2004	10:24:57 PM		26.113	26.662	24.85	27.235	26.246		46.363	49.201	12.782	34.276	-1.216	-7.375		48.962	0.089	14.643	0.004		790.23	13.1706	47.7	12.0	40.3	2.780	0.013	0.013	0.000	0.330	0.28	
816	6/14/2004	10:25:57 PM		26.093	26.636	24.794	27.179	26.23		46.417	49.35	12.802	34.328	-1.225	-7.384		47.692	0.087	14.643	0.003		791.23	13.1872	47.9	11.7	40.4	2.784	0.013	0.013	0.000	0.323	0.28	
817	6/14/2004	10:26:57 PM		26.107	26.64	24.803	27.224	26.229		46.253	49.365	12.798	34.102	-1.222	-7.378		48.1	0.089	14.643	0.004		792.23	13.2039	47.9	11.8	40.2	2.770	0.013	0.013	0.000	0.332	0.28	
818	6/14/2004	10:27:57 PM		26.091	26.639	24.822	27.193	26.213		46.243	49.232	12.738	34.244	-1.216	-7.363		46.599	0.089	14.643	0.004		793.23	13.2206	47.8	11.4	40.2	2.775	0.013	0.013	0.000	0.331	0.28	
819	6/14/2004	10:28:57 PM		26.08	26.618	24.787	27.167	26.222		46.429	49.552	12.764	34.381	-1.222	-7.375		49.216	0.087	14.643	0.004		794.23	13.2372	48.1	12.1	40.4	2.786	0.013	0.013	0.000	0.323	0.27	
820	6/14/2004	10:29:57 PM		26.09	26.628	24.832	27.192	26.217		46.178	49.317	12.717	34.145	-1.219	-7.366		53.152	0.089	14.643	0.004		795.23	13.2539	47.8	13.0	40.2	2.769	0.013	0.013	0.000	0.332	0.28	
821	6/14/2004	10:30:57 PM		26.054	26.598	24.771	27.156	26.216		46.211	49.394	12.744	34.102	-1.225	-7.366		47.402	0.089	14.643	0.004		796.23	13.2706	47.9	11.6	40.2	2.769	0.013	0.013	0.000	0.333	0.28	
822	6/14/2004	10:31:57 PM		26.053	26.597	24.795	27.17	26.261		46.294	49.454	12.724	34.227	-1.222	-7.366		50.18	0.087	14.643	0.004		797.23	13.2872	48.0	12.3	40.3	2.776	0.013	0.013	0.000	0.324	0.28	
823	6/14/2004	10:32:57 PM		26.058	26.597	24.79	27.275	26.305		46.35	49.477	12.792	34.256	-1.222	-7.363		53.321	0.088	14.643	0.004		798.23	13.3039	48.0	13.1	40.3	2.779	0.013	0.013	0.000	0.327	0.28	
824	6/14/2004	10:33:57 PM		26.063	26.602	24.81	27.32	26.345		46.357	49.558	12.843	34.186	-1.219	-7.36		46.058	0.088	14.643	0.004		799.23	13.3206	48.1	11.3	40.3	2.777	0.013	0.013	0.000	0.328	0.28	
825	6/14/2004	10:34:57 PM		26.058	26.602	24.8	27.375	26.405		46.485	49.748	12.773	34.375	-1.219	-7.36		44.903	0.088	14.643	0.004		800.23	13.3372	48.3	11.0	40.4	2.788	0.013	0.013	0.000	0.326	0.28	
826	6/14/2004	10:35:57 PM		26.055	26.583	24.772	27.422	26.462		46.205	49.131	12.733	34.301	-1.222	-7.358		49.755	0.088	14.643	0.004		801.23	13.3539	47.7	12.2	40.3	2.775	0.013	0.013	0.000	0.328	0.28	
827	6/14/2004	10:36:57 PM		26.057	26.595	24.808	27.443	26.528		46.224	49.104	12.694	34.274	-1.219	-7.355		56.921	0.088	14.643	0.004		802.23	13.3706	47.6	13.9	40.2	2.775	0.013	0.013	0.000	0.328	0.28	
828	6/14/2004	10:37:57 PM		26.043	26.581	24.769	27.444	26.519		46.336	49.413	12.734	34.348	-1.222	-7.36		47.254	0.088	14.643	0.004		803.23	13.3872	47.9	11.6	40.3	2.781	0.013	0.013	0.000	0.327	0.28	
829	6/14/2004	10:38:57 PM		26.049	26.583	24.791	27.396	26.491		46.46	49.634	12.771	34.379	-1.225	-7.36		46.624	0.088	14.643	0.004		804.23	13.4039	48.2	11.4	40.4	2.787	0.013	0.013	0.000	0.327	0.28	
830	6/14/2004	10:39:57 PM		26.051	26.59	24.833	27.388	26.473		46.164	49.508	12.744	34.073	-1.225	-7.363		44.542	0.087	14.643	0.003		805.23	13.4206	48.0	10.9	40.1	2.766	0.013	0.013	0.000	0.325	0.28	
831	6/14/2004	10:40:57 PM		26.051	26.58	24.928	27.373	26.418		46.311	49.529	12.699	34.313	-1.222	-7.355		45.249	0.088	14.643	0.004		806.23	13.4372	48.1	11.1	40.3	2.779	0.013	0.013	0.000	0.326	0.28	
832	6/14/2004	10:41:57 PM		26.058	26.586	24.93	27.355	26.425		46.191	49.583	12.704	34.092	-1.222	-7.36		45.195	0.087	14.643	0.004		807.23	13.4539	48.1	11.1	40.1	2.768	0.013	0.013	0.000	0.324	0.28	
833	6/14/2004	10:42:57 PM		26.068	26.581	24.89	27.34	26.41		46.298	49.469	12.46	34.58	-1.222	-7.36		41.296	0.087	14.643	0.003		808.23	13.4706	48.0	10.1	40.4	2.788	0.013	0.013	0.000	0.322	0.27	
834	6/14/2004	10:43:57 PM		26.068	26.581	24.885	27.305	26.415		46.112	49.388	12.422	34.377	-1.219	-7.349		48.641	0.089	14.643	0.003		809.23	13.4872	47.9	11.9	40.2	2.775	0.013	0.013	0.000	0.331	0.28	
835	6/14/2004	10:44:57 PM		26.068	26.581	24.86	27.305	26.39		46.645	49.968	12.399	34.951	-1.219	-7.352		47.831	0.088	14.643	0.004		810.23	13.5039	48.5	11.7	40.8	2.813	0.013	0.013	0.000	0.323	0.27	
836	6/14/2004	10:45:57 PM		26.078	26.581	24.844	27.28	26.385		46.535	49.763	12.391	34.775	-1.225	-7.352		49.062	0.088	14.643	0.004		811.23	13.5206	48.3	12.0	40.7	2.803	0.013	0.013	0.000	0.324	0.28	
837	6/14/2004	10:46:57 PM		26.074	26.582	24.83	27.27	26.381		46.541	49.779	12.378	34.865	-1.225	-7.346		45.656	0.089	14.643	0.004		812.23	13.5372	48.3	11.2	40.7	2.806	0.013	0.013	0.000	0.328	0.28	
838	6/14/2004	10:47:57 PM		26.069	26.572	24.795	27.295	26.376		46.692	49.921	12.434	34.91	-1.222	-7.355		47.012	0.087	14.643	0.004		813.23	13.5539	48.4	11.5	40.8	2.813	0.013	0.013	0.000	0.320	0.27	
839	6/14/2004	10:48:57 PM		26.053	26.571	24.804	27.275	26.355		46.618	49.885	12.407	34.935	-1.219	-7.352		45.136	0.087	14.643	0.004		814.23	13.5706	48.4	11.1	40.8	2.811	0.013	0.013	0.000	0.320	0.27	
840	6/14/2004	10:49:57 PM		26.054	26.562	24.765	27.275	26.331		46.423	49.819	12.404	34.685	-1.222	-7.349		49.164	0.088	14.643	0.004		815.23	13.5872	48.3	12.0	40.6	2.796	0.013	0.013	0.000	0.326	0.28	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
841	6/14/2004	10:50:57 PM		26.055	26.558	24.786	27.241	26.342		46.753	50.13	12.414	35.046	-1.222	-7.352		50.727	0.088	14.643	0.004		816.23	13.6039	48.7	12.4	40.9	2.820	0.013	0.013	0.000	0.323	0.27	
842	6/14/2004	10:51:57 PM		26.035	26.553	24.756	27.241	26.307		46.5	49.862	12.339	34.835	-1.219	-7.346		48.449	0.089	14.643	0.003		817.23	13.6206	48.4	11.9	40.7	2.804	0.013	0.013	0.000	0.329	0.28	
843	6/14/2004	10:52:57 PM		26.029	26.557	24.745	27.211	26.301		46.649	49.931	12.349	35.073	-1.225	-7.343		44.786	0.088	14.643	0.004		818.23	13.6372	48.5	11.0	40.9	2.817	0.013	0.013	0.000	0.323	0.28	
844	6/14/2004	10:53:57 PM		26.024	26.542	24.73	27.171	26.296		46.23	49.761	12.27	34.652	-1.225	-7.303		42.093	0.088	14.643	0.003		819.23	13.6539	48.3	10.3	40.4	2.788	0.013	0.013	0.000	0.327	0.28	
845	6/14/2004	10:54:57 PM		26.035	26.538	24.731	27.186	26.312		46.659	50.163	12.377	34.966	-1.222	-7.291		51.686	0.087	14.643	0.003		820.23	13.6706	48.7	12.7	40.8	2.814	0.013	0.013	0.000	0.320	0.27	
846	6/14/2004	10:55:57 PM		26.026	26.545	24.733	27.178	26.289		46.338	49.991	12.362	34.656	-1.225	-7.291		45.914	0.088	14.643	0.003		821.23	13.6872	48.5	11.3	40.5	2.792	0.013	0.013	0.000	0.326	0.28	
847	6/14/2004	10:56:57 PM		26.026	26.545	24.733	27.218	26.259		46.05	49.493	12.272	34.506	-1.219	-7.279		47.933	0.088	14.643	0.004		822.23	13.7039	48.0	11.7	40.3	2.777	0.013	0.013	0.000	0.328	0.28	
848	6/14/2004	10:57:57 PM		26.011	26.54	24.743	27.238	26.269		46.363	50.153	12.406	34.57	-1.219	-7.291		55.338	0.086	14.643	0.004		823.23	13.7206	48.7	13.6	40.5	2.790	0.013	0.013	0.000	0.319	0.27	
849	6/14/2004	10:58:57 PM		26.001	26.529	24.717	27.252	26.248		46.547	50.252	12.425	34.763	-1.219	-7.285		48.132	0.088	14.643	0.004		824.23	13.7372	48.8	11.8	40.7	2.803	0.013	0.013	0.000	0.325	0.28	
850	6/14/2004	10:59:57 PM		25.996	26.52	24.713	27.238	26.249		46.259	49.724	12.389	34.539	-1.225	-7.291		47.982	0.087	14.643	0.003		825.23	13.7539	48.3	11.8	40.4	2.785	0.013	0.013	0.000	0.324	0.28	
851	6/14/2004	11:00:57 PM		25.996	26.519	24.727	27.242	26.203		46.325	49.583	12.407	34.693	-1.222	-7.285		49.586	0.088	14.643	0.004		826.23	13.7706	48.1	12.2	40.5	2.793	0.013	0.013	0.000	0.326	0.28	
852	6/14/2004	11:01:57 PM		25.985	26.513	24.731	27.226	26.197		46.589	49.962	12.436	34.874	-1.222	-7.282		44.617	0.088	14.643	0.004		827.23	13.7872	48.5	10.9	40.7	2.808	0.013	0.013	0.000	0.325	0.28	
853	6/14/2004	11:02:57 PM		25.973	26.491	24.699	27.21	26.175		46.282	49.914	12.384	34.564	-1.222	-7.291		45.823	0.087	14.643	0.004		828.23	13.8039	48.4	11.2	40.4	2.787	0.013	0.013	0.000	0.324	0.28	
854	6/14/2004	11:03:57 PM		25.987	26.51	24.743	27.199	26.164		46.355	50.144	12.424	34.551	-1.222	-7.288		47.819	0.087	14.643	0.004		829.23	13.8206	48.7	11.7	40.5	2.789	0.013	0.013	0.000	0.323	0.27	
855	6/14/2004	11:04:57 PM		25.982	26.5	24.758	27.189	26.149		46.384	50.055	12.402	34.703	-1.222	-7.288		45.992	0.087	14.643	0.004		830.23	13.8372	48.6	11.3	40.5	2.795	0.013	0.013	0.000	0.322	0.27	
856	6/14/2004	11:05:57 PM		25.986	26.505	24.753	27.208	26.144		46.464	50.119	12.461	34.664	-1.219	-7.288		46.753	0.087	14.643	0.004		831.23	13.8539	48.6	11.5	40.6	2.797	0.013	0.013	0.000	0.322	0.27	
857	6/14/2004	11:06:57 PM		25.986	26.49	24.758	27.178	26.159		46.786	50.265	12.507	35.036	-1.219	-7.282		49.079	0.088	14.643	0.004		832.23	13.8706	48.8	12.0	40.9	2.821	0.013	0.013	0.000	0.323	0.27	
858	6/14/2004	11:07:57 PM		25.979	26.483	24.741	27.181	26.132		46.558	50.229	12.525	34.716	-1.219	-7.285		53.461	0.087	14.643	0.004		833.23	13.8872	48.8	13.1	40.6	2.802	0.013	0.013	0.000	0.322	0.27	
859	6/14/2004	11:08:57 PM		25.974	26.477	24.76	27.15	26.126		46.282	49.987	12.422	34.56	-1.219	-7.291		48.903	0.086	14.643	0.004		834.23	13.9039	48.5	12.0	40.4	2.787	0.013	0.013	0.000	0.319	0.27	
860	6/14/2004	11:09:57 PM		25.979	26.483	24.771	27.201	26.207		46.412	49.893	12.494	34.668	-1.219	-7.291		48.953	0.086	14.643	0.004		835.23	13.9206	48.4	12.0	40.5	2.795	0.013	0.013	0.000	0.318	0.27	
861	6/14/2004	11:10:57 PM		25.984	26.478	24.781	27.196	26.252		46.255	49.875	12.463	34.521	-1.219	-7.294		42.758	0.086	14.643	0.004		836.23	13.9372	48.4	10.5	40.4	2.785	0.013	0.013	0.000	0.319	0.27	
862	6/14/2004	11:11:57 PM		25.987	26.47	24.934	27.269	26.299		46.182	49.68	12.341	34.609	-1.219	-7.285		45.981	0.087	14.643	0.004		837.23	13.9539	48.2	11.3	40.4	2.785	0.013	0.013	0.000	0.322	0.27	
863	6/14/2004	11:12:57 PM		25.991	26.469	24.923	27.308	26.378		46.603	50.366	12.393	34.882	-1.222	-7.291		49.237	0.086	14.643	0.004		838.23	13.9706	48.9	12.1	40.7	2.809	0.013	0.013	0.000	0.315	0.27	
864	6/14/2004	11:13:57 PM		26.006	26.464	24.898	27.343	26.448		46.34	50.047	12.421	34.609	-1.222	-7.288		45.966	0.086	14.643	0.004		839.23	13.9872	48.6	11.3	40.5	2.791	0.013	0.013	0.000	0.318	0.27	
865	6/14/2004	11:14:57 PM		26.01	26.458	24.852	27.377	26.482		46.485	50.047	12.428	34.765	-1.222	-7.285		48.649	0.086	14.643	0.004		840.23	14.0039	48.6	11.9	40.6	2.801	0.013	0.013	0.000	0.317	0.27	
866	6/14/2004	11:15:57 PM		26.022	26.475	24.868	27.358	26.474		46.172	49.856	12.339	34.574	-1.219	-7.277		47.85	0.087	14.643	0.004		841.23	14.0206	48.4	11.7	40.4	2.784	0.013	0.013	0.000	0.322	0.27	
867	6/14/2004	11:16:57 PM		26.017	26.465	24.823	27.363	26.469		46.367	50.217	12.356	34.699	-1.222	-7.282		43.363	0.086	14.643	0.004		842.23	14.0372	48.7	10.6	40.5	2.795	0.013	0.013	0.000	0.318	0.27	
868	6/14/2004	11:17:57 PM		26.027	26.465	24.843	27.383	26.404		46.16	50.18	12.388	34.387	-1.222	-7.282		49.736	0.086	14.643	0.004		843.23	14.0539	48.7	12.2	40.3	2.777	0.013	0.013	0.000	0.320	0.27	
869	6/14/2004	11:18:57 PM		26.027	26.46	24.803	27.348	26.369		45.971	49.918	12.3	34.324	-1.225	-7.285		50.199	0.086	14.643	0.003		844.23	14.0706	48.4	12.3	40.1	2.768	0.013	0.013	0.000	0.321	0.27	
870	6/14/2004	11:19:57 PM		26.026	26.469	24.802	27.348	26.358		46.412	50.275	12.427	34.658	-1.222	-7.282		45.831	0.085	14.643	0.004		845.23	14.0872	48.8	11.2	40.5	2.795	0.013	0.013	0.000	0.314	0.27	
871	6/14/2004	11:20:57 PM		26.015	26.453	24.777	27.347	26.322		46.213	49.995	12.376	34.529	-1.222	-7.277		46.336	0.086	14.643	0.004		846.23	14.1039	48.5	11.4	40.4	2.783	0.013	0.013	0.000	0.320	0.27	
872	6/14/2004	11:21:57 PM		26.003	26.447	24.74	27.32	26.3		46.431	50.13	12.422	34.728	-1.225	-7.279		44.796	0.085	14.643	0.004		847.23	14.1206	48.7	11.0	40.6	2.798	0.013	0.013	0.000	0.315	0.27	
873	6/14/2004	11:22:57 PM		26.007	26.466	24.764	27.329	26.305		46.047	49.576	12.37	34.377	-1.219	-7.282		51.928	0.085	14.643	0.004		848.23	14.1372	48.1	12.7	40.2	2.772	0.013	0.013	0.000	0.317	0.27	
874	6/14/2004	11:23:57 PM		26.022	26.466	24.789	27.269	26.295		46.363	50.078	12.392	34.74	-1.222	-7.274		53.177	0.087	14.643	0.004		849.23	14.1539	48.6	13.0	40.6	2.796	0.013	0.013	0.000	0.322	0.27	
875	6/14/2004	11:24:57 PM		26.011	26.464	24.767	27.248	26.273		46.305	49.925	12.36	34.724	-1.222	-7.279		50.072	0.086	14.643	0.003		850.23	14.1706	48.5	12.3	40.5	2.793	0.013	0.013	0.000	0.319	0.27	
876	6/14/2004	11:25:57 PM		26.016	26.449	24.782	27.213	26.268		46.4	50.25	12.373	34.718	-1.219	-7.279		45.318	0.085	14.643	0.004		851.23	14.1872	48.8	11.1	40.6	2.796	0.013	0.013	0.000	0.314	0.27	
877	6/14/2004	11:26:57 PM		26.011	26.459	24.772	27.208	26.233		46.417	50.435	12.42	34.664	-1.219	-7.268		45.827	0.086	14.643	0.004		852.23	14.2039	49.0	11.2	40.5	2.795	0.013	0.013	0.000	0.318	0.27	
878	6/14/2004	11:27:57 PM		26	26.453	24.761	27.157	26.227		46.435	50.316	12.398	34.789	-1.222	-7.285		46.603	0.085	14.643	0.003		853.23	14.2206	48.8	11.4	40.6	2.800	0.013	0.013	0.000	0.314	0.27	
879	6/14/2004	11:28:57 PM		25.994	26.447	24.74	27.161	26.216		46.247	50.051	12.407	34.557	-1.225	-7.277		46.144	0.086	14.643	0.003		854.23	14.2372	48.6	11.3	40.4	2.786	0.013	0.013	0.000	0.320	0.27	
880	6/14/2004	11:29:57 PM		25.993	26.442	24.78	27.175	26.195		46.454	50.119	12.445	34.734	-1.219	-7.274		49.565	0.085	14.643	0.004		855.23	14.2539	48.6	12.1	40.6	2.799	0.013	0.013	0.000	0.314	0.27	
881	6/14/2004	11:30:57 PM		26.007	26.456	24.789	27.199	26.23		46.533	50.428	12.458	34.775	-1.219	-7.268		46.087	0.086	14.643	0.004		856.23	14.2706	49.0	11.3	40.7	2.803	0.013	0.013	0.000	0.317	0.27	
882	6/14/2004	11:31:57 PM		25.981	26.434	24.767	27.142	26.178		46.525	50.372	12.45	34.773	-1.219	-7.282		39.807	0.084	14.643	0.004		857.23	14.2872	48.9	9.8	40.6	2.803	0.013	0.013	0.000	0.310	0.26	
883	6/14/2004	11:32:57 PM		25.979	26.422	24.765	27.161	26.186		46.419	50.482	12.458	34.695	-1.219	-7.279		49.066	0.084	14.643	0.003		858.23	14.3039	49.0	12.0	40.6	2.796	0.013	0.013	0.000	0.311	0.26	
884	6/14/2004	11:33:57 PM		25.993	26.436	24.789	27.175	26.17		45.907	49.968	12.403	34.211	-1.219	-7.271		41.69	0.086	14.643	0.003		859.23	14.3206	48.5	10.2	40.1	2.762	0.013	0.013	0.000	0.322	0.27	
885	6/14/2004	11:34:57 PM		25.992	26.436	24.919	27.189	26.15		45.857	49.784	12.31	34.285	-1.216	-7.277		44.976	0.084	14.643	0.004		860.23	14.3372	48.3	11.0	40.1	2.763	0.013	0.013	0.000	0.313	0.27	
886	6/14/2004	11:35:57 PM		25.996	26.42	24.918	27.183	26.149		46.106	50.115	12.326	34.457	-1.222	-7.277		41.188	0.084	14.643	0.004		861.23	14.3539	48.6	10.1	40.3	2.777	0.013	0.013	0.000	0.312	0.27	
887	6/14/2004	11:36:57 PM		25.995	26.419	24.902	27.117	26.143		46.052	50.111	12.323	34.41	-1.222	-7.279		45.674	0.085	14.643	0.003		862.23	14.3706	48.6	11.2	40.2	2.774	0.013	0.013	0.000	0.316	0.27	
888	6/14/2004	11:37:57 PM		26.015	26.419	24.897	27.157	26.133		46.16	49.958	12.388	34.516	-1.219	-7.271		47.596	0.085	14.643	0.004		863.23	14.3872	48.5	11.7	40.3	2.781	0.013	0.013	0.000	0.315	0.27	
889	6/14/2004	11:38:57 PM		26.016	26.415	24.883	27.143	26.129		46.07	50.012	12.316	34.455	-1.219	-7.277		46.25	0.085	14.643	0.004		864.23	14.4039	48.5	11.3	40.3	2.776	0.013	0.013	0.000	0.316	0.27	
890	6/14/2004	11:39:57 PM		26.011	26.41	24.853	27.143	26.109		46.168	50.312	12.29	34.578	-1.219	-7.277		44.429	0.085	14.643	0.004		865.23	14.4206	48.8	10.9	40.4	2.784	0.013	0.013	0.000	0.315	0.27	
891	6/14/2004	11:40:57 PM		25.991	26.39	24.798	27.123	26.099		46.365	50.658	12.307	34.722	-1.222	-7.277		46.632	0.084	14.643	0.004		866.23	14.4372	49.2	11.4	40.5	2.795	0.013	0.013	0.000	0.311	0.26	
892	6/14/2004	11:41:57 PM		25.992	26.386	24.814	27.109	26.115		46.128	50.36	12.229	34.557	-1.222	-7.274		46.774	0.085	14.643	0.003		867.23	14.4539	48.9	11.5	40.3	2.781	0.013	0.013	0.000	0.316	0.27	
893	6/14/2004	11:42:57 PM		25.996	26.375	24.783	27.098	26.089		46.533	50.644	12.236	34.988	-1.225	-7.268		41.567	0.085	14.643	0.004		868.23	14.4706	49.2	10.2	40.8	2.810	0.013	0.013	0.000	0.313	0.27	
894	6/14/2004	11:43:57 PM		25.995	26.373	24.791	27.091	26.077		46.101	50.244	12.196	34.617	-1.219	-7.274		43.973	0.084	14.643	0.004		869.23	14.4872	48.8	10.8	40.4	2.783	0.013	0.013	0.000	0.312	0.27	
895	6/14/2004	11:44:57 PM		25.989	26.372	24.81	27.101	26.101		46.066	50.082	12.198	34.625	-1.216	-7.268		48.453	0.084	14.643	0.004		870.23	14.5039	48.6	11.9	40.3	2.782	0.013	0.013	0.000	0.312	0.27	
896	6/14/2004	11:45:57 PM		25.977	26.36	24.758	27.104	26.154		46.126	50.041	12.217	34.631	-1.228	-7.274		42.813	0.084	14.643	0.003		871.23	14.5206	48.6	10.5	40.4	2.784	0.013	0.013	0.000	0.312	0.27	
897	6/14/2004	11:46:57 PM		25.991	26.36	24.773	27.158	26.213		46.245	50.484	12.242	34.65	-1.219	-7.268		51.928	0.085	14.643	0.004		872.23	14.5372	49.0	12.7	40.4	2.789	0.013	0.013	0.000	0.315	0.27	
898	6/14/2004	11:47:57 PM		25.97	26.349	24.742	27.137	26.282		46.298	50.393	12.153	34.863	-1.222	-7.277		39.788	0.083	14.643	0.004		873.23	14.5539	48.9	9.8	40.6	2.798	0.012	0.012	0.000	0.307	0.26	
899	6/14/2004	11:48:57 PM		25.991	26.37	24.737	27.213	26.353		46.276	50.48	12.207	34.736	-1.222	-7.265		46.259	0.085	14.643	0.003		874.23	14.5706	49.0	11.3	40.5	2.793	0.013	0.013	0.000	0.315	0.27	
900	6/14/2004	11:49:57 PM		25.98	26.369	24.752	27.217	26.402		46.085	50.341	12.116	34.666	-1.222	-7.268		43.67	0.084	14.643	0.003		875.23	14.5872	48.9	10.7	40.4	2.784	0.013	0.013	0.000	0.312	0.27	
901	6/14/2004	11:50:57 PM		25.99	26.374	24.737	27.292	26.407		46.072	50.178	12.141	34.609	-1.222	-7.259		46.062	0.085	14.643	0.004		876.23	14.6039	48.7	11.3	40.3	2.781	0.013	0.013	0.000	0.316	0.27	
902	6/14/2004	11:51:57 PM		26.007	26.395	24.768	27.284	26.419		46.047	50.273	12.114	34.637	-1.219	-7.199		45.255	0.085	14.643	0.004		877.23	14.6206	48.8	11.1	40.3	2.781	0.013	0.013	0.000	0.316	0.27	
903	6/14/2004	11:52:57 PM		25.992	26.385	24.733	27.304	26.399		46.184	50.296	12.203	34.707	-1.222	-7.239		41.741	0.084	14.643	0.004		878.23	14.6372	48.8	10.2	40.4	2.789	0.013	0.013	0.000	0.312	0.27	
904	6/14/2004	11:53:57 PM		25.981	26.38	24.737	27.268	26.373		46.265	50.376	12.271	34.726	-1.219	-7.245		44.166	0.083	14.643	0.004		879.23	14.6539	48.9	10.8	40.5	2.792	0.012	0.012	0.000	0.308	0.26	
905	6/14/2004	11:54:57 PM		25.971	26.37	24.702	27.228	26.333		46.095	50.221	12.248	34.553	-1.225	-7.256		43.159	0.083	14.643	0.003		880.23	14.6706	48.7	10.6	40.3	2.780	0.012	0.012	0.000	0.309	0.26	
906	6/14/2004	11:55:57 PM		25.965	26.379	24.717	27.207	26.287		46.238	50.265	12.222	34.767	-1.222	-7.245		37.264	0.083	14.643	0.004		881.23	14.6872	48.8	9.1	40.5	2.793	0.012	0.012	0.000	0.308	0.26	
907	6/14/2004	11:56:57 PM		25.964	26.383	24.701	27.146	26.272		46.07	49.889	12.255	34.547	-1.222	-7.245		48.259	0.083	14.643	0.004		882.23	14.7039	48.4	11.8	40.3	2.779	0.012	0.012	0.000	0.310	0.26	
908	6/14/2004	11:57:57 PM		25.968	26.381	24.694	27.18	26.2		46.224	50.289	12.296	34.644	-1.219	-7.248		46.888	0.082	14.643	0.004		883.23	14.7206	48.8	11.5	40.4	2.788	0.012	0.012	0.000	0.305	0.26	
909	6/14/2004	11:58:57 PM		25.956	26.374	24.702	27.193	26.198		46.477	50.555	12.339	34.865	-1.219	-7.245		48.24	0.083	14.643	0.004		884.23	14.7372	49.1	11.8	40.7	2.804	0.012	0.012	0.000	0.307	0.26	
910	6/14/2004	11:59:57 PM		25.961	26.384	24.732	27.208	26.193		46.074	50.343	12.33	34.43	-1.222	-7.253		49.527	0.082	14.643	0.003		885.23	14.7539	48.9	12.1	40.3	2.775	0.012	0.012	0.000	0.306	0.26	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
911	6/15/2004	12:00:57 AM		25.954	26.388	24.911	27.221	26.197		46.193	50.405	12.214	34.722	-1.222	-7.251		51.569	0.082	14.643	0.003		886.23	14.7706	48.9	12.6	40.5	2.789	0.012	0.012	0.000	0.303	0.26	
912	6/15/2004	12:01:57 AM		25.974	26.403	24.926	27.211	26.217		46.798	50.725	12.346	35.192	-1.219	-7.23		43.055	0.085	14.643	0.004		887.23	14.7872	49.3	10.6	41.0	2.826	0.013	0.013	0.000	0.310	0.26	
913	6/15/2004	12:02:57 AM		25.983	26.397	24.905	27.195	26.201		46.634	51.021	12.32	34.97	-1.216	-7.236		46.323	0.083	14.643	0.004		888.23	14.8039	49.5	11.4	40.8	2.813	0.012	0.012	0.000	0.304	0.26	
914	6/15/2004	12:03:57 AM		25.983	26.381	24.869	27.169	26.18		46.58	50.799	12.321	34.97	-1.222	-7.236		45.67	0.084	14.643	0.004		889.23	14.8206	49.3	11.2	40.8	2.811	0.013	0.013	0.000	0.308	0.26	
915	6/15/2004	12:04:57 AM		26.002	26.39	24.898	27.149	26.179		46.556	50.333	12.259	35.066	-1.219	-7.239		42.323	0.084	14.643	0.004		890.23	14.8372	48.9	10.4	40.8	2.814	0.013	0.013	0.000	0.308	0.26	
916	6/15/2004	12:05:57 AM		25.991	26.374	24.847	27.103	26.143		46.643	50.893	12.341	35.001	-1.219	-7.233		52.224	0.084	14.643	0.004		891.23	14.8539	49.4	12.8	40.8	2.815	0.013	0.013	0.000	0.308	0.26	
917	6/15/2004	12:06:57 AM		25.996	26.379	24.857	27.083	26.183		46.56	50.951	12.334	34.917	-1.222	-7.236		48.739	0.083	14.643	0.004		892.23	14.8706	49.5	11.9	40.7	2.809	0.012	0.012	0.000	0.305	0.26	
918	6/15/2004	12:07:57 AM		25.983	26.356	24.819	27.049	26.155		46.572	50.878	12.302	34.982	-1.222	-7.236		46.194	0.083	14.643	0.004		893.23	14.8872	49.4	11.3	40.8	2.811	0.012	0.012	0.000	0.305	0.26	
919	6/15/2004	12:08:57 AM		25.986	26.359	24.827	27.078	26.148		46.446	50.634	12.276	34.954	-1.225	-7.242		49.936	0.083	14.643	0.004		894.23	14.9039	49.2	12.2	40.7	2.806	0.012	0.012	0.000	0.306	0.26	
920	6/15/2004	12:09:57 AM		25.996	26.374	24.822	27.133	26.128		46.833	51.274	12.416	35.052	-1.219	-7.236		46.534	0.083	14.643	0.004		895.23	14.9206	49.8	11.4	40.9	2.823	0.012	0.012	0.000	0.304	0.26	
921	6/15/2004	12:10:57 AM		25.99	26.368	24.816	27.117	26.137		46.666	51.087	12.352	34.999	-1.219	-7.239		48.127	0.082	14.643	0.004		896.23	14.9372	49.6	11.8	40.8	2.815	0.012	0.012	0.000	0.301	0.26	
922	6/15/2004	12:11:57 AM		25.995	26.358	24.811	27.117	26.102		46.593	50.948	12.334	34.943	-1.222	-7.233		46.73	0.084	14.643	0.003		897.23	14.9539	49.5	11.5	40.8	2.811	0.013	0.013	0.000	0.309	0.26	
923	6/15/2004	12:12:57 AM		25.984	26.352	24.79	27.141	26.087		46.634	50.619	12.297	35.126	-1.219	-7.239		46.84	0.082	14.643	0.004		898.23	14.9706	49.1	11.5	40.9	2.819	0.012	0.012	0.000	0.301	0.26	
924	6/15/2004	12:13:57 AM		25.974	26.347	24.805	27.101	26.097		46.707	51.023	12.322	35.077	-1.219	-7.242		51.102	0.082	14.643	0.004		899.23	14.9872	49.6	12.5	40.9	2.819	0.012	0.012	0.000	0.301	0.26	
925	6/15/2004	12:14:57 AM		25.981	26.339	24.827	27.088	26.083		46.263	50.646	12.301	34.638	-1.222	-7.233		49.246	0.083	14.643	0.004		900.23	15.0039	49.2	12.1	40.5	2.789	0.012	0.012	0.000	0.307	0.26	
926	6/15/2004	12:15:29 AM		25.975	26.338	24.816	27.077	26.082		46.415	50.696	12.353	34.752	-1.222	-7.236		49.318	0.082	14.643	0.004		900.77	15.0128	49.2	12.1	40.6	2.798	0.012	0.012	0.000	0.303	0.26	
927	6/15/2004	12:16:29 AM		25.985	26.338	24.806	27.087	26.077		46.643	50.706	12.334	35.034	-1.222	-7.233		53.221	0.082	14.643	0.004		901.77	15.0294	49.2	13.0	40.8	2.816	0.012	0.012	0.000	0.301	0.26	
928	6/15/2004	12:17:29 AM		25.979	26.342	24.815	27.021	26.096		46.578	51.038	12.386	34.869	-1.222	-7.227		44.525	0.081	14.643	0.004		902.77	15.0461	49.6	10.9	40.7	2.808	0.012	0.012	0.000	0.298	0.25	
929	6/15/2004	12:18:29 AM		25.98	26.333	24.806	27.062	26.067		46.377	51	12.329	34.724	-1.222	-7.225		44.515	0.083	14.643	0.003		903.77	15.0628	49.5	10.9	40.6	2.796	0.012	0.012	0.000	0.307	0.26	
930	6/15/2004	12:19:29 AM		25.968	26.322	24.815	27.04	26.066		46.599	50.808	12.348	34.956	-1.219	-7.225		46.198	0.082	14.643	0.004		904.77	15.0794	49.3	11.3	40.8	2.811	0.012	0.012	0.000	0.301	0.26	
931	6/15/2004	12:20:29 AM		25.98	26.333	24.806	27.057	26.067		46.614	51.1	12.345	34.956	-1.222	-7.23		48.814	0.082	14.643	0.003		905.77	15.0961	49.6	12.0	40.8	2.812	0.012	0.012	0.000	0.301	0.26	
932	6/15/2004	12:21:29 AM		25.976	26.324	24.817	27.063	26.103		46.471	50.816	12.302	34.894	-1.219	-7.219		49.871	0.083	14.643	0.004		906.77	15.1128	49.3	12.2	40.7	2.805	0.012	0.012	0.000	0.306	0.26	
933	6/15/2004	12:22:29 AM		25.991	26.334	24.837	27.153	26.128		46.744	51.293	12.427	34.97	-1.216	-7.225		45.13	0.082	14.643	0.003		907.77	15.1294	49.8	11.1	40.9	2.817	0.012	0.012	0.000	0.301	0.26	
934	6/15/2004	12:23:29 AM		25.981	26.329	24.812	27.138	26.193		46.603	51.063	12.43	34.81	-1.219	-7.222		46.092	0.083	14.643	0.004		908.77	15.1461	49.6	11.3	40.7	2.807	0.012	0.012	0.000	0.306	0.26	
935	6/15/2004	12:24:29 AM		25.971	26.319	24.817	27.148	26.263		46.651	50.919	12.424	34.964	-1.222	-7.239		46.962	0.08	14.643	0.003		909.77	15.1628	49.4	11.5	40.8	2.814	0.012	0.012	0.000	0.294	0.25	
936	6/15/2004	12:25:29 AM		25.987	26.321	24.819	27.179	26.319		46.626	51.332	12.397	34.89	-1.216	-7.222		43.524	0.082	14.643	0.004		910.77	15.1794	49.9	10.7	40.8	2.810	0.012	0.012	0.000	0.301	0.26	
937	6/15/2004	12:26:29 AM		25.983	26.327	24.835	27.21	26.365		46.423	51.071	12.408	34.722	-1.222	-7.222		44.744	0.081	14.643	0.004		911.77	15.1961	49.6	11.0	40.6	2.797	0.012	0.012	0.000	0.299	0.25	
938	6/15/2004	12:27:29 AM		25.984	26.322	24.826	27.256	26.361		46.556	51.065	12.433	34.783	-1.219	-7.227		46.09	0.081	14.643	0.004		912.77	15.2128	49.6	11.3	40.7	2.804	0.012	0.012	0.000	0.298	0.25	
939	6/15/2004	12:28:29 AM		25.986	26.329	24.832	27.263	26.328		46.338	50.606	12.433	34.635	-1.222	-7.225		46.826	0.081	14.643	0.003		913.77	15.2294	49.1	11.5	40.5	2.791	0.012	0.012	0.000	0.300	0.26	
940	6/15/2004	12:29:29 AM		25.976	26.319	24.997	27.263	26.308		46.357	50.919	12.374	34.605	-1.222	-7.227		46.119	0.081	14.643	0.003		914.77	15.2461	49.4	11.3	40.5	2.791	0.012	0.012	0.000	0.298	0.25	
941	6/15/2004	12:30:29 AM		26.008	26.331	24.989	27.279	26.319		46.355	50.776	12.314	34.763	-1.222	-7.225		37.139	0.081	14.643	0.004		915.77	15.2628	49.3	9.1	40.6	2.796	0.012	0.012	0.000	0.298	0.25	
942	6/15/2004	12:31:29 AM		26.008	26.331	24.969	27.299	26.29		46.164	50.522	12.365	34.521	-1.222	-7.216		48.545	0.082	14.643	0.004		916.77	15.2794	49.0	11.9	40.3	2.781	0.012	0.012	0.000	0.303	0.26	
943	6/15/2004	12:32:29 AM		26.028	26.337	24.96	27.31	26.265		45.807	50.727	12.332	34.122	-1.216	-6.571		50.66	0.079	14.643	0.004		917.77	15.2961	49.3	12.4	40.0	2.755	0.012	0.012	0.000	0.295	0.25	
944	6/15/2004	12:33:29 AM		26.036	26.349	24.963	27.268	26.273		46.369	51.015	12.306	34.785	-1.219	-7.149		48.659	0.082	14.643	0.004		918.77	15.3128	49.5	11.9	40.6	2.798	0.012	0.012	0.000	0.302	0.26	
945	6/15/2004	12:34:29 AM		26.03	26.323	24.912	27.262	26.247		46.666	51.688	12.374	34.9	-1.222	-7.193		48.509	0.082	14.643	0.003		919.77	15.3294	50.2	11.9	40.8	2.812	0.012	0.012	0.000	0.301	0.26	
946	6/15/2004	12:35:29 AM		26.029	26.338	24.911	27.216	26.251		46.354	50.996	12.388	34.642	-1.222	-7.187		44.104	0.083	14.643	0.004		920.77	15.3461	49.5	10.8	40.5	2.792	0.012	0.012	0.000	0.306	0.26	
947	6/15/2004	12:36:29 AM		26.046	26.349	24.912	27.223	26.218		46.216	50.843	12.306	34.601	-1.222	-7.187		49.402	0.082	14.643	0.003		921.77	15.3628	49.4	12.1	40.4	2.786	0.012	0.012	0.000	0.303	0.26	
948	6/15/2004	12:37:29 AM		26.042	26.335	24.898	27.179	26.209		46.336	51.112	12.358	34.599	-1.219	-7.196		48.082	0.081	14.643	0.004		922.77	15.3794	49.6	11.8	40.5	2.790	0.012	0.012	0.000	0.299	0.25	
949	6/15/2004	12:38:29 AM		26.042	26.325	24.893	27.164	26.169		46.284	51.046	12.335	34.65	-1.222	-7.193		48.926	0.081	14.643	0.004		923.77	15.3961	49.6	12.0	40.5	2.790	0.012	0.012	0.000	0.299	0.25	
950	6/15/2004	12:39:29 AM		26.036	26.324	24.852	27.158	26.163		46.458	51.098	12.343	34.798	-1.219	-7.19		44.824	0.081	14.643	0.004		924.77	15.4128	49.6	11.0	40.6	2.801	0.012	0.012	0.000	0.298	0.25	
951	6/15/2004	12:40:29 AM		26.038	26.326	24.874	27.134	26.175		46.24	50.785	12.331	34.646	-1.222	-7.19		39.92	0.081	14.643	0.004		925.77	15.4294	49.3	9.8	40.4	2.788	0.012	0.012	0.000	0.300	0.26	
952	6/15/2004	12:41:29 AM		26.036	26.314	24.837	27.153	26.163		46.415	51.033	12.349	34.781	-1.222	-7.187		43.343	0.082	14.643	0.003		926.77	15.4461	49.6	10.6	40.6	2.799	0.012	0.012	0.000	0.303	0.26	
953	6/15/2004	12:42:29 AM		26.035	26.323	24.857	27.172	26.177		46.381	50.878	12.397	34.697	-1.222	-7.199		49.464	0.081	14.643	0.004		927.77	15.4628	49.4	12.1	40.5	2.795	0.012	0.012	0.000	0.299	0.25	
954	6/15/2004	12:43:29 AM		26.026	26.304	24.837	27.183	26.138		46.22	51.301	12.379	34.447	-1.219	-7.184		44.64	0.081	14.643	0.004		928.77	15.4794	49.8	10.9	40.3	2.781	0.012	0.012	0.000	0.301	0.26	
955	6/15/2004	12:44:29 AM		26.023	26.297	24.835	27.18	26.131		46.039	50.648	12.344	34.399	-1.219	-7.187		48.357	0.081	14.643	0.004		929.77	15.4961	49.2	11.9	40.2	2.773	0.012	0.012	0.000	0.302	0.26	
956	6/15/2004	12:45:29 AM		26.026	26.304	24.922	27.237	26.113		46.328	51.025	12.388	34.631	-1.219	-7.196		49.825	0.08	14.643	0.004		930.77	15.5128	49.6	12.2	40.5	2.791	0.012	0.012	0.000	0.295	0.25	
957	6/15/2004	12:46:29 AM		26.028	26.302	24.915	27.18	26.116		46.398	51.092	12.381	34.73	-1.219	-7.19		45.879	0.08	14.643	0.004		931.77	15.5294	49.6	11.2	40.6	2.797	0.012	0.012	0.000	0.295	0.25	
958	6/15/2004	12:47:29 AM		26.024	26.282	24.89	27.116	26.121		46.352	51.125	12.357	34.677	-1.222	-7.19		46.703	0.081	14.643	0.004		932.77	15.5461	49.7	11.4	40.5	2.793	0.012	0.012	0.000	0.299	0.25	
959	6/15/2004	12:48:29 AM		26.032	26.296	24.879	27.114	26.095		46.355	51.114	12.288	34.765	-1.222	-7.187		47.623	0.081	14.643	0.004		933.77	15.5628	49.6	11.7	40.6	2.796	0.012	0.012	0.000	0.299	0.25	
960	6/15/2004	12:49:29 AM		26.047	26.311	24.894	27.099	26.11		46.133	50.673	12.284	34.594	-1.219	-7.201		52.399	0.078	14.643	0.004		934.77	15.5794	49.2	12.8	40.4	2.783	0.012	0.012	0.000	0.289	0.25	
961	6/15/2004	12:50:29 AM		26.041	26.294	24.867	27.087	26.133		46.184	51.108	12.325	34.527	-1.222	-7.19		46.38	0.079	14.643	0.003		935.77	15.5961	49.6	11.4	40.4	2.782	0.012	0.012	0.000	0.293	0.25	
962	6/15/2004	12:51:29 AM		26.035	26.288	24.871	27.077	26.177		46.047	50.735	12.329	34.352	-1.222	-7.181		45.683	0.081	14.643	0.004		936.77	15.6128	49.3	11.2	40.2	2.772	0.012	0.012	0.000	0.302	0.26	
963	6/15/2004	12:52:29 AM		26.034	26.282	24.83	27.056	26.181		46.384	50.917	12.322	34.794	-1.225	-7.193		43.72	0.08	14.643	0.003		937.77	15.6294	49.4	10.7	40.6	2.798	0.012	0.012	0.000	0.295	0.25	
964	6/15/2004	12:53:29 AM		26.048	26.306	24.89	27.095	26.145		46.425	51.494	12.329	34.748	-1.219	-7.19		49.2	0.079	14.643	0.004		938.77	15.6461	50.0	12.1	40.6	2.798	0.012	0.012	0.000	0.291	0.25	
965	6/15/2004	12:54:29 AM		26.03	26.273	24.836	27.052	26.137		46.298	51.063	12.348	34.621	-1.219	-7.187		51.092	0.08	14.643	0.004		939.77	15.6628	49.6	12.5	40.5	2.790	0.012	0.012	0.000	0.296	0.25	
966	6/15/2004	12:55:29 AM		26.033	26.286	24.854	27.08	26.17		46.537	51.237	12.429	34.761	-1.216	-7.175		43.426	0.082	14.643	0.004		940.77	15.6794	49.8	10.6	40.6	2.803	0.012	0.012	0.000	0.302	0.26	
967	6/15/2004	12:56:29 AM		26.021	26.28	24.918	27.073	26.219		46.464	51.494	12.347	34.771	-1.225	-7.187		47.585	0.08	14.643	0.004		941.77	15.6961	50.0	11.7	40.6	2.800	0.012	0.012	0.000	0.294	0.25	
968	6/15/2004	12:57:29 AM		26.015	26.268	24.866	27.142	26.262		45.973	51.034	12.25	34.377	-1.222	-7.193		42.214	0.078	14.643	0.004		942.77	15.7128	49.6	10.3	40.2	2.770	0.012	0.012	0.000	0.291	0.25	
969	6/15/2004	12:58:29 AM		26.03	26.283	24.901	27.186	26.307		46.025	50.729	12.304	34.449	-1.219	-7.175		48.017	0.081	14.643	0.004		943.77	15.7294	49.3	11.8	40.2	2.774	0.012	0.012	0.000	0.301	0.26	
970	6/15/2004	12:59:29 AM		26.035	26.298	24.891	27.201	26.337		46.338	51.119	12.348	34.672	-1.222	-7.181		51.625	0.08	14.643	0.004		944.77	15.7461	49.6	12.7	40.5	2.793	0.012	0.012	0.000	0.295	0.25	
971	6/15/2004	1:00:29 AM		26.045	26.304	24.907	27.252	26.382		46.274	51.166	12.363	34.596	-1.219	-7.175		44.056	0.081	14.643	0.004		945.77	15.7628	49.7	10.8	40.4	2.788	0.012	0.012	0.000	0.299	0.25	
972	6/15/2004	1:01:29 AM		26.046	26.305	24.888	27.303	26.413		46.077	51.071	12.284	34.463	-1.222	-7.17		53.29	0.081	14.643	0.004		946.77	15.7794	49.6	13.1	40.3	2.776	0.012	0.012	0.000	0.301	0.26	
973	6/15/2004	1:02:29 AM		26.058	26.316	24.884	27.325	26.43		46.095	50.882	12.267	34.521	-1.222	-7.184		44.208	0.078	14.643	0.004		947.77	15.7961	49.4	10.8	40.3	2.779	0.012	0.012	0.000	0.289	0.25	
974	6/15/2004	1:03:29 AM		26.043	26.306	24.864	27.325	26.415		46.421	51.002	12.33	34.816	-1.219	-7.175		46.442	0.08	14.643	0.004		948.77	15.8128	49.5	11.4	40.6	2.801	0.012	0.012	0.000	0.295	0.25	
975	6/15/2004	1:04:29 AM		26.044	26.312	24.875	27.266	26.391		45.992	50.942	12.295	34.356	-1.159	-7.167		47.629	0.081	14.643	0.003		949.77	15.8294	49.5	11.7	40.2	2.770	0.012	0.012	0.000	0.302	0.26	
976	6/15/2004	1:05:29 AM		26.06	26.324	24.872	27.282	26.327		46.211	51.131	12.376	34.547	-1.156	-7.178		50.628	0.079	14.643	0.004		950.77	15.8461	49.7	12.4	40.4	2.784	0.012	0.012	0.000	0.293	0.25	
977	6/15/2004	1:06:29 AM		26.045	26.323	24.866	27.261	26.297		46.243	50.994	12.352	34.57	-1.159	-7.167		42.721	0.08	14.643	0.004		951.77	15.8628	49.5	10.5	40.4	2.786	0.012	0.012	0.000	0.296	0.25	
978	6/15/2004	1:07:29 AM		26.051	26.335	24.888	27.223	26.253		46.209	51.398	12.321	34.523	-1.156	-7.178		48.837	0.079	14.643	0.004		952.77	15.8794	49.9	12.0	40.4	2.783	0.012	0.012	0.000	0.293	0.25	
979	6/15/2004	1:08:29 AM		26.046	26.324	24.857	27.187	26.243		45.969	51.104	12.323	34.289	-1.159	-7.172		47.16	0.079	14.643	0.003		953.77	15.8961	49.6	11.6	40.1	2.767	0.012	0.012	0.000	0.295	0.25	
980	6/15/2004	1:09:29 AM		26.049	26.337	24.87	27.161	26.216		45.689	50.447	12.234	34.182	-1.156	-7.172		48.152	0.079	14.643	0.004		954.77	15.9128	49.0	11.8	39.9	2.753	0.012	0.012	0.000	0.296	0.25	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
981	6/15/2004	1:10:29 AM		26.042	26.331	24.874	27.129	26.264		46.081	51.405	12.352	34.399	-0.776	-6.328		48.417	0.069	14.643	0.004		955.77	15.9294	49.9	11.9	40.2	2.774	0.010	0.010	0.000	0.257	0.22	
982	6/15/2004	1:11:29 AM		26.047	26.341	24.869	27.164	26.264		45.838	51.141	12.294	34.204	-0.91	-6.733		47.228	0.08	14.643	0.004		956.77	15.9461	49.7	11.6	40.0	2.759	0.012	0.012	0.000	0.299	0.25	
983	6/15/2004	1:12:29 AM		26.145	26.339	24.882	27.177	26.213		46.11	51.127	12.326	34.494	-1.005	-6.97		43.007	0.078	14.643	0.004		957.77	15.9628	49.7	10.5	40.3	2.779	0.012	0.012	0.000	0.290	0.25	
984	6/15/2004	1:13:29 AM		26.157	26.341	24.894	27.129	26.164		44.859	50.861	12.374	33.125	-0.09	-6.386		44.002	0.004	14.643	0.004		958.77	15.9794	49.4	10.8	39.0	2.688	0.001	0.001	0.000	0.015	0.01	
985	6/15/2004	1:14:29 AM		26.076	26.34	24.898	27.133	26.189		-5.249	-0.645	1.413	-5.853	-1.219	-6.392		-0.066	0.003	14.643	0.004		959.77	15.9961	-2.1	0.0	-5.6	-0.383	0.000	0.000	0.000	-0.081	-0.07	
986	6/15/2004	1:15:29 AM		26.09	26.349	24.907	27.027	26.143		-4.089	-0.794	1.274	-4.609	-1.219	-6.392		-0.072	0.003	14.643	0.004		960.77	16.0128	-2.3	0.0	-4.3	-0.300	0.000	0.000	0.000	-0.103	-0.09	
987	6/15/2004	1:19:09 PM		25.392	24.853	24.2	27.053	25.379		46.848	51.39	13.097	34.215	-1.219	-6.565		49.016	0.099	14.643	0.004		1684.43	28.0739	49.9	12.0	40.5	2.795	0.015	0.015	0.000	0.372	0.32	
988	6/15/2004	1:20:09 PM		25.375	24.892	24.264	27.057	25.357		47.555	51.214	12.999	35.165	-1.219	-7.566		45.172	0.095	14.643	0.004		1685.43	28.0906	49.7	11.1	41.4	2.852	0.014	0.014	0.000	0.350	0.30	
989	6/15/2004	1:21:09 PM		25.373	24.914	24.321	27.084	25.385		47.041	50.551	13.781	33.864	-1.225	-7.664		51.609	0.088	14.643	0.003		1686.43	28.1072	49.1	12.6	40.5	2.789	0.013	0.013	0.000	0.331	0.28	
990	6/15/2004	1:22:09 PM		25.405	24.936	24.369	27.051	25.387		47.252	50.855	13.538	34.233	-1.214	-7.658		54.815	0.087	14.643	0.004		1687.43	28.1239	49.4	13.4	40.7	2.809	0.013	0.013	0.000	0.324	0.28	
991	6/15/2004	1:23:09 PM		25.417	24.949	24.401	26.989	25.37		47.982	51.661	13.283	35.237	-1.216	-7.661		54.227	0.089	14.643	0.004		1688.43	28.1406	50.2	13.3	41.6	2.869	0.013	0.013	0.000	0.324	0.28	
992	6/15/2004	1:24:09 PM		25.415	24.967	24.444	26.997	25.373		48.074	51.892	13.346	35.235	-1.222	-7.644		46.742	0.087	14.643	0.004		1689.43	28.1572	50.4	11.5	41.7	2.872	0.013	0.013	0.000	0.316	0.27	
993	6/15/2004	1:25:09 PM		25.404	24.986	24.539	26.926	25.387		47.611	51.342	13.305	34.777	-1.225	-7.661		44.273	0.086	14.643	0.004		1690.43	28.1739	49.9	10.8	41.2	2.840	0.013	0.013	0.000	0.315	0.27	
994	6/15/2004	1:26:09 PM		25.407	24.999	24.601	26.984	25.389		47.798	51.487	13.105	35.181	-1.219	-7.661		51.646	0.085	14.643	0.004		1691.43	28.1906	50.0	12.7	41.5	2.861	0.013	0.013	0.000	0.309	0.26	
995	6/15/2004	1:27:09 PM		25.41	25.022	24.64	27.012	25.338		46.251	49.95	14.32	32.452	-1.222	-7.681		43.413	0.082	14.643	0.003		1692.43	28.2072	48.5	10.6	39.4	2.713	0.012	0.012	0.000	0.314	0.27	
996	6/15/2004	1:28:09 PM		25.434	25.046	24.683	27.075	25.356		46.943	50.486	13.828	33.677	-1.219	-7.667		63.367	0.084	14.643	0.004		1693.43	28.2239	49.0	15.5	40.3	2.779	0.013	0.013	0.000	0.313	0.27	
997	6/15/2004	1:29:09 PM		25.437	25.064	24.697	27.164	25.495		46.952	50.604	13.813	33.652	-1.219	-7.687		44.308	0.081	14.643	0.004		1694.43	28.2406	49.1	10.9	40.3	2.779	0.012	0.012	0.000	0.302	0.26	
998	6/15/2004	1:30:09 PM		25.457	25.079	24.712	27.254	25.589		47.008	50.644	13.801	33.798	-1.222	-7.681		48.534	0.083	14.643	0.004		1695.43	28.2572	49.2	11.9	40.4	2.786	0.012	0.012	0.000	0.309	0.26	
999	6/15/2004	1:31:09 PM		25.498	25.12	24.782	27.344	25.67		47.155	50.924	13.7	33.964	-1.216	-7.675		46.584	0.083	14.643	0.004		1696.43	28.2739	49.5	11.4	40.6	2.796	0.012	0.012	0.000	0.307	0.26	
1000	6/15/2004	1:32:09 PM		25.502	25.119	24.747	27.424	25.75		47.035	50.602	13.588	34.012	-1.219	-7.678		48.395	0.082	14.643	0.004		1697.43	28.2906	49.1	11.9	40.5	2.794	0.012	0.012	0.000	0.304	0.26	
1001	6/15/2004	1:33:09 PM		25.532	25.139	24.782	27.503	25.824		47.203	50.961	13.558	34.174	-1.219	-7.678		36.534	0.082	14.643	0.004		1698.43	28.3072	49.5	9.0	40.7	2.805	0.012	0.012	0.000	0.302	0.26	
1002	6/15/2004	1:34:09 PM		25.568	25.19	24.828	27.524	25.895		46.661	50.217	14.057	33.158	-1.222	-7.673		44.031	0.083	14.643	0.004		1699.43	28.3239	48.7	10.8	39.9	2.752	0.012	0.012	0.000	0.312	0.27	
1003	6/15/2004	1:35:09 PM		25.587	25.194	24.812	27.523	25.944		46.303	49.701	14.275	32.657	-1.219	-7.69		49.671	0.079	14.643	0.004		1700.43	28.3406	48.2	12.2	39.5	2.722	0.012	0.012	0.000	0.300	0.26	
1004	6/15/2004	1:36:09 PM		25.623	25.23	24.843	27.479	25.955		46.383	49.923	13.972	32.994	-1.222	-7.684		48.019	0.081	14.643	0.003		1701.43	28.3572	48.5	11.8	39.7	2.736	0.012	0.012	0.000	0.306	0.26	
1005	6/15/2004	1:37:09 PM		25.648	25.261	24.873	27.505	25.945		46.939	50.642	13.866	33.552	-1.219	-7.675		46.271	0.081	14.643	0.004		1702.43	28.3739	49.2	11.3	40.2	2.775	0.012	0.012	0.000	0.301	0.26	
1006	6/15/2004	1:38:09 PM		25.684	25.286	24.949	27.54	25.896		46.846	50.403	13.704	33.654	-1.219	-7.673		52.825	0.081	14.643	0.004		1703.43	28.3906	48.9	12.9	40.3	2.775	0.012	0.012	0.000	0.300	0.26	
1007	6/15/2004	1:39:09 PM		25.699	25.311	24.984	27.535	25.911		46.916	50.517	13.813	33.655	-1.219	-7.673		42.844	0.081	14.643	0.004		1704.43	28.4072	49.0	10.5	40.3	2.778	0.012	0.012	0.000	0.300	0.26	
1008	6/15/2004	1:40:09 PM		25.734	25.336	25.059	27.61	25.926		47.062	50.631	13.689	33.964	-1.219	-7.667		54.456	0.082	14.643	0.004		1705.43	28.4239	49.2	13.3	40.5	2.793	0.012	0.012	0.000	0.301	0.26	
1009	6/15/2004	1:41:09 PM		25.768	25.355	25.123	27.624	25.91		46.796	50.582	13.589	33.714	-1.216	-7.664		47.456	0.082	14.643	0.004		1706.43	28.4406	49.1	11.6	40.3	2.775	0.012	0.012	0.000	0.303	0.26	
1010	6/15/2004	1:42:09 PM		25.791	25.379	25.142	27.567	25.943		46.286	49.806	14.167	32.682	-1.219	-7.681		51.657	0.08	14.643	0.004		1707.43	28.4572	48.3	12.7	39.5	2.722	0.012	0.012	0.000	0.301	0.26	
1011	6/15/2004	1:43:09 PM		25.829	25.397	25.175	27.625	25.911		46.415	50.007	13.845	33.139	-1.216	-7.675		44.792	0.08	14.643	0.004		1708.43	28.4739	48.5	11.0	39.8	2.742	0.012	0.012	0.000	0.298	0.25	
1012	6/15/2004	1:44:09 PM		25.874	25.432	25.2	27.66	25.916		46.464	50.03	13.708	33.365	-1.216	-7.673		45.693	0.081	14.643	0.004		1709.43	28.4906	48.6	11.2	39.9	2.752	0.012	0.012	0.000	0.301	0.26	
1013	6/15/2004	1:45:09 PM		25.897	25.445	25.203	27.603	25.894		46.776	50.546	13.854	33.382	-1.225	-7.673		47.195	0.081	14.643	0.004		1710.43	28.5072	49.1	11.6	40.1	2.763	0.012	0.012	0.000	0.300	0.25	
1014	6/15/2004	1:46:09 PM		25.936	25.459	25.227	27.597	25.893		46.664	50.217	13.811	33.421	-1.222	-7.678		54.523	0.081	14.643	0.004		1711.43	28.5239	48.7	13.4	40.0	2.761	0.012	0.012	0.000	0.300	0.26	
1015	6/15/2004	1:47:09 PM		25.949	25.467	25.225	27.555	25.896		46.408	49.952	13.802	33.162	-1.222	-7.673		47.049	0.081	14.643	0.004		1712.43	28.5406	48.5	11.5	39.8	2.743	0.012	0.012	0.000	0.302	0.26	
1016	6/15/2004	1:48:09 PM		25.998	25.501	25.279	27.615	25.911		46.527	50.19	13.801	33.258	-1.219	-7.673		42.275	0.081	14.643	0.004		1713.43	28.5572	48.7	10.4	39.9	2.750	0.012	0.012	0.000	0.300	0.26	
1017	6/15/2004	1:49:09 PM		26.027	25.52	25.298	27.598	25.919		46.607	49.968	13.7	33.54	-1.219	-7.675		48.125	0.082	14.643	0.004		1714.43	28.5739	48.5	11.8	40.1	2.763	0.012	0.012	0.000	0.303	0.26	
1018	6/15/2004	1:50:09 PM		26.051	25.539	25.302	27.628	25.894		46.608	50.26	13.634	33.54	-1.225	-7.681		50.931	0.081	14.643	0.003		1715.43	28.5906	48.8	12.5	40.1	2.763	0.012	0.012	0.000	0.299	0.25	
1019	6/15/2004	1:51:09 PM		26.074	25.557	25.33	27.665	25.937		46.444	50.049	13.693	33.297	-1.219	-7.678		47.256	0.081	14.643	0.004		1716.43	28.6072	48.6	11.6	39.9	2.749	0.012	0.012	0.000	0.300	0.26	
1020	6/15/2004	1:52:09 PM		26.097	25.555	25.338	27.628	25.92		46.589	50.287	13.694	33.472	-1.219	-7.678		49.212	0.081	14.643	0.004		1717.43	28.6239	48.8	12.1	40.0	2.760	0.012	0.012	0.000	0.299	0.25	
1021	6/15/2004	1:53:09 PM		26.126	25.574	25.367	27.672	25.933		46.636	50.53	13.766	33.365	-1.219	-7.681		45.718	0.081	14.643	0.004		1718.43	28.6406	49.1	11.2	40.0	2.758	0.012	0.012	0.000	0.299	0.25	
1022	6/15/2004	1:54:09 PM		26.139	25.587	25.375	27.715	25.921		46.695	50.7	13.758	33.336	-1.222	-7.684		52.714	0.081	14.643	0.003		1719.43	28.6572	49.2	12.9	40.0	2.759	0.012	0.012	0.000	0.299	0.25	
1023	6/15/2004	1:55:09 PM		26.162	25.606	25.394	27.724	25.92		46.599	50.509	13.767	33.263	-1.222	-7.684		48.791	0.08	14.643	0.004		1720.43	28.6739	49.0	12.0	39.9	2.753	0.012	0.012	0.000	0.295	0.25	
1024	6/15/2004	1:56:09 PM		26.185	25.624	25.417	27.712	25.923		46.62	50.49	13.767	33.308	-1.216	-7.675		39.744	0.081	14.643	0.004		1721.43	28.6906	49.0	9.7	40.0	2.755	0.012	0.012	0.000	0.299	0.25	
1025	6/15/2004	1:57:09 PM		26.21	25.648	25.436	27.806	26.017		46.58	50.374	13.717	33.394	-1.216	-7.675		57.524	0.081	14.643	0.004		1722.43	28.7072	48.9	14.1	40.0	2.757	0.012	0.012	0.000	0.298	0.25	
1026	6/15/2004	1:58:09 PM		26.223	25.647	25.425	27.765	26.096		46.572	50.374	13.763	33.316	-1.222	-7.678		42.368	0.081	14.643	0.004		1723.43	28.7239	48.9	10.4	39.9	2.754	0.012	0.012	0.000	0.299	0.25	
1027	6/15/2004	1:59:09 PM		26.242	25.66	25.439	27.863	26.184		46.541	50.242	13.68	33.398	-1.219	-7.678		43.972	0.081	14.643	0.004		1724.43	28.7406	48.8	10.8	40.0	2.756	0.012	0.012	0.000	0.298	0.25	
1028	6/15/2004	2:00:09 PM		26.272	25.701	25.484	27.928	26.274		46.282	50.13	13.723	33.074	-1.219	-7.675		53.449	0.081	14.643	0.004		1725.43	28.7572	48.7	13.1	39.7	2.736	0.012	0.012	0.000	0.300	0.26	
1029	6/15/2004	2:01:09 PM		26.283	25.712	25.47	27.939	26.32		46.541	50.362	13.608	33.427	-1.219	-7.684		51.192	0.081	14.643	0.004		1726.43	28.7739	48.9	12.5	40.0	2.757	0.012	0.012	0.000	0.298	0.25	
1030	6/15/2004	2:02:09 PM		26.308	25.736	25.485	28.039	26.395		46.402	50.148	13.586	33.34	-1.222	-7.693		53.753	0.081	14.643	0.004		1727.43	28.7906	48.7	13.2	39.9	2.749	0.012	0.012	0.000	0.299	0.25	
1031	6/15/2004	2:03:09 PM		26.34	25.768	25.526	28.07	26.466		46.419	50.194	13.675	33.322	-1.219	-7.69		49.062	0.081	14.643	0.004		1728.43	28.8072	48.7	12.0	39.9	2.749	0.012	0.012	0.000	0.298	0.25	
1032	6/15/2004	2:04:09 PM		26.349	25.788	25.511	28.06	26.441		46.417	50.095	13.682	33.301	-1.222	-7.69		46.705	0.081	14.643	0.003		1729.43	28.8239	48.6	11.4	39.9	2.748	0.012	0.012	0.000	0.299	0.25	
1033	6/15/2004	2:05:09 PM		26.369	25.812	25.531	28.039	26.425		46.259	49.962	13.662	33.17	-1.219	-7.69		45.307	0.081	14.643	0.004		1730.43	28.8406	48.5	11.1	39.7	2.738	0.012	0.012	0.000	0.300	0.25	
1034	6/15/2004	2:06:09 PM		26.38	25.828	25.527	27.966	26.422		46.603	50.524	13.625	33.445	-1.222	-7.725		48.257	0.081	14.643	0.004		1731.43	28.8572	49.1	11.8	40.0	2.760	0.012	0.012	0.000	0.297	0.25	
1035	6/15/2004	2:07:09 PM		26.403	25.861	25.545	27.984	26.415		46.664	50.606	13.652	33.462	-1.219	-7.733		45.869	0.08	14.643	0.004		1732.43	28.8739	49.1	11.2	40.1	2.762	0.012	0.012	0.000	0.293	0.25	
1036	6/15/2004	2:08:09 PM		26.421	25.88	25.553	27.992	26.418		46.612	50.476	13.528	33.577	-1.222	-7.733		38.689	0.081	14.643	0.004		1733.43	28.8906	49.0	9.5	40.1	2.764	0.012	0.012	0.000	0.297	0.25	
1037	6/15/2004	2:09:09 PM		26.439	25.903	25.556	28.04	26.421		46.591	50.482	13.468	33.589	-1.219	-7.73		55.301	0.081	14.643	0.004		1734.43	28.9072	49.0	13.6	40.1	2.764	0.012	0.012	0.000	0.297	0.25	
1038	6/15/2004	2:10:09 PM		26.453	25.921	25.555	28.009	26.4		46.968	51.009	13.543	33.876	-1.222	-7.733		52.036	0.081	14.643	0.004		1735.43	28.9239	49.5	12.8	40.4	2.787	0.012	0.012	0.000	0.294	0.25	
1039	6/15/2004	2:11:09 PM		26.47	25.929	25.557	27.971	26.307		46.632	50.567	13.491	33.64	-1.222	-7.733		44.494	0.081	14.643	0.004		1736.43	28.9406	49.1	10.9	40.1	2.767	0.012	0.012	0.000	0.296	0.25	
1040	6/15/2004	2:12:09 PM		26.508	25.947	25.565	28.089	26.34		46.245	49.966	13.428	33.414	-1.222	-7.681		46.446	0.081	14.643	0.004		1737.43	28.9572	48.5	11.4	39.8	2.746	0.012	0.012	0.000	0.298	0.25	
1041	6/15/2004	2:13:09 PM		26.527	25.966	25.559	28.083	26.409		46.581	50.443	13.457	33.681	-1.225	-7.722		48.188	0.081	14.643	0.004		1738.43	28.9739	49.0	11.8	40.1	2.767	0.012	0.012	0.000	0.296	0.25	
1042	6/15/2004	2:14:09 PM		26.546	25.99	25.588	28.122	26.423		46.587	50.441	13.541	33.556	-1.222	-7.67		45.322	0.081	14.643	0.004		1739.43	28.9906	49.0	11.1	40.1	2.763	0.012	0.012	0.000	0.296	0.25	
1043	6/15/2004	2:15:09 PM		26.569	26.014	25.592	28.185	26.417		46.854	50.557	13.338	34.106	-1.219	-7.667		43.418	0.082	14.643	0.004		1740.43	29.0072	49.1	10.6	40.5	2.791	0.012	0.012	0.000	0.297	0.25	
1044	6/15/2004	2:16:09 PM		26.585	26.029	25.602	28.191	26.437		46.637	50.665	13.274	33.839	-1.219	-7.67		46.997	0.081	14.643	0.004		1741.43	29.0239	49.2	11.5	40.2	2.774	0.012	0.012	0.000	0.295	0.25	
1045	6/15/2004	2:17:09 PM		26.591	26.041	25.609	28.177	26.379		46.701	50.497	13.243	34.003	-1.222	-7.623		47.56	0.077	14.643	0.004		1742.43	29.0406	49.0	11.7	40.4	2.782	0.011	0.011	0.000	0.280	0.24	
1046	6/15/2004	2:18:09 PM		26.588	26.037	25.585	28.084	26.331		46.581	50.399	13.236	33.897	-1.219	-7.661		43.879	0.083	14.643	0.004		1743.43	29.0572	48.9	10.8	40.2	2.774	0.012	0.012	0.000	0.303	0.26	
1047	6/15/2004	2:19:09 PM		26.597	26.056	25.6	28.123	26.34		46.659	50.681	13.203	33.948	-1.219	-7.678		46.11	0.081	14.643	0.004		1744.43	29.0739	49.2	11.3	40.3	2.779	0.012	0.012	0.000	0.295	0.25	
1048	6/15/2004	2:20:09 PM		26.609	26.053	25.576	28.165	26.356		46.865	50.762	13.136	34.227	-1.225	-7.678		47.518	0.082	14.643	0.004		1745.43	29.0906	49.3	11.6	40.5	2.796	0.012	0.012	0.000	0.297	0.25	
1049	6/15/2004	2:21:09 PM		26.62	26.08	25.578	28.226	26.358		46.838	50.774	13.174	34.133	-1.222	-7.678		43.539	0.082	14.643	0.004		1746.43	29.1072	49.3	10.7	40.5	2.791	0.012	0.012	0.000	0.297	0.25	
1050	6/15/2004	2:22:09 PM		26.639	26.099	25.587	28.235	26.397		46.811	50.839	13.162	34.194	-1.219	-7.687		50.662	0.082	14.643	0.004		1747.43	29.1239	49.4	12.4	40.5	2.793	0.012	0.012	0.000	0.297	0.25	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1051	6/15/2004	2:23:09 PM		26.653	26.107	25.601	28.219	26.406		46.612	50.507	13.103	34.077	-1.219	-7.684		48.303	0.082	14.643	0.004		1748.43	29.1406	49.0	11.8	40.3	2.782	0.012	0.012	0.000	0.298	0.25	
1052	6/15/2004	2:24:09 PM		26.651	26.111	25.594	28.207	26.424		46.931	51.036	13.207	34.233	-1.219	-7.69		45.837	0.082	14.643	0.003		1749.43	29.1572	49.6	11.2	40.6	2.798	0.012	0.012	0.000	0.296	0.25	
1053	6/15/2004	2:25:09 PM		26.67	26.14	25.608	28.246	26.418		46.655	50.549	13.168	34.044	-1.216	-7.687		48.91	0.081	14.643	0.004		1750.43	29.1739	49.1	12.0	40.3	2.782	0.012	0.012	0.000	0.294	0.25	
1054	6/15/2004	2:26:09 PM		26.674	26.144	25.552	28.215	26.447		46.717	50.48	13.152	34.149	-1.225	-7.696		47.072	0.083	14.643	0.003		1751.43	29.1906	49.0	11.5	40.4	2.788	0.012	0.012	0.000	0.301	0.26	
1055	6/15/2004	2:27:09 PM		26.683	26.162	25.521	28.244	26.476		46.933	50.888	13.205	34.205	-1.222	-7.707		52.55	0.082	14.643	0.003		1752.43	29.2072	49.4	12.9	40.6	2.797	0.012	0.012	0.000	0.297	0.25	
1056	6/15/2004	2:28:09 PM		26.686	26.176	25.484	28.267	26.499		46.786	50.797	13.141	34.198	-1.222	-7.702		42.946	0.082	14.643	0.004		1753.43	29.2239	49.3	10.5	40.5	2.792	0.012	0.012	0.000	0.298	0.25	
1057	6/15/2004	2:29:09 PM		26.685	26.19	25.423	28.266	26.488		46.74	50.671	13.184	34.12	-1.222	-7.67		46.221	0.075	14.643	0.004		1754.43	29.2406	49.2	11.3	40.4	2.788	0.011	0.011	0.000	0.273	0.23	
1058	6/15/2004	2:30:09 PM		26.668	26.193	25.351	28.254	26.486		46.782	50.673	13.268	34.022	-1.222	-7.69		45.645	0.081	14.643	0.003		1755.43	29.2572	49.2	11.2	40.4	2.786	0.012	0.012	0.000	0.296	0.25	
1059	6/15/2004	2:31:09 PM		26.648	26.192	25.29	28.064	26.465		46.946	51.226	13.224	34.159	-1.219	-7.704		43.24	0.08	14.643	0.004		1756.43	29.2739	49.8	10.6	40.6	2.796	0.012	0.012	0.000	0.292	0.25	
1060	6/15/2004	2:32:09 PM		26.621	26.18	25.213	27.952	26.393		46.769	51.009	13.18	34.079	-1.219	-7.702		44.454	0.081	14.643	0.004		1757.43	29.2906	49.5	10.9	40.4	2.787	0.012	0.012	0.000	0.297	0.25	
1061	6/15/2004	2:33:09 PM		26.618	26.203	25.141	27.905	26.381		46.649	50.517	13.151	34.04	-1.219	-7.71		46.321	0.08	14.643	0.004		1758.43	29.3072	49.0	11.4	40.3	2.782	0.012	0.012	0.000	0.294	0.25	
1062	6/15/2004	2:34:09 PM		26.596	26.205	25.078	27.862	26.358		46.628	50.486	13.123	34.061	-1.225	-7.713		38.626	0.079	14.643	0.003		1759.43	29.3239	49.0	9.5	40.3	2.782	0.012	0.012	0.000	0.291	0.25	
1063	6/15/2004	2:35:09 PM		26.598	26.227	25.035	27.889	26.385		46.811	50.878	13.189	34.108	-1.219	-7.716		52.068	0.078	14.643	0.004		1760.43	29.3406	49.4	12.8	40.5	2.790	0.012	0.012	0.000	0.287	0.24	
1064	6/15/2004	2:36:09 PM		26.579	26.238	24.996	27.891	26.377		46.636	50.718	13.164	34.034	-1.219	-7.713		56.654	0.078	14.643	0.004		1761.43	29.3572	49.2	13.9	40.3	2.781	0.012	0.012	0.000	0.288	0.25	
1065	6/15/2004	2:37:09 PM		26.563	26.252	24.925	27.869	26.345		46.649	50.617	13.109	34.092	-1.222	-7.713		45.681	0.079	14.643	0.004		1762.43	29.3739	49.1	11.2	40.4	2.783	0.012	0.012	0.000	0.292	0.25	
1066	6/15/2004	2:38:09 PM		26.557	26.281	24.903	27.908	26.349		46.726	50.704	13.176	34.106	-1.219	-7.713		49.337	0.079	14.643	0.004		1763.43	29.3906	49.2	12.1	40.4	2.787	0.012	0.012	0.000	0.292	0.25	
1067	6/15/2004	2:39:09 PM		26.531	26.28	24.847	27.852	26.353		46.636	50.785	13.225	33.868	-1.222	-7.71		48.641	0.081	14.643	0.004		1764.43	29.4072	49.3	11.9	40.3	2.775	0.012	0.012	0.000	0.301	0.26	
1068	6/15/2004	2:40:09 PM		26.516	26.29	24.807	27.852	26.348		46.574	50.874	13.218	33.788	-1.225	-7.719		50.71	0.078	14.643	0.004		1765.43	29.4239	49.4	12.4	40.2	2.770	0.012	0.012	0.000	0.291	0.25	
1069	6/15/2004	2:41:09 PM		26.486	26.301	24.768	27.853	26.354		46.585	50.577	13.102	34.016	-1.222	-7.725		48.079	0.078	14.643	0.003		1766.43	29.4406	49.1	11.8	40.3	2.779	0.012	0.012	0.000	0.290	0.25	
1070	6/15/2004	2:42:09 PM		26.478	26.317	24.724	27.824	26.345		46.688	50.374	13.137	34.207	-1.222	-7.733		44.246	0.076	14.643	0.004		1767.43	29.4572	48.9	10.8	40.4	2.789	0.011	0.011	0.000	0.282	0.24	
1071	6/15/2004	2:43:09 PM		26.449	26.308	24.675	27.755	26.336		46.479	50.553	13.145	33.841	-1.219	-7.733		47.568	0.077	14.643	0.004		1768.43	29.4739	49.1	11.7	40.2	2.769	0.011	0.012	0.000	0.288	0.25	
1072	6/15/2004	2:44:09 PM		26.427	26.326	24.638	27.703	26.339		46.628	50.737	13.205	33.934	-1.222	-7.73		42.9	0.077	14.643	0.004		1769.43	29.4906	49.3	10.5	40.3	2.777	0.011	0.012	0.000	0.288	0.25	
1073	6/15/2004	2:45:09 PM		26.409	26.328	24.61	27.731	26.336		46.468	50.451	13.124	33.88	-1.216	-7.673		48.993	0.078	14.643	0.004		1770.43	29.5072	49.0	12.0	40.2	2.770	0.012	0.012	0.000	0.293	0.25	
1074	6/15/2004	2:46:09 PM		26.388	26.327	24.564	27.764	26.39		46.892	51.127	13.177	34.18	-1.222	-7.704		47.164	0.077	14.643	0.004		1771.43	29.5239	49.7	11.6	40.5	2.795	0.011	0.012	0.000	0.287	0.24	
1075	6/15/2004	2:47:09 PM		26.357	26.336	24.533	27.778	26.364		46.726	50.762	13.165	34.1	-1.222	-7.704		47.838	0.077	14.643	0.004		1772.43	29.5406	49.3	11.7	40.4	2.786	0.011	0.012	0.000	0.288	0.24	
1076	6/15/2004	2:48:09 PM		26.341	26.335	24.496	27.777	26.343		46.815	50.843	13.232	34.165	-1.222	-7.707		39.628	0.077	14.643	0.004		1773.43	29.5572	49.4	9.7	40.5	2.792	0.011	0.012	0.000	0.288	0.24	
1077	6/15/2004	2:49:09 PM		26.309	26.338	24.47	27.775	26.341		47.369	51.388	13.287	34.631	-1.219	-7.696		52.247	0.079	14.643	0.004		1774.43	29.5739	49.9	12.8	41.0	2.827	0.012	0.012	0.000	0.292	0.25	
1078	6/15/2004	2:50:09 PM		26.292	26.351	24.462	27.773	26.434		46.415	50.509	13.984	32.953	-1.219	-7.71		44.404	0.077	14.643	0.004		1775.43	29.5906	49.0	10.9	39.7	2.736	0.011	0.012	0.000	0.294	0.25	
1079	6/15/2004	2:51:09 PM		26.277	26.361	24.462	27.803	26.459		46.182	50.169	13.918	32.879	-1.219	-7.719		50.766	0.076	14.643	0.004		1776.43	29.6072	48.7	12.4	39.5	2.725	0.011	0.012	0.000	0.291	0.25	
1080	6/15/2004	2:52:09 PM		26.235	26.339	24.431	27.866	26.487		46.373	50.621	13.954	32.858	-1.222	-7.722		46.334	0.075	14.643	0.004		1777.43	29.6239	49.1	11.4	39.6	2.731	0.011	0.011	0.000	0.287	0.24	
1081	6/15/2004	2:53:09 PM		26.245	26.369	24.441	27.941	26.532		46.442	50.464	13.936	33.059	-1.222	-7.713		56.801	0.076	14.643	0.004		1778.43	29.6406	49.0	13.9	39.8	2.741	0.011	0.012	0.000	0.290	0.25	
1082	6/15/2004	2:54:09 PM		26.24	26.378	24.43	28.01	26.601		46.614	50.98	13.853	33.172	-1.222	-7.713		51.446	0.077	14.643	0.004		1779.43	29.6572	49.5	12.6	39.9	2.750	0.011	0.012	0.000	0.292	0.25	
1083	6/15/2004	2:55:09 PM		26.229	26.383	24.404	28.015	26.625		46.632	50.808	13.747	33.414	-1.222	-7.716		48.778	0.074	14.643	0.003		1780.43	29.6739	49.3	12.0	40.0	2.759	0.011	0.011	0.000	0.280	0.24	
1084	6/15/2004	2:56:09 PM		26.219	26.398	24.394	28.119	26.71		46.759	51.118	13.752	33.46	-1.222	-7.716		43.149	0.075	14.643	0.004		1781.43	29.6906	49.6	10.6	40.1	2.765	0.011	0.011	0.000	0.284	0.24	
1085	6/15/2004	2:57:09 PM		26.21	26.414	24.375	28.135	26.726		46.778	50.967	13.792	33.517	-1.222	-7.722		52.134	0.074	14.643	0.004		1782.43	29.7072	49.5	12.8	40.1	2.768	0.011	0.011	0.000	0.280	0.24	
1086	6/15/2004	2:58:09 PM		26.21	26.429	24.376	28.096	26.666		46.58	50.806	13.774	33.293	-1.216	-7.722		55.864	0.074	14.643	0.004		1783.43	29.7239	49.3	13.7	39.9	2.753	0.011	0.011	0.000	0.281	0.24	
1087	6/15/2004	2:59:09 PM		26.201	26.44	24.351	28.057	26.657		46.506	50.735	13.776	33.228	-1.222	-7.716		44.508	0.077	14.643	0.004		1784.43	29.7406	49.3	10.9	39.9	2.749	0.011	0.012	0.000	0.293	0.25	
1088	6/15/2004	3:00:09 PM		26.197	26.461	24.347	28.008	26.623		46.355	50.573	13.704	33.123	-1.222	-7.716		48.495	0.077	14.643	0.004		1785.43	29.7572	49.1	11.9	39.7	2.740	0.011	0.012	0.000	0.294	0.25	
1089	6/15/2004	3:01:09 PM		26.191	26.465	24.316	28.022	26.612		46.529	50.901	13.741	33.25	-1.222	-7.728		48.144	0.075	14.643	0.004		1786.43	29.7739	49.4	11.8	39.9	2.750	0.011	0.011	0.000	0.286	0.24	
1090	6/15/2004	3:02:09 PM		26.191	26.465	24.316	28.042	26.597		46.834	50.932	13.795	33.597	-1.222	-7.722		43.511	0.075	14.643	0.004		1787.43	29.7906	49.5	10.7	40.2	2.773	0.011	0.011	0.000	0.283	0.24	
1091	6/15/2004	3:03:09 PM		26.181	26.489	24.31	28.046	26.587		46.834	51.245	13.846	33.433	-1.219	-7.597		51.173	0.073	14.643	0.004		1788.43	29.8072	49.8	12.5	40.1	2.767	0.011	0.011	0.000	0.277	0.24	
1092	6/15/2004	3:03:51 PM		26.171	26.474	24.285	28.021	26.572		46.626	51.081	13.772	33.281	-1.219	-7.603		51.386	0.079	14.643	0.004		1789.13	29.8189	49.6	12.6	40.0	2.755	0.012	0.012	0.000	0.301	0.26	
1093	6/15/2004	3:04:51 PM		26.176	26.495	24.286	28.057	26.572		46.724	51.187	13.789	33.345	-1.222	-7.707		46.845	0.075	14.643	0.004		1790.13	29.8356	49.7	11.5	40.0	2.760	0.011	0.011	0.000	0.285	0.24	
1094	6/15/2004	3:05:51 PM		26.156	26.494	24.29	27.976	26.552		46.585	50.762	13.727	33.365	-1.222	-7.678		44.68	0.072	14.643	0.004		1791.13	29.8522	49.3	10.9	40.0	2.756	0.011	0.011	0.000	0.274	0.23	
1095	6/15/2004	3:06:51 PM		26.169	26.518	24.309	28.015	26.52		46.554	50.969	13.708	33.31	-1.219	-7.626		50.641	0.076	14.643	0.004		1792.13	29.8689	49.5	12.4	39.9	2.753	0.011	0.012	0.000	0.289	0.25	
1096	6/15/2004	3:07:51 PM		26.153	26.507	24.278	27.979	26.555		46.68	50.884	13.743	33.41	-1.219	-7.687		46.279	0.074	14.643	0.004		1793.13	29.8856	49.4	11.3	40.0	2.761	0.011	0.011	0.000	0.281	0.24	
1097	6/15/2004	3:08:51 PM		26.143	26.517	24.258	27.984	26.525		47.13	51.384	13.501	34.139	-1.222	-7.693		50.572	0.074	14.643	0.004		1794.13	29.9022	49.9	12.4	40.6	2.802	0.011	0.011	0.000	0.277	0.24	
1098	6/15/2004	3:09:51 PM		26.138	26.522	24.243	27.989	26.535		46.483	50.77	13.369	33.667	-1.219	-7.687		48.255	0.074	14.643	0.004		1795.13	29.9189	49.3	11.8	40.1	2.763	0.011	0.011	0.000	0.281	0.24	
1099	6/15/2004	3:10:51 PM		26.127	26.515	24.226	27.957	26.513		46.964	51.415	13.558	33.823	-1.219	-7.603		50.503	0.078	14.643	0.004		1796.13	29.9356	49.9	12.4	40.4	2.785	0.012	0.012	0.000	0.294	0.25	
1100	6/15/2004	3:11:51 PM		26.128	26.516	24.212	27.943	26.509		46.518	50.731	13.661	33.406	-1.219	-7.664		45.987	0.076	14.643	0.004		1797.13	29.9522	49.3	11.3	40.0	2.755	0.011	0.012	0.000	0.290	0.25	
1101	6/15/2004	3:12:51 PM		26.107	26.51	24.186	27.997	26.498		46.757	51.152	13.674	33.558	-1.222	-7.493		48.317	0.073	14.643	0.004		1798.13	29.9689	49.7	11.8	40.2	2.769	0.011	0.011	0.000	0.277	0.24	
1102	6/15/2004	3:13:51 PM		26.108	26.536	24.197	28.013	26.519		46.4	50.571	13.573	33.408	-1.222	-7.635		49.755	0.076	14.643	0.004		1799.13	29.9856	49.1	12.2	39.9	2.751	0.011	0.012	0.000	0.290	0.25	
1103	6/15/2004	3:14:51 PM		26.112	26.535	24.196	28.062	26.538		47.101	51.477	13.708	33.864	-1.219	-7.6		47.677	0.073	14.643	0.004		1800.13	30.0022	50.0	11.7	40.5	2.791	0.011	0.011	0.000	0.275	0.23	
1104	6/15/2004	3:15:51 PM		26.091	26.53	24.16	28.002	26.507		46.408	50.797	13.68	33.213	-1.222	-7.519		45.668	0.076	14.643	0.004		1801.13	30.0189	49.3	11.2	39.8	2.745	0.011	0.012	0.000	0.291	0.25	
1105	6/15/2004	3:16:51 PM		26.091	26.535	24.16	27.967	26.497		46.997	51.514	13.735	33.646	-1.225	-7.641		44.392	0.075	14.643	0.004		1802.13	30.0356	50.0	10.9	40.3	2.780	0.011	0.011	0.000	0.284	0.24	
1106	6/15/2004	3:17:51 PM		26.085	26.529	24.155	27.961	26.502		46.659	50.861	13.719	33.492	-1.222	-7.502		48.561	0.066	14.643	0.004		1803.13	30.0522	49.4	11.9	40.1	2.763	0.010	0.010	0.000	0.251	0.21	
1107	6/15/2004	3:18:51 PM		26.09	26.544	24.15	27.956	26.492		46.975	51.442	13.731	33.698	-1.222	-7.528		52.034	0.074	14.643	0.004		1804.13	30.0689	50.0	12.8	40.3	2.781	0.011	0.011	0.000	0.280	0.24	
1108	6/15/2004	3:19:51 PM		26.09	26.548	24.149	27.995	26.496		46.786	51.1	13.684	33.632	-1.222	-7.632		52.91	0.077	14.643	0.004		1805.13	30.0856	49.6	13.0	40.2	2.772	0.011	0.012	0.000	0.292	0.25	
1109	6/15/2004	3:20:51 PM		26.074	26.537	24.143	27.969	26.475		46.506	50.834	13.65	33.386	-1.222	-7.649		44.235	0.074	14.643	0.004		1806.13	30.1022	49.4	10.8	39.9	2.754	0.011	0.011	0.000	0.283	0.24	
1110	6/15/2004	3:21:51 PM		26.063	26.532	24.142	27.934	26.474		46.856	51.096	13.668	33.737	-1.222	-7.658		48.463	0.074	14.643	0.004		1807.13	30.1189	49.6	11.9	40.3	2.778	0.011	0.011	0.000	0.281	0.24	
1111	6/15/2004	3:22:51 PM		26.062	26.536	24.147	27.948	26.489		47.006	51.496	13.663	33.761	-1.222	-7.632		43.407	0.073	14.643	0.004		1808.13	30.1356	50.0	10.6	40.4	2.784	0.011	0.011	0.000	0.276	0.23	
1112	6/15/2004	3:23:51 PM		26.062	26.546	24.147	27.988	26.484		46.798	50.94	13.563	33.833	-1.219	-7.525		49.527	0.073	14.643	0.004		1809.13	30.1522	49.5	12.1	40.3	2.780	0.011	0.011	0.000	0.277	0.24	
1113	6/15/2004	3:24:51 PM		26.067	26.551	24.137	28.018	26.489		46.995	51.554	13.449	33.944	-1.219	-7.543		49.757	0.075	14.643	0.004		1810.13	30.1689	50.1	12.2	40.5	2.790	0.011	0.011	0.000	0.283	0.24	
1114	6/15/2004	3:25:51 PM		26.052	26.546	24.112	27.988	26.489		46.904	51.179	13.536	33.856	-1.222	-7.623		51.582	0.079	14.643	0.004		1811.13	30.1856	49.7	12.6	40.4	2.784	0.012	0.012	0.000	0.299	0.25	
1115	6/15/2004	3:26:51 PM		26.032	26.525	24.076	27.942	26.513		46.977	51.346	13.514	34.001	-1.222	-7.291		41.713	0.062	14.643	0.004		1812.13	30.2022	49.9	10.2	40.5	2.792	0.009	0.009	0.000	0.234	0.20	
1116	6/15/2004	3:27:51 PM		26.049	26.547	24.093	28.004	26.595		46.811	51.019	13.562	33.751	-1.225	-7.566		51.826	0.076	14.643	0.004		1813.13	30.2189	49.5	12.7	40.3	2.777	0.011	0.012	0.000	0.289	0.25	
1117	6/15/2004	3:28:51 PM		26.045	26.558	24.089	28.105	26.675		47.029	51.489	13.622	33.819	-1.219	-7.58		52.889	0.075	14.643	0.004		1814.13	30.2356	50.0	13.0	40.4	2.787	0.011	0.011	0.000	0.284	0.24	
1118	6/15/2004	3:29:51 PM		26.051	26.57	24.085	28.161	26.747		46.792	50.926	13.547	33.778	-1.222	-7.673		45.33	0.077	14.643	0.004		1815.13	30.2522	49.5	11.1	40.3	2.778	0.011	0.012	0.000	0.292	0.25	
1119	6/15/2004	3:30:51 PM		26.033	26.567	24.057	28.183	26.834		46.991	51.392	13.617	33.845	-1.225	-7.496		45.028	0.059	14.643	0.004		1816.13	30.2689	49.9	11.0	40.4	2.787	0.009	0.009	0.000	0.224	0.19	
1120	6/15/2004	3:31:51 PM		26.051	26.585	24.071	28.256	26.897		46.848	50.839	13.562	33.93	-1.222	-7.595		45.212	0.073	14.643	0.004		1817.13	30.2856	49.4	11.1	40.4	2.785	0.011	0.011	0.000	0.277	0.24	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1121	6/15/2004	3:32:51 PM		26.049	26.603	24.074	28.339	26.984		46.792	51.21	13.546	33.743	-1.219	-7.635		51.087	0.075	14.643	0.004		1818.13	30.3022	49.7	12.5	40.3	2.776	0.011	0.011	0.000	0.285	0.24	
1122	6/15/2004	3:33:51 PM		26.08	26.633	24.099	28.424	26.99		46.657	50.727	13.549	33.694	-1.219	-7.655		48.795	0.078	14.643	0.004		1819.13	30.3189	49.3	12.0	40.2	2.770	0.012	0.012	0.000	0.297	0.25	
1123	6/15/2004	3:34:51 PM		26.058	26.641	24.072	28.387	26.958		47.109	51.473	13.597	34.034	-1.219	-7.569		53.336	0.07	14.643	0.004		1820.13	30.3356	50.0	13.1	40.6	2.797	0.010	0.011	0.000	0.264	0.22	
1124	6/15/2004	3:35:51 PM		26.065	26.649	24.069	28.365	26.92		46.941	51.141	13.577	33.847	-1.222	-7.58		42.343	0.075	14.643	0.004		1821.13	30.3522	49.7	10.4	40.4	2.785	0.011	0.011	0.000	0.284	0.24	
1125	6/15/2004	3:36:51 PM		26.057	26.66	24.061	28.351	26.892		46.684	50.99	13.506	33.704	-1.219	-7.687		48.949	0.07	14.643	0.004		1822.13	30.3689	49.5	12.0	40.2	2.771	0.010	0.011	0.000	0.267	0.23	
1126	6/15/2004	3:37:51 PM		26.047	26.671	24.057	28.342	26.868		47.035	51.371	13.625	33.925	-1.222	-7.522		46.123	0.075	14.643	0.004		1823.13	30.3856	49.9	11.3	40.5	2.791	0.011	0.011	0.000	0.284	0.24	
1127	6/15/2004	3:38:51 PM		26.059	26.678	24.073	28.304	26.829		47.041	51.127	13.571	34.042	-1.225	-7.719		47.053	0.075	14.643	0.003		1824.13	30.4022	49.7	11.5	40.5	2.795	0.011	0.011	0.000	0.283	0.24	
1128	6/15/2004	3:39:51 PM		26.064	26.702	24.103	28.319	26.829		46.58	50.795	13.469	33.603	-1.219	-7.499		56.356	0.072	14.643	0.004		1825.13	30.4189	49.3	13.8	40.1	2.764	0.011	0.011	0.000	0.275	0.23	
1129	6/15/2004	3:40:51 PM		26.07	26.719	24.085	28.245	26.796		46.771	50.917	13.483	33.852	-1.222	-7.54		55.03	0.076	14.643	0.004		1826.13	30.4356	49.4	13.5	40.3	2.779	0.011	0.012	0.000	0.288	0.25	
1130	6/15/2004	3:41:51 PM		26.065	26.713	24.074	28.26	26.775		46.765	50.899	13.476	33.886	-1.219	-7.577		44.997	0.074	14.643	0.004		1827.13	30.4522	49.4	11.0	40.3	2.780	0.011	0.011	0.000	0.281	0.24	
1131	6/15/2004	3:42:51 PM		26.085	26.734	24.085	28.225	26.761		46.819	51.112	13.498	33.808	-1.219	-7.673		46.87	0.075	14.643	0.004		1828.13	30.4689	49.6	11.5	40.3	2.779	0.011	0.011	0.000	0.285	0.24	
1132	6/15/2004	3:43:51 PM		26.07	26.728	24.054	28.205	26.785		47.19	51.461	13.549	34.176	-1.222	-7.655		48.007	0.074	14.643	0.004		1829.13	30.4856	50.0	11.8	40.7	2.805	0.011	0.011	0.000	0.279	0.24	
1133	6/15/2004	3:44:51 PM		26.065	26.733	24.059	28.18	26.785		47.153	51.46	13.543	34.135	-1.222	-7.661		46.526	0.073	14.643	0.004		1830.13	30.5022	50.0	11.4	40.6	2.802	0.011	0.011	0.000	0.275	0.23	
1134	6/15/2004	3:45:51 PM		26.065	26.734	24.04	28.196	26.771		47.275	51.661	13.566	34.204	-1.222	-7.595		44.479	0.072	14.643	0.004		1831.13	30.5189	50.2	10.9	40.7	2.809	0.011	0.011	0.000	0.271	0.23	
1135	6/15/2004	3:46:51 PM		26.074	26.763	24.054	28.204	26.78		47.024	51.282	13.483	34.04	-1.219	-7.696		51.991	0.077	14.643	0.004		1832.13	30.5356	49.8	12.7	40.5	2.795	0.011	0.012	0.000	0.291	0.25	
1136	6/15/2004	3:47:51 PM		26.061	26.754	24.035	28.216	26.737		47.172	51.454	13.575	34.077	-1.222	-7.603		44.999	0.071	14.643	0.004		1833.13	30.5522	50.0	11.0	40.6	2.801	0.011	0.011	0.000	0.268	0.23	
1137	6/15/2004	3:48:51 PM		26.056	26.754	24.04	28.181	26.682		47.265	51.672	13.666	34.007	-1.219	-7.554		40.948	0.075	14.643	0.004		1834.13	30.5689	50.2	10.0	40.6	2.802	0.011	0.011	0.000	0.283	0.24	
1138	6/15/2004	3:49:51 PM		26.066	26.769	24.05	28.156	26.677		47.13	51.423	13.576	34.063	-1.216	-7.67		42.723	0.074	14.643	0.004		1835.13	30.5856	50.0	10.5	40.6	2.799	0.011	0.011	0.000	0.279	0.24	
1139	6/15/2004	3:50:51 PM		26.065	26.764	24.039	28.16	26.701		47.199	51.531	13.674	33.995	-1.222	-7.675		40.739	0.073	14.643	0.004		1836.13	30.6022	50.1	10.0	40.6	2.799	0.011	0.011	0.000	0.275	0.23	
1140	6/15/2004	3:51:51 PM		26.069	26.778	24.049	28.204	26.71		47.141	51.521	13.641	33.942	-1.222	-7.67		46.995	0.074	14.643	0.004		1837.13	30.6189	50.0	11.5	40.5	2.795	0.011	0.011	0.000	0.280	0.24	
1141	6/15/2004	3:52:51 PM		26.064	26.767	24.038	28.169	26.714		46.989	51.177	13.55	33.977	-1.222	-7.667		48.457	0.074	14.643	0.004		1838.13	30.6356	49.7	11.9	40.5	2.791	0.011	0.011	0.000	0.280	0.24	
1142	6/15/2004	3:53:51 PM		26.053	26.756	24.022	28.168	26.719		47.143	51.624	13.551	34.059	-1.222	-7.661		51.947	0.073	14.643	0.004		1839.13	30.6522	50.2	12.7	40.6	2.799	0.011	0.011	0.000	0.276	0.23	
1143	6/15/2004	3:54:51 PM		26.057	26.766	24.021	28.162	26.703		47.143	51.562	13.688	33.888	-1.219	-7.331		45.739	0.06	14.643	0.004		1840.13	30.6689	50.1	11.2	40.5	2.793	0.009	0.009	0.000	0.227	0.19	
1144	6/15/2004	3:55:51 PM		26.065	26.764	24.09	28.211	26.721		46.842	51.029	13.538	33.817	-1.222	-7.589		49.85	0.063	14.643	0.004		1841.13	30.6856	49.6	12.2	40.3	2.781	0.009	0.010	0.000	0.239	0.20	
1145	6/15/2004	3:56:51 PM		26.078	26.781	24.092	28.228	26.778		46.883	51.206	13.554	33.835	-1.225	-7.696		49.777	0.072	14.643	0.003		1842.13	30.7022	49.7	12.2	40.4	2.783	0.011	0.011	0.000	0.273	0.23	
1146	6/15/2004	3:57:51 PM		26.075	26.779	24.084	28.285	26.746		46.85	50.969	13.518	33.93	-1.219	-7.571		57.084	0.067	14.643	0.004		1843.13	30.7189	49.5	14.0	40.4	2.785	0.010	0.010	0.000	0.254	0.22	
1147	6/15/2004	3:58:51 PM		26.067	26.776	24.056	28.257	26.748		46.564	50.824	13.486	33.628	-1.225	-7.545		50.165	0.08	14.643	0.003		1844.13	30.7356	49.4	12.3	40.1	2.764	0.012	0.012	0.000	0.306	0.26	
1148	6/15/2004	3:59:51 PM		26.09	26.799	24.08	28.255	26.751		46.873	50.88	13.53	33.932	-1.222	-7.658		47.518	0.073	14.643	0.004		1845.13	30.7522	49.4	11.6	40.4	2.786	0.011	0.011	0.000	0.276	0.24	
1149	6/15/2004	4:00:51 PM		26.089	26.803	24.083	28.319	26.755		47.002	51.205	13.56	33.999	-1.222	-7.678		49.469	0.072	14.643	0.004		1846.13	30.7689	49.7	12.1	40.5	2.792	0.011	0.011	0.000	0.272	0.23	
1150	6/15/2004	4:01:51 PM		26.088	26.796	24.072	28.337	26.773		46.86	51.193	13.531	33.804	-1.222	-7.67		48.849	0.075	14.643	0.004		1847.13	30.7856	49.7	12.0	40.3	2.781	0.011	0.011	0.000	0.285	0.24	
1151	6/15/2004	4:02:51 PM		26.09	26.788	24.064	28.32	26.79		47.149	51.313	13.548	34.174	-1.222	-7.675		52.099	0.074	14.643	0.004		1848.13	30.8022	49.8	12.8	40.7	2.803	0.011	0.011	0.000	0.279	0.24	
1152	6/15/2004	4:03:51 PM		26.082	26.79	24.046	28.272	26.753		46.956	51.448	13.59	33.823	-1.222	-7.467		48.728	0.073	14.643	0.004		1849.13	30.8189	50.0	11.9	40.4	2.785	0.011	0.011	0.000	0.277	0.24	
1153	6/15/2004	4:04:51 PM		26.081	26.784	24.05	28.301	26.791		47.122	51.208	13.597	34.071	-1.216	-7.621		48.962	0.073	14.643	0.004		1850.13	30.8356	49.7	12.0	40.6	2.799	0.011	0.011	0.000	0.275	0.23	
1154	6/15/2004	4:05:51 PM		26.075	26.774	24.014	28.285	26.826		47.085	51.461	13.579	33.973	-1.222	-7.621		50.251	0.072	14.643	0.004		1851.13	30.8522	50.0	12.3	40.5	2.794	0.011	0.011	0.000	0.272	0.23	
1155	6/15/2004	4:06:51 PM		26.085	26.784	24.009	28.335	26.806		47.006	51.317	13.574	33.942	-1.222	-7.54		49.308	0.077	14.643	0.004		1852.13	30.8689	49.8	12.1	40.5	2.791	0.011	0.012	0.000	0.292	0.25	
1156	6/15/2004	4:07:51 PM		26.103	26.777	24.003	28.398	26.794		46.873	51.038	13.57	33.852	-1.222	-7.644		49.291	0.074	14.643	0.003		1853.13	30.8856	49.6	12.1	40.4	2.783	0.011	0.011	0.000	0.281	0.24	
1157	6/15/2004	4:08:51 PM		26.093	26.782	23.998	28.318	26.804		47.257	51.757	13.615	34.094	-1.222	-7.687		53.221	0.077	14.643	0.004		1854.13	30.9022	50.3	13.0	40.7	2.804	0.011	0.012	0.000	0.290	0.25	
1158	6/15/2004	4:09:51 PM		26.108	26.787	23.998	28.258	26.834		46.916	51.168	13.412	34.032	-1.222	-7.331		46.067	0.065	14.643	0.003		1855.13	30.9189	49.7	11.3	40.5	2.791	0.010	0.010	0.000	0.246	0.21	
1159	6/15/2004	4:10:51 PM		26.111	26.8	24.01	28.341	26.852		47.113	51.599	13.532	34.057	-1.219	-7.436		52.015	0.075	14.643	0.004		1856.13	30.9356	50.1	12.7	40.6	2.798	0.011	0.011	0.000	0.283	0.24	
1160	6/15/2004	4:11:51 PM		26.119	26.808	24.009	28.374	26.865		47.155	51.552	13.552	34.071	-1.222	-7.664		49.513	0.077	14.643	0.004		1857.13	30.9522	50.1	12.1	40.6	2.800	0.011	0.012	0.000	0.291	0.25	
1161	6/15/2004	4:12:51 PM		26.111	26.82	24.016	28.401	26.857		47.138	51.152	13.473	34.26	-1.225	-7.609		46.634	0.065	14.643	0.003		1858.13	30.9689	49.7	11.4	40.7	2.806	0.010	0.010	0.000	0.245	0.21	
1162	6/15/2004	4:13:51 PM		26.125	26.839	24.09	28.445	26.871		47.232	51.641	13.526	34.19	-1.216	-7.618		48.274	0.074	14.643	0.004		1859.13	30.9856	50.2	11.8	40.7	2.807	0.011	0.011	0.000	0.278	0.24	
1163	6/15/2004	4:14:51 PM		26.131	26.85	24.091	28.406	26.862		46.788	51.203	13.453	33.817	-1.219	-7.652		41.918	0.073	14.643	0.004		1860.13	31.0022	49.7	10.3	40.3	2.779	0.011	0.011	0.000	0.277	0.24	
1164	6/15/2004	4:15:51 PM		26.132	26.846	24.072	28.332	26.858		47.232	51.446	13.541	34.246	-1.222	-7.696		42.535	0.072	14.643	0.004		1861.13	31.0189	50.0	10.4	40.7	2.809	0.011	0.011	0.000	0.270	0.23	
1165	6/15/2004	4:16:51 PM		26.129	26.857	24.053	28.338	26.849		47.165	51.575	13.532	34.114	-1.222	-7.516		45.372	0.073	14.643	0.004		1862.13	31.0356	50.1	11.1	40.6	2.802	0.011	0.011	0.000	0.275	0.23	
1166	6/15/2004	4:17:51 PM		26.13	26.854	24.055	28.295	26.836		47.118	51.359	13.504	34.139	-1.222	-7.615		53.457	0.073	14.643	0.003		1863.13	31.0522	49.9	13.1	40.6	2.801	0.011	0.011	0.000	0.275	0.23	
1167	6/15/2004	4:18:51 PM		26.131	26.855	24.045	28.281	26.777		46.887	51.127	13.471	34.005	-1.225	-7.673		47.391	0.074	14.643	0.004		1864.13	31.0689	49.7	11.6	40.4	2.789	0.011	0.011	0.000	0.280	0.24	
1168	6/15/2004	4:19:51 PM		26.125	26.859	24.045	28.265	26.771		47.404	51.836	13.592	34.229	-1.219	-7.693		45.326	0.074	14.643	0.004		1865.13	31.0856	50.4	11.1	40.8	2.814	0.011	0.011	0.000	0.278	0.24	
1169	6/15/2004	4:20:51 PM		26.119	26.848	24.034	28.234	26.805		46.968	51.365	13.511	33.952	-1.225	-7.381		50.411	0.067	14.643	0.003		1866.13	31.1022	49.9	12.4	40.5	2.790	0.010	0.010	0.000	0.254	0.22	
1170	6/15/2004	4:21:51 PM		26.123	26.861	24.047	28.283	26.779		46.908	51.349	13.45	33.971	-1.219	-7.557		45.733	0.07	14.643	0.004		1867.13	31.1189	49.9	11.2	40.4	2.788	0.010	0.011	0.000	0.265	0.23	
1171	6/15/2004	4:22:51 PM		26.11	26.863	24.039	28.215	26.77		47.196	51.502	13.498	34.196	-1.222	-7.638		44.386	0.071	14.643	0.004		1868.13	31.1356	50.0	10.9	40.7	2.806	0.011	0.011	0.000	0.267	0.23	
1172	6/15/2004	4:23:51 PM		26.124	26.872	24.063	28.279	26.785		46.983	51.063	13.488	34.071	-1.216	-7.693		43.966	0.069	14.643	0.004		1869.13	31.1522	49.6	10.8	40.5	2.794	0.010	0.011	0.000	0.261	0.22	
1173	6/15/2004	4:24:51 PM		26.112	26.871	24.042	28.262	26.763		47.25	51.732	13.558	34.174	-1.219	-7.667		49.004	0.076	14.643	0.004		1870.13	31.1689	50.3	12.0	40.7	2.807	0.011	0.012	0.000	0.286	0.24	
1174	6/15/2004	4:25:51 PM		26.115	26.874	24.049	28.255	26.771		47.226	51.653	13.623	34.065	-1.216	-7.355		47.012	0.066	14.643	0.004		1871.13	31.1856	50.2	11.5	40.6	2.802	0.010	0.010	0.000	0.249	0.21	
1175	6/15/2004	4:26:51 PM		26.129	26.888	24.059	28.249	26.77		47.205	51.419	13.493	34.235	-1.216	-7.696		52.687	0.074	14.643	0.004		1872.13	31.2022	49.9	12.9	40.7	2.808	0.011	0.011	0.000	0.278	0.24	
1176	6/15/2004	4:27:51 PM		26.112	26.865	24.036	28.247	26.753		47.157	51.347	13.482	34.17	-1.222	-7.704		45.447	0.072	14.643	0.004		1873.13	31.2189	49.9	11.1	40.7	2.804	0.011	0.011	0.000	0.271	0.23	
1177	6/15/2004	4:28:51 PM		26.121	26.88	24.04	28.286	26.787		47.093	51.349	13.494	34.094	-1.219	-7.719		47.21	0.077	14.643	0.004		1874.13	31.2356	49.9	11.6	40.6	2.799	0.011	0.012	0.000	0.291	0.25	
1178	6/15/2004	4:29:51 PM		26.12	26.884	24.04	28.23	26.771		47.292	51.498	13.486	34.282	-1.222	-7.638		50.745	0.072	14.643	0.004		1875.13	31.2522	50.0	12.4	40.8	2.812	0.011	0.011	0.000	0.270	0.23	
1179	6/15/2004	4:30:51 PM		26.124	26.873	24.049	28.24	26.755		47.321	51.552	13.472	34.469	-1.219	-7.479		44.767	0.073	14.643	0.004		1876.13	31.2689	50.1	11.0	40.9	2.820	0.011	0.011	0.000	0.273	0.23	
1180	6/15/2004	4:31:51 PM		26.113	26.871	24.077	28.213	26.759		47.342	51.597	13.54	34.27	-1.222	-7.644		43.169	0.073	14.643	0.004		1877.13	31.2856	50.1	10.6	40.8	2.813	0.011	0.011	0.000	0.274	0.23	
1181	6/15/2004	4:32:51 PM		26.111	26.87	24.081	28.251	26.762		47.306	51.527	13.543	34.243	-1.219	-7.658		43.835	0.072	14.643	0.004		1878.13	31.3022	50.1	10.7	40.8	2.811	0.011	0.011	0.000	0.270	0.23	
1182	6/15/2004	4:33:51 PM		26.106	26.859	24.055	28.201	26.776		47.087	51.45	13.488	34.081	-1.222	-7.681		50.167	0.07	14.643	0.004		1879.13	31.3189	50.0	12.3	40.6	2.798	0.010	0.011	0.000	0.264	0.22	
1183	6/15/2004	4:34:51 PM		26.136	26.899	24.1	28.226	26.776		47.178	51.562	13.486	34.184	-1.222	-7.675		46.676	0.072	14.643	0.004		1880.13	31.3356	50.1	11.4	40.7	2.805	0.011	0.011	0.000	0.271	0.23	
1184	6/15/2004	4:35:51 PM		26.114	26.873	24.063	28.249	26.775		47.176	51.626	13.459	34.186	-1.225	-7.707		49.608	0.073	14.643	0.004		1881.13	31.3522	50.2	12.2	40.7	2.805	0.011	0.011	0.000	0.275	0.23	
1185	6/15/2004	4:36:51 PM		26.129	26.888	24.078	28.334	26.81		47.138	51.697	13.472	34.088	-1.219	-7.534		54.763	0.071	14.643	0.004		1882.13	31.3689	50.2	13.4	40.6	2.800	0.011	0.011	0.000	0.268	0.23	
1186	6/15/2004	4:37:51 PM		26.113	26.877	24.058	28.468	26.844		47.45	51.896	13.599	34.295	-1.225	-7.569		45.645	0.074	14.643	0.003		1883.13	31.3856	50.4	11.2	40.9	2.818	0.011	0.011	0.000	0.277	0.24	
1187	6/15/2004	4:38:51 PM		26.118	26.877	24.063	28.592	26.864		47.485	51.616	13.627	34.422	-1.222	-7.621		47.212	0.071	14.643	0.004		1884.13	31.4022	50.1	11.6	41.0	2.824	0.011	0.011	0.000	0.265	0.23	
1188	6/15/2004	4:39:51 PM		26.124	26.893	24.068	28.693	26.874		47.302	51.69	13.622	34.178	-1.222	-7.638		47.057	0.071	14.643	0.004		1885.13	31.4189	50.2	11.5	40.7	2.809	0.011	0.011	0.000	0.267	0.23	
1189	6/15/2004	4:40:51 PM		26.121	26.89	24.086	28.745	26.892		46.263	50.774	14.758	31.912	-1.222	-7.67		51.623	0.068	14.643	0.004		1886.13	31.4356	49.3	12.7	39.1	2.695	0.010	0.010	0.000	0.266	0.23	
1190	6/15/2004	4:41:51 PM		26.127	26.896	24.112	28.746	26.932		46.624	50.928	14.573	32.536	-1.222	-7.667		43.781	0.072	14.643	0.004		1887.13	31.4522	49.5	10.7	39.6	2.729	0.011	0.011	0.000	0.278	0.24	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1191	6/15/2004	4:42:51 PM		26.123	26.901	24.128	28.916	26.933		46.84	51.148	14.464	32.885	-1.225	-7.534		50.368	0.066	14.643	0.004		1888.13	31.4689	49.7	12.3	39.9	2.748	0.010	0.010	0.000	0.253	0.22	
1192	6/15/2004	4:43:51 PM		26.109	26.887	24.123	28.852	26.949		46.699	50.996	14.39	32.811	-1.225	-7.511		46.186	0.067	14.643	0.004		1889.13	31.4856	49.5	11.3	39.8	2.741	0.010	0.010	0.000	0.258	0.22	
1193	6/15/2004	4:44:51 PM		26.135	26.919	24.17	28.868	26.97		47.101	51.261	14.461	33.16	-1.222	-7.543		49.045	0.069	14.643	0.004		1890.13	31.5022	49.8	12.0	40.1	2.767	0.010	0.011	0.000	0.262	0.22	
1194	6/15/2004	4:45:51 PM		26.14	26.919	24.18	28.764	26.936		47.028	51.145	14.484	33.074	-1.219	-7.609		48.76	0.07	14.643	0.004		1891.13	31.5189	49.7	11.9	40.1	2.761	0.010	0.011	0.000	0.267	0.23	
1195	6/15/2004	4:46:51 PM		26.141	26.92	24.191	28.665	26.906		46.885	51.141	14.418	33.002	-1.222	-7.638		45.531	0.07	14.643	0.004		1892.13	31.5356	49.7	11.2	39.9	2.754	0.010	0.011	0.000	0.267	0.23	
1196	6/15/2004	4:47:51 PM		26.15	26.929	24.2	28.529	26.901		47.132	51.471	14.41	33.219	-1.225	-7.644		48.493	0.069	14.643	0.003		1893.13	31.5522	50.0	11.9	40.2	2.770	0.010	0.011	0.000	0.262	0.22	
1197	6/15/2004	4:48:51 PM		26.17	26.944	24.23	28.495	26.871		46.794	51.139	14.375	32.948	-1.222	-7.612		50.107	0.072	14.643	0.004		1894.13	31.5689	49.7	12.3	39.9	2.749	0.011	0.011	0.000	0.275	0.23	
1198	6/15/2004	4:49:51 PM		26.165	26.939	24.285	28.405	26.871		46.956	51.436	14.173	33.256	-1.222	-7.43		46.29	0.071	14.643	0.004		1895.13	31.5856	50.0	11.3	40.1	2.765	0.011	0.011	0.000	0.269	0.23	
1199	6/15/2004	4:50:51 PM		26.175	26.944	24.285	28.39	26.861		47.006	51.591	14.238	33.207	-1.219	-7.519		50.015	0.071	14.643	0.004		1896.13	31.6022	50.1	12.3	40.1	2.765	0.011	0.011	0.000	0.269	0.23	
1200	6/15/2004	4:51:51 PM		26.169	26.922	24.264	28.393	26.839		46.931	51.164	14.205	33.24	-1.225	-7.592		45.449	0.072	14.643	0.003		1897.13	31.6189	49.7	11.1	40.1	2.764	0.011	0.011	0.000	0.273	0.23	
1201	6/15/2004	4:52:51 PM		26.173	26.931	24.283	28.358	26.853		46.734	51.073	14.152	33.113	-1.219	-7.597		58.615	0.069	14.643	0.004		1898.13	31.6356	49.6	14.4	39.9	2.753	0.010	0.010	0.000	0.263	0.22	
1202	6/15/2004	4:53:51 PM		26.192	26.936	24.287	28.302	26.818		46.703	50.876	14.037	33.215	-1.225	-7.592		47.579	0.07	14.643	0.004		1899.13	31.6522	49.4	11.7	40.0	2.755	0.010	0.011	0.000	0.266	0.23	
1203	6/15/2004	4:54:51 PM		26.2	26.939	24.301	28.266	26.786		46.522	50.978	14.156	32.875	-1.219	-7.482		47.89	0.071	14.643	0.004		1900.13	31.6689	49.5	11.7	39.7	2.737	0.011	0.011	0.000	0.272	0.23	
1204	6/15/2004	4:55:51 PM		26.2	26.938	24.295	28.265	26.8		46.719	51.11	14.032	33.189	-1.225	-7.56		45.804	0.071	14.643	0.004		1901.13	31.6856	49.6	11.2	40.0	2.755	0.011	0.011	0.000	0.270	0.23	
1205	6/15/2004	4:56:51 PM		26.209	26.948	24.309	28.234	26.795		47.257	51.705	14.192	33.566	-1.219	-7.415		48.221	0.063	14.643	0.004		1902.13	31.7022	50.2	11.8	40.4	2.786	0.009	0.010	0.000	0.237	0.20	
1206	6/15/2004	4:57:51 PM		26.212	26.936	24.312	28.257	26.783		46.79	51.253	14.074	33.166	-1.222	-7.574		41.501	0.073	14.643	0.004		1903.13	31.7189	49.8	10.2	40.0	2.756	0.011	0.011	0.000	0.278	0.24	
1207	6/15/2004	4:58:51 PM		26.222	26.94	24.322	28.277	26.797		47.317	51.566	14.155	33.671	-1.222	-7.464		52.962	0.065	14.643	0.004		1904.13	31.7356	50.1	13.0	40.5	2.792	0.010	0.010	0.000	0.244	0.21	
1208	6/15/2004	4:59:51 PM		26.226	26.924	24.326	28.266	26.802		46.404	51.079	14.14	32.809	-0.886	-6.395		55.155	0.074	14.643	0.004		1905.13	31.7522	49.6	13.5	39.6	2.731	0.011	0.011	0.000	0.284	0.24	
1209	6/15/2004	5:00:04 PM		26.216	26.919	24.306	28.266	26.802		46.417	51.191	14.081	32.762	-1.031	-6.727		42.734	0.08	14.643	0.004		1905.35	31.7558	49.7	10.5	39.6	2.730	0.012	0.012	0.000	0.307	0.26	
1210	6/15/2004	5:01:04 PM		26.231	26.934	24.336	28.286	26.772		47.196	51.45	14.135	33.587	-1.222	-7.308		39.365	0.072	14.643	0.004		1906.35	31.7725	50.0	9.6	40.4	2.785	0.011	0.011	0.000	0.271	0.23	
1211	6/15/2004	5:02:04 PM		26.237	26.93	24.332	28.237	26.752		47.393	51.684	14.144	33.739	-1.219	-7.447		54.141	0.075	14.643	0.004		1907.35	31.7892	50.2	13.3	40.6	2.797	0.011	0.011	0.000	0.281	0.24	
1212	6/15/2004	5:03:04 PM		26.237	26.935	24.342	28.192	26.737		47.255	51.633	14.05	33.667	-1.219	-7.519		47.425	0.07	14.643	0.004		1908.35	31.8058	50.2	11.6	40.5	2.790	0.010	0.011	0.000	0.263	0.22	
1213	6/15/2004	5:04:04 PM		26.247	26.925	24.352	28.157	26.757		47.192	51.562	13.965	33.774	-1.222	-7.519		52.764	0.07	14.643	0.004		1909.35	31.8225	50.1	12.9	40.5	2.791	0.010	0.011	0.000	0.263	0.22	
1214	6/15/2004	5:05:04 PM		26.242	26.92	24.357	28.187	26.742		47.292	51.744	14.052	33.718	-1.219	-7.514		53.138	0.071	14.643	0.004		1910.35	31.8392	50.3	13.0	40.5	2.793	0.011	0.011	0.000	0.266	0.23	
1215	6/15/2004	5:06:04 PM		26.241	26.909	24.346	28.146	26.712		47.282	51.836	14.084	33.587	-1.222	-7.514		50.036	0.072	14.643	0.004		1911.35	31.8558	50.4	12.3	40.4	2.788	0.011	0.011	0.000	0.270	0.23	
1216	6/15/2004	5:07:04 PM		26.251	26.909	24.371	28.141	26.712		47.236	51.608	14.006	33.673	-1.222	-7.514		50.847	0.07	14.643	0.004		1912.35	31.8725	50.1	12.5	40.5	2.789	0.010	0.011	0.000	0.263	0.22	
1217	6/15/2004	5:08:04 PM		26.254	26.908	24.41	28.125	26.67		47.439	51.79	14.064	33.837	-1.222	-7.508		39.019	0.071	14.643	0.004		1913.35	31.8892	50.3	9.6	40.6	2.802	0.011	0.011	0.000	0.265	0.23	
1218	6/15/2004	5:09:04 PM		26.248	26.897	24.414	28.099	26.65		47.423	51.786	14.053	33.878	-1.222	-7.462		45.629	0.073	14.643	0.004		1914.35	31.9058	50.3	11.2	40.7	2.803	0.011	0.011	0.000	0.272	0.23	
1219	6/15/2004	5:10:04 PM		26.248	26.876	24.398	28.048	26.639		47.205	51.711	14.027	33.64	-1.222	-7.511		45.741	0.071	14.643	0.004		1915.35	31.9225	50.2	11.2	40.4	2.787	0.011	0.011	0.000	0.266	0.23	
1220	6/15/2004	5:11:04 PM		26.257	26.881	24.397	28.072	26.643		47.057	51.662	14.027	33.445	-1.222	-7.56		41.499	0.072	14.643	0.004		1916.35	31.9392	50.2	10.2	40.3	2.775	0.011	0.011	0.000	0.271	0.23	
1221	6/15/2004	5:12:04 PM		26.255	26.879	24.401	28.031	26.646		47.375	51.74	14.002	33.833	-1.222	-7.56		52.403	0.071	14.643	0.004		1917.35	31.9558	50.3	12.8	40.6	2.800	0.011	0.011	0.000	0.265	0.23	
1222	6/15/2004	5:13:04 PM		26.255	26.873	24.395	28.03	26.646		47.099	51.533	14.002	33.54	-1.222	-7.569		41.146	0.069	14.643	0.004		1918.35	31.9725	50.1	10.1	40.3	2.780	0.010	0.010	0.000	0.260	0.22	
1223	6/15/2004	5:14:04 PM		26.264	26.867	24.394	27.98	26.62		47.045	51.311	13.962	33.562	-1.222	-7.577		50.526	0.071	14.643	0.003		1919.35	31.9892	49.8	12.4	40.3	2.779	0.011	0.011	0.000	0.267	0.23	
1224	6/15/2004	5:15:04 PM		26.252	26.856	24.377	27.998	26.599		47.197	51.564	13.974	33.761	-1.222	-7.595		50.624	0.07	14.643	0.004		1920.35	32.0058	50.1	12.4	40.5	2.791	0.010	0.011	0.000	0.262	0.22	
1225	6/15/2004	5:16:04 PM		26.246	26.85	24.382	27.952	26.563		47.184	51.707	14.004	33.704	-1.219	-7.531		51.267	0.071	14.643	0.004		1921.35	32.0225	50.2	12.6	40.4	2.788	0.011	0.011	0.000	0.266	0.23	
1226	6/15/2004	5:17:04 PM		26.246	26.849	24.381	27.971	26.552		47.302	51.637	14.076	33.751	-1.222	-7.609		54.327	0.071	14.643	0.004		1922.35	32.0392	50.2	13.3	40.5	2.794	0.011	0.011	0.000	0.266	0.23	
1227	6/15/2004	5:18:04 PM		26.249	26.843	24.379	27.91	26.541		47.321	51.811	13.983	33.858	-1.222	-7.606		46.753	0.071	14.643	0.004		1923.35	32.0558	50.3	11.5	40.6	2.799	0.011	0.011	0.000	0.265	0.23	
1228	6/15/2004	5:19:04 PM		26.238	26.821	24.378	27.844	26.494		47.479	51.871	14.031	33.964	-1.219	-7.563		52.919	0.077	14.643	0.004		1924.35	32.0725	50.4	13.0	40.7	2.808	0.011	0.012	0.000	0.287	0.24	
1229	6/15/2004	5:20:04 PM		26.232	26.816	24.382	27.883	26.473		47.174	51.566	13.983	33.696	-1.219	-7.514		56.154	0.071	14.643	0.004		1925.35	32.0892	50.1	13.8	40.4	2.788	0.011	0.011	0.000	0.266	0.23	
1230	6/15/2004	5:21:04 PM		26.229	26.808	24.385	27.89	26.446		47.06	51.434	13.961	33.632	-1.219	-7.508		48.426	0.072	14.643	0.004		1926.35	32.1058	50.0	11.9	40.3	2.782	0.011	0.011	0.000	0.271	0.23	
1231	6/15/2004	5:22:04 PM		26.218	26.797	24.373	27.804	26.43		47.476	51.97	13.993	33.96	-1.222	-7.534		45.253	0.072	14.643	0.004		1927.35	32.1225	50.5	11.1	40.7	2.807	0.011	0.011	0.000	0.268	0.23	
1232	6/15/2004	5:23:04 PM		26.221	26.784	24.371	27.802	26.432		47.192	51.49	14.013	33.739	-1.219	-7.537		42.625	0.071	14.643	0.004		1928.35	32.1392	50.0	10.4	40.5	2.790	0.011	0.011	0.000	0.266	0.23	
1233	6/15/2004	5:24:04 PM		26.208	26.772	24.374	27.804	26.41		47.147	51.471	14.054	33.552	-1.219	-7.569		54.064	0.068	14.643	0.004		1929.35	32.1558	50.0	13.2	40.3	2.782	0.010	0.010	0.000	0.256	0.22	
1234	6/15/2004	5:25:04 PM		26.206	26.765	24.376	27.827	26.403		47.454	51.825	14.023	33.932	-1.222	-7.436		47.124	0.068	14.643	0.004		1930.35	32.1725	50.4	11.5	40.7	2.806	0.010	0.010	0.000	0.254	0.22	
1235	6/15/2004	5:26:04 PM		26.209	26.757	24.394	27.77	26.386		47.217	51.682	14.027	33.687	-1.219	-7.331		56.663	0.071	14.643	0.004		1931.35	32.1892	50.2	13.9	40.5	2.789	0.011	0.011	0.000	0.266	0.23	
1236	6/15/2004	5:27:04 PM		26.191	26.735	24.427	27.783	26.373		47.273	51.674	13.909	33.862	-1.222	-7.511		39.455	0.07	14.643	0.004		1932.35	32.2058	50.2	9.7	40.6	2.797	0.010	0.011	0.000	0.261	0.22	
1237	6/15/2004	5:28:04 PM		26.197	26.736	24.427	27.788	26.444		47.391	51.688	13.928	33.975	-1.225	-7.525		43.783	0.071	14.643	0.003		1933.35	32.2225	50.2	10.7	40.7	2.805	0.011	0.011	0.000	0.264	0.23	
1238	6/15/2004	5:29:04 PM		26.201	26.725	24.422	27.823	26.513		47.383	51.682	13.916	34.003	-1.222	-7.537		48.614	0.071	14.643	0.004		1934.35	32.2392	50.2	11.9	40.7	2.806	0.011	0.011	0.000	0.264	0.23	
1239	6/15/2004	5:30:04 PM		26.191	26.72	24.407	27.887	26.558		47.439	51.659	13.914	34.065	-1.222	-7.545		48.322	0.071	14.643	0.004		1935.35	32.2558	50.2	11.8	40.8	2.810	0.011	0.011	0.000	0.264	0.22	
1240	6/15/2004	5:31:04 PM		26.196	26.725	24.417	27.942	26.628		47.053	51.535	13.85	33.708	-1.219	-7.158		42.75	0.074	14.643	0.004		1936.35	32.2725	50.1	10.5	40.4	2.784	0.011	0.011	0.000	0.278	0.24	
1241	6/15/2004	5:32:04 PM		26.192	26.716	24.407	27.978	26.668		46.973	51.44	13.823	33.624	-1.219	-7.395		46.674	0.07	14.643	0.004		1937.35	32.2892	50.0	11.4	40.3	2.778	0.010	0.011	0.000	0.263	0.22	
1242	6/15/2004	5:33:04 PM		26.198	26.722	24.408	28.049	26.714		47.288	51.67	13.814	33.973	-1.222	-7.516		47.064	0.07	14.643	0.004		1938.35	32.3058	50.2	11.5	40.6	2.801	0.010	0.011	0.000	0.261	0.22	
1243	6/15/2004	5:34:04 PM		26.199	26.722	24.409	28.039	26.784		47.325	51.819	13.858	33.93	-1.222	-7.54		55.282	0.07	14.643	0.004		1939.35	32.3225	50.3	13.5	40.6	2.801	0.010	0.011	0.000	0.261	0.22	
1244	6/15/2004	5:35:04 PM		26.191	26.725	24.401	28.097	26.827		47.275	51.715	13.784	33.95	-1.222	-7.58		52.013	0.072	14.643	0.004		1940.35	32.3392	50.2	12.7	40.6	2.800	0.011	0.011	0.000	0.269	0.23	
1245	6/15/2004	5:36:04 PM		26.207	26.726	24.407	28.107	26.827		47.286	51.73	13.867	33.903	-1.222	-7.375		45.641	0.067	14.643	0.004		1941.35	32.3558	50.3	11.2	40.6	2.799	0.010	0.010	0.000	0.250	0.21	
1246	6/15/2004	5:37:04 PM		26.218	26.736	24.408	28.133	26.778		47.576	52.072	13.822	34.287	-1.222	-7.464		47.996	0.074	14.643	0.004		1942.35	32.3725	50.6	11.8	40.9	2.822	0.011	0.011	0.000	0.274	0.23	
1247	6/15/2004	5:38:04 PM		26.223	26.742	24.409	28.164	26.779		47.657	52.147	13.859	34.284	-1.222	-7.528		50.774	0.071	14.643	0.004		1943.35	32.3892	50.7	12.4	41.0	2.825	0.011	0.011	0.000	0.263	0.22	
1248	6/15/2004	5:39:04 PM		26.223	26.742	24.409	28.074	26.744		47.423	51.852	13.803	34.098	-1.222	-7.519		47.552	0.07	14.643	0.004		1944.35	32.4058	50.4	11.7	40.8	2.810	0.010	0.011	0.000	0.260	0.22	
1249	6/15/2004	5:40:04 PM		26.239	26.758	24.409	28.08	26.73		47.669	52.062	13.826	34.348	-1.222	-7.545		42.514	0.071	14.643	0.004		1945.35	32.4225	50.6	10.4	41.0	2.827	0.011	0.011	0.000	0.262	0.22	
1250	6/15/2004	5:41:04 PM		26.233	26.747	24.399	27.999	26.694		47.788	52.165	13.814	34.482	-1.222	-7.554		41.353	0.069	14.643	0.004		1946.35	32.4392	50.7	10.1	41.1	2.836	0.010	0.010	0.000	0.254	0.22	
1251	6/15/2004	5:42:04 PM		26.233	26.756	24.403	28.043	26.709		47.564	51.798	13.848	34.289	-1.222	-7.545		57.393	0.071	14.643	0.004		1947.35	32.4558	50.3	14.1	40.9	2.822	0.011	0.011	0.000	0.263	0.22	
1252	6/15/2004	5:43:04 PM		26.243	26.751	24.423	27.988	26.699		45.956	50.405	15.227	31.126	-1.222	-7.574		46.838	0.064	14.643	0.004		1948.35	32.4725	48.9	11.5	38.5	2.657	0.010	0.010	0.000	0.252	0.21	
1253	6/15/2004	5:44:04 PM		26.246	26.76	24.446	27.992	26.667		45.944	50.36	15.193	31.237	-1.225	-7.456		55.027	0.068	14.643	0.003		1949.35	32.4892	48.9	13.5	38.6	2.661	0.010	0.010	0.000	0.267	0.23	
1254	6/15/2004	5:45:04 PM		26.255	26.764	24.456	28.011	26.661		46.408	50.795	14.864	32.046	-1.225	-7.482		44.05	0.067	14.643	0.003		1950.35	32.5058	49.3	10.8	39.2	2.705	0.010	0.010	0.000	0.259	0.22	
1255	6/15/2004	5:46:04 PM		26.264	26.757	24.479	28.019	26.66		46.182	50.727	15.054	31.608	-1.219	-7.511		57.533	0.066	14.643	0.004		1951.35	32.5225	49.3	14.1	38.9	2.682	0.010	0.010	0.000	0.257	0.22	
1256	6/15/2004	5:47:04 PM		26.269	26.767	24.504	27.999	26.655		45.958	50.372	15.035	31.424	-1.222	-7.534		52.552	0.068	14.643	0.004		1952.35	32.5392	48.9	12.9	38.7	2.668	0.010	0.010	0.000	0.266	0.23	
1257	6/15/2004	5:48:04 PM		26.284	26.762	24.524	28.059	26.685		46.315	50.785	15.078	31.717	-1.222	-7.528		59.295	0.068	14.643	0.004		1953.35	32.5558	49.3	14.5	39.0	2.690	0.010	0.010	0.000	0.263	0.22	
1258	6/15/2004	5:49:04 PM		26.298	26.772	24.559	28.093	26.664		45.842	50.198	14.987	31.405	-1.219	-7.343		47.829	0.064	14.643	0.004		1954.35	32.5725	48.7	11.7	38.6	2.663	0.010	0.010	0.000	0.250	0.21	
1259	6/15/2004	5:50:04 PM		26.302	26.766	24.563	28.068	26.668		46.261	50.741	14.823	31.92	-1.222	-7.467		60.638	0.069	14.643	0.004		1955.35	32.5892	49.3	14.9	39.1	2.695	0.010	0.010	0.000	0.266	0.23	
1260	6/15/2004	5:51:04 PM		26.322	26.771	24.583	28.073	26.658		46.168	50.439	14.796	31.949	-1.222	-7.519		55.386	0.067	14.643	0.004		1956.35	32.6058	49.0	13.6	39.1	2.693	0.010	0.010	0.000	0.259	0.22	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1261	6/15/2004	5:52:04 PM		26.327	26.771	24.578	28.053	26.678		46.093	50.602	14.747	31.869	-1.219	-7.277		46.384	0.069	14.643	0.004		1957.35	32.6225	49.1	11.4	39.0	2.688	0.010	0.010	0.000	0.267	0.23	
1262	6/15/2004	5:53:04 PM		26.339	26.777	24.574	28.109	26.705		46.668	51.077	14.428	32.77	-1.219	-7.502		48.488	0.069	14.643	0.004		1958.35	32.6392	49.6	11.9	39.7	2.738	0.010	0.010	0.000	0.262	0.22	
1263	6/15/2004	5:54:04 PM		26.346	26.775	24.572	28.082	26.687		46.842	51.313	14.329	33.018	-1.219	-7.514		49.371	0.066	14.643	0.004		1959.35	32.6558	49.8	12.1	39.9	2.753	0.010	0.010	0.000	0.249	0.21	
1264	6/15/2004	5:55:04 PM		26.366	26.795	24.592	28.117	26.707		46.724	51.454	14.348	32.786	-1.219	-7.516		50.885	0.068	14.643	0.004		1960.35	32.6725	50.0	12.5	39.8	2.741	0.010	0.010	0.000	0.258	0.22	
1265	6/15/2004	5:56:04 PM		26.357	26.791	24.582	28.087	26.728		46.773	51.367	14.372	32.829	-1.216	-7.447		52.447	0.071	14.643	0.004		1961.35	32.6892	49.9	12.9	39.8	2.744	0.011	0.011	0.000	0.269	0.23	
1266	6/15/2004	5:57:04 PM		26.331	26.769	24.541	28.066	26.776		46.556	51.091	14.263	32.776	-1.222	-7.522		53.38	0.072	14.643	0.004		1962.35	32.7058	49.6	13.1	39.7	2.735	0.011	0.011	0.000	0.274	0.23	
1267	6/15/2004	5:58:04 PM		26.339	26.763	24.54	28.17	26.855		47.145	51.614	14.408	33.223	-1.225	-7.355		50.758	0.068	14.643	0.004		1963.35	32.7225	50.1	12.4	40.2	2.771	0.010	0.010	0.000	0.256	0.22	
1268	6/15/2004	5:59:04 PM		26.357	26.781	24.563	28.243	26.928		46.527	51.222	14.322	32.63	-1.222	-7.323		50.432	0.071	14.643	0.004		1964.35	32.7392	49.7	12.4	39.6	2.729	0.011	0.011	0.000	0.271	0.23	
1269	6/15/2004	6:00:04 PM		26.355	26.779	24.546	28.29	26.985		46.73	51.249	14.371	32.823	-1.225	-7.525		53.592	0.075	14.643	0.004		1965.35	32.7558	49.8	13.1	39.8	2.742	0.011	0.011	0.000	0.285	0.24	
1270	6/15/2004	6:01:04 PM		26.378	26.797	24.579	28.358	27.068		46.848	51.376	14.379	33	-1.222	-7.427		47.335	0.068	14.643	0.004		1966.35	32.7725	49.9	11.6	39.9	2.753	0.010	0.010	0.000	0.257	0.22	
1271	6/15/2004	6:02:04 PM		26.379	26.813	24.58	28.399	27.09		46.802	51.548	14.367	32.834	-1.222	-7.462		48.52	0.068	14.643	0.004		1967.35	32.7892	50.1	11.9	39.8	2.745	0.010	0.010	0.000	0.258	0.22	
1272	6/15/2004	6:03:04 PM		26.39	26.834	24.586	28.445	27.055		46.794	51.311	14.385	32.907	-1.222	-7.462		42.944	0.068	14.643	0.004		1968.35	32.8058	49.8	10.5	39.9	2.748	0.010	0.010	0.000	0.257	0.22	
1273	6/15/2004	6:04:04 PM		26.399	26.828	24.58	28.439	27.01		46.562	51.063	14.319	32.688	-1.222	-7.479		43.632	0.07	14.643	0.004		1969.35	32.8225	49.6	10.7	39.6	2.732	0.010	0.011	0.000	0.267	0.23	
1274	6/15/2004	6:05:04 PM		26.394	26.833	24.56	28.374	26.98		46.661	51.11	14.296	32.862	-1.222	-7.268		43.47	0.066	14.643	0.004		1970.35	32.8392	49.6	10.7	39.8	2.741	0.010	0.010	0.000	0.251	0.21	
1275	6/15/2004	6:06:04 PM		26.424	26.858	24.6	28.379	26.954		46.904	51.533	14.383	32.963	-1.222	-7.384		55.103	0.067	14.643	0.004		1971.35	32.8558	50.1	13.5	39.9	2.753	0.010	0.010	0.000	0.253	0.22	
1276	6/15/2004	6:07:04 PM		26.412	26.861	24.588	28.322	26.923		46.645	51.197	14.37	32.768	-1.225	-7.441		52.112	0.067	14.643	0.004		1972.35	32.8725	49.7	12.8	39.7	2.738	0.010	0.010	0.000	0.255	0.22	
1277	6/15/2004	6:08:04 PM		26.6	26.874	24.602	28.326	26.911		47.085	51.456	14.411	33.113	-1.219	-7.326		52.856	0.091	14.643	0.004		1973.35	32.8892	50.0	13.0	40.1	2.765	0.014	0.014	0.000	0.342	0.29	
1278	6/15/2004	6:09:04 PM		26.784	26.884	24.611	28.345	26.905		46.124	51.118	14.3	32.275	-0.739	-6.097		46.974	0.064	14.643	0.004		1974.35	32.9058	49.6	11.5	39.2	2.703	0.010	0.010	0.000	0.246	0.21	
1279	6/15/2004	6:10:04 PM		26.745	26.909	24.642	28.366	26.931		46.769	51.407	14.439	32.756	-1.216	-6.909		49.469	0.067	14.643	0.004		1975.35	32.9225	49.9	12.1	39.8	2.741	0.010	0.010	0.000	0.254	0.22	
1280	6/15/2004	6:11:04 PM		26.65	26.899	24.622	28.331	26.911		46.73	51.127	14.305	32.922	-1.222	-7.187		48.782	0.066	14.643	0.003		1976.35	32.9392	49.7	12.0	39.8	2.746	0.010	0.010	0.000	0.250	0.21	
1281	6/15/2004	6:12:04 PM		26.569	26.904	24.621	28.335	26.9		47.161	51.525	14.348	33.334	-1.222	-7.271		50.678	0.067	14.643	0.003		1977.35	32.9558	50.1	12.4	40.2	2.775	0.010	0.010	0.000	0.251	0.21	
1282	6/15/2004	6:13:04 PM		26.49	26.914	24.657	28.326	26.891		46.688	51.065	14.366	32.848	-1.222	-7.415		42.25	0.07	14.643	0.004		1978.35	32.9725	49.6	10.4	39.8	2.742	0.010	0.011	0.000	0.265	0.23	
1283	6/15/2004	6:14:04 PM		26.404	26.908	24.705	28.314	26.87		46.724	51.143	14.241	32.985	-1.219	-7.412		45.729	0.069	14.643	0.004		1979.35	32.9892	49.7	11.2	39.9	2.748	0.010	0.010	0.000	0.260	0.22	
1284	6/15/2004	6:15:04 PM		26.367	26.911	24.684	28.283	26.878		47.068	51.378	14.277	33.285	-1.222	-7.41		45.136	0.069	14.643	0.004		1980.35	33.0058	49.9	11.1	40.2	2.770	0.010	0.010	0.000	0.258	0.22	
1285	6/15/2004	6:16:04 PM		26.367	26.906	24.679	28.273	26.858		46.946	51.27	14.287	33.144	-1.222	-7.41		50.804	0.069	14.643	0.003		1981.35	33.0225	49.8	12.5	40.0	2.761	0.010	0.010	0.000	0.259	0.22	
1286	6/15/2004	6:17:04 PM		26.377	26.921	24.684	28.293	26.878		46.861	51.299	14.193	33.182	-1.222	-7.41		49.01	0.068	14.643	0.004		1982.35	33.0392	49.8	12.0	40.0	2.759	0.010	0.010	0.000	0.256	0.22	
1287	6/15/2004	6:18:04 PM		26.387	26.916	24.674	28.248	26.848		46.885	51.249	14.236	33.18	-1.222	-7.404		58.133	0.07	14.643	0.004		1983.35	33.0558	49.8	14.2	40.0	2.760	0.010	0.011	0.000	0.263	0.22	
1288	6/15/2004	6:19:04 PM		26.397	26.916	24.674	28.288	26.843		46.811	51.241	14.372	32.942	-1.219	-7.407		48.599	0.068	14.643	0.004		1984.35	33.0725	49.8	11.9	39.9	2.749	0.010	0.010	0.000	0.257	0.22	
1289	6/15/2004	6:20:04 PM		26.413	26.922	24.674	28.269	26.829		46.773	51.346	14.281	32.987	-1.219	-7.401		56.926	0.067	14.643	0.004		1985.35	33.0892	49.9	14.0	39.9	2.750	0.010	0.010	0.000	0.253	0.22	
1290	6/15/2004	6:21:04 PM		26.428	26.927	24.684	28.298	26.814		46.834	51.461	14.337	32.961	-1.216	-7.398		43.34	0.068	14.643	0.004		1986.35	33.1058	50.0	10.6	39.9	2.751	0.010	0.010	0.000	0.256	0.22	
1291	6/15/2004	6:22:04 PM		26.44	26.924	24.667	28.236	26.802		46.902	51.388	14.339	33.022	-1.225	-7.41		49.331	0.068	14.643	0.003		1987.35	33.1225	49.9	12.1	40.0	2.755	0.010	0.010	0.000	0.256	0.22	
1292	6/15/2004	6:23:04 PM		26.454	26.923	24.675	28.299	26.845		46.937	51.32	14.312	33.199	-1.219	-7.404		52.13	0.068	14.643	0.004		1988.35	33.1392	49.8	12.8	40.1	2.763	0.010	0.010	0.000	0.255	0.22	
1293	6/15/2004	6:24:04 PM		26.45	26.914	24.666	28.305	26.816		47.001	51.51	14.37	33.105	-1.222	-7.398		54.239	0.068	14.643	0.004		1989.35	33.1558	50.0	13.3	40.1	2.762	0.010	0.010	0.000	0.256	0.22	
1294	6/15/2004	6:25:04 PM		26.439	26.898	24.645	28.244	26.785		46.612	51.013	14.326	32.817	-1.225	-7.398		49.805	0.068	14.643	0.004		1990.35	33.1725	49.5	12.2	39.7	2.738	0.010	0.010	0.000	0.258	0.22	
1295	6/15/2004	6:26:04 PM		26.466	26.915	24.662	28.236	26.792		46.898	51.413	14.365	32.992	-1.222	-7.395		58.45	0.068	14.643	0.004		1991.35	33.1892	49.9	14.3	39.9	2.754	0.010	0.010	0.000	0.256	0.22	
1296	6/15/2004	6:27:04 PM		26.461	26.915	24.677	28.251	26.792		46.989	51.543	14.358	33.154	-1.216	-7.392		53.288	0.068	14.643	0.004		1992.35	33.2058	50.1	13.1	40.1	2.763	0.010	0.010	0.000	0.255	0.22	
1297	6/15/2004	6:28:04 PM		26.467	26.906	24.664	28.283	26.804		46.972	51.661	14.445	32.948	-1.222	-7.389		47.372	0.069	14.643	0.004		1993.35	33.2225	50.2	11.6	40.0	2.755	0.010	0.010	0.000	0.260	0.22	
1298	6/15/2004	6:29:04 PM		26.47	26.914	24.661	28.26	26.821		46.848	51.349	14.424	32.893	-1.225	-7.392		52.059	0.069	14.643	0.004		1994.35	33.2392	49.9	12.8	39.9	2.749	0.010	0.010	0.000	0.260	0.22	
1299	6/15/2004	6:30:04 PM		26.483	26.922	24.669	28.283	26.874		46.701	51.33	14.384	32.751	-1.222	-7.407		50.656	0.072	14.643	0.004		1995.35	33.2558	49.9	12.4	39.7	2.739	0.011	0.011	0.000	0.273	0.23	
1300	6/15/2004	6:31:04 PM		26.485	26.914	24.672	28.306	26.921		46.693	51.257	14.334	32.873	-1.219	-7.381		48.843	0.068	14.643	0.004		1996.35	33.2725	49.8	12.0	39.8	2.743	0.010	0.010	0.000	0.257	0.22	
1301	6/15/2004	6:32:04 PM		26.496	26.935	24.687	28.401	26.996		46.964	51.523	14.452	32.985	-1.222	-7.386		49.905	0.069	14.643	0.004		1997.35	33.2892	50.1	12.2	40.0	2.756	0.010	0.010	0.000	0.260	0.22	
1302	6/15/2004	6:33:04 PM		26.489	26.928	24.68	28.434	27.064		46.927	51.434	14.419	32.983	-1.219	-7.386		50.236	0.068	14.643	0.004		1998.35	33.3058	50.0	12.3	40.0	2.755	0.010	0.010	0.000	0.256	0.22	
1303	6/15/2004	6:34:04 PM		26.489	26.938	24.681	28.459	27.125		47.045	51.448	14.371	33.172	-1.219	-7.433		54.045	0.069	14.643	0.004		1999.35	33.3225	50.0	13.2	40.1	2.765	0.010	0.010	0.000	0.259	0.22	
1304	6/15/2004	6:35:04 PM		26.498	26.942	24.694	28.517	27.163		46.898	51.32	14.369	33.053	-1.219	-7.433		43.086	0.069	14.643	0.004		2000.35	33.3392	49.8	10.6	40.0	2.756	0.010	0.010	0.000	0.260	0.22	
1305	6/15/2004	6:36:04 PM		26.512	26.956	24.693	28.521	27.162		46.914	51.361	14.407	33.049	-1.222	-7.436		50.92	0.069	14.643	0.004		2001.35	33.3558	49.9	12.5	40.0	2.757	0.010	0.010	0.000	0.260	0.22	
1306	6/15/2004	6:37:04 PM		26.511	26.97	24.698	28.521	27.132		46.755	51.303	14.448	32.793	-1.222	-7.438		50.466	0.069	14.643	0.004		2002.35	33.3725	49.8	12.4	39.8	2.742	0.010	0.010	0.000	0.261	0.22	
1307	6/15/2004	6:38:04 PM		26.53	26.994	24.757	28.52	27.121		46.591	51.119	14.315	32.772	-1.202	-7.271		43.468	0.064	14.643	0.004		2003.35	33.3892	49.6	10.7	39.7	2.736	0.010	0.010	0.000	0.242	0.21	
1308	6/15/2004	6:39:04 PM		26.523	26.977	24.734	28.483	27.083		46.514	50.828	14.313	32.782	-1.222	-7.459		49.296	0.07	14.643	0.004		2004.35	33.4058	49.4	12.1	39.6	2.734	0.010	0.011	0.000	0.265	0.23	
1309	6/15/2004	6:40:04 PM		26.524	26.988	24.736	28.444	27.03		46.748	51.299	14.366	32.844	-1.225	-7.3		50.758	0.066	14.643	0.003		2005.35	33.4225	49.8	12.4	39.8	2.744	0.010	0.010	0.000	0.249	0.21	
1310	6/15/2004	6:41:04 PM		26.543	27.007	24.74	28.433	27.004		46.498	51.052	14.384	32.575	-1.225	-7.36		54.919	0.067	14.643	0.003		2006.35	33.4392	49.6	13.5	39.5	2.726	0.010	0.010	0.000	0.255	0.22	
1311	6/15/2004	6:42:04 PM		26.546	27.005	24.727	28.411	26.977		46.686	51.29	14.433	32.715	-1.225	-7.384		52.362	0.068	14.643	0.003		2007.35	33.4558	49.8	12.8	39.7	2.737	0.010	0.010	0.000	0.257	0.22	
1312	6/15/2004	6:43:04 PM		26.552	27.026	24.739	28.423	26.963		46.508	51.152	14.399	32.548	-1.222	-7.404		47.602	0.068	14.643	0.004		2008.35	33.4725	49.7	11.7	39.5	2.725	0.010	0.010	0.000	0.258	0.22	
1313	6/15/2004	6:44:04 PM		26.538	27.012	24.72	28.448	26.929		46.643	51.21	14.313	32.856	-1.222	-7.418		43.466	0.068	14.643	0.004		2009.35	33.4892	49.7	10.7	39.7	2.741	0.010	0.010	0.000	0.257	0.22	
1314	6/15/2004	6:45:04 PM		26.543	27.022	24.735	28.413	26.904		47.018	51.641	14.422	33.053	-1.219	-7.418		46.872	0.067	14.643	0.004		2010.35	33.5058	50.2	11.5	40.0	2.760	0.010	0.010	0.000	0.251	0.21	
1315	6/15/2004	6:46:04 PM		26.534	27.018	24.711	28.329	26.89		46.657	51.429	14.384	32.667	-1.193	-7.32		58.186	0.069	14.643	0.004		2011.35	33.5225	50.0	14.3	39.7	2.735	0.010	0.010	0.000	0.261	0.22	
1316	6/15/2004	6:47:04 PM		26.541	27.03	24.722	28.286	26.852		46.9	51.433	14.395	32.965	-1.222	-7.395		47.414	0.069	14.643	0.004		2012.35	33.5392	50.0	11.6	39.9	2.753	0.010	0.010	0.000	0.260	0.22	
1317	6/15/2004	6:48:04 PM		26.537	27.016	24.714	28.293	26.863		46.566	51.206	14.364	32.655	-1.219	-7.395		49.531	0.068	14.643	0.004		2013.35	33.5558	49.7	12.1	39.6	2.731	0.010	0.010	0.000	0.258	0.22	
1318	6/15/2004	6:49:04 PM		26.522	27.006	24.694	28.243	26.843		46.889	51.49	14.344	33.027	-1.222	-7.384		46.448	0.071	14.643	0.004		2014.35	33.5725	50.0	11.4	40.0	2.755	0.011	0.011	0.000	0.267	0.23	
1319	6/15/2004	6:50:04 PM		26.537	27.011	24.724	28.258	26.838		46.912	51.84	14.46	32.852	-1.092	-7.022		50.703	0.058	14.643	0.004		2015.35	33.5892	50.4	12.4	39.9	2.750	0.009	0.009	0.000	0.219	0.19	
1320	6/15/2004	6:51:04 PM		26.528	27.007	24.695	28.299	26.829		47.012	51.678	14.229	33.244	-1.159	-7.256		53.202	0.071	14.643	0.004		2016.35	33.6058	50.2	13.0	40.1	2.767	0.011	0.011	0.000	0.266	0.23	
1321	6/15/2004	6:52:04 PM		26.55	27.019	24.726	28.41	26.821		46.74	51.336	14.34	32.887	-1.179	-7.3		48.597	0.068	14.643	0.004		2017.35	33.6225	49.9	11.9	39.8	2.745	0.010	0.010	0.000	0.257	0.22	
1322	6/15/2004	6:53:04 PM		26.544	27.008	24.731	28.404	26.775		46.987	51.896	14.429	32.963	-1.216	-7.369		49.548	0.073	14.643	0.004		2018.35	33.6392	50.4	12.1	40.0	2.756	0.011	0.011	0.000	0.274	0.23	
1323	6/15/2004	6:54:04 PM		26.554	27.008	24.731	28.439	26.775		46.699	51.4	14.338	32.803	-1.216	-7.349		45.518	0.067	14.643	0.004		2019.35	33.6558	49.9	11.2	39.8	2.741	0.010	0.010	0.000	0.253	0.22	
1324	6/15/2004	6:55:04 PM		26.543	27.002	24.72	28.418	26.779		46.722	51.473	14.332	32.782	-1.219	-7.436		46.204	0.067	14.643	0.004		2020.35	33.6725	50.0	11.3	39.8	2.741	0.010	0.010	0.000	0.253	0.22	
1325	6/15/2004	6:56:04 PM		26.549	26.993	24.716	28.299	26.765		46.802	51.21	14.254	33.082	-1.225	-7.334		49.448	0.068	14.643	0.003		2021.35	33.6892	49.7	12.1	39.9	2.754	0.010	0.010	0.000	0.256	0.22	
1326	6/15/2004	6:57:04 PM		26.56	26.999	24.727	28.296	26.782		46.634	51.216	14.303	32.83	-1.156	-7.251		45.134	0.071	14.643	0.004		2022.35	33.7058	49.7	11.1	39.7	2.739	0.011	0.011	0.000	0.268	0.23	
1327	6/15/2004	6:58:04 PM		26.54	26.989	24.716	28.275	26.821		46.908	51.465	14.27	33.158	-1.222	-7.36		51.19	0.069	14.643	0.004		2023.35	33.7225	50.0	12.5	40.0	2.760	0.010	0.010	0.000	0.259	0.22	
1328	6/15/2004	6:59:04 PM		26.555	26.989	24.731	28.3	26.886		46.51	50.978	14.27	32.749	-1.222	-7.407		55.059	0.066	14.643	0.004		2024.35	33.7392	49.5	13.5	39.6	2.732	0.010	0.010	0.000	0.250	0.21	
1329	6/15/2004	7:00:04 PM		26.547	26.996	24.799	28.392	26.943		46.759	51.309	14.222	32.981	-1.222	-7.418		50.889	0.069	14.643	0.004		2025.35	33.7558	49.8	12.5	39.9	2.749	0.010	0.010	0.000	0.259	0.22	
1330	6/15/2004	7:01:04 PM		26.572	27.021	24.814	28.452	26.998		46.632	51.305	14.23	32.881	-1.222	-7.418		50.462	0.069	14.643	0.004		2026.35	33.7725	49.8	12.4	39.8	2.741	0.010	0.010	0.000	0.260	0.22	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1331	6/15/2004	7:02:04 PM		26.565	27.014	24.807	28.475	27.081		46.84	51.342	14.224	33.139	-1.222	-7.418		41.565	0.066	14.643	0.004		2027.35	33.7892	49.9	10.2	40.0	2.757	0.010	0.010	0.000	0.247	0.21	
1332	6/15/2004	7:03:04 PM		26.564	27.013	24.785	28.469	27.099		46.68	51.092	14.169	33.035	-1.222	-7.334		48.866	0.068	14.643	0.004		2028.35	33.8058	49.6	12.0	39.9	2.748	0.010	0.010	0.000	0.256	0.22	
1333	6/15/2004	7:04:04 PM		26.564	27.013	24.776	28.489	27.105		46.763	51.315	14.216	33.041	-1.159	-7.196		42.187	0.069	14.643	0.004		2029.35	33.8225	49.8	10.3	39.9	2.751	0.010	0.010	0.000	0.259	0.22	
1334	6/15/2004	7:05:04 PM		26.56	27.014	24.767	28.495	27.056		46.552	50.986	14.168	32.875	-1.159	-7.256		46.937	0.068	14.643	0.004		2030.35	33.8392	49.5	11.5	39.7	2.738	0.010	0.010	0.000	0.257	0.22	
1335	6/15/2004	7:06:04 PM		26.555	27.004	24.747	28.39	26.996		46.983	51.693	14.317	33.15	-1.222	-7.358		55.974	0.07	14.643	0.004		2031.35	33.8558	50.2	13.7	40.1	2.762	0.010	0.011	0.000	0.262	0.22	
1336	6/15/2004	7:07:04 PM		26.566	27.02	24.753	28.351	26.982		46.904	51.579	14.25	33.119	-1.199	-7.352		45.837	0.068	14.643	0.004		2032.35	33.8725	50.1	11.2	40.0	2.759	0.010	0.010	0.000	0.255	0.22	
1337	6/15/2004	7:08:04 PM		26.579	27.038	24.766	28.31	26.94		46.846	51.535	14.3	32.983	-1.219	-7.372		60.82	0.065	14.643	0.004		2033.35	33.8892	50.1	14.9	39.9	2.752	0.010	0.010	0.000	0.244	0.21	
1338	6/15/2004	7:09:04 PM		26.572	27.041	24.759	28.277	26.923		46.964	51.695	14.336	33.01	-1.222	-7.398		43.096	0.068	14.643	0.004		2034.35	33.9058	50.2	10.6	40.0	2.757	0.010	0.010	0.000	0.255	0.22	
1339	6/15/2004	7:10:04 PM		26.562	27.027	24.749	28.268	26.869		46.796	51.562	14.284	32.949	-1.202	-7.323		45.756	0.063	14.643	0.004		2035.35	33.9225	50.1	11.2	39.9	2.749	0.009	0.009	0.000	0.237	0.20	
1340	6/15/2004	7:11:04 PM		26.561	27.025	24.748	28.197	26.832		46.726	51.421	14.303	32.897	-1.222	-7.404		44.945	0.067	14.643	0.004		2036.35	33.9392	49.9	11.0	39.8	2.745	0.010	0.010	0.000	0.253	0.22	
1341	6/15/2004	7:12:04 PM		26.543	27.007	24.73	28.129	26.795		46.736	51.427	14.267	32.951	-1.156	-7.242		51.867	0.068	14.643	0.004		2037.35	33.9558	50.0	12.7	39.8	2.747	0.010	0.010	0.000	0.256	0.22	
1342	6/15/2004	7:12:42 PM		26.533	27.007	24.719	28.099	26.774		47.095	51.747	14.341	33.191	-1.161	-7.329		44.066	0.071	14.643	0.004		2037.98	33.9664	50.3	10.8	40.1	2.768	0.011	0.011	0.000	0.266	0.23	
1343	6/15/2004	7:13:42 PM		26.543	27.017	24.74	28.075	26.74		46.719	51.091	14.314	32.965	-1.153	-7.277		53.874	0.068	14.643	0.004		2038.98	33.9831	49.6	13.2	39.8	2.747	0.010	0.010	0.000	0.256	0.22	
1344	6/15/2004	7:14:42 PM		26.537	27.006	24.739	28.038	26.698		46.518	51.129	14.239	32.751	-1.182	-7.372		49.986	0.072	14.643	0.004		2039.98	33.9997	49.7	12.2	39.6	2.733	0.011	0.011	0.000	0.273	0.23	
1345	6/15/2004	7:15:42 PM		26.537	27.006	24.749	27.998	26.689		46.977	51.332	14.329	33.154	-1.222	-7.41		50.699	0.071	14.643	0.004		2040.98	34.0164	49.9	12.4	40.1	2.762	0.011	0.011	0.000	0.266	0.23	
1346	6/15/2004	7:16:42 PM		26.54	26.999	24.742	27.991	26.682		46.703	51.525	14.246	32.905	-1.098	-7.06		56.728	0.065	14.643	0.004		2041.98	34.0331	50.1	13.9	39.8	2.744	0.010	0.010	0.000	0.245	0.21	
1347	6/15/2004	7:17:42 PM		26.528	26.997	24.744	27.984	26.664		46.954	51.604	14.269	33.18	-1.222	-7.349		51.459	0.068	14.643	0.004		2042.98	34.0497	50.1	12.6	40.1	2.762	0.010	0.010	0.000	0.255	0.22	
1348	6/15/2004	7:18:42 PM		26.496	26.965	24.723	27.967	26.628		47.169	51.836	14.337	33.258	-1.222	-7.386		55.616	0.066	14.643	0.004		2043.98	34.0664	50.4	13.6	40.2	2.773	0.010	0.010	0.000	0.247	0.21	
1349	6/15/2004	7:19:42 PM		26.489	26.952	24.725	27.995	26.655		47.089	51.84	14.288	33.226	-1.222	-7.381		46.148	0.067	14.643	0.004		2044.98	34.0831	50.4	11.3	40.2	2.769	0.010	0.010	0.000	0.251	0.21	
1350	6/15/2004	7:20:42 PM		26.494	26.953	24.731	28.035	26.701		46.587	51.176	14.197	32.85	-1.214	-7.392		50.845	0.066	14.643	0.004		2045.98	34.0997	49.7	12.5	39.7	2.738	0.010	0.010	0.000	0.250	0.21	
1351	6/15/2004	7:21:42 PM		26.489	26.953	24.736	28.07	26.726		46.804	51.518	14.266	32.967	-1.214	-7.395		49.909	0.066	14.643	0.004		2046.98	34.1164	50.0	12.2	39.9	2.750	0.010	0.010	0.000	0.249	0.21	
1352	6/15/2004	7:22:42 PM		26.485	26.939	24.727	28.041	26.782		46.821	51.682	14.235	32.998	-1.156	-7.381		53.142	0.069	14.643	0.004		2047.98	34.1331	50.2	13.0	39.9	2.752	0.010	0.010	0.000	0.260	0.22	
1353	6/15/2004	7:23:42 PM		26.482	26.936	24.729	28.118	26.808		47.074	51.655	14.276	33.271	-1.199	-7.381		47.374	0.067	14.643	0.004		2048.98	34.1497	50.2	11.6	40.2	2.770	0.010	0.010	0.000	0.251	0.21	
1354	6/15/2004	7:24:42 PM		26.478	26.937	24.729	28.169	26.829		46.865	51.587	14.398	32.887	-1.156	-7.239		51.769	0.063	14.643	0.004		2049.98	34.1664	50.1	12.7	39.9	2.749	0.009	0.009	0.000	0.237	0.20	
1355	6/15/2004	7:25:42 PM		26.489	26.943	24.73	28.209	26.865		47.02	51.608	14.235	33.308	-1.156	-7.323		37.794	0.067	14.643	0.004		2050.98	34.1831	50.1	9.3	40.2	2.769	0.010	0.010	0.000	0.251	0.21	
1356	6/15/2004	7:26:42 PM		26.5	26.949	24.742	28.196	26.911		46.89	51.541	14.267	33.109	-1.156	-7.369		48.128	0.068	14.643	0.004		2051.98	34.1997	50.1	11.8	40.0	2.758	0.010	0.010	0.000	0.255	0.22	
1357	6/15/2004	7:27:42 PM		26.504	26.957	24.745	28.224	26.934		46.948	51.57	14.3	33.152	-1.199	-7.378		48.515	0.067	14.643	0.004		2052.98	34.2164	50.1	11.9	40.1	2.761	0.010	0.010	0.000	0.251	0.21	
1358	6/15/2004	7:28:42 PM		26.489	26.947	24.74	28.234	26.939		47.136	51.935	14.327	33.219	-1.13	-7.268		45.645	0.065	14.643	0.004		2053.98	34.2331	50.5	11.2	40.2	2.770	0.010	0.010	0.000	0.243	0.21	
1359	6/15/2004	7:29:42 PM		26.496	26.96	24.748	28.222	26.947		46.939	51.492	14.262	33.189	-1.159	-7.308		47.135	0.066	14.643	0.004		2054.98	34.2497	50.0	11.6	40.1	2.762	0.010	0.010	0.000	0.247	0.21	
1360	6/15/2004	7:30:42 PM		26.492	26.961	24.829	28.173	26.883		46.628	51.143	14.146	33.027	-1.135	-7.337		51.588	0.067	14.643	0.004		2055.98	34.2664	49.7	12.6	39.8	2.746	0.010	0.010	0.000	0.252	0.21	
1361	6/15/2004	7:31:42 PM		26.485	26.959	24.822	28.151	26.791		46.746	51.349	14.144	33.098	-1.153	-7.358		49.079	0.065	14.643	0.004		2056.98	34.2831	49.9	12.0	39.9	2.752	0.010	0.010	0.000	0.244	0.21	
1362	6/15/2004	7:32:42 PM		26.485	26.949	24.797	28.066	26.722		46.916	51.502	14.214	33.232	-1.19	-7.36		51.909	0.069	14.643	0.004		2057.98	34.2997	50.0	12.7	40.1	2.763	0.010	0.010	0.000	0.258	0.22	
1363	6/15/2004	7:33:42 PM		26.498	26.962	24.804	28.059	26.709		46.759	51.483	14.217	32.996	-1.095	-7.002		54.189	0.056	14.643	0.004		2058.98	34.3164	50.0	13.3	39.9	2.749	0.008	0.008	0.000	0.211	0.18	
1364	6/15/2004	7:34:42 PM		26.482	26.936	24.779	27.968	26.688		46.892	51.661	14.234	33.082	-1.115	-7.265		45.779	0.073	14.643	0.004		2059.98	34.3331	50.2	11.2	40.0	2.757	0.011	0.011	0.000	0.274	0.23	
1365	6/15/2004	7:35:42 PM		26.485	26.939	24.782	27.941	26.622		46.852	51.405	14.251	33.09	-1.185	-7.323		41.997	0.068	14.643	0.004		2060.98	34.3497	49.9	10.3	40.0	2.756	0.010	0.010	0.000	0.255	0.22	
1366	6/15/2004	7:36:42 PM		26.469	26.928	24.765	27.895	26.6		46.653	51.226	14.218	32.905	-1.159	-7.323		40.535	0.067	14.643	0.003		2061.98	34.3664	49.8	9.9	39.8	2.743	0.010	0.010	0.000	0.253	0.22	
1367	6/15/2004	7:37:42 PM		26.476	26.925	24.788	27.897	26.543		47.126	51.792	14.306	33.269	-1.153	-7.32		54.963	0.069	14.643	0.004		2062.98	34.3831	50.3	13.5	40.2	2.771	0.010	0.010	0.000	0.257	0.22	
1368	6/15/2004	7:38:42 PM		26.452	26.896	24.754	27.819	26.494		46.977	51.523	14.246	33.258	-1.156	-7.317		51.542	0.067	14.643	0.004		2063.98	34.3997	50.1	12.6	40.1	2.766	0.010	0.010	0.000	0.251	0.21	
1369	6/15/2004	7:39:42 PM		26.439	26.888	24.75	27.815	26.501		47.161	51.819	14.269	33.318	-1.156	-7.349		48.674	0.066	14.643	0.004		2064.98	34.4164	50.3	11.9	40.2	2.774	0.010	0.010	0.000	0.246	0.21	
1370	6/15/2004	7:40:42 PM		26.421	26.87	24.733	27.778	26.473		47.273	51.968	14.39	33.318	-1.159	-7.372		48.321	0.067	14.643	0.004		2065.98	34.4331	50.5	11.8	40.3	2.778	0.010	0.010	0.000	0.250	0.21	
1371	6/15/2004	7:41:42 PM		26.424	26.858	24.731	27.825	26.511		46.869	51.319	14.232	33.16	-1.156	-7.178		52.729	0.061	14.643	0.004		2066.98	34.4497	49.8	12.9	40.0	2.759	0.009	0.009	0.000	0.229	0.19	
1372	6/15/2004	7:42:42 PM		26.395	26.824	24.696	27.796	26.532		46.975	51.489	14.256	33.174	-1.153	-7.239		49.838	0.068	14.643	0.004		2067.98	34.4664	50.0	12.2	40.1	2.763	0.010	0.010	0.000	0.255	0.22	
1373	6/15/2004	7:43:42 PM		26.423	26.846	24.739	27.869	26.599		47.215	52.068	14.341	33.25	-1.153	-7.3		47.185	0.065	14.643	0.004		2068.98	34.4831	50.6	11.6	40.2	2.774	0.010	0.010	0.000	0.243	0.21	
1374	6/15/2004	7:44:42 PM		26.411	26.825	24.712	27.872	26.638		46.626	51.361	14.217	32.817	-1.156	-7.34		50.952	0.065	14.643	0.004		2069.98	34.4997	49.9	12.5	39.7	2.739	0.010	0.010	0.000	0.246	0.21	
1375	6/15/2004	7:45:42 PM		26.409	26.823	24.711	27.901	26.676		47.138	51.767	14.325	33.287	-1.156	-7.329		48.196	0.067	14.643	0.004		2070.98	34.5164	50.3	11.8	40.2	2.773	0.010	0.010	0.000	0.250	0.21	
1376	6/15/2004	7:46:42 PM		26.423	26.832	24.719	27.944	26.709		46.556	51.388	14.23	32.694	-1.153	-7.331		44.938	0.067	14.643	0.004		2071.98	34.5331	49.9	11.0	39.6	2.732	0.010	0.010	0.000	0.254	0.22	
1377	6/15/2004	7:47:42 PM		26.418	26.822	24.729	27.999	26.759		47.226	52.01	14.373	33.287	-1.153	-7.323		43.136	0.068	14.643	0.004		2072.98	34.5497	50.5	10.6	40.3	2.776	0.010	0.010	0.000	0.254	0.22	
1378	6/15/2004	7:48:42 PM		26.411	26.815	24.713	28.032	26.762		46.987	51.477	14.332	33.144	-1.127	-7.326		41.772	0.068	14.643	0.004		2073.98	34.5664	50.0	10.2	40.1	2.762	0.010	0.010	0.000	0.255	0.22	
1379	6/15/2004	7:49:42 PM		26.421	26.815	24.713	28.037	26.782		46.871	51.577	14.333	32.949	-1.156	-7.331		51.732	0.067	14.643	0.004		2074.98	34.5831	50.1	12.7	39.9	2.752	0.010	0.010	0.000	0.252	0.21	
1380	6/15/2004	7:50:42 PM		26.427	26.836	24.713	28.093	26.808		47.323	52.091	14.347	33.367	-1.101	-7.236		52.689	0.071	14.643	0.004		2075.98	34.5997	50.6	12.9	40.3	2.782	0.011	0.011	0.000	0.265	0.23	
1381	6/15/2004	7:51:42 PM		26.428	26.832	24.724	28.084	26.849		46.989	51.86	14.35	33.027	-1.101	-7.308		55.021	0.065	14.643	0.004		2076.98	34.6164	50.4	13.5	40.0	2.758	0.010	0.010	0.000	0.244	0.21	
1382	6/15/2004	7:52:42 PM		26.441	26.845	24.737	28.107	26.867		46.749	51.405	14.279	32.924	-1.132	-7.337		51.348	0.063	14.643	0.003		2077.98	34.6331	49.9	12.6	39.8	2.747	0.009	0.009	0.000	0.238	0.20	
1383	6/15/2004	7:53:42 PM		26.448	26.862	24.76	28.189	26.889		46.997	51.759	14.39	32.987	-1.095	-7.094		58.361	0.065	14.643	0.004		2078.98	34.6497	50.3	14.3	40.0	2.757	0.010	0.010	0.000	0.244	0.21	
1384	6/15/2004	7:54:42 PM		26.428	26.841	24.734	28.113	26.844		46.726	51.483	14.305	32.877	-1.101	-7.248		49.423	0.076	14.643	0.004		2079.98	34.6664	50.0	12.1	39.8	2.744	0.011	0.011	0.000	0.287	0.24	
1385	6/15/2004	7:55:42 PM		26.427	26.846	24.738	28.063	26.788		46.821	51.498	14.275	33.043	-1.098	-7.213		50.758	0.068	14.643	0.004		2080.98	34.6831	50.0	12.4	39.9	2.753	0.010	0.010	0.000	0.256	0.22	
1386	6/15/2004	7:56:42 PM		26.425	26.839	24.732	27.996	26.736		47.182	51.693	14.288	33.429	-1.159	-7.317		46.004	0.068	14.643	0.003		2081.98	34.6997	50.2	11.3	40.3	2.779	0.010	0.010	0.000	0.253	0.22	
1387	6/15/2004	7:57:42 PM		26.417	26.841	24.733	27.958	26.673		47.236	51.89	14.366	33.353	-1.159	-7.337		52.731	0.066	14.643	0.004		2082.98	34.7164	50.4	12.9	40.3	2.778	0.010	0.010	0.000	0.246	0.21	
1388	6/15/2004	7:58:42 PM		26.437	26.861	24.819	27.968	26.639		46.954	51.394	14.2	33.279	-1.219	-7.343		53.09	0.067	14.643	0.004		2083.98	34.7331	49.9	13.0	40.1	2.766	0.010	0.010	0.000	0.250	0.21	
1389	6/15/2004	7:59:42 PM		26.446	26.87	24.833	27.882	26.593		47.001	51.736	14.28	33.156	-0.996	-6.921		52.37	0.06	14.643	0.004		2084.98	34.7497	50.3	12.8	40.1	2.763	0.009	0.009	0.000	0.224	0.19	
1390	6/15/2004	8:00:42 PM		26.439	26.858	24.806	27.801	26.561		46.991	51.655	14.22	33.254	-1.101	-7.112		52.224	0.066	14.643	0.003		2085.98	34.7664	50.2	12.8	40.1	2.766	0.010	0.010	0.000	0.247	0.21	
1391	6/15/2004	8:01:42 PM		26.419	26.833	24.766	27.731	26.501		47.105	51.782	14.327	33.26	-1.132	-7.19		49.798	0.067	14.643	0.004		2086.98	34.7831	50.3	12.2	40.2	2.770	0.010	0.010	0.000	0.250	0.21	
1392	6/15/2004	8:02:42 PM		26.419	26.818	24.771	27.681	26.461		46.877	51.527	14.227	33.115	-1.156	-7.288		42.233	0.066	14.643	0.004		2087.98	34.7997	50.1	10.3	40.0	2.758	0.010	0.010	0.000	0.248	0.21	
1393	6/15/2004	8:03:42 PM		26.412	26.801	24.753	27.648	26.464		46.794	51.288	14.174	33.183	-1.159	-7.314		49.998	0.067	14.643	0.003		2088.98	34.8164	49.8	12.3	40.0	2.757	0.010	0.010	0.000	0.252	0.21	
1394	6/15/2004	8:04:42 PM		26.411	26.805	24.757	27.713	26.498		47.23	51.906	14.286	33.408	-1.17	-7.331		48.138	0.066	14.643	0.004		2089.98	34.8331	50.4	11.8	40.3	2.780	0.010	0.010	0.000	0.246	0.21	
1395	6/15/2004	8:05:42 PM		26.381	26.78	24.728	27.748	26.523		46.713	51.243	14.172	32.985	-1.156	-7.346		52.243	0.065	14.643	0.004		2090.98	34.8497	49.8	12.8	39.8	2.747	0.010	0.010	0.000	0.245	0.21	
1396	6/15/2004	8:06:42 PM		26.417	26.801	24.763	27.793	26.554		46.91	51.591	14.213	33.115	-1.156	-7.355		53.3	0.067	14.643	0.004		2091.98	34.8664	50.1	13.1	40.0	2.759	0.010	0.010	0.000	0.251	0.21	
1397	6/15/2004	8:07:42 PM		26.424	26.808	24.771	27.816	26.601		46.919	51.434	14.209	33.224	-1.15	-7.3		51.694	0.066	14.643	0.004		2092.98	34.8831	50.0	12.7	40.1	2.763	0.010	0.010	0.000	0.247	0.21	
1398	6/15/2004	8:08:42 PM		26.41	26.789	24.757	27.822	26.622		47.085	51.705	14.266	33.306	-1.156	-7.355		52.695	0.066	14.643	0.004		2093.98	34.8997	50.2	12.9	40.2	2.771	0.010	0.010	0.000	0.246	0.21	
1399	6/15/2004	8:09:42 PM		26.405	26.784	24.752	27.871	26.642		47.17	51.788	14.284	33.353	-1.098	-7.181		48.81	0.066	14.643	0.004		2094.98	34.9164	50.3	12.0	40.3	2.776	0.010	0.010	0.000	0.246	0.21	
1400	6/15/2004	8:10:42 PM		26.4	26.774	24.747	27.861	26.667		46.91	51.311	14.203	33.283	-1.135	-7.248		45.074	0.066	14.643	0.004		2095.98	34.9331	49.8	11.0	40.1	2.765	0.010	0.010	0.000	0.247	0.21	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1401	6/15/2004	8:11:42 PM		26.392	26.776	24.748	27.913	26.683		47.134	51.765	14.207	33.466	-1.156	-7.285		49.715	0.067	14.643	0.004		2096.98	34.9497	50.3	12.2	40.3	2.779	0.010	0.010	0.000	0.250	0.21	
1402	6/15/2004	8:12:42 PM		26.388	26.767	24.74	27.91	26.69		47.323	51.993	14.107	33.696	-1.121	-7.329		46.163	0.067	14.643	0.003		2097.98	34.9664	50.5	11.3	40.5	2.793	0.010	0.010	0.000	0.248	0.21	
1403	6/15/2004	8:13:42 PM		26.382	26.761	24.738	27.898	26.683		47.25	51.975	14.12	33.562	-1.156	-7.355		45.176	0.067	14.643	0.004		2098.98	34.9831	50.5	11.1	40.4	2.786	0.010	0.010	0.000	0.249	0.21	
1404	6/15/2004	8:14:42 PM		26.393	26.782	24.764	27.989	26.699		47.296	52.136	14.202	33.507	-1.219	-7.158		48.566	0.06	14.643	0.004		2099.98	34.9997	50.7	11.9	40.4	2.786	0.009	0.009	0.000	0.223	0.19	
1405	6/15/2004	8:15:42 PM		26.383	26.762	24.735	27.95	26.715		46.861	51.79	14.18	33.088	-0.996	-6.907		46.403	0.07	14.643	0.004		2100.98	35.0164	50.3	11.4	40.0	2.756	0.010	0.011	0.000	0.263	0.22	
1406	6/15/2004	8:16:42 PM		26.373	26.762	24.725	27.959	26.725		47.422	52.298	14.255	33.55	-1.101	-7.17		57.635	0.066	14.643	0.004		2101.98	35.0331	50.8	14.1	40.5	2.791	0.010	0.010	0.000	0.245	0.21	
1407	6/15/2004	8:17:42 PM		26.394	26.778	24.756	27.98	26.731		47.437	52.238	14.236	33.655	-1.098	-7.135		49.135	0.068	14.643	0.004		2102.98	35.0497	50.8	12.0	40.5	2.796	0.010	0.010	0.000	0.252	0.21	
1408	6/15/2004	8:18:42 PM		26.391	26.785	24.787	27.922	26.692		47.199	51.97	14.179	33.466	-1.156	-7.265		45.086	0.066	14.643	0.004		2103.98	35.0664	50.5	11.0	40.3	2.781	0.010	0.010	0.000	0.245	0.21	
1409	6/15/2004	8:19:42 PM		26.369	26.763	24.811	27.841	26.621		46.964	51.664	14.12	33.238	-1.167	-7.32		48.472	0.059	14.643	0.004		2104.98	35.0831	50.2	11.9	40.1	2.765	0.009	0.009	0.000	0.221	0.19	
1410	6/15/2004	8:20:42 PM		26.377	26.771	24.808	27.813	26.564		47.221	51.856	14.129	33.531	-1.156	-7.297		57.157	0.066	14.643	0.004		2105.98	35.0997	50.4	14.0	40.4	2.784	0.010	0.010	0.000	0.245	0.21	
1411	6/15/2004	8:21:42 PM		26.393	26.762	24.8	27.72	26.495		47.02	51.668	14.069	33.396	-1.156	-7.288		51.292	0.067	14.643	0.004		2106.98	35.1164	50.2	12.6	40.2	2.772	0.010	0.010	0.000	0.250	0.21	
1412	6/15/2004	8:22:42 PM		26.378	26.762	24.79	27.685	26.45		47.157	51.867	14.109	33.517	-1.159	-7.294		48.203	0.066	14.643	0.004		2107.98	35.1331	50.4	11.8	40.3	2.781	0.010	0.010	0.000	0.245	0.21	
1413	6/15/2004	8:23:42 PM		26.36	26.739	24.762	27.622	26.412		47.062	51.838	14.134	33.343	-1.156	-7.308		52.222	0.066	14.643	0.004		2108.98	35.1497	50.4	12.8	40.2	2.772	0.010	0.010	0.000	0.246	0.21	
1414	6/15/2004	8:24:42 PM		26.367	26.736	24.773	27.604	26.389		47.402	51.981	14.142	33.708	-1.144	-7.337		45.241	0.066	14.643	0.004		2109.98	35.1664	50.5	11.1	40.6	2.796	0.010	0.010	0.000	0.244	0.21	
1415	6/15/2004	8:25:42 PM		26.352	26.721	24.744	27.594	26.409		47.358	52.086	14.12	33.712	-1.156	-7.329		56.189	0.068	14.643	0.004		2110.98	35.1831	50.6	13.8	40.5	2.795	0.010	0.010	0.000	0.252	0.21	
1416	6/15/2004	8:26:42 PM		26.347	26.705	24.728	27.608	26.424		47.076	51.784	14.03	33.478	-1.156	-7.329		51.575	0.068	14.643	0.004		2111.98	35.1997	50.3	12.6	40.3	2.777	0.010	0.010	0.000	0.254	0.22	
1417	6/15/2004	8:27:42 PM		26.342	26.696	24.723	27.638	26.459		47.211	52.004	14.117	33.423	-1.156	-7.326		48.845	0.067	14.643	0.004		2112.98	35.2164	50.5	12.0	40.3	2.780	0.010	0.010	0.000	0.250	0.21	
1418	6/15/2004	8:28:42 PM		26.335	26.684	24.722	27.687	26.452		47.14	51.89	14.086	33.474	-1.098	-7.201		41.355	0.069	14.643	0.004		2113.98	35.2331	50.4	10.1	40.3	2.779	0.010	0.010	0.000	0.257	0.22	
1419	6/15/2004	8:29:42 PM		26.339	26.688	24.715	27.721	26.496		46.921	51.434	14.027	33.357	-1.101	-7.282		52.078	0.066	14.643	0.003		2114.98	35.2497	50.0	12.8	40.1	2.767	0.010	0.010	0.000	0.247	0.21	
1420	6/15/2004	8:30:42 PM		26.352	26.696	24.733	27.763	26.543		47.445	52.29	14.137	33.696	-1.115	-7.291		47.727	0.068	14.643	0.004		2115.98	35.2664	50.8	11.7	40.6	2.797	0.010	0.010	0.000	0.252	0.21	
1421	6/15/2004	8:31:42 PM		26.352	26.691	24.718	27.788	26.563		47.136	51.718	14.09	33.544	-1.098	-7.297		47.354	0.067	14.643	0.004		2116.98	35.2831	50.2	11.6	40.3	2.781	0.010	0.010	0.000	0.250	0.21	
1422	6/15/2004	8:32:42 PM		26.353	26.701	24.724	27.824	26.594		47.294	51.854	14.103	33.693	-1.115	-7.274		52.94	0.071	14.643	0.004		2117.98	35.2997	50.4	13.0	40.5	2.792	0.011	0.011	0.000	0.263	0.22	
1423	6/15/2004	8:33:42 PM		26.356	26.7	24.737	27.847	26.607		47.221	51.935	14.09	33.527	-1.077	-7.164		46.486	0.067	14.643	0.004		2118.98	35.3164	50.5	11.4	40.4	2.784	0.010	0.010	0.000	0.249	0.21	
1424	6/15/2004	8:34:42 PM		26.376	26.72	24.757	27.892	26.642		47.041	51.657	14.141	33.351	-1.098	-7.251		53.474	0.067	14.643	0.004		2119.98	35.3331	50.2	13.1	40.2	2.771	0.010	0.010	0.000	0.250	0.21	
1425	6/15/2004	8:35:42 PM		26.347	26.701	24.729	27.859	26.654		46.956	51.763	14.108	33.262	-1.098	-7.253		43.067	0.066	14.643	0.004		2120.98	35.3497	50.3	10.6	40.1	2.765	0.010	0.010	0.000	0.247	0.21	
1426	6/15/2004	8:36:42 PM		26.351	26.705	24.728	27.887	26.673		47.364	52.047	14.168	33.648	-1.101	-7.233		48.432	0.071	14.643	0.004		2121.98	35.3664	50.6	11.9	40.5	2.793	0.011	0.011	0.000	0.263	0.22	
1427	6/15/2004	8:37:42 PM		26.35	26.704	24.737	27.896	26.687		47.338	52.25	14.171	33.613	-1.031	-7.199		49.302	0.067	14.643	0.004		2122.98	35.3831	50.8	12.1	40.5	2.791	0.010	0.010	0.000	0.249	0.21	
1428	6/15/2004	8:38:42 PM		26.32	26.674	24.701	27.896	26.662		47.273	52.06	14.096	33.673	-1.051	-7.248		52.182	0.066	14.643	0.004		2123.98	35.3997	50.6	12.8	40.5	2.790	0.010	0.010	0.000	0.245	0.21	
1429	6/15/2004	8:39:42 PM		26.325	26.679	24.712	27.891	26.682		46.97	51.861	14.145	33.224	-1.034	-7.248		53.271	0.066	14.643	0.004		2124.98	35.4164	50.4	13.1	40.1	2.765	0.010	0.010	0.000	0.247	0.21	
1430	6/15/2004	8:40:42 PM		26.344	26.708	24.736	27.93	26.715		47.186	51.993	14.192	33.394	-1.034	-7.248		48.682	0.066	14.643	0.004		2125.98	35.4331	50.5	11.9	40.3	2.778	0.010	0.010	0.000	0.246	0.21	
1431	6/15/2004	8:41:42 PM		26.334	26.708	24.726	27.93	26.701		47.041	51.85	14.144	33.361	-1.043	-7.242		46.953	0.066	14.643	0.004		2126.98	35.4497	50.4	11.5	40.2	2.772	0.010	0.010	0.000	0.247	0.21	
1432	6/15/2004	8:42:42 PM		26.328	26.692	24.729	27.874	26.639		47.157	51.78	14.13	33.515	-1.028	-7.245		54.529	0.065	14.643	0.004		2127.98	35.4664	50.3	13.4	40.3	2.781	0.010	0.010	0.000	0.242	0.21	
1433	6/15/2004	8:43:42 PM		26.32	26.689	24.721	27.831	26.602		47.342	51.831	14.175	33.689	-1.028	-7.239		52.685	0.066	14.643	0.004		2128.98	35.4831	50.4	12.9	40.5	2.793	0.010	0.010	0.000	0.245	0.21	
1434	6/15/2004	8:44:42 PM		26.295	26.678	24.706	27.761	26.531		46.977	51.715	14.173	33.258	-1.014	-7.037		55.249	0.06	14.643	0.004		2129.98	35.4997	50.2	13.5	40.1	2.766	0.009	0.009	0.000	0.225	0.19	
1435	6/15/2004	8:45:42 PM		26.311	26.679	24.722	27.727	26.492		47.103	51.879	14.194	33.384	-0.965	-7.103		44.634	0.066	14.643	0.004		2130.98	35.5164	50.4	10.9	40.2	2.775	0.010	0.010	0.000	0.246	0.21	
1436	6/15/2004	8:46:42 PM		26.343	26.717	24.774	27.679	26.5		47.29	51.966	14.217	33.537	-1.002	-7.141		45.211	0.066	14.643	0.004		2131.98	35.5331	50.5	11.1	40.4	2.786	0.010	0.010	0.000	0.245	0.21	
1437	6/15/2004	8:47:42 PM		26.311	26.695	24.828	27.598	26.443		46.997	51.682	14.158	33.299	-0.996	-7.155		48.824	0.065	14.643	0.004		2132.98	35.5497	50.2	12.0	40.1	2.768	0.010	0.010	0.000	0.243	0.21	
1438	6/15/2004	8:48:42 PM		26.297	26.676	24.814	27.579	26.379		47.302	52.078	14.228	33.513	-0.996	-7.167		46.961	0.063	14.643	0.004		2133.98	35.5664	50.6	11.5	40.4	2.786	0.009	0.009	0.000	0.234	0.20	
1439	6/15/2004	8:49:42 PM		26.294	26.668	24.795	27.556	26.366		47.306	52.109	14.197	33.538	-0.982	-7.077		48.553	0.067	14.643	0.004		2134.98	35.5831	50.6	11.9	40.4	2.787	0.010	0.010	0.000	0.249	0.21	
1440	6/15/2004	8:50:42 PM		26.289	26.643	24.775	27.535	26.386		46.742	51.413	14.096	33.135	-0.967	-7.106		47.827	0.067	14.643	0.004		2135.98	35.5997	49.9	11.7	39.9	2.754	0.010	0.010	0.000	0.252	0.21	
1441	6/15/2004	8:51:42 PM		26.311	26.654	24.787	27.577	26.407		46.827	51.587	14.104	33.143	-0.941	-7.103		50.889	0.065	14.643	0.004		2136.98	35.6164	50.1	12.5	40.0	2.757	0.010	0.010	0.000	0.244	0.21	
1442	6/15/2004	8:52:42 PM		26.318	26.647	24.784	27.59	26.445		47.23	52.12	14.176	33.492	-0.944	-7.123		48.768	0.066	14.643	0.004		2137.98	35.6331	50.6	12.0	40.4	2.783	0.010	0.010	0.000	0.245	0.21	
1443	6/15/2004	8:53:42 PM		26.306	26.64	24.772	27.587	26.468		47.462	52.24	14.153	33.73	-0.994	-7.187		45.088	0.065	14.643	0.003		2138.98	35.6497	50.8	11.0	40.6	2.799	0.010	0.010	0.000	0.240	0.20	
1444	6/15/2004	8:54:42 PM		26.31	26.634	24.776	27.672	26.502		47.335	52.186	14.107	33.714	-0.941	-7.187		47.602	0.064	14.643	0.004		2139.98	35.6664	50.7	11.7	40.5	2.794	0.010	0.010	0.000	0.237	0.20	
1445	6/15/2004	8:55:42 PM		26.28	26.603	24.751	27.651	26.531		47.236	52.138	14.117	33.55	-0.965	-7.181		52.933	0.065	14.643	0.004		2140.98	35.6831	50.7	13.0	40.4	2.785	0.010	0.010	0.000	0.242	0.21	
1446	6/15/2004	8:56:42 PM		26.262	26.601	24.733	27.698	26.523		47.389	52.101	14.091	33.78	-1.025	-7.225		44.421	0.058	14.643	0.004		2141.98	35.6997	50.6	10.9	40.6	2.798	0.009	0.009	0.000	0.215	0.18	
1447	6/15/2004	8:57:42 PM		26.258	26.587	24.709	27.755	26.53		47.07	51.825	14.071	33.386	-1.034	-7.034		55.046	0.059	14.643	0.004		2142.98	35.7164	50.4	13.5	40.2	2.774	0.009	0.009	0.000	0.220	0.19	
1448	6/15/2004	8:58:42 PM		26.261	26.589	24.707	27.757	26.562		47.273	52.188	14.169	33.535	-0.936	-6.996		45.28	0.068	14.643	0.004		2143.98	35.7331	50.7	11.1	40.4	2.786	0.010	0.010	0.000	0.253	0.22	
1449	6/15/2004	8:59:42 PM		26.264	26.608	24.71	27.731	26.591		47.174	51.941	14.126	33.499	-0.947	-7.04		53.234	0.066	14.643	0.003		2144.98	35.7497	50.5	13.0	40.3	2.781	0.010	0.010	0.000	0.246	0.21	
1450	6/15/2004	9:00:42 PM		26.268	26.621	24.713	27.759	26.609		46.916	51.807	14.032	33.355	-0.936	-6.979		45.416	0.065	14.643	0.004		2145.98	35.7664	50.3	11.1	40.1	2.767	0.010	0.010	0.000	0.243	0.21	
1451	6/15/2004	9:01:42 PM		26.282	26.636	24.713	27.753	26.633		47.197	51.805	14.173	33.55	-0.941	-7.031		49.604	0.066	14.643	0.003		2146.98	35.7831	50.3	12.2	40.4	2.784	0.010	0.010	0.000	0.246	0.21	
1452	6/15/2004	9:02:42 PM		26.312	26.676	24.753	27.768	26.658		47.037	51.802	14.116	33.289	-0.994	-7.138		41.595	0.066	14.643	0.004		2147.98	35.7997	50.3	10.2	40.2	2.769	0.010	0.010	0.000	0.247	0.21	
1453	6/15/2004	9:03:42 PM		26.302	26.671	24.754	27.764	26.659		47.159	52.024	14.179	33.433	-1.025	-7.199		56.043	0.07	14.643	0.004		2148.98	35.8164	50.6	13.7	40.3	2.778	0.010	0.011	0.000	0.261	0.22	
1454	6/15/2004	9:04:42 PM		26.296	26.68	24.747	27.772	26.677		47.001	51.854	14.187	33.252	-0.994	-7.146		44.573	0.065	14.643	0.004		2149.98	35.8331	50.4	10.9	40.1	2.767	0.010	0.010	0.000	0.243	0.21	
1455	6/15/2004	9:05:42 PM		26.308	26.682	24.769	27.769	26.694		46.912	51.722	14.134	33.25	-1.025	-7.23		48.97	0.066	14.643	0.004		2150.98	35.8497	50.2	12.0	40.1	2.763	0.010	0.010	0.000	0.247	0.21	
1456	6/15/2004	9:06:42 PM		26.308	26.682	24.774	27.77	26.64		47.165	51.786	14.142	33.548	-1.098	-7.213		42.273	0.063	14.643	0.004		2151.98	35.8664	50.3	10.4	40.4	2.782	0.009	0.009	0.000	0.234	0.20	
1457	6/15/2004	9:07:42 PM		26.274	26.653	24.745	27.695	26.575		47.097	51.85	14.222	33.326	-0.982	-7.057		52.297	0.068	14.643	0.004		2152.98	35.8831	50.4	12.8	40.2	2.772	0.010	0.010	0.000	0.254	0.22	
1458	6/15/2004	9:08:42 PM		26.28	26.659	24.751	27.657	26.517		47.255	51.999	14.139	33.624	-1.002	-7.17		47.904	0.066	14.643	0.003		2153.98	35.8997	50.5	11.7	40.4	2.788	0.010	0.010	0.000	0.245	0.21	
1459	6/15/2004	9:09:42 PM		26.276	26.654	24.757	27.602	26.472		47.194	51.875	14.167	33.511	-1.014	-7.219		46.672	0.065	14.643	0.004		2154.98	35.9164	50.4	11.4	40.4	2.782	0.010	0.010	0.000	0.242	0.21	
1460	6/15/2004	9:10:42 PM		26.275	26.638	24.746	27.556	26.401		47.039	51.817	14.034	33.464	-1.028	-7.225		49.683	0.065	14.643	0.003		2155.98	35.9331	50.3	12.2	40.3	2.775	0.010	0.010	0.000	0.242	0.21	
1461	6/15/2004	9:11:42 PM		26.257	26.621	24.738	27.494	26.349		47.182	51.948	14.14	33.472	-0.941	-7.12		46.277	0.061	14.643	0.004		2156.98	35.9497	50.5	11.3	40.3	2.780	0.009	0.009	0.000	0.227	0.19	
1462	6/15/2004	9:12:42 PM		26.264	26.613	24.74	27.436	26.311		47.379	52.246	14.135	33.667	-0.95	-7.152		47.297	0.064	14.643	0.004		2157.98	35.9664	50.8	11.6	40.5	2.794	0.010	0.010	0.000	0.237	0.20	
1463	6/15/2004	9:13:42 PM		26.256	26.585	24.727	27.378	26.313		47.223	52.147	14.175	33.476	-0.996	-7.172		51.653	0.064	14.643	0.003		2158.98	35.9831	50.7	12.7	40.3	2.782	0.010	0.010	0.000	0.238	0.20	
1464	6/15/2004	9:14:42 PM		26.258	26.582	24.724	27.395	26.315		47.093	52.045	14.272	33.256	-0.939	-7.077		48.424	0.064	14.643	0.004		2159.98	35.9997	50.6	11.9	40.2	2.770	0.010	0.010	0.000	0.239	0.20	
1465	6/15/2004	9:15:42 PM		26.244	26.553	24.715	27.426	26.311		47.105	51.979	14.191	33.363	-0.939	-7.144		42.352	0.064	14.643	0.004		2160.98	36.0164	50.5	10.4	40.2	2.774	0.010	0.010	0.000	0.239	0.20	
1466	6/15/2004	9:16:42 PM		26.245	26.549	24.721	27.487	26.347		47.232	51.863	14.207	33.546	-0.936	-7.155		41.592	0.063	14.643	0.004		2161.98	36.0331	50.4	10.2	40.4	2.785	0.009	0.009	0.000	0.234	0.20	
1467	6/15/2004	9:17:42 PM		26.241	26.544	24.717	27.522	26.393		47.207	51.929	14.286	33.386	-0.936	-7.146		45.762	0.065	14.643	0.004		2162.98	36.0497	50.5	11.2	40.3	2.778	0.010	0.010	0.000	0.242	0.21	
1468	6/15/2004	9:18:42 PM		26.236	26.52	24.783	27.523	26.413		46.964	51.782	14.17	33.215	-0.941	-7.144		41.613	0.067	14.643	0.004		2163.98	36.0664	50.3	10.2	40.1	2.764	0.010	0.010	0.000	0.251	0.21	
1469	6/15/2004	9:19:42 PM		26.242	26.516	24.778	27.544	26.434		46.858	51.659	14.128	33.199	-0.936	-7.158		46.524	0.062	14.643	0.004		2164.98	36.0831	50.2	11.4	40.0	2.760	0.009	0.009	0.000	0.232	0.20	
1470	6/15/2004	9:20:42 PM		26.249	26.523	24.775	27.54	26.456		47.228	52.012	14.242	33.453	-0.936	-7.164		58.112	0.066	14.643	0.004		2165.98	36.0997	50.5	14.2	40.3	2.781	0.010	0.010	0.000	0.245	0.21	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1471	6/15/2004	9:21:42 PM		26.25	26.509	24.767	27.517	26.447		47.228	52.12	14.21	33.402	-1.011	-7.048		50.676	0.06	14.643	0.004		2166.98	36.1164	50.6	12.4	40.3	2.780	0.009	0.009	0.000	0.223	0.19	
1472	6/15/2004	9:22:42 PM		26.262	26.516	24.778	27.544	26.449		46.927	51.86	14.193	33.205	-0.82	-6.75		47.473	0.065	14.643	0.004		2167.98	36.1331	50.4	11.6	40.1	2.762	0.010	0.010	0.000	0.243	0.21	
1473	6/15/2004	9:23:42 PM		26.244	26.497	24.75	27.54	26.465		47.418	52.333	14.215	33.609	-0.936	-6.996		47.879	0.065	14.643	0.004		2168.98	36.1497	50.9	11.7	40.5	2.793	0.010	0.010	0.000	0.241	0.21	
1474	6/15/2004	9:24:42 PM		26.256	26.505	24.762	27.548	26.488		47.026	51.78	14.192	33.297	-0.936	-7.016		52.929	0.064	14.643	0.004		2169.98	36.1664	50.3	13.0	40.2	2.769	0.010	0.010	0.000	0.239	0.20	
1475	6/15/2004	9:25:42 PM		26.261	26.51	24.772	27.593	26.478		47.037	51.946	14.19	33.308	-0.933	-7.022		43.916	0.063	14.643	0.004		2170.98	36.1831	50.5	10.8	40.2	2.770	0.009	0.009	0.000	0.235	0.20	
1476	6/15/2004	9:26:42 PM		26.253	26.501	24.754	27.569	26.489		47.36	52.161	14.223	33.618	-0.904	-7.025		44.896	0.064	14.643	0.004		2171.98	36.1997	50.7	11.0	40.5	2.792	0.010	0.010	0.000	0.237	0.20	
1477	6/15/2004	9:27:42 PM		26.239	26.478	24.725	27.551	26.526		47.402	52.157	14.16	33.735	-0.901	-7.022		50.505	0.064	14.643	0.004		2172.98	36.2164	50.7	12.4	40.6	2.797	0.010	0.010	0.000	0.237	0.20	
1478	6/15/2004	9:28:42 PM		26.25	26.484	24.741	27.557	26.517		47.35	52.19	14.247	33.562	-0.936	-7.031		47.537	0.058	14.643	0.004		2173.98	36.2331	50.7	11.6	40.5	2.789	0.009	0.009	0.000	0.215	0.18	
1479	6/15/2004	9:29:42 PM		26.245	26.489	24.741	27.572	26.537		47.576	52.574	14.167	33.802	-0.895	-7.013		49.218	0.063	14.643	0.004		2174.98	36.2497	51.1	12.1	40.7	2.805	0.009	0.009	0.000	0.233	0.20	
1480	6/15/2004	9:30:42 PM		26.248	26.492	24.76	27.565	26.52		46.804	51.726	14.086	33.15	-0.904	-7.06		45.332	0.063	14.643	0.004		2175.98	36.2664	50.3	11.1	40.0	2.756	0.009	0.009	0.000	0.237	0.20	
1481	6/15/2004	9:31:42 PM		26.24	26.489	24.741	27.567	26.532		46.912	51.659	14.135	33.199	-0.939	-7.06		47.377	0.065	14.643	0.004		2176.98	36.2831	50.2	11.6	40.1	2.762	0.010	0.010	0.000	0.244	0.21	
1482	6/15/2004	9:32:42 PM		26.25	26.499	24.741	27.592	26.556		47.058	51.981	14.156	33.281	-0.886	-7.063		44.848	0.063	14.643	0.004		2177.98	36.2997	50.5	11.0	40.2	2.770	0.009	0.009	0.000	0.236	0.20	
1483	6/15/2004	9:33:42 PM		26.256	26.5	24.752	27.602	26.547		47.004	51.817	14.182	33.293	-0.939	-7.097		51.081	0.07	14.643	0.004		2178.98	36.3164	50.3	12.5	40.1	2.768	0.010	0.011	0.000	0.262	0.22	
1484	6/15/2004	9:34:42 PM		26.242	26.506	24.739	27.624	26.524		47.24	52.124	14.26	33.427	-0.886	-6.967		47.694	0.061	14.643	0.003		2179.98	36.3331	50.7	11.7	40.3	2.781	0.009	0.009	0.000	0.227	0.19	
1485	6/15/2004	9:35:42 PM		26.238	26.512	24.744	27.57	26.46		47.493	52.646	14.227	33.663	-0.939	-7.109		39.782	0.063	14.643	0.004		2180.98	36.3497	51.2	9.7	40.6	2.798	0.009	0.009	0.000	0.233	0.20	
1486	6/15/2004	9:36:42 PM		26.242	26.495	24.743	27.528	26.423		47.161	52.103	14.224	33.388	-0.936	-7.115		50.76	0.064	14.643	0.004		2181.98	36.3664	50.6	12.4	40.3	2.777	0.010	0.010	0.000	0.239	0.20	
1487	6/15/2004	9:37:42 PM		26.235	26.489	24.816	27.487	26.367		47.4	52.256	14.249	33.591	-0.912	-7.115		49.054	0.064	14.643	0.004		2182.98	36.3831	50.8	12.0	40.5	2.792	0.010	0.010	0.000	0.237	0.20	
1488	6/15/2004	9:38:42 PM		26.245	26.494	24.816	27.457	26.317		47.18	52.033	14.263	33.375	-0.901	-7.112		48.858	0.065	14.643	0.004		2183.98	36.3997	50.6	12.0	40.3	2.777	0.010	0.010	0.000	0.242	0.21	
1489	6/15/2004	9:39:42 PM		26.232	26.466	24.778	27.359	26.274		47.06	51.805	14.113	33.425	-0.889	-7.123		47.813	0.064	14.643	0.004		2184.98	36.4164	50.3	11.7	40.2	2.775	0.010	0.010	0.000	0.239	0.20	
1490	6/15/2004	9:40:42 PM		26.244	26.467	24.785	27.355	26.251		46.956	51.433	14.207	33.226	-1.005	-6.996		56.248	0.07	14.643	0.004		2185.98	36.4331	50.0	13.8	40.1	2.764	0.010	0.010	0.000	0.262	0.22	
1491	6/15/2004	9:41:42 PM		26.235	26.459	24.777	27.382	26.288		46.827	51.807	14.117	33.254	-0.649	-6.253		50.676	0.067	14.643	0.004		2186.98	36.4497	50.3	12.4	40.0	2.761	0.010	0.010	0.000	0.251	0.21	
1492	6/15/2004	9:42:42 PM		26.233	26.447	24.754	27.375	26.295		47.213	51.948	14.128	33.574	-0.889	-6.883		44.532	0.062	14.643	0.003		2187.98	36.4664	50.5	10.9	40.4	2.785	0.009	0.009	0.000	0.230	0.20	
1493	6/15/2004	9:43:42 PM		26.23	26.444	24.761	27.382	26.317		47.238	52.08	14.238	33.419	-0.886	-6.898		51.196	0.064	14.643	0.004		2188.98	36.4831	50.6	12.5	40.3	2.781	0.010	0.010	0.000	0.238	0.20	
1494	6/15/2004	9:44:42 PM		26.227	26.426	24.754	27.424	26.31		47.344	52.124	14.202	33.57	-0.884	-6.933		48.751	0.064	14.643	0.004		2189.98	36.4997	50.7	11.9	40.5	2.789	0.010	0.010	0.000	0.237	0.20	
1495	6/15/2004	9:45:42 PM		26.236	26.44	24.757	27.438	26.358		47.136	51.923	14.096	33.542	-0.881	-6.907		43.165	0.064	14.643	0.004		2190.98	36.5164	50.5	10.6	40.3	2.781	0.010	0.010	0.000	0.238	0.20	
1496	6/15/2004	9:46:42 PM		26.24	26.434	24.751	27.447	26.372		47.284	52.12	14.139	33.611	-0.886	-6.935		55.72	0.065	14.643	0.004		2191.98	36.5331	50.6	13.7	40.4	2.789	0.010	0.010	0.000	0.241	0.21	
1497	6/15/2004	9:47:42 PM		26.246	26.44	24.762	27.493	26.403		47.045	51.863	14.104	33.458	-0.884	-6.953		43.197	0.063	14.643	0.004		2192.98	36.5497	50.4	10.6	40.3	2.775	0.009	0.009	0.000	0.235	0.20	
1498	6/15/2004	9:48:42 PM		26.237	26.436	24.754	27.494	26.424		47.338	52.234	14.131	33.675	-0.886	-6.953		46.405	0.063	14.643	0.004		2193.98	36.5664	50.8	11.4	40.5	2.793	0.009	0.009	0.000	0.233	0.20	
1499	6/15/2004	9:49:42 PM		26.233	26.427	24.754	27.505	26.415		46.977	52.03	14.091	33.297	-0.884	-6.953		45.22	0.063	14.643	0.004		2194.98	36.5831	50.6	11.1	40.1	2.767	0.009	0.009	0.000	0.236	0.20	
1500	6/15/2004	9:50:42 PM		26.229	26.423	24.745	27.516	26.441		47.416	52.132	14.15	33.8	-0.884	-6.956		46.866	0.064	14.643	0.004		2195.98	36.5997	50.7	11.5	40.6	2.800	0.010	0.010	0.000	0.237	0.20	
1501	6/15/2004	9:51:42 PM		26.211	26.415	24.723	27.498	26.483		47.389	52.138	14.044	33.876	-0.889	-7.031		48.361	0.067	14.643	0.003		2196.98	36.6164	50.7	11.9	40.6	2.801	0.010	0.010	0.000	0.248	0.21	
1502	6/15/2004	9:52:42 PM		26.217	26.416	24.748	27.539	26.464		47.217	52.037	14.121	33.533	-0.884	-7.04		46.622	0.063	14.643	0.004		2197.98	36.6331	50.6	11.4	40.4	2.784	0.009	0.009	0.000	0.234	0.20	
1503	6/15/2004	9:53:42 PM		26.213	26.417	24.734	27.535	26.455		47.364	52.352	14.126	33.646	-0.884	-7.04		53.912	0.064	14.643	0.004		2198.98	36.6497	50.9	13.2	40.5	2.793	0.010	0.010	0.000	0.237	0.20	
1504	6/15/2004	9:54:42 PM		26.214	26.428	24.745	27.555	26.471		47.234	52.107	14.147	33.585	-0.884	-7.005		52.109	0.06	14.643	0.004		2199.98	36.6664	50.6	12.8	40.4	2.786	0.009	0.009	0.000	0.223	0.19	
1505	6/15/2004	9:55:42 PM		26.215	26.429	24.737	27.542	26.467		47.352	52.263	14.079	33.78	-0.826	-6.979		52.658	0.063	14.643	0.004		2200.98	36.6831	50.8	12.9	40.6	2.797	0.009	0.009	0.000	0.233	0.20	
1506	6/15/2004	9:56:42 PM		26.229	26.447	24.775	27.565	26.5		47.267	52.062	14.1	33.622	-0.86	-6.993		51.267	0.064	14.643	0.004		2201.98	36.6997	50.6	12.6	40.4	2.789	0.010	0.010	0.000	0.237	0.20	
1507	6/15/2004	9:57:42 PM		26.214	26.433	24.741	27.556	26.506		47.024	51.883	14.096	33.386	-0.869	-7.005		50.03	0.064	14.643	0.004		2202.98	36.7164	50.4	12.3	40.2	2.772	0.010	0.010	0.000	0.239	0.20	
1508	6/15/2004	9:58:42 PM		26.225	26.434	24.756	27.592	26.502		47.785	52.766	14.326	33.845	-0.866	-7.008		44.219	0.063	14.643	0.004		2203.98	36.7331	51.3	10.8	40.8	2.814	0.009	0.009	0.000	0.232	0.20	
1509	6/15/2004	9:59:42 PM		26.217	26.436	24.743	27.553	26.503		47.62	52.497	14.308	33.8	-0.846	-7.013		50.551	0.061	14.643	0.004		2204.98	36.7497	51.0	12.4	40.7	2.807	0.009	0.009	0.000	0.225	0.19	
1510	6/15/2004	10:00:42 PM		26.208	26.441	24.749	27.559	26.499		47.358	52.219	14.224	33.577	-0.82	-7.011		48.303	0.061	14.643	0.004		2205.98	36.7664	50.7	11.8	40.5	2.790	0.009	0.009	0.000	0.226	0.19	
1511	6/15/2004	10:01:42 PM		26.203	26.437	24.75	27.535	26.52		47.302	52.136	14.212	33.548	-0.846	-7.019		41.307	0.062	14.643	0.004		2206.98	36.7831	50.7	10.1	40.4	2.787	0.009	0.009	0.000	0.230	0.20	
1512	6/15/2004	10:01:49 PM		26.213	26.447	24.75	27.535	26.515		47.238	52.227	14.183	33.521	-0.86	-7.022		44.569	0.063	14.643	0.004		2207.10	36.785	50.8	10.9	40.4	2.784	0.009	0.009	0.000	0.234	0.20	
1513	6/15/2004	10:02:49 PM		26.215	26.444	24.751	27.547	26.507		47.433	52.306	14.248	33.615	-0.823	-7.042		50.945	0.065	14.643	0.004		2208.10	36.8017	50.8	12.5	40.5	2.794	0.010	0.010	0.000	0.241	0.20	
1514	6/15/2004	10:03:49 PM		26.211	26.44	24.752	27.567	26.512		47.282	52.113	14.32	33.382	-0.884	-7.051		49.55	0.063	14.643	0.004		2209.10	36.8183	50.6	12.1	40.3	2.781	0.009	0.009	0.000	0.235	0.20	
1515	6/15/2004	10:04:49 PM		26.217	26.446	24.824	27.569	26.479		47.402	52.223	14.269	33.576	-0.82	-6.895		45.839	0.061	14.643	0.004		2210.10	36.835	50.8	11.2	40.5	2.792	0.009	0.009	0.000	0.226	0.19	
1516	6/15/2004	10:05:49 PM		26.21	26.434	24.821	27.557	26.397		46.892	51.587	14.12	33.252	-0.884	-7.097		38.157	0.067	14.643	0.004		2211.10	36.8517	50.1	9.4	40.1	2.763	0.010	0.010	0.000	0.251	0.21	
1517	6/15/2004	10:06:49 PM		26.212	26.441	24.809	27.519	26.369		47.456	52.267	14.166	33.804	-0.823	-6.886		50.704	0.062	14.643	0.003		2212.10	36.8683	50.8	12.4	40.6	2.801	0.009	0.009	0.000	0.229	0.19	
1518	6/15/2004	10:07:49 PM		26.198	26.432	24.784	27.46	26.335		47.226	52.14	14.128	33.636	-0.82	-6.927		49.681	0.061	14.643	0.004		2213.10	36.885	50.7	12.2	40.4	2.788	0.009	0.009	0.000	0.226	0.19	
1519	6/15/2004	10:08:49 PM		26.204	26.428	24.785	27.406	26.251		47.184	51.999	14.134	33.546	-0.814	-6.976		46.726	0.062	14.643	0.004		2214.10	36.9017	50.5	11.5	40.4	2.783	0.009	0.009	0.000	0.230	0.20	
1520	6/15/2004	10:09:49 PM		26.181	26.41	24.757	27.293	26.203		47.485	52.447	14.148	33.763	-0.82	-7.005		46.909	0.063	14.643	0.004		2215.10	36.9183	51.0	11.5	40.6	2.801	0.009	0.009	0.000	0.233	0.20	
1521	6/15/2004	10:10:49 PM		26.183	26.412	24.744	27.265	26.185		47.163	52.057	14.124	33.433	-0.82	-7.013		44.938	0.063	14.643	0.004		2216.10	36.935	50.6	11.0	40.3	2.778	0.009	0.009	0.000	0.235	0.20	
1522	6/15/2004	10:11:49 PM		26.196	26.425	24.772	27.293	26.174		47.414	52.424	14.154	33.702	-0.814	-7.037		45.447	0.062	14.643	0.004		2217.10	36.9517	51.0	11.1	40.6	2.796	0.009	0.009	0.000	0.229	0.20	
1523	6/15/2004	10:12:49 PM		26.191	26.425	24.747	27.303	26.199		47.456	52.385	14.11	33.835	-0.84	-7.051		49.754	0.061	14.643	0.004		2218.10	36.9683	50.9	12.2	40.6	2.802	0.009	0.009	0.000	0.225	0.19	
1524	6/15/2004	10:13:49 PM		26.185	26.423	24.746	27.302	26.232		47.076	51.865	14.16	33.361	-0.826	-7.06		44.043	0.061	14.643	0.004		2219.10	36.985	50.4	10.8	40.2	2.773	0.009	0.009	0.000	0.228	0.19	
1525	6/15/2004	10:14:49 PM		26.155	26.399	24.706	27.292	26.242		47.42	52.234	14.145	33.755	-0.939	-6.826		40.737	0.062	14.643	0.004		2220.10	37.0017	50.8	10.0	40.6	2.798	0.009	0.009	0.000	0.230	0.20	
1526	6/15/2004	10:15:49 PM		26.164	26.398	24.72	27.311	26.256		47.008	52.057	14.125	33.343	-0.669	-6.47		48.941	0.068	14.643	0.004		2221.10	37.0183	50.6	12.0	40.2	2.770	0.010	0.010	0.000	0.254	0.22	
1527	6/15/2004	10:16:49 PM		26.165	26.403	24.731	27.336	26.267		47.01	52.022	14.277	33.104	-0.826	-6.93		51.331	0.056	14.643	0.004		2222.10	37.035	50.5	12.6	40.1	2.762	0.008	0.008	0.000	0.210	0.18	
1528	6/15/2004	10:17:49 PM		26.175	26.409	24.736	27.367	26.292		47.14	52.084	14.287	33.308	-0.846	-6.941		47.982	0.063	14.643	0.004		2223.10	37.0517	50.6	11.8	40.2	2.773	0.009	0.009	0.000	0.235	0.20	
1529	6/15/2004	10:18:49 PM		26.149	26.393	24.725	27.351	26.306		46.865	51.547	14.212	33.193	-0.886	-6.961		46.784	0.063	14.643	0.004		2224.10	37.0683	50.1	11.5	40.0	2.760	0.009	0.009	0.000	0.236	0.20	
1530	6/15/2004	10:19:49 PM		26.166	26.409	24.741	27.382	26.332		47.109	52.022	14.288	33.263	-0.884	-7.045		51.955	0.063	14.643	0.004		2225.10	37.085	50.5	12.7	40.2	2.771	0.009	0.009	0.000	0.235	0.20	
1531	6/15/2004	10:20:49 PM		26.157	26.411	24.743	27.394	26.354		47.186	51.894	14.369	33.291	-0.884	-7.013		56.5	0.061	14.643	0.004		2226.10	37.1017	50.4	13.8	40.2	2.774	0.009	0.009	0.000	0.228	0.19	
1532	6/15/2004	10:21:49 PM		26.164	26.403	24.75	27.406	26.381		47.369	52.126	14.283	33.601	-0.886	-7.04		45.672	0.061	14.643	0.003		2227.10	37.1183	50.7	11.2	40.5	2.791	0.009	0.009	0.000	0.226	0.19	
1533	6/15/2004	10:22:49 PM		26.155	26.399	24.746	27.417	26.377		47.184	51.993	14.375	33.24	-0.886	-7.051		48.833	0.06	14.643	0.004		2228.10	37.135	50.5	12.0	40.2	2.772	0.009	0.009	0.000	0.224	0.19	
1534	6/15/2004	10:23:49 PM		26.163	26.407	24.759	27.42	26.365		47.091	51.79	14.399	33.119	-0.872	-7.045		47.17	0.061	14.643	0.004		2229.10	37.1517	50.3	11.6	40.1	2.765	0.009	0.009	0.000	0.228	0.19	
1535	6/15/2004	10:24:49 PM		26.165	26.418	24.756	27.446	26.386		47.161	52.115	14.407	33.172	-0.889	-7.048		53.814	0.062	14.643	0.003		2230.10	37.1683	50.6	13.2	40.2	2.769	0.009	0.009	0.000	0.232	0.20	
1536	6/15/2004	10:24:58 PM		26.165	26.418	24.756	27.446	26.381		46.848	51.635	14.29	32.988	-0.886	-7.051		48.079	0.061	14.643	0.003		2230.25	37.1708	50.2	11.8	39.9	2.752	0.009	0.009	0.000	0.229	0.20	
1537	6/15/2004	10:25:58 PM		26.177	26.421	24.768	27.489	26.394		47.311	52.213	14.389	33.349	-0.826	-7.042		49.686	0.063	14.643	0.003		2231.25	37.1875	50.7	12.2	40.3	2.781	0.009	0.009	0.000	0.234	0.20	
1538	6/15/2004	10:26:58 PM		26.164	26.412	24.769	27.52	26.415		47.431	52.26	14.402	33.511	-0.872	-7.034		51.235	0.065	14.643	0.004		2232.25	37.2042	50.8	12.6	40.5	2.790	0.010	0.010	0.000	0.241	0.21	
1539	6/15/2004	10:27:58 PM		26.148	26.401	24.744	27.499	26.449		47.199	51.887	14.396	33.293	-0.875	-7.048		44.707	0.063	14.643	0.004		2233.25	37.2208	50.4	11.0	40.2	2.775	0.009	0.009	0.000	0.235	0.20	
1540	6/15/2004	10:28:58 PM		26.162	26.416	24.773	27.499	26.444		47.298	51.972	14.399	33.382	-0.892	-7.06		49.767	0.06	14.643	0.004		2234.25	37.2375	50.5	12.2	40.3	2.781	0.009	0.009	0.000	0.223	0.19	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1541	6/15/2004	10:29:58 PM		26.156	26.395	24.762	27.488	26.453		47.333	52.155	14.412	33.377	-0.831	-6.811		49.344	0.063	14.643	0.004		2235.25	37.2542	50.7	12.1	40.4	2.782	0.009	0.009	0.000	0.234	0.20	
1542	6/15/2004	10:30:58 PM		26.169	26.413	24.865	27.531	26.476		46.649	51.454	14.232	32.881	-0.791	-6.794		44.584	0.069	14.643	0.004		2236.25	37.2708	50.0	10.9	39.8	2.742	0.010	0.010	0.000	0.260	0.22	
1543	6/15/2004	10:31:58 PM		26.176	26.43	24.857	27.532	26.467		46.833	51.726	14.214	33.068	-0.794	-6.837		51.156	0.061	14.643	0.004		2237.25	37.2875	50.3	12.5	40.0	2.754	0.009	0.009	0.000	0.229	0.19	
1544	6/15/2004	10:32:58 PM		26.182	26.431	24.839	27.519	26.464		47.136	52.003	14.324	33.256	-0.82	-6.909		39.713	0.062	14.643	0.003		2238.25	37.3042	50.5	9.7	40.2	2.771	0.009	0.009	0.000	0.231	0.20	
1545	6/15/2004	10:33:58 PM		26.189	26.433	24.835	27.545	26.466		46.966	51.786	14.3	33.115	-0.82	-6.927		48.97	0.061	14.643	0.004		2239.25	37.3208	50.3	12.0	40.0	2.761	0.009	0.009	0.000	0.228	0.19	
1546	6/15/2004	10:34:58 PM		26.176	26.419	24.797	27.527	26.467		47.008	51.761	14.322	33.144	-0.823	-6.933		48.257	0.062	14.643	0.003		2240.25	37.3375	50.3	11.8	40.1	2.763	0.009	0.009	0.000	0.232	0.20	
1547	6/15/2004	10:35:58 PM		26.188	26.432	24.814	27.569	26.484		46.917	51.825	14.312	33.006	-0.82	-6.967		45.624	0.063	14.643	0.004		2241.25	37.3542	50.4	11.2	40.0	2.755	0.009	0.009	0.000	0.236	0.20	
1548	6/15/2004	10:36:58 PM		26.205	26.444	24.826	27.597	26.492		47.315	52.136	14.369	33.386	-0.834	-7.031		52.689	0.062	14.643	0.004		2242.25	37.3708	50.7	12.9	40.4	2.782	0.009	0.009	0.000	0.230	0.20	
1549	6/15/2004	10:37:58 PM		26.197	26.44	24.803	27.578	26.493		47.076	51.981	14.385	33.092	-0.855	-7.034		48.188	0.061	14.643	0.004		2243.25	37.3875	50.5	11.8	40.1	2.764	0.009	0.009	0.000	0.228	0.19	
1550	6/15/2004	10:38:58 PM		26.192	26.44	24.808	27.538	26.493		47.246	51.91	14.334	33.445	-0.817	-7.037		45.704	0.061	14.643	0.004		2244.25	37.4042	50.4	11.2	40.3	2.782	0.009	0.009	0.000	0.227	0.19	
1551	6/15/2004	10:39:58 PM		26.192	26.435	24.808	27.533	26.493		47.105	51.923	14.318	33.314	-0.817	-7.028		41.363	0.063	14.643	0.004		2245.25	37.4208	50.5	10.1	40.2	2.772	0.009	0.009	0.000	0.235	0.20	
1552	6/15/2004	10:40:58 PM		26.193	26.431	24.794	27.564	26.464		47.128	51.875	14.292	33.304	-0.82	-7.031		43.215	0.061	14.643	0.004		2246.25	37.4375	50.4	10.6	40.2	2.773	0.009	0.009	0.000	0.227	0.19	
1553	6/15/2004	10:41:58 PM		26.199	26.443	24.79	27.541	26.451		46.95	51.614	14.244	33.162	-0.82	-7.028		51.396	0.062	14.643	0.003		2247.25	37.4542	50.1	12.6	40.1	2.762	0.009	0.009	0.000	0.232	0.20	
1554	6/15/2004	10:42:58 PM		26.211	26.46	24.803	27.538	26.408		46.958	51.661	14.373	33.049	-0.817	-7.025		47.752	0.06	14.643	0.004		2248.25	37.4708	50.2	11.7	40.0	2.758	0.009	0.009	0.000	0.225	0.19	
1555	6/15/2004	10:43:58 PM		26.186	26.429	24.772	27.447	26.343		47.057	52.032	14.307	33.15	-0.82	-7.037		46.386	0.062	14.643	0.004		2249.25	37.4875	50.6	11.4	40.1	2.765	0.009	0.009	0.000	0.232	0.20	
1556	6/15/2004	10:44:58 PM		26.186	26.425	24.768	27.363	26.284		47.261	52.283	14.388	33.295	-0.788	-6.843		41.855	0.058	14.643	0.004		2250.25	37.5042	50.8	10.3	40.3	2.777	0.009	0.009	0.000	0.216	0.18	
1557	6/15/2004	10:45:58 PM		26.191	26.439	24.777	27.348	26.223		47.114	52.188	14.315	33.168	-0.736	-6.785		51.014	0.064	14.643	0.004		2251.25	37.5208	50.7	12.5	40.1	2.768	0.010	0.010	0.000	0.239	0.20	
1558	6/15/2004	10:46:58 PM		26.179	26.428	24.77	27.276	26.161		47.379	52.464	14.359	33.458	-0.771	-6.878		52.262	0.062	14.643	0.004		2252.25	37.5375	51.0	12.8	40.4	2.787	0.009	0.009	0.000	0.230	0.20	
1559	6/15/2004	10:47:58 PM		26.198	26.431	24.799	27.259	26.135		46.997	51.923	14.356	33.031	-0.771	-6.912		50.92	0.061	14.643	0.004		2253.25	37.5542	50.5	12.5	40.0	2.759	0.009	0.009	0.000	0.229	0.19	
1560	6/15/2004	10:48:58 PM		26.169	26.398	24.74	27.221	26.137		46.802	51.645	14.264	33.002	-0.782	-6.927		47.596	0.061	14.643	0.003		2254.25	37.5708	50.2	11.7	39.9	2.751	0.009	0.009	0.000	0.230	0.20	
1561	6/15/2004	10:49:58 PM		26.168	26.402	24.759	27.285	26.165		46.852	51.846	14.256	33.049	-0.779	-6.921		50.284	0.061	14.643	0.004		2255.25	37.5875	50.4	12.3	40.0	2.754	0.009	0.009	0.000	0.229	0.20	
1562	6/15/2004	10:50:58 PM		26.166	26.39	24.767	27.358	26.174		46.991	51.753	14.381	33.104	-0.785	-6.912		48.059	0.061	14.643	0.004		2256.25	37.6042	50.3	11.8	40.0	2.761	0.009	0.009	0.000	0.229	0.19	
1563	6/15/2004	10:51:58 PM		26.17	26.388	24.766	27.372	26.237		47.002	51.997	14.393	33.074	-0.771	-6.918		48.68	0.06	14.643	0.004		2257.25	37.6208	50.5	11.9	40.0	2.760	0.009	0.009	0.000	0.225	0.19	
1564	6/15/2004	10:52:58 PM		26.17	26.393	24.761	27.342	26.252		47.045	51.863	14.254	33.271	-0.771	-6.93		41.367	0.06	14.643	0.004		2258.25	37.6375	50.4	10.1	40.2	2.769	0.009	0.009	0.000	0.224	0.19	
1565	6/15/2004	10:53:58 PM		26.164	26.383	24.755	27.366	26.251		47.275	52.115	14.396	33.386	-0.771	-6.924		48.561	0.061	14.643	0.004		2259.25	37.6542	50.6	11.9	40.3	2.781	0.009	0.009	0.000	0.227	0.19	
1566	6/15/2004	10:54:58 PM		26.164	26.378	24.765	27.376	26.291		46.85	51.844	14.311	33.002	-0.771	-6.921		51.855	0.061	14.643	0.004		2260.25	37.6708	50.4	12.7	39.9	2.753	0.009	0.009	0.000	0.229	0.20	
1567	6/15/2004	10:55:58 PM		26.169	26.378	24.77	27.381	26.296		47.506	52.727	14.437	33.48	-0.771	-6.95		48.444	0.059	14.643	0.004		2261.25	37.6875	51.3	11.9	40.5	2.792	0.009	0.009	0.000	0.219	0.19	
1568	6/15/2004	10:56:58 PM		26.154	26.363	24.745	27.356	26.296		47.047	51.962	14.385	33.135	-0.773	-6.953		46.663	0.06	14.643	0.004		2262.25	37.7042	50.5	11.4	40.1	2.764	0.009	0.009	0.000	0.225	0.19	
1569	6/15/2004	10:57:58 PM		26.165	26.358	24.766	27.367	26.312		47.211	52.277	14.396	33.193	-0.739	-6.947		47.637	0.06	14.643	0.004		2263.25	37.7208	50.8	11.7	40.2	2.772	0.009	0.009	0.000	0.224	0.19	
1570	6/15/2004	10:58:58 PM		26.165	26.363	24.771	27.391	26.312		47.215	52.053	14.408	33.283	-0.739	-6.86		55.708	0.057	14.643	0.004		2264.25	37.7375	50.6	13.7	40.2	2.775	0.008	0.009	0.000	0.213	0.18	
1571	6/15/2004	10:59:58 PM		26.165	26.358	24.771	27.426	26.322		47.338	52.563	14.456	33.269	-0.707	-6.771		44.098	0.06	14.643	0.004		2265.25	37.7542	51.1	10.8	40.3	2.779	0.009	0.009	0.000	0.223	0.19	
1572	6/15/2004	11:00:58 PM		26.166	26.354	24.782	27.452	26.327		47.238	52.229	14.405	33.265	-0.707	-6.837		39.617	0.061	14.643	0.004		2266.25	37.7708	50.8	9.7	40.3	2.775	0.009	0.009	0.000	0.227	0.19	
1573	6/15/2004	11:01:58 PM		26.166	26.364	24.782	27.447	26.332		47.302	52.391	14.446	33.308	-0.704	-6.849		47.942	0.062	14.643	0.004		2267.25	37.7875	50.9	11.7	40.3	2.779	0.009	0.009	0.000	0.231	0.20	
1574	6/15/2004	11:02:58 PM		26.161	26.36	24.827	27.453	26.333		46.987	51.946	14.4	33.066	-0.707	-6.854		49.788	0.063	14.643	0.004		2268.25	37.8042	50.5	12.2	40.0	2.760	0.009	0.009	0.000	0.236	0.20	
1575	6/15/2004	11:03:58 PM		26.166	26.37	24.857	27.408	26.348		46.697	51.807	14.328	32.842	-0.707	-6.866		50.028	0.062	14.643	0.004		2269.25	37.8208	50.3	12.3	39.8	2.742	0.009	0.009	0.000	0.233	0.20	
1576	6/15/2004	11:04:58 PM		26.171	26.37	24.857	27.473	26.353		47.128	52.115	14.351	33.258	-0.707	-6.872		45.334	0.061	14.643	0.004		2270.25	37.8375	50.6	11.1	40.2	2.771	0.009	0.009	0.000	0.227	0.19	
1577	6/15/2004	11:05:58 PM		26.177	26.371	24.853	27.479	26.384		47.18	52.06	14.312	33.402	-0.707	-6.866		55.693	0.061	14.643	0.004		2271.25	37.8542	50.6	13.6	40.3	2.778	0.009	0.009	0.000	0.227	0.19	
1578	6/15/2004	11:06:58 PM		26.177	26.371	24.833	27.484	26.374		47.194	52.252	14.346	33.31	-0.707	-6.863		44.826	0.06	14.643	0.004		2272.25	37.8708	50.8	11.0	40.3	2.775	0.009	0.009	0.000	0.223	0.19	
1579	6/15/2004	11:07:58 PM		26.187	26.381	24.838	27.484	26.374		47.24	52.146	14.266	33.464	-0.684	-6.872		46.302	0.06	14.643	0.004		2273.25	37.8875	50.7	11.3	40.4	2.782	0.009	0.009	0.000	0.223	0.19	
1580	6/15/2004	11:08:58 PM		26.177	26.371	24.823	27.494	26.379		46.973	52.049	14.307	33.086	-0.707	-6.854		48.486	0.062	14.643	0.004		2274.25	37.9042	50.6	11.9	40.0	2.760	0.009	0.009	0.000	0.232	0.20	
1581	6/15/2004	11:09:58 PM		26.183	26.372	24.829	27.489	26.395		47.391	52.43	14.363	33.427	-0.707	-6.852		46.031	0.062	14.643	0.004		2275.25	37.9208	51.0	11.3	40.4	2.786	0.009	0.009	0.000	0.230	0.20	
1582	6/15/2004	11:10:58 PM		26.189	26.378	24.826	27.511	26.396		46.869	51.921	14.304	32.971	-0.652	-6.733		47.074	0.063	14.643	0.004		2276.25	37.9375	50.4	11.5	39.9	2.752	0.009	0.009	0.000	0.236	0.20	
1583	6/15/2004	11:11:58 PM		26.205	26.399	24.841	27.522	26.402		47.157	52.327	14.315	33.273	-0.69	-6.852		52.848	0.059	14.643	0.004		2277.25	37.9542	50.9	13.0	40.2	2.773	0.009	0.009	0.000	0.220	0.19	
1584	6/15/2004	11:12:58 PM		26.196	26.38	24.817	27.508	26.418		47.13	52.2	14.346	33.252	-0.681	-6.849		45.608	0.06	14.643	0.003		2278.25	37.9708	50.7	11.2	40.2	2.771	0.009	0.009	0.000	0.224	0.19	
1585	6/15/2004	11:13:58 PM		26.198	26.396	24.824	27.489	26.429		46.958	52.173	14.288	33.045	-0.69	-6.843		44.878	0.061	14.643	0.004		2279.25	37.9875	50.7	11.0	40.0	2.758	0.009	0.009	0.000	0.228	0.19	
1586	6/15/2004	11:14:58 PM		26.193	26.386	24.814	27.479	26.399		47.043	52.188	14.315	33.189	-0.707	-6.84		56.93	0.061	14.643	0.004		2280.25	38.0042	50.7	14.0	40.1	2.766	0.009	0.009	0.000	0.228	0.19	
1587	6/15/2004	11:15:58 PM		26.179	26.373	24.79	27.411	26.346		47.122	52.132	14.351	33.224	-0.608	-6.658		52.914	0.058	14.643	0.004		2281.25	38.0208	50.7	13.0	40.2	2.770	0.009	0.009	0.000	0.217	0.18	
1588	6/15/2004	11:16:58 PM		26.181	26.37	24.797	27.363	26.288		46.73	51.802	14.452	32.731	-0.649	-6.745		41.198	0.058	14.643	0.004		2282.25	38.0375	50.3	10.1	39.7	2.739	0.009	0.009	0.000	0.219	0.19	
1589	6/15/2004	11:17:58 PM		26.167	26.361	24.788	27.329	26.205		47.17	52.254	14.464	33.154	-0.652	-6.756		52.704	0.059	14.643	0.004		2283.25	38.0542	50.8	12.9	40.2	2.769	0.009	0.009	0.000	0.220	0.19	
1590	6/15/2004	11:18:58 PM		26.174	26.368	24.79	27.261	26.142		47.024	52.275	14.458	32.93	-0.652	-6.802		49.953	0.062	14.643	0.004		2284.25	38.0708	50.8	12.2	40.0	2.756	0.009	0.009	0.000	0.233	0.20	
1591	6/15/2004	11:19:58 PM		26.178	26.381	24.809	27.215	26.09		47.174	52.484	14.417	33.125	-0.658	-6.846		47.253	0.064	14.643	0.004		2285.25	38.0875	51.0	11.6	40.1	2.768	0.010	0.010	0.000	0.239	0.20	
1592	6/15/2004	11:20:58 PM		26.175	26.358	24.801	27.177	26.077		47.031	52.128	14.51	32.946	-0.773	-6.883		46.747	0.068	14.643	0.004		2286.25	38.1042	50.7	11.5	40.0	2.757	0.010	0.010	0.000	0.255	0.22	
1593	6/15/2004	11:21:58 PM		26.157	26.336	24.773	27.169	26.13		47.008	52.29	14.39	33.088	-0.542	-6.447		45.353	0.059	14.643	0.004		2287.25	38.1208	50.8	11.1	40.0	2.761	0.009	0.009	0.000	0.221	0.19	
1594	6/15/2004	11:22:58 PM		26.163	26.337	24.804	27.18	26.141		47.472	52.29	14.51	33.546	-0.704	-6.753		49.398	0.056	14.643	0.004		2288.25	38.1375	50.8	12.1	40.5	2.793	0.008	0.008	0.000	0.207	0.18	
1595	6/15/2004	11:23:58 PM		26.157	26.346	24.798	27.209	26.149		47.192	52.169	14.494	33.131	-0.773	-6.927		50.353	0.061	14.643	0.004		2289.25	38.1542	50.7	12.3	40.2	2.769	0.009	0.009	0.000	0.228	0.19	
1596	6/15/2004	11:24:58 PM		26.173	26.357	24.829	27.245	26.201		47.107	52.2	14.371	33.203	-0.768	-6.933		48.699	0.062	14.643	0.004		2290.25	38.1708	50.7	11.9	40.2	2.769	0.009	0.009	0.000	0.231	0.20	
1597	6/15/2004	11:25:58 PM		26.163	26.341	24.814	27.25	26.23		46.943	52.024	14.441	32.903	-0.71	-6.826		50.585	0.059	14.643	0.004		2291.25	38.1875	50.6	12.4	39.9	2.753	0.009	0.009	0.000	0.221	0.19	
1598	6/15/2004	11:26:58 PM		26.153	26.326	24.799	27.24	26.215		47.151	52.078	14.422	33.185	-0.771	-6.95		49.444	0.065	14.643	0.004		2292.25	38.2042	50.6	12.1	40.2	2.769	0.010	0.010	0.000	0.243	0.21	
1599	6/15/2004	11:27:58 PM		26.163	26.327	24.809	27.265	26.221		47.029	52.062	14.487	33.037	-0.704	-6.753		48.718	0.055	14.643	0.004		2293.25	38.2208	50.6	11.9	40.0	2.760	0.008	0.008	0.000	0.206	0.18	
1600	6/15/2004	11:28:58 PM		26.165	26.314	24.801	27.262	26.232		46.919	51.9	14.492	32.951	-0.652	-6.722		53.396	0.007	14.643	0.004		2294.25	38.2375	50.4	13.1	39.9	2.753	0.001	0.001	0.000	0.026	0.02	
1601	6/15/2004	11:29:58 PM		26.152	26.315	24.803	27.258	26.184		46.892	52.07	14.497	32.891	-0.435	-6.245		42.333	0.059	14.643	0.004		2295.25	38.2542	50.6	10.4	39.9	2.750	0.009	0.009	0.000	0.222	0.19	
1602	6/15/2004	11:30:58 PM		26.142	26.311	24.798	27.239	26.264		47.186	52.275	14.516	33.131	-0.556	-6.528		48.657	0.061	14.643	0.004		2296.25	38.2708	50.8	11.9	40.2	2.769	0.009	0.009	0.000	0.228	0.19	
1603	6/15/2004	11:31:58 PM		26.144	26.308	24.805	27.276	26.286		47.126	52.59	14.517	32.99	-0.475	-6.349		53.271	0.058	14.643	0.004		2297.25	38.2875	51.1	13.1	40.1	2.762	0.009	0.009	0.000	0.217	0.18	
1604	6/15/2004	11:32:58 PM		26.145	26.308	24.811	27.252	26.257		46.522	51.931	14.433	32.532	-0.478	-6.346		44.469	0.059	14.643	0.004		2298.25	38.3042	50.5	10.9	39.5	2.725	0.009	0.009	0.000	0.224	0.19	
1605	6/15/2004	11:33:58 PM		26.134	26.288	24.8	27.241	26.221		46.813	52.003	14.347	32.969	-0.484	-6.404		55.109	0.053	14.643	0.004		2299.25	38.3208	50.5	13.5	39.9	2.750	0.008	0.008	0.000	0.199	0.17	
1606	6/15/2004	11:34:58 PM		26.138	26.292	24.804	27.275	26.245		46.809	51.985	14.435	32.821	-0.533	-6.516		46.582	0.073	14.643	0.004		2300.25	38.3375	50.5	11.4	39.8	2.745	0.011	0.011	0.000	0.275	0.23	
1607	6/15/2004	11:35:58 PM		26.143	26.297	24.804	27.305	26.235		46.91	52.105	14.56	32.85	-0.461	-6.346		41.91	0.058	14.643	0.004		2301.25	38.3542	50.6	10.3	39.9	2.750	0.009	0.009	0.000	0.218	0.19	
1608	6/15/2004	11:36:58 PM		26.165	26.319	24.836	27.347	26.262		46.881	52.13	14.525	32.817	-0.475	-6.334		48.257	0.06	14.643	0.004		2302.25	38.3708	50.7	11.8	39.8	2.747	0.009	0.009	0.000	0.226	0.19	
1609	6/15/2004	11:37:58 PM		26.147	26.301	24.808	27.289	26.254		46.726	51.906	14.473	32.661	-0.475	-6.349		35.176	0.059	14.643	0.004		2303.25	38.3875	50.4	8.6	39.7	2.737	0.009	0.009	0.000	0.223	0.19	
1610	6/15/2004	11:38:58 PM		26.148	26.306	24.814	27.31	26.235		46.898	52.236	14.428	32.881	-0.472	-6.34		46.444	0.06	14.643	0.004		2304.25	38.4042	50.8	11.4	39.9	2.750	0.009	0.009	0.000	0.225	0.19	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1611	6/15/2004	11:39:58 PM		26.149	26.302	24.815	27.325	26.216		46.767	51.999	14.467	32.77	-0.475	-6.343		52.533	0.059	14.643	0.004		2305.25	38.4208	50.5	12.9	39.8	2.742	0.009	0.009	0.000	0.222	0.19	
1612	6/15/2004	11:40:58 PM		26.144	26.293	24.805	27.261	26.241		46.964	52.244	14.552	32.866	-0.443	-6.343		44.5	0.059	14.643	0.004		2306.25	38.4375	50.8	10.9	39.9	2.752	0.009	0.009	0.000	0.222	0.19	
1613	6/15/2004	11:41:58 PM		26.149	26.288	24.815	27.246	26.271		46.997	52.095	14.458	32.987	-0.58	-6.828		48.395	0.1	14.643	0.004		2307.25	38.4542	50.6	11.9	40.0	2.757	0.015	0.015	0.000	0.375	0.32	
1614	6/15/2004	11:42:58 PM		26.178	26.302	24.835	27.275	26.251		48.02	51.991	14.517	33.977	-1.216	-4.932		41.868	0.005	14.643	0.004		2308.25	38.4708	50.5	10.3	41.0	2.827	0.001	0.001	0.000	0.018	0.02	
1615	6/15/2004	11:43:58 PM		26.183	26.301	24.824	27.28	26.265		46.541	52.414	14.523	32.433	0.075	-2.125		45.48	0.038	14.643	0.004		2309.25	38.4875	50.9	11.1	39.5	2.722	0.006	0.006	0.000	0.144	0.12	
1616	6/15/2004	11:44:58 PM		26.193	26.306	24.834	27.295	26.27		47.545	52.246	14.484	33.494	-1.083	-5.126		43.998	0.158	14.643	0.004		2310.25	38.5042	50.8	10.8	40.5	2.794	0.024	0.024	0.001	0.584	0.50	
1617	6/15/2004	11:45:58 PM		26.148	26.296	24.814	27.29	26.29		48.401	52.52	14.462	34.336	-1.219	-6.889		47.107	0.061	14.643	0.004		2311.25	38.5208	51.0	11.5	41.4	2.852	0.009	0.009	0.000	0.221	0.19	
1618	6/15/2004	11:46:58 PM		26.149	26.298	24.81	27.296	26.291		48.488	52.08	14.5	34.482	-1.219	-7.337		51.769	0.063	14.643	0.004		2312.25	38.5375	50.6	12.7	41.5	2.860	0.009	0.009	0.000	0.228	0.19	
1619	6/15/2004	11:47:58 PM		26.15	26.299	24.816	27.327	26.307		48.725	52.499	14.669	34.508	-1.222	-7.259		44.811	0.061	14.643	0.004		2313.25	38.5542	51.0	11.0	41.6	2.869	0.009	0.009	0.000	0.220	0.19	
1620	6/15/2004	11:48:58 PM		26.135	26.289	24.811	27.332	26.307		48.65	52.424	14.616	34.477	-1.222	-7.355		48.628	0.061	14.643	0.004		2314.25	38.5708	51.0	11.9	41.6	2.866	0.009	0.009	0.000	0.220	0.19	
1621	6/15/2004	11:49:58 PM		26.14	26.299	24.826	27.377	26.307		48.99	52.654	14.749	34.765	-1.222	-7.427		48.705	0.054	14.643	0.004		2315.25	38.5875	51.2	11.9	41.9	2.887	0.008	0.008	0.000	0.193	0.16	
1622	6/15/2004	11:50:58 PM		26.415	26.31	24.912	27.403	26.333		48.455	52.252	14.544	34.301	-1.222	-7.534		47.105	0.062	14.643	0.004		2316.25	38.6042	50.8	11.5	41.4	2.853	0.009	0.009	0.000	0.224	0.19	
1623	6/15/2004	11:51:58 PM		26.352	26.316	24.924	27.414	26.354		48.509	52.12	14.495	34.494	-1.216	-7.592		54.375	0.061	14.643	0.004		2317.25	38.6208	50.6	13.3	41.5	2.861	0.009	0.009	0.000	0.220	0.19	
1624	6/15/2004	11:52:58 PM		26.283	26.307	24.894	27.37	26.37		48.333	52.107	14.461	34.299	-1.222	-7.597		46.893	0.062	14.643	0.004		2318.25	38.6375	50.6	11.5	41.3	2.849	0.009	0.009	0.000	0.224	0.19	
1625	6/15/2004	11:53:58 PM		26.259	26.313	24.88	27.386	26.366		48.381	52.122	14.497	34.311	-1.219	-7.609		51.098	0.061	14.643	0.004		2319.25	38.6542	50.6	12.5	41.3	2.851	0.009	0.009	0.000	0.221	0.19	
1626	6/15/2004	11:54:58 PM		26.239	26.298	24.865	27.386	26.366		48.588	52.07	14.573	34.514	-1.222	-7.635		40.435	0.06	14.643	0.004		2320.25	38.6708	50.6	9.9	41.6	2.865	0.009	0.009	0.000	0.216	0.18	
1627	6/15/2004	11:55:58 PM		26.235	26.313	24.866	27.391	26.382		48.055	51.655	14.404	34.165	-1.219	-7.563		52.598	0.061	14.643	0.004		2321.25	38.6875	50.2	12.9	41.1	2.834	0.009	0.009	0.000	0.222	0.19	
1628	6/15/2004	11:56:58 PM		26.22	26.314	24.857	27.377	26.367		48.296	51.974	14.489	34.239	-1.222	-7.566		47.443	0.061	14.643	0.004		2322.25	38.7042	50.5	11.6	41.3	2.845	0.009	0.009	0.000	0.221	0.19	
1629	6/15/2004	11:57:58 PM		26.21	26.323	24.876	27.396	26.372		48.24	51.653	14.466	34.301	-1.216	-7.56		55.768	0.062	14.643	0.004		2323.25	38.7208	50.2	13.7	41.3	2.845	0.009	0.009	0.000	0.225	0.19	
1630	6/15/2004	11:58:58 PM		26.176	26.309	24.847	27.392	26.387		48.509	52.13	14.489	34.488	-1.225	-7.623		48.874	0.062	14.643	0.003		2324.25	38.7375	50.7	12.0	41.5	2.861	0.009	0.009	0.000	0.224	0.19	
1631	6/15/2004	11:59:58 PM		26.151	26.319	24.857	27.382	26.387		48.318	51.995	14.473	34.307	-1.219	-7.641		53.814	0.061	14.643	0.004		2325.25	38.7542	50.5	13.2	41.3	2.848	0.009	0.009	0.000	0.221	0.19	
1632	6/16/2004	12:00:58 AM		26.131	26.315	24.852	27.343	26.333		48.397	52.086	14.528	34.334	-1.216	-7.635		42.404	0.063	14.643	0.004		2326.25	38.7708	50.6	10.4	41.4	2.852	0.009	0.009	0.000	0.228	0.19	
1633	6/16/2004	12:01:58 AM		26.121	26.315	24.842	27.313	26.273		48.418	52.155	14.485	34.41	-1.222	-7.647		51.035	0.06	14.643	0.004		2327.25	38.7875	50.7	12.5	41.4	2.855	0.009	0.009	0.000	0.217	0.18	
1634	6/16/2004	12:02:58 AM		26.095	26.298	24.831	27.252	26.212		48.155	51.925	14.434	34.129	-1.225	-7.644		56.629	0.061	14.643	0.004		2328.25	38.8042	50.5	13.9	41.1	2.837	0.009	0.009	0.000	0.222	0.19	
1635	6/16/2004	12:03:58 AM		26.092	26.296	24.839	27.224	26.165		47.871	51.518	15.194	33.16	-1.222	-7.658		49.794	0.059	14.643	0.004		2329.25	38.8208	50.0	12.2	40.5	2.793	0.009	0.009	0.000	0.218	0.19	
1636	6/16/2004	12:04:12 AM		26.086	26.29	24.827	27.188	26.153		48.142	51.842	15.029	33.576	-1.219	-7.649		48.04	0.06	14.643	0.004		2329.48	38.8247	50.4	11.8	40.9	2.817	0.009	0.009	0.000	0.220	0.19	
1637	6/16/2004	12:05:12 AM		26.099	26.303	24.86	27.131	26.087		47.788	51.446	14.809	33.382	-1.219	-7.644		53.876	0.06	14.643	0.004		2330.48	38.8414	50.0	13.2	40.6	2.798	0.009	0.009	0.000	0.221	0.19	
1638	6/16/2004	12:06:12 AM		26.088	26.286	24.849	27.07	26.05		48.074	51.852	14.789	33.769	-1.222	-7.649		42.637	0.06	14.643	0.004		2331.48	38.8581	50.4	10.4	40.9	2.821	0.009	0.009	0.000	0.220	0.19	
1639	6/16/2004	12:07:12 AM		26.086	26.275	24.842	27.093	26.059		48.348	52.01	14.678	34.075	-1.222	-7.647		54.433	0.06	14.643	0.004		2332.48	38.8747	50.5	13.3	41.2	2.841	0.009	0.009	0.000	0.218	0.19	
1640	6/16/2004	12:08:12 AM		26.095	26.283	24.851	27.112	26.087		48.014	51.703	14.504	33.977	-1.219	-7.641		50.576	0.061	14.643	0.004		2333.48	38.8914	50.2	12.4	41.0	2.826	0.009	0.009	0.000	0.223	0.19	
1641	6/16/2004	12:09:12 AM		26.093	26.272	24.849	27.165	26.115		48.213	51.902	14.617	34.09	-1.219	-7.641		51.202	0.06	14.643	0.004		2334.48	38.9081	50.4	12.5	41.2	2.837	0.009	0.009	0.000	0.218	0.19	
1642	6/16/2004	12:10:12 AM		26.092	26.261	24.853	27.169	25.96		48.321	51.831	14.57	34.28	-1.219	-7.644		49.479	0.06	14.643	0.004		2335.48	38.9247	50.4	12.1	41.3	2.848	0.009	0.009	0.000	0.217	0.19	
1643	6/16/2004	12:11:12 AM		26.082	26.245	24.828	27.144	25.964		48.617	52.402	14.684	34.399	-1.225	-7.655		51.004	0.06	14.643	0.003		2336.48	38.9414	50.9	12.5	41.5	2.862	0.009	0.009	0.000	0.217	0.18	
1644	6/16/2004	12:12:12 AM		26.092	26.25	24.833	27.164	26.124		48.65	52.478	14.533	34.533	-1.222	-7.638		49.755	0.062	14.643	0.004		2337.48	38.9581	51.0	12.2	41.6	2.868	0.009	0.009	0.000	0.223	0.19	
1645	6/16/2004	12:13:12 AM		26.097	26.245	24.843	27.179	26.164		48.352	51.946	14.48	34.334	-1.222	-7.647		49.066	0.06	14.643	0.004		2338.48	38.9747	50.5	12.0	41.3	2.850	0.009	0.009	0.000	0.217	0.18	
1646	6/16/2004	12:14:12 AM		26.113	26.267	24.874	27.21	26.21		48.771	52.462	14.49	34.759	-1.219	-7.641		48.701	0.06	14.643	0.004		2339.48	38.9914	51.0	11.9	41.8	2.880	0.009	0.009	0.000	0.215	0.18	
1647	6/16/2004	12:15:12 AM		26.097	26.241	24.843	27.249	26.189		49.001	52.694	14.555	34.915	-1.219	-7.649		52.312	0.059	14.643	0.004		2340.48	39.0081	51.2	12.8	42.0	2.893	0.009	0.009	0.000	0.211	0.18	
1648	6/16/2004	12:16:12 AM		26.109	26.248	24.855	27.331	26.201		48.403	52.082	14.499	34.334	-1.222	-7.644		45.835	0.061	14.643	0.004		2341.48	39.0247	50.6	11.2	41.4	2.852	0.009	0.009	0.000	0.221	0.19	
1649	6/16/2004	12:17:12 AM		26.109	26.243	24.855	27.331	26.216		48.138	51.877	14.431	34.178	-1.222	-7.569		45.606	0.06	14.643	0.004		2342.48	39.0414	50.4	11.2	41.2	2.838	0.009	0.009	0.000	0.218	0.19	
1650	6/16/2004	12:18:12 AM		26.119	26.238	24.865	27.281	26.251		48.936	52.754	14.607	34.72	-1.216	-7.58		43.991	0.06	14.643	0.004		2343.48	39.0581	51.3	10.8	41.8	2.884	0.009	0.009	0.000	0.215	0.18	
1651	6/16/2004	12:19:12 AM		26.119	26.233	24.85	27.256	26.261		48.812	52.675	14.783	34.43	-1.225	-7.583		51.482	0.06	14.643	0.004		2344.48	39.0747	51.2	12.6	41.6	2.870	0.009	0.009	0.000	0.216	0.18	
1652	6/16/2004	12:20:12 AM		26.118	26.227	24.844	27.235	26.255		48.437	52.107	14.588	34.324	-1.222	-7.592		47.815	0.06	14.643	0.004		2345.48	39.0914	50.6	11.7	41.4	2.853	0.009	0.009	0.000	0.217	0.18	
1653	6/16/2004	12:21:12 AM		26.113	26.227	24.859	27.235	26.265		48.318	51.983	14.531	34.289	-1.222	-7.592		52.66	0.061	14.643	0.004		2346.48	39.1081	50.5	12.9	41.3	2.848	0.009	0.009	0.000	0.221	0.19	
1654	6/16/2004	12:22:12 AM		26.119	26.228	24.86	27.261	26.256		48.912	52.578	14.645	34.715	-1.225	-7.592		51.456	0.06	14.643	0.004		2347.48	39.1247	51.1	12.6	41.8	2.883	0.009	0.009	0.000	0.215	0.18	
1655	6/16/2004	12:23:12 AM		26.145	26.243	24.891	27.306	26.252		48.657	52.337	14.573	34.525	-1.219	-7.589		49.018	0.06	14.643	0.004		2348.48	39.1414	50.9	12.0	41.6	2.868	0.009	0.009	0.000	0.216	0.18	
1656	6/16/2004	12:24:12 AM		26.13	26.238	24.871	27.242	26.267		48.853	52.528	14.712	34.637	-1.222	-7.592		53.332	0.06	14.643	0.004		2349.48	39.1581	51.1	13.1	41.7	2.878	0.009	0.009	0.000	0.215	0.18	
1657	6/16/2004	12:25:12 AM		26.11	26.223	24.911	27.257	26.267		48.47	52.076	14.526	34.416	-1.225	-7.589		46.457	0.061	14.643	0.003		2350.48	39.1747	50.6	11.4	41.4	2.857	0.009	0.009	0.000	0.220	0.19	
1658	6/16/2004	12:26:12 AM		26.124	26.233	24.94	27.321	26.281		48.484	52.325	14.51	34.426	-1.216	-7.586		46.955	0.06	14.643	0.004		2351.48	39.1914	50.9	11.5	41.5	2.858	0.009	0.009	0.000	0.216	0.18	
1659	6/16/2004	12:27:12 AM		26.129	26.228	24.905	27.286	26.296		48.513	52.117	14.37	34.666	-1.222	-7.589		53.069	0.061	14.643	0.004		2352.48	39.2081	50.6	13.0	41.6	2.867	0.009	0.009	0.000	0.219	0.19	
1660	6/16/2004	12:28:12 AM		26.14	26.233	24.906	27.301	26.297		48.238	51.875	14.47	34.272	-1.222	-7.589		52.232	0.061	14.643	0.004		2353.48	39.2247	50.4	12.8	41.3	2.844	0.009	0.009	0.000	0.221	0.19	
1661	6/16/2004	12:29:12 AM		26.15	26.243	24.906	27.316	26.302		48.652	52.451	14.493	34.703	-1.219	-7.597		52.524	0.059	14.643	0.004		2354.48	39.2414	51.0	12.9	41.7	2.874	0.009	0.009	0.000	0.212	0.18	
1662	6/16/2004	12:30:12 AM		26.15	26.238	24.886	27.316	26.302		48.777	52.804	14.495	34.658	-1.222	-7.592		48.541	0.06	14.643	0.004		2355.48	39.2581	51.3	11.9	41.7	2.876	0.009	0.009	0.000	0.215	0.18	
1663	6/16/2004	12:31:12 AM		26.161	26.25	24.897	27.313	26.313		48.264	52.089	14.369	34.379	-1.222	-7.592		41.127	0.06	14.643	0.004		2356.48	39.2747	50.6	10.1	41.3	2.849	0.009	0.009	0.000	0.217	0.18	
1664	6/16/2004	12:32:12 AM		26.157	26.246	24.888	27.314	26.314		48.754	52.623	14.48	34.72	-1.219	-7.586		47.341	0.06	14.643	0.004		2357.48	39.2914	51.2	11.6	41.7	2.878	0.009	0.009	0.000	0.215	0.18	
1665	6/16/2004	12:33:12 AM		26.163	26.241	24.869	27.29	26.33		48.783	52.847	14.489	34.794	-1.222	-7.615		48.311	0.062	14.643	0.004		2358.48	39.3081	51.4	11.8	41.8	2.881	0.009	0.009	0.000	0.222	0.19	
1666	6/16/2004	12:34:12 AM		26.163	26.251	24.884	27.305	26.33		47.674	51.496	14.878	33.279	-1.219	-7.609		52.266	0.058	14.643	0.004		2359.48	39.3247	50.0	12.8	40.5	2.791	0.009	0.009	0.000	0.214	0.18	
1667	6/16/2004	12:35:12 AM		26.159	26.247	24.88	27.315	26.345		48.646	52.416	14.333	34.783	-1.219	-7.615		48.378	0.059	14.643	0.004		2360.48	39.3414	50.9	11.9	41.7	2.876	0.009	0.009	0.000	0.212	0.18	
1668	6/16/2004	12:36:12 AM		26.159	26.248	24.88	27.316	26.361		47.257	51.048	15.76	31.951	-1.222	-7.621		54.327	0.059	14.643	0.004		2361.48	39.3581	49.6	13.3	39.6	2.731	0.009	0.009	0.000	0.223	0.19	
1669	6/16/2004	12:37:12 AM		26.167	26.271	24.899	27.324	26.364		48.024	51.805	14.616	33.905	-1.219	-7.621		54.879	0.059	14.643	0.004		2362.48	39.3747	50.3	13.4	41.0	2.824	0.009	0.009	0.000	0.215	0.18	
1670	6/16/2004	12:38:12 AM		26.166	26.265	24.887	27.328	26.333		48.854	52.687	14.039	35.304	-1.222	-7.618		46.913	0.061	14.643	0.003		2363.48	39.3914	51.2	11.5	42.1	2.901	0.009	0.009	0.000	0.217	0.18	
1671	6/16/2004	12:39:12 AM		26.161	26.26	24.862	27.323	26.353		49.264	53.098	13.775	35.971	-1.222	-7.652		52.664	0.06	14.643	0.004		2364.48	39.4081	51.6	12.9	42.6	2.938	0.009	0.009	0.000	0.211	0.18	
1672	6/16/2004	12:40:12 AM		26.151	26.254	24.842	27.302	26.347		49.559	53.382	13.875	36.136	-1.222	-7.652		51.014	0.06	14.643	0.004		2365.48	39.4247	51.9	12.5	42.8	2.954	0.009	0.009	0.000	0.210	0.18	
1673	6/16/2004	12:41:12 AM		26.158	26.272	24.859	27.345	26.365		48.074	51.889	14.771	33.79	-1.222	-7.658		50.551	0.058	14.643	0.003		2366.48	39.4414	50.4	12.4	40.9	2.822	0.009	0.009	0.000	0.212	0.18	
1674	6/16/2004	12:42:12 AM		26.166	26.275	24.872	27.328	26.368		48.443	52.146	14.624	34.301	-1.219	-7.652		41.399	0.059	14.643	0.004		2367.48	39.4581	50.7	10.1	41.4	2.852	0.009	0.009	0.000	0.213	0.18	
1675	6/16/2004	12:43:12 AM		26.165	26.274	24.881	27.262	26.357		47.848	51.639	14.896	33.437	-1.225	-7.667		52.337	0.057	14.643	0.004		2368.48	39.4747	50.2	12.8	40.6	2.802	0.008	0.009	0.000	0.210	0.18	
1676	6/16/2004	12:44:12 AM		26.17	26.288	24.901	27.292	26.342		48.215	52.074	14.8	33.907	-1.222	-7.655		49.917	0.059	14.643	0.004		2369.48	39.4914	50.6	12.2	41.1	2.831	0.009	0.009	0.000	0.215	0.18	
1677	6/16/2004	12:45:12 AM		26.174	26.293	24.906	27.261	26.326		48.59	52.58	14.311	34.748	-1.219	-7.652		48.782	0.06	14.643	0.004		2370.48	39.5081	51.1	12.0	41.7	2.873	0.009	0.009	0.000	0.215	0.18	
1678	6/16/2004	12:46:12 AM		26.158	26.276	24.874	27.219	26.315		48.965	52.959	14.279	35.155	-1.225	-7.655		52.841	0.061	14.643	0.003		2371.48	39.5247	51.5	12.9	42.1	2.900	0.009	0.009	0.000	0.217	0.18	
1679	6/16/2004	12:47:12 AM		26.162	26.28	24.888	27.228	26.328		48.217	52.132	14.931	33.794	-1.219	-7.661		52.247	0.059	14.643	0.004		2372.48	39.5414	50.7	12.8	41.0	2.827	0.009	0.009	0.000	0.215	0.18	
1680	6/16/2004	12:48:12 AM		26.156	26.274	24.887	27.217	26.312		47.837	51.782	15.238	33.102	-1.219	-7.667		52.22	0.057	14.643	0.004		2373.48	39.5581	50.3	12.8	40.5	2.790	0.008	0.009	0.000	0.211	0.18	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1681	6/16/2004	12:49:12 AM		26.16	26.284	24.902	27.242	26.322		47.978	51.601	15.067	33.423	-1.222	-7.661		51.35	0.058	14.643	0.003		2374.48	39.5747	50.1	12.6	40.7	2.806	0.009	0.009	0.000	0.213	0.18	
1682	6/16/2004	12:50:12 AM		26.164	26.288	24.916	27.276	26.311		47.953	51.682	14.873	33.562	-1.219	-7.661		51.248	0.058	14.643	0.004		2375.48	39.5914	50.2	12.6	40.8	2.810	0.009	0.009	0.000	0.213	0.18	
1683	6/16/2004	12:51:12 AM		26.159	26.293	24.92	27.246	26.306		47.92	51.676	14.773	33.589	-1.222	-7.658		48.105	0.059	14.643	0.004		2376.48	39.6081	50.2	11.8	40.8	2.810	0.009	0.009	0.000	0.216	0.18	
1684	6/16/2004	12:52:12 AM		26.152	26.281	24.904	27.229	26.269		48.119	51.975	14.804	33.732	-1.225	-7.664		49.811	0.058	14.643	0.003		2377.48	39.6247	50.5	12.2	40.9	2.822	0.009	0.009	0.000	0.212	0.18	
1685	6/16/2004	12:53:12 AM		26.143	26.272	24.899	27.25	26.255		48.179	52.095	14.836	33.773	-1.222	-7.661		54.078	0.058	14.643	0.004		2378.48	39.6414	50.6	13.3	41.0	2.825	0.009	0.009	0.000	0.212	0.18	
1686	6/16/2004	12:54:12 AM		26.156	26.285	24.913	27.273	26.278		48.097	51.983	14.844	33.759	-1.219	-7.661		45.216	0.058	14.643	0.004		2379.48	39.6581	50.5	11.1	40.9	2.822	0.009	0.009	0.000	0.212	0.18	
1687	6/16/2004	12:55:12 AM		26.151	26.285	24.993	27.238	26.313		48.039	51.931	14.637	33.876	-1.222	-7.658		44.667	0.059	14.643	0.004		2380.48	39.6747	50.5	10.9	41.0	2.824	0.009	0.009	0.000	0.215	0.18	
1688	6/16/2004	12:56:12 AM		26.157	26.286	24.979	27.199	26.334		47.889	51.879	14.817	33.537	-1.219	-7.655		51.569	0.059	14.643	0.004		2381.48	39.6914	50.4	12.6	40.7	2.807	0.009	0.009	0.000	0.216	0.18	
1689	6/16/2004	12:57:12 AM		26.146	26.285	24.963	27.183	26.348		48.043	51.865	14.702	33.847	-1.219	-7.661		46.765	0.058	14.643	0.004		2382.48	39.7081	50.4	11.5	40.9	2.823	0.009	0.009	0.000	0.211	0.18	
1690	6/16/2004	12:58:12 AM		26.151	26.285	24.958	27.183	26.338		47.908	51.941	14.684	33.675	-1.222	-7.655		47.383	0.059	14.643	0.004		2383.48	39.7247	50.5	11.6	40.8	2.812	0.009	0.009	0.000	0.216	0.18	
1691	6/16/2004	12:59:12 AM		26.149	26.278	24.93	27.241	26.351		47.873	51.906	14.644	33.644	-1.219	-7.661		43.115	0.058	14.643	0.004		2384.48	39.7414	50.4	10.6	40.8	2.810	0.009	0.009	0.000	0.213	0.18	
1692	6/16/2004	1:00:12 AM		26.14	26.278	24.926	27.282	26.367		48.368	52.304	14.832	34.008	-1.222	-7.661		52.71	0.058	14.643	0.004		2385.48	39.7581	50.8	12.9	41.2	2.840	0.009	0.009	0.000	0.210	0.18	
1693	6/16/2004	1:01:12 AM		26.15	26.289	24.931	27.282	26.377		47.839	51.784	14.705	33.597	-1.216	-7.655		50.24	0.058	14.643	0.004		2386.48	39.7747	50.3	12.3	40.7	2.807	0.009	0.009	0.000	0.213	0.18	
1694	6/16/2004	1:02:12 AM		26.157	26.291	24.928	27.274	26.434		47.607	51.659	15.095	32.988	-1.219	-7.592		57.068	0.056	14.643	0.004		2387.48	39.7914	50.2	14.0	40.3	2.778	0.008	0.008	0.000	0.208	0.18	
1695	6/16/2004	1:03:12 AM		26.145	26.288	24.931	27.317	26.441		47.684	51.603	14.932	33.271	-1.219	-7.644		50.459	0.057	14.643	0.004		2388.48	39.8081	50.1	12.4	40.5	2.791	0.008	0.009	0.000	0.210	0.18	
1696	6/16/2004	1:04:12 AM		26.158	26.302	24.945	27.325	26.46		47.792	51.69	14.985	33.26	-1.219	-7.649		49.842	0.057	14.643	0.004		2389.48	39.8247	50.2	12.2	40.5	2.794	0.008	0.009	0.000	0.210	0.18	
1697	6/16/2004	1:05:12 AM		26.152	26.306	24.933	27.299	26.484		47.576	51.521	14.984	32.996	-1.222	-7.655		51.402	0.057	14.643	0.004		2390.48	39.8414	50.0	12.6	40.3	2.778	0.008	0.009	0.000	0.211	0.18	
1698	6/16/2004	1:06:12 AM		26.161	26.309	24.942	27.328	26.482		47.922	51.912	14.977	33.398	-1.219	-7.649		45.262	0.057	14.643	0.004		2391.48	39.8581	50.4	11.1	40.7	2.803	0.008	0.009	0.000	0.209	0.18	
1699	6/16/2004	1:07:12 AM		26.165	26.324	24.936	27.332	26.492		47.703	51.651	14.964	33.148	-1.222	-7.649		57.704	0.058	14.643	0.003		2392.48	39.8747	50.2	14.1	40.4	2.787	0.009	0.009	0.000	0.214	0.18	
1700	6/16/2004	1:08:12 AM		26.169	26.333	24.945	27.361	26.476		47.96	51.975	14.972	33.447	-1.219	-7.644		49.45	0.057	14.643	0.004		2393.48	39.8914	50.5	12.1	40.7	2.806	0.008	0.009	0.000	0.209	0.18	
1701	6/16/2004	1:09:12 AM		26.159	26.327	24.93	27.36	26.465		48.074	52.151	14.956	33.521	-1.219	-7.638		47.775	0.058	14.643	0.004		2394.48	39.9081	50.7	11.7	40.8	2.813	0.009	0.009	0.000	0.212	0.18	
1702	6/16/2004	1:10:12 AM		26.175	26.338	24.956	27.386	26.486		47.624	51.718	14.86	33.203	-1.219	-7.649		52.449	0.057	14.643	0.004		2395.48	39.9247	50.2	12.9	40.4	2.786	0.008	0.009	0.000	0.211	0.18	
1703	6/16/2004	1:11:12 AM		26.165	26.344	24.951	27.357	26.486		47.858	51.831	14.874	33.46	-1.219	-7.647		45.395	0.057	14.643	0.004		2396.48	39.9414	50.4	11.1	40.7	2.803	0.008	0.009	0.000	0.209	0.18	
1704	6/16/2004	1:12:12 AM		26.181	26.36	24.977	27.393	26.483		47.887	51.858	14.91	33.453	-1.216	-7.649		45.441	0.056	14.643	0.004		2397.48	39.9581	50.4	11.1	40.7	2.804	0.008	0.008	0.000	0.205	0.17	
1705	6/16/2004	1:13:12 AM		26.172	26.356	24.958	27.344	26.509		47.756	51.63	14.863	33.396	-1.222	-7.641		48.073	0.058	14.643	0.004		2398.48	39.9747	50.2	11.8	40.6	2.798	0.009	0.009	0.000	0.213	0.18	
1706	6/16/2004	1:14:12 AM		26.169	26.358	24.975	27.331	26.501		47.927	51.979	14.912	33.513	-1.216	-7.635		49.079	0.059	14.643	0.004		2399.48	39.9914	50.5	12.0	40.7	2.808	0.009	0.009	0.000	0.216	0.18	
1707	6/16/2004	1:15:12 AM		26.17	26.358	24.971	27.331	26.476		47.692	51.734	14.865	33.316	-1.219	-7.641		47.514	0.058	14.643	0.004		2400.48	40.0081	50.3	11.6	40.5	2.793	0.009	0.009	0.000	0.214	0.18	
1708	6/16/2004	1:16:12 AM		26.182	26.376	24.978	27.299	26.499		47.481	51.438	14.878	33.102	-1.222	-7.647		36.119	0.058	14.643	0.004		2401.48	40.0247	50.0	8.9	40.3	2.778	0.009	0.009	0.000	0.215	0.18	
1709	6/16/2004	1:17:12 AM		26.181	26.395	24.993	27.333	26.493		47.821	51.989	14.96	33.299	-1.219	-7.649		52.6	0.056	14.643	0.004		2402.48	40.0414	50.5	12.9	40.6	2.796	0.008	0.008	0.000	0.206	0.18	
1710	6/16/2004	1:18:12 AM		26.186	26.384	24.987	27.333	26.457		47.883	51.9	14.95	33.382	-1.222	-7.652		55.964	0.058	14.643	0.004		2403.48	40.0581	50.4	13.7	40.6	2.801	0.009	0.009	0.000	0.213	0.18	
1711	6/16/2004	1:19:12 AM		26.206	26.409	25.017	27.363	26.467		47.931	51.869	14.868	33.566	-1.219	-7.649		53.983	0.058	14.643	0.004		2404.48	40.0747	50.4	13.2	40.7	2.809	0.009	0.009	0.000	0.212	0.18	
1712	6/16/2004	1:20:12 AM		26.188	26.402	25.015	27.36	26.5		47.676	51.686	14.934	33.185	-1.216	-7.644		49.283	0.058	14.643	0.004		2405.48	40.0914	50.2	12.1	40.4	2.788	0.009	0.009	0.000	0.214	0.18	
1713	6/16/2004	1:21:12 AM		26.186	26.4	25.002	27.343	26.508		47.819	51.641	14.886	33.425	-1.219	-7.655		51.006	0.057	14.643	0.004		2406.48	40.1081	50.2	12.5	40.6	2.801	0.008	0.008	0.000	0.209	0.18	
1714	6/16/2004	1:22:12 AM		26.181	26.4	24.997	27.323	26.492		47.773	51.846	14.855	33.365	-1.222	-7.649		53.35	0.058	14.643	0.004		2407.48	40.1247	50.4	13.1	40.6	2.797	0.009	0.009	0.000	0.213	0.18	
1715	6/16/2004	1:23:12 AM		26.188	26.402	25.009	27.315	26.499		48.088	52.057	14.919	33.644	-1.216	-7.647		51.753	0.059	14.643	0.004		2408.48	40.1414	50.6	12.7	40.9	2.818	0.009	0.009	0.000	0.215	0.18	
1716	6/16/2004	1:24:12 AM		26.204	26.423	25.026	27.306	26.471		47.899	52.074	14.951	33.355	-1.222	-7.661		46.799	0.058	14.643	0.004		2409.48	40.1581	50.6	11.5	40.6	2.801	0.009	0.009	0.000	0.213	0.18	
1717	6/16/2004	1:25:12 AM		26.197	26.415	25.018	27.313	26.418		47.929	51.941	15.024	33.367	-1.222	-7.655		44.308	0.058	14.643	0.004		2410.48	40.1747	50.5	10.9	40.6	2.803	0.009	0.009	0.000	0.213	0.18	
1718	6/16/2004	1:26:12 AM		26.204	26.433	25.05	27.316	26.445		47.885	52.035	14.964	33.379	-1.219	-7.655		51.815	0.058	14.643	0.004		2411.48	40.1914	50.6	12.7	40.6	2.801	0.009	0.009	0.000	0.213	0.18	
1719	6/16/2004	1:27:12 AM		26.184	26.413	25.08	27.276	26.41		47.713	51.948	14.847	33.291	-1.219	-7.658		50.063	0.057	14.643	0.004		2412.48	40.2081	50.5	12.3	40.5	2.792	0.008	0.008	0.000	0.209	0.18	
1720	6/16/2004	1:28:12 AM		26.188	26.407	25.079	27.275	26.45		47.441	51.456	14.815	33.063	-1.222	-7.652		56.905	0.059	14.643	0.004		2413.48	40.2247	50.0	13.9	40.3	2.775	0.009	0.009	0.000	0.218	0.19	
1721	6/16/2004	1:29:12 AM		26.192	26.416	25.074	27.274	26.479		47.493	51.537	14.819	33.129	-1.222	-7.649		48.311	0.058	14.643	0.004		2414.48	40.2414	50.1	11.8	40.3	2.779	0.009	0.009	0.000	0.214	0.18	
1722	6/16/2004	1:30:12 AM		26.187	26.406	25.058	27.284	26.454		47.692	51.757	14.822	33.297	-1.219	-7.649		52.249	0.059	14.643	0.004		2415.48	40.2581	50.3	12.8	40.5	2.792	0.009	0.009	0.000	0.217	0.18	
1723	6/16/2004	1:31:12 AM		26.182	26.405	25.048	27.274	26.408		47.588	51.574	14.799	33.283	-1.219	-7.658		48.009	0.057	14.643	0.004		2416.48	40.2747	50.1	11.8	40.4	2.788	0.008	0.008	0.000	0.210	0.18	
1724	6/16/2004	1:32:12 AM		26.191	26.404	25.047	27.278	26.397		48.02	51.977	14.831	33.685	-1.214	-7.649		50.14	0.057	14.643	0.004		2417.48	40.2914	50.5	12.3	40.9	2.817	0.008	0.008	0.000	0.208	0.18	
1725	6/16/2004	1:33:12 AM		26.19	26.393	25.021	27.267	26.396		47.73	51.761	14.822	33.38	-1.222	-7.658		45.086	0.057	14.643	0.004		2418.48	40.3081	50.3	11.0	40.6	2.796	0.008	0.008	0.000	0.209	0.18	
1726	6/16/2004	1:34:12 AM		26.196	26.405	25.022	27.273	26.422		47.628	51.775	14.728	33.338	-1.225	-7.664		49.037	0.056	14.643	0.003		2419.48	40.3247	50.3	12.0	40.5	2.791	0.008	0.008	0.000	0.206	0.18	
1727	6/16/2004	1:35:12 AM		26.206	26.42	25.033	27.253	26.418		48.123	52.3	14.931	33.581	-1.219	-7.67		56.05	0.057	14.643	0.004		2420.48	40.3414	50.8	13.7	40.9	2.817	0.008	0.008	0.000	0.208	0.18	
1728	6/16/2004	1:36:12 AM		26.208	26.427	25.034	27.24	26.429		47.877	52.066	14.834	33.499	-1.219	-7.67		54.335	0.057	14.643	0.004		2421.48	40.3581	50.6	13.3	40.7	2.805	0.008	0.008	0.000	0.209	0.18	
1729	6/16/2004	1:37:12 AM		26.209	26.433	25.035	27.271	26.421		47.628	51.838	14.893	33.156	-1.219	-7.667		54.754	0.057	14.643	0.004		2422.48	40.3747	50.4	13.4	40.4	2.785	0.008	0.008	0.000	0.210	0.18	
1730	6/16/2004	1:38:12 AM		26.215	26.439	25.041	27.297	26.422		47.74	51.852	14.783	33.416	-1.219	-7.612		51.14	0.057	14.643	0.004		2423.48	40.3914	50.4	12.5	40.6	2.798	0.008	0.008	0.000	0.209	0.18	
1731	6/16/2004	1:39:12 AM		26.197	26.411	25.023	27.224	26.419		47.786	51.948	14.763	33.496	-1.219	-7.641		50.745	0.057	14.643	0.004		2424.48	40.4081	50.5	12.4	40.6	2.802	0.008	0.008	0.000	0.209	0.18	
1732	6/16/2004	1:40:12 AM		26.194	26.428	25.02	27.251	26.376		47.75	51.985	14.791	33.408	-1.219	-7.702		46.402	0.057	14.643	0.004		2425.48	40.4247	50.5	11.4	40.6	2.798	0.008	0.008	0.000	0.209	0.18	
1733	6/16/2004	1:41:12 AM		26.203	26.422	25.029	27.265	26.399		47.837	51.863	14.722	33.615	-1.222	-7.69		48.557	0.061	14.643	0.004		2426.48	40.4414	50.4	11.9	40.7	2.808	0.009	0.009	0.000	0.223	0.19	
1734	6/16/2004	1:42:12 AM		26.2	26.424	25.031	27.242	26.451		47.394	51.448	14.789	33.074	-1.219	-7.69		50.449	0.06	14.643	0.004		2427.48	40.4581	50.0	12.4	40.2	2.774	0.009	0.009	0.000	0.222	0.19	
1735	6/16/2004	1:43:12 AM		26.208	26.437	25.05	27.26	26.48		47.479	51.651	14.774	33.131	-1.219	-7.719		56.882	0.056	14.643	0.004		2428.48	40.4747	50.2	13.9	40.3	2.779	0.008	0.008	0.000	0.207	0.18	
1736	6/16/2004	1:44:12 AM		26.213	26.442	25.055	27.26	26.48		47.51	51.659	14.802	33.191	-1.222	-7.655		47.362	0.058	14.643	0.004		2429.48	40.4914	50.2	11.6	40.4	2.782	0.009	0.009	0.000	0.214	0.18	
1737	6/16/2004	1:45:12 AM		26.205	26.439	25.056	27.277	26.501		47.57	51.508	14.735	33.308	-1.219	-7.725		53.311	0.061	14.643	0.004		2430.48	40.5081	50.0	13.1	40.4	2.788	0.009	0.009	0.000	0.225	0.19	
1738	6/16/2004	1:46:12 AM		26.207	26.446	25.043	27.274	26.494		47.902	52.151	14.798	33.548	-1.219	-7.73		52.883	0.059	14.643	0.004		2431.48	40.5247	50.7	13.0	40.7	2.808	0.009	0.009	0.000	0.216	0.18	
1739	6/16/2004	1:47:12 AM		26.201	26.435	25.037	27.263	26.497		47.647	51.875	14.785	33.269	-1.222	-7.745		39.369	0.057	14.643	0.004		2432.48	40.5414	50.4	9.6	40.5	2.789	0.008	0.008	0.000	0.210	0.18	
1740	6/16/2004	1:48:12 AM		26.199	26.438	25.035	27.246	26.48		47.989	52.128	14.77	33.677	-1.219	-7.739		55.119	0.057	14.643	0.004		2433.48	40.5581	50.7	13.5	40.8	2.815	0.008	0.008	0.000	0.208	0.18	
1741	6/16/2004	1:49:12 AM		26.203	26.442	25.034	27.27	26.445		47.846	52.088	14.79	33.503	-1.219	-7.742		51.571	0.056	14.643	0.004		2434.48	40.5747	50.6	12.6	40.7	2.804	0.008	0.008	0.000	0.205	0.17	
1742	6/16/2004	1:50:12 AM		26.182	26.426	25.018	27.269	26.404		47.684	51.834	14.736	33.369	-1.222	-7.736		44.548	0.059	14.643	0.004		2435.48	40.5914	50.4	10.9	40.5	2.794	0.009	0.009	0.000	0.217	0.18	
1743	6/16/2004	1:51:12 AM		26.186	26.42	25.008	27.303	26.368		48.111	52.236	14.814	33.784	-1.219	-7.751		50.633	0.055	14.643	0.004		2436.48	40.6081	50.8	12.4	40.9	2.823	0.008	0.008	0.000	0.200	0.17	
1744	6/16/2004	1:52:12 AM		26.182	26.415	25.008	27.299	26.368		47.63	51.805	14.655	33.47	-1.219	-7.736		46.528	0.058	14.643	0.003		2437.48	40.6247	50.3	11.4	40.6	2.796	0.009	0.009	0.000	0.213	0.18	
1745	6/16/2004	1:53:12 AM		26.175	26.399	25.007	27.272	26.337		47.86	51.954	14.711	33.626	-1.219	-7.745		40.593	0.057	14.643	0.004		2438.48	40.6414	50.5	9.9	40.7	2.809	0.008	0.008	0.000	0.209	0.18	
1746	6/16/2004	1:54:12 AM		26.201	26.425	25.038	27.293	26.348		47.929	51.887	14.76	33.687	-1.219	-7.739		46.955	0.055	14.643	0.004		2439.48	40.6581	50.4	11.5	40.8	2.814	0.008	0.008	0.000	0.201	0.17	
1747	6/16/2004	1:55:12 AM		26.19	26.399	25.016	27.287	26.342		47.595	51.79	14.694	33.414	-1.222	-7.589		55.814	0.055	14.643	0.004		2440.48	40.6747	50.3	13.7	40.5	2.793	0.008	0.008	0.000	0.202	0.17	
1748	6/16/2004	1:56:12 AM		26.174	26.383	25.005	27.281	26.321		47.781	52.043	14.734	33.496	-1.219	-7.655		48.253	0.059	14.643	0.004		2441.48	40.6914	50.6	11.8	40.6	2.802	0.009	0.009	0.000	0.216	0.18	
1749	6/16/2004	1:57:12 AM		26.174	26.382	25	27.285	26.335		47.953	52.173	14.787	33.587	-1.222	-7.742		43.977	0.055	14.643	0.004		2442.48	40.7081	50.7	10.8	40.8	2.811	0.008	0.008	0.000	0.201	0.17	
1750	6/16/2004	1:58:12 AM		26.181	26.38	25.017	27.288	26.333		48.024	52.254	14.793	33.661	-1.216	-7.716		48.86	0.058	14.643	0.004		2443.48	40.7247	50.8	12.0	40.8	2.816	0.009	0.009	0.000	0.212	0.18	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1751	6/16/2004	1:59:12 AM		26.178	26.377	25.014	27.285	26.325		48.225	52.343	14.813	33.851	-1.219	-7.728		55.182	0.058	14.643	0.004		2444.48	40.7414	50.9	13.5	41.0	2.829	0.009	0.009	0.000	0.211	0.18	
1752	6/16/2004	2:00:12 AM		26.18	26.363	25.011	27.262	26.316		47.987	51.977	14.793	33.63	-1.219	-7.702		44.344	0.057	14.643	0.004		2445.48	40.7581	50.5	10.9	40.8	2.814	0.008	0.008	0.000	0.208	0.18	
1753	6/16/2004	2:01:13 AM		26.177	26.366	25.008	27.274	26.334		48.03	52.225	14.786	33.698	-1.222	-7.647		51.213	0.058	14.643	0.004		2446.50	40.775	50.8	12.6	40.9	2.817	0.009	0.009	0.000	0.212	0.18	
1754	6/16/2004	2:02:13 AM		26.173	26.346	25.009	27.265	26.32		48.041	52.236	14.81	33.65	-1.222	-7.725		51.296	0.057	14.643	0.004		2447.50	40.7917	50.8	12.6	40.8	2.816	0.008	0.008	0.000	0.208	0.18	
1755	6/16/2004	2:03:13 AM		26.17	26.344	24.996	27.272	26.332		47.624	51.881	14.705	33.326	-1.222	-7.641		50.351	0.05	14.643	0.004		2448.50	40.8083	50.4	12.3	40.5	2.791	0.007	0.007	0.000	0.184	0.16	
1756	6/16/2004	2:04:13 AM		26.182	26.346	25.054	27.299	26.319		47.748	52.07	14.685	33.519	-1.219	-7.531		41.49	0.057	14.643	0.004		2449.50	40.825	50.6	10.2	40.6	2.802	0.008	0.008	0.000	0.209	0.18	
1757	6/16/2004	2:05:13 AM		26.185	26.344	25.082	27.267	26.322		47.804	52.024	14.761	33.484	-1.222	-7.647		49.604	0.06	14.643	0.003		2450.50	40.8417	50.6	12.2	40.6	2.802	0.009	0.009	0.000	0.220	0.19	
1758	6/16/2004	2:06:13 AM		26.188	26.337	25.075	27.21	26.345		47.835	52.02	14.819	33.435	-1.222	-7.595		49.31	0.058	14.643	0.004		2451.50	40.8583	50.5	12.1	40.6	2.802	0.009	0.009	0.000	0.212	0.18	
1759	6/16/2004	2:07:13 AM		26.2	26.339	25.066	27.187	26.352		47.92	52.101	14.705	33.665	-1.216	-7.592		47.527	0.058	14.643	0.004		2452.50	40.875	50.6	11.6	40.8	2.813	0.009	0.009	0.000	0.212	0.18	
1760	6/16/2004	2:07:41 AM		26.2	26.344	25.086	27.202	26.337		47.978	52.08	14.764	33.691	-1.219	-7.595		53.013	0.058	14.643	0.004		2452.97	40.8828	50.6	13.0	40.8	2.815	0.009	0.009	0.000	0.211	0.18	
1761	6/16/2004	2:08:41 AM		26.201	26.339	25.062	27.188	26.283		47.943	52.059	14.67	33.759	-1.219	-7.606		50.716	0.057	14.643	0.004		2453.97	40.8994	50.6	12.4	40.9	2.817	0.008	0.008	0.000	0.208	0.18	
1762	6/16/2004	2:09:41 AM		26.186	26.314	25.032	27.133	26.283		47.696	51.908	14.705	33.476	-1.225	-7.609		53.367	0.056	14.643	0.003		2454.97	40.9161	50.4	13.1	40.6	2.798	0.008	0.008	0.000	0.206	0.17	
1763	6/16/2004	2:10:41 AM		26.191	26.315	25.043	27.124	26.288		47.999	52.323	14.816	33.615	-1.225	-7.606		43.881	0.057	14.643	0.003		2455.97	40.9328	50.9	10.8	40.8	2.813	0.008	0.008	0.000	0.208	0.18	
1764	6/16/2004	2:11:41 AM		26.181	26.32	25.033	27.124	26.283		47.922	52.217	14.853	33.414	-1.219	-7.615		47.174	0.057	14.643	0.004		2456.97	40.9494	50.7	11.6	40.7	2.804	0.008	0.008	0.000	0.209	0.18	
1765	6/16/2004	2:12:41 AM		26.205	26.333	25.056	27.172	26.291		47.57	51.788	14.653	33.363	-1.216	-7.606		56.461	0.057	14.643	0.004		2457.97	40.9661	50.3	13.8	40.5	2.790	0.008	0.008	0.000	0.210	0.18	
1766	6/16/2004	2:13:41 AM		26.213	26.342	25.065	27.185	26.3		47.926	52.074	14.778	33.62	-1.219	-7.612		52.328	0.057	14.643	0.004		2458.97	40.9828	50.6	12.8	40.8	2.811	0.008	0.008	0.000	0.208	0.18	
1767	6/16/2004	2:14:41 AM		26.191	26.325	25.038	27.203	26.323		48.233	52.542	14.701	34.008	-1.219	-7.621		54.46	0.057	14.643	0.004		2459.97	40.9994	51.1	13.3	41.1	2.835	0.008	0.008	0.000	0.206	0.18	
1768	6/16/2004	2:15:41 AM		26.185	26.323	25.041	27.172	26.317		47.864	52.072	14.715	33.638	-1.219	-7.626		48.203	0.056	14.643	0.003		2460.97	41.0161	50.6	11.8	40.8	2.810	0.008	0.008	0.000	0.205	0.17	
1769	6/16/2004	2:16:41 AM		26.173	26.311	25.014	27.175	26.31		47.864	52.184	14.793	33.513	-1.225	-7.626		50.482	0.056	14.643	0.003		2461.97	41.0328	50.7	12.4	40.7	2.805	0.008	0.008	0.000	0.205	0.17	
1770	6/16/2004	2:17:41 AM		26.188	26.317	25.035	27.165	26.28		47.609	51.916	15.069	32.971	-1.219	-7.623		47.982	0.056	14.643	0.003		2462.97	41.0494	50.4	11.8	40.3	2.778	0.008	0.008	0.000	0.207	0.18	
1771	6/16/2004	2:18:41 AM		26.179	26.318	25.021	27.121	26.271		47.456	51.547	14.989	32.936	-1.225	-7.626		48.42	0.056	14.643	0.003		2463.97	41.0661	50.1	11.9	40.2	2.771	0.008	0.008	0.000	0.208	0.18	
1772	6/16/2004	2:19:41 AM		26.197	26.326	25.044	27.169	26.269		47.518	51.728	15.065	32.897	-1.219	-7.629		49.148	0.057	14.643	0.004		2464.97	41.0828	50.3	12.0	40.2	2.772	0.008	0.008	0.000	0.211	0.18	
1773	6/16/2004	2:20:41 AM		26.186	26.32	25.053	27.163	26.283		47.846	51.962	15.075	33.207	-1.216	-7.522		54.235	0.056	14.643	0.004		2465.97	41.0994	50.5	13.3	40.5	2.794	0.008	0.008	0.000	0.206	0.18	
1774	6/16/2004	2:21:41 AM		26.422	26.306	25.029	27.105	26.295		47.205	51.699	15.114	32.501	-1.222	-6.915		43.864	0.063	14.643	0.003		2466.97	41.1161	50.2	10.7	39.9	2.748	0.009	0.009	0.000	0.235	0.20	
1775	6/16/2004	2:22:41 AM		26.278	26.297	25.03	27.141	26.261		47.603	52.03	15.055	32.981	-1.219	-7.285		53.603	0.06	14.643	0.004		2467.97	41.1328	50.6	13.1	40.3	2.778	0.009	0.009	0.000	0.222	0.19	
1776	6/16/2004	2:23:41 AM		26.199	26.278	25.001	27.161	26.246		47.705	51.981	15.072	33.004	-1.222	-7.337		51.636	0.056	14.643	0.004		2468.97	41.1494	50.5	12.7	40.4	2.782	0.008	0.008	0.000	0.207	0.18	
1777	6/16/2004	2:24:41 AM		26.183	26.301	25.024	27.19	26.225		47.85	52.339	15.045	33.232	-1.216	-7.381		51.459	0.056	14.643	0.004		2469.97	41.1661	50.9	12.6	40.5	2.795	0.008	0.008	0.000	0.206	0.18	
1778	6/16/2004	2:25:41 AM		26.157	26.296	25.009	27.199	26.224		47.632	52.062	15.055	32.973	-1.219	-7.384		44.085	0.056	14.643	0.003		2470.97	41.1828	50.6	10.8	40.3	2.779	0.008	0.008	0.000	0.207	0.18	
1779	6/16/2004	2:26:41 AM		26.169	26.312	25.03	27.196	26.241		47.835	52.169	15.054	33.254	-1.222	-7.386		51.988	0.055	14.643	0.004		2471.97	41.1994	50.7	12.7	40.5	2.795	0.008	0.008	0.000	0.202	0.17	
1780	6/16/2004	2:27:41 AM		26.153	26.296	25.014	27.175	26.27		47.634	51.871	15.009	33.012	-1.225	-7.436		49.385	0.056	14.643	0.003		2472.97	41.2161	50.4	12.1	40.3	2.780	0.008	0.008	0.000	0.207	0.18	
1781	6/16/2004	2:28:41 AM		26.14	26.279	25.007	27.167	26.262		47.647	51.794	14.962	33.178	-1.225	-7.412		44.638	0.057	14.643	0.003		2473.97	41.2328	50.3	10.9	40.4	2.786	0.008	0.008	0.000	0.210	0.18	
1782	6/16/2004	2:29:41 AM		26.149	26.293	25.026	27.171	26.246		47.767	51.993	15.051	33.174	-1.222	-7.412		49.049	0.056	14.643	0.003		2474.97	41.2494	50.5	12.0	40.5	2.790	0.008	0.008	0.000	0.206	0.18	
1783	6/16/2004	2:30:41 AM		26.135	26.269	25.022	27.162	26.267		47.493	51.784	15.102	32.778	-1.216	-7.412		51.434	0.056	14.643	0.004		2475.97	41.2661	50.3	12.6	40.1	2.767	0.008	0.008	0.000	0.208	0.18	
1784	6/16/2004	2:31:41 AM		26.127	26.255	25.013	27.169	26.254		47.338	51.577	14.904	32.926	-1.219	-7.41		45.028	0.057	14.643	0.004		2476.97	41.2828	50.1	11.0	40.1	2.767	0.008	0.008	0.000	0.212	0.18	
1785	6/16/2004	2:32:41 AM		26.146	26.265	25.023	27.168	26.263		47.572	51.975	15.07	32.907	-1.219	-7.412		58.989	0.057	14.643	0.004		2477.97	41.2994	50.5	14.5	40.2	2.774	0.008	0.008	0.000	0.211	0.18	
1786	6/16/2004	2:33:41 AM		26.137	26.246	25.024	27.199	26.249		47.653	51.979	14.956	33.15	-1.216	-7.412		50.647	0.056	14.643	0.004		2478.97	41.3161	50.5	12.4	40.4	2.786	0.008	0.008	0.000	0.207	0.18	
1787	6/16/2004	2:34:41 AM		26.151	26.255	25.023	27.193	26.273		47.796	52.097	14.912	33.365	-1.219	-7.407		53.613	0.057	14.643	0.004		2479.97	41.3328	50.6	13.1	40.6	2.798	0.008	0.008	0.000	0.209	0.18	
1788	6/16/2004	2:35:41 AM		26.144	26.258	25.02	27.196	26.271		47.738	52.151	15.029	33.115	-1.219	-7.412		53.48	0.056	14.643	0.004		2480.97	41.3494	50.7	13.1	40.4	2.787	0.008	0.008	0.000	0.206	0.18	
1789	6/16/2004	2:36:41 AM		26.154	26.258	25.05	27.191	26.266		47.387	52.016	14.911	32.813	-1.225	-7.41		56.542	0.057	14.643	0.003		2481.97	41.3661	50.5	13.9	40.1	2.765	0.008	0.008	0.000	0.212	0.18	
1790	6/16/2004	2:37:41 AM		26.182	26.276	25.094	27.194	26.254		47.649	52.072	14.91	33.162	-1.222	-7.412		48.488	0.056	14.643	0.004		2482.97	41.3828	50.6	11.9	40.4	2.786	0.008	0.008	0.000	0.206	0.18	
1791	6/16/2004	2:38:41 AM		26.186	26.275	25.083	27.183	26.218		47.584	51.95	14.972	32.996	-1.225	-7.424		48.054	0.056	14.643	0.003		2483.97	41.3994	50.5	11.8	40.3	2.778	0.008	0.008	0.000	0.207	0.18	
1792	6/16/2004	2:39:41 AM		26.196	26.269	25.092	27.183	26.203		47.317	51.711	14.868	32.869	-1.222	-7.444		49.189	0.056	14.643	0.004		2484.97	41.4161	50.2	12.1	40.1	2.764	0.008	0.008	0.000	0.208	0.18	
1793	6/16/2004	2:40:41 AM		26.196	26.269	25.082	27.208	26.213		47.228	51.494	14.78	32.967	-1.222	-7.438		53.632	0.057	14.643	0.004		2485.97	41.4328	50.0	13.1	40.1	2.765	0.008	0.008	0.000	0.211	0.18	
1794	6/16/2004	2:41:41 AM		26.176	26.244	25.052	27.148	26.218		47.342	51.705	14.87	32.887	-1.225	-7.363		47.725	0.058	14.643	0.004		2486.97	41.4494	50.2	11.7	40.1	2.766	0.009	0.009	0.000	0.215	0.18	
1795	6/16/2004	2:42:41 AM		26.167	26.235	25.058	27.159	26.209		47.416	51.751	14.947	32.944	-1.219	-7.395		45.22	0.056	14.643	0.004		2487.97	41.4661	50.3	11.1	40.2	2.770	0.008	0.008	0.000	0.207	0.18	
1796	6/16/2004	2:43:41 AM		26.164	26.222	25.05	27.136	26.251		47.435	51.804	14.913	32.946	-1.216	-7.404		49.035	0.056	14.643	0.004		2488.97	41.4828	50.3	12.0	40.2	2.771	0.008	0.008	0.000	0.207	0.18	
1797	6/16/2004	2:44:41 AM		26.166	26.219	25.042	27.118	26.293		47.661	51.916	14.971	33.143	-1.219	-7.404		50.439	0.056	14.643	0.004		2489.97	41.4994	50.4	12.4	40.4	2.786	0.008	0.008	0.000	0.206	0.18	
1798	6/16/2004	2:45:41 AM		26.172	26.22	25.043	27.084	26.274		47.703	52.19	14.922	33.205	-1.222	-7.415		52.272	0.056	14.643	0.004		2490.97	41.5161	50.7	12.8	40.5	2.789	0.008	0.008	0.000	0.206	0.18	
1799	6/16/2004	2:46:41 AM		26.188	26.246	25.069	27.145	26.255		47.678	52.105	14.864	33.262	-1.219	-7.418		57.677	0.055	14.643	0.004		2491.97	41.5328	50.6	14.1	40.5	2.790	0.008	0.008	0.000	0.202	0.17	
1800	6/16/2004	2:47:41 AM		26.185	26.244	25.062	27.132	26.258		47.4	51.871	14.836	32.963	-1.222	-7.45		56.579	0.058	14.643	0.004		2492.97	41.5494	50.4	13.9	40.2	2.770	0.009	0.009	0.000	0.215	0.18	
1801	6/16/2004	2:48:41 AM		26.183	26.242	25.065	27.16	26.23		47.422	51.807	14.86	33.01	-1.219	-7.372		44.723	0.052	14.643	0.004		2493.97	41.5661	50.3	11.0	40.2	2.773	0.008	0.008	0.000	0.192	0.16	
1802	6/16/2004	2:49:41 AM		26.186	26.235	25.063	27.114	26.259		47.785	51.914	14.899	33.421	-1.222	-7.606		49.494	0.062	14.643	0.004		2494.97	41.5828	50.4	12.1	40.6	2.799	0.009	0.009	0.000	0.227	0.19	
1803	6/16/2004	2:50:41 AM		26.196	26.244	25.077	27.093	26.243		47.734	51.952	14.851	33.382	-1.222	-7.401		55.484	0.055	14.643	0.004		2495.97	41.5994	50.5	13.6	40.6	2.796	0.008	0.008	0.000	0.202	0.17	
1804	6/16/2004	2:51:41 AM		26.179	26.238	25.061	27.136	26.206		47.64	51.975	14.862	33.246	-1.222	-7.326		47.714	0.06	14.643	0.004		2496.97	41.6161	50.5	11.7	40.4	2.788	0.009	0.009	0.000	0.221	0.19	
1805	6/16/2004	2:52:41 AM		26.176	26.235	25.067	27.113	26.218		47.947	52.325	14.985	33.369	-1.219	-7.381		44.596	0.057	14.643	0.004		2497.97	41.6328	50.9	10.9	40.7	2.803	0.008	0.008	0.000	0.209	0.18	
1806	6/16/2004	2:53:41 AM		26.168	26.232	25.064	27.085	26.225		47.877	52.18	14.946	33.382	-1.222	-7.493		53.709	0.058	14.643	0.004		2498.97	41.6494	50.7	13.2	40.6	2.801	0.009	0.009	0.000	0.212	0.18	
1807	6/16/2004	2:54:41 AM		26.173	26.227	25.07	27.065	26.22		47.452	51.579	14.921	33.008	-1.222	-7.49		53.805	0.057	14.643	0.004		2499.97	41.6661	50.1	13.2	40.2	2.774	0.008	0.008	0.000	0.211	0.18	
1808	6/16/2004	2:55:41 AM		26.175	26.229	25.066	27.047	26.227		47.873	52.146	14.928	33.412	-1.219	-7.493		50.789	0.057	14.643	0.004		2500.97	41.6828	50.7	12.4	40.6	2.802	0.008	0.008	0.000	0.209	0.18	
1809	6/16/2004	2:56:41 AM		26.177	26.241	25.073	27.054	26.254		47.763	52.194	14.914	33.252	-1.222	-7.493		49.644	0.056	14.643	0.004		2501.97	41.6994	50.7	12.2	40.5	2.793	0.008	0.008	0.000	0.206	0.18	
1810	6/16/2004	2:57:41 AM		26.173	26.217	25.069	27.04	26.265		47.767	52.288	14.902	33.244	-1.222	-7.488		53.121	0.057	14.643	0.004		2502.97	41.7161	50.8	13.0	40.5	2.793	0.008	0.008	0.000	0.209	0.18	
1811	6/16/2004	2:58:41 AM		26.18	26.224	25.081	27.072	26.252		47.796	52.2	14.949	33.277	-1.222	-7.496		54.516	0.056	14.643	0.004		2503.97	41.7328	50.7	13.4	40.5	2.795	0.008	0.008	0.000	0.205	0.17	
1812	6/16/2004	2:59:41 AM		26.183	26.222	25.07	27.09	26.221		47.74	52.059	14.906	33.267	-1.225	-7.502		57.506	0.056	14.643	0.003		2504.97	41.7494	50.6	14.1	40.5	2.793	0.008	0.008	0.000	0.206	0.18	
1813	6/16/2004	3:00:41 AM		26.198	26.241	25.109	27.145	26.235		47.873	52.115	14.952	33.396	-1.219	-7.502		55.368	0.057	14.643	0.004		2505.97	41.7661	50.6	13.6	40.6	2.802	0.008	0.008	0.000	0.208	0.18	
1814	6/16/2004	3:01:41 AM		26.191	26.24	25.102	27.133	26.228		47.854	52.184	14.945	33.423	-1.219	-7.467		41.557	0.056	14.643	0.004		2506.97	41.7828	50.7	10.2	40.6	2.802	0.008	0.008	0.000	0.205	0.17	
1815	6/16/2004	3:02:41 AM		26.19	26.229	25.102	27.117	26.237		47.559	51.975	14.851	33.109	-1.225	-7.485		46.832	0.056	14.643	0.003		2507.97	41.7994	50.5	11.5	40.3	2.781	0.008	0.008	0.000	0.206	0.18	
1816	6/16/2004	3:03:41 AM		26.189	26.222	25.1	27.121	26.246		47.566	51.927	14.974	33.024	-1.225	-7.493		47.06	0.055	14.643	0.003		2508.97	41.8161	50.5	11.5	40.3	2.778	0.008	0.008	0.000	0.203	0.17	
1817	6/16/2004	3:04:41 AM		26.203	26.232	25.114	27.125	26.235		47.966	52.317	14.98	33.382	-1.222	-7.496		49.788	0.057	14.643	0.003		2509.97	41.8328	50.8	12.2	40.7	2.804	0.008	0.008	0.000	0.208	0.18	
1818	6/16/2004	3:05:41 AM		26.198	26.222	25.099	27.09	26.245		47.758	52.107	14.979	33.287	-1.225	-7.493		43.182	0.058	14.643	0.003		2510.97	41.8494	50.6	10.6	40.5	2.794	0.009	0.009	0.000	0.213	0.18	
1819	6/16/2004	3:06:41 AM		26.222	26.241	25.144	27.154	26.254		47.447	52.02	14.826	32.99	-1.222	-7.493		48.67	0.056	14.643	0.004		2511.97	41.8661	50.5	11.9	40.2	2.773	0.008	0.008	0.000	0.207	0.18	
1820	6/16/2004	3:07:41 AM		26.222	26.241	25.164	27.149	26.224		47.418	51.977	14.919	32.914	-1.222	-7.496		51.669	0.055	14.643	0.004		2512.97	41.8828	50.5	12.7	40.2	2.769	0.008	0.008	0.000	0.203	0.17	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1821	6/16/2004	3:08:41 AM		26.232	26.251	25.183	27.169	26.234		47.526	51.979	14.809	33.16	-1.222	-7.499		47.739	0.055	14.643	0.004		2513.97	41.8994	50.5	11.7	40.3	2.782	0.008	0.008	0.000	0.202	0.17	
1822	6/16/2004	3:09:41 AM		26.228	26.241	25.179	27.145	26.24		47.367	51.769	14.845	32.992	-1.219	-7.493		45.612	0.057	14.643	0.004		2514.97	41.9161	50.3	11.2	40.2	2.770	0.008	0.008	0.000	0.210	0.18	
1823	6/16/2004	3:10:41 AM		26.213	26.221	25.164	27.12	26.255		47.34	51.875	14.86	32.821	-1.219	-7.355		53.553	0.056	14.643	0.004		2515.97	41.9328	50.4	13.1	40.1	2.763	0.008	0.008	0.000	0.207	0.18	
1824	6/16/2004	3:11:41 AM		26.22	26.219	25.152	27.072	26.252		47.391	51.763	14.797	33.041	-1.222	-7.395		48.132	0.055	14.643	0.004		2516.97	41.9494	50.3	11.8	40.2	2.773	0.008	0.008	0.000	0.203	0.17	
1825	6/16/2004	3:12:41 AM		26.224	26.217	25.15	27.111	26.256		47.729	52.165	14.963	33.187	-1.219	-7.415		57.443	0.056	14.643	0.004		2517.97	41.9661	50.7	14.1	40.5	2.789	0.008	0.008	0.000	0.205	0.17	
1826	6/16/2004	3:13:41 AM		26.227	26.231	25.149	27.104	26.234		47.628	51.923	14.747	33.334	-1.219	-7.43		41.772	0.058	14.643	0.004		2518.97	41.9828	50.5	10.2	40.5	2.791	0.009	0.009	0.000	0.213	0.18	
1827	6/16/2004	3:14:41 AM		26.22	26.224	25.136	27.097	26.182		47.603	51.86	14.811	33.338	-1.219	-7.436		50.261	0.056	14.643	0.004		2519.97	41.9994	50.4	12.3	40.5	2.790	0.008	0.008	0.000	0.206	0.17	
1828	6/16/2004	3:15:41 AM		26.231	26.239	25.147	27.108	26.203		47.759	52.049	14.754	33.505	-1.219	-7.436		46.261	0.055	14.643	0.004		2520.97	42.0161	50.6	11.3	40.6	2.801	0.008	0.008	0.000	0.201	0.17	
1829	6/16/2004	3:16:41 AM		26.231	26.234	25.142	27.133	26.233		47.493	52.026	14.744	33.166	-1.219	-7.441		47.994	0.056	14.643	0.004		2521.97	42.0328	50.6	11.8	40.3	2.781	0.008	0.008	0.000	0.206	0.18	
1830	6/16/2004	3:17:41 AM		26.232	26.231	25.134	27.144	26.234		47.458	51.887	14.735	33.143	-1.219	-7.436		40.329	0.056	14.643	0.004		2522.97	42.0494	50.4	9.9	40.3	2.779	0.008	0.008	0.000	0.206	0.18	
1831	6/16/2004	3:18:41 AM		26.217	26.226	25.124	27.164	26.224		47.983	52.36	14.845	33.597	-1.219	-7.447		46.332	0.056	14.643	0.004		2523.97	42.0661	50.9	11.4	40.8	2.812	0.008	0.008	0.000	0.204	0.17	
1832	6/16/2004	3:19:41 AM		26.229	26.228	25.126	27.157	26.242		47.871	52.132	14.853	33.453	-1.222	-7.453		48.651	0.045	14.643	0.003		2524.97	42.0828	50.7	11.9	40.7	2.804	0.007	0.007	0.000	0.164	0.14	
1833	6/16/2004	3:20:41 AM		26.575	26.229	25.127	27.162	26.237		47.298	51.96	14.898	32.809	-1.014	-6.239		56.34	0.044	14.643	0.004		2525.97	42.0994	50.5	13.8	40.1	2.762	0.007	0.007	0.000	0.163	0.14	
1834	6/16/2004	3:21:41 AM		26.441	26.221	25.123	27.129	26.249		46.962	51.69	14.799	32.61	-0.886	-6.45		47.623	0.061	14.643	0.004		2526.97	42.1161	50.2	11.7	39.8	2.743	0.009	0.009	0.000	0.228	0.19	
1835	6/16/2004	3:22:41 AM		26.324	26.233	25.131	27.131	26.261		47.425	52.146	14.914	32.977	-0.918	-6.516		48.173	0.056	14.643	0.004		2527.97	42.1328	50.7	11.8	40.2	2.772	0.008	0.008	0.000	0.207	0.18	
1836	6/16/2004	3:23:41 AM		26.25	26.219	25.126	27.132	26.247		47.982	52.292	14.884	33.566	-1.222	-7.135		46.038	0.057	14.643	0.004		2528.97	42.1494	50.8	11.3	40.8	2.811	0.008	0.008	0.000	0.208	0.18	
1837	6/16/2004	3:24:41 AM		26.21	26.199	25.116	27.132	26.227		47.292	51.726	14.799	32.969	-1.219	-7.19		52.124	0.058	14.643	0.004		2529.97	42.1661	50.3	12.8	40.1	2.767	0.009	0.009	0.000	0.215	0.18	
1838	6/16/2004	3:25:41 AM		26.197	26.216	25.124	27.154	26.229		47.472	51.892	14.827	33.098	-1.219	-7.305		45.297	0.056	14.643	0.004		2530.97	42.1828	50.4	11.1	40.3	2.778	0.008	0.008	0.000	0.207	0.18	
1839	6/16/2004	3:26:41 AM		26.179	26.212	25.12	27.121	26.251		47.439	51.74	14.92	32.983	-1.219	-7.242		45.362	0.056	14.643	0.004		2531.97	42.1994	50.3	11.1	40.2	2.772	0.008	0.008	0.000	0.207	0.18	
1840	6/16/2004	3:27:41 AM		26.16	26.198	25.111	27.112	26.222		47.441	51.765	14.82	33.086	-1.222	-7.262		40.99	0.055	14.643	0.004		2532.97	42.2161	50.3	10.0	40.3	2.776	0.008	0.008	0.000	0.203	0.17	
1841	6/16/2004	3:28:41 AM		26.15	26.194	25.117	27.127	26.222		47.798	52.161	15.01	33.244	-1.216	-7.285		50.904	0.056	14.643	0.004		2533.97	42.2328	50.7	12.5	40.5	2.794	0.008	0.008	0.000	0.205	0.17	
1842	6/16/2004	3:29:41 AM		26.151	26.19	25.113	27.118	26.228		47.744	52.126	14.835	33.408	-1.222	-7.213		49.392	0.056	14.643	0.004		2534.97	42.2494	50.7	12.1	40.6	2.798	0.008	0.008	0.000	0.205	0.17	
1843	6/16/2004	3:30:41 AM		26.131	26.165	25.093	27.038	26.238		47.653	52.026	14.816	33.265	-1.225	-7.23		52.754	0.056	14.643	0.003		2535.97	42.2661	50.6	12.9	40.5	2.790	0.008	0.008	0.000	0.206	0.18	
1844	6/16/2004	3:31:41 AM		26.14	26.179	25.117	26.998	26.218		47.897	52.408	14.96	33.338	-1.222	-7.236		44.304	0.057	14.643	0.004		2536.97	42.2828	50.9	10.9	40.6	2.800	0.008	0.008	0.000	0.209	0.18	
1845	6/16/2004	3:32:41 AM		26.145	26.193	25.121	26.992	26.222		47.705	52.142	14.886	33.223	-1.219	-7.277		52.804	0.049	14.643	0.004		2537.97	42.2994	50.7	12.9	40.5	2.790	0.007	0.007	0.000	0.180	0.15	
1846	6/16/2004	3:33:41 AM		26.143	26.177	25.104	26.955	26.25		47.727	52.153	14.873	33.31	-1.222	-7.447		52.297	0.056	14.643	0.004		2538.97	42.3161	50.7	12.8	40.5	2.794	0.008	0.008	0.000	0.205	0.17	
1847	6/16/2004	3:34:41 AM		26.158	26.187	25.109	26.995	26.175		47.968	52.254	14.959	33.49	-1.225	-7.456		48.686	0.056	14.643	0.003		2539.97	42.3328	50.8	11.9	40.7	2.808	0.008	0.008	0.000	0.204	0.17	
1848	6/16/2004	3:35:41 AM		26.163	26.187	25.12	27.005	26.15		47.761	52.113	14.931	33.289	-1.225	-7.462		47.508	0.056	14.643	0.003		2540.97	42.3494	50.6	11.6	40.5	2.794	0.008	0.008	0.000	0.205	0.17	
1849	6/16/2004	3:36:41 AM		26.152	26.176	25.119	26.984	26.145		47.933	52.366	14.772	33.634	-1.219	-7.459		47.908	0.056	14.643	0.004		2541.97	42.3661	50.9	11.7	40.8	2.812	0.008	0.008	0.000	0.204	0.17	
1850	6/16/2004	3:37:41 AM		26.173	26.197	25.15	27.005	26.135		47.983	52.431	15.034	33.301	-1.222	-7.462		51.146	0.055	14.643	0.004		2542.97	42.3828	51.0	12.5	40.6	2.802	0.008	0.008	0.000	0.201	0.17	
1851	6/16/2004	3:38:41 AM		26.169	26.197	25.15	26.996	26.121		47.736	52.035	14.923	33.324	-1.219	-7.459		58.79	0.056	14.643	0.004		2543.97	42.3994	50.6	14.4	40.5	2.794	0.008	0.008	0.000	0.205	0.17	
1852	6/16/2004	3:39:41 AM		26.184	26.202	25.17	27.001	26.121		48.039	52.254	15.077	33.429	-1.219	-7.464		48.18	0.055	14.643	0.004		2544.97	42.4161	50.8	11.8	40.7	2.808	0.008	0.008	0.000	0.200	0.17	
1853	6/16/2004	3:40:41 AM		26.18	26.183	25.151	26.977	26.122		47.939	52.391	15.014	33.402	-1.219	-7.467		53.526	0.055	14.643	0.004		2545.97	42.4328	50.9	13.1	40.7	2.804	0.008	0.008	0.000	0.201	0.17	
1854	6/16/2004	3:41:41 AM		26.169	26.177	25.155	26.966	26.111		47.75	52.234	14.976	33.174	-1.219	-7.459		43.167	0.057	14.643	0.004		2546.97	42.4494	50.8	10.6	40.5	2.790	0.008	0.008	0.000	0.209	0.18	
1855	6/16/2004	3:42:41 AM		26.185	26.183	25.171	27.007	26.107		47.846	52.261	15.057	33.223	-1.219	-7.467		49.583	0.054	14.643	0.004		2547.97	42.4661	50.8	12.2	40.5	2.795	0.008	0.008	0.000	0.198	0.17	
1856	6/16/2004	3:43:41 AM		26.185	26.178	25.156	26.972	26.127		47.987	52.464	15.062	33.406	-1.222	-7.467		42.988	0.055	14.643	0.003		2548.97	42.4828	51.0	10.5	40.7	2.806	0.008	0.008	0.000	0.201	0.17	
1857	6/16/2004	3:44:41 AM		26.178	26.167	25.21	26.995	26.145		47.839	52.234	14.93	33.34	-1.219	-7.459		51.663	0.056	14.643	0.004		2549.97	42.4994	50.8	12.7	40.6	2.799	0.008	0.008	0.000	0.204	0.17	
1858	6/16/2004	3:45:41 AM		26.184	26.162	25.195	26.966	26.131		47.537	51.894	14.862	33.15	-1.222	-7.459		52.476	0.057	14.643	0.003		2550.97	42.5161	50.4	12.9	40.3	2.782	0.008	0.008	0.000	0.209	0.18	
1859	6/16/2004	3:46:41 AM		26.2	26.184	25.207	26.983	26.133		47.501	51.89	14.919	33.055	-1.219	-7.459		51.942	0.057	14.643	0.004		2551.97	42.5328	50.4	12.7	40.3	2.777	0.008	0.008	0.000	0.210	0.18	
1860	6/16/2004	3:47:41 AM		26.197	26.176	25.193	26.984	26.114		47.779	52.285	14.921	33.32	-1.222	-7.459		48.584	0.055	14.643	0.004		2552.97	42.5494	50.8	11.9	40.5	2.796	0.008	0.008	0.000	0.201	0.17	
1861	6/16/2004	3:48:41 AM		26.193	26.157	25.18	26.951	26.126		47.775	52.29	14.954	33.234	-1.225	-7.43		44.175	0.056	14.643	0.004		2553.97	42.5661	50.8	10.8	40.5	2.793	0.008	0.008	0.000	0.205	0.17	
1862	6/16/2004	3:49:41 AM		26.202	26.155	25.183	26.919	26.119		47.194	51.852	14.841	32.694	-1.222	-7.43		50.737	0.056	14.643	0.004		2554.97	42.5828	50.4	12.4	39.9	2.754	0.008	0.008	0.000	0.208	0.18	
1863	6/16/2004	3:50:41 AM		26.203	26.157	25.175	26.95	26.111		47.321	51.639	14.758	32.988	-1.219	-7.43		48.983	0.055	14.643	0.004		2555.97	42.5994	50.2	12.0	40.2	2.769	0.008	0.008	0.000	0.203	0.17	
1864	6/16/2004	3:51:41 AM		26.2	26.148	25.166	26.942	26.092		47.786	52.256	14.846	33.34	-1.219	-7.424		45.065	0.056	14.643	0.004		2556.97	42.6161	50.8	11.0	40.6	2.797	0.008	0.008	0.000	0.205	0.17	
1865	6/16/2004	3:52:41 AM		26.204	26.152	25.16	26.926	26.086		47.738	52.037	14.856	33.336	-1.222	-7.427		47.226	0.056	14.643	0.004		2557.97	42.6328	50.6	11.6	40.5	2.795	0.008	0.008	0.000	0.205	0.17	
1866	6/16/2004	3:53:41 AM		26.189	26.133	25.141	26.947	26.047		47.725	52.026	14.86	33.369	-1.222	-7.427		50.184	0.054	14.643	0.004		2558.97	42.6494	50.6	12.3	40.5	2.796	0.008	0.008	0.000	0.198	0.17	
1867	6/16/2004	3:54:41 AM		26.186	26.125	25.123	27.008	26.038		47.445	51.86	14.889	32.949	-1.222	-7.424		50.81	0.054	14.643	0.004		2559.97	42.6661	50.4	12.5	40.2	2.771	0.008	0.008	0.000	0.200	0.17	
1868	6/16/2004	3:55:41 AM		26.189	26.118	25.131	26.971	26.067		47.423	51.834	14.871	32.981	-1.222	-7.43		52.445	0.052	14.643	0.004		2560.97	42.6828	50.4	12.9	40.2	2.772	0.008	0.008	0.000	0.192	0.16	
1869	6/16/2004	3:56:41 AM		26.197	26.131	25.154	26.949	26.105		47.723	52.06	14.972	33.228	-1.216	-7.41		46.259	0.057	14.643	0.004		2561.97	42.6994	50.6	11.3	40.5	2.791	0.008	0.008	0.000	0.209	0.18	
1870	6/16/2004	3:57:41 AM		26.194	26.107	25.135	26.936	26.046		47.7	52.294	14.953	33.117	-1.216	-7.412		53.511	0.055	14.643	0.004		2562.97	42.7161	50.8	13.1	40.4	2.786	0.008	0.008	0.000	0.202	0.17	
1871	6/16/2004	3:58:41 AM		26.202	26.111	25.139	26.954	26.049		47.45	51.97	14.908	32.965	-1.222	-7.421		48.709	0.056	14.643	0.004		2563.97	42.7328	50.5	11.9	40.2	2.772	0.008	0.008	0.000	0.207	0.18	
1872	6/16/2004	3:59:41 AM		26.2	26.114	25.132	26.942	26.048		47.472	52.014	14.794	33.102	-1.219	-7.297		48.86	0.057	14.643	0.004		2564.97	42.7494	50.5	12.0	40.3	2.778	0.008	0.008	0.000	0.210	0.18	
1873	6/16/2004	3:59:45 AM		26.2	26.099	25.127	26.932	26.043		47.508	51.898	14.917	33.022	-1.222	-7.305		49.873	0.056	14.643	0.003		2565.03	42.7506	50.4	12.2	40.3	2.776	0.008	0.008	0.000	0.207	0.18	
1874	6/16/2004	4:00:45 AM		26.198	26.107	25.14	26.941	26.051		47.537	52.155	14.946	32.944	-1.216	-7.291		50.756	0.056	14.643	0.004		2566.03	42.7672	50.7	12.4	40.2	2.774	0.008	0.008	0.000	0.207	0.18	
1875	6/16/2004	4:01:45 AM		26.196	26.089	25.117	26.928	26.013		47.617	52.018	14.934	33.135	-1.219	-7.407		53.05	0.057	14.643	0.004		2567.03	42.7839	50.5	13.0	40.4	2.784	0.008	0.008	0.000	0.210	0.18	
1876	6/16/2004	4:02:45 AM		26.193	26.082	25.12	26.955	26.031		47.924	52.43	14.979	33.361	-1.219	-7.305		50.726	0.058	14.643	0.004		2568.03	42.8006	51.0	12.4	40.6	2.802	0.009	0.009	0.000	0.212	0.18	
1877	6/16/2004	4:03:45 AM		26.185	26.088	25.111	26.942	26.022		47.632	52.292	14.889	33.199	-1.219	-7.308		49.327	0.055	14.643	0.004		2569.03	42.8172	50.8	12.1	40.4	2.787	0.008	0.008	0.000	0.202	0.17	
1878	6/16/2004	4:04:45 AM		26.174	26.072	25.105	26.931	25.982		47.508	51.952	14.851	33.119	-1.222	-7.355		49.93	0.055	14.643	0.003		2570.03	42.8339	50.5	12.2	40.3	2.779	0.008	0.008	0.000	0.203	0.17	
1879	6/16/2004	4:05:45 AM		26.179	26.067	25.105	26.946	25.996		47.709	52.028	14.919	33.279	-1.222	-7.366		47.133	0.055	14.643	0.003		2571.03	42.8506	50.6	11.6	40.5	2.792	0.008	0.008	0.000	0.202	0.17	
1880	6/16/2004	4:06:45 AM		26.184	26.072	25.11	26.966	26.006		48.039	52.632	15.046	33.377	-1.222	-7.363		47.097	0.055	14.643	0.003		2572.03	42.8672	51.2	11.5	40.7	2.807	0.008	0.008	0.000	0.201	0.17	
1881	6/16/2004	4:07:45 AM		26.185	26.063	25.111	26.957	26.002		47.568	52.136	14.907	33.133	-1.219	-7.372		48.057	0.055	14.643	0.004		2573.03	42.8839	50.7	11.8	40.4	2.782	0.008	0.008	0.000	0.203	0.17	
1882	6/16/2004	4:08:45 AM		26.198	26.076	25.119	26.965	26.02		47.607	52.219	14.924	33.115	-1.219	-7.36		53.165	0.058	14.643	0.004		2574.03	42.9006	50.7	13.0	40.4	2.783	0.009	0.009	0.000	0.214	0.18	
1883	6/16/2004	4:09:45 AM		26.189	26.063	25.116	26.957	26.012		47.462	51.933	14.947	32.926	-1.225	-7.375		48.818	0.055	14.643	0.004		2575.03	42.9172	50.5	12.0	40.2	2.771	0.008	0.008	0.000	0.203	0.17	
1884	6/16/2004	4:10:45 AM		26.187	26.06	25.118	26.959	26.004		47.628	52.045	14.923	33.162	-1.222	-7.334		52.535	0.053	14.643	0.004		2576.03	42.9339	50.6	12.9	40.4	2.785	0.008	0.008	0.000	0.195	0.17	
1885	6/16/2004	4:11:45 AM		26.183	26.057	25.115	26.921	26.006		47.769	52.153	14.889	33.377	-1.202	-7.303		57.23	0.056	14.643	0.003		2577.03	42.9506	50.7	14.0	40.6	2.797	0.008	0.008	0.000	0.205	0.17	
1886	6/16/2004	4:12:45 AM		26.18	26.054	25.122	26.932	26.013		48.126	52.532	14.908	33.646	-1.219	-7.343		47.128	0.056	14.643	0.004		2578.03	42.9672	51.1	11.5	40.9	2.819	0.008	0.008	0.000	0.204	0.17	
1887	6/16/2004	4:13:45 AM		26.177	26.046	25.114	26.935	26		47.812	52.308	14.85	33.412	-1.214	-7.331		52.139	0.058	14.643	0.004		2579.03	42.9839	50.8	12.8	40.6	2.800	0.009	0.009	0.000	0.212	0.18	
1888	6/16/2004	4:14:45 AM		26.158	26.027	25.09	26.905	25.966		47.924	52.534	14.889	33.484	-1.159	-7.259		52.716	0.048	14.643	0.004		2580.03	43.0006	51.1	12.9	40.7	2.806	0.007	0.007	0.000	0.175	0.15	
1889	6/16/2004	4:15:45 AM		26.176	26.039	25.117	26.933	25.978		47.63	52.261	14.887	33.131	-1.193	-7.303		51.577	0.057	14.643	0.004		2581.03	43.0172	50.8	12.6	40.4	2.784	0.008	0.008	0.000	0.210	0.18	
1890	6/16/2004	4:16:45 AM		26.166	26.03	25.108	26.914	25.984		47.893	52.366	14.894	33.498	-1.176	-7.32		44.075	0.054	14.643	0.003		2582.03	43.0339	50.9	10.8	40.7	2.806	0.008	0.008	0.000	0.197	0.17	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1891	6/16/2004	4:17:45 AM		26.162	26.026	25.109	26.909	25.97		48.07	52.632	14.898	33.616	-1.199	-7.337		50.222	0.055	14.643	0.004		2583.03	43.0506	51.2	12.3	40.8	2.816	0.008	0.008	0.000	0.200	0.17	
1892	6/16/2004	4:18:45 AM		26.162	26.026	25.114	26.894	25.965		47.705	52.302	14.854	33.265	-1.173	-7.346		46.72	0.053	14.643	0.004		2584.03	43.0672	50.8	11.4	40.5	2.791	0.008	0.008	0.000	0.195	0.17	
1893	6/16/2004	4:19:45 AM		26.157	26.011	25.099	26.845	25.955		47.599	52.321	14.934	33.047	-1.161	-7.193		46.04	0.05	14.643	0.003		2585.03	43.0839	50.8	11.3	40.3	2.780	0.007	0.007	0.000	0.184	0.16	
1894	6/16/2004	4:20:45 AM		26.158	26.017	25.15	26.88	25.956		47.425	52.113	14.845	32.998	-1.156	-7.193		47.7	0.056	14.643	0.004		2586.03	43.1006	50.6	11.7	40.2	2.772	0.008	0.008	0.000	0.207	0.18	
1895	6/16/2004	4:21:45 AM		26.164	26.022	25.136	26.876	25.972		48.254	52.916	14.516	34.157	-1.156	-7.251		51.479	0.054	14.643	0.003		2587.03	43.1172	51.4	12.6	41.2	2.841	0.008	0.008	0.000	0.195	0.17	
1896	6/16/2004	4:22:45 AM		26.161	26.005	25.118	26.799	25.964		48.022	52.598	14.56	33.925	-1.156	-7.32		50.777	0.058	14.643	0.003		2588.03	43.1339	51.1	12.4	41.0	2.825	0.009	0.009	0.000	0.210	0.18	
1897	6/16/2004	4:23:45 AM		26.147	26.001	25.109	26.85	25.91		48.385	52.6	14.525	34.268	-1.222	-6.635		45.272	0.057	14.643	0.004		2589.03	43.1506	51.1	11.1	41.3	2.849	0.008	0.008	0.000	0.205	0.17	
1898	6/16/2004	4:24:45 AM		26.173	26.007	25.115	26.891	25.901		47.346	52.758	14.539	33.24	-0.322	-4.698		50.405	0.049	14.643	0.004		2590.03	43.1672	51.3	12.4	40.3	2.778	0.007	0.007	0.000	0.181	0.15	
1899	6/16/2004	4:25:45 AM		26.149	25.993	25.071	26.872	25.897		46.983	52.207	14.462	32.922	-0.545	-5.305		46.663	0.052	14.643	0.004		2591.03	43.1839	50.7	11.4	40.0	2.755	0.008	0.008	0.000	0.194	0.16	
1900	6/16/2004	4:26:45 AM		26.146	25.98	25.078	26.883	25.889		47.962	52.754	14.636	33.78	-1.014	-6.502		46.183	0.059	14.643	0.004		2592.03	43.2006	51.3	11.3	40.9	2.818	0.009	0.009	0.000	0.215	0.18	
1901	6/16/2004	4:27:45 AM		26.148	25.982	25.07	26.87	25.951		48.184	52.843	14.631	33.946	-1.156	-6.742		48.566	0.06	14.643	0.004		2593.03	43.2172	51.4	11.9	41.1	2.831	0.009	0.009	0.000	0.217	0.19	
1902	6/16/2004	4:28:45 AM		26.15	25.988	25.076	26.822	25.978		47.924	52.211	14.867	33.503	-1.219	-7.196		48.319	0.077	14.643	0.004		2594.03	43.2339	50.7	11.8	40.7	2.807	0.011	0.011	0.000	0.281	0.24	
1903	6/16/2004	4:29:45 AM		26.141	25.974	25.082	26.808	25.949		47.466	51.802	15.124	32.758	-1.219	-7.199		47.546	0.054	14.643	0.004		2595.03	43.2506	50.3	11.7	40.1	2.766	0.008	0.008	0.000	0.200	0.17	
1904	6/16/2004	4:30:45 AM		26.145	25.989	25.107	26.857	25.953		47.622	51.744	15.154	32.973	-1.216	-7.207		53.766	0.053	14.643	0.004		2596.03	43.2672	50.3	13.2	40.3	2.778	0.008	0.008	0.000	0.195	0.17	
1905	6/16/2004	4:31:45 AM		26.136	25.97	25.083	26.793	25.984		47.669	51.91	15.092	33.012	-1.225	-7.225		47.614	0.053	14.643	0.003		2597.03	43.2839	50.4	11.7	40.3	2.781	0.008	0.008	0.000	0.195	0.17	
1906	6/16/2004	4:32:45 AM		26.132	25.97	25.083	26.749	26.004		47.902	52.261	15.17	33.117	-1.219	-7.219		51.133	0.053	14.643	0.004		2598.03	43.3006	50.8	12.5	40.5	2.793	0.008	0.008	0.000	0.195	0.17	
1907	6/16/2004	4:33:45 AM		26.123	25.966	25.089	26.72	25.95		47.887	52.312	15.025	33.297	-1.222	-7.213		49.79	0.054	14.643	0.004		2599.03	43.3172	50.8	12.2	40.6	2.799	0.008	0.008	0.000	0.198	0.17	
1908	6/16/2004	4:34:45 AM		26.125	25.979	25.082	26.747	25.918		47.68	52.12	15.056	33.051	-1.219	-7.222		55.194	0.055	14.643	0.004		2600.03	43.3339	50.6	13.5	40.4	2.783	0.008	0.008	0.000	0.203	0.17	
1909	6/16/2004	4:35:45 AM		26.128	25.971	25.084	26.73	25.926		47.578	51.829	15.038	33.033	-1.222	-7.225		46.098	0.055	14.643	0.004		2601.03	43.3506	50.4	11.3	40.3	2.779	0.008	0.008	0.000	0.203	0.17	
1910	6/16/2004	4:36:45 AM		26.125	25.963	25.086	26.757	25.922		47.58	51.975	15.143	32.844	-1.222	-7.23		53.559	0.054	14.643	0.004		2602.03	43.3672	50.5	13.1	40.2	2.772	0.008	0.008	0.000	0.200	0.17	
1911	6/16/2004	4:37:45 AM		26.124	25.977	25.1	26.756	25.917		47.688	52.12	15.079	33.037	-1.219	-7.227		49.389	0.054	14.643	0.004		2603.03	43.3839	50.6	12.1	40.4	2.783	0.008	0.008	0.000	0.199	0.17	
1912	6/16/2004	4:38:45 AM		26.123	25.977	25.115	26.78	25.906		48.055	52.408	15.112	33.402	-1.216	-7.227		50.704	0.054	14.643	0.004		2604.03	43.4006	50.9	12.4	40.7	2.808	0.008	0.008	0.000	0.197	0.17	
1913	6/16/2004	4:39:45 AM		26.123	25.977	25.115	26.79	25.901		47.962	52.248	15.177	33.248	-1.219	-7.222		47.005	0.055	14.643	0.004		2605.03	43.4172	50.8	11.5	40.6	2.800	0.008	0.008	0.000	0.201	0.17	
1914	6/16/2004	4:40:45 AM		26.117	25.971	25.114	26.75	25.9		47.792	52.215	15.166	33.047	-1.219	-7.222		47.833	0.054	14.643	0.004		2606.03	43.4339	50.7	11.7	40.4	2.787	0.008	0.008	0.000	0.199	0.17	
1915	6/16/2004	4:41:45 AM		26.112	25.971	25.104	26.775	25.885		47.879	52.273	15.071	33.24	-1.222	-7.23		50.036	0.054	14.643	0.004		2607.03	43.4506	50.8	12.3	40.6	2.796	0.008	0.008	0.000	0.198	0.17	
1916	6/16/2004	4:42:45 AM		26.113	25.967	25.105	26.805	25.911		47.943	52.176	15.075	33.291	-1.222	-7.225		49.396	0.054	14.643	0.004		2608.03	43.4672	50.7	12.1	40.6	2.800	0.008	0.008	0.000	0.198	0.17	
1917	6/16/2004	4:43:45 AM		26.092	25.951	25.089	26.775	25.885		48.074	52.547	15.116	33.392	-1.222	-7.233		56.381	0.054	14.643	0.004		2609.03	43.4839	51.1	13.8	40.7	2.808	0.008	0.008	0.000	0.197	0.17	
1918	6/16/2004	4:44:45 AM		26.103	25.947	25.09	26.8	25.881		47.705	52.07	15.155	32.967	-1.219	-7.227		49.694	0.055	14.643	0.004		2610.03	43.5006	50.6	12.2	40.3	2.781	0.008	0.008	0.000	0.203	0.17	
1919	6/16/2004	4:45:45 AM		26.109	25.957	25.1	26.846	25.937		47.951	52.505	15.245	33.104	-1.222	-7.245		53.386	0.058	14.643	0.004		2611.03	43.5172	51.0	13.1	40.5	2.794	0.009	0.009	0.000	0.213	0.18	
1920	6/16/2004	4:46:45 AM		26.1	25.953	25.091	26.887	25.982		47.756	52.062	15.115	33.09	-1.222	-7.233		49.51	0.055	14.643	0.003		2612.03	43.5339	50.6	12.1	40.4	2.787	0.008	0.008	0.000	0.202	0.17	
1921	6/16/2004	4:47:45 AM		26.106	25.964	25.107	26.958	26.053		47.615	51.954	15.175	32.922	-1.216	-7.291		43.167	0.053	14.643	0.004		2613.03	43.5506	50.5	10.6	40.3	2.776	0.008	0.008	0.000	0.196	0.17	
1922	6/16/2004	4:48:45 AM		26.093	25.942	25.13	27	26.12		47.702	52.014	14.916	33.254	-1.222	-7.297		50.612	0.055	14.643	0.004		2614.03	43.5672	50.5	12.4	40.5	2.791	0.008	0.008	0.000	0.202	0.17	
1923	6/16/2004	4:49:45 AM		26.107	25.951	25.134	27.119	26.22		47.862	52.18	14.958	33.351	-1.216	-7.3		52.844	0.054	14.643	0.004		2615.03	43.5839	50.7	13.0	40.6	2.800	0.008	0.008	0.000	0.198	0.17	
1924	6/16/2004	4:50:45 AM		26.111	25.959	25.132	27.108	26.273		47.618	52.028	14.937	33.109	-1.222	-7.3		46.984	0.054	14.643	0.004		2616.03	43.6006	50.6	11.5	40.4	2.783	0.008	0.008	0.000	0.199	0.17	
1925	6/16/2004	4:51:45 AM		26.146	25.994	25.157	27.153	26.288		47.912	52.304	14.898	33.482	-1.219	-7.314		51.934	0.054	14.643	0.004		2617.03	43.6172	50.8	12.7	40.7	2.806	0.008	0.008	0.000	0.197	0.17	
1926	6/16/2004	4:52:45 AM		26.15	26.004	25.147	27.137	26.262		47.748	52.219	14.919	33.254	-1.225	-7.32		50.825	0.054	14.643	0.003		2618.03	43.6339	50.7	12.5	40.5	2.792	0.008	0.008	0.000	0.198	0.17	
1927	6/16/2004	4:53:45 AM		26.14	25.993	25.126	27.117	26.237		48.192	52.644	14.975	33.634	-1.219	-7.314		49.36	0.054	14.643	0.004		2619.03	43.6506	51.2	12.1	40.9	2.821	0.008	0.008	0.000	0.196	0.17	
1928	6/16/2004	4:54:45 AM		26.155	26.008	25.126	27.082	26.212		47.659	52.231	14.901	33.123	-1.219	-7.311		47.952	0.055	14.643	0.004		2620.03	43.6672	50.8	11.8	40.4	2.785	0.008	0.008	0.000	0.202	0.17	
1929	6/16/2004	4:55:45 AM		26.142	26.006	25.119	27.054	26.189		47.597	52.003	14.951	33.082	-1.222	-7.317		40.76	0.054	14.643	0.004		2621.03	43.6839	50.5	10.0	40.3	2.781	0.008	0.008	0.000	0.199	0.17	
1930	6/16/2004	4:56:45 AM		26.157	26.02	25.138	26.984	26.199		47.58	51.956	14.914	33.111	-1.222	-7.311		48.559	0.054	14.643	0.004		2622.03	43.7006	50.5	11.9	40.3	2.782	0.008	0.008	0.000	0.199	0.17	
1931	6/16/2004	4:57:45 AM		26.154	26.018	25.126	26.961	26.141		47.843	52.026	14.881	33.437	-1.222	-7.311		43.58	0.054	14.643	0.003		2623.03	43.7172	50.6	10.7	40.6	2.802	0.008	0.008	0.000	0.197	0.17	
1932	6/16/2004	4:58:45 AM		26.16	26.028	25.116	26.982	26.142		47.866	52.244	14.923	33.382	-1.228	-7.32		43.292	0.054	14.643	0.003		2624.03	43.7339	50.8	10.6	40.6	2.801	0.008	0.008	0.000	0.198	0.17	
1933	6/16/2004	4:59:45 AM		26.143	26.021	25.099	27.015	26.135		47.707	52.105	14.87	33.285	-1.222	-7.311		46.959	0.052	14.643	0.004		2625.03	43.7506	50.6	11.5	40.5	2.792	0.008	0.008	0.000	0.191	0.16	
1934	6/16/2004	5:00:45 AM		26.133	26.016	25.104	26.975	26.12		47.862	52.422	14.905	33.359	-1.222	-7.248		47.929	0.053	14.643	0.004		2626.03	43.7672	50.9	11.7	40.6	2.800	0.008	0.008	0.000	0.194	0.17	
1935	6/16/2004	5:01:45 AM		26.134	26.007	25.1	26.966	26.076		47.69	52.13	14.902	33.293	-1.219	-7.245		52.921	0.054	14.643	0.003		2627.03	43.7839	50.7	13.0	40.5	2.792	0.008	0.008	0.000	0.198	0.17	
1936	6/16/2004	5:02:45 AM		26.161	26.035	25.113	26.953	26.074		47.431	51.89	14.894	32.949	-1.222	-7.251		54.462	0.054	14.643	0.004		2628.03	43.8006	50.4	13.3	40.2	2.771	0.008	0.008	0.000	0.200	0.17	
1937	6/16/2004	5:03:45 AM		26.174	26.043	25.121	26.967	26.067		47.665	52.341	14.996	33.004	-1.219	-7.245		51.73	0.054	14.643	0.004		2629.03	43.8172	50.9	12.7	40.3	2.781	0.008	0.008	0.000	0.199	0.17	
1938	6/16/2004	5:04:45 AM		26.162	26.045	25.113	26.889	26.074		47.854	52.335	14.976	33.338	-1.222	-7.248		50.412	0.054	14.643	0.003		2630.03	43.8339	50.9	12.4	40.6	2.799	0.008	0.008	0.000	0.198	0.17	
1939	6/16/2004	5:05:45 AM		26.165	26.049	25.122	26.867	26.058		47.624	51.966	14.857	33.283	-1.219	-7.248		44.986	0.054	14.643	0.004		2631.03	43.8506	50.5	11.0	40.5	2.789	0.008	0.008	0.000	0.198	0.17	
1940	6/16/2004	5:06:45 AM		26.142	26.036	25.089	26.85	25.985		47.626	51.979	14.886	33.201	-1.222	-7.256		52.556	0.053	14.643	0.004		2632.03	43.8672	50.5	12.9	40.4	2.786	0.008	0.008	0.000	0.195	0.17	
1941	6/16/2004	5:07:45 AM		26.156	26.04	25.103	26.909	25.979		47.676	52.068	14.899	33.283	-1.219	-7.248		51.154	0.054	14.643	0.004		2633.03	43.8839	50.6	12.5	40.5	2.791	0.008	0.008	0.000	0.198	0.17	
1942	6/16/2004	5:08:45 AM		26.155	26.038	25.111	26.927	25.962		47.518	52.057	14.946	33	-1.219	-7.242		53.104	0.054	14.643	0.004		2634.03	43.9006	50.6	13.0	40.3	2.776	0.008	0.008	0.000	0.199	0.17	
1943	6/16/2004	5:09:45 AM		26.13	26.018	25.081	26.912	25.967		47.858	52.474	14.959	33.263	-1.219	-7.251		46.934	0.054	14.643	0.004		2635.03	43.9172	51.0	11.5	40.6	2.797	0.008	0.008	0.000	0.198	0.17	
1944	6/16/2004	5:10:45 AM		26.122	26.001	25.069	26.909	25.945		48.074	52.619	14.949	33.554	-1.222	-7.253		51.966	0.054	14.643	0.004		2636.03	43.9339	51.1	12.7	40.8	2.814	0.008	0.008	0.000	0.197	0.17	
1945	6/16/2004	5:11:45 AM		26.123	26.002	25.085	26.97	25.901		47.823	52.178	14.972	33.328	-1.219	-7.256		48.326	0.054	14.643	0.004		2637.03	43.9506	50.7	11.8	40.6	2.798	0.008	0.008	0.000	0.198	0.17	
1946	6/16/2004	5:12:45 AM		26.124	25.992	25.07	26.966	25.886		47.431	51.825	14.882	33.002	-1.222	-7.259		42.832	0.054	14.643	0.004		2638.03	43.9672	50.4	10.5	40.2	2.773	0.008	0.008	0.000	0.200	0.17	
1947	6/16/2004	5:13:45 AM		26.124	25.987	25.065	26.936	25.881		48.105	52.613	15.097	33.443	-1.219	-7.262		50.562	0.053	14.643	0.004		2639.03	43.9839	51.1	12.4	40.8	2.811	0.008	0.008	0.000	0.193	0.16	
1948	6/16/2004	5:14:45 AM		26.125	25.973	25.066	26.912	25.882		47.578	52.059	14.93	33.068	-1.222	-7.274		47.005	0.054	14.643	0.003		2640.03	44.0006	50.6	11.5	40.3	2.780	0.008	0.008	0.000	0.199	0.17	
1949	6/16/2004	5:15:45 AM		26.13	25.973	25.071	26.922	25.873		47.947	52.472	14.992	33.375	-1.216	-7.242		51.911	0.053	14.643	0.004		2641.03	44.0172	51.0	12.7	40.7	2.803	0.008	0.008	0.000	0.194	0.17	
1950	6/16/2004	5:16:45 AM		26.132	25.97	25.068	26.929	25.88		47.968	52.658	15.026	33.338	-1.222	-7.337		39.868	0.054	14.643	0.004		2642.03	44.0339	51.2	9.8	40.7	2.803	0.008	0.008	0.000	0.198	0.17	
1951	6/16/2004	5:17:45 AM		26.139	25.972	25.075	26.941	25.871		47.375	51.894	14.858	32.953	-1.225	-7.34		46.281	0.054	14.643	0.003		2643.03	44.0506	50.4	11.3	40.2	2.769	0.008	0.008	0.000	0.200	0.17	
1952	6/16/2004	5:18:45 AM		26.142	25.965	25.079	26.924	25.87		48.387	52.859	14.972	33.835	-1.219	-7.337		53.503	0.053	14.643	0.004		2644.03	44.0672	51.4	13.1	41.1	2.834	0.008	0.008	0.000	0.192	0.16	
1953	6/16/2004	5:19:45 AM		26.159	25.968	25.096	26.927	25.927		48.142	52.489	14.943	33.724	-1.222	-7.334		49.156	0.054	14.643	0.003		2645.03	44.0839	51.0	12.0	40.9	2.822	0.008	0.008	0.000	0.196	0.17	
1954	6/16/2004	5:20:45 AM		26.169	25.983	25.116	26.931	25.952		48.43	52.814	15.077	33.81	-1.222	-7.334		45.823	0.054	14.643	0.004		2646.03	44.1006	51.3	11.2	41.1	2.835	0.008	0.008	0.000	0.195	0.17	
1955	6/16/2004	5:21:45 AM		26.168	25.982	25.155	26.875	25.961		47.918	52.489	14.927	33.384	-1.222	-7.343		44.715	0.053	14.643	0.004		2647.03	44.1172	51.0	11.0	40.7	2.803	0.008	0.008	0.000	0.194	0.16	
1956	6/16/2004	5:22:45 AM		26.16	25.974	25.157	26.803	25.968		47.831	52.414	14.891	33.38	-1.219	-7.337		45.201	0.055	14.643	0.004		2648.03	44.1339	50.9	11.1	40.6	2.800	0.008	0.008	0.000	0.201	0.17	
1957	6/16/2004	5:23:45 AM		26.136	25.939	25.117	26.723	25.948		47.978	52.584	14.869	33.556	-1.196	-7.297		49.312	0.052	14.643	0.004		2649.03	44.1506	51.1	12.1	40.8	2.811	0.008	0.008	0.000	0.190	0.16	
1958	6/16/2004	5:24:45 AM		26.151	25.954	25.132	26.733	25.958		47.765	52.385	14.868	33.306	-1.222	-7.311		47.744	0.054	14.643	0.004		2650.03	44.1672	50.9	11.7	40.5	2.795	0.008	0.008	0.000	0.198	0.17	
1959	6/16/2004	5:25:45 AM		26.155	25.948	25.136	26.712	25.952		47.877	52.366	14.891	33.423	-1.216	-7.314		45.989	0.053	14.643	0.004		2651.03	44.1839	50.9	11.3	40.7	2.803	0.008	0.008	0.000	0.194	0.16	
1960	6/16/2004	5:26:45 AM		26.149	25.937	25.12	26.716	25.917		47.983	52.457	14.864	33.538	-1.182	-7.308		50.205	0.054	14.643	0.004		2652.03	44.2006	51.0	12.3	40.8	2.810	0.008	0.008	0.000	0.197	0.17	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1961	6/16/2004	5:27:45 AM		26.148	25.937	25.13	26.73	25.931		47.987	52.418	14.96	33.484	-1.159	-7.314		43.026	0.054	14.643	0.004		2653.03	44.2172	50.9	10.5	40.7	2.809	0.008	0.008	0.000	0.197	0.17	
1962	6/16/2004	5:28:45 AM		26.135	25.928	25.116	26.737	25.928		47.68	52.037	14.874	33.324	-1.156	-7.3		54.348	0.056	14.643	0.004		2654.03	44.2339	50.6	13.3	40.5	2.792	0.008	0.008	0.000	0.205	0.17	
1963	6/16/2004	5:29:45 AM		26.154	25.948	25.141	26.761	25.922		48.032	52.592	14.928	33.589	-1.167	-7.311		50.155	0.053	14.643	0.004		2655.03	44.2506	51.1	12.3	40.8	2.814	0.008	0.008	0.000	0.193	0.16	
1964	6/16/2004	5:30:45 AM		26.161	25.949	25.147	26.793	25.893		47.644	52.408	14.868	33.166	-1.176	-7.303		53.042	0.054	14.643	0.004		2656.03	44.2672	50.9	13.0	40.4	2.786	0.008	0.008	0.000	0.198	0.17	
1965	6/16/2004	5:31:45 AM		26.15	25.948	25.137	26.747	25.908		47.945	52.58	14.984	33.396	-1.156	-7.311		51.991	0.052	14.643	0.004		2657.03	44.2839	51.1	12.7	40.7	2.804	0.008	0.008	0.000	0.190	0.16	
1966	6/16/2004	5:32:45 AM		26.145	25.938	25.132	26.752	25.928		47.835	52.43	14.958	33.332	-1.159	-7.308		45.109	0.053	14.643	0.004		2658.03	44.3006	51.0	11.1	40.6	2.798	0.008	0.008	0.000	0.194	0.17	
1967	6/16/2004	5:33:45 AM		26.134	25.948	25.136	26.776	25.922		47.8	52.35	14.899	33.316	-1.156	-7.305		54.66	0.054	14.643	0.004		2659.03	44.3172	50.9	13.4	40.6	2.796	0.008	0.008	0.000	0.198	0.17	
1968	6/16/2004	5:34:45 AM		26.132	25.94	25.128	26.769	25.924		48.045	52.629	14.895	33.671	-1.173	-7.305		52.769	0.054	14.643	0.004		2660.03	44.3339	51.2	12.9	40.9	2.817	0.008	0.008	0.000	0.196	0.17	
1969	6/16/2004	5:35:45 AM		26.133	25.936	25.124	26.75	25.916		47.897	52.348	14.976	33.34	-1.153	-7.305		52.287	0.054	14.643	0.004		2661.03	44.3506	50.9	12.8	40.6	2.801	0.008	0.008	0.000	0.198	0.17	
1970	6/16/2004	5:36:45 AM		26.133	25.932	25.11	26.76	25.916		47.989	52.401	14.94	33.562	-1.156	-7.308		48.857	0.053	14.643	0.004		2662.03	44.3672	50.9	12.0	40.8	2.811	0.008	0.008	0.000	0.193	0.16	
1971	6/16/2004	5:37:45 AM		26.132	25.935	25.128	26.774	25.934		47.779	52.306	14.882	33.347	-1.153	-7.294		48.91	0.055	14.643	0.004		2663.03	44.3839	50.8	12.0	40.6	2.797	0.008	0.008	0.000	0.201	0.17	
1972	6/16/2004	5:38:45 AM		26.131	25.925	25.113	26.759	25.949		47.9	52.615	14.939	33.402	-1.156	-7.303		50.044	0.054	14.643	0.004		2664.03	44.4006	51.1	12.3	40.7	2.803	0.008	0.008	0.000	0.197	0.17	
1973	6/16/2004	5:39:45 AM		26.142	25.941	25.119	26.83	26.005		48.072	52.609	14.929	33.605	-1.156	-7.305		43.582	0.053	14.643	0.004		2665.03	44.4172	51.1	10.7	40.8	2.816	0.008	0.008	0.000	0.193	0.16	
1974	6/16/2004	5:40:45 AM		26.154	25.953	25.131	26.911	26.057		47.837	52.339	14.989	33.334	-1.156	-7.303		54.637	0.054	14.643	0.004		2666.03	44.4339	50.9	13.4	40.6	2.798	0.008	0.008	0.000	0.198	0.17	
1975	6/16/2004	5:41:45 AM		26.161	25.95	25.133	26.963	26.104		47.866	52.231	14.984	33.308	-1.156	-7.3		44.924	0.054	14.643	0.004		2667.03	44.4506	50.8	11.0	40.6	2.798	0.008	0.008	0.000	0.198	0.17	
1976	6/16/2004	5:42:45 AM		26.158	25.962	25.145	26.98	26.155		47.69	52.192	14.97	33.207	-1.118	-7.308		48.246	0.052	14.643	0.004		2668.03	44.4672	50.7	11.8	40.4	2.789	0.008	0.008	0.000	0.191	0.16	
1977	6/16/2004	5:43:45 AM		26.172	25.97	25.163	26.979	26.174		47.458	52.167	15.405	32.466	-1.153	-7.308		48.81	0.049	14.643	0.004		2669.03	44.4839	50.7	12.0	40.0	2.755	0.007	0.007	0.000	0.182	0.15	
1978	6/16/2004	5:44:45 AM		26.175	25.973	25.156	26.972	26.152		48.252	52.973	14.658	33.999	-1.106	-7.297		53.403	0.053	14.643	0.004		2670.03	44.5006	51.5	13.1	41.1	2.835	0.008	0.008	0.000	0.191	0.16	
1979	6/16/2004	5:45:45 AM		26.173	25.982	25.14	26.926	26.161		48.758	53.257	14.514	34.734	-1.101	-7.282		48.194	0.055	14.643	0.003		2671.03	44.5172	51.8	11.8	41.7	2.878	0.008	0.008	0.000	0.196	0.17	
1980	6/16/2004	5:46:45 AM		26.175	25.983	25.156	26.887	26.142		47.783	52.516	15.883	32.308	-1.127	-7.126		45.48	0.039	14.643	0.004		2672.03	44.5339	51.0	11.1	40.0	2.761	0.006	0.006	0.000	0.145	0.12	
1981	6/16/2004	5:47:45 AM		26.175	25.978	25.146	26.882	26.072		48.267	53.011	15.065	33.646	-0.939	-6.857		50.024	0.056	14.643	0.003		2673.03	44.5506	51.5	12.3	41.0	2.824	0.008	0.008	0.000	0.203	0.17	
1982	6/16/2004	5:48:45 AM		26.169	25.988	25.171	26.891	26.062		48.538	53.278	14.692	34.321	-0.996	-6.964		49.757	0.052	14.643	0.004		2674.03	44.5672	51.8	12.2	41.4	2.856	0.008	0.008	0.000	0.186	0.16	
1983	6/16/2004	5:49:45 AM		26.173	25.997	25.165	26.886	26.021		48.252	52.839	14.555	34.194	-0.944	-6.967		45.48	0.054	14.643	0.004		2675.03	44.5839	51.4	11.1	41.2	2.842	0.008	0.008	0.000	0.194	0.17	
1984	6/16/2004	5:50:45 AM		26.16	25.978	25.136	26.837	26.027		48.623	53.264	14.323	34.767	-0.939	-6.982		41.398	0.054	14.643	0.004		2676.03	44.6006	51.8	10.1	41.7	2.875	0.008	0.008	0.000	0.192	0.16	
1985	6/16/2004	5:51:45 AM		26.16	25.993	25.121	26.837	26.052		48.773	53.458	14.295	34.931	-0.936	-6.987		50.147	0.052	14.643	0.004		2677.03	44.6172	52.0	12.3	41.9	2.886	0.008	0.008	0.000	0.185	0.16	
1986	6/16/2004	5:52:45 AM		26.171	26	25.112	26.818	26.039		48.717	53.56	14.115	35.007	-0.936	-6.985		52.718	0.054	14.643	0.004		2678.03	44.6339	52.1	12.9	41.9	2.886	0.008	0.008	0.000	0.192	0.16	
1987	6/16/2004	5:53:45 AM		26.163	25.997	25.099	26.815	25.996		48.972	53.844	14.136	35.259	-0.936	-6.985		47.762	0.055	14.643	0.004		2679.03	44.6506	52.4	11.7	42.1	2.904	0.008	0.008	0.000	0.194	0.17	
1988	6/16/2004	5:54:45 AM		26.167	26.015	25.088	26.794	26.029		48.833	53.724	14.001	35.261	-0.936	-6.987		47.982	0.053	14.643	0.004		2680.03	44.6672	52.3	11.8	42.0	2.899	0.008	0.008	0.000	0.187	0.16	
1989	6/16/2004	5:55:45 AM		26.16	26.009	25.061	26.762	26.002		49.333	54.142	14.094	35.684	-0.939	-7.002		46.313	0.056	14.643	0.003		2681.03	44.6839	52.7	11.3	42.5	2.931	0.008	0.008	0.000	0.196	0.17	
1990	6/16/2004	5:56:45 AM		26.152	26.015	25.058	26.739	26.014		49.474	54.143	13.828	36.111	-0.939	-7.008		45.239	0.056	14.643	0.004		2682.03	44.7006	52.7	11.1	42.8	2.950	0.008	0.008	0.000	0.195	0.17	
1991	6/16/2004	5:57:45 AM		26.142	26.001	25.039	26.735	25.965		49.552	54.302	13.831	36.162	-0.936	-7.019		41.682	0.053	14.643	0.004		2683.03	44.7172	52.8	10.2	42.9	2.955	0.008	0.008	0.000	0.184	0.16	
1992	6/16/2004	5:58:45 AM		26.144	26.008	25.026	26.732	25.937		49.716	54.474	14.093	36.025	-0.936	-7.013		45.134	0.055	14.643	0.004		2684.03	44.7339	53.0	11.1	42.9	2.956	0.008	0.008	0.000	0.191	0.16	
1993	6/16/2004	5:59:45 AM		26.141	26.01	25.012	26.774	25.974		49.638	54.279	14.242	35.85	-0.936	-7.013		44.071	0.054	14.643	0.004		2685.03	44.7506	52.8	10.8	42.7	2.947	0.008	0.008	0.000	0.188	0.16	
1994	6/16/2004	6:00:13 AM		26.14	26.008	25.011	26.792	25.967		49.712	54.455	14.187	35.967	-0.936	-7.013		45.147	0.053	14.643	0.004		2685.50	44.7583	53.0	11.1	42.8	2.954	0.008	0.008	0.000	0.184	0.16	
1995	6/16/2004	6:01:13 AM		26.138	26.017	25.029	26.805	25.946		49.619	54.484	14.242	35.84	-0.936	-7.022		46.797	0.052	14.643	0.004		2686.50	44.775	53.0	11.5	42.7	2.946	0.008	0.008	0.000	0.181	0.15	
1996	6/16/2004	6:02:13 AM		26.123	26.006	25.004	26.77	25.935		49.781	54.599	14.277	35.9	-0.936	-7.013		46.667	0.053	14.643	0.004		2687.50	44.7917	53.1	11.4	42.8	2.954	0.008	0.008	0.000	0.184	0.16	
1997	6/16/2004	6:03:13 AM		26.127	26.005	25.033	26.799	25.944		48.723	53.421	15.037	34.147	-0.953	-7.031		49.763	0.05	14.643	0.004		2688.50	44.8083	51.9	12.2	41.4	2.857	0.007	0.007	0.000	0.180	0.15	
1998	6/16/2004	6:04:13 AM		26.122	26.02	25.033	26.759	25.924		48.706	53.475	14.776	34.383	-0.939	-7.028		47.381	0.052	14.643	0.004		2689.50	44.825	52.0	11.6	41.5	2.864	0.008	0.008	0.000	0.186	0.16	
1999	6/16/2004	6:05:13 AM		26.11	26.008	25.016	26.742	25.887		48.829	53.79	14.715	34.477	-0.936	-7.031		49.99	0.051	14.643	0.004		2690.50	44.8417	52.3	12.3	41.7	2.872	0.008	0.008	0.000	0.182	0.16	
2000	6/16/2004	6:06:13 AM		26.11	26.003	25.021	26.727	25.897		49.077	53.964	14.743	34.752	-0.933	-7.031		46.5	0.051	14.643	0.004		2691.50	44.8583	52.5	11.4	41.9	2.890	0.008	0.008	0.000	0.181	0.15	
2001	6/16/2004	6:07:13 AM		26.098	26.007	25.009	26.7	25.891		49.08	53.749	14.635	34.921	-0.939	-7.031		47.276	0.052	14.643	0.004		2692.50	44.875	52.3	11.6	42.0	2.896	0.008	0.008	0.000	0.185	0.16	
2002	6/16/2004	6:08:13 AM		26.104	26.007	25.01	26.716	25.911		49.277	53.989	14.793	34.884	-0.936	-7.028		51.861	0.052	14.643	0.003		2693.50	44.8917	52.5	12.7	42.1	2.901	0.008	0.008	0.000	0.184	0.16	
2003	6/16/2004	6:09:13 AM		26.082	25.986	25.003	26.724	25.89		49.461	54.107	14.625	35.263	-0.936	-7.031		49.137	0.052	14.643	0.004		2694.50	44.9083	52.6	12.0	42.4	2.921	0.008	0.008	0.000	0.183	0.16	
2004	6/16/2004	6:10:13 AM		26.082	25.986	24.973	26.729	25.88		49.501	54.41	14.594	35.302	-0.939	-7.028		48.361	0.052	14.643	0.004		2695.50	44.925	52.9	11.9	42.4	2.923	0.008	0.008	0.000	0.183	0.16	
2005	6/16/2004	6:11:13 AM		26.092	25.995	24.988	26.769	25.884		49.279	54.012	14.621	35.056	-0.936	-7.028		41.953	0.052	14.643	0.004		2696.50	44.9417	52.5	10.3	42.2	2.907	0.008	0.008	0.000	0.184	0.16	
2006	6/16/2004	6:12:13 AM		26.075	25.984	24.966	26.712	25.873		49.397	54.153	14.652	35.188	-0.936	-7.025		46.355	0.052	14.643	0.004		2697.50	44.9583	52.7	11.4	42.3	2.916	0.008	0.008	0.000	0.183	0.16	
2007	6/16/2004	6:13:13 AM		26.074	25.988	24.975	26.721	25.877		49.134	53.97	14.647	34.925	-0.936	-7.025		46.357	0.052	14.643	0.004		2698.50	44.975	52.5	11.4	42.0	2.898	0.008	0.008	0.000	0.185	0.16	
2008	6/16/2004	6:14:13 AM		26.083	25.991	24.969	26.715	25.875		49.409	54.109	14.711	35.149	-0.936	-7.028		46.596	0.051	14.643	0.004		2699.50	44.9917	52.6	11.4	42.3	2.915	0.008	0.008	0.000	0.180	0.15	
2009	6/16/2004	6:15:13 AM		26.071	25.984	24.961	26.703	25.858		49.393	54.099	14.766	35.151	-0.936	-7.025		48.148	0.051	14.643	0.004		2700.50	45.0083	52.6	11.8	42.3	2.915	0.008	0.008	0.000	0.180	0.15	
2010	6/16/2004	6:16:13 AM		26.064	25.983	24.95	26.696	25.847		49.293	53.74	14.841	34.968	-0.933	-7.025		42.781	0.052	14.643	0.004		2701.50	45.025	52.3	10.5	42.1	2.905	0.008	0.008	0.000	0.184	0.16	
2011	6/16/2004	6:17:13 AM		26.063	25.961	24.923	26.715	25.83		49.275	53.902	14.823	34.925	-0.939	-7.028		48.319	0.051	14.643	0.004		2702.50	45.0417	52.4	11.8	42.1	2.903	0.008	0.008	0.000	0.181	0.15	
2012	6/16/2004	6:18:13 AM		26.094	25.993	24.955	26.806	25.887		49.53	54.142	14.738	35.239	-0.901	-7.022		46.09	0.05	14.643	0.004		2703.50	45.0583	52.7	11.3	42.4	2.922	0.007	0.007	0.000	0.176	0.15	
2013	6/16/2004	6:19:13 AM		26.086	25.984	24.961	26.933	25.958		49.737	54.53	14.827	35.352	-0.933	-7.022		40.051	0.05	14.643	0.004		2704.50	45.075	53.1	9.8	42.5	2.933	0.007	0.007	0.000	0.175	0.15	
2014	6/16/2004	6:20:13 AM		26.083	25.971	24.969	26.96	26.03		49.482	54.223	14.858	35.027	-0.933	-7.034		44.483	0.049	14.643	0.004		2705.50	45.0917	52.8	10.9	42.3	2.913	0.007	0.007	0.000	0.173	0.15	
2015	6/16/2004	6:21:13 AM		26.091	25.974	24.977	27.013	26.093		49.42	54.242	14.708	35.128	-0.927	-7.022		44.102	0.051	14.643	0.004		2706.50	45.1083	52.8	10.8	42.3	2.915	0.008	0.008	0.000	0.180	0.15	
2016	6/16/2004	6:22:13 AM		26.089	25.962	24.96	27.051	26.151		49.438	54.18	14.791	35.11	-0.895	-7.022		45.441	0.051	14.643	0.004		2707.50	45.125	52.7	11.1	42.3	2.915	0.008	0.008	0.000	0.180	0.15	
2017	6/16/2004	6:23:13 AM		26.085	25.964	24.946	27.082	26.102		49.642	54.408	14.879	35.21	-0.886	-7.028		47.276	0.05	14.643	0.004		2708.50	45.1417	52.9	11.6	42.4	2.925	0.007	0.007	0.000	0.176	0.15	
2018	6/16/2004	6:24:13 AM		26.086	25.96	24.937	27.058	26.068		49.243	53.995	14.75	34.929	-0.849	-7.022		49.237	0.05	14.643	0.004		2709.50	45.1583	52.5	12.1	42.1	2.902	0.007	0.007	0.000	0.177	0.15	
2019	6/16/2004	6:25:13 AM		26.09	25.964	24.941	27.027	26.053		47.756	52.491	16.46	31.732	-0.927	-7.028		47.039	0.049	14.643	0.004		2710.50	45.175	51.0	11.5	39.7	2.740	0.007	0.007	0.000	0.184	0.16	
2020	6/16/2004	6:26:13 AM		26.085	25.948	24.956	26.987	26.017		47.883	52.573	16.567	31.74	-0.933	-7.037		48.864	0.047	14.643	0.004		2711.50	45.1917	51.1	12.0	39.8	2.745	0.007	0.007	0.000	0.176	0.15	
2021	6/16/2004	6:27:13 AM		26.079	25.947	24.955	26.956	25.981		47.769	52.447	16.29	31.992	-0.939	-7.037		49.986	0.048	14.643	0.004		2712.50	45.2083	51.0	12.2	39.9	2.750	0.007	0.007	0.000	0.180	0.15	
2022	6/16/2004	6:28:13 AM		26.084	25.952	24.965	26.961	25.961		47.765	52.561	16.096	32.107	-0.889	-7.037		50.628	0.048	14.643	0.003		2713.50	45.225	51.1	12.4	39.9	2.753	0.007	0.007	0.000	0.179	0.15	
2023	6/16/2004	6:29:13 AM		26.084	25.952	24.975	26.911	25.946		47.897	52.644	16.122	32.279	-0.884	-7.031		53.766	0.049	14.643	0.004		2714.50	45.2417	51.2	13.2	40.1	2.764	0.007	0.007	0.000	0.182	0.16	
2024	6/16/2004	6:30:13 AM		26.079	25.942	24.96	26.886	25.941		47.709	52.441	15.847	32.349	-0.884	-7.034		45.622	0.048	14.643	0.004		2715.50	45.2583	51.0	11.2	40.0	2.760	0.007	0.007	0.000	0.179	0.15	
2025	6/16/2004	6:31:13 AM		26.088	25.956	24.984	26.915	25.916		47.644	52.381	15.916	32.201	-0.884	-7.028		51.231	0.048	14.643	0.004		2716.50	45.275	50.9	12.6	39.9	2.753	0.007	0.007	0.000	0.179	0.15	
2026	6/16/2004	6:32:13 AM		26.092	25.951	24.983	26.884	25.91		47.871	52.663	15.957	32.366	-0.884	-7.028		44.696	0.049	14.643	0.004		2717.50	45.2917	51.2	11.0	40.1	2.766	0.007	0.007	0.000	0.182	0.16	
2027	6/16/2004	6:33:13 AM		26.107	25.956	25.008	26.914	25.91		47.883	52.918	15.975	32.245	-0.884	-7.025		51.853	0.048	14.643	0.004		2718.50	45.3083	51.4	12.7	40.1	2.762	0.007	0.007	0.000	0.179	0.15	
2028	6/16/2004	6:34:13 AM		26.087	25.93	24.988	26.869	25.904		48.057	52.876	15.993	32.485	-0.884	-7.025		48.914	0.048	14.643	0.004		2719.50	45.325	51.4	12.0	40.3	2.777	0.007	0.007	0.000	0.178	0.15	
2029	6/16/2004	6:35:13 AM		26.097	25.945	25.003	26.874	25.894		48.03	52.706	16.014	32.46	-0.884	-7.025		50.595	0.049	14.643	0.004		2720.50	45.3417	51.2	12.4	40.2	2.775	0.007	0.007	0.000	0.182	0.15	
2030	6/16/2004	6:36:13 AM		26.092	25.925	24.993	26.854	25.904		47.862	52.663	15.842	32.493	-0.886	-7.022		56.283	0.049	14.643	0.004		2721.50	45.3583	51.2	13.8	40.2	2.770	0.007	0.007	0.000	0.182	0.15	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2031	6/16/2004	6:37:13 AM		26.096	25.924	24.997	26.853	25.893		47.721	52.509	15.76	32.386	-0.837	-7.034		48.745	0.046	14.643	0.004		2722.50	45.375	51.0	11.9	40.1	2.762	0.007	0.007	0.000	0.171	0.15	
2032	6/16/2004	6:38:13 AM		26.096	25.914	24.997	26.853	25.878		48.264	53.235	15.812	32.819	-0.846	-7.002		45.798	0.048	14.643	0.003		2723.50	45.3917	51.8	11.2	40.5	2.795	0.007	0.007	0.000	0.177	0.15	
2033	6/16/2004	6:39:13 AM		26.106	25.919	25.007	26.858	25.888		47.837	52.768	15.723	32.511	-0.866	-6.996		55.833	0.049	14.643	0.004		2724.50	45.4083	51.3	13.7	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2034	6/16/2004	6:40:13 AM		26.11	25.908	25.021	26.822	25.883		47.85	52.764	15.559	32.719	-0.86	-6.99		47.654	0.049	14.643	0.004		2725.50	45.425	51.3	11.7	40.3	2.777	0.007	0.007	0.000	0.181	0.15	
2035	6/16/2004	6:41:13 AM		26.105	25.913	25.016	26.812	25.873		47.991	52.76	15.765	32.622	-0.817	-6.99		49.742	0.05	14.643	0.004		2726.50	45.4417	51.3	12.2	40.3	2.779	0.007	0.007	0.000	0.185	0.16	
2036	6/16/2004	6:42:13 AM		26.11	25.903	25.011	26.827	25.873		47.908	52.629	15.617	32.795	-0.817	-6.993		52.199	0.048	14.643	0.004		2727.50	45.4583	51.2	12.8	40.4	2.782	0.007	0.007	0.000	0.177	0.15	
2037	6/16/2004	6:43:13 AM		26.099	25.882	25	26.806	25.866		47.887	52.783	15.538	32.817	-0.82	-6.967		47.666	0.049	14.643	0.004		2728.50	45.475	51.3	11.7	40.4	2.782	0.007	0.007	0.000	0.181	0.15	
2038	6/16/2004	6:44:13 AM		26.109	25.887	25.015	26.826	25.866		47.895	52.804	15.464	32.891	-0.817	-6.964		49.481	0.051	14.643	0.004		2729.50	45.4917	51.3	12.1	40.4	2.785	0.008	0.008	0.000	0.188	0.16	
2039	6/16/2004	6:45:13 AM		26.108	25.881	25.009	26.82	25.875		48.451	52.822	15.676	33.168	-1.219	-6.889		43.947	0.065	14.643	0.004		2730.50	45.5083	51.3	10.8	40.8	2.814	0.010	0.010	0.000	0.237	0.20	
2040	6/16/2004	6:46:13 AM		26.123	25.871	25.024	26.76	25.86		47.282	52.404	15.575	32.165	-0.542	-5.21		47.698	0.028	14.643	0.004		2731.50	45.525	50.9	11.7	39.7	2.739	0.004	0.004	0.000	0.105	0.09	
2041	6/16/2004	6:47:13 AM		26.132	25.875	25.028	26.764	25.85		46.912	52.791	15.584	31.688	0.199	-3.744		45.796	0.054	14.643	0.004		2732.50	45.5417	51.3	11.2	39.3	2.710	0.008	0.008	0.000	0.205	0.17	
2042	6/16/2004	6:48:13 AM		26.128	25.862	25.025	26.771	25.841		47.462	52.967	15.664	32.15	-0.238	-4.894		46.044	0.075	14.643	0.004		2733.50	45.5583	51.5	11.3	39.8	2.744	0.011	0.011	0.000	0.281	0.24	
2043	6/16/2004	6:49:13 AM		26.099	25.852	25.025	26.751	25.831		47.783	52.712	15.527	32.747	-0.817	-6.146		47.264	0.037	14.643	0.004		2734.50	45.575	51.2	11.6	40.3	2.776	0.006	0.006	0.000	0.137	0.12	
2044	6/16/2004	6:50:13 AM		26.113	25.851	25.034	26.795	25.835		47.823	52.632	15.396	32.887	-0.721	-5.99		46.323	0.05	14.643	0.004		2735.50	45.5917	51.2	11.4	40.4	2.782	0.007	0.007	0.000	0.185	0.16	
2045	6/16/2004	6:51:13 AM		26.092	25.83	25.003	26.719	25.84		48.02	52.98	15.443	33.037	-0.759	-6.013		46.3	0.049	14.643	0.003		2736.50	45.6083	51.5	11.3	40.5	2.794	0.007	0.007	0.000	0.180	0.15	
2046	6/16/2004	6:52:13 AM		26.101	25.83	25.022	26.748	25.839		47.997	52.967	15.401	33.086	-0.736	-6.01		45.683	0.049	14.643	0.004		2737.50	45.625	51.5	11.2	40.5	2.795	0.007	0.007	0.000	0.180	0.15	
2047	6/16/2004	6:53:13 AM		26.111	25.835	25.017	26.763	25.864		47.713	52.752	15.245	32.91	-0.724	-6.007		51.475	0.05	14.643	0.004		2738.50	45.6417	51.3	12.6	40.3	2.779	0.007	0.007	0.000	0.185	0.16	
2048	6/16/2004	6:54:13 AM		26.117	25.845	25.023	26.829	25.919		47.995	53.162	15.393	32.985	-0.707	-6.01		48.278	0.05	14.643	0.004		2739.50	45.6583	51.7	11.8	40.5	2.792	0.007	0.007	0.000	0.184	0.16	
2049	6/16/2004	6:55:13 AM		26.123	25.841	25.029	26.87	25.975		47.703	52.64	15.463	32.684	-0.713	-6.01		42.929	0.05	14.643	0.004		2740.50	45.675	51.2	10.5	40.2	2.771	0.007	0.007	0.000	0.185	0.16	
2050	6/16/2004	6:56:13 AM		26.138	25.862	25.045	26.926	26.041		48.045	53.011	15.453	33.051	-0.704	-6.013		44.529	0.049	14.643	0.004		2741.50	45.6917	51.5	10.9	40.5	2.796	0.007	0.007	0.000	0.180	0.15	
2051	6/16/2004	6:57:13 AM		26.135	25.848	25.026	26.942	26.112		47.871	53.03	15.372	32.916	-0.707	-6.013		48.591	0.049	14.643	0.003		2742.50	45.7083	51.6	11.9	40.4	2.785	0.007	0.007	0.000	0.181	0.15	
2052	6/16/2004	6:58:13 AM		26.141	25.855	25.033	26.994	26.134		47.854	52.831	15.288	33.035	-0.704	-6.016		47.491	0.049	14.643	0.004		2743.50	45.725	51.4	11.6	40.4	2.789	0.007	0.007	0.000	0.180	0.15	
2053	6/16/2004	6:59:13 AM		26.148	25.866	25.034	27	26.105		48.453	53.502	15.391	33.445	-0.704	-6.007		45.894	0.049	14.643	0.004		2744.50	45.7417	52.0	11.2	40.9	2.823	0.007	0.007	0.000	0.178	0.15	
2054	6/16/2004	7:00:13 AM		26.154	25.873	25.041	26.982	26.082		47.899	52.949	15.347	32.938	-0.704	-6.002		47.477	0.049	14.643	0.004		2745.50	45.7583	51.5	11.6	40.4	2.787	0.007	0.007	0.000	0.181	0.15	
2055	6/16/2004	7:01:13 AM		26.145	25.864	25.021	26.917	26.053		47.87	52.973	15.395	32.854	-0.71	-6.01		51.732	0.049	14.643	0.003		2746.50	45.775	51.5	12.7	40.4	2.783	0.007	0.007	0.000	0.181	0.15	
2056	6/16/2004	7:02:13 AM		26.147	25.88	25.028	26.924	26.054		48.009	53.081	15.387	33.012	-0.707	-6.013		50.789	0.049	14.643	0.004		2747.50	45.7917	51.6	12.4	40.5	2.793	0.007	0.007	0.000	0.180	0.15	
2057	6/16/2004	7:03:13 AM		26.142	25.875	25.028	26.969	26.004		47.62	52.495	15.325	32.78	-0.707	-6.007		49.348	0.049	14.643	0.004		2748.50	45.8083	51.0	12.1	40.2	2.772	0.007	0.007	0.000	0.182	0.15	
2058	6/16/2004	7:04:13 AM		26.148	25.886	25.034	26.92	26		47.759	52.748	15.401	32.762	-0.704	-6.005		51.571	0.049	14.643	0.004		2749.50	45.825	51.3	12.6	40.3	2.776	0.007	0.007	0.000	0.181	0.15	
2059	6/16/2004	7:05:13 AM		26.148	25.891	25.029	26.94	25.99		47.86	52.974	15.353	32.92	-0.698	-5.996		48.259	0.049	14.643	0.004		2750.50	45.8417	51.5	11.8	40.4	2.785	0.007	0.007	0.000	0.181	0.15	
2060	6/16/2004	7:06:13 AM		26.148	25.892	25.024	26.885	25.986		47.808	52.942	15.416	32.788	-0.652	-6.005		45.631	0.049	14.643	0.003		2751.50	45.8583	51.5	11.2	40.3	2.778	0.007	0.007	0.000	0.181	0.15	
2061	6/16/2004	7:07:13 AM		26.154	25.897	25.025	26.901	25.986		48.092	53.106	15.443	33.043	-0.649	-6.005		48.019	0.049	14.643	0.003		2752.50	45.875	51.6	11.8	40.6	2.797	0.007	0.007	0.000	0.180	0.15	
2062	6/16/2004	7:08:13 AM		26.155	25.903	25.031	26.882	25.977		47.993	53.038	15.402	32.967	-0.69	-6.002		44.703	0.049	14.643	0.004		2753.50	45.8917	51.6	11.0	40.5	2.791	0.007	0.007	0.000	0.180	0.15	
2063	6/16/2004	7:09:13 AM		26.15	25.893	25.031	26.877	25.967		47.92	52.862	15.372	33.027	-0.652	-6.002		51.711	0.049	14.643	0.003		2754.50	45.9083	51.4	12.7	40.5	2.791	0.007	0.007	0.000	0.180	0.15	
2064	6/16/2004	7:10:13 AM		26.155	25.898	25.041	26.892	25.957		48.163	53.291	15.466	33.15	-0.649	-5.99		43.851	0.049	14.643	0.004		2755.50	45.925	51.8	10.7	40.7	2.803	0.007	0.007	0.000	0.179	0.15	
2065	6/16/2004	7:11:13 AM		26.144	25.887	25.045	26.861	25.942		47.866	52.878	15.423	32.829	-0.652	-6.005		48.597	0.049	14.643	0.004		2756.50	45.9417	51.4	11.9	40.3	2.782	0.007	0.007	0.000	0.181	0.15	
2066	6/16/2004	7:12:13 AM		26.143	25.892	25.059	26.875	25.936		48.209	53.175	15.44	33.277	-0.649	-5.996		48.476	0.049	14.643	0.004		2757.50	45.9583	51.7	11.9	40.7	2.809	0.007	0.007	0.000	0.179	0.15	
2067	6/16/2004	7:13:13 AM		26.153	25.887	25.054	26.925	25.951		47.657	52.772	15.34	32.684	-0.649	-5.999		55.843	0.049	14.643	0.004		2758.50	45.975	51.3	13.7	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2068	6/16/2004	7:14:13 AM		26.153	25.897	25.049	26.97	25.956		48.07	53.237	15.406	33.086	-0.652	-5.996		40.61	0.049	14.643	0.004		2759.50	45.9917	51.8	10.0	40.6	2.798	0.007	0.007	0.000	0.180	0.15	
2069	6/16/2004	7:15:13 AM		26.157	25.896	25.044	26.92	25.94		47.702	52.911	15.247	32.825	-0.646	-5.993		55.733	0.049	14.643	0.004		2760.50	46.0083	51.4	13.7	40.3	2.776	0.007	0.007	0.000	0.181	0.15	
2070	6/16/2004	7:16:13 AM		26.136	25.884	25.017	26.888	25.919		47.671	52.86	15.209	32.875	-0.652	-5.996		47.646	0.049	14.643	0.004		2761.50	46.025	51.4	11.7	40.3	2.777	0.007	0.007	0.000	0.181	0.15	
2071	6/16/2004	7:17:13 AM		26.145	25.879	25.016	26.872	25.923		48.011	53.359	15.248	33.144	-0.614	-5.99		47.176	0.049	14.643	0.004		2762.50	46.0417	51.9	11.6	40.6	2.798	0.007	0.007	0.000	0.180	0.15	
2072	6/16/2004	7:18:13 AM		26.149	25.883	25.016	26.917	25.922		47.783	52.887	15.248	32.949	-0.64	-5.984		52.854	0.049	14.643	0.004		2763.50	46.0583	51.4	13.0	40.4	2.783	0.007	0.007	0.000	0.181	0.15	
2073	6/16/2004	7:19:13 AM		26.144	25.883	25.006	26.912	25.927		48.057	53.206	15.169	33.361	-0.614	-5.984		47.958	0.049	14.643	0.004		2764.50	46.075	51.7	11.8	40.7	2.807	0.007	0.007	0.000	0.179	0.15	
2074	6/16/2004	7:20:13 AM		26.144	25.888	25.001	26.912	25.942		47.744	52.926	15.194	32.959	-0.603	-5.987		51.757	0.049	14.643	0.004		2765.50	46.0917	51.5	12.7	40.4	2.782	0.007	0.007	0.000	0.181	0.15	
2075	6/16/2004	7:21:13 AM		26.144	25.887	25.005	26.911	25.941		48.063	53.245	15.246	33.195	-0.614	-5.984		48.538	0.049	14.643	0.004		2766.50	46.1083	51.8	11.9	40.6	2.801	0.007	0.007	0.000	0.180	0.15	
2076	6/16/2004	7:22:13 AM		26.139	25.877	24.985	26.926	25.941		47.895	53.056	15.156	33.09	-0.597	-5.981		46.375	0.05	14.643	0.004		2767.50	46.125	51.6	11.4	40.5	2.792	0.007	0.007	0.000	0.184	0.16	
2077	6/16/2004	7:23:13 AM		26.144	25.877	24.995	26.961	25.941		48.207	53.386	15.27	33.39	-0.58	-5.981		52.212	0.049	14.643	0.004		2768.50	46.1417	51.9	12.8	40.8	2.813	0.007	0.007	0.000	0.179	0.15	
2078	6/16/2004	7:24:13 AM		26.144	25.878	24.986	26.907	25.947		48.036	53.284	15.203	33.217	-0.562	-5.984		51.108	0.05	14.643	0.004		2769.50	46.1583	51.8	12.5	40.6	2.801	0.007	0.007	0.000	0.184	0.16	
2079	6/16/2004	7:25:13 AM		26.145	25.879	24.991	26.927	25.953		47.999	53.115	15.198	33.234	-0.556	-5.984		49.809	0.049	14.643	0.004		2770.50	46.175	51.6	12.2	40.6	2.800	0.007	0.007	0.000	0.180	0.15	
2080	6/16/2004	7:26:13 AM		26.139	25.873	24.996	26.972	25.942		48.009	53.199	15.234	33.195	-0.545	-5.976		48.772	0.049	14.643	0.004		2771.50	46.1917	51.7	12.0	40.6	2.799	0.007	0.007	0.000	0.180	0.15	
2081	6/16/2004	7:27:13 AM		26.13	25.869	24.976	26.927	25.948		47.91	53.023	15.202	33.185	-0.545	-5.981		46.607	0.049	14.643	0.004		2772.50	46.2083	51.6	11.4	40.5	2.796	0.007	0.007	0.000	0.180	0.15	
2082	6/16/2004	7:28:13 AM		26.136	25.869	24.977	26.958	25.953		47.802	52.915	15.093	33.15	-0.542	-5.981		50.943	0.049	14.643	0.004		2773.50	46.225	51.4	12.5	40.5	2.791	0.007	0.007	0.000	0.181	0.15	
2083	6/16/2004	7:29:13 AM		26.127	25.86	24.978	26.934	25.944		47.999	53.069	15.133	33.312	-0.542	-5.979		46.932	0.049	14.643	0.004		2774.50	46.2417	51.6	11.5	40.7	2.803	0.007	0.007	0.000	0.180	0.15	
2084	6/16/2004	7:30:13 AM		26.127	25.855	24.958	26.919	25.939		48.113	53.258	14.911	33.648	-0.545	-5.976		50.111	0.049	14.643	0.003		2775.50	46.2583	51.8	12.3	40.9	2.819	0.007	0.007	0.000	0.179	0.15	
2085	6/16/2004	7:31:13 AM		26.122	25.85	24.948	26.934	25.944		48.192	53.4	14.867	33.776	-0.542	-5.976		54.748	0.049	14.643	0.004		2776.50	46.275	51.9	13.4	41.0	2.826	0.007	0.007	0.000	0.179	0.15	
2086	6/16/2004	7:32:13 AM		26.116	25.844	24.947	26.853	25.929		47.839	52.967	14.83	33.519	-0.539	-5.973		45.22	0.05	14.643	0.004		2777.50	46.2917	51.5	11.1	40.7	2.805	0.007	0.007	0.000	0.184	0.16	
2087	6/16/2004	7:33:13 AM		26.128	25.856	24.939	26.88	25.94		48.347	53.581	15.224	33.476	-0.542	-5.973		48.451	0.049	14.643	0.004		2778.50	46.3083	52.1	11.9	40.9	2.821	0.007	0.007	0.000	0.179	0.15	
2088	6/16/2004	7:34:13 AM		26.111	25.839	24.927	26.873	25.939		47.786	52.884	15.364	32.809	-0.545	-5.979		37.755	0.048	14.643	0.003		2779.50	46.325	51.4	9.3	40.3	2.778	0.007	0.007	0.000	0.178	0.15	
2089	6/16/2004	7:35:13 AM		26.102	25.825	24.913	26.834	25.929		47.877	53.152	15.264	33.041	-0.545	-5.979		51.438	0.049	14.643	0.004		2780.50	46.3417	51.7	12.6	40.5	2.790	0.007	0.007	0.000	0.181	0.15	
2090	6/16/2004	7:36:13 AM		26.118	25.856	24.959	26.955	25.91		47.879	53.044	15.25	33.084	-0.533	-5.97		49.252	0.049	14.643	0.004		2781.50	46.3583	51.6	12.1	40.5	2.791	0.007	0.007	0.000	0.181	0.15	
2091	6/16/2004	7:37:13 AM		26.113	25.852	24.954	26.965	25.936		47.551	52.773	15.24	32.747	-0.536	-5.97		46.398	0.048	14.643	0.004		2782.50	46.375	51.3	11.4	40.1	2.768	0.007	0.007	0.000	0.178	0.15	
2092	6/16/2004	7:38:13 AM		26.099	25.832	24.91	26.926	25.922		47.935	53.154	15.349	32.994	-0.548	-5.981		53.53	0.048	14.643	0.003		2783.50	46.3917	51.7	13.1	40.5	2.790	0.007	0.007	0.000	0.177	0.15	
2093	6/16/2004	7:39:13 AM		26.116	25.844	24.942	26.978	25.943		47.744	53.036	15.354	32.829	-0.539	-5.97		46.394	0.048	14.643	0.004		2784.50	46.4083	51.6	11.4	40.3	2.778	0.007	0.007	0.000	0.178	0.15	
2094	6/16/2004	7:40:13 AM		26.111	25.835	24.927	26.988	26.014		47.572	52.828	15.217	32.817	-0.501	-5.973		45.293	0.048	14.643	0.004		2785.50	46.425	51.4	11.1	40.2	2.771	0.007	0.007	0.000	0.178	0.15	
2095	6/16/2004	7:41:13 AM		26.112	25.835	24.938	27.009	26.074		48.032	53.415	15.258	33.191	-0.487	-5.967		49.677	0.049	14.643	0.004		2786.50	46.4417	51.9	12.2	40.6	2.800	0.007	0.007	0.000	0.180	0.15	
2096	6/16/2004	7:42:13 AM		26.119	25.848	24.93	27.111	26.161		47.748	53.021	15.252	32.912	-0.522	-5.964		45.789	0.049	14.643	0.004		2787.50	46.4583	51.5	11.2	40.3	2.781	0.007	0.007	0.000	0.181	0.15	
2097	6/16/2004	7:43:13 AM		26.12	25.869	24.936	27.122	26.227		47.777	52.918	15.197	33.014	-0.478	-5.961		47.548	0.049	14.643	0.004		2788.50	46.475	51.4	11.7	40.4	2.785	0.007	0.007	0.000	0.181	0.15	
2098	6/16/2004	7:44:13 AM		26.123	25.877	24.939	27.145	26.265		47.877	52.996	15.262	33.047	-0.484	-5.964		44.884	0.049	14.643	0.003		2789.50	46.4917	51.5	11.0	40.5	2.790	0.007	0.007	0.000	0.181	0.15	
2099	6/16/2004	7:45:13 AM		26.13	25.888	24.951	27.222	26.267		47.742	53.075	15.497	32.624	-0.478	-5.964		46.378	0.049	14.643	0.004		2790.50	46.5083	51.6	11.4	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2100	6/16/2004	7:46:13 AM		26.14	25.898	24.966	27.202	26.272		47.57	52.849	15.755	32.212	-0.481	-5.964		48.23	0.048	14.643	0.004		2791.50	46.525	51.4	11.8	39.9	2.750	0.007	0.007	0.000	0.180	0.15	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2101	6/16/2004	7:47:13 AM		26.151	25.924	24.982	27.163	26.288		47.852	53.067	15.49	32.776	-0.481	-5.961		46.279	0.049	14.643	0.004		2792.50	46.5417	51.6	11.3	40.3	2.780	0.007	0.007	0.000	0.181	0.15	
2102	6/16/2004	7:48:13 AM		26.154	25.927	24.985	27.186	26.231		47.445	52.698	15.371	32.513	-0.478	-5.961		55.795	0.048	14.643	0.004		2793.50	46.5583	51.2	13.7	40.0	2.756	0.007	0.007	0.000	0.179	0.15	
2103	6/16/2004	7:49:13 AM		26.139	25.917	24.985	27.171	26.186		47.609	52.967	15.379	32.698	-0.481	-5.964		48.474	0.048	14.643	0.004		2794.50	46.575	51.5	11.9	40.2	2.768	0.007	0.007	0.000	0.178	0.15	
2104	6/16/2004	7:50:13 AM		26.138	25.927	24.974	27.23	26.165		47.47	52.613	15.415	32.466	-0.478	-5.958		49.406	0.048	14.643	0.004		2795.50	46.5917	51.1	12.1	40.0	2.756	0.007	0.007	0.000	0.179	0.15	
2105	6/16/2004	7:51:13 AM		26.153	25.947	24.979	27.245	26.16		48.034	53.247	15.368	33.086	-0.461	-5.955		47.028	0.048	14.643	0.004		2796.50	46.6083	51.8	11.5	40.6	2.796	0.007	0.007	0.000	0.177	0.15	
2106	6/16/2004	7:52:13 AM		26.153	25.952	24.989	27.26	26.155		47.669	52.855	15.367	32.715	-0.478	-5.958		48.501	0.047	14.643	0.004		2797.50	46.625	51.4	11.9	40.2	2.771	0.007	0.007	0.000	0.174	0.15	
2107	6/16/2004	7:53:13 AM		26.146	25.954	24.962	27.293	26.138		47.8	53.096	15.423	32.778	-0.47	-5.953		49.752	0.048	14.643	0.004		2798.50	46.6417	51.6	12.2	40.3	2.778	0.007	0.007	0.000	0.178	0.15	
2108	6/16/2004	7:54:13 AM		26.15	25.963	24.966	27.277	26.137		47.64	52.847	15.335	32.7	-0.449	-5.95		48.04	0.049	14.643	0.004		2799.50	46.6583	51.4	11.8	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2109	6/16/2004	7:55:13 AM		26.165	25.974	24.976	27.272	26.142		47.595	52.866	15.352	32.653	-0.435	-5.955		48.317	0.047	14.643	0.003		2800.50	46.675	51.4	11.8	40.1	2.766	0.007	0.007	0.000	0.175	0.15	
2110	6/16/2004	7:56:13 AM		26.175	25.984	24.976	27.257	26.157		47.68	53.05	15.33	32.799	-0.426	-5.953		48.315	0.048	14.643	0.004		2801.50	46.6917	51.6	11.8	40.2	2.774	0.007	0.007	0.000	0.178	0.15	
2111	6/16/2004	7:57:13 AM		26.165	25.974	24.966	27.247	26.132		48.074	53.363	15.268	33.195	-0.423	-5.95		49.362	0.048	14.643	0.004		2802.50	46.7083	51.9	12.1	40.6	2.802	0.007	0.007	0.000	0.176	0.15	
2112	6/16/2004	7:58:13 AM		26.171	25.994	24.972	27.238	26.128		47.889	53.365	15.309	32.988	-0.426	-5.95		40.612	0.049	14.643	0.004		2803.50	46.725	51.9	10.0	40.4	2.788	0.007	0.007	0.000	0.181	0.15	
2113	6/16/2004	7:59:13 AM		26.161	25.984	24.962	27.193	26.138		47.713	53.09	15.314	32.84	-0.426	-5.947		47.762	0.048	14.643	0.004		2804.50	46.7417	51.6	11.7	40.3	2.777	0.007	0.007	0.000	0.178	0.15	
2114	6/16/2004	8:00:13 AM		26.171	26	24.968	27.198	26.124		47.57	52.793	15.235	32.813	-0.426	-5.95		51.596	0.048	14.643	0.003		2805.50	46.7583	51.3	12.6	40.2	2.771	0.007	0.007	0.000	0.178	0.15	
2115	6/16/2004	8:01:13 AM		26.161	25.979	24.942	27.218	26.108		47.854	53.173	15.308	32.948	-0.426	-5.944		45.493	0.049	14.643	0.003		2806.50	46.775	51.7	11.1	40.4	2.786	0.007	0.007	0.000	0.181	0.15	
2116	6/16/2004	8:02:13 AM		26.168	26.002	24.949	27.225	26.115		47.75	53.222	15.284	32.848	-0.426	-5.941		46.567	0.047	14.643	0.003		2807.50	46.7917	51.7	11.4	40.3	2.778	0.007	0.007	0.000	0.174	0.15	
2117	6/16/2004	8:03:13 AM		26.17	25.998	24.956	27.256	26.112		47.935	53.427	15.252	33.07	-0.426	-5.944		50.591	0.048	14.643	0.004		2808.50	46.8083	52.0	12.4	40.5	2.793	0.007	0.007	0.000	0.177	0.15	
2118	6/16/2004	8:03:24 AM		26.154	25.987	24.93	27.236	26.101		47.945	53.311	15.321	33.059	-0.426	-5.944		45.77	0.048	14.643	0.004		2808.68	46.8114	51.8	11.2	40.5	2.792	0.007	0.007	0.000	0.177	0.15	
2119	6/16/2004	8:04:24 AM		26.16	26.003	24.946	27.236	26.107		47.947	53.286	15.321	33.002	-0.426	-5.941		49.068	0.049	14.643	0.004		2809.68	46.8281	51.8	12.0	40.5	2.791	0.007	0.007	0.000	0.181	0.15	
2120	6/16/2004	8:05:24 AM		26.165	26.003	24.951	27.202	26.117		47.663	53.061	15.186	32.961	-0.423	-5.938		54.731	0.049	14.643	0.004		2810.68	46.8447	51.6	13.4	40.3	2.779	0.007	0.007	0.000	0.181	0.15	
2121	6/16/2004	8:06:24 AM		26.17	26.013	24.951	27.236	26.117		48.19	53.496	14.837	33.819	-0.426	-5.935		45.643	0.049	14.643	0.004		2811.68	46.8614	52.0	11.2	41.0	2.827	0.007	0.007	0.000	0.178	0.15	
2122	6/16/2004	8:07:24 AM		26.164	25.997	24.95	27.186	26.126		47.644	52.816	15.85	32.169	-0.426	-5.941		50.743	0.047	14.643	0.004		2812.68	46.8781	51.3	12.4	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2123	6/16/2004	8:08:24 AM		26.164	26.002	24.955	27.196	26.121		47.447	52.768	15.738	32.113	-0.426	-5.941		50.401	0.048	14.643	0.003		2813.68	46.8947	51.3	12.4	39.8	2.743	0.007	0.007	0.000	0.180	0.15	
2124	6/16/2004	8:09:24 AM		26.172	26.02	24.988	27.219	26.169		47.742	53.087	15.702	32.425	-0.426	-5.938		44.799	0.048	14.643	0.004		2814.68	46.9114	51.6	11.0	40.1	2.764	0.007	0.007	0.000	0.179	0.15	
2125	6/16/2004	8:10:24 AM		26.158	26.006	24.994	27.18	26.15		47.678	53.013	15.489	32.632	-0.386	-5.941		49.318	0.048	14.643	0.004		2815.68	46.9281	51.5	12.1	40.2	2.769	0.007	0.007	0.000	0.178	0.15	
2126	6/16/2004	8:11:24 AM		26.169	26.013	24.985	27.176	26.146		47.281	52.611	15.439	32.325	-0.394	-5.941		46.947	0.047	14.643	0.004		2816.68	46.9447	51.1	11.5	39.8	2.744	0.007	0.007	0.000	0.176	0.15	
2127	6/16/2004	8:12:24 AM		26.164	26.013	24.975	27.206	26.126		47.416	52.918	15.429	32.388	-0.417	-5.938		49.836	0.048	14.643	0.004		2817.68	46.9614	51.4	12.2	39.9	2.751	0.007	0.007	0.000	0.179	0.15	
2128	6/16/2004	8:13:24 AM		26.164	26.003	24.965	27.146	26.131		47.447	53.079	15.493	32.321	-0.423	-5.929		48.622	0.048	14.643	0.004		2818.68	46.9781	51.6	11.9	39.9	2.750	0.007	0.007	0.000	0.180	0.15	
2129	6/16/2004	8:14:24 AM		26.179	26.013	24.97	27.176	26.136		47.605	53.079	15.463	32.485	-0.426	-5.932		54.166	0.048	14.643	0.004		2819.68	46.9947	51.6	13.3	40.0	2.761	0.007	0.007	0.000	0.179	0.15	
2130	6/16/2004	8:15:24 AM		26.169	26.013	24.96	27.236	26.141		47.422	52.826	15.418	32.372	-0.365	-5.932		48.238	0.048	14.643	0.004		2820.68	47.0114	51.4	11.8	39.9	2.751	0.007	0.007	0.000	0.180	0.15	
2131	6/16/2004	8:16:24 AM		26.179	26.018	24.96	27.236	26.151		47.464	52.69	15.45	32.515	-0.36	-5.935		47.349	0.047	14.643	0.004		2821.68	47.0281	51.2	11.6	40.0	2.757	0.007	0.007	0.000	0.175	0.15	
2132	6/16/2004	8:17:24 AM		26.173	26.016	24.959	27.25	26.165		47.479	52.82	15.405	32.532	-0.371	-5.932		43.013	0.048	14.643	0.004		2822.68	47.0447	51.3	10.5	40.0	2.758	0.007	0.007	0.000	0.179	0.15	
2133	6/16/2004	8:18:24 AM		26.165	26.014	24.946	27.237	26.192		47.508	52.996	15.316	32.604	-0.377	-5.921		52.23	0.047	14.643	0.004		2823.68	47.0614	51.5	12.8	40.1	2.762	0.007	0.007	0.000	0.175	0.15	
2134	6/16/2004	8:19:24 AM		26.186	26.025	24.957	27.248	26.198		47.804	53.191	15.483	32.756	-0.357	-5.921		48.322	0.048	14.643	0.004		2824.68	47.0781	51.7	11.8	40.3	2.777	0.007	0.007	0.000	0.178	0.15	
2135	6/16/2004	8:20:24 AM		26.172	26.02	24.928	27.254	26.209		47.435	52.669	15.334	32.528	-0.4	-5.924		50.668	0.048	14.643	0.003		2825.68	47.0947	51.2	12.4	40.0	2.757	0.007	0.007	0.000	0.179	0.15	
2136	6/16/2004	8:21:24 AM		26.187	26.03	24.953	27.294	26.234		47.871	53.208	15.418	32.918	-0.383	-5.915		53.515	0.048	14.643	0.004		2826.68	47.1114	51.7	13.1	40.4	2.785	0.007	0.007	0.000	0.177	0.15	
2137	6/16/2004	8:22:24 AM		26.193	26.041	24.944	27.275	26.255		47.7	53.172	15.397	32.684	-0.377	-5.915		45.556	0.048	14.643	0.004		2827.68	47.1281	51.7	11.2	40.2	2.771	0.007	0.007	0.000	0.178	0.15	
2138	6/16/2004	8:23:24 AM		26.198	26.052	24.96	27.36	26.255		47.236	52.768	15.579	32.06	-0.362	-5.918		48.474	0.047	14.643	0.004		2828.68	47.1447	51.3	11.9	39.6	2.734	0.007	0.007	0.000	0.177	0.15	
2139	6/16/2004	8:24:24 AM		26.188	26.052	24.95	27.33	26.265		47.404	52.82	15.63	32.158	-0.357	-5.918		50.011	0.047	14.643	0.004		2829.68	47.1614	51.3	12.3	39.8	2.743	0.007	0.007	0.000	0.176	0.15	
2140	6/16/2004	8:25:24 AM		26.189	26.038	24.94	27.301	26.291		47.242	52.609	15.781	31.861	-0.36	-5.918		54.587	0.047	14.643	0.004		2830.68	47.1781	51.1	13.4	39.6	2.727	0.007	0.007	0.000	0.177	0.15	
2141	6/16/2004	8:26:24 AM		26.196	26.054	24.947	27.328	26.303		47.362	52.76	15.789	31.984	-0.388	-5.924		47.685	0.046	14.643	0.004		2831.68	47.1947	51.3	11.7	39.7	2.735	0.007	0.007	0.000	0.173	0.15	
2142	6/16/2004	8:27:24 AM		26.202	26.066	24.953	27.369	26.344		47.147	52.464	15.732	31.888	-0.357	-5.921		49.859	0.047	14.643	0.004		2832.68	47.2114	51.0	12.2	39.5	2.725	0.007	0.007	0.000	0.178	0.15	
2143	6/16/2004	8:28:24 AM		26.212	26.081	24.963	27.399	26.354		47.535	52.918	15.661	32.296	-0.357	-5.915		51.552	0.048	14.643	0.004		2833.68	47.2281	51.4	12.6	39.9	2.752	0.007	0.007	0.000	0.179	0.15	
2144	6/16/2004	8:29:24 AM		26.208	26.077	24.959	27.405	26.355		47.649	53.112	15.642	32.442	-0.357	-5.909		33.923	0.047	14.643	0.004		2834.68	47.2447	51.6	8.3	40.0	2.761	0.007	0.007	0.000	0.175	0.15	
2145	6/16/2004	8:30:24 AM		26.199	26.077	24.935	27.406	26.376		47.491	52.75	15.62	32.312	-0.36	-5.912		51.922	0.047	14.643	0.004		2835.68	47.2614	51.3	12.7	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2146	6/16/2004	8:31:24 AM		26.214	26.102	24.955	27.455	26.386		47.327	52.64	15.587	32.195	-0.36	-5.912		43.954	0.047	14.643	0.004		2836.68	47.2781	51.2	10.8	39.8	2.741	0.007	0.007	0.000	0.176	0.15	
2147	6/16/2004	8:32:24 AM		26.214	26.112	24.955	27.406	26.366		47.634	53.22	15.683	32.31	-0.36	-5.915		48.284	0.047	14.643	0.004		2837.68	47.2947	51.7	11.8	40.0	2.756	0.007	0.007	0.000	0.176	0.15	
2148	6/16/2004	8:33:24 AM		26.229	26.127	24.98	27.45	26.386		47.489	52.973	15.622	32.3	-0.357	-5.906		53.874	0.047	14.643	0.004		2838.68	47.3114	51.5	13.2	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2149	6/16/2004	8:34:24 AM		26.219	26.123	24.971	27.446	26.376		47.184	52.252	15.649	32.056	-0.357	-5.906		46.667	0.047	14.643	0.004		2839.68	47.3281	50.8	11.4	39.6	2.732	0.007	0.007	0.000	0.177	0.15	
2150	6/16/2004	8:35:24 AM		26.215	26.124	24.967	27.432	26.387		47.234	52.576	15.569	32.043	-0.36	-5.901		44.164	0.047	14.643	0.004		2840.68	47.3447	51.1	10.8	39.6	2.733	0.007	0.007	0.000	0.177	0.15	
2151	6/16/2004	8:36:24 AM		26.226	26.14	25.007	27.428	26.373		47.369	52.841	15.599	32.15	-0.354	-5.898		53.396	0.048	14.643	0.004		2841.68	47.3614	51.4	13.1	39.8	2.741	0.007	0.007	0.000	0.180	0.15	
2152	6/16/2004	8:37:24 AM		26.225	26.139	24.992	27.442	26.377		47.213	52.687	15.579	32.029	-0.357	-5.901		46.113	0.047	14.643	0.004		2842.68	47.3781	51.2	11.3	39.6	2.732	0.007	0.007	0.000	0.177	0.15	
2153	6/16/2004	8:38:24 AM		26.242	26.171	25.013	27.459	26.389		47.082	52.42	15.576	31.974	-0.354	-5.895		55.003	0.047	14.643	0.004		2843.68	47.3947	50.9	13.5	39.5	2.725	0.007	0.007	0.000	0.177	0.15	
2154	6/16/2004	8:39:24 AM		26.232	26.161	24.978	27.424	26.399		47.215	52.486	15.561	32.126	-0.357	-5.898		43.564	0.047	14.643	0.004		2844.68	47.4114	51.0	10.7	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2155	6/16/2004	8:40:24 AM		26.248	26.172	24.99	27.44	26.38		47.236	52.596	15.58	32.085	-0.357	-5.898		44.534	0.047	14.643	0.004		2845.68	47.4281	51.1	10.9	39.7	2.734	0.007	0.007	0.000	0.177	0.15	
2156	6/16/2004	8:41:24 AM		26.238	26.177	24.985	27.455	26.37		47.377	52.804	15.588	32.189	-0.348	-5.895		46.851	0.048	14.643	0.004		2846.68	47.4447	51.3	11.5	39.8	2.743	0.007	0.007	0.000	0.180	0.15	
2157	6/16/2004	8:42:24 AM		26.25	26.184	24.976	27.442	26.372		47.36	52.772	15.604	32.199	-0.36	-5.895		43.155	0.047	14.643	0.004		2847.68	47.4614	51.3	10.6	39.8	2.743	0.007	0.007	0.000	0.176	0.15	
2158	6/16/2004	8:43:24 AM		26.235	26.169	24.946	27.402	26.372		46.889	52.13	15.528	31.771	-0.36	-5.895		45.612	0.047	14.643	0.004		2848.68	47.4781	50.7	11.2	39.3	2.712	0.007	0.007	0.000	0.178	0.15	
2159	6/16/2004	8:44:24 AM		26.25	26.189	24.971	27.472	26.362		47.055	52.339	15.532	31.929	-0.322	-5.892		52.714	0.047	14.643	0.004		2849.68	47.4947	50.9	12.9	39.5	2.723	0.007	0.007	0.000	0.178	0.15	
2160	6/16/2004	8:45:24 AM		26.245	26.189	24.966	27.452	26.352		47.505	53.05	15.504	32.374	-0.36	-5.889		46.713	0.047	14.643	0.004		2850.68	47.5114	51.6	11.4	39.9	2.754	0.007	0.007	0.000	0.176	0.15	
2161	6/16/2004	8:46:24 AM		26.245	26.194	24.956	27.447	26.352		47.437	52.969	15.606	32.216	-0.325	-5.889		43.91	0.048	14.643	0.003		2851.68	47.5281	51.5	10.8	39.8	2.746	0.007	0.007	0.000	0.180	0.15	
2162	6/16/2004	8:47:24 AM		26.245	26.194	24.956	27.492	26.332		47.323	52.667	15.498	32.224	-0.325	-5.886		50.639	0.047	14.643	0.004		2852.68	47.5447	51.2	12.4	39.8	2.742	0.007	0.007	0.000	0.176	0.15	
2163	6/16/2004	8:48:24 AM		26.256	26.214	24.962	27.482	26.353		47.238	52.455	15.601	32.107	-0.316	-5.886		52.111	0.047	14.643	0.004		2853.68	47.5614	51.0	12.8	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2164	6/16/2004	8:49:24 AM		26.256	26.215	24.963	27.468	26.363		47.416	52.694	15.53	32.321	-0.313	-5.886		51.961	0.047	14.643	0.003		2854.68	47.5781	51.2	12.7	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2165	6/16/2004	8:50:24 AM		26.251	26.204	24.952	27.492	26.353		47.499	52.915	15.57	32.353	-0.322	-5.886		52.072	0.047	14.643	0.004		2855.68	47.5947	51.4	12.8	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2166	6/16/2004	8:51:24 AM		26.263	26.217	24.959	27.5	26.365		47.319	52.696	15.485	32.255	-0.319	-5.889		51.129	0.047	14.643	0.004		2856.68	47.6114	51.2	12.5	39.8	2.743	0.007	0.007	0.000	0.176	0.15	
2167	6/16/2004	8:52:24 AM		26.269	26.238	24.97	27.505	26.361		47.199	52.582	15.605	32.031	-0.307	-5.886		53.313	0.047	14.643	0.004		2857.68	47.6281	51.1	13.1	39.6	2.731	0.007	0.007	0.000	0.177	0.15	
2168	6/16/2004	8:53:24 AM		26.245	26.218	24.956	27.446	26.366		47.391	52.818	15.532	32.253	-0.313	-5.883		48.609	0.047	14.643	0.004		2858.68	47.6447	51.3	11.9	39.8	2.746	0.007	0.007	0.000	0.176	0.15	
2169	6/16/2004	8:54:24 AM		26.255	26.223	24.986	27.436	26.351		47.319	52.851	15.44	32.243	-0.31	-5.88		49.884	0.047	14.643	0.004		2859.68	47.6614	51.4	12.2	39.8	2.743	0.007	0.007	0.000	0.176	0.15	
2170	6/16/2004	8:55:24 AM		26.25	26.224	24.962	27.447	26.352		47.23	52.772	15.442	32.173	-0.31	-5.889		55.355	0.047	14.643	0.003		2860.68	47.6781	51.3	13.6	39.7	2.737	0.007	0.007	0.000	0.177	0.15	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2171	6/16/2004	8:56:24 AM		26.256	26.23	24.972	27.493	26.368		47.429	52.845	15.412	32.423	-0.296	-5.88		48.319	0.047	14.643	0.004		2861.68	47.6947	51.4	11.8	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2172	6/16/2004	8:57:24 AM		26.262	26.231	24.978	27.489	26.364		47.327	52.787	15.448	32.265	-0.307	-5.88		47.79	0.047	14.643	0.004		2862.68	47.7114	51.3	11.7	39.8	2.744	0.007	0.007	0.000	0.176	0.15	
2173	6/16/2004	8:58:24 AM		26.258	26.236	24.954	27.449	26.389		47.205	52.621	15.384	32.253	-0.31	-5.883		48.924	0.047	14.643	0.003		2863.68	47.7281	51.1	12.0	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2174	6/16/2004	8:59:24 AM		26.263	26.237	24.945	27.485	26.375		47.425	52.88	15.444	32.433	-0.249	-5.88		48.661	0.047	14.643	0.004		2864.68	47.7447	51.4	11.9	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2175	6/16/2004	9:00:24 AM		26.248	26.227	24.925	27.43	26.375		47.358	52.936	15.505	32.169	-0.307	-5.88		49.598	0.047	14.643	0.004		2865.68	47.7614	51.5	12.2	39.8	2.742	0.007	0.007	0.000	0.177	0.15	
2176	6/16/2004	9:01:24 AM		26.264	26.243	24.931	27.491	26.371		47.441	52.911	15.554	32.302	-0.307	-5.874		47.715	0.047	14.643	0.004		2866.68	47.7781	51.4	11.7	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2177	6/16/2004	9:02:24 AM		26.255	26.239	24.921	27.417	26.377		47.468	52.932	15.365	32.61	-0.307	-5.874		54.129	0.047	14.643	0.004		2867.68	47.7947	51.5	13.3	40.0	2.761	0.007	0.007	0.000	0.175	0.15	
2178	6/16/2004	9:03:24 AM		26.266	26.25	24.923	27.458	26.388		46.846	52.288	15.363	31.937	-0.241	-5.866		48.976	0.047	14.643	0.004		2868.68	47.8114	50.8	12.0	39.4	2.716	0.007	0.007	0.000	0.178	0.15	
2179	6/16/2004	9:04:24 AM		26.272	26.256	24.934	27.484	26.384		47.279	52.766	15.445	32.277	-0.241	-5.872		47.679	0.046	14.643	0.004		2869.68	47.8281	51.3	11.7	39.8	2.743	0.007	0.007	0.000	0.173	0.15	
2180	6/16/2004	9:05:24 AM		26.269	26.258	24.93	27.521	26.396		47.225	52.735	15.397	32.193	-0.238	-5.869		53.302	0.047	14.643	0.004		2870.68	47.8447	51.3	13.1	39.7	2.738	0.007	0.007	0.000	0.177	0.15	
2181	6/16/2004	9:06:24 AM		26.255	26.258	24.891	27.461	26.421		47.356	52.841	15.43	32.273	-0.232	-5.869		43.29	0.047	14.643	0.004		2871.68	47.8614	51.4	10.6	39.8	2.745	0.007	0.007	0.000	0.177	0.15	
2182	6/16/2004	9:07:24 AM		26.254	26.253	24.885	27.466	26.396		47.508	52.965	15.424	32.524	-0.209	-5.869		52.589	0.047	14.643	0.004		2872.68	47.8781	51.5	12.9	40.0	2.759	0.007	0.007	0.000	0.176	0.15	
2183	6/16/2004	9:08:24 AM		26.239	26.248	24.86	27.446	26.416		47.213	52.745	15.417	32.185	-0.203	-5.872		46.367	0.047	14.643	0.003		2873.68	47.8947	51.3	11.4	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2184	6/16/2004	9:09:24 AM		26.265	26.264	24.877	27.512	26.427		47.082	52.677	15.35	32.107	-0.183	-5.866		46.209	0.047	14.643	0.004		2874.68	47.9114	51.2	11.3	39.6	2.730	0.007	0.007	0.000	0.178	0.15	
2185	6/16/2004	9:10:24 AM		26.255	26.264	24.882	27.507	26.457		47.217	52.673	15.436	32.214	-0.189	-5.863		44.373	0.047	14.643	0.004		2875.68	47.9281	51.2	10.9	39.7	2.738	0.007	0.007	0.000	0.177	0.15	
2186	6/16/2004	9:11:24 AM		26.262	26.271	24.878	27.519	26.454		47.126	52.611	15.37	32.201	-0.223	-5.857		50.53	0.047	14.643	0.004		2876.68	47.9447	51.1	12.4	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2187	6/16/2004	9:12:24 AM		26.257	26.266	24.858	27.504	26.459		47.267	52.915	15.421	32.187	-0.194	-5.863		45.382	0.047	14.643	0.003		2877.68	47.9614	51.4	11.1	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2188	6/16/2004	9:13:24 AM		26.246	26.265	24.862	27.518	26.433		47.352	52.928	15.413	32.331	-0.183	-5.86		54.625	0.047	14.643	0.004		2878.68	47.9781	51.5	13.4	39.8	2.747	0.007	0.007	0.000	0.177	0.15	
2189	6/16/2004	9:14:24 AM		26.257	26.271	24.858	27.509	26.439		47.203	52.712	15.433	32.169	-0.183	-5.86		49.585	0.047	14.643	0.004		2879.68	47.9947	51.2	12.2	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2190	6/16/2004	9:15:24 AM		26.261	26.28	24.872	27.563	26.453		47.076	52.648	15.407	32.054	-0.183	-5.857		49.383	0.047	14.643	0.004		2880.68	48.0114	51.2	12.1	39.6	2.728	0.007	0.007	0.000	0.178	0.15	
2191	6/16/2004	9:16:24 AM		26.266	26.285	24.857	27.553	26.473		47.225	52.59	15.401	32.269	-0.186	-5.857		47.715	0.047	14.643	0.004		2881.68	48.0281	51.1	11.7	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2192	6/16/2004	9:17:24 AM		26.255	26.274	24.842	27.562	26.487		47.093	52.547	15.324	32.259	-0.186	-5.857		49.629	0.047	14.643	0.004		2882.68	48.0447	51.1	12.2	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2193	6/16/2004	9:18:24 AM		26.256	26.29	24.847	27.558	26.503		47.06	52.671	15.423	32.021	-0.183	-5.86		48.127	0.046	14.643	0.004		2883.68	48.0614	51.2	11.8	39.5	2.726	0.007	0.007	0.000	0.174	0.15	
2194	6/16/2004	9:19:24 AM		26.261	26.29	24.842	27.578	26.498		47.468	52.965	15.524	32.333	-0.163	-5.857		43.351	0.047	14.643	0.004		2884.68	48.0781	51.5	10.6	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2195	6/16/2004	9:20:24 AM		26.277	26.316	24.868	27.614	26.489		47.391	52.949	15.512	32.271	-0.145	-5.854		47.929	0.046	14.643	0.004		2885.68	48.0947	51.5	11.7	39.8	2.746	0.007	0.007	0.000	0.173	0.15	
2196	6/16/2004	9:21:24 AM		26.273	26.312	24.859	27.619	26.504		47.226	52.605	15.409	32.273	-0.16	-5.851		47.94	0.047	14.643	0.004		2886.68	48.1114	51.1	11.7	39.7	2.741	0.007	0.007	0.000	0.177	0.15	
2197	6/16/2004	9:22:24 AM		26.258	26.307	24.849	27.709	26.514		47.174	52.627	15.479	32.122	-0.174	-5.851		49.538	0.047	14.643	0.004		2887.68	48.1281	51.2	12.1	39.6	2.734	0.007	0.007	0.000	0.177	0.15	
2198	6/16/2004	9:23:24 AM		26.264	26.313	24.846	27.825	26.536		47.184	52.804	15.395	32.146	-0.168	-5.854		47.984	0.047	14.643	0.004		2888.68	48.1447	51.3	11.8	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2199	6/16/2004	9:24:24 AM		26.261	26.325	24.847	27.737	26.567		47.209	52.634	15.382	32.253	-0.113	-5.846		52.598	0.046	14.643	0.004		2889.68	48.1614	51.2	12.9	39.7	2.739	0.007	0.007	0.000	0.173	0.15	
2200	6/16/2004	9:25:24 AM		26.248	26.307	24.834	27.705	26.54		47.113	52.779	15.47	32.06	-0.113	-5.846		48.732	0.047	14.643	0.004		2890.68	48.1781	51.3	11.9	39.6	2.729	0.007	0.007	0.000	0.178	0.15	
2201	6/16/2004	9:26:24 AM		26.255	26.329	24.851	27.756	26.571		47.205	52.741	15.368	32.31	-0.166	-5.843		49.339	0.047	14.643	0.004		2891.68	48.1947	51.3	12.1	39.8	2.741	0.007	0.007	0.000	0.177	0.15	
2202	6/16/2004	9:27:24 AM		26.251	26.33	24.848	27.788	26.548		47.356	52.83	15.416	32.392	-0.113	-5.84		46.288	0.047	14.643	0.004		2892.68	48.2114	51.4	11.3	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2203	6/16/2004	9:28:24 AM		26.254	26.333	24.85	27.71	26.56		47.559	53.173	15.475	32.479	-0.113	-5.837		45.891	0.047	14.643	0.004		2893.68	48.2281	51.7	11.2	40.0	2.759	0.007	0.007	0.000	0.176	0.15	
2204	6/16/2004	9:29:24 AM		26.256	26.335	24.857	27.698	26.563		47.157	52.88	15.395	32.146	-0.113	-5.84		46.06	0.047	14.643	0.003		2894.68	48.2447	51.4	11.3	39.7	2.734	0.007	0.007	0.000	0.177	0.15	
2205	6/16/2004	9:30:24 AM		26.247	26.346	24.858	27.783	26.583		47.002	52.524	15.436	31.947	-0.111	-5.837		46.39	0.046	14.643	0.004		2895.68	48.2614	51.1	11.4	39.5	2.722	0.007	0.007	0.000	0.174	0.15	
2206	6/16/2004	9:31:24 AM		26.253	26.351	24.854	27.849	26.614		47.308	52.942	15.463	32.247	-0.096	-5.837		48.505	0.046	14.643	0.004		2896.68	48.2781	51.5	11.9	39.8	2.743	0.007	0.007	0.000	0.173	0.15	
2207	6/16/2004	9:32:24 AM		26.243	26.341	24.844	27.899	26.634		47.447	53.133	15.489	32.425	-0.093	-5.84		51.855	0.046	14.643	0.003		2897.68	48.2947	51.7	12.7	39.9	2.753	0.007	0.007	0.000	0.172	0.15	
2208	6/16/2004	9:33:24 AM		26.258	26.367	24.865	27.919	26.675		46.858	52.435	15.383	31.883	-0.096	-5.837		54.433	0.047	14.643	0.004		2898.68	48.3114	51.0	13.3	39.4	2.714	0.007	0.007	0.000	0.179	0.15	
2209	6/16/2004	9:34:24 AM		26.26	26.379	24.876	27.931	26.681		47.124	52.64	15.503	32.083	-0.099	-5.828		47.408	0.047	14.643	0.004		2899.68	48.3281	51.2	11.6	39.6	2.731	0.007	0.007	0.000	0.178	0.15	
2210	6/16/2004	9:35:24 AM		26.256	26.365	24.867	27.952	26.677		47.221	52.822	15.442	32.122	-0.09	-5.834		44.519	0.047	14.643	0.004		2900.68	48.3447	51.3	10.9	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2211	6/16/2004	9:36:24 AM		26.278	26.402	24.905	27.994	26.694		47.215	52.899	15.347	32.302	-0.087	-5.831		44.6	0.047	14.643	0.004		2901.68	48.3614	51.4	10.9	39.8	2.741	0.007	0.007	0.000	0.177	0.15	
2212	6/16/2004	9:37:24 AM		26.256	26.39	24.863	27.972	26.712		47.138	52.638	15.329	32.271	-0.093	-5.837		46.78	0.047	14.643	0.003		2902.68	48.3781	51.2	11.5	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2213	6/16/2004	9:38:24 AM		26.269	26.398	24.885	27.995	26.725		47.159	52.723	15.518	32.039	-0.093	-5.834		46.836	0.047	14.643	0.003		2903.68	48.3947	51.3	11.5	39.6	2.730	0.007	0.007	0.000	0.178	0.15	
2214	6/16/2004	9:39:24 AM		26.27	26.389	24.872	27.971	26.716		47.072	52.698	15.46	32.05	-0.09	-5.834		48.474	0.047	14.643	0.003		2904.68	48.4114	51.2	11.9	39.6	2.728	0.007	0.007	0.000	0.178	0.15	
2215	6/16/2004	9:40:24 AM		26.289	26.417	24.905	28.044	26.745		47.456	52.963	15.418	32.45	-0.087	-5.828		45.541	0.047	14.643	0.004		2905.68	48.4281	51.5	11.2	40.0	2.755	0.007	0.007	0.000	0.176	0.15	
2216	6/16/2004	9:41:24 AM		26.281	26.41	24.887	28.037	26.752		47.302	53.007	15.443	32.228	-0.09	-5.831		47.299	0.047	14.643	0.004		2906.68	48.4447	51.5	11.6	39.8	2.742	0.007	0.007	0.000	0.177	0.15	
2217	6/16/2004	9:42:24 AM		26.298	26.432	24.905	28.054	26.784		47.167	52.893	15.449	32.163	-0.09	-5.822		46.062	0.046	14.643	0.004		2907.68	48.4614	51.4	11.3	39.7	2.735	0.007	0.007	0.000	0.173	0.15	
2218	6/16/2004	9:43:24 AM		26.309	26.443	24.911	28.115	26.82		47.296	52.818	15.548	32.185	-0.09	-5.822		49.214	0.047	14.643	0.004		2908.68	48.4781	51.3	12.1	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2219	6/16/2004	9:44:24 AM		26.311	26.45	24.917	28.156	26.851		47.257	52.891	15.444	32.275	-0.084	-5.82		45.823	0.046	14.643	0.004		2909.68	48.4947	51.4	11.2	39.8	2.742	0.007	0.007	0.000	0.173	0.15	
2220	6/16/2004	9:45:24 AM		26.307	26.451	24.924	28.173	26.853		47.537	53.179	15.535	32.417	-0.087	-5.82		46.836	0.046	14.643	0.004		2910.68	48.5114	51.7	11.5	40.0	2.756	0.007	0.007	0.000	0.172	0.15	
2221	6/16/2004	9:46:24 AM		26.32	26.469	24.921	28.16	26.85		47.385	52.94	15.512	32.323	-0.038	-5.82		49.907	0.047	14.643	0.003		2911.68	48.5281	51.5	12.2	39.9	2.748	0.007	0.007	0.000	0.176	0.15	
2222	6/16/2004	9:47:24 AM		26.336	26.475	24.938	28.142	26.852		47.252	52.839	15.462	32.263	-0.067	-5.82		51.388	0.047	14.643	0.004		2912.68	48.5447	51.4	12.6	39.8	2.741	0.007	0.007	0.000	0.177	0.15	
2223	6/16/2004	9:48:24 AM		26.349	26.493	24.945	28.199	26.909		47.497	53.255	15.505	32.423	-0.061	-5.82		46.248	0.047	14.643	0.003		2913.68	48.5614	51.8	11.3	40.0	2.755	0.007	0.007	0.000	0.176	0.15	
2224	6/16/2004	9:49:24 AM		26.365	26.514	24.957	28.221	26.941		47.101	52.781	15.502	32.017	-0.032	-5.814		43.901	0.047	14.643	0.004		2914.68	48.5781	51.3	10.8	39.6	2.727	0.007	0.007	0.000	0.177	0.15	
2225	6/16/2004	9:50:24 AM		26.367	26.516	24.944	28.212	26.962		47.306	52.851	15.637	32.095	-0.035	-5.82		50.088	0.047	14.643	0.003		2915.68	48.5947	51.4	12.3	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2226	6/16/2004	9:51:24 AM		26.369	26.523	24.956	28.235	26.98		47.369	53.222	15.528	32.165	-0.032	-5.814		48.223	0.046	14.643	0.004		2916.68	48.6114	51.7	11.8	39.8	2.742	0.007	0.007	0.000	0.173	0.15	
2227	6/16/2004	9:52:24 AM		26.382	26.546	24.968	28.257	26.982		47.097	52.632	15.524	31.994	-0.032	-5.811		47.756	0.047	14.643	0.004		2917.68	48.6281	51.2	11.7	39.5	2.727	0.007	0.007	0.000	0.177	0.15	
2228	6/16/2004	9:53:24 AM		26.371	26.54	24.948	28.236	26.971		47.313	53.137	15.542	32.146	-0.035	-5.808		50.088	0.047	14.643	0.004		2918.68	48.6447	51.7	12.3	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2229	6/16/2004	9:54:24 AM		26.399	26.568	24.971	28.229	26.935		46.85	52.528	15.498	31.764	-0.035	-5.811		49.425	0.046	14.643	0.004		2919.68	48.6614	51.1	12.1	39.3	2.710	0.007	0.007	0.000	0.175	0.15	
2230	6/16/2004	9:55:24 AM		26.405	26.574	24.967	28.215	26.896		47.265	52.94	15.466	32.206	-0.038	-5.811		44.753	0.047	14.643	0.003		2920.68	48.6781	51.5	11.0	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2231	6/16/2004	9:56:24 AM		26.406	26.585	24.983	28.186	26.842		47.387	53.048	15.508	32.304	-0.032	-5.805		47.256	0.047	14.643	0.004		2921.68	48.6947	51.6	11.6	39.8	2.747	0.007	0.007	0.000	0.176	0.15	
2232	6/16/2004	9:57:24 AM		26.434	26.598	25.006	28.09	26.805		47.292	53.058	15.546	32.154	-0.027	-5.802		53.3	0.047	14.643	0.004		2922.68	48.7114	51.6	13.1	39.7	2.739	0.007	0.007	0.000	0.176	0.15	
2233	6/16/2004	9:58:24 AM		26.426	26.595	24.992	27.987	26.732		46.977	52.772	15.491	31.869	-0.003	-5.799		51.488	0.047	14.643	0.003		2923.68	48.7281	51.3	12.6	39.4	2.718	0.007	0.007	0.000	0.178	0.15	
2234	6/16/2004	9:59:24 AM		26.426	26.6	24.993	27.962	26.688		47.116	52.687	15.481	32.076	-0.024	-5.799		45.468	0.046	14.643	0.004		2924.68	48.7447	51.2	11.1	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2235	6/16/2004	10:00:24 AM		26.444	26.608	25.021	27.96	26.655		47.505	53.199	15.538	32.337	0.017	-5.799		45.962	0.047	14.643	0.004		2925.68	48.7614	51.7	11.3	39.9	2.752	0.007	0.007	0.000	0.175	0.15	
2236	6/16/2004	10:01:04 AM		26.439	26.598	25.016	27.92	26.64		46.952	52.957	15.423	31.916	-0.015	-5.802		47.475	0.047	14.643	0.003		2926.35	48.7725	51.5	11.6	39.4	2.719	0.007	0.007	0.000	0.178	0.15	
2237	6/16/2004	10:02:04 AM		26.438	26.587	25.015	27.794	26.679		47.337	52.992	15.47	32.318	0.005	-5.799		51.444	0.047	14.643	0.004		2927.35	48.7892	51.5	12.6	39.8	2.746	0.007	0.007	0.000	0.176	0.15	
2238	6/16/2004	10:03:04 AM		26.459	26.593	25.011	27.745	26.675		47.559	53.427	15.544	32.415	0.014	-5.794		50.19	0.046	14.643	0.003		2928.35	48.8058	52.0	12.3	40.0	2.757	0.007	0.007	0.000	0.171	0.15	
2239	6/16/2004	10:04:04 AM		26.448	26.587	25.005	27.759	26.679		47.576	53.332	15.585	32.427	0.02	-5.788		48.006	0.047	14.643	0.004		2929.35	48.8225	51.9	11.8	40.0	2.758	0.007	0.007	0.000	0.175	0.15	
2240	6/16/2004	10:05:04 AM		26.463	26.587	25.02	27.769	26.709		46.703	52.147	15.456	31.764	0.026	-5.785		54.32	0.047	14.643	0.004		2930.35	48.8392	50.7	13.3	39.2	2.705	0.007	0.007	0.000	0.179	0.15	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2241	6/16/2004	10:06:04 AM		26.469	26.589	25.012	27.751	26.731		47.317	53.228	15.505	32.214	0.02	-5.791		48.589	0.046	14.643	0.003		2931.35	48.8558	51.8	11.9	39.8	2.742	0.007	0.007	0.000	0.172	0.15	
2242	6/16/2004	10:07:04 AM		26.469	26.583	25.016	27.76	26.745		47.138	52.949	15.451	32.093	0.023	-5.788		50.026	0.046	14.643	0.004		2932.35	48.8725	51.5	12.3	39.6	2.731	0.007	0.007	0.000	0.173	0.15	
2243	6/16/2004	10:08:04 AM		26.479	26.589	25.032	27.791	26.741		47.085	52.766	15.562	31.926	0.023	-5.788		48.077	0.046	14.643	0.004		2933.35	48.8892	51.3	11.8	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2244	6/16/2004	10:09:04 AM		26.475	26.584	25.007	27.787	26.767		47.029	52.735	15.364	32.101	0.02	-5.791		54.71	0.046	14.643	0.004		2934.35	48.9058	51.3	13.4	39.6	2.728	0.007	0.007	0.000	0.173	0.15	
2245	6/16/2004	10:10:04 AM		26.486	26.59	25.033	27.823	26.782		46.908	52.683	15.545	31.742	0.02	-5.788		46.949	0.046	14.643	0.004		2935.35	48.9225	51.2	11.5	39.3	2.711	0.007	0.007	0.000	0.174	0.15	
2246	6/16/2004	10:11:04 AM		26.496	26.605	25.048	27.843	26.802		46.881	52.443	15.416	31.941	0.026	-5.785		48	0.046	14.643	0.004		2936.35	48.9392	51.0	11.8	39.4	2.717	0.007	0.007	0.000	0.174	0.15	
2247	6/16/2004	10:12:04 AM		26.485	26.594	25.032	27.822	26.812		47.389	53.214	15.664	32.117	0.017	-5.782		51.027	0.047	14.643	0.003		2937.35	48.9558	51.7	12.5	39.8	2.741	0.007	0.007	0.000	0.176	0.15	
2248	6/16/2004	10:13:04 AM		26.479	26.594	25.027	27.826	26.831		47.176	53.065	15.514	32.025	0.037	-5.779		47.861	0.046	14.643	0.004		2938.35	48.9725	51.6	11.7	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2249	6/16/2004	10:14:04 AM		26.474	26.583	25.021	27.835	26.84		47.364	53.098	15.62	32.16	0.046	-5.782		48.689	0.046	14.643	0.004		2939.35	48.9892	51.6	11.9	39.8	2.741	0.007	0.007	0.000	0.172	0.15	
2250	6/16/2004	10:15:04 AM		26.499	26.599	25.042	27.846	26.841		47.118	52.903	15.505	32.005	0.083	-5.779		47.621	0.046	14.643	0.004		2940.35	49.0058	51.4	11.7	39.6	2.728	0.007	0.007	0.000	0.173	0.15	
2251	6/16/2004	10:16:04 AM		26.51	26.619	25.067	27.882	26.836		47.124	52.934	15.529	32.039	0.063	-5.779		45.695	0.046	14.643	0.003		2941.35	49.0225	51.5	11.2	39.6	2.729	0.007	0.007	0.000	0.173	0.15	
2252	6/16/2004	10:17:04 AM		26.515	26.629	25.077	27.862	26.807		46.902	52.557	15.532	31.791	0.046	-5.773		48.689	0.046	14.643	0.004		2942.35	49.0392	51.1	11.9	39.3	2.713	0.007	0.007	0.000	0.174	0.15	
2253	6/16/2004	10:18:04 AM		26.526	26.63	25.088	27.863	26.762		47.066	52.895	15.572	31.871	0.069	-5.776		49.018	0.046	14.643	0.004		2943.35	49.0558	51.4	12.0	39.5	2.721	0.007	0.007	0.000	0.173	0.15	
2254	6/16/2004	10:19:04 AM		26.521	26.625	25.073	27.927	26.733		47.024	53.013	15.438	31.988	0.092	-5.77		47.641	0.046	14.643	0.004		2944.35	49.0725	51.5	11.7	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2255	6/16/2004	10:20:04 AM		26.512	26.616	25.064	27.883	26.718		46.966	52.841	15.507	31.91	0.112	-5.776		45.287	0.047	14.643	0.003		2945.35	49.0892	51.4	11.1	39.4	2.719	0.007	0.007	0.000	0.177	0.15	
2256	6/16/2004	10:21:04 AM		26.528	26.617	25.07	27.844	26.694		47.309	53.077	15.582	32.189	0.095	-5.773		57.645	0.046	14.643	0.004		2946.35	49.1058	51.6	14.1	39.7	2.741	0.007	0.007	0.000	0.172	0.15	
2257	6/16/2004	10:22:04 AM		26.518	26.623	25.056	27.74	26.64		47.304	53.297	15.549	32.105	0.112	-5.779		47.967	0.046	14.643	0.003		2947.35	49.1225	51.8	11.8	39.7	2.737	0.007	0.007	0.000	0.172	0.15	
2258	6/16/2004	10:23:04 AM		26.519	26.613	25.052	27.676	26.581		47.06	52.932	15.512	31.947	0.124	-5.773		50.399	0.046	14.643	0.003		2948.35	49.1392	51.5	12.4	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2259	6/16/2004	10:24:04 AM		26.499	26.593	25.036	27.62	26.531		47.084	52.934	15.547	31.877	0.13	-5.77		48.787	0.047	14.643	0.004		2949.35	49.1558	51.5	12.0	39.5	2.722	0.007	0.007	0.000	0.177	0.15	
2260	6/16/2004	10:25:04 AM		26.513	26.598	25.051	27.58	26.516		47.194	52.992	15.516	32.091	0.13	-5.77		48.801	0.047	14.643	0.004		2950.35	49.1725	51.5	12.0	39.6	2.733	0.007	0.007	0.000	0.177	0.15	
2261	6/16/2004	10:26:04 AM		26.497	26.581	25.034	27.609	26.559		47.273	53.088	15.566	32.124	0.133	-5.765		49.035	0.047	14.643	0.004		2951.35	49.1892	51.6	12.0	39.7	2.737	0.007	0.007	0.000	0.176	0.15	
2262	6/16/2004	10:27:04 AM		26.502	26.576	25.039	27.664	26.589		47.113	52.86	15.525	32.091	0.107	-5.768		48.876	0.046	14.643	0.004		2952.35	49.2058	51.4	12.0	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2263	6/16/2004	10:28:04 AM		26.507	26.581	25.044	27.699	26.629		47.051	52.953	15.441	31.966	0.133	-5.77		48.482	0.046	14.643	0.004		2953.35	49.2225	51.5	11.9	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2264	6/16/2004	10:29:04 AM		26.507	26.576	25.044	27.719	26.689		47.062	53.075	15.53	31.902	0.133	-5.765		46.861	0.046	14.643	0.004		2954.35	49.2392	51.6	11.5	39.5	2.722	0.007	0.007	0.000	0.173	0.15	
2265	6/16/2004	10:30:04 AM		26.503	26.567	25.025	27.734	26.724		47.074	52.963	15.418	32.068	0.13	-5.776		50.124	0.046	14.643	0.003		2955.35	49.2558	51.5	12.3	39.6	2.728	0.007	0.007	0.000	0.173	0.15	
2266	6/16/2004	10:31:04 AM		26.503	26.557	25.035	27.819	26.744		47.29	53.214	15.529	32.156	0.133	-5.765		49.11	0.046	14.643	0.004		2956.35	49.2725	51.7	12.0	39.7	2.739	0.007	0.007	0.000	0.172	0.15	
2267	6/16/2004	10:32:04 AM		26.518	26.572	25.06	27.859	26.794		47.062	52.866	15.437	32.068	0.138	-5.768		48.937	0.046	14.643	0.004		2957.35	49.2892	51.4	12.0	39.6	2.728	0.007	0.007	0.000	0.173	0.15	
2268	6/16/2004	10:33:04 AM		26.508	26.562	25.035	27.844	26.834		47.211	52.743	15.562	32.183	0.133	-5.765		50.286	0.046	14.643	0.004		2958.35	49.3058	51.3	12.3	39.7	2.737	0.007	0.007	0.000	0.173	0.15	
2269	6/16/2004	10:34:04 AM		26.509	26.573	25.041	27.866	26.846		47.018	53.061	15.498	31.861	0.13	-5.77		52.691	0.045	14.643	0.004		2959.35	49.3225	51.6	12.9	39.4	2.719	0.007	0.007	0.000	0.170	0.14	
2270	6/16/2004	10:35:04 AM		26.52	26.579	25.062	27.921	26.861		47.124	52.928	15.451	32.078	0.153	-5.762		48.453	0.046	14.643	0.004		2960.35	49.3392	51.5	11.9	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2271	6/16/2004	10:36:04 AM		26.52	26.579	25.047	27.921	26.881		47.393	53.423	15.57	32.189	0.13	-5.765		52.673	0.046	14.643	0.003		2961.35	49.3558	52.0	12.9	39.8	2.743	0.007	0.007	0.000	0.172	0.15	
2272	6/16/2004	10:37:04 AM		26.535	26.599	25.067	27.996	26.911		46.892	52.791	15.506	31.822	0.173	-5.759		49.798	0.046	14.643	0.004		2962.35	49.3725	51.3	12.2	39.4	2.714	0.007	0.007	0.000	0.174	0.15	
2273	6/16/2004	10:38:04 AM		26.529	26.598	25.062	27.971	26.94		47.099	52.973	15.419	32.14	0.162	-5.759		44.801	0.046	14.643	0.003		2963.35	49.3892	51.5	11.0	39.6	2.732	0.007	0.007	0.000	0.173	0.15	
2274	6/16/2004	10:39:04 AM		26.54	26.609	25.072	28.026	26.971		47.205	53.272	15.592	31.959	0.196	-5.762		46.548	0.046	14.643	0.004		2964.35	49.4058	51.8	11.4	39.6	2.729	0.007	0.007	0.000	0.173	0.15	
2275	6/16/2004	10:40:04 AM		26.558	26.627	25.08	28.059	26.988		47.161	52.957	15.606	31.941	0.196	-5.759		45.38	0.046	14.643	0.004		2965.35	49.4225	51.5	11.1	39.6	2.727	0.007	0.007	0.000	0.173	0.15	
2276	6/16/2004	10:41:04 AM		26.553	26.633	25.081	27.98	26.954		47.24	53.286	15.615	32.013	0.199	-5.759		44.611	0.046	14.643	0.004		2966.35	49.4392	51.8	10.9	39.6	2.732	0.007	0.007	0.000	0.173	0.15	
2277	6/16/2004	10:42:04 AM		26.563	26.643	25.096	28.01	26.885		47.066	53.073	15.499	32.007	0.202	-5.75		46.53	0.047	14.643	0.004		2967.35	49.4558	51.6	11.4	39.5	2.726	0.007	0.007	0.000	0.177	0.15	
2278	6/16/2004	10:43:04 AM		26.548	26.627	25.055	28.009	26.859		47.095	53.137	15.514	31.935	0.193	-5.756		51.634	0.046	14.643	0.003		2968.35	49.4725	51.7	12.7	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2279	6/16/2004	10:44:04 AM		26.582	26.651	25.099	28.008	26.818		47.033	53.011	15.554	31.861	0.196	-5.756		47.085	0.046	14.643	0.004		2969.35	49.4892	51.5	11.5	39.4	2.720	0.007	0.007	0.000	0.173	0.15	
2280	6/16/2004	10:45:04 AM		26.575	26.669	25.107	27.936	26.781		47.12	52.899	15.577	31.996	0.196	-5.75		53.309	0.046	14.643	0.004		2970.35	49.5058	51.4	13.1	39.6	2.727	0.007	0.007	0.000	0.173	0.15	
2281	6/16/2004	10:46:04 AM		26.581	26.665	25.128	27.897	26.727		47.002	52.828	15.494	31.994	0.199	-5.744		46.463	0.046	14.643	0.004		2971.35	49.5225	51.4	11.4	39.5	2.723	0.007	0.007	0.000	0.173	0.15	
2282	6/16/2004	10:47:04 AM		26.571	26.65	25.123	27.867	26.677		47.109	52.791	15.554	32.091	0.199	-5.744		45.566	0.046	14.643	0.004		2972.35	49.5392	51.3	11.2	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2283	6/16/2004	10:48:04 AM		26.571	26.65	25.118	27.792	26.643		47.18	53.255	15.503	32.115	0.196	-5.753		48.442	0.045	14.643	0.004		2973.35	49.5558	51.8	11.9	39.6	2.734	0.007	0.007	0.000	0.169	0.14	
2284	6/16/2004	10:49:04 AM		26.575	26.649	25.112	27.777	26.682		47.23	53.419	15.571	31.974	0.196	-5.75		52.472	0.045	14.643	0.003		2974.35	49.5725	51.9	12.9	39.6	2.730	0.007	0.007	0.000	0.169	0.14	
2285	6/16/2004	10:50:04 AM		26.58	26.644	25.107	27.812	26.712		47.085	52.909	15.458	32.099	0.225	-5.747		45.218	0.046	14.643	0.003		2975.35	49.5892	51.4	11.1	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2286	6/16/2004	10:51:04 AM		26.578	26.652	25.111	27.915	26.775		47.182	53.133	15.578	31.994	0.199	-5.742		48.488	0.046	14.643	0.004		2976.35	49.6058	51.7	11.9	39.6	2.729	0.007	0.007	0.000	0.173	0.15	
2287	6/16/2004	10:52:04 AM		26.582	26.646	25.104	27.893	26.808		47.311	53.423	15.635	32.066	0.234	-5.739		48.962	0.046	14.643	0.004		2977.35	49.6225	52.0	12.0	39.7	2.736	0.007	0.007	0.000	0.172	0.15	
2288	6/16/2004	10:53:04 AM		26.582	26.637	25.08	27.854	26.844		47.155	52.926	15.558	32.013	0.231	-5.742		46.813	0.046	14.643	0.004		2978.35	49.6392	51.5	11.5	39.6	2.729	0.007	0.007	0.000	0.173	0.15	
2289	6/16/2004	10:54:04 AM		26.593	26.652	25.101	27.89	26.884		47.06	53.029	15.531	31.97	0.248	-5.742		45.875	0.046	14.643	0.003		2979.35	49.6558	51.6	11.2	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2290	6/16/2004	10:55:04 AM		26.6	26.659	25.097	27.946	26.921		46.846	52.891	15.468	31.769	0.22	-5.742		50.103	0.046	14.643	0.003		2980.35	49.6725	51.4	12.3	39.3	2.710	0.007	0.007	0.000	0.174	0.15	
2291	6/16/2004	10:56:04 AM		26.601	26.661	25.094	27.988	26.953		46.8	52.723	15.434	31.812	0.237	-5.73		47.61	0.046	14.643	0.004		2981.35	49.6892	51.3	11.7	39.3	2.710	0.007	0.007	0.000	0.174	0.15	
2292	6/16/2004	10:57:04 AM		26.606	26.671	25.094	28.033	26.972		47.024	53.114	15.463	31.91	0.251	-5.739		50.727	0.046	14.643	0.004		2982.35	49.7058	51.6	12.4	39.5	2.721	0.007	0.007	0.000	0.173	0.15	
2293	6/16/2004	10:58:04 AM		26.617	26.687	25.12	28.058	26.993		47.167	53.193	15.509	32.078	0.257	-5.73		47.443	0.045	14.643	0.004		2983.35	49.7225	51.7	11.6	39.6	2.732	0.007	0.007	0.000	0.169	0.14	
2294	6/16/2004	10:59:04 AM		26.615	26.689	25.107	28.081	27.006		47.039	53.056	15.551	31.84	0.254	-5.733		49.2	0.046	14.643	0.004		2984.35	49.7392	51.6	12.1	39.4	2.719	0.007	0.007	0.000	0.173	0.15	
2295	6/16/2004	11:00:04 AM		26.605	26.689	25.102	28.081	27.021		47.167	53.191	15.549	32.019	0.251	-5.733		44.922	0.045	14.643	0.004		2985.35	49.7558	51.7	11.0	39.6	2.730	0.007	0.007	0.000	0.169	0.14	
2296	6/16/2004	11:01:04 AM		26.601	26.695	25.098	28.072	27.021		46.684	52.7	15.409	31.688	0.248	-5.733		50.074	0.046	14.643	0.004		2986.35	49.7725	51.2	12.3	39.2	2.702	0.007	0.007	0.000	0.175	0.15	
2297	6/16/2004	11:02:04 AM		26.621	26.716	25.114	28.048	26.987		46.979	53.038	15.408	31.972	0.251	-5.727		51.235	0.045	14.643	0.004		2987.35	49.7892	51.6	12.6	39.5	2.722	0.007	0.007	0.000	0.169	0.14	
2298	6/16/2004	11:03:04 AM		26.621	26.715	25.108	28.032	26.942		46.722	52.741	15.441	31.69	0.251	-5.724		47.193	0.046	14.643	0.004		2988.35	49.8058	51.3	11.6	39.2	2.703	0.007	0.007	0.000	0.174	0.15	
2299	6/16/2004	11:04:04 AM		26.621	26.716	25.109	27.998	26.888		46.794	52.849	15.517	31.662	0.251	-5.727		44.892	0.046	14.643	0.004		2989.35	49.8225	51.4	11.0	39.2	2.705	0.007	0.007	0.000	0.174	0.15	
2300	6/16/2004	11:05:04 AM		26.632	26.726	25.11	27.954	26.874		46.856	52.729	15.486	31.849	0.251	-5.724		49.187	0.046	14.643	0.004		2990.35	49.8392	51.3	12.1	39.4	2.713	0.007	0.007	0.000	0.174	0.15	
2301	6/16/2004	11:06:04 AM		26.627	26.721	25.105	27.909	26.844		47.172	53.201	15.623	31.918	0.248	-5.733		45.768	0.045	14.643	0.004		2991.35	49.8558	51.7	11.2	39.5	2.726	0.007	0.007	0.000	0.169	0.14	
2302	6/16/2004	11:07:04 AM		26.623	26.722	25.106	27.905	26.775		47.194	53.152	15.579	32.089	0.283	-5.727		44.986	0.046	14.643	0.004		2992.35	49.8725	51.7	11.0	39.6	2.733	0.007	0.007	0.000	0.172	0.15	
2303	6/16/2004	11:08:04 AM		26.623	26.722	25.106	27.89	26.75		47.122	53.181	15.443	32.058	0.277	-5.721		51.062	0.046	14.643	0.004		2993.35	49.8892	51.7	12.5	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2304	6/16/2004	11:09:04 AM		26.629	26.723	25.116	27.866	26.726		47.315	53.442	15.606	32.115	0.254	-5.721		51.905	0.046	14.643	0.004		2994.35	49.9058	52.0	12.7	39.7	2.738	0.007	0.007	0.000	0.172	0.15	
2305	6/16/2004	11:10:04 AM		26.621	26.721	25.124	27.848	26.688		46.732	52.549	15.421	31.769	0.303	-5.715		52.827	0.046	14.643	0.004		2995.35	49.9225	51.1	12.9	39.3	2.706	0.007	0.007	0.000	0.174	0.15	
2306	6/16/2004	11:11:04 AM		26.612	26.706	25.105	27.814	26.639		47.028	53.206	15.511	31.887	0.303	-5.721		49.725	0.045	14.643	0.004		2996.35	49.9392	51.7	12.2	39.5	2.720	0.007	0.007	0.000	0.170	0.14	
2307	6/16/2004	11:12:04 AM		26.612	26.701	25.11	27.769	26.634		46.844	52.924	15.564	31.645	0.312	-5.718		53.328	0.046	14.643	0.004		2997.35	49.9558	51.5	13.1	39.2	2.706	0.007	0.007	0.000	0.174	0.15	
2308	6/16/2004	11:13:04 AM		26.606	26.685	25.103	27.713	26.653		46.931	52.959	15.524	31.816	0.306	-5.715		49.087	0.046	14.643	0.004		2998.35	49.9725	51.5	12.0	39.4	2.715	0.007	0.007	0.000	0.174	0.15	
2309	6/16/2004	11:14:04 AM		26.616	26.685	25.113	27.777	26.722		46.96	52.971	15.475	31.892	0.286	-5.718		50.168	0.046	14.643	0.004		2999.35	49.9892	51.5	12.3	39.4	2.718	0.007	0.007	0.000	0.173	0.15	
2310	6/16/2004	11:15:04 AM		26.615	26.684	25.112	27.851	26.756		47.246	53.4	15.646	31.98	0.321	-5.713		51.673	0.045	14.643	0.004		3000.35	50.0058	51.9	12.7	39.6	2.731	0.007	0.007	0.000	0.169	0.14	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2311	6/16/2004	11:16:04 AM		26.62	26.679	25.117	27.926	26.826		47.116	53.295	15.569	31.896	0.318	-5.715		44.058	0.046	14.643	0.004		3001.35	50.0225	51.8	10.8	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2312	6/16/2004	11:17:04 AM		26.626	26.675	25.123	27.982	26.922		47.136	53.224	15.608	31.927	0.321	-5.713		49.894	0.046	14.643	0.004		3002.35	50.0392	51.8	12.2	39.5	2.726	0.007	0.007	0.000	0.173	0.15	
2313	6/16/2004	11:18:04 AM		26.642	26.691	25.14	28.088	26.983		47.267	53.168	15.622	32.138	0.321	-5.71		48.296	0.046	14.643	0.004		3003.35	50.0558	51.7	11.8	39.7	2.737	0.007	0.007	0.000	0.172	0.15	
2314	6/16/2004	11:19:04 AM		26.659	26.688	25.136	28.18	27.045		47.103	53.216	15.603	31.931	0.321	-5.707		48.791	0.046	14.643	0.004		3004.35	50.0725	51.7	12.0	39.5	2.725	0.007	0.007	0.000	0.173	0.15	
2315	6/16/2004	11:20:04 AM		26.665	26.695	25.143	28.206	27.091		47.045	53.284	15.64	31.775	0.321	-5.71		44.269	0.046	14.643	0.004		3005.35	50.0892	51.8	10.8	39.4	2.717	0.007	0.007	0.000	0.173	0.15	
2316	6/16/2004	11:21:04 AM		26.673	26.712	25.161	28.249	27.124		47.236	52.963	15.595	32.093	0.338	-5.707		47.347	0.045	14.643	0.004		3006.35	50.1058	51.5	11.6	39.7	2.735	0.007	0.007	0.000	0.168	0.14	
2317	6/16/2004	11:22:04 AM		26.68	26.719	25.162	28.24	27.115		47.064	53.129	15.659	31.818	0.327	-5.704		52.671	0.046	14.643	0.004		3007.35	50.1225	51.7	12.9	39.4	2.719	0.007	0.007	0.000	0.173	0.15	
2318	6/16/2004	11:23:04 AM		26.686	26.726	25.169	28.162	27.057		47.058	53.108	15.536	31.957	0.321	-5.704		44.229	0.045	14.643	0.004		3008.35	50.1392	51.6	10.8	39.5	2.724	0.007	0.007	0.000	0.169	0.14	
2319	6/16/2004	11:24:04 AM		26.677	26.706	25.14	28.128	26.973		47.452	53.678	15.761	32.002	0.318	-5.707		48.855	0.045	14.643	0.004		3009.35	50.1558	52.2	12.0	39.7	2.739	0.007	0.007	0.000	0.168	0.14	
2320	6/16/2004	11:25:04 AM		26.704	26.743	25.171	28.085	26.965		47.155	53.154	15.713	31.859	0.338	-5.701		46.5	0.046	14.643	0.004		3010.35	50.1725	51.7	11.4	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2321	6/16/2004	11:26:04 AM		26.694	26.733	25.171	28.075	26.925		47.085	53.258	15.618	31.873	0.327	-5.698		47.606	0.046	14.643	0.004		3011.35	50.1892	51.8	11.7	39.5	2.722	0.007	0.007	0.000	0.173	0.15	
2322	6/16/2004	11:27:04 AM		26.699	26.748	25.191	28.01	26.87		46.929	53.112	15.49	31.826	0.332	-5.701		40.397	0.045	14.643	0.004		3012.35	50.2058	51.6	9.9	39.4	2.715	0.007	0.007	0.000	0.169	0.14	
2323	6/16/2004	11:28:04 AM		26.689	26.733	25.186	27.905	26.83		47.093	53.073	15.613	31.955	0.356	-5.698		47.035	0.045	14.643	0.004		3013.35	50.2225	51.6	11.5	39.5	2.725	0.007	0.007	0.000	0.169	0.14	
2324	6/16/2004	11:29:04 AM		26.688	26.727	25.176	27.87	26.805		47.433	53.649	15.696	32.093	0.35	-5.701		49.969	0.045	14.643	0.003		3014.35	50.2392	52.2	12.2	39.8	2.742	0.007	0.007	0.000	0.168	0.14	
2325	6/16/2004	11:30:04 AM		26.701	26.736	25.194	27.903	26.778		46.871	52.806	15.462	31.83	0.358	-5.695		48.309	0.046	14.643	0.004		3015.35	50.2558	51.3	11.8	39.4	2.713	0.007	0.007	0.000	0.173	0.15	
2326	6/16/2004	11:31:04 AM		26.694	26.723	25.166	27.88	26.78		46.58	52.644	15.45	31.553	0.358	-5.695		45.992	0.045	14.643	0.004		3016.35	50.2725	51.2	11.3	39.1	2.693	0.007	0.007	0.000	0.171	0.15	
2327	6/16/2004	11:32:04 AM		26.708	26.732	25.191	27.87	26.775		46.715	52.959	15.506	31.592	0.361	-5.689		49.285	0.046	14.643	0.004		3017.35	50.2892	51.5	12.1	39.2	2.699	0.007	0.007	0.000	0.174	0.15	
2328	6/16/2004	11:33:04 AM		26.69	26.72	25.163	27.847	26.727		46.637	52.675	15.553	31.489	0.358	-5.689		52.764	0.046	14.643	0.004		3018.35	50.3058	51.2	12.9	39.1	2.693	0.007	0.007	0.000	0.175	0.15	
2329	6/16/2004	11:34:04 AM		26.693	26.717	25.161	27.8	26.68		46.773	52.872	15.47	31.769	0.361	-5.687		48.866	0.045	14.643	0.004		3019.35	50.3225	51.4	12.0	39.3	2.708	0.007	0.007	0.000	0.170	0.14	
2330	6/16/2004	11:35:04 AM		26.692	26.706	25.16	27.744	26.644		46.583	52.872	15.497	31.45	0.358	-5.689		47.256	0.046	14.643	0.003		3020.35	50.3392	51.4	11.6	39.0	2.690	0.007	0.007	0.000	0.175	0.15	
2331	6/16/2004	11:36:04 AM		26.707	26.716	25.175	27.714	26.614		47.055	53.092	15.51	32.002	0.358	-5.687		47.533	0.046	14.643	0.004		3021.35	50.3558	51.6	11.6	39.5	2.725	0.007	0.007	0.000	0.173	0.15	
2332	6/16/2004	11:37:04 AM		26.686	26.701	25.159	27.778	26.668		46.86	52.967	15.563	31.729	0.361	-5.681		51.304	0.046	14.643	0.004		3022.35	50.3725	51.5	12.6	39.3	2.709	0.007	0.007	0.000	0.174	0.15	
2333	6/16/2004	11:38:04 AM		26.68	26.675	25.143	27.827	26.762		47.124	53.529	15.617	31.812	0.358	-5.684		48.438	0.045	14.643	0.004		3023.35	50.3892	52.1	11.9	39.5	2.721	0.007	0.007	0.000	0.169	0.14	
2334	6/16/2004	11:39:04 AM		26.681	26.676	25.139	27.868	26.798		46.678	52.706	15.437	31.705	0.37	-5.672		49.26	0.046	14.643	0.004		3024.35	50.4058	51.2	12.1	39.2	2.702	0.007	0.007	0.000	0.174	0.15	
2335	6/16/2004	11:40:04 AM		26.687	26.681	25.15	27.939	26.888		46.749	52.897	15.514	31.619	0.419	-5.675		43.803	0.045	14.643	0.003		3025.35	50.4225	51.4	10.7	39.2	2.702	0.007	0.007	0.000	0.170	0.15	
2336	6/16/2004	11:41:04 AM		26.694	26.688	25.161	28.015	26.96		47.058	53.353	15.557	31.922	0.422	-5.672		48.918	0.045	14.643	0.004		3026.35	50.4392	51.9	12.0	39.5	2.723	0.007	0.007	0.000	0.169	0.14	
2337	6/16/2004	11:42:04 AM		26.695	26.679	25.147	28.086	26.991		46.749	52.899	15.528	31.633	0.419	-5.669		48.58	0.045	14.643	0.003		3027.35	50.4558	51.4	11.9	39.2	2.702	0.007	0.007	0.000	0.170	0.15	
2338	6/16/2004	11:43:04 AM		26.711	26.701	25.169	28.152	27.037		46.871	52.953	15.47	31.855	0.431	-5.672		48.697	0.045	14.643	0.004		3028.35	50.4725	51.5	11.9	39.4	2.714	0.007	0.007	0.000	0.170	0.14	
2339	6/16/2004	11:44:04 AM		26.703	26.702	25.151	28.124	27.034		46.952	53.09	15.54	31.84	0.422	-5.672		44.75	0.045	14.643	0.004		3029.35	50.4892	51.6	11.0	39.4	2.716	0.007	0.007	0.000	0.170	0.14	
2340	6/16/2004	11:45:04 AM		26.699	26.708	25.151	28.11	27.035		46.917	52.992	15.621	31.748	0.457	-5.681		52.737	0.045	14.643	0.004		3030.35	50.5058	51.5	12.9	39.3	2.712	0.007	0.007	0.000	0.170	0.14	
2341	6/16/2004	11:46:04 AM		26.689	26.698	25.136	28.1	26.98		47.047	53.378	15.598	31.81	0.419	-5.695		47.448	0.046	14.643	0.004		3031.35	50.5225	51.9	11.6	39.4	2.718	0.007	0.007	0.000	0.173	0.15	
2342	6/16/2004	11:47:04 AM		26.709	26.719	25.162	28.051	26.921		46.834	52.915	15.49	31.76	0.425	-5.704		45.606	0.045	14.643	0.004		3032.35	50.5392	51.4	11.2	39.3	2.709	0.007	0.007	0.000	0.170	0.14	
2343	6/16/2004	11:48:04 AM		26.71	26.715	25.158	28.017	26.902		47.319	53.66	15.632	32.074	0.425	-5.695		49.4	0.046	14.643	0.004		3033.35	50.5558	52.2	12.1	39.7	2.737	0.007	0.007	0.000	0.172	0.15	
2344	6/16/2004	11:49:04 AM		26.7	26.725	25.143	27.967	26.852		46.97	53.069	15.546	31.855	0.422	-5.707		46.484	0.044	14.643	0.004		3034.35	50.5725	51.6	11.4	39.4	2.717	0.007	0.007	0.000	0.166	0.14	
2345	6/16/2004	11:50:04 AM		26.704	26.734	25.162	27.931	26.811		46.904	53.075	15.524	31.777	0.448	-5.698		53.371	0.045	14.643	0.004		3035.35	50.5892	51.6	13.1	39.3	2.712	0.007	0.007	0.000	0.170	0.14	
2346	6/16/2004	11:51:04 AM		26.69	26.724	25.142	27.871	26.776		46.742	53.108	15.474	31.627	0.422	-5.695		48.128	0.045	14.643	0.004		3036.35	50.6058	51.6	11.8	39.2	2.702	0.007	0.007	0.000	0.171	0.15	
2347	6/16/2004	11:52:04 AM		26.68	26.714	25.127	27.826	26.746		47.045	53.307	15.651	31.758	0.454	-5.687		45.549	0.046	14.643	0.004		3037.35	50.6225	51.8	11.2	39.4	2.717	0.007	0.007	0.000	0.173	0.15	
2348	6/16/2004	11:53:04 AM		26.69	26.714	25.142	27.901	26.746		47.111	53.315	15.457	32.105	0.431	-5.687		43.438	0.046	14.643	0.004		3038.35	50.6392	51.8	10.6	39.6	2.731	0.007	0.007	0.000	0.172	0.15	
2349	6/16/2004	11:54:04 AM		26.69	26.719	25.142	27.936	26.766		46.848	53.061	15.496	31.791	0.474	-5.684		51.734	0.045	14.643	0.004		3039.35	50.6558	51.6	12.7	39.3	2.711	0.007	0.007	0.000	0.170	0.14	
2350	6/16/2004	11:55:04 AM		26.704	26.729	25.162	27.976	26.771		47.004	53.313	15.523	31.808	0.419	-5.684		48.065	0.043	14.643	0.004		3040.35	50.6725	51.8	11.8	39.4	2.717	0.006	0.006	0.000	0.162	0.14	
2351	6/16/2004	11:56:04 AM		26.685	26.694	25.132	27.916	26.756		46.765	53.065	15.509	31.713	0.596	-5.322		48.63	0.044	14.643	0.004		3041.35	50.6892	51.6	11.9	39.2	2.705	0.007	0.007	0.000	0.167	0.14	
2352	6/16/2004	11:57:04 AM		26.694	26.704	25.152	27.856	26.716		47.076	53.231	15.532	31.951	0.593	-5.369		50.132	0.046	14.643	0.004		3042.35	50.7058	51.8	12.3	39.5	2.724	0.007	0.007	0.000	0.173	0.15	
2353	6/16/2004	11:58:04 AM		26.683	26.692	25.141	27.84	26.715		46.57	53.042	15.593	31.323	0.593	-5.36		46.816	0.045	14.643	0.004		3043.35	50.7225	51.6	11.5	38.9	2.685	0.007	0.007	0.000	0.172	0.15	
2354	6/16/2004	11:59:04 AM		26.682	26.686	25.145	27.864	26.689		46.997	53.315	15.494	31.935	0.596	-5.354		46.181	0.045	14.643	0.004		3044.35	50.7392	51.8	11.3	39.5	2.721	0.007	0.007	0.000	0.169	0.14	
2355	6/16/2004	12:00:04 PM		26.69	26.695	25.153	27.822	26.667		47.114	53.467	15.648	31.894	0.59	-5.36		46.261	0.045	14.643	0.004		3045.35	50.7558	52.0	11.3	39.5	2.724	0.007	0.007	0.000	0.169	0.14	
2356	6/16/2004	12:01:04 PM		26.679	26.683	25.151	27.875	26.746		46.709	53.102	15.556	31.539	0.634	-5.348		47.354	0.046	14.643	0.004		3046.35	50.7725	51.6	11.6	39.1	2.697	0.007	0.007	0.000	0.175	0.15	
2357	6/16/2004	12:02:03 PM		26.694	26.683	25.161	27.985	26.845		46.993	53.367	15.601	31.814	0.657	-5.345		47.262	0.045	14.643	0.004		3047.33	50.7889	51.9	11.6	39.4	2.717	0.007	0.007	0.000	0.169	0.14	
2358	6/16/2004	12:03:03 PM		26.69	26.68	25.168	28.012	26.917		46.545	52.831	15.456	31.533	0.622	-5.351		49.533	0.045	14.643	0.004		3048.33	50.8056	51.4	12.1	39.0	2.692	0.007	0.007	0.000	0.171	0.15	
2359	6/16/2004	12:04:03 PM		26.703	26.702	25.176	28.069	26.954		47.026	53.264	15.58	31.883	0.645	-5.354		49.173	0.045	14.643	0.004		3049.33	50.8222	51.8	12.1	39.5	2.720	0.007	0.007	0.000	0.169	0.14	
2360	6/16/2004	12:05:03 PM		26.704	26.699	25.182	28.116	26.986		47.192	53.662	15.759	31.775	0.596	-5.392		49.721	0.048	14.643	0.004		3050.33	50.8389	52.2	12.2	39.5	2.722	0.007	0.007	0.000	0.180	0.15	
2361	6/16/2004	12:06:03 PM		26.701	26.691	25.199	28.127	27.012		46.887	53.191	15.612	31.707	0.59	-5.452		52.547	0.045	14.643	0.004		3051.33	50.8556	51.7	12.9	39.3	2.709	0.007	0.007	0.000	0.170	0.14	
2362	6/16/2004	12:07:03 PM		26.703	26.702	25.201	28.199	27.084		46.875	53.316	15.604	31.656	0.59	-5.45		47.566	0.045	14.643	0.004		3052.33	50.8722	51.8	11.7	39.3	2.707	0.007	0.007	0.000	0.170	0.14	
2363	6/16/2004	12:08:03 PM		26.699	26.708	25.191	28.19	27.075		46.419	52.777	15.488	31.35	0.59	-5.452		51.452	0.045	14.643	0.004		3053.33	50.8889	51.3	12.6	38.9	2.681	0.007	0.007	0.000	0.172	0.15	
2364	6/16/2004	12:09:03 PM		26.704	26.713	25.196	28.18	27.005		46.657	53.029	15.524	31.592	0.593	-5.444		47.331	0.045	14.643	0.004		3054.33	50.9056	51.6	11.6	39.1	2.697	0.007	0.007	0.000	0.171	0.15	
2365	6/16/2004	12:10:03 PM		26.715	26.72	25.193	28.142	26.981		46.834	53.251	15.59	31.613	0.593	-5.447		48.242	0.045	14.643	0.004		3055.33	50.9222	51.8	11.8	39.2	2.704	0.007	0.007	0.000	0.170	0.14	
2366	6/16/2004	12:11:03 PM		26.721	26.741	25.194	28.082	26.942		46.72	53.087	15.524	31.612	0.599	-5.441		46.626	0.045	14.643	0.004		3056.33	50.9389	51.6	11.4	39.2	2.700	0.007	0.007	0.000	0.170	0.14	
2367	6/16/2004	12:12:03 PM		26.717	26.736	25.185	28.008	26.898		46.86	53.17	15.49	31.752	0.616	-5.441		50.845	0.045	14.643	0.004		3057.33	50.9556	51.7	12.5	39.3	2.710	0.007	0.007	0.000	0.170	0.14	
2368	6/16/2004	12:13:03 PM		26.743	26.762	25.211	28.029	26.844		46.56	52.911	15.525	31.459	0.66	-5.45		50.806	0.043	14.643	0.004		3058.33	50.9722	51.4	12.5	39.0	2.690	0.006	0.006	0.000	0.163	0.14	
2369	6/16/2004	12:14:03 PM		26.724	26.743	25.181	28.005	26.85		46.724	53.177	15.541	31.537	0.674	-5.441		50.973	0.044	14.643	0.004		3059.33	50.9889	51.7	12.5	39.1	2.698	0.007	0.007	0.000	0.167	0.14	
2370	6/16/2004	12:15:03 PM		26.734	26.759	25.187	28.026	26.846		46.618	52.944	15.443	31.645	0.657	-5.432		43.126	0.045	14.643	0.004		3060.33	51.0056	51.5	10.6	39.1	2.698	0.007	0.007	0.000	0.171	0.15	
2371	6/16/2004	12:16:03 PM		26.731	26.751	25.199	27.993	26.848		45.226	51.521	16.986	28.655	0.593	-5.447		52.376	0.043	14.643	0.004		3061.33	51.0222	50.0	12.8	36.9	2.547	0.006	0.006	0.000	0.173	0.15	
2372	6/16/2004	12:17:03 PM		26.72	26.735	25.198	27.977	26.847		46.205	52.588	15.94	30.677	0.657	-5.421		45.529	0.045	14.643	0.004		3062.33	51.0389	51.1	11.2	38.4	2.650	0.007	0.007	0.000	0.174	0.15	
2373	6/16/2004	12:18:03 PM		26.714	26.738	25.166	28	26.84		47.717	54.254	14.933	33.16	0.715	-5.392		42.312	0.047	14.643	0.004		3063.33	51.0556	52.8	10.4	40.4	2.788	0.007	0.007	0.000	0.172	0.15	
2374	6/16/2004	12:19:03 PM		26.724	26.743	25.156	27.985	26.77		48.965	55.218	14.691	34.664	0.657	-5.481		48.722	0.052	14.643	0.004		3064.33	51.0722	53.7	11.9	41.8	2.883	0.008	0.008	0.000	0.185	0.16	
2375	6/16/2004	12:20:03 PM		26.709	26.739	25.202	27.981	26.811		48.717	52.472	17.214	32.023	-1.222	-4.733		49.462	0.025	14.643	0.004		3065.33	51.0889	51.0	12.1	40.4	2.783	0.004	0.004	0.000	0.092	0.08	
2376	6/16/2004	12:21:03 PM		26.724	26.744	25.242	27.936	26.776		47.058	52.816	17.1	30.279	-0.032	-3.371		56.323	0.031	14.643	0.004		3066.33	51.1056	51.3	13.8	38.7	2.666	0.005	0.005	0.000	0.119	0.10	
2377	6/16/2004	12:22:03 PM		26.721	26.731	25.269	27.908	26.788		45.575	52.29	16.918	29.092	1.045	-1.076		46.332	0.028	14.643	0.004		3067.33	51.1222	50.8	11.4	37.3	2.574	0.004	0.004	0.000	0.111	0.09	
2378	6/16/2004	12:23:03 PM		26.723	26.732	25.286	27.915	26.795		46.73	54.172	15.782	31.307	1.71	0.089		49.127	0.058	14.643	0.004		3068.33	51.1389	52.7	12.0	39.0	2.690	0.009	0.009	0.000	0.220	0.19	
2379	6/16/2004	12:24:03 PM		26.729	26.739	25.297	27.931	26.771		49.154	54.435	15.398	34.192	-0.426	-4.559		47.8	0.044	14.643	0.004		3069.33	51.1556	53.0	11.7	41.7	2.873	0.007	0.007	0.000	0.156	0.13	
2380	6/16/2004	12:25:03 PM		26.717	26.716	25.285	27.934	26.839		48.972	53.396	16.879	32.591	-1.222	-6.594		54.906	0.075	14.643	0.003		3070.33	51.1722	51.9	13.5	40.8	2.812	0.011	0.011	0.000	0.272	0.23	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2381	6/16/2004	12:26:03 PM		26.733	26.737	25.336	27.989	26.894		48.603	53.156	16.872	32.093	-1.222	-6.632		48.47	0.047	14.643	0.003		3071.33	51.1889	51.7	11.9	40.3	2.782	0.007	0.007	0.000	0.172	0.15	
2382	6/16/2004	12:27:03 PM		26.739	26.728	25.352	28.025	26.935		48.321	52.802	17.15	31.602	-1.219	-6.635		54.529	0.046	14.643	0.004		3072.33	51.2056	51.3	13.4	40.0	2.755	0.007	0.007	0.000	0.170	0.14	
2383	6/16/2004	12:28:03 PM		26.745	26.73	25.363	28.072	26.987		48.491	53.096	16.833	32.099	-1.222	-6.632		48.44	0.046	14.643	0.004		3073.33	51.2222	51.6	11.9	40.3	2.778	0.007	0.007	0.000	0.168	0.14	
2384	6/16/2004	12:29:03 PM		26.759	26.739	25.393	28.121	27.006		48.534	53.243	16.619	32.331	-1.222	-6.638		48.338	0.046	14.643	0.004		3074.33	51.2389	51.8	11.8	40.4	2.788	0.007	0.007	0.000	0.168	0.14	
2385	6/16/2004	12:30:03 PM		26.764	26.744	25.413	28.121	27.036		48.843	53.268	16.692	32.579	-1.219	-6.756		48.157	0.048	14.643	0.004		3075.33	51.2556	51.8	11.8	40.7	2.807	0.007	0.007	0.000	0.174	0.15	
2386	6/16/2004	12:31:03 PM		26.776	26.746	25.414	28.177	27.112		49.274	53.838	16.647	33.033	-1.225	-6.756		62.582	0.047	14.643	0.003		3076.33	51.2722	52.4	15.3	41.2	2.837	0.007	0.007	0.000	0.168	0.14	
2387	6/16/2004	12:32:03 PM		26.806	26.771	25.449	28.297	27.137		49.098	53.722	16.366	33.185	-1.219	-6.756		48.566	0.048	14.643	0.004		3077.33	51.2889	52.2	11.9	41.1	2.837	0.007	0.007	0.000	0.172	0.15	
2388	6/16/2004	12:33:03 PM		26.821	26.771	25.459	28.292	27.097		49.189	53.728	16.375	33.211	-1.216	-6.765		51.498	0.047	14.643	0.004		3078.33	51.3056	52.3	12.6	41.2	2.841	0.007	0.007	0.000	0.168	0.14	
2389	6/16/2004	12:34:03 PM		26.837	26.791	25.445	28.273	27.073		49.198	53.749	16.366	33.287	-1.222	-6.805		43.929	0.044	14.643	0.004		3079.33	51.3222	52.3	10.8	41.2	2.844	0.007	0.006	0.000	0.157	0.13	
2390	6/16/2004	12:35:03 PM		26.864	26.804	25.433	28.28	27.08		49.318	53.885	16.318	33.414	-1.222	-6.774		49.636	0.047	14.643	0.003		3080.33	51.3389	52.4	12.2	41.4	2.852	0.007	0.007	0.000	0.167	0.14	
2391	6/16/2004	12:36:03 PM		26.875	26.815	25.423	28.241	27.061		49.229	53.687	16.208	33.48	-1.219	-6.771		44.575	0.047	14.643	0.004		3081.33	51.3556	52.2	10.9	41.4	2.851	0.007	0.007	0.000	0.167	0.14	
2392	6/16/2004	12:37:03 PM		26.875	26.815	25.398	28.177	27.021		49.387	53.915	16.18	33.698	-1.222	-6.768		48.826	0.048	14.643	0.004		3082.33	51.3722	52.4	12.0	41.5	2.864	0.007	0.007	0.000	0.170	0.14	
2393	6/16/2004	12:38:03 PM		26.875	26.815	25.363	28.102	26.942		49.289	53.898	16.062	33.644	-1.225	-6.771		51.062	0.047	14.643	0.003		3083.33	51.3889	52.4	12.5	41.5	2.859	0.007	0.007	0.000	0.167	0.14	
2394	6/16/2004	12:39:03 PM		26.884	26.819	25.338	28.106	26.976		49.391	53.883	16.129	33.718	-1.222	-6.768		49.27	0.047	14.643	0.004		3084.33	51.4056	52.4	12.1	41.6	2.865	0.007	0.007	0.000	0.167	0.14	
2395	6/16/2004	12:40:03 PM		26.889	26.819	25.328	28.111	26.941		48.939	53.568	16.438	32.92	-1.222	-6.768		51.05	0.046	14.643	0.004		3085.33	51.4222	52.1	12.5	40.9	2.822	0.007	0.007	0.000	0.166	0.14	
2396	6/16/2004	12:41:03 PM		26.883	26.823	25.282	28.07	26.895		48.91	53.303	16.217	33.156	-1.222	-6.765		48.384	0.047	14.643	0.003		3086.33	51.4389	51.8	11.9	41.0	2.829	0.007	0.007	0.000	0.169	0.14	
2397	6/16/2004	12:42:03 PM		26.882	26.826	25.275	28.068	26.864		48.555	53.073	16.744	32.241	-1.222	-6.768		49.919	0.046	14.643	0.004		3087.33	51.4556	51.6	12.2	40.4	2.785	0.007	0.007	0.000	0.168	0.14	
2398	6/16/2004	12:43:03 PM		26.875	26.825	25.253	28.057	26.887		48.874	53.459	16.494	32.807	-1.222	-6.762		55.62	0.047	14.643	0.004		3088.33	51.4722	52.0	13.6	40.8	2.816	0.007	0.007	0.000	0.170	0.14	
2399	6/16/2004	12:44:03 PM		26.88	26.845	25.248	28.082	26.862		48.851	53.322	16.428	32.901	-1.216	-6.759		50.762	0.047	14.643	0.004		3089.33	51.4889	51.8	12.4	40.9	2.818	0.007	0.007	0.000	0.170	0.14	
2400	6/16/2004	12:45:03 PM		26.856	26.826	25.184	28.008	26.848		48.793	53.087	16.361	32.957	-1.225	-6.765		47.224	0.047	14.643	0.004		3090.33	51.5056	51.6	11.6	40.9	2.818	0.007	0.007	0.000	0.171	0.15	
2401	6/16/2004	12:46:03 PM		26.882	26.857	25.206	28.054	26.849		49.104	53.757	16.392	33.144	-1.216	-6.756		50.466	0.047	14.643	0.004		3091.33	51.5222	52.3	12.4	41.1	2.835	0.007	0.007	0.000	0.169	0.14	
2402	6/16/2004	12:47:03 PM		26.859	26.839	25.147	27.996	26.776		48.928	53.349	16.323	33.018	-1.219	-6.759		53.816	0.047	14.643	0.003		3092.33	51.5389	51.9	13.2	41.0	2.825	0.007	0.007	0.000	0.170	0.14	
2403	6/16/2004	12:48:03 PM		26.853	26.842	25.131	27.979	26.725		48.271	52.671	16.998	31.799	-1.222	-6.762		50.466	0.046	14.643	0.004		3093.33	51.5556	51.2	12.4	40.0	2.760	0.007	0.007	0.000	0.171	0.15	
2404	6/16/2004	12:49:03 PM		26.834	26.829	25.112	28.006	26.737		48.841	53.446	16.77	32.479	-1.222	-6.759		53.008	0.046	14.643	0.004		3094.33	51.5722	52.0	13.0	40.7	2.803	0.007	0.007	0.000	0.168	0.14	
2405	6/16/2004	12:50:03 PM		26.814	26.814	25.072	27.991	26.702		48.656	53.146	16.761	32.397	-1.222	-6.762		53.459	0.046	14.643	0.004		3095.33	51.5889	51.7	13.1	40.5	2.794	0.007	0.007	0.000	0.169	0.14	
2406	6/16/2004	12:51:03 PM		26.79	26.8	25.028	27.917	26.683		48.476	52.924	16.649	32.29	-1.222	-6.762		48.966	0.046	14.643	0.003		3096.33	51.6056	51.5	12.0	40.4	2.784	0.007	0.007	0.000	0.170	0.14	
2407	6/16/2004	12:52:03 PM		26.779	26.804	25.022	27.931	26.697		48.71	53.187	16.498	32.643	-1.222	-6.756		52.291	0.046	14.643	0.004		3097.33	51.6222	51.7	12.8	40.7	2.805	0.007	0.007	0.000	0.168	0.14	
2408	6/16/2004	12:53:03 PM		26.779	26.809	25.027	27.966	26.757		48.532	52.94	16.954	32.076	-1.219	-6.753		57.797	0.045	14.643	0.004		3098.33	51.6389	51.5	14.2	40.3	2.779	0.007	0.007	0.000	0.166	0.14	
2409	6/16/2004	12:54:03 PM		26.745	26.79	24.968	27.942	26.807		48.764	53.28	16.693	32.54	-1.222	-6.75		46.807	0.046	14.643	0.004		3099.33	51.6556	51.8	11.5	40.7	2.803	0.007	0.007	0.000	0.169	0.14	
2410	6/16/2004	12:55:03 PM		26.757	26.801	24.985	27.989	26.899		48.769	53.343	16.647	32.581	-1.219	-6.748		50.12	0.046	14.643	0.004		3100.33	51.6722	51.9	12.3	40.7	2.804	0.007	0.007	0.000	0.169	0.14	
2411	6/16/2004	12:56:03 PM		26.748	26.807	24.961	28.024	26.944		48.547	53.164	16.543	32.448	-1.222	-6.75		51.711	0.046	14.643	0.004		3101.33	51.6889	51.7	12.7	40.5	2.792	0.007	0.007	0.000	0.170	0.14	
2412	6/16/2004	12:57:03 PM		26.746	26.821	24.954	28.048	26.968		48.621	53.092	16.573	32.474	-1.222	-6.75		51.023	0.046	14.643	0.004		3102.33	51.7056	51.6	12.5	40.5	2.796	0.007	0.007	0.000	0.169	0.14	
2413	6/16/2004	12:58:03 PM		26.715	26.815	24.928	28.052	27.002		48.628	53.371	16.593	32.427	-1.222	-6.748		49.683	0.046	14.643	0.004		3103.33	51.7222	51.9	12.2	40.5	2.794	0.007	0.007	0.000	0.170	0.14	
2414	6/16/2004	12:59:03 PM		26.703	26.797	24.9	28.004	26.974		49.115	53.629	16.673	32.858	-1.222	-6.75		49.145	0.046	14.643	0.004		3104.33	51.7389	52.2	12.0	41.0	2.826	0.007	0.007	0.000	0.168	0.14	
2415	6/16/2004	1:00:03 PM		26.695	26.81	24.888	28.007	26.907		48.547	52.998	16.61	32.388	-1.202	-6.745		52.445	0.046	14.643	0.004		3105.33	51.7556	51.5	12.9	40.5	2.790	0.007	0.007	0.000	0.170	0.14	
2416	6/16/2004	1:01:03 PM		26.677	26.796	24.849	27.929	26.864		49.003	53.624	16.531	32.862	-1.185	-6.745		47.52	0.046	14.643	0.004		3106.33	51.7722	52.2	11.6	40.9	2.822	0.007	0.007	0.000	0.168	0.14	
2417	6/16/2004	1:02:03 PM		26.681	26.816	24.849	27.918	26.833		48.932	53.564	16.45	32.873	-1.196	-6.742		51.413	0.046	14.643	0.004		3107.33	51.7889	52.1	12.6	40.9	2.820	0.007	0.007	0.000	0.168	0.14	
2418	6/16/2004	1:03:03 PM		26.675	26.819	24.847	27.931	26.786		49.092	53.628	16.636	32.893	-1.159	-6.742		47.612	0.045	14.643	0.003		3108.33	51.8056	52.2	11.7	41.0	2.826	0.007	0.007	0.000	0.164	0.14	
2419	6/16/2004	1:04:03 PM		26.663	26.822	24.835	27.92	26.775		48.596	53.195	16.541	32.472	-1.159	-6.742		50.159	0.046	14.643	0.004		3109.33	51.8222	51.7	12.3	40.5	2.795	0.007	0.007	0.000	0.170	0.14	
2420	6/16/2004	1:05:03 PM		26.661	26.821	24.834	27.963	26.773		48.723	53.429	16.686	32.437	-1.156	-6.739		50.028	0.046	14.643	0.004		3110.33	51.8389	52.0	12.3	40.6	2.798	0.007	0.007	0.000	0.170	0.14	
2421	6/16/2004	1:06:03 PM		26.641	26.816	24.814	27.968	26.843		48.824	53.429	16.586	32.684	-1.156	-6.739		52.998	0.046	14.643	0.004		3111.33	51.8556	52.0	13.0	40.8	2.810	0.007	0.007	0.000	0.169	0.14	
2422	6/16/2004	1:07:03 PM		26.634	26.808	24.816	27.915	26.83		48.661	53.257	16.626	32.419	-1.156	-6.739		46.146	0.045	14.643	0.004		3112.33	51.8722	51.8	11.3	40.5	2.795	0.007	0.007	0.000	0.166	0.14	
2423	6/16/2004	1:08:03 PM		26.611	26.791	24.798	27.908	26.748		49.024	53.572	16.628	32.84	-1.161	-6.736		51.988	0.046	14.643	0.003		3113.33	51.8889	52.1	12.7	40.9	2.822	0.007	0.007	0.000	0.169	0.14	
2424	6/16/2004	1:09:03 PM		26.601	26.791	24.803	27.883	26.708		48.742	53.494	16.552	32.554	-1.159	-6.736		49.22	0.046	14.643	0.003		3114.33	51.9056	52.0	12.1	40.6	2.803	0.007	0.007	0.000	0.170	0.14	
2425	6/16/2004	1:10:03 PM		26.606	26.806	24.818	27.888	26.738		48.912	53.525	16.651	32.692	-1.159	-6.727		44.504	0.047	14.643	0.004		3115.33	51.9222	52.1	10.9	40.8	2.813	0.007	0.007	0.000	0.173	0.15	
2426	6/16/2004	1:11:03 PM		26.586	26.786	24.793	27.863	26.718		48.58	53.108	16.556	32.505	-1.159	-6.733		55.847	0.045	14.643	0.004		3116.33	51.9389	51.6	13.7	40.5	2.795	0.007	0.007	0.000	0.166	0.14	
2427	6/16/2004	1:12:03 PM		26.581	26.781	24.783	27.873	26.723		48.934	53.651	16.63	32.651	-1.159	-6.739		54.469	0.046	14.643	0.004		3117.33	51.9556	52.2	13.3	40.8	2.813	0.007	0.007	0.000	0.169	0.14	
2428	6/16/2004	1:13:03 PM		26.576	26.771	24.768	27.918	26.698		48.862	53.684	16.698	32.501	-1.161	-6.727		52.51	0.045	14.643	0.004		3118.33	51.9722	52.2	12.9	40.7	2.805	0.007	0.007	0.000	0.166	0.14	
2429	6/16/2004	1:14:03 PM		26.563	26.767	24.76	27.954	26.71		48.482	53.048	16.428	32.579	-1.109	-6.733		46.123	0.044	14.643	0.004		3119.33	51.9889	51.6	11.3	40.5	2.794	0.007	0.007	0.000	0.163	0.14	
2430	6/16/2004	1:15:03 PM		26.562	26.761	24.734	27.934	26.694		48.679	53.425	16.572	32.544	-1.104	-6.727		56.721	0.046	14.643	0.004		3120.33	52.0056	52.0	13.9	40.6	2.800	0.007	0.007	0.000	0.170	0.14	
2431	6/16/2004	1:16:03 PM		26.527	26.731	24.699	27.904	26.624		49.077	53.707	16.73	32.793	-1.118	-6.724		48.278	0.046	14.643	0.004		3121.33	52.0222	52.2	11.8	40.9	2.822	0.007	0.007	0.000	0.169	0.14	
2432	6/16/2004	1:17:03 PM		26.545	26.734	24.697	28.051	26.652		48.522	53.179	16.514	32.452	-1.115	-6.722		55.401	0.045	14.643	0.004		3122.33	52.0389	51.7	13.6	40.5	2.791	0.007	0.007	0.000	0.167	0.14	
2433	6/16/2004	1:18:03 PM		26.56	26.744	24.697	28.026	26.771		48.71	53.266	16.593	32.649	-1.098	-6.716		50.097	0.047	14.643	0.004		3123.33	52.0556	51.8	12.3	40.7	2.805	0.007	0.007	0.000	0.174	0.15	
2434	6/16/2004	1:19:03 PM		26.571	26.756	24.698	28.107	26.923		48.584	53.336	16.511	32.505	-1.098	-6.719		50.22	0.046	14.643	0.003		3124.33	52.0722	51.9	12.3	40.5	2.795	0.007	0.007	0.000	0.171	0.15	
2435	6/16/2004	1:20:03 PM		26.563	26.762	24.69	28.129	26.959		48.557	53.146	16.668	32.316	-1.098	-6.716		50.883	0.046	14.643	0.004		3125.33	52.0889	51.7	12.5	40.4	2.788	0.007	0.007	0.000	0.171	0.15	
2436	6/16/2004	1:21:03 PM		26.541	26.75	24.657	28.117	26.972		48.526	53.16	16.66	32.316	-1.101	-6.719		52.449	0.046	14.643	0.004		3126.33	52.1056	51.7	12.9	40.4	2.787	0.007	0.007	0.000	0.171	0.15	
2437	6/16/2004	1:22:03 PM		26.548	26.767	24.665	28.159	27.014		48.565	53.268	16.677	32.29	-1.101	-6.716		51.448	0.045	14.643	0.003		3127.33	52.1222	51.8	12.6	40.4	2.787	0.007	0.007	0.000	0.168	0.14	
2438	6/16/2004	1:23:03 PM		26.566	26.795	24.687	28.221	27.046		48.677	53.286	16.783	32.349	-1.101	-6.716		49.8	0.046	14.643	0.004		3128.33	52.1389	51.8	12.2	40.5	2.793	0.007	0.007	0.000	0.171	0.15	
2439	6/16/2004	1:24:03 PM		26.553	26.797	24.67	28.279	27.114		48.609	53.258	16.64	32.37	-1.054	-6.641		48.772	0.045	14.643	0.004		3129.33	52.1556	51.8	12.0	40.5	2.792	0.007	0.007	0.000	0.167	0.14	
2440	6/16/2004	1:25:03 PM		26.541	26.79	24.632	28.276	27.146		48.557	53.143	16.578	32.433	-1.077	-6.69		43.814	0.044	14.643	0.004		3130.33	52.1722	51.7	10.7	40.5	2.792	0.007	0.007	0.000	0.164	0.14	
2441	6/16/2004	1:26:03 PM		26.56	26.814	24.652	28.345	27.12		48.864	53.67	16.735	32.511	-1.049	-6.684		48.472	0.044	14.643	0.004		3131.33	52.1889	52.2	11.9	40.7	2.805	0.007	0.007	0.000	0.163	0.14	
2442	6/16/2004	1:27:03 PM		26.556	26.82	24.642	28.276	27.056		48.659	53.4	16.676	32.366	-1.075	-6.669		48.599	0.046	14.643	0.004		3132.33	52.2056	51.9	11.9	40.5	2.793	0.007	0.007	0.000	0.171	0.15	
2443	6/16/2004	1:28:03 PM		26.552	26.821	24.638	28.222	26.972		48.769	53.515	16.552	32.676	-1.025	-6.669		47.489	0.045	14.643	0.004		3133.33	52.2222	52.0	11.6	40.7	2.808	0.007	0.007	0.000	0.166	0.14	
2444	6/16/2004	1:29:03 PM		26.553	26.832	24.62	28.194	26.954		48.646	53.398	16.585	32.435	-1.028	-6.672		45.203	0.045	14.643	0.004		3134.33	52.2389	51.9	11.1	40.5	2.795	0.007	0.007	0.000	0.167	0.14	
2445	6/16/2004	1:30:03 PM		26.546	26.835	24.618	28.221	26.957		48.522	53.239	16.575	32.388	-1.031	-6.672		50.049	0.045	14.643	0.004		3135.33	52.2556	51.8	12.3	40.5	2.789	0.007	0.007	0.000	0.168	0.14	
2446	6/16/2004	1:31:03 PM		26.562	26.851	24.639	28.218	26.919		48.812	53.39	16.517	32.76	-1.002	-6.661		51.442	0.046	14.643	0.004		3136.33	52.2722	51.9	12.6	40.8	2.812	0.007	0.007	0.000	0.170	0.14	
2447	6/16/2004	1:32:03 PM		26.542	26.836	24.598	28.088	26.868		48.949	53.653	16.527	32.852	-0.996	-6.669		50.674	0.045	14.643	0.004		3137.33	52.2889	52.2	12.4	40.9	2.820	0.007	0.007	0.000	0.166	0.14	
2448	6/16/2004	1:33:03 PM		26.542	26.846	24.604	28.064	26.844		48.449	53.172	16.582	32.323	-1.002	-6.664		46.48	0.045	14.643	0.004		3138.33	52.3056	51.7	11.4	40.4	2.784	0.007	0.007	0.000	0.168	0.14	
2449	6/16/2004	1:34:03 PM		26.517	26.827	24.569	28.034	26.839		48.814	53.707	16.554	32.682	-0.994	-6.667		53.478	0.044	14.643	0.004		3139.33	52.3222	52.2	13.1	40.7	2.809	0.007	0.007	0.000	0.163	0.14	
2450	6/16/2004	1:35:03 PM		26.518	26.832	24.57	28.014	26.805		48.816	53.581	16.536	32.723	-1.008	-6.658		47.571	0.046	14.643	0.004		3140.33	52.3389	52.1	11.7	40.8	2.811	0.007	0.007	0.000	0.170	0.14	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2451	6/16/2004	1:36:03 PM		26.517	26.836	24.584	28.059	26.794		48.909	53.543	16.524	32.891	-0.996	-6.655		49.84	0.046	14.643	0.004		3141.33	52.3556	52.1	12.2	40.9	2.820	0.007	0.007	0.000	0.170	0.14	
2452	6/16/2004	1:37:03 PM		26.501	26.83	24.577	28.057	26.792		48.733	53.573	16.349	32.795	-0.994	-6.649		51.726	0.046	14.643	0.004		3142.33	52.3722	52.1	12.7	40.8	2.811	0.007	0.007	0.000	0.170	0.14	
2453	6/16/2004	1:38:03 PM		26.501	26.82	24.582	28.017	26.842		49.078	53.761	16.372	33.187	-0.956	-6.661		55.28	0.046	14.643	0.004		3143.33	52.3889	52.3	13.5	41.1	2.836	0.007	0.007	0.000	0.169	0.14	
2454	6/16/2004	1:39:03 PM		26.497	26.836	24.588	28.048	26.818		49.258	54.142	16.351	33.306	-0.939	-6.652		50.057	0.046	14.643	0.004		3144.33	52.4056	52.7	12.3	41.3	2.846	0.007	0.007	0.000	0.168	0.14	
2455	6/16/2004	1:40:03 PM		26.492	26.831	24.578	27.988	26.788		48.557	53.26	16.24	32.749	-0.936	-6.649		50.055	0.045	14.643	0.004		3145.33	52.4222	51.8	12.3	40.7	2.803	0.007	0.007	0.000	0.167	0.14	
2456	6/16/2004	1:41:03 PM		26.472	26.826	24.563	27.953	26.768		47.738	52.381	17.229	30.98	-0.941	-6.658		53.148	0.045	14.643	0.004		3146.33	52.4389	50.9	13.0	39.4	2.714	0.007	0.007	0.000	0.173	0.15	
2457	6/16/2004	1:42:03 PM		26.481	26.825	24.577	27.987	26.737		48.372	53.22	16.696	32.134	-0.939	-6.658		54.615	0.044	14.643	0.004		3147.33	52.4556	51.7	13.4	40.3	2.775	0.007	0.007	0.000	0.165	0.14	
2458	6/16/2004	1:43:03 PM		26.466	26.81	24.562	27.972	26.757		48.387	53.201	16.93	31.865	-0.939	-6.655		44.571	0.045	14.643	0.004		3148.33	52.4722	51.7	10.9	40.1	2.767	0.007	0.007	0.000	0.169	0.14	
2459	6/16/2004	1:44:03 PM		26.481	26.82	24.567	28.057	26.762		48.377	53.189	16.792	32.019	-0.939	-6.652		62.668	0.044	14.643	0.004		3149.33	52.4889	51.7	15.4	40.2	2.772	0.007	0.007	0.000	0.165	0.14	
2460	6/16/2004	1:45:03 PM		26.471	26.82	24.562	28.027	26.772		48.119	52.884	16.621	31.949	-0.933	-6.652		49.815	0.044	14.643	0.004		3150.33	52.5056	51.4	12.2	40.0	2.760	0.007	0.007	0.000	0.166	0.14	
2461	6/16/2004	1:46:03 PM		26.464	26.793	24.526	27.98	26.701		48.348	53.061	16.63	32.167	-0.941	-6.652		44.575	0.045	14.643	0.003		3151.33	52.5222	51.6	10.9	40.3	2.776	0.007	0.007	0.000	0.169	0.14	
2462	6/16/2004	1:47:03 PM		26.463	26.801	24.529	27.934	26.679		48.24	52.932	16.636	32.029	-0.939	-6.652		51.408	0.044	14.643	0.004		3152.33	52.5389	51.5	12.6	40.1	2.767	0.007	0.007	0.000	0.166	0.14	
2463	6/16/2004	1:48:03 PM		26.457	26.791	24.523	27.998	26.713		48.188	53.158	16.666	31.91	-0.901	-6.646		49.784	0.045	14.643	0.004		3153.33	52.5556	51.7	12.2	40.0	2.761	0.007	0.007	0.000	0.170	0.14	
2464	6/16/2004	1:49:03 PM		26.46	26.789	24.521	28.006	26.746		48.592	53.334	16.494	32.55	-0.936	-6.643		49.327	0.045	14.643	0.004		3154.33	52.5722	51.9	12.1	40.6	2.797	0.007	0.007	0.000	0.168	0.14	
2465	6/16/2004	1:50:03 PM		26.447	26.781	24.494	27.979	26.704		48.468	53.68	16.62	32.218	-0.75	-6.271		52.28	0.033	14.643	0.003		3155.33	52.5889	52.2	12.8	40.3	2.782	0.005	0.005	0.000	0.124	0.11	
2466	6/16/2004	1:51:03 PM		26.462	26.771	24.489	28.009	26.704		48.576	53.902	16.547	32.45	-0.655	-6.175		50.747	0.044	14.643	0.003		3156.33	52.6056	52.4	12.4	40.5	2.793	0.007	0.007	0.000	0.164	0.14	
2467	6/16/2004	1:52:03 PM		26.478	26.792	24.515	28.019	26.71		48.292	53.519	16.536	32.148	-0.652	-6.166		50.747	0.044	14.643	0.003		3157.33	52.6222	52.0	12.4	40.2	2.773	0.007	0.007	0.000	0.165	0.14	
2468	6/16/2004	1:53:03 PM		26.483	26.797	24.535	28.294	26.83		48.314	53.477	16.557	32.212	-0.649	-6.164		49.014	0.045	14.643	0.004		3158.33	52.6389	52.0	12.0	40.3	2.776	0.007	0.007	0.000	0.169	0.14	
2469	6/16/2004	1:54:03 PM		26.459	26.778	24.495	28.479	26.94		48.323	53.206	16.426	32.351	-0.855	-6.513		53.903	0.044	14.643	0.003		3159.33	52.6556	51.7	13.2	40.3	2.781	0.007	0.007	0.000	0.165	0.14	
2470	6/16/2004	1:55:03 PM		26.452	26.771	24.474	28.587	27.008		48.449	53.606	16.471	32.438	-0.71	-6.227		54.21	0.036	14.643	0.004		3160.33	52.6722	52.1	13.3	40.4	2.788	0.005	0.005	0.000	0.135	0.11	
2471	6/16/2004	1:56:03 PM		26.461	26.785	24.467	28.501	27.016		48.242	53.388	16.36	32.304	-0.71	-6.227		50.968	0.045	14.643	0.004		3161.33	52.6889	51.9	12.5	40.3	2.777	0.007	0.007	0.000	0.169	0.14	
2472	6/16/2004	1:57:03 PM		26.494	26.813	24.51	28.359	27.005		48.698	53.714	16.428	32.688	-0.71	-6.221		58.221	0.045	14.643	0.004		3162.33	52.7056	52.2	14.3	40.7	2.806	0.007	0.007	0.000	0.167	0.14	
2473	6/16/2004	1:58:03 PM		26.492	26.831	24.513	28.327	26.923		48.553	53.289	16.39	32.706	-0.71	-6.233		52.549	0.045	14.643	0.003		3163.33	52.7222	51.8	12.9	40.6	2.801	0.007	0.007	0.000	0.167	0.14	
2474	6/16/2004	1:59:03 PM		26.483	26.822	24.5	28.184	26.834		48.864	53.324	16.552	32.766	-1.104	-7.152		49.834	0.046	14.643	0.004		3164.33	52.7389	51.9	12.2	40.8	2.814	0.007	0.007	0.000	0.170	0.15	
2475	6/16/2004	2:00:03 PM		26.474	26.828	24.495	28.035	26.751		49.134	53.714	16.582	32.928	-1.101	-7.109		53.428	0.045	14.643	0.004		3165.33	52.7556	52.2	13.1	41.0	2.829	0.007	0.007	0.000	0.166	0.14	
2476	6/16/2004	2:01:03 PM		26.465	26.819	24.481	28.021	26.776		48.741	53.494	16.459	32.712	-1.159	-7.248		48.684	0.046	14.643	0.003		3166.33	52.7722	52.0	11.9	40.7	2.808	0.007	0.007	0.000	0.171	0.15	
2477	6/16/2004	2:02:03 PM		26.456	26.815	24.477	27.987	26.752		48.959	53.564	16.544	32.807	-1.156	-7.265		56.296	0.046	14.643	0.004		3167.33	52.7889	52.1	13.8	40.9	2.819	0.007	0.007	0.000	0.170	0.14	
2478	6/16/2004	2:03:03 PM		26.457	26.821	24.474	27.969	26.719		49.125	53.653	16.509	33.027	-1.159	-7.253		45.222	0.051	14.643	0.004		3168.33	52.8056	52.2	11.1	41.1	2.832	0.008	0.008	0.000	0.188	0.16	
2479	6/16/2004	2:04:03 PM		26.438	26.806	24.464	27.914	26.664		48.928	53.734	16.5	32.823	-1.144	-7.274		50.245	0.045	14.643	0.003		3169.33	52.8222	52.3	12.3	40.9	2.818	0.007	0.007	0.000	0.167	0.14	
2480	6/16/2004	2:05:03 PM		26.418	26.806	24.454	27.884	26.674		48.744	53.456	16.378	32.813	-1.153	-7.274		48.624	0.043	14.643	0.004		3170.33	52.8389	52.0	11.9	40.8	2.812	0.006	0.007	0.000	0.160	0.14	
2481	6/16/2004	2:06:03 PM		26.408	26.801	24.449	27.884	26.704		48.953	53.459	16.46	32.94	-1.156	-7.285		50.011	0.044	14.643	0.004		3171.33	52.8556	52.0	12.3	40.9	2.823	0.007	0.007	0.000	0.163	0.14	
2482	6/16/2004	2:07:03 PM		26.414	26.808	24.465	27.915	26.756		48.853	53.504	16.456	32.838	-1.101	-7.199		49.89	0.044	14.643	0.004		3172.33	52.8722	52.0	12.2	40.8	2.816	0.007	0.007	0.000	0.163	0.14	
2483	6/16/2004	2:08:03 PM		26.408	26.807	24.465	27.989	26.84		49.065	53.651	16.404	33.158	-1.098	-7.219		51.083	0.045	14.643	0.004		3173.33	52.8889	52.2	12.5	41.1	2.834	0.007	0.007	0.000	0.166	0.14	
2484	6/16/2004	2:09:03 PM		26.383	26.791	24.429	28.024	26.894		49.343	53.912	16.454	33.39	-1.106	-7.225		48.645	0.046	14.643	0.003		3174.33	52.9056	52.4	11.9	41.4	2.852	0.007	0.007	0.000	0.168	0.14	
2485	6/16/2004	2:10:03 PM		26.398	26.802	24.455	28.099	26.939		49.042	53.815	16.477	32.975	-1.101	-7.207		49.294	0.047	14.643	0.004		3175.33	52.9222	52.3	12.1	41.0	2.827	0.007	0.007	0.000	0.174	0.15	
2486	6/16/2004	2:11:03 PM		26.394	26.808	24.445	28.13	26.97		49.131	53.971	16.442	33.102	-1.101	-7.216		49.619	0.044	14.643	0.004		3176.33	52.9389	52.5	12.2	41.1	2.835	0.007	0.007	0.000	0.162	0.14	
2487	6/16/2004	2:12:03 PM		26.389	26.808	24.435	28.15	26.995		48.986	53.792	16.365	33.137	-1.098	-7.213		54.191	0.046	14.643	0.004		3177.33	52.9556	52.3	13.3	41.1	2.831	0.007	0.007	0.000	0.170	0.14	
2488	6/16/2004	2:13:03 PM		26.405	26.824	24.446	28.245	26.981		49.011	53.583	16.519	32.981	-1.101	-7.213		55.048	0.045	14.643	0.004		3178.33	52.9722	52.1	13.5	41.0	2.827	0.007	0.007	0.000	0.166	0.14	
2489	6/16/2004	2:14:03 PM		26.42	26.839	24.486	28.201	27.021		49.277	53.975	16.554	33.182	-1.101	-7.216		48.488	0.045	14.643	0.004		3179.33	52.9889	52.5	11.9	41.2	2.843	0.007	0.007	0.000	0.165	0.14	
2490	6/16/2004	2:15:03 PM		26.416	26.835	24.487	28.226	27.007		49.077	53.776	16.463	33.133	-1.098	-7.21		52.94	0.046	14.643	0.004		3180.33	53.0056	52.3	13.0	41.1	2.834	0.007	0.007	0.000	0.169	0.14	
2491	6/16/2004	2:16:03 PM		26.432	26.861	24.513	28.247	26.953		49.021	53.805	16.532	32.955	-1.095	-7.222		53.19	0.046	14.643	0.004		3181.33	53.0222	52.3	13.0	41.0	2.826	0.007	0.007	0.000	0.170	0.14	
2492	6/16/2004	2:17:03 PM		26.412	26.851	24.483	28.197	26.928		48.727	53.517	16.346	32.758	-1.104	-7.21		48.707	0.047	14.643	0.004		3182.33	53.0389	52.0	11.9	40.7	2.809	0.007	0.007	0.000	0.175	0.15	
2493	6/16/2004	2:18:03 PM		26.403	26.846	24.464	28.183	26.899		48.652	53.398	16.414	32.653	-1.098	-7.225		49.058	0.044	14.643	0.004		3183.33	53.0556	51.9	12.0	40.7	2.803	0.007	0.007	0.000	0.164	0.14	
2494	6/16/2004	2:19:03 PM		26.413	26.857	24.46	28.144	26.874		48.659	53.257	16.368	32.776	-1.101	-7.236		53.148	0.041	14.643	0.004		3184.33	53.0722	51.8	13.0	40.7	2.807	0.006	0.006	0.000	0.152	0.13	
2495	6/16/2004	2:20:03 PM		26.425	26.869	24.476	28.121	26.836		48.887	53.693	16.407	32.889	-1.077	-7.21		47.001	0.044	14.643	0.004		3185.33	53.0889	52.2	11.5	40.9	2.819	0.007	0.007	0.000	0.163	0.14	
2496	6/16/2004	2:21:03 PM		26.43	26.879	24.476	28.076	26.816		48.903	53.539	16.515	32.866	-1.086	-7.219		41.672	0.045	14.643	0.004		3186.33	53.1056	52.1	10.2	40.9	2.819	0.007	0.007	0.000	0.167	0.14	
2497	6/16/2004	2:22:03 PM		26.424	26.883	24.466	28.08	26.83		48.835	53.459	16.44	32.852	-1.025	-7.199		51.947	0.048	14.643	0.004		3187.33	53.1222	52.0	12.7	40.8	2.816	0.007	0.007	0.000	0.178	0.15	
2498	6/16/2004	2:22:46 PM		26.404	26.858	24.43	28.065	26.825		48.681	53.343	16.406	32.725	-1.037	-7.17		41.542	0.04	14.643	0.004		3188.05	53.1342	51.9	10.2	40.7	2.806	0.006	0.006	0.000	0.149	0.13	
2499	6/16/2004	2:23:46 PM		26.409	26.858	24.425	28.09	26.825		48.634	53.425	16.401	32.739	-1.002	-7.123		47.835	0.045	14.643	0.004		3189.05	53.1508	52.0	11.7	40.7	2.805	0.007	0.007	0.000	0.168	0.14	
2500	6/16/2004	2:24:46 PM		26.398	26.847	24.415	28.104	26.825		48.943	53.883	16.489	32.848	-1.022	-7.17		52.301	0.045	14.643	0.004		3190.05	53.1675	52.4	12.8	40.9	2.820	0.007	0.007	0.000	0.167	0.14	
2501	6/16/2004	2:25:46 PM		26.398	26.862	24.415	28.069	26.81		48.939	53.72	16.52	32.838	-0.991	-7.092		51.375	0.045	14.643	0.004		3191.05	53.1842	52.2	12.6	40.9	2.819	0.007	0.007	0.000	0.167	0.14	
2502	6/16/2004	2:26:46 PM		26.398	26.856	24.424	28.009	26.799		48.632	53.38	16.361	32.743	-0.996	-7.149		50.937	0.044	14.643	0.004		3192.05	53.2008	51.9	12.5	40.7	2.805	0.007	0.007	0.000	0.164	0.14	
2503	6/16/2004	2:27:46 PM		26.388	26.856	24.424	27.974	26.739		48.057	52.785	17.192	31.266	-1.011	-7.155		49.039	0.044	14.643	0.004		3193.05	53.2175	51.3	12.0	39.7	2.735	0.007	0.007	0.000	0.168	0.14	
2504	6/16/2004	2:28:46 PM		26.388	26.856	24.429	27.969	26.729		47.676	52.433	16.93	31.251	-1.005	-7.155		49.973	0.044	14.643	0.004		3194.05	53.2342	51.0	12.2	39.5	2.721	0.007	0.007	0.000	0.169	0.14	
2505	6/16/2004	2:29:46 PM		26.368	26.831	24.404	27.939	26.719		48.111	52.973	17.046	31.45	-1.002	-7.164		49.024	0.043	14.643	0.004		3195.05	53.2508	51.5	12.0	39.8	2.743	0.006	0.007	0.000	0.164	0.14	
2506	6/16/2004	2:30:46 PM		26.388	26.856	24.444	27.959	26.749		48.545	53.33	17.086	31.914	-0.996	-7.155		47.18	0.044	14.643	0.004		3196.05	53.2675	51.9	11.6	40.2	2.774	0.007	0.007	0.000	0.166	0.14	
2507	6/16/2004	2:31:46 PM		26.363	26.816	24.414	27.994	26.784		48.159	52.791	16.967	31.695	-0.994	-7.152		49.337	0.044	14.643	0.004		3197.05	53.2842	51.3	12.1	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
2508	6/16/2004	2:32:46 PM		26.363	26.826	24.424	28.068	26.739		48.09	52.702	16.946	31.602	-0.959	-7.155		54.7	0.044	14.643	0.004		3198.05	53.3008	51.2	13.4	39.8	2.747	0.007	0.007	0.000	0.167	0.14	
2509	6/16/2004	2:33:46 PM		26.368	26.827	24.424	28.114	26.78		48.399	53.148	17.001	31.826	-0.979	-7.149		45.741	0.045	14.643	0.004		3199.05	53.3175	51.7	11.2	40.1	2.766	0.007	0.007	0.000	0.170	0.14	
2510	6/16/2004	2:34:46 PM		26.393	26.847	24.444	28.029	26.8		47.964	52.806	16.928	31.452	-0.996	-7.135		49.825	0.047	14.643	0.004		3200.05	53.3342	51.3	12.2	39.7	2.738	0.007	0.007	0.000	0.179	0.15	
2511	6/16/2004	2:35:46 PM		26.383	26.837	24.444	28.074	26.8		48.119	53.048	16.937	31.52	-0.973	-7.054		52.157	0.039	14.643	0.004		3201.05	53.3508	51.6	12.8	39.8	2.745	0.006	0.006	0.000	0.148	0.13	
2512	6/16/2004	2:36:46 PM		26.395	26.844	24.456	28.146	26.766		48.103	53.144	17.095	31.383	-0.886	-6.907		44.688	0.044	14.643	0.004		3202.05	53.3675	51.7	11.0	39.7	2.740	0.007	0.007	0.000	0.168	0.14	
2513	6/16/2004	2:37:46 PM		26.398	26.841	24.454	28.123	26.809		48.391	53.22	17.12	31.678	-0.921	-6.956		48.958	0.043	14.643	0.004		3203.05	53.3842	51.7	12.0	40.0	2.760	0.006	0.007	0.000	0.163	0.14	
2514	6/16/2004	2:38:46 PM		26.4	26.839	24.456	28.201	26.836		48.269	53.228	17.081	31.627	-0.889	-6.947		49.268	0.045	14.643	0.004		3204.05	53.4008	51.8	12.1	39.9	2.754	0.007	0.007	0.000	0.171	0.15	
2515	6/16/2004	2:39:46 PM		26.408	26.851	24.474	28.193	26.804		48.3	53.013	16.993	31.793	-0.884	-6.953		47.836	0.043	14.643	0.004		3205.05	53.4175	51.5	11.7	40.0	2.761	0.006	0.007	0.000	0.162	0.14	
2516	6/16/2004	2:40:46 PM		26.393	26.837	24.46	28.159	26.849		48.233	52.965	16.983	31.74	-0.884	-6.944		50.015	0.044	14.643	0.004		3206.05	53.4342	51.5	12.3	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2517	6/16/2004	2:41:46 PM		26.388	26.827	24.46	28.229	26.869		48.161	53.025	17.074	31.535	-0.886	-6.938		52.193	0.045	14.643	0.004		3207.05	53.4508	51.6	12.8	39.8	2.747	0.007	0.007	0.000	0.171	0.15	
2518	6/16/2004	2:42:46 PM		26.405	26.839	24.471	28.285	26.876		48.329	53.191	17.047	31.717	-0.886	-6.935		52.673	0.043	14.643	0.003		3208.05	53.4675	51.7	12.9	40.0	2.759	0.006	0.007	0.000	0.163	0.14	
2519	6/16/2004	2:43:46 PM		26.396	26.835	24.462	28.251	26.887		48.119	53.088	17.069	31.366	-0.886	-6.941		49.725	0.043	14.643	0.004		3209.05	53.4842	51.6	12.2	39.7	2.740	0.006	0.007	0.000	0.164	0.14	
2520	6/16/2004	2:44:46 PM		26.393	26.821	24.444	28.218	26.879		48.447	53.355	17.125	31.723	-0.889	-6.944		48.743	0.044	14.643	0.004		3210.05	53.5008	51.9	11.9	40.1	2.764	0.007	0.007	0.000	0.166	0.14	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2521	6/16/2004	2:45:46 PM		26.409	26.833	24.476	28.2	26.855		48.248	53.239	16.986	31.697	-0.855	-6.944		48.989	0.043	14.643	0.004		3211.05	53.5175	51.8	12.0	40.0	2.756	0.006	0.007	0.000	0.163	0.14	
2522	6/16/2004	2:46:46 PM		26.409	26.838	24.476	28.175	26.83		48.341	53.175	17.017	31.805	-0.869	-6.938		49.483	0.045	14.643	0.004		3212.05	53.5342	51.7	12.1	40.1	2.763	0.007	0.007	0.000	0.170	0.14	
2523	6/16/2004	2:47:46 PM		26.421	26.84	24.477	28.177	26.817		48.298	53.367	16.917	31.746	-0.834	-6.941		51.258	0.043	14.643	0.004		3213.05	53.5508	51.9	12.6	40.0	2.759	0.006	0.007	0.000	0.163	0.14	
2524	6/16/2004	2:48:46 PM		26.422	26.841	24.478	28.227	26.868		48.287	53.189	17.026	31.693	-0.823	-6.944		54.166	0.043	14.643	0.004		3214.05	53.5675	51.7	13.3	40.0	2.757	0.006	0.007	0.000	0.163	0.14	
2525	6/16/2004	2:49:46 PM		26.423	26.836	24.484	28.273	26.894		48.233	53.106	16.842	31.826	-0.86	-6.947		52.31	0.041	14.643	0.004		3215.05	53.5842	51.6	12.8	40.0	2.760	0.006	0.006	0.000	0.155	0.13	
2526	6/16/2004	2:50:46 PM		26.429	26.843	24.491	28.3	26.92		48.194	52.982	16.934	31.727	-0.823	-6.918		51.728	0.045	14.643	0.003		3216.05	53.6008	51.5	12.7	40.0	2.755	0.007	0.007	0.000	0.170	0.14	
2527	6/16/2004	2:51:46 PM		26.43	26.839	24.537	28.236	26.896		48.032	52.822	16.865	31.625	-0.82	-6.924		49.083	0.044	14.643	0.004		3217.05	53.6175	51.3	12.0	39.8	2.746	0.007	0.007	0.000	0.167	0.14	
2528	6/16/2004	2:52:46 PM		26.436	26.855	24.542	28.241	26.872		48.399	53.434	16.922	31.855	-0.82	-6.918		47.545	0.044	14.643	0.004		3218.05	53.6342	52.0	11.7	40.1	2.767	0.007	0.007	0.000	0.166	0.14	
2529	6/16/2004	2:53:46 PM		26.447	26.856	24.553	28.242	26.838		48.08	52.93	16.84	31.725	-0.82	-6.927		50.437	0.043	14.643	0.004		3219.05	53.6508	51.5	12.4	39.9	2.751	0.006	0.006	0.000	0.163	0.14	
2530	6/16/2004	2:54:46 PM		26.442	26.841	24.538	28.207	26.843		48.408	53.556	16.799	32.035	-0.817	-6.918		47.537	0.045	14.643	0.004		3220.05	53.6675	52.1	11.6	40.2	2.773	0.007	0.007	0.000	0.169	0.14	
2531	6/16/2004	2:55:46 PM		26.447	26.841	24.528	28.207	26.843		48.632	53.502	16.834	32.165	-0.823	-6.915		53.59	0.046	14.643	0.003		3221.05	53.6842	52.0	13.1	40.4	2.785	0.007	0.007	0.000	0.172	0.15	
2532	6/16/2004	2:56:46 PM		26.478	26.862	24.554	28.213	26.839		48.391	53.374	16.729	32.095	-0.817	-6.907		56.972	0.045	14.643	0.004		3222.05	53.7008	51.9	14.0	40.2	2.775	0.007	0.007	0.000	0.169	0.14	
2533	6/16/2004	2:57:46 PM		26.473	26.852	24.524	28.263	26.859		48.414	53.164	16.73	32.177	-0.808	-6.93		48.161	0.041	14.643	0.004		3223.05	53.7175	51.7	11.8	40.3	2.778	0.006	0.006	0.000	0.154	0.13	
2534	6/16/2004	2:58:46 PM		26.483	26.852	24.52	28.284	26.89		48.028	52.967	16.645	31.916	-0.782	-6.912		49.771	0.046	14.643	0.004		3224.05	53.7342	51.5	12.2	40.0	2.756	0.007	0.007	0.000	0.174	0.15	
2535	6/16/2004	2:59:46 PM		26.485	26.849	24.512	28.231	26.896		48.443	53.544	16.87	31.927	-0.817	-6.924		51.238	0.044	14.643	0.003		3225.05	53.7508	52.1	12.6	40.2	2.771	0.007	0.007	0.000	0.166	0.14	
2536	6/16/2004	3:00:46 PM		26.482	26.846	24.488	28.252	26.893		48.206	53.253	16.844	31.787	-0.779	-6.907		58.653	0.045	14.643	0.004		3226.05	53.7675	51.8	14.4	40.0	2.758	0.007	0.007	0.000	0.170	0.14	
2537	6/16/2004	3:01:46 PM		26.494	26.853	24.511	28.26	26.975		48.03	53.065	16.685	31.768	-0.773	-6.912		48.833	0.044	14.643	0.003		3227.05	53.7842	51.6	12.0	39.9	2.751	0.007	0.007	0.000	0.167	0.14	
2538	6/16/2004	3:02:46 PM		26.494	26.873	24.505	28.284	27.004		48.424	53.305	16.714	32.191	-0.773	-6.912		53.515	0.044	14.643	0.004		3228.05	53.8008	51.8	13.1	40.3	2.779	0.007	0.007	0.000	0.165	0.14	
2539	6/16/2004	3:03:46 PM		26.506	26.88	24.508	28.297	26.952		48.072	53.166	16.644	31.818	-0.773	-6.904		57.954	0.044	14.643	0.004		3229.05	53.8175	51.7	14.2	39.9	2.754	0.007	0.007	0.000	0.167	0.14	
2540	6/16/2004	3:04:46 PM		26.492	26.866	24.489	28.248	26.923		48.445	53.481	16.728	32.076	-0.773	-6.907		52.527	0.044	14.643	0.003		3230.05	53.8342	52.0	12.9	40.3	2.776	0.007	0.007	0.000	0.165	0.14	
2541	6/16/2004	3:05:46 PM		26.498	26.872	24.499	28.243	26.874		48.518	53.498	16.664	32.31	-0.773	-6.904		53.962	0.043	14.643	0.004		3231.05	53.8508	52.0	13.2	40.4	2.786	0.006	0.007	0.000	0.161	0.14	
2542	6/16/2004	3:06:46 PM		26.487	26.866	24.479	28.208	26.868		48.404	53.32	16.585	32.236	-0.773	-6.915		55.307	0.044	14.643	0.003		3232.05	53.8675	51.8	13.6	40.3	2.780	0.007	0.007	0.000	0.165	0.14	
2543	6/16/2004	3:07:46 PM		26.47	26.849	24.462	28.191	26.847		48.632	53.79	16.525	32.555	-0.773	-6.904		41.269	0.044	14.643	0.004		3233.05	53.8842	52.3	10.1	40.6	2.799	0.007	0.007	0.000	0.164	0.14	
2544	6/16/2004	3:08:46 PM		26.469	26.853	24.45	28.179	26.855		48.323	53.26	16.545	32.171	-0.776	-6.912		49.379	0.043	14.643	0.003		3234.05	53.9008	51.8	12.1	40.2	2.775	0.006	0.007	0.000	0.162	0.14	
2545	6/16/2004	3:09:46 PM		26.474	26.873	24.475	28.169	26.825		48.459	53.272	16.544	32.446	-0.724	-6.907		45.668	0.043	14.643	0.004		3235.05	53.9175	51.8	11.2	40.5	2.789	0.006	0.007	0.000	0.161	0.14	
2546	6/16/2004	3:10:46 PM		26.447	26.851	24.438	28.108	26.823		48.35	53.394	16.53	32.288	-0.721	-6.904		50.111	0.044	14.643	0.003		3236.05	53.9342	51.9	12.3	40.3	2.780	0.007	0.007	0.000	0.165	0.14	
2547	6/16/2004	3:11:46 PM		26.457	26.866	24.463	28.128	26.793		48.715	53.722	16.528	32.665	-0.745	-6.895		51.286	0.045	14.643	0.004		3237.05	53.9508	52.2	12.6	40.7	2.805	0.007	0.007	0.000	0.167	0.14	
2548	6/16/2004	3:12:46 PM		26.46	26.869	24.467	28.136	26.792		48.223	53.311	16.606	32.087	-0.724	-6.875		48.476	0.051	14.643	0.004		3238.05	53.9675	51.8	11.9	40.2	2.769	0.008	0.008	0.000	0.192	0.16	
2549	6/16/2004	3:13:46 PM		26.46	26.874	24.467	28.161	26.812		48.267	53.392	16.46	32.238	-0.704	-6.805		51.676	0.043	14.643	0.004		3239.05	53.9842	51.9	12.7	40.3	2.775	0.006	0.007	0.000	0.162	0.14	
2550	6/16/2004	3:14:46 PM		26.451	26.855	24.437	28.157	26.877		48.289	53.253	16.534	32.142	-0.71	-6.817		53.371	0.043	14.643	0.004		3240.05	54.0008	51.8	13.1	40.2	2.773	0.006	0.007	0.000	0.162	0.14	
2551	6/16/2004	3:15:46 PM		26.462	26.866	24.463	28.198	26.893		48.578	53.575	16.598	32.438	-0.704	-6.817		49.083	0.045	14.643	0.004		3241.05	54.0175	52.1	12.0	40.5	2.793	0.007	0.007	0.000	0.168	0.14	
2552	6/16/2004	3:16:46 PM		26.469	26.888	24.475	28.204	26.9		48.418	53.324	16.534	32.396	-0.707	-6.823		52.885	0.044	14.643	0.004		3242.05	54.0342	51.9	13.0	40.4	2.786	0.007	0.007	0.000	0.165	0.14	
2553	6/16/2004	3:17:46 PM		26.454	26.878	24.47	28.204	26.875		48.441	53.475	16.568	32.327	-0.707	-6.82		51.104	0.044	14.643	0.004		3243.05	54.0508	52.0	12.5	40.4	2.784	0.007	0.007	0.000	0.165	0.14	
2554	6/16/2004	3:18:46 PM		26.44	26.868	24.446	28.16	26.851		48.789	53.902	16.683	32.499	-0.71	-6.849		44.671	0.044	14.643	0.004		3244.05	54.0675	52.4	10.9	40.6	2.802	0.007	0.007	0.000	0.164	0.14	
2555	6/16/2004	3:19:46 PM		26.44	26.878	24.461	28.135	26.841		48.271	53.338	16.559	32.169	-0.681	-6.785		49.788	0.044	14.643	0.004		3245.05	54.0842	51.9	12.2	40.2	2.773	0.007	0.007	0.000	0.166	0.14	
2556	6/16/2004	3:20:46 PM		26.429	26.868	24.45	28.13	26.825		48.464	53.635	16.677	32.189	-0.666	-6.782		57.462	0.043	14.643	0.004		3246.05	54.1008	52.2	14.1	40.3	2.780	0.006	0.007	0.000	0.161	0.14	
2557	6/16/2004	3:21:46 PM		26.445	26.878	24.466	28.185	26.831		48.721	53.854	16.61	32.538	-0.669	-6.776		49.369	0.045	14.643	0.004		3247.05	54.1175	52.4	12.1	40.6	2.801	0.007	0.007	0.000	0.168	0.14	
2558	6/16/2004	3:22:46 PM		26.433	26.867	24.449	28.213	26.859		48.553	53.738	16.657	32.31	-0.655	-6.776		47.262	0.046	14.643	0.003		3248.05	54.1342	52.3	11.6	40.4	2.788	0.007	0.007	0.000	0.172	0.15	
2559	6/16/2004	3:23:46 PM		26.448	26.872	24.459	28.278	26.859		48.451	53.521	16.582	32.282	-0.649	-6.768		46.384	0.043	14.643	0.004		3249.05	54.1508	52.0	11.4	40.4	2.783	0.006	0.007	0.000	0.161	0.14	
2560	6/16/2004	3:24:46 PM		26.463	26.882	24.474	28.303	26.879		48.283	53.434	16.651	32.035	-0.646	-6.759		52.437	0.045	14.643	0.004		3250.05	54.1675	52.0	12.9	40.2	2.769	0.007	0.007	0.000	0.170	0.14	
2561	6/16/2004	3:25:46 PM		26.453	26.872	24.454	28.248	26.859		48.488	53.512	16.599	32.351	-0.652	-6.762		49.458	0.045	14.643	0.004		3251.05	54.1842	52.0	12.1	40.4	2.787	0.007	0.007	0.000	0.169	0.14	
2562	6/16/2004	3:26:46 PM		26.463	26.887	24.459	28.253	26.879		48.339	53.417	16.638	32.195	-0.652	-6.771		54.314	0.045	14.643	0.004		3252.05	54.2008	51.9	13.3	40.3	2.776	0.007	0.007	0.000	0.169	0.14	
2563	6/16/2004	3:27:46 PM		26.453	26.882	24.459	28.238	26.879		48.42	53.573	16.612	32.228	-0.655	-6.782		50.044	0.043	14.643	0.003		3253.05	54.2175	52.1	12.3	40.3	2.780	0.006	0.007	0.000	0.161	0.14	
2564	6/16/2004	3:28:46 PM		26.459	26.893	24.465	28.194	26.885		48.387	53.742	16.644	32.177	-0.652	-6.759		48.445	0.045	14.643	0.004		3254.05	54.2342	52.3	11.9	40.3	2.777	0.007	0.007	0.000	0.169	0.14	
2565	6/16/2004	3:29:46 PM		26.454	26.893	24.47	28.164	26.885		48.15	53.328	16.627	32.005	-0.649	-6.765		49.617	0.044	14.643	0.004		3255.05	54.2508	51.9	12.2	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
2566	6/16/2004	3:30:46 PM		26.459	26.888	24.515	28.169	26.855		48.343	53.498	16.565	32.169	-0.649	-6.774		53.265	0.044	14.643	0.004		3256.05	54.2675	52.0	13.1	40.3	2.776	0.007	0.007	0.000	0.165	0.14	
2567	6/16/2004	3:31:46 PM		26.463	26.877	24.509	28.149	26.799		48.652	53.869	16.593	32.495	-0.635	-6.774		49.98	0.043	14.643	0.004		3257.05	54.2842	52.4	12.2	40.6	2.797	0.006	0.007	0.000	0.160	0.14	
2568	6/16/2004	3:32:46 PM		26.452	26.871	24.493	28.068	26.833		48.318	53.494	16.599	32.122	-0.585	-6.768		48.97	0.044	14.643	0.004		3258.05	54.3008	52.0	12.0	40.2	2.773	0.007	0.007	0.000	0.165	0.14	
2569	6/16/2004	3:33:46 PM		26.467	26.881	24.524	28.138	26.793		48.308	53.332	16.627	32.179	-0.614	-6.774		46.365	0.042	14.643	0.004		3259.05	54.3175	51.9	11.4	40.2	2.775	0.006	0.006	0.000	0.158	0.13	
2570	6/16/2004	3:34:46 PM		26.458	26.887	24.509	28.119	26.794		48.171	53.241	16.52	32.15	-0.652	-6.736		55.77	0.046	14.643	0.004		3260.05	54.3342	51.8	13.7	40.2	2.769	0.007	0.007	0.000	0.173	0.15	
2571	6/16/2004	3:35:46 PM		26.468	26.887	24.504	28.149	26.799		47.922	53.185	16.445	31.951	-0.47	-6.401		49.158	0.043	14.643	0.004		3261.05	54.3508	51.7	12.0	39.9	2.753	0.006	0.007	0.000	0.163	0.14	
2572	6/16/2004	3:36:46 PM		26.457	26.886	24.503	28.153	26.793		47.974	53.456	16.61	31.748	-0.481	-6.406		52.018	0.042	14.643	0.004		3262.05	54.3675	52.0	12.7	39.9	2.748	0.006	0.006	0.000	0.159	0.14	
2573	6/16/2004	3:37:46 PM		26.446	26.875	24.488	28.142	26.788		48.213	53.572	16.579	32.072	-0.426	-6.378		52.112	0.044	14.643	0.004		3263.05	54.3842	52.1	12.8	40.1	2.768	0.007	0.007	0.000	0.166	0.14	
2574	6/16/2004	3:38:46 PM		26.452	26.896	24.493	28.148	26.773		47.945	53.191	16.49	31.873	-0.429	-6.398		48.48	0.044	14.643	0.004		3264.05	54.4008	51.7	11.9	39.9	2.752	0.007	0.007	0.000	0.167	0.14	
2575	6/16/2004	3:39:46 PM		26.449	26.883	24.476	28.145	26.791		47.819	53.079	16.453	31.803	-0.461	-6.392		49.608	0.045	14.643	0.004		3265.05	54.4175	51.6	12.2	39.8	2.745	0.007	0.007	0.000	0.171	0.15	
2576	6/16/2004	3:40:46 PM		26.45	26.879	24.457	28.151	26.822		48.337	53.707	16.57	32.162	-0.429	-6.406		49.49	0.043	14.643	0.003		3266.05	54.4342	52.2	12.1	40.2	2.775	0.006	0.007	0.000	0.162	0.14	
2577	6/16/2004	3:41:46 PM		26.451	26.885	24.458	28.177	26.827		48.144	53.535	16.453	32.093	-0.429	-6.404		51.513	0.043	14.643	0.004		3267.05	54.4508	52.1	12.6	40.1	2.766	0.006	0.007	0.000	0.162	0.14	
2578	6/16/2004	3:42:46 PM		26.475	26.898	24.491	28.145	26.811		48.567	53.914	16.646	32.327	-0.446	-6.404		53.24	0.043	14.643	0.004		3268.05	54.4675	52.4	13.0	40.4	2.789	0.006	0.007	0.000	0.161	0.14	
2579	6/16/2004	3:43:46 PM		26.45	26.888	24.466	28.14	26.811		48.192	53.463	16.576	32.113	-0.455	-6.412		49.408	0.044	14.643	0.003		3269.05	54.4842	52.0	12.1	40.2	2.768	0.007	0.007	0.000	0.166	0.14	
2580	6/16/2004	3:44:46 PM		26.471	26.905	24.488	28.262	26.818		47.926	53.154	16.452	31.931	-0.423	-6.395		50.564	0.044	14.643	0.004		3270.05	54.5008	51.7	12.4	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
2581	6/16/2004	3:45:46 PM		26.485	26.909	24.491	28.39	26.861		48.136	53.566	16.543	32.007	-0.423	-6.395		51.148	0.044	14.643	0.004		3271.05	54.5175	52.1	12.5	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
2582	6/16/2004	3:46:46 PM		26.472	26.896	24.474	28.387	26.913		48.236	53.655	16.529	32.156	-0.426	-6.409		48.1	0.042	14.643	0.004		3272.05	54.5342	52.2	11.8	40.2	2.771	0.006	0.006	0.000	0.158	0.13	
2583	6/16/2004	3:47:46 PM		26.476	26.91	24.472	28.421	26.937		48.304	53.626	16.517	32.241	-0.426	-6.404		48.753	0.043	14.643	0.004		3273.05	54.5508	52.2	11.9	40.3	2.777	0.006	0.007	0.000	0.162	0.14	
2584	6/16/2004	3:48:46 PM		26.489	26.913	24.471	28.344	26.925		48.491	53.883	16.64	32.224	-0.426	-6.392		49.439	0.044	14.643	0.004		3274.05	54.5675	52.4	12.1	40.4	2.783	0.007	0.007	0.000	0.165	0.14	
2585	6/16/2004	3:49:46 PM		26.475	26.904	24.461	28.3	26.906		48.466	53.877	16.549	32.298	-0.423	-6.392		50.251	0.044	14.643	0.004		3275.05	54.5842	52.4	12.3	40.4	2.784	0.007	0.007	0.000	0.165	0.14	
2586	6/16/2004	3:50:46 PM		26.479	26.908	24.466	28.319	26.93		48.067	53.405	16.558	31.927	-0.426	-6.412		46.909	0.042	14.643	0.004		3276.05	54.6008	51.9	11.5	40.0	2.758	0.006	0.006	0.000	0.159	0.14	
2587	6/16/2004	3:51:46 PM		26.473	26.907	24.43	28.398	26.944		48.25	53.647	16.552	32.113	-0.429	-6.398		44.717	0.044	14.643	0.004		3277.05	54.6175	52.2	11.0	40.2	2.770	0.007	0.007	0.000	0.166	0.14	
2588	6/16/2004	3:52:46 PM		26.488	26.922	24.45	28.383	26.944		48.103	53.568	16.569	31.933	-0.386	-6.389		46.202	0.044	14.643	0.004		3278.05	54.6342	52.1	11.3	40.0	2.759	0.007	0.007	0.000	0.166	0.14	
2589	6/16/2004	3:53:46 PM		26.489	26.928	24.461	28.379	26.94		47.97	53.456	16.586	31.764	-0.426	-6.406		48.699	0.043	14.643	0.004		3279.05	54.6508	52.0	11.9	39.9	2.749	0.006	0.007	0.000	0.163	0.14	
2590	6/16/2004	3:54:46 PM		26.49	26.924	24.451	28.31	26.936		48.534	54.014	16.66	32.245	-0.388	-6.404		48.991	0.043	14.643	0.004		3280.05	54.6675	52.5	12.0	40.4	2.785	0.006	0.007	0.000	0.161	0.14	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2591	6/16/2004	3:55:46 PM		26.489	26.928	24.446	28.275	26.905		48.186	53.401	16.536	32.14	-0.36	-6.401		53.74	0.043	14.643	0.004		3281.05	54.6842	51.9	13.2	40.2	2.769	0.006	0.007	0.000	0.162	0.14	
2592	6/16/2004	3:56:46 PM		26.502	26.951	24.463	28.342	26.938		48.291	53.658	16.6	32.076	-0.368	-6.398		47.696	0.044	14.643	0.004		3282.05	54.7008	52.2	11.7	40.2	2.771	0.007	0.007	0.000	0.166	0.14	
2593	6/16/2004	3:57:46 PM		26.503	26.951	24.449	28.343	26.944		48.466	53.805	16.614	32.298	-0.362	-6.395		49.114	0.044	14.643	0.003		3283.05	54.7175	52.3	12.0	40.4	2.784	0.007	0.007	0.000	0.165	0.14	
2594	6/16/2004	3:58:46 PM		26.509	26.958	24.466	28.369	26.98		48.395	53.854	16.618	32.13	-0.36	-6.406		52.733	0.043	14.643	0.004		3284.05	54.7342	52.4	12.9	40.3	2.776	0.006	0.007	0.000	0.162	0.14	
2595	6/16/2004	3:59:46 PM		26.507	26.966	24.468	28.392	26.983		48.09	53.562	16.547	31.978	-0.36	-6.409		48.428	0.042	14.643	0.004		3285.05	54.7508	52.1	11.9	40.0	2.760	0.006	0.006	0.000	0.159	0.14	
2596	6/16/2004	4:00:03 PM		26.508	26.972	24.479	28.393	26.929		48.123	53.446	16.526	32.033	-0.354	-6.386		50.241	0.046	14.643	0.004		3285.33	54.7556	52.0	12.3	40.1	2.763	0.007	0.007	0.000	0.174	0.15	
2597	6/16/2004	4:01:03 PM		26.494	26.968	24.466	28.275	26.831		48.151	53.527	16.612	31.963	-0.36	-6.401		52.915	0.044	14.643	0.004		3286.33	54.7722	52.1	13.0	40.1	2.762	0.007	0.007	0.000	0.166	0.14	
2598	6/16/2004	4:02:03 PM		26.484	26.967	24.46	28.264	26.855		48.412	53.892	16.665	32.158	-0.36	-6.412		54.252	0.043	14.643	0.004		3287.33	54.7889	52.4	13.3	40.3	2.778	0.006	0.007	0.000	0.162	0.14	
2599	6/16/2004	4:03:03 PM		26.489	26.967	24.455	28.249	26.865		47.777	53.226	16.472	31.719	-0.36	-6.383		47.61	0.044	14.643	0.004		3288.33	54.8056	51.8	11.7	39.7	2.740	0.007	0.007	0.000	0.168	0.14	
2600	6/16/2004	4:04:03 PM		26.498	26.977	24.479	28.308	26.929		48.175	53.593	16.581	32.087	-0.333	-6.372		52.172	0.044	14.643	0.004		3289.33	54.8222	52.1	12.8	40.1	2.767	0.007	0.007	0.000	0.166	0.14	
2601	6/16/2004	4:05:03 PM		26.493	26.972	24.464	28.403	26.984		48.229	53.796	16.524	32.113	-0.357	-6.372		45.804	0.044	14.643	0.004		3290.33	54.8389	52.3	11.2	40.2	2.770	0.007	0.007	0.000	0.166	0.14	
2602	6/16/2004	4:06:03 PM		26.488	26.972	24.444	28.353	26.999		48.072	53.587	16.496	31.963	-0.348	-6.404		52.13	0.047	14.643	0.004		3291.33	54.8556	52.1	12.8	40.0	2.759	0.007	0.007	0.000	0.178	0.15	
2603	6/16/2004	4:07:03 PM		26.505	26.994	24.467	28.361	27.041		48.094	53.668	16.551	31.926	-0.362	-6.415		48.497	0.044	14.643	0.003		3292.33	54.8722	52.2	11.9	40.0	2.759	0.007	0.007	0.000	0.166	0.14	
2604	6/16/2004	4:08:03 PM		26.511	26.995	24.478	28.416	27.032		48.273	53.641	16.598	32.109	-0.36	-6.418		54.969	0.043	14.643	0.004		3293.33	54.8889	52.2	13.5	40.2	2.771	0.006	0.007	0.000	0.162	0.14	
2605	6/16/2004	4:09:03 PM		26.513	27.007	24.489	28.408	27.064		48.526	53.786	16.721	32.206	-0.36	-6.441		44.54	0.045	14.643	0.004		3294.33	54.9056	52.3	10.9	40.4	2.783	0.007	0.007	0.000	0.169	0.14	
2606	6/16/2004	4:10:03 PM		26.509	27.008	24.485	28.389	27		47.92	53.115	16.556	31.849	-0.357	-6.43		49.195	0.044	14.643	0.004		3295.33	54.9222	51.6	12.1	39.9	2.750	0.007	0.007	0.000	0.167	0.14	
2607	6/16/2004	4:11:03 PM		26.509	27.003	24.48	28.354	27		48.269	53.593	16.512	32.255	-0.36	-6.444		50.96	0.045	14.643	0.004		3296.33	54.9389	52.1	12.5	40.3	2.776	0.007	0.007	0.000	0.169	0.14	
2608	6/16/2004	4:12:03 PM		26.514	27.023	24.505	28.349	27.01		48.439	53.763	16.638	32.265	-0.351	-6.435		51.769	0.044	14.643	0.004		3297.33	54.9556	52.3	12.7	40.4	2.782	0.007	0.007	0.000	0.165	0.14	
2609	6/16/2004	4:13:03 PM		26.513	27.027	24.54	28.373	27.024		48.393	53.711	16.6	32.302	-0.345	-6.418		49.634	0.042	14.643	0.004		3298.33	54.9722	52.2	12.2	40.3	2.782	0.006	0.006	0.000	0.157	0.13	
2610	6/16/2004	4:14:03 PM		26.513	27.027	24.545	28.493	27.029		48.07	53.554	16.57	31.955	-0.357	-6.43		43.774	0.043	14.643	0.003		3299.33	54.9889	52.1	10.7	40.0	2.759	0.006	0.006	0.000	0.162	0.14	
2611	6/16/2004	4:15:03 PM		26.528	27.047	24.58	28.503	27.054		48.271	53.842	16.544	32.124	-0.339	-6.432		47.06	0.043	14.643	0.004		3300.33	55.0056	52.4	11.5	40.2	2.771	0.006	0.006	0.000	0.161	0.14	
2612	6/16/2004	4:16:03 PM		26.534	27.048	24.571	28.469	27.049		48.103	53.568	16.541	31.965	-0.357	-6.435		56.008	0.043	14.643	0.004		3301.33	55.0222	52.1	13.7	40.0	2.760	0.006	0.006	0.000	0.162	0.14	
2613	6/16/2004	4:17:03 PM		26.539	27.048	24.566	28.509	27.035		48.206	53.523	16.505	32.195	-0.357	-6.464		47.137	0.045	14.643	0.004		3302.33	55.0389	52.1	11.6	40.2	2.772	0.007	0.007	0.000	0.169	0.14	
2614	6/16/2004	4:18:03 PM		26.56	27.049	24.572	28.515	27.101		48.393	53.761	16.616	32.191	-0.333	-6.49		53.594	0.041	14.643	0.004		3303.33	55.0556	52.3	13.1	40.3	2.778	0.006	0.006	0.000	0.154	0.13	
2615	6/16/2004	4:19:03 PM		26.561	27.055	24.553	28.561	27.122		47.785	53.195	16.501	31.73	-0.342	-6.453		46.275	0.046	14.643	0.004		3304.33	55.0722	51.7	11.3	39.8	2.741	0.007	0.007	0.000	0.175	0.15	
2616	6/16/2004	4:20:03 PM		26.567	27.061	24.544	28.592	27.143		47.982	53.415	16.489	31.99	-0.36	-6.456		50.822	0.045	14.643	0.003		3305.33	55.0889	51.9	12.5	40.0	2.757	0.007	0.007	0.000	0.170	0.14	
2617	6/16/2004	4:21:03 PM		26.588	27.077	24.545	28.662	27.148		48.024	53.678	16.523	31.871	-0.31	-6.435		45.647	0.041	14.643	0.004		3306.33	55.1056	52.2	11.2	39.9	2.754	0.006	0.006	0.000	0.155	0.13	
2618	6/16/2004	4:22:03 PM		26.589	27.073	24.536	28.678	27.174		48.235	53.707	16.636	32.013	-0.287	-6.432		51.085	0.042	14.643	0.004		3307.33	55.1222	52.2	12.5	40.1	2.766	0.006	0.006	0.000	0.158	0.13	
2619	6/16/2004	4:23:03 PM		26.596	27.084	24.547	28.655	27.216		48.598	53.784	16.477	32.513	-0.684	-6.453		50.843	0.055	14.643	0.004		3308.33	55.1389	52.3	12.5	40.6	2.796	0.008	0.008	0.000	0.205	0.17	
2620	6/16/2004	4:24:03 PM		26.596	27.084	24.537	28.615	27.211		48.897	53.684	16.524	32.786	-1.014	-4.996		46.655	0.024	14.643	0.004		3309.33	55.1556	52.2	11.4	40.8	2.816	0.004	0.004	0.000	0.089	0.08	
2621	6/16/2004	4:25:03 PM		26.603	27.097	24.555	28.613	27.193		47.296	53.486	16.526	31.165	0.321	-2.856		55.595	0.026	14.643	0.004		3310.33	55.1722	52.0	13.6	39.2	2.705	0.004	0.004	0.000	0.100	0.09	
2622	6/16/2004	4:26:03 PM		26.605	27.089	24.517	28.57	27.156		46.477	53.718	16.546	30.272	1.343	-0.726		51.396	0.045	14.643	0.004		3311.33	55.1889	52.2	12.6	38.4	2.646	0.007	0.007	0.000	0.177	0.15	
2623	6/16/2004	4:27:03 PM		26.621	27.125	24.543	28.566	27.142		48.408	53.56	16.543	32.228	-0.773	-5.533		46.24	0.035	14.643	0.004		3312.33	55.2056	52.1	11.3	40.3	2.780	0.005	0.005	0.000	0.131	0.11	
2624	6/16/2004	4:28:03 PM		26.62	27.124	24.537	28.57	27.121		48.766	53.488	16.611	32.626	-1.011	-6.158		53.033	0.041	14.643	0.004		3313.33	55.2222	52.0	13.0	40.7	2.806	0.006	0.006	0.000	0.152	0.13	
2625	6/16/2004	4:29:03 PM		26.636	27.14	24.538	28.531	27.127		49.015	53.369	16.496	33.004	-1.222	-6.826		46.711	0.038	14.643	0.003		3314.33	55.2389	51.9	11.4	41.0	2.827	0.006	0.006	0.000	0.140	0.12	
2626	6/16/2004	4:30:03 PM		26.631	27.13	24.538	28.506	27.107		49.127	53.718	16.537	33.024	-1.222	-6.811		53.473	0.044	14.643	0.004		3315.33	55.2556	52.2	13.1	41.1	2.832	0.007	0.007	0.000	0.162	0.14	
2627	6/16/2004	4:31:03 PM		26.641	27.15	24.558	28.491	27.057		48.988	53.483	16.554	32.862	-1.216	-6.814		48.453	0.045	14.643	0.004		3316.33	55.2722	52.0	11.9	40.9	2.822	0.007	0.007	0.000	0.166	0.14	
2628	6/16/2004	4:32:03 PM		26.632	27.151	24.534	28.502	27.103		48.845	53.21	16.453	32.883	-1.222	-6.82		47.251	0.044	14.643	0.003		3317.33	55.2889	51.7	11.6	40.9	2.817	0.007	0.007	0.000	0.163	0.14	
2629	6/16/2004	4:33:03 PM		26.638	27.137	24.535	28.508	27.079		49.266	53.618	16.582	33.158	-1.225	-7.054		52.973	0.045	14.643	0.004		3318.33	55.3056	52.1	13.0	41.2	2.841	0.007	0.007	0.000	0.165	0.14	
2630	6/16/2004	4:34:03 PM		26.633	27.142	24.53	28.473	27.059		49.619	53.892	16.653	33.386	-1.222	-7.048		56.855	0.046	14.643	0.004		3319.33	55.3222	52.4	13.9	41.5	2.861	0.007	0.007	0.000	0.167	0.14	
2631	6/16/2004	4:35:03 PM		26.643	27.147	24.54	28.468	27.059		49.395	53.666	16.605	33.236	-1.219	-7.051		47.285	0.044	14.643	0.004		3320.33	55.3389	52.2	11.6	41.3	2.849	0.007	0.007	0.000	0.161	0.14	
2632	6/16/2004	4:36:03 PM		26.653	27.162	24.555	28.553	27.039		49.588	53.979	16.59	33.402	-1.219	-7.045		55.342	0.045	14.643	0.004		3321.33	55.3556	52.5	13.6	41.5	2.861	0.007	0.007	0.000	0.164	0.14	
2633	6/16/2004	4:37:03 PM		26.649	27.153	24.546	28.579	27.065		49.096	53.239	16.5	33.084	-1.219	-7.04		57.443	0.045	14.643	0.004		3322.33	55.3722	51.8	14.1	41.1	2.833	0.007	0.007	0.000	0.165	0.14	
2634	6/16/2004	4:38:03 PM		26.64	27.149	24.532	28.56	27.075		49.254	53.599	16.558	33.109	-1.225	-7.048		49.15	0.045	14.643	0.004		3323.33	55.3889	52.1	12.0	41.2	2.839	0.007	0.007	0.000	0.165	0.14	
2635	6/16/2004	4:39:03 PM		26.661	27.16	24.553	28.526	27.102		49.457	53.898	16.667	33.217	-1.222	-7.04		47.543	0.046	14.643	0.004		3324.33	55.4056	52.4	11.7	41.3	2.850	0.007	0.007	0.000	0.168	0.14	
2636	6/16/2004	4:40:03 PM		26.661	27.155	24.548	28.491	27.087		49.47	53.886	16.582	33.338	-1.219	-7.048		48.386	0.045	14.643	0.004		3325.33	55.4222	52.4	11.9	41.4	2.855	0.007	0.007	0.000	0.164	0.14	
2637	6/16/2004	4:41:03 PM		26.668	27.162	24.55	28.473	27.089		49.351	53.705	16.62	33.197	-1.222	-7.048		48.328	0.044	14.643	0.004		3326.33	55.4389	52.2	11.8	41.3	2.846	0.007	0.007	0.000	0.161	0.14	
2638	6/16/2004	4:42:03 PM		26.659	27.158	24.561	28.434	27.1		48.781	53.096	17.554	31.649	-1.222	-7.06		49.788	0.043	14.643	0.004		3327.33	55.4556	51.6	12.2	40.2	2.773	0.006	0.006	0.000	0.161	0.14	
2639	6/16/2004	4:43:03 PM		26.671	27.155	24.578	28.466	27.102		47.98	52.088	17.22	31.346	-1.219	-7.063		53.275	0.043	14.643	0.004		3328.33	55.4722	50.6	13.1	39.7	2.735	0.006	0.006	0.000	0.164	0.14	
2640	6/16/2004	4:44:03 PM		26.666	27.146	24.569	28.447	27.058		47.767	52.14	17.085	31.106	-1.222	-7.063		54.829	0.042	14.643	0.004		3329.33	55.4889	50.7	13.4	39.4	2.719	0.006	0.006	0.000	0.161	0.14	
2641	6/16/2004	4:45:03 PM		26.672	27.161	24.58	28.463	27.073		48.161	52.567	17.198	31.44	-1.222	-7.06		51.94	0.043	14.643	0.004		3330.33	55.5056	51.1	12.7	39.8	2.744	0.006	0.006	0.000	0.163	0.14	
2642	6/16/2004	4:46:03 PM		26.666	27.151	24.574	28.442	27.058		47.922	52.374	17.084	31.309	-1.222	-7.063		52.164	0.043	14.643	0.004		3331.33	55.5222	50.9	12.8	39.6	2.731	0.006	0.006	0.000	0.164	0.14	
2643	6/16/2004	4:47:03 PM		26.666	27.146	24.574	28.442	27.048		48.362	52.942	17.005	31.777	-1.222	-7.063		48.741	0.043	14.643	0.003		3332.33	55.5389	51.5	11.9	40.1	2.763	0.006	0.006	0.000	0.162	0.14	
2644	6/16/2004	4:48:03 PM		26.666	27.155	24.604	28.442	27.058		48.041	52.495	17.078	31.37	-1.222	-7.06		43.956	0.043	14.643	0.004		3333.33	55.5556	51.0	10.8	39.7	2.738	0.006	0.006	0.000	0.163	0.14	
2645	6/16/2004	4:49:03 PM		26.661	27.145	24.603	28.401	27.082		47.613	51.848	16.917	31.192	-1.225	-7.066		50.199	0.042	14.643	0.004		3334.33	55.5722	50.4	12.3	39.4	2.717	0.006	0.006	0.000	0.161	0.14	
2646	6/16/2004	4:50:03 PM		26.686	27.165	24.633	28.491	27.072		47.586	52.064	16.967	31.048	-1.219	-7.06		48.62	0.043	14.643	0.004		3335.33	55.5889	50.6	11.9	39.3	2.711	0.006	0.006	0.000	0.165	0.14	
2647	6/16/2004	4:51:03 PM		26.674	27.148	24.591	28.374	27.025		47.885	52.493	16.975	31.311	-1.225	-7.066		54.942	0.043	14.643	0.003		3336.33	55.6056	51.0	13.5	39.6	2.730	0.006	0.006	0.000	0.164	0.14	
2648	6/16/2004	4:52:03 PM		26.677	27.141	24.579	28.368	26.988		47.263	51.564	16.817	30.958	-1.222	-7.068		46.476	0.042	14.643	0.004		3337.33	55.6222	50.1	11.4	39.1	2.697	0.006	0.006	0.000	0.162	0.14	
2649	6/16/2004	4:53:03 PM		26.677	27.151	24.569	28.348	27.008		47.732	52.003	16.979	31.19	-1.222	-7.068		52.71	0.042	14.643	0.003		3338.33	55.6389	50.5	12.9	39.5	2.721	0.006	0.006	0.000	0.161	0.14	
2650	6/16/2004	4:54:03 PM		26.679	27.153	24.556	28.344	27.04		47.858	52.273	16.711	31.578	-1.222	-7.066		47.268	0.042	14.643	0.004		3339.33	55.6556	50.8	11.6	39.7	2.738	0.006	0.006	0.000	0.160	0.14	
2651	6/16/2004	4:55:03 PM		26.664	27.143	24.536	28.374	27.055		48.2	52.598	16.53	32.091	-1.219	-7.057		52.685	0.043	14.643	0.004		3340.33	55.6722	51.1	12.9	40.1	2.768	0.006	0.006	0.000	0.162	0.14	
2652	6/16/2004	4:56:03 PM		26.662	27.141	24.509	28.328	26.988		48.02	52.615	16.42	31.97	-1.222	-7.054		46.632	0.044	14.643	0.004		3341.33	55.6889	51.1	11.4	40.0	2.758	0.007	0.007	0.000	0.166	0.14	
2653	6/16/2004	4:57:03 PM		26.651	27.13	24.488	28.302	26.973		48.057	52.478	16.433	32.062	-1.219	-7.048		50.583	0.044	14.643	0.004		3342.33	55.7056	51.0	12.4	40.1	2.762	0.007	0.007	0.000	0.166	0.14	
2654	6/16/2004	4:58:03 PM		26.645	27.134	24.472	28.256	26.922		48.412	52.739	16.43	32.397	-1.219	-7.048		48.999	0.044	14.643	0.004		3343.33	55.7222	51.3	12.0	40.4	2.786	0.007	0.007	0.000	0.165	0.14	
2655	6/16/2004	4:59:03 PM		26.645	27.129	24.447	28.132	26.872		47.723	52.368	16.373	31.672	-1.222	-7.06		50.885	0.043	14.643	0.003		3344.33	55.7389	50.9	12.5	39.7	2.737	0.006	0.007	0.000	0.164	0.14	
2656	6/16/2004	5:00:03 PM		26.624	27.108	24.405	28.085	26.845		48.067	52.625	16.36	32.14	-1.225	-7.051		53.818	0.043	14.643	0.004		3345.33	55.7556	51.2	13.2	40.1	2.765	0.006	0.007	0.000	0.163	0.14	
2657	6/16/2004	5:01:03 PM		26.633	27.112	24.405	28.114	26.859		48.223	52.6	16.292	32.358	-1.222	-7.045		47.383	0.044	14.643	0.004		3346.33	55.7722	51.1	11.6	40.3	2.778	0.007	0.007	0.000	0.166	0.14	
2658	6/16/2004	5:02:03 PM		26.62	27.114	24.397	28.151	26.842		48.117	52.88	16.357	32.083	-1.219	-7.042		55.017	0.044	14.643	0.004		3347.33	55.7889	51.4	13.5	40.1	2.765	0.007	0.007	0.000	0.166	0.14	
2659	6/16/2004	5:03:03 PM		26.589	27.093	24.36	28.15	26.81		48.31	52.706	16.301	32.515	-1.222	-7.048		50.155	0.043	14.643	0.004		3348.33	55.8056	51.2	12.3	40.4	2.786	0.006	0.007	0.000	0.162	0.14	
2660	6/16/2004	5:04:03 PM		26.594	27.098	24.355	28.15	26.86		48.273	52.723	16.418	32.325	-1.225	-7.054		44.7	0.042	14.643	0.004		3349.33	55.8222	51.3	11.0	40.3	2.778	0.006	0.006	0.000	0.158	0.13	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2661	6/16/2004	5:05:03 PM		26.582	27.086	24.343	28.153	26.838		48.242	52.777	16.338	32.321	-1.222	-7.045		47.571	0.043	14.643	0.004		3350.33	55.8389	51.3	11.7	40.3	2.777	0.006	0.007	0.000	0.162	0.14	
2662	6/16/2004	5:06:03 PM		26.57	27.074	24.327	28.156	26.842		48.011	52.368	16.316	32.158	-1.225	-7.045		46.732	0.044	14.643	0.004		3351.33	55.8556	50.9	11.5	40.1	2.764	0.007	0.007	0.000	0.167	0.14	
2663	6/16/2004	5:07:03 PM		26.563	27.077	24.31	28.129	26.85		48.219	52.652	16.242	32.442	-1.219	-7.045		51.469	0.043	14.643	0.004		3352.33	55.8722	51.2	12.6	40.3	2.781	0.006	0.007	0.000	0.162	0.14	
2664	6/16/2004	5:08:03 PM		26.536	27.055	24.287	28.057	26.797		48.611	53.104	16.343	32.698	-1.222	-7.048		49.16	0.044	14.643	0.004		3353.33	55.8889	51.6	12.0	40.7	2.803	0.007	0.007	0.000	0.165	0.14	
2665	6/16/2004	5:09:03 PM		26.533	27.052	24.284	28.054	26.78		48.065	52.598	16.248	32.251	-1.225	-7.048		46.793	0.043	14.643	0.003		3354.33	55.9056	51.1	11.5	40.2	2.769	0.006	0.007	0.000	0.163	0.14	
2666	6/16/2004	5:10:03 PM		26.526	27.05	24.277	28.037	26.797		48.264	52.65	16.298	32.466	-1.222	-7.048		53.789	0.043	14.643	0.004		3355.33	55.9222	51.2	13.2	40.4	2.783	0.006	0.007	0.000	0.162	0.14	
2667	6/16/2004	5:11:03 PM		26.525	27.049	24.266	28.046	26.757		48.258	52.853	16.319	32.355	-1.225	-7.048		48.918	0.043	14.643	0.004		3356.33	55.9389	51.4	12.0	40.3	2.779	0.006	0.007	0.000	0.162	0.14	
2668	6/16/2004	5:12:03 PM		26.499	27.028	24.24	27.95	26.711		48.457	52.843	16.248	32.645	-1.225	-7.054		47.062	0.042	14.643	0.004		3357.33	55.9556	51.4	11.5	40.6	2.796	0.006	0.006	0.000	0.158	0.13	
2669	6/16/2004	5:13:03 PM		26.483	27.027	24.229	27.949	26.695		48.563	53.108	16.301	32.762	-1.222	-7.045		49.306	0.043	14.643	0.004		3358.33	55.9722	51.6	12.1	40.7	2.804	0.006	0.007	0.000	0.161	0.14	
2670	6/16/2004	5:14:03 PM		26.472	27.016	24.228	27.924	26.669		48.69	53.257	16.234	32.862	-1.222	-7.04		50.789	0.043	14.643	0.004		3359.33	55.9889	51.8	12.4	40.8	2.811	0.006	0.007	0.000	0.161	0.14	
2671	6/16/2004	5:15:03 PM		26.446	26.994	24.197	27.867	26.628		48.426	52.876	16.252	32.655	-1.222	-7.042		48.979	0.044	14.643	0.003		3360.33	56.0056	51.4	12.0	40.5	2.795	0.007	0.007	0.000	0.166	0.14	
2672	6/16/2004	5:16:03 PM		26.438	26.987	24.194	27.909	26.64		48.632	53.063	16.163	32.883	-1.222	-7.04		44.513	0.044	14.643	0.003		3361.33	56.0222	51.6	10.9	40.8	2.810	0.007	0.007	0.000	0.165	0.14	
2673	6/16/2004	5:17:03 PM		26.411	26.97	24.172	27.868	26.648		48.352	52.828	16.095	32.669	-1.222	-7.048		54.902	0.043	14.643	0.003		3362.33	56.0389	51.4	13.5	40.5	2.793	0.006	0.007	0.000	0.162	0.14	
2674	6/16/2004	5:18:03 PM		26.405	26.974	24.165	27.846	26.637		48.441	53.027	16.127	32.731	-1.216	-7.034		47.944	0.044	14.643	0.004		3363.33	56.0556	51.6	11.7	40.6	2.798	0.007	0.007	0.000	0.165	0.14	
2675	6/16/2004	5:19:03 PM		26.374	26.953	24.144	27.82	26.621		48.422	52.944	16.14	32.756	-1.222	-7.034		50.845	0.044	14.643	0.004		3364.33	56.0722	51.5	12.5	40.6	2.798	0.007	0.007	0.000	0.166	0.14	
2676	6/16/2004	5:20:03 PM		26.367	26.946	24.153	27.819	26.589		48.466	53.065	16.133	32.791	-1.222	-7.04		56.448	0.043	14.643	0.004		3365.33	56.0889	51.6	13.8	40.6	2.801	0.006	0.007	0.000	0.162	0.14	
2677	6/16/2004	5:21:03 PM		26.341	26.935	24.127	27.868	26.603		48.663	53.239	16.186	32.951	-1.222	-7.04		51.058	0.043	14.643	0.003		3366.33	56.1056	51.8	12.5	40.8	2.813	0.006	0.007	0.000	0.161	0.14	
2678	6/16/2004	5:22:03 PM		26.329	26.908	24.104	27.82	26.596		48.619	53.009	16.123	32.969	-1.222	-7.037		55.547	0.044	14.643	0.004		3367.33	56.1222	51.5	13.6	40.8	2.813	0.007	0.007	0.000	0.165	0.14	
2679	6/16/2004	5:23:03 PM		26.332	26.921	24.118	27.828	26.614		48.036	52.54	16.357	32.154	-1.222	-7.042		52.137	0.043	14.643	0.004		3368.33	56.1389	51.1	12.8	40.1	2.764	0.006	0.007	0.000	0.164	0.14	
2680	6/16/2004	5:24:03 PM		26.316	26.904	24.126	27.802	26.577		48.219	52.735	16.392	32.3	-1.219	-7.048		47.812	0.042	14.643	0.004		3369.33	56.1556	51.3	11.7	40.3	2.776	0.006	0.006	0.000	0.159	0.14	
2681	6/16/2004	5:25:03 PM		26.311	26.894	24.156	27.797	26.582		48.459	52.907	16.551	32.376	-1.225	-7.04		51.292	0.043	14.643	0.003		3370.33	56.1722	51.4	12.6	40.4	2.787	0.006	0.007	0.000	0.162	0.14	
2682	6/16/2004	5:26:03 PM		26.295	26.893	24.165	27.771	26.576		48.488	52.955	16.439	32.522	-1.219	-7.04		54.12	0.043	14.643	0.004		3371.33	56.1889	51.5	13.3	40.5	2.793	0.006	0.007	0.000	0.162	0.14	
2683	6/16/2004	5:27:03 PM		26.274	26.877	24.149	27.775	26.591		48.451	53.096	16.457	32.47	-1.225	-7.045		46.926	0.042	14.643	0.003		3372.33	56.2056	51.6	11.5	40.5	2.790	0.006	0.006	0.000	0.159	0.13	
2684	6/16/2004	5:28:03 PM		26.266	26.87	24.147	27.818	26.573		48.233	52.656	16.349	32.339	-1.222	-7.045		49.46	0.041	14.643	0.004		3373.33	56.2222	51.2	12.1	40.3	2.778	0.006	0.006	0.000	0.155	0.13	
2685	6/16/2004	5:29:03 PM		26.254	26.857	24.124	27.86	26.575		48.084	52.617	16.259	32.29	-1.222	-7.037		47.539	0.043	14.643	0.004		3374.33	56.2389	51.1	11.7	40.2	2.771	0.006	0.007	0.000	0.164	0.14	
2686	6/16/2004	5:30:03 PM		26.247	26.836	24.112	27.853	26.604		48.2	52.756	16.22	32.413	-1.225	-7.045		50.799	0.041	14.643	0.003		3375.33	56.2556	51.3	12.4	40.3	2.779	0.006	0.006	0.000	0.156	0.13	
2687	6/16/2004	5:31:03 PM		26.236	26.84	24.101	27.827	26.593		48.677	53.195	16.265	32.819	-1.161	-7.048		47.616	0.042	14.643	0.003		3376.33	56.2722	51.7	11.7	40.7	2.809	0.006	0.006	0.000	0.158	0.13	
2688	6/16/2004	5:32:03 PM		26.24	26.833	24.095	27.786	26.546		48.52	53.104	16.257	32.684	-1.219	-7.045		54.08	0.042	14.643	0.004		3377.33	56.2889	51.6	13.3	40.6	2.799	0.006	0.006	0.000	0.158	0.13	
2689	6/16/2004	5:33:03 PM		26.239	26.822	24.149	27.74	26.54		48.291	52.996	16.182	32.477	-1.179	-7.042		46.72	0.043	14.643	0.003		3378.33	56.3056	51.5	11.4	40.4	2.784	0.006	0.007	0.000	0.163	0.14	
2690	6/16/2004	5:34:03 PM		26.223	26.812	24.208	27.719	26.52		48.401	52.971	16.175	32.686	-1.199	-7.034		46.617	0.043	14.643	0.004		3379.33	56.3222	51.5	11.4	40.5	2.795	0.006	0.007	0.000	0.162	0.14	
2691	6/16/2004	5:35:03 PM		26.222	26.811	24.243	27.738	26.539		48.18	52.835	16.059	32.534	-1.153	-7.034		47.149	0.042	14.643	0.004		3380.33	56.3389	51.4	11.6	40.4	2.782	0.006	0.006	0.000	0.159	0.13	
2692	6/16/2004	5:36:03 PM		26.211	26.805	24.267	27.688	26.558		48.262	52.787	16.104	32.589	-1.159	-7.013		53.071	0.04	14.643	0.004		3381.33	56.3556	51.3	13.0	40.4	2.787	0.006	0.006	0.000	0.151	0.13	
2693	6/16/2004	5:37:03 PM		26.216	26.805	24.312	27.772	26.548		48.358	52.884	16.02	32.827	-1.115	-7.005		48.662	0.044	14.643	0.003		3382.33	56.3722	51.4	11.9	40.6	2.799	0.007	0.007	0.000	0.165	0.14	
2694	6/16/2004	5:38:03 PM		26.205	26.789	24.311	27.732	26.537		48.009	52.615	16.013	32.431	-1.159	-7.019		47.195	0.043	14.643	0.004		3383.33	56.3889	51.1	11.6	40.2	2.773	0.006	0.007	0.000	0.163	0.14	
2695	6/16/2004	5:39:03 PM		26.21	26.789	24.371	27.752	26.542		48.333	52.965	15.894	32.895	-1.132	-7.016		48.463	0.044	14.643	0.004		3384.33	56.4056	51.5	11.9	40.6	2.800	0.007	0.007	0.000	0.164	0.14	
2696	6/16/2004	5:40:03 PM		26.205	26.789	24.381	27.757	26.497		48.265	52.94	15.942	32.749	-1.141	-7.016		52.7	0.043	14.643	0.004		3385.33	56.4222	51.5	12.9	40.5	2.793	0.006	0.007	0.000	0.161	0.14	
2697	6/16/2004	5:41:03 PM		26.214	26.782	24.43	27.745	26.52		48.217	52.911	16.016	32.602	-1.138	-7.019		49.095	0.043	14.643	0.004		3386.33	56.4389	51.4	12.0	40.4	2.786	0.006	0.007	0.000	0.161	0.14	
2698	6/16/2004	5:42:03 PM		26.202	26.761	24.433	27.723	26.414		48.393	52.893	16.027	32.944	-1.106	-7.022		50.276	0.043	14.643	0.004		3387.33	56.4556	51.4	12.3	40.7	2.804	0.006	0.007	0.000	0.160	0.14	
2699	6/16/2004	5:43:03 PM		26.206	26.76	24.427	27.712	26.468		48.459	53.177	16.026	32.854	-1.135	-7.019		48.791	0.044	14.643	0.003		3388.33	56.4722	51.7	12.0	40.7	2.803	0.007	0.007	0.000	0.164	0.14	
2700	6/16/2004	5:44:03 PM		26.205	26.749	24.471	27.677	26.572		48.376	53.063	15.968	32.848	-1.101	-7.022		47.802	0.043	14.643	0.004		3389.33	56.4889	51.6	11.7	40.6	2.800	0.006	0.007	0.000	0.160	0.14	
2701	6/16/2004	5:45:03 PM		26.225	26.753	24.496	27.791	26.616		48.372	52.772	15.922	32.975	-1.104	-7.019		49.788	0.043	14.643	0.004		3390.33	56.5056	51.3	12.2	40.7	2.804	0.006	0.007	0.000	0.160	0.14	
2702	6/16/2004	5:46:03 PM		26.244	26.777	24.545	27.87	26.705		48.283	53.135	15.972	32.657	-1.098	-7.011		48.88	0.043	14.643	0.004		3391.33	56.5222	51.7	12.0	40.5	2.790	0.006	0.006	0.000	0.160	0.14	
2703	6/16/2004	5:47:03 PM		26.237	26.751	24.553	27.908	26.758		48.43	53.115	15.868	33.031	-1.098	-7.019		50.182	0.042	14.643	0.004		3392.33	56.5389	51.6	12.3	40.7	2.808	0.006	0.006	0.000	0.156	0.13	
2704	6/16/2004	5:48:03 PM		26.247	26.766	24.558	27.958	26.813		48.379	53.152	15.915	32.864	-1.098	-7.019		52.282	0.043	14.643	0.004		3393.33	56.5556	51.7	12.8	40.6	2.801	0.006	0.006	0.000	0.160	0.14	
2705	6/16/2004	5:49:03 PM		26.262	26.761	24.558	27.988	26.838		48.748	53.527	16.023	33.121	-1.104	-7.022		46.24	0.043	14.643	0.003		3394.33	56.5722	52.1	11.3	40.9	2.822	0.006	0.006	0.000	0.159	0.13	
2706	6/16/2004	5:50:03 PM		26.272	26.771	24.598	27.943	26.798		48.592	53.359	16.118	32.938	-1.101	-7.016		49.314	0.044	14.643	0.003		3395.33	56.5889	51.9	12.1	40.8	2.811	0.007	0.007	0.000	0.163	0.14	
2707	6/16/2004	5:51:03 PM		26.275	26.769	24.607	27.916	26.756		48.493	53.065	16.056	32.875	-1.098	-7.016		49.594	0.043	14.643	0.004		3396.33	56.6056	51.6	12.2	40.7	2.805	0.006	0.006	0.000	0.159	0.14	
2708	6/16/2004	5:52:03 PM		26.284	26.773	24.601	27.915	26.736		48.791	53.452	15.971	33.306	-1.049	-7.016		47.024	0.044	14.643	0.004		3397.33	56.6222	52.0	11.5	41.0	2.830	0.007	0.007	0.000	0.162	0.14	
2709	6/16/2004	5:53:03 PM		26.294	26.773	24.641	27.851	26.676		48.273	52.934	16.121	32.645	-1.077	-7.011		48.545	0.044	14.643	0.004		3398.33	56.6389	51.5	11.9	40.5	2.790	0.007	0.007	0.000	0.164	0.14	
2710	6/16/2004	5:54:03 PM		26.304	26.777	24.64	27.8	26.63		48.486	53.073	16.101	32.864	-1.057	-7.013		48.207	0.044	14.643	0.004		3399.33	56.6556	51.6	11.8	40.7	2.804	0.007	0.007	0.000	0.163	0.14	
2711	6/16/2004	5:55:03 PM		26.308	26.776	24.644	27.779	26.589		48.526	53.152	16.113	32.869	-1.028	-7.011		48.175	0.044	14.643	0.004		3400.33	56.6722	51.7	11.8	40.7	2.806	0.007	0.007	0.000	0.163	0.14	
2712	6/16/2004	5:56:03 PM		26.318	26.781	24.684	27.734	26.569		48.459	53.268	16.116	32.786	-1.04	-7.013		49.448	0.043	14.643	0.004		3401.33	56.6889	51.8	12.1	40.6	2.801	0.006	0.006	0.000	0.159	0.14	
2713	6/16/2004	5:57:03 PM		26.332	26.776	24.693	27.718	26.544		48.408	53.054	16.149	32.721	-1.075	-7.013		44.323	0.044	14.643	0.004		3402.33	56.7056	51.6	10.9	40.6	2.797	0.007	0.007	0.000	0.163	0.14	
2714	6/16/2004	5:58:03 PM		26.322	26.761	24.678	27.663	26.544		48.285	52.835	16.137	32.649	-1.028	-7.016		49.012	0.043	14.643	0.004		3403.33	56.7222	51.4	12.0	40.5	2.790	0.006	0.006	0.000	0.160	0.14	
2715	6/16/2004	5:59:03 PM		26.318	26.752	24.71	27.655	26.505		48.54	53.291	16.3	32.635	-1.025	-7.008		51.993	0.043	14.643	0.004		3404.33	56.7389	51.8	12.7	40.6	2.798	0.006	0.006	0.000	0.159	0.14	
2716	6/16/2004	6:00:03 PM		26.336	26.75	24.712	27.667	26.448		48.42	53.094	16.087	32.825	-1.028	-7.005		52.299	0.043	14.643	0.004		3405.33	56.7556	51.6	12.8	40.6	2.801	0.006	0.006	0.000	0.159	0.14	
2717	6/16/2004	6:01:03 PM		26.334	26.743	24.726	27.651	26.451		48.797	53.554	16.284	32.912	-1.011	-7.013		49.46	0.043	14.643	0.004		3406.33	56.7722	52.1	12.1	40.9	2.817	0.006	0.006	0.000	0.158	0.13	
2718	6/16/2004	6:02:03 PM		26.327	26.731	24.788	27.583	26.454		48.542	53.33	16.231	32.719	-1.002	-6.996		49.734	0.043	14.643	0.003		3407.33	56.7889	51.9	12.2	40.6	2.801	0.006	0.006	0.000	0.159	0.14	
2719	6/16/2004	6:03:03 PM		26.34	26.719	24.797	27.612	26.402		48.571	53.083	16.159	32.918	-0.996	-6.996		45.403	0.045	14.643	0.004		3408.33	56.8056	51.6	11.1	40.7	2.809	0.007	0.007	0.000	0.166	0.14	
2720	6/16/2004	6:04:03 PM		26.343	26.717	24.785	27.57	26.411		48.383	53.345	16.076	32.731	-0.999	-7.002		49.239	0.043	14.643	0.004		3409.33	56.8222	51.9	12.1	40.6	2.796	0.006	0.006	0.000	0.159	0.14	
2721	6/16/2004	6:05:03 PM		26.342	26.696	24.798	27.554	26.499		48.206	52.851	16.061	32.61	-0.999	-7.008		49.965	0.043	14.643	0.004		3410.33	56.8389	51.4	12.2	40.4	2.786	0.006	0.006	0.000	0.160	0.14	
2722	6/16/2004	6:06:03 PM		26.36	26.699	24.802	27.622	26.522		48.262	52.911	16.105	32.594	-0.999	-6.996		49.782	0.044	14.643	0.004		3411.33	56.8556	51.4	12.2	40.4	2.787	0.007	0.007	0.000	0.163	0.14	
2723	6/16/2004	6:07:03 PM		26.364	26.693	24.801	27.706	26.561		48.607	53.363	16.042	32.955	-0.973	-7.002		48.874	0.043	14.643	0.004		3412.33	56.8722	51.9	12.0	40.8	2.812	0.006	0.006	0.000	0.158	0.13	
2724	6/16/2004	6:08:03 PM		26.363	26.692	24.81	27.685	26.625		48.287	52.853	16.11	32.676	-0.973	-6.999		51.634	0.044	14.643	0.004		3413.33	56.8889	51.4	12.7	40.5	2.791	0.007	0.007	0.000	0.163	0.14	
2725	6/16/2004	6:09:03 PM		26.369	26.688	24.821	27.766	26.661		48.362	53.073	16.001	32.823	-0.959	-7.011		47.95	0.041	14.643	0.004		3414.33	56.9056	51.6	11.8	40.6	2.799	0.006	0.006	0.000	0.151	0.13	
2726	6/16/2004	6:10:03 PM		26.378	26.682	24.8	27.84	26.715		48.748	53.45	16.08	33.143	-0.941	-7.005		48.97	0.044	14.643	0.004		3415.33	56.9222	52.0	12.0	40.9	2.823	0.007	0.007	0.000	0.161	0.14	
2727	6/16/2004	6:11:03 PM		26.383	26.687	24.78	27.91	26.765		48.138	52.984	15.963	32.587	-0.939	-7.008		50.405	0.043	14.643	0.004		3416.33	56.9389	51.5	12.4	40.4	2.783	0.006	0.006	0.000	0.160	0.14	
2728	6/16/2004	6:12:03 PM		26.409	26.708	24.826	27.93	26.82		48.377	53.146	16.051	32.778	-0.939	-7.005		52.929	0.042	14.643	0.004		3417.33	56.9556	51.7	13.0	40.6	2.798	0.006	0.006	0.000	0.155	0.13	
2729	6/16/2004	6:13:03 PM		26.416	26.71	24.828	28.017	26.857		48.325	53.106	16.025	32.715	-0.939	-7.005		48.995	0.043	14.643	0.004		3418.33	56.9722	51.6	12.0	40.5	2.794	0.006	0.006	0.000	0.159	0.14	
2730	6/16/2004	6:14:03 PM		26.421	26.715	24.803	28.022	26.862		48.694	53.407	16.076	33.094	-0.939	-7.002		49.563	0.043	14.643	0.003		3419.33	56.9889	51.9	12.1	40.9	2.819	0.006	0.006	0.000	0.158	0.13	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2731	6/16/2004	6:14:42 PM		26.432	26.726	24.798	28.043	26.873		48.644	53.444	16.055	33.049	-0.939	-7.005		51.567	0.043	14.643	0.004		3419.98	56.9997	52.0	12.6	40.8	2.816	0.006	0.006	0.000	0.158	0.13	
2732	6/16/2004	6:15:42 PM		26.442	26.731	24.829	27.994	26.794		48.665	53.355	16.037	33.111	-0.939	-6.999		49.26	0.044	14.643	0.004		3420.98	57.0164	51.9	12.1	40.9	2.819	0.007	0.007	0.000	0.161	0.14	
2733	6/16/2004	6:16:42 PM		26.442	26.731	24.814	27.929	26.774		48.58	53.427	16.162	32.844	-0.939	-7.005		48.684	0.044	14.643	0.004		3421.98	57.0331	52.0	11.9	40.7	2.807	0.007	0.007	0.000	0.162	0.14	
2734	6/16/2004	6:17:42 PM		26.437	26.746	24.813	27.903	26.708		48.534	53.262	16.093	32.873	-0.939	-7.002		47.869	0.043	14.643	0.004		3422.98	57.0497	51.8	11.7	40.7	2.806	0.006	0.006	0.000	0.158	0.13	
2735	6/16/2004	6:18:42 PM		26.441	26.73	24.803	27.787	26.652		48.192	52.872	15.971	32.729	-0.939	-7.002		49.827	0.044	14.643	0.004		3423.98	57.0664	51.4	12.2	40.5	2.790	0.007	0.007	0.000	0.163	0.14	
2736	6/16/2004	6:19:42 PM		26.454	26.743	24.811	27.766	26.606		48.617	53.618	16.111	32.836	-0.939	-7.011		49.677	0.043	14.643	0.004		3424.98	57.0831	52.1	12.2	40.7	2.808	0.006	0.006	0.000	0.158	0.13	
2737	6/16/2004	6:20:42 PM		26.448	26.737	24.8	27.745	26.575		48.52	53.224	16.031	32.975	-0.939	-7.002		50.313	0.044	14.643	0.003		3425.98	57.0997	51.8	12.3	40.7	2.809	0.007	0.007	0.000	0.162	0.14	
2738	6/16/2004	6:21:42 PM		26.463	26.752	24.82	27.745	26.55		48.352	53.141	16.016	32.809	-0.912	-7.005		46.895	0.043	14.643	0.004		3426.98	57.1164	51.7	11.5	40.6	2.798	0.006	0.006	0.000	0.159	0.14	
2739	6/16/2004	6:22:42 PM		26.454	26.733	24.821	27.671	26.521		48.279	53.253	16.076	32.598	-0.93	-7.005		48.678	0.043	14.643	0.004		3427.98	57.1331	51.8	11.9	40.4	2.788	0.006	0.006	0.000	0.159	0.14	
2740	6/16/2004	6:23:42 PM		26.453	26.727	24.815	27.625	26.475		48.468	53.376	16.043	32.885	-0.93	-7.002		51.575	0.043	14.643	0.004		3428.98	57.1497	51.9	12.6	40.7	2.805	0.006	0.006	0.000	0.158	0.13	
2741	6/16/2004	6:24:42 PM		26.447	26.726	24.804	27.609	26.41		48.422	53.307	15.976	32.885	-0.939	-7.002		49.298	0.044	14.643	0.004		3429.98	57.1664	51.8	12.1	40.7	2.803	0.007	0.007	0.000	0.162	0.14	
2742	6/16/2004	6:25:42 PM		26.437	26.706	24.823	27.494	26.354		48.58	53.357	16.068	32.928	-0.892	-7.016		51.851	0.042	14.643	0.004		3430.98	57.1831	51.9	12.7	40.8	2.810	0.006	0.006	0.000	0.154	0.13	
2743	6/16/2004	6:26:42 PM		26.441	26.71	24.823	27.513	26.348		48.547	53.309	16.088	32.875	-0.904	-7.013		48.426	0.041	14.643	0.004		3431.98	57.1997	51.8	11.9	40.7	2.807	0.006	0.006	0.000	0.151	0.13	
2744	6/16/2004	6:27:42 PM		26.434	26.683	24.806	27.526	26.396		48.511	53.376	16.106	32.844	-0.884	-7.002		46.465	0.043	14.643	0.004		3432.98	57.2164	51.9	11.4	40.7	2.805	0.006	0.006	0.000	0.158	0.13	
2745	6/16/2004	6:28:42 PM		26.423	26.667	24.81	27.515	26.436		48.671	53.562	16.105	33.027	-0.886	-7.002		49.179	0.043	14.643	0.003		3433.98	57.2331	52.1	12.1	40.8	2.816	0.006	0.006	0.000	0.158	0.13	
2746	6/16/2004	6:29:42 PM		26.418	26.662	24.834	27.594	26.485		48.715	53.405	16.179	32.998	-0.886	-7.005		52.773	0.043	14.643	0.004		3434.98	57.2497	51.9	12.9	40.9	2.817	0.006	0.006	0.000	0.158	0.13	
2747	6/16/2004	6:30:42 PM		26.422	26.646	24.818	27.648	26.509		48.497	53.456	16.176	32.715	-0.886	-7.008		46.705	0.042	14.643	0.004		3435.98	57.2664	52.0	11.4	40.6	2.800	0.006	0.006	0.000	0.155	0.13	
2748	6/16/2004	6:31:42 PM		26.426	26.65	24.818	27.673	26.543		48.586	53.345	16.276	32.719	-0.884	-6.999		47.352	0.045	14.643	0.004		3436.98	57.2831	51.9	11.6	40.7	2.803	0.007	0.007	0.000	0.166	0.14	
2749	6/16/2004	6:32:42 PM		26.42	26.634	24.837	27.717	26.577		48.559	53.334	16.203	32.823	-0.886	-6.999		48.881	0.044	14.643	0.004		3437.98	57.2997	51.9	12.0	40.7	2.806	0.007	0.007	0.000	0.162	0.14	
2750	6/16/2004	6:33:42 PM		26.441	26.665	24.863	27.752	26.603		48.569	53.535	16.214	32.749	-0.884	-6.999		47.153	0.044	14.643	0.004		3438.98	57.3164	52.1	11.6	40.7	2.803	0.007	0.007	0.000	0.162	0.14	
2751	6/16/2004	6:34:42 PM		26.41	26.629	24.817	27.787	26.647		48.76	53.618	16.355	32.817	-0.889	-7.002		48.13	0.043	14.643	0.004		3439.98	57.3331	52.1	11.8	40.8	2.812	0.006	0.006	0.000	0.158	0.13	
2752	6/16/2004	6:35:42 PM		26.437	26.656	24.869	27.768	26.688		48.584	53.465	16.206	32.844	-0.886	-7.005		53.215	0.042	14.643	0.004		3440.98	57.3497	52.0	13.0	40.7	2.807	0.006	0.006	0.000	0.154	0.13	
2753	6/16/2004	6:36:42 PM		26.428	26.647	24.85	27.785	26.73		48.613	53.672	16.239	32.756	-0.878	-7.031		49.337	0.041	14.643	0.004		3441.98	57.3664	52.2	12.1	40.7	2.805	0.006	0.006	0.000	0.151	0.13	
2754	6/16/2004	6:37:42 PM		26.444	26.663	24.876	27.836	26.756		48.704	53.492	16.265	32.955	-0.869	-7.005		48.997	0.042	14.643	0.003		3442.98	57.3831	52.0	12.0	40.8	2.815	0.006	0.006	0.000	0.154	0.13	
2755	6/16/2004	6:38:42 PM		26.429	26.658	24.851	27.821	26.785		48.43	53.231	16.255	32.694	-0.843	-7.016		48.924	0.042	14.643	0.004		3443.98	57.3997	51.8	12.0	40.6	2.797	0.006	0.006	0.000	0.155	0.13	
2756	6/16/2004	6:39:42 PM		26.434	26.668	24.896	27.905	26.775		48.435	53.34	16.296	32.548	-0.878	-6.99		50.309	0.045	14.643	0.004		3444.98	57.4164	51.9	12.3	40.5	2.792	0.007	0.007	0.000	0.166	0.14	
2757	6/16/2004	6:40:42 PM		26.448	26.687	24.93	27.935	26.775		48.526	53.357	16.399	32.579	-0.872	-6.996		47.915	0.044	14.643	0.004		3445.98	57.4331	51.9	11.7	40.6	2.796	0.007	0.007	0.000	0.162	0.14	
2758	6/16/2004	6:41:42 PM		26.443	26.681	24.899	27.834	26.709		48.571	53.301	16.336	32.729	-0.878	-7.008		49.512	0.043	14.643	0.003		3446.98	57.4497	51.8	12.1	40.7	2.803	0.006	0.006	0.000	0.158	0.13	
2759	6/16/2004	6:42:42 PM		26.448	26.687	24.93	27.73	26.64		48.713	53.684	16.303	32.827	-0.82	-6.99		51.701	0.047	14.643	0.004		3447.98	57.4664	52.2	12.7	40.8	2.811	0.007	0.007	0.000	0.172	0.15	
2760	6/16/2004	6:43:42 PM		26.47	26.694	24.957	27.732	26.577		48.433	53.197	16.324	32.593	-0.837	-6.999		45.622	0.043	14.643	0.004		3448.98	57.4831	51.7	11.2	40.5	2.793	0.006	0.006	0.000	0.158	0.13	
2761	6/16/2004	6:44:42 PM		26.465	26.684	24.932	27.707	26.527		48.534	53.577	16.351	32.622	-0.84	-6.996		48.722	0.043	14.643	0.004		3449.98	57.4997	52.1	11.9	40.6	2.798	0.006	0.006	0.000	0.158	0.13	
2762	6/16/2004	6:45:42 PM		26.465	26.679	24.922	27.637	26.512		48.43	53.241	16.327	32.555	-0.817	-7.002		50.48	0.042	14.643	0.004		3450.98	57.5164	51.8	12.4	40.5	2.792	0.006	0.006	0.000	0.155	0.13	
2763	6/16/2004	6:46:42 PM		26.466	26.675	24.943	27.598	26.488		48.42	53.27	16.276	32.608	-0.817	-7.031		49.552	0.038	14.643	0.004		3451.98	57.5331	51.8	12.1	40.5	2.793	0.006	0.006	0.000	0.140	0.12	
2764	6/16/2004	6:47:42 PM		26.466	26.675	24.933	27.568	26.438		48.52	53.411	16.29	32.665	-0.817	-6.996		48.749	0.043	14.643	0.003		3452.98	57.5497	51.9	11.9	40.6	2.799	0.006	0.006	0.000	0.158	0.13	
2765	6/16/2004	6:48:42 PM		26.45	26.644	24.887	27.557	26.382		47.931	52.814	16.16	32.218	-0.823	-6.996		42.176	0.045	14.643	0.004		3453.98	57.5664	51.3	10.3	40.1	2.763	0.007	0.007	0.000	0.168	0.14	
2766	6/16/2004	6:49:42 PM		26.455	26.644	24.912	27.492	26.397		48.528	53.206	16.263	32.749	-0.82	-6.996		50.789	0.043	14.643	0.004		3454.98	57.5831	51.7	12.4	40.6	2.802	0.006	0.006	0.000	0.158	0.13	
2767	6/16/2004	6:50:42 PM		26.449	26.633	24.901	27.531	26.406		48.6	53.743	16.324	32.618	-0.823	-7.011		51.705	0.041	14.643	0.003		3455.98	57.5997	52.3	12.7	40.6	2.800	0.006	0.006	0.000	0.151	0.13	
2768	6/16/2004	6:51:42 PM		26.457	26.632	24.894	27.579	26.47		48.488	53.473	16.381	32.513	-0.82	-7.013		48.574	0.041	14.643	0.004		3456.98	57.6164	52.0	11.9	40.5	2.792	0.006	0.006	0.000	0.151	0.13	
2769	6/16/2004	6:52:42 PM		26.457	26.631	24.874	27.633	26.504		48.58	53.637	16.217	32.778	-0.817	-6.993		46.778	0.043	14.643	0.004		3457.98	57.6331	52.2	11.5	40.7	2.805	0.006	0.006	0.000	0.158	0.13	
2770	6/16/2004	6:53:42 PM		26.459	26.613	24.901	27.666	26.531		48.331	53.287	16.185	32.632	-0.82	-7.011		50.847	0.041	14.643	0.004		3458.98	57.6497	51.8	12.5	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
2771	6/16/2004	6:54:42 PM		26.463	26.622	24.894	27.719	26.569		48.435	53.305	16.168	32.725	-0.823	-7.005		47.683	0.042	14.643	0.003		3459.98	57.6664	51.8	11.7	40.6	2.798	0.006	0.006	0.000	0.155	0.13	
2772	6/16/2004	6:55:42 PM		26.467	26.621	24.889	27.738	26.613		48.323	53.39	16.292	32.407	-0.808	-6.904		50.286	0.041	14.643	0.004		3460.98	57.6831	51.9	12.3	40.4	2.783	0.006	0.006	0.000	0.152	0.13	
2773	6/16/2004	6:56:42 PM		26.464	26.623	24.891	27.756	26.636		48.233	53.206	16.232	32.452	-0.771	-6.788		47.308	0.043	14.643	0.004		3461.98	57.6997	51.7	11.6	40.3	2.781	0.006	0.006	0.000	0.159	0.14	
2774	6/16/2004	6:57:42 PM		26.458	26.622	24.89	27.775	26.65		48.105	53.139	16.18	32.345	-0.773	-6.823		49.552	0.041	14.643	0.004		3462.98	57.7164	51.7	12.1	40.2	2.773	0.006	0.006	0.000	0.152	0.13	
2775	6/16/2004	6:58:42 PM		26.479	26.633	24.901	27.796	26.676		48.441	53.419	16.281	32.596	-0.771	-6.817		50.925	0.042	14.643	0.004		3463.98	57.7331	51.9	12.5	40.5	2.794	0.006	0.006	0.000	0.155	0.13	
2776	6/16/2004	6:59:42 PM		26.464	26.623	24.851	27.786	26.716		48.484	53.438	16.275	32.678	-0.773	-6.814		47.867	0.043	14.643	0.003		3464.98	57.7497	52.0	11.7	40.6	2.798	0.006	0.006	0.000	0.159	0.14	
2777	6/16/2004	7:00:42 PM		26.479	26.638	24.906	27.801	26.731		48.41	53.419	16.393	32.442	-0.771	-6.82		49.016	0.041	14.643	0.004		3465.98	57.7664	51.9	12.0	40.4	2.787	0.006	0.006	0.000	0.152	0.13	
2778	6/16/2004	7:01:42 PM		26.475	26.634	24.892	27.841	26.746		48.221	53.208	16.261	32.423	-0.768	-6.817		48.411	0.042	14.643	0.004		3466.98	57.7831	51.7	11.9	40.3	2.780	0.006	0.006	0.000	0.156	0.13	
2779	6/16/2004	7:02:42 PM		26.485	26.644	24.897	27.832	26.702		48.273	53.22	16.178	32.608	-0.716	-6.811		49.677	0.043	14.643	0.004		3467.98	57.7997	51.7	12.2	40.4	2.788	0.006	0.006	0.000	0.159	0.14	
2780	6/16/2004	7:03:42 PM		26.48	26.634	24.877	27.742	26.632		48.314	53.313	16.332	32.446	-0.718	-6.808		47.846	0.043	14.643	0.004		3468.98	57.8164	51.8	11.7	40.4	2.784	0.006	0.006	0.000	0.159	0.14	
2781	6/16/2004	7:04:42 PM		26.49	26.654	24.912	27.672	26.572		48.389	53.398	16.243	32.587	-0.75	-6.808		50.897	0.042	14.643	0.004		3469.98	57.8331	51.9	12.5	40.5	2.792	0.006	0.006	0.000	0.155	0.13	
2782	6/16/2004	7:05:42 PM		26.474	26.628	24.886	27.616	26.476		47.991	52.992	16.187	32.265	-0.707	-6.805		46.797	0.042	14.643	0.004		3470.98	57.8497	51.5	11.5	40.1	2.767	0.006	0.006	0.000	0.157	0.13	
2783	6/16/2004	7:06:42 PM		26.485	26.639	24.877	27.562	26.472		48.265	53.297	16.241	32.456	-0.707	-6.8		47.683	0.044	14.643	0.004		3471.98	57.8664	51.8	11.7	40.4	2.783	0.007	0.007	0.000	0.163	0.14	
2784	6/16/2004	7:07:42 PM		26.475	26.629	24.892	27.487	26.402		48.244	53.048	16.198	32.536	-0.707	-6.802		47.272	0.043	14.643	0.004		3472.98	57.8831	51.6	11.6	40.4	2.785	0.006	0.006	0.000	0.159	0.14	
2785	6/16/2004	7:08:42 PM		26.464	26.608	24.881	27.511	26.352		48.42	53.452	16.309	32.575	-0.707	-6.802		48.868	0.041	14.643	0.004		3473.98	57.8997	52.0	12.0	40.5	2.792	0.006	0.006	0.000	0.151	0.13	
2786	6/16/2004	7:09:42 PM		26.464	26.618	24.871	27.486	26.317		48.202	53.347	16.184	32.425	-0.707	-6.794		45.66	0.043	14.643	0.004		3474.98	57.9164	51.9	11.2	40.3	2.779	0.006	0.006	0.000	0.160	0.14	
2787	6/16/2004	7:10:42 PM		26.458	26.592	24.88	27.441	26.311		48.484	53.554	16.422	32.435	-0.707	-6.805		47.496	0.041	14.643	0.004		3475.98	57.9331	52.1	11.6	40.5	2.790	0.006	0.006	0.000	0.152	0.13	
2788	6/16/2004	7:11:42 PM		26.448	26.577	24.874	27.47	26.365		48.584	53.73	16.332	32.667	-0.713	-6.8		50.197	0.042	14.643	0.003		3476.98	57.9497	52.3	12.3	40.6	2.801	0.006	0.006	0.000	0.155	0.13	
2789	6/16/2004	7:12:42 PM		26.447	26.581	24.899	27.559	26.399		48.277	53.315	16.276	32.364	-0.704	-6.794		48.384	0.042	14.643	0.004		3477.98	57.9664	51.8	11.9	40.3	2.780	0.006	0.006	0.000	0.156	0.13	
2790	6/16/2004	7:13:42 PM		26.445	26.564	24.897	27.587	26.442		48.292	53.313	16.199	32.536	-0.707	-6.797		45.664	0.041	14.643	0.004		3478.98	57.9831	51.8	11.2	40.4	2.786	0.006	0.006	0.000	0.152	0.13	
2791	6/16/2004	7:14:42 PM		26.449	26.553	24.93	27.585	26.491		48.486	53.643	16.311	32.571	-0.704	-6.8		48.13	0.041	14.643	0.004		3479.98	57.9997	52.2	11.8	40.5	2.794	0.006	0.006	0.000	0.151	0.13	
2792	6/16/2004	7:15:42 PM		26.448	26.552	24.915	27.639	26.525		48.41	53.396	16.252	32.593	-0.707	-6.791		50.184	0.042	14.643	0.004		3480.98	58.0164	51.9	12.3	40.5	2.792	0.006	0.006	0.000	0.155	0.13	
2793	6/16/2004	7:16:42 PM		26.453	26.562	24.925	27.699	26.55		48.316	53.421	16.12	32.608	-0.707	-6.791		45.722	0.044	14.643	0.004		3481.98	58.0331	51.9	11.2	40.5	2.790	0.007	0.007	0.000	0.162	0.14	
2794	6/16/2004	7:17:42 PM		26.454	26.558	24.925	27.71	26.62		48.271	53.28	16.366	32.323	-0.701	-6.797		50.557	0.042	14.643	0.004		3482.98	58.0497	51.8	12.4	40.3	2.778	0.006	0.006	0.000	0.156	0.13	
2795	6/16/2004	7:18:42 PM		26.449	26.563	24.925	27.735	26.635		48.009	53.123	16.19	32.247	-0.675	-6.8		50.718	0.041	14.643	0.004		3483.98	58.0664	51.7	12.4	40.1	2.767	0.006	0.006	0.000	0.153	0.13	
2796	6/16/2004	7:19:42 PM		26.454	26.568	24.925	27.735	26.655		48.2	53.318	16.314	32.257	-0.652	-6.791		47.959	0.041	14.643	0.004		3484.98	58.0831	51.8	11.8	40.2	2.774	0.006	0.006	0.000	0.152	0.13	
2797	6/16/2004	7:20:42 PM		26.47	26.584	24.917	27.787	26.677		47.808	52.752	16.077	32.199	-0.687	-6.776		49.089	0.043	14.643	0.004		3485.98	58.0997	51.3	12.0	40.0	2.758	0.006	0.006	0.000	0.161	0.14	
2798	6/16/2004	7:21:42 PM		26.454	26.563	24.906	27.776	26.691		48.151	53.137	16.292	32.304	-0.669	-6.791		49.537	0.041	14.643	0.004		3486.98	58.1164	51.7	12.1	40.2	2.774	0.006	0.006	0.000	0.152	0.13	
2799	6/16/2004	7:22:42 PM		26.466	26.59	24.913	27.773	26.707		48.244	53.419	16.317	32.318	-0.69	-6.785		48.945	0.042	14.643	0.003		3487.98	58.1331	51.9	12.0	40.3	2.777	0.006	0.006	0.000	0.156	0.13	
2800	6/16/2004	7:23:42 PM		26.471	26.585	24.903	27.792	26.673		48.07	53.038	16.274	32.306	-0.649	-6.776		48.989	0.042	14.643	0.004		3488.98	58.1497	51.6	12.0	40.2	2.771	0.006	0.006	0.000	0.156	0.13	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2801	6/16/2004	7:24:42 PM		26.461	26.59	24.868	27.763	26.633		48.565	53.767	16.304	32.682	-0.652	-6.785		46.607	0.041	14.643	0.004		3489.98	58.1664	52.3	11.4	40.6	2.801	0.006	0.006	0.000	0.151	0.13	
2802	6/16/2004	7:25:42 PM		26.466	26.59	24.893	27.663	26.563		48.148	53.228	16.269	32.255	-0.655	-6.779		51.536	0.041	14.643	0.004		3490.98	58.1831	51.8	12.6	40.2	2.772	0.006	0.006	0.000	0.153	0.13	
2803	6/16/2004	7:26:42 PM		26.461	26.59	24.883	27.638	26.518		48.184	53.309	16.294	32.333	-0.655	-6.774		47.552	0.043	14.643	0.003		3491.98	58.1997	51.8	11.7	40.3	2.776	0.006	0.006	0.000	0.160	0.14	
2804	6/16/2004	7:27:42 PM		26.461	26.595	24.868	27.588	26.453		48.281	53.224	16.216	32.534	-0.652	-6.779		52.013	0.042	14.643	0.004		3492.98	58.2164	51.8	12.7	40.4	2.786	0.006	0.006	0.000	0.156	0.13	
2805	6/16/2004	7:28:42 PM		26.461	26.595	24.878	27.533	26.373		48.109	53.172	16.302	32.236	-0.652	-6.774		47.735	0.043	14.643	0.004		3493.98	58.2331	51.7	11.7	40.2	2.770	0.006	0.006	0.000	0.160	0.14	
2806	6/16/2004	7:29:42 PM		26.449	26.588	24.871	27.496	26.337		48.061	53.139	16.16	32.37	-0.652	-6.771		51.375	0.037	14.643	0.004		3494.98	58.2497	51.7	12.6	40.2	2.773	0.006	0.006	0.000	0.138	0.12	
2807	6/16/2004	7:30:42 PM		26.455	26.589	24.867	27.462	26.308		47.864	52.918	16.172	32.152	-0.652	-6.779		46.006	0.041	14.643	0.004		3495.98	58.2664	51.4	11.3	40.0	2.758	0.006	0.006	0.000	0.153	0.13	
2808	6/16/2004	7:31:42 PM		26.444	26.573	24.845	27.421	26.256		48.074	53.334	16.183	32.337	-0.649	-6.762		47.529	0.043	14.643	0.004		3496.98	58.2831	51.9	11.6	40.2	2.772	0.006	0.006	0.000	0.160	0.14	
2809	6/16/2004	7:32:42 PM		26.443	26.567	24.895	27.395	26.265		48.306	53.376	16.248	32.435	-0.614	-6.762		49.465	0.041	14.643	0.004		3497.98	58.2997	51.9	12.1	40.4	2.783	0.006	0.006	0.000	0.152	0.13	
2810	6/16/2004	7:33:42 PM		26.426	26.55	24.853	27.423	26.299		47.97	53.034	16.122	32.36	-0.582	-6.748		50.645	0.043	14.643	0.004		3498.98	58.3164	51.6	12.4	40.2	2.769	0.006	0.006	0.000	0.160	0.14	
2811	6/16/2004	7:34:42 PM		26.424	26.543	24.856	27.471	26.362		48.159	53.293	16.225	32.378	-0.606	-6.745		49.49	0.044	14.643	0.004		3499.98	58.3331	51.8	12.1	40.3	2.776	0.007	0.007	0.000	0.164	0.14	
2812	6/16/2004	7:35:42 PM		26.419	26.523	24.855	27.451	26.361		48.399	53.318	15.849	33.041	-0.585	-6.75		50.783	0.044	14.643	0.004		3500.98	58.3497	51.8	12.4	40.7	2.808	0.007	0.007	0.000	0.162	0.14	
2813	6/16/2004	7:36:42 PM		26.407	26.516	24.854	27.519	26.379		48.518	53.755	15.976	32.907	-0.603	-6.742		48.265	0.042	14.643	0.004		3501.98	58.3664	52.3	11.8	40.7	2.807	0.006	0.006	0.000	0.154	0.13	
2814	6/16/2004	7:37:42 PM		26.405	26.519	24.842	27.517	26.438		48.715	53.738	16.065	33.127	-0.603	-6.739		45.775	0.043	14.643	0.004		3502.98	58.3831	52.3	11.2	40.9	2.821	0.006	0.006	0.000	0.157	0.13	
2815	6/16/2004	7:38:42 PM		26.405	26.514	24.822	27.542	26.448		48.333	53.604	15.968	32.766	-0.545	-6.675		45.944	0.039	14.643	0.004		3503.98	58.3997	52.1	11.3	40.5	2.796	0.006	0.006	0.000	0.144	0.12	
2816	6/16/2004	7:39:42 PM		26.404	26.518	24.851	27.606	26.456		48.499	53.714	15.959	32.934	-0.542	-6.664		46.597	0.042	14.643	0.004		3504.98	58.4164	52.2	11.4	40.7	2.807	0.006	0.006	0.000	0.154	0.13	
2817	6/16/2004	7:40:42 PM		26.398	26.507	24.84	27.6	26.48		48.576	53.709	16.06	32.963	-0.542	-6.658		46.841	0.043	14.643	0.004		3505.98	58.4331	52.2	11.5	40.8	2.811	0.006	0.006	0.000	0.158	0.13	
2818	6/16/2004	7:41:42 PM		26.392	26.516	24.824	27.599	26.504		48.374	53.56	16.003	32.823	-0.542	-6.667		49.8	0.041	14.643	0.004		3506.98	58.4497	52.1	12.2	40.6	2.799	0.006	0.006	0.000	0.151	0.13	
2819	6/16/2004	7:42:42 PM		26.386	26.505	24.833	27.568	26.508		48.671	53.948	16.025	33.014	-0.542	-6.667		47.485	0.043	14.643	0.004		3507.98	58.4664	52.5	11.6	40.8	2.816	0.006	0.006	0.000	0.158	0.13	
2820	6/16/2004	7:43:42 PM		26.406	26.53	24.867	27.662	26.522		48.65	53.817	16.023	33.139	-0.542	-6.664		47.673	0.042	14.643	0.004		3508.98	58.4831	52.3	11.7	40.9	2.820	0.006	0.006	0.000	0.154	0.13	
2821	6/16/2004	7:44:42 PM		26.386	26.51	24.827	27.607	26.522		48.783	54.099	16.131	32.988	-0.542	-6.661		49.254	0.044	14.643	0.004		3509.98	58.4997	52.6	12.1	40.9	2.819	0.007	0.007	0.000	0.161	0.14	
2822	6/16/2004	7:45:42 PM		26.386	26.51	24.817	27.592	26.557		48.432	53.628	16.097	32.768	-0.542	-6.661		54.531	0.044	14.643	0.004		3510.98	58.5164	52.2	13.4	40.6	2.799	0.007	0.007	0.000	0.162	0.14	
2823	6/16/2004	7:46:42 PM		26.391	26.525	24.842	27.602	26.552		48.358	53.649	16.007	32.749	-0.545	-6.658		51.365	0.042	14.643	0.004		3511.98	58.5331	52.2	12.6	40.6	2.796	0.006	0.006	0.000	0.155	0.13	
2824	6/16/2004	7:47:42 PM		26.386	26.525	24.848	27.648	26.563		48.542	53.798	16.127	32.854	-0.542	-6.669		45.693	0.041	14.643	0.004		3512.98	58.5497	52.3	11.2	40.7	2.806	0.006	0.006	0.000	0.151	0.13	
2825	6/16/2004	7:48:42 PM		26.386	26.535	24.822	27.612	26.532		48.688	53.819	16.21	32.94	-0.545	-6.661		43.68	0.042	14.643	0.003		3513.98	58.5664	52.3	10.7	40.8	2.814	0.006	0.006	0.000	0.154	0.13	
2826	6/16/2004	7:49:42 PM		26.385	26.529	24.851	27.537	26.447		48.542	53.877	16.075	32.893	-0.539	-6.664		45.136	0.041	14.643	0.004		3514.98	58.5831	52.4	11.1	40.7	2.807	0.006	0.006	0.000	0.151	0.13	
2827	6/16/2004	7:50:42 PM		26.384	26.528	24.841	27.471	26.371		48.59	53.898	16.197	32.747	-0.545	-6.664		48.78	0.042	14.643	0.004		3515.98	58.5997	52.4	12.0	40.7	2.804	0.006	0.006	0.000	0.155	0.13	
2828	6/16/2004	7:51:42 PM		26.379	26.523	24.821	27.421	26.311		48.667	53.904	16.217	32.883	-0.519	-6.664		51.06	0.041	14.643	0.004		3516.98	58.6164	52.4	12.5	40.8	2.811	0.006	0.006	0.000	0.151	0.13	
2829	6/16/2004	7:52:42 PM		26.377	26.511	24.834	27.329	26.265		48.576	53.79	16.2	32.797	-0.504	-6.664		47.504	0.041	14.643	0.004		3517.98	58.6331	52.3	11.6	40.7	2.805	0.006	0.006	0.000	0.151	0.13	
2830	6/16/2004	7:53:42 PM		26.377	26.5	24.843	27.324	26.224		48.53	53.74	16.165	32.862	-0.527	-6.658		46.451	0.042	14.643	0.004		3518.98	58.6497	52.3	11.4	40.7	2.806	0.006	0.006	0.000	0.155	0.13	
2831	6/16/2004	7:54:42 PM		26.354	26.488	24.816	27.276	26.207		48.656	53.859	16.283	32.832	-0.536	-6.669		47.243	0.041	14.643	0.003		3519.98	58.6664	52.4	11.6	40.7	2.809	0.006	0.006	0.000	0.151	0.13	
2832	6/16/2004	7:55:42 PM		26.357	26.481	24.813	27.274	26.224		48.453	53.572	16.239	32.715	-0.51	-6.661		44.371	0.042	14.643	0.004		3520.98	58.6831	52.1	10.9	40.6	2.798	0.006	0.006	0.000	0.155	0.13	
2833	6/16/2004	7:56:42 PM		26.355	26.479	24.842	27.297	26.223		48.476	53.676	16.269	32.651	-0.519	-6.652		46.982	0.042	14.643	0.004		3521.98	58.6997	52.2	11.5	40.6	2.797	0.006	0.006	0.000	0.155	0.13	
2834	6/16/2004	7:57:42 PM		26.343	26.462	24.899	27.32	26.27		48.333	53.401	16.243	32.596	-0.498	-6.649		46.707	0.042	14.643	0.003		3522.98	58.7164	51.9	11.4	40.5	2.790	0.006	0.006	0.000	0.155	0.13	
2835	6/16/2004	7:58:42 PM		26.341	26.455	24.918	27.378	26.278		48.64	53.885	16.144	32.946	-0.481	-6.649		48.238	0.042	14.643	0.004		3523.98	58.7331	52.4	11.8	40.8	2.813	0.006	0.006	0.000	0.154	0.13	
2836	6/16/2004	7:59:42 PM		26.339	26.443	24.921	27.381	26.327		48.733	53.942	16.184	32.973	-0.484	-6.649		50.418	0.042	14.643	0.004		3524.98	58.7497	52.5	12.4	40.9	2.817	0.006	0.006	0.000	0.154	0.13	
2837	6/16/2004	8:00:42 PM		26.344	26.443	24.91	27.461	26.341		48.404	53.794	16.068	32.791	-0.36	-6.276		48.716	0.04	14.643	0.004		3525.98	58.7664	52.3	11.9	40.6	2.799	0.006	0.006	0.000	0.147	0.13	
2838	6/16/2004	8:01:42 PM		26.354	26.438	24.895	27.505	26.381		48.642	54.024	15.921	33.119	-0.357	-6.262		48.042	0.042	14.643	0.004		3526.98	58.7831	52.6	11.8	40.9	2.819	0.006	0.006	0.000	0.154	0.13	
2839	6/16/2004	8:02:42 PM		26.359	26.438	24.87	27.495	26.411		48.495	53.941	15.775	33.16	-0.357	-6.279		53.069	0.041	14.643	0.004		3527.98	58.7997	52.5	13.0	40.8	2.815	0.006	0.006	0.000	0.150	0.13	
2840	6/16/2004	8:03:42 PM		26.354	26.423	24.865	27.476	26.401		48.387	53.85	15.82	33.008	-0.357	-6.282		46.761	0.042	14.643	0.004		3528.98	58.8164	52.4	11.5	40.7	2.806	0.006	0.006	0.000	0.154	0.13	
2841	6/16/2004	8:04:33 PM		26.364	26.438	24.861	27.511	26.441		48.611	54.124	15.683	33.355	-0.325	-6.282		49.527	0.041	14.643	0.004		3529.83	58.8306	52.7	12.1	41.0	2.826	0.006	0.006	0.000	0.150	0.13	
2842	6/16/2004	8:05:33 PM		26.349	26.423	24.831	27.516	26.436		48.58	54.062	15.726	33.277	-0.357	-6.285		42.546	0.04	14.643	0.004		3530.83	58.8472	52.6	10.4	40.9	2.822	0.006	0.006	0.000	0.146	0.12	
2843	6/16/2004	8:06:33 PM		26.356	26.43	24.808	27.568	26.458		48.744	54.028	15.776	33.451	-0.36	-6.285		45.649	0.042	14.643	0.004		3531.83	58.8639	52.6	11.2	41.1	2.834	0.006	0.006	0.000	0.153	0.13	
2844	6/16/2004	8:07:33 PM		26.351	26.43	24.828	27.553	26.473		48.464	54.049	15.663	33.17	-0.331	-6.262		46.672	0.042	14.643	0.004		3532.83	58.8806	52.6	11.4	40.8	2.814	0.006	0.006	0.000	0.154	0.13	
2845	6/16/2004	8:08:33 PM		26.34	26.419	24.797	27.562	26.472		48.791	54.302	15.83	33.336	-0.31	-6.268		44.625	0.043	14.643	0.004		3533.83	58.8972	52.8	10.9	41.1	2.831	0.006	0.006	0.000	0.157	0.13	
2846	6/16/2004	8:09:33 PM		26.35	26.429	24.792	27.612	26.467		48.791	54.267	15.743	33.484	-0.29	-6.25		45.109	0.043	14.643	0.004		3534.83	58.9139	52.8	11.1	41.1	2.836	0.006	0.006	0.000	0.157	0.13	
2847	6/16/2004	8:10:33 PM		26.35	26.434	24.792	27.547	26.502		48.839	54.476	15.851	33.38	-0.313	-6.279		49.496	0.043	14.643	0.004		3535.83	58.9306	53.0	12.1	41.1	2.834	0.006	0.006	0.000	0.157	0.13	
2848	6/16/2004	8:11:33 PM		26.357	26.451	24.798	27.574	26.494		48.636	54.026	15.75	33.316	-0.333	-6.299		45.627	0.041	14.643	0.004		3536.83	58.9472	52.6	11.2	41.0	2.825	0.006	0.006	0.000	0.150	0.13	
2849	6/16/2004	8:12:33 PM		26.337	26.436	24.768	27.559	26.489		49.146	54.565	15.864	33.691	-0.31	-6.291		44.738	0.042	14.643	0.004		3537.83	58.9639	53.1	11.0	41.4	2.856	0.006	0.006	0.000	0.152	0.13	
2850	6/16/2004	8:13:33 PM		26.338	26.442	24.739	27.569	26.509		48.58	53.983	15.808	33.254	-0.284	-6.282		45.652	0.043	14.643	0.003		3538.83	58.9806	52.5	11.2	40.9	2.821	0.006	0.006	0.000	0.158	0.13	
2851	6/16/2004	8:14:33 PM		26.338	26.452	24.774	27.564	26.514		48.739	54.296	15.819	33.312	-0.31	-6.291		45.255	0.041	14.643	0.004		3539.83	58.9972	52.8	11.1	41.0	2.829	0.006	0.006	0.000	0.150	0.13	
2852	6/16/2004	8:15:33 PM		26.338	26.442	24.774	27.559	26.48		48.586	54.143	15.746	33.26	-0.299	-6.271		43.778	0.042	14.643	0.004		3540.83	59.0139	52.7	10.7	40.9	2.821	0.006	0.006	0.000	0.154	0.13	
2853	6/16/2004	8:16:33 PM		26.333	26.452	24.75	27.545	26.416		48.489	54.035	15.786	33.104	-0.278	-6.276		50.288	0.042	14.643	0.004		3541.83	59.0306	52.6	12.3	40.8	2.813	0.006	0.006	0.000	0.155	0.13	
2854	6/16/2004	8:17:33 PM		26.307	26.441	24.723	27.419	26.324		48.905	54.441	15.777	33.515	-0.287	-6.276		46.742	0.043	14.643	0.004		3542.83	59.0472	53.0	11.5	41.2	2.841	0.006	0.006	0.000	0.157	0.13	
2855	6/16/2004	8:18:33 PM		26.316	26.445	24.742	27.393	26.268		48.706	54.08	15.761	33.332	-0.258	-6.282		47.18	0.042	14.643	0.004		3543.83	59.0639	52.6	11.6	41.0	2.828	0.006	0.006	0.000	0.154	0.13	
2856	6/16/2004	8:19:33 PM		26.306	26.44	24.732	27.363	26.224		48.843	54.399	15.841	33.443	-0.247	-6.271		45.76	0.042	14.643	0.004		3544.83	59.0806	52.9	11.2	41.1	2.837	0.006	0.006	0.000	0.153	0.13	
2857	6/16/2004	8:20:33 PM		26.305	26.433	24.716	27.307	26.162		48.574	54.087	15.729	33.267	-0.212	-6.276		48.444	0.04	14.643	0.004		3545.83	59.0972	52.6	11.9	40.9	2.821	0.006	0.006	0.000	0.147	0.13	
2858	6/16/2004	8:21:33 PM		26.283	26.407	24.704	27.23	26.12		48.692	54.279	15.719	33.353	-0.244	-6.271		46.202	0.042	14.643	0.004		3546.83	59.1139	52.8	11.3	41.0	2.828	0.006	0.006	0.000	0.154	0.13	
2859	6/16/2004	8:22:33 PM		26.285	26.404	24.721	27.202	26.102		48.619	54.167	15.742	33.32	-0.229	-6.265		47.673	0.041	14.643	0.004		3547.83	59.1306	52.7	11.7	41.0	2.825	0.006	0.006	0.000	0.150	0.13	
2860	6/16/2004	8:23:33 PM		26.284	26.403	24.7	27.196	26.136		48.781	54.283	15.839	33.338	-0.206	-6.259		47.679	0.041	14.643	0.004		3548.83	59.1472	52.8	11.7	41.1	2.831	0.006	0.006	0.000	0.150	0.13	
2861	6/16/2004	8:24:33 PM		26.287	26.396	24.729	27.204	26.165		48.503	53.935	15.773	33.205	-0.212	-6.265		48.561	0.041	14.643	0.004		3549.83	59.1639	52.5	11.9	40.9	2.817	0.006	0.006	0.000	0.151	0.13	
2862	6/16/2004	8:25:33 PM		26.266	26.375	24.712	27.248	26.183		48.986	54.578	15.92	33.443	-0.2	-6.259		45.476	0.042	14.643	0.004		3550.83	59.1806	53.1	11.1	41.2	2.842	0.006	0.006	0.000	0.153	0.13	
2863	6/16/2004	8:26:33 PM		26.269	26.373	24.705	27.241	26.177		48.764	54.288	15.833	33.375	-0.212	-6.262		46.098	0.04	14.643	0.004		3551.83	59.1972	52.8	11.3	41.1	2.832	0.006	0.006	0.000	0.146	0.12	
2864	6/16/2004	8:27:33 PM		26.268	26.376	24.724	27.285	26.195		48.787	54.257	15.911	33.332	-0.189	-6.268		48.949	0.04	14.643	0.004		3552.83	59.2139	52.8	12.0	41.1	2.831	0.006	0.006	0.000	0.146	0.12	
2865	6/16/2004	8:28:33 PM		26.251	26.345	24.707	27.258	26.208		48.134	53.711	16.843	31.711	-0.215	-6.271		48.063	0.041	14.643	0.003		3553.83	59.2306	52.2	11.8	39.9	2.753	0.006	0.006	0.000	0.154	0.13	
2866	6/16/2004	8:29:33 PM		26.229	26.333	24.7	27.296	26.237		47.958	53.585	16.767	31.561	-0.244	-6.285		49.306	0.04	14.643	0.003		3554.83	59.2472	52.1	12.1	39.8	2.741	0.006	0.006	0.000	0.151	0.13	
2867	6/16/2004	8:30:33 PM		26.244	26.347	24.73	27.321	26.271		47.947	53.44	16.617	31.74	-0.232	-6.276		48.966	0.04	14.643	0.004		3555.83	59.2639	52.0	12.0	39.8	2.747	0.006	0.006	0.000	0.151	0.13	
2868	6/16/2004	8:31:33 PM		26.233	26.337	24.759	27.345	26.28		47.927	53.429	16.639	31.736	-0.206	-6.273		51.304	0.041	14.643	0.004		3556.83	59.2806	52.0	12.6	39.8	2.746	0.006	0.006	0.000	0.155	0.13	
2869	6/16/2004	8:32:33 PM		26.232	26.326	24.768	27.369	26.259		48.059	53.579	16.507	31.955	-0.221	-6.271		45.775	0.041	14.643	0.004		3557.83	59.2972	52.1	11.2	40.0	2.758	0.006	0.006	0.000	0.154	0.13	
2870	6/16/2004	8:33:33 PM		26.239	26.332	24.755	27.39	26.296		48.07	53.49	16.634	31.888	-0.189	-6.265		45.203	0.042	14.643	0.004		3558.83	59.3139	52.0	11.1	40.0	2.756	0.006	0.006	0.000	0.158	0.13	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2871	6/16/2004	8:34:33 PM		26.234	26.337	24.795	27.385	26.291		47.763	53.363	16.399	31.769	-0.218	-6.276		45.783	0.04	14.643	0.004		3559.83	59.3306	51.9	11.2	39.8	2.742	0.006	0.006	0.000	0.151	0.13	
2872	6/16/2004	8:35:33 PM		26.228	26.322	24.779	27.395	26.305		48.254	53.794	16.482	32.169	-0.197	-6.265		48.486	0.041	14.643	0.004		3560.83	59.3472	52.3	11.9	40.2	2.772	0.006	0.006	0.000	0.153	0.13	
2873	6/16/2004	8:36:33 PM		26.239	26.332	24.79	27.43	26.331		48.157	53.705	16.335	32.234	-0.183	-6.262		47.278	0.04	14.643	0.004		3561.83	59.3639	52.2	11.6	40.2	2.771	0.006	0.006	0.000	0.149	0.13	
2874	6/16/2004	8:37:33 PM		26.239	26.332	24.815	27.395	26.336		47.815	53.425	16.261	32.002	-0.183	-6.268		47.226	0.04	14.643	0.004		3562.83	59.3806	52.0	11.6	39.9	2.752	0.006	0.006	0.000	0.150	0.13	
2875	6/16/2004	8:38:33 PM		26.232	26.321	24.808	27.379	26.329		47.92	53.456	16.338	32.027	-0.183	-6.271		46.029	0.039	14.643	0.004		3563.83	59.3972	52.0	11.3	40.0	2.756	0.006	0.006	0.000	0.146	0.12	
2876	6/16/2004	8:39:33 PM		26.249	26.342	24.81	27.435	26.361		48.345	53.745	16.447	32.337	-0.183	-6.271		46.939	0.04	14.643	0.004		3564.83	59.4139	52.3	11.5	40.3	2.781	0.006	0.006	0.000	0.149	0.13	
2877	6/16/2004	8:40:33 PM		26.255	26.349	24.826	27.352	26.362		47.904	53.494	16.355	31.941	-0.186	-6.279		44.423	0.04	14.643	0.004		3565.83	59.4306	52.0	10.9	39.9	2.753	0.006	0.006	0.000	0.150	0.13	
2878	6/16/2004	8:41:33 PM		26.255	26.344	24.837	27.392	26.362		48.41	53.716	16.422	32.477	-0.183	-6.259		49.723	0.041	14.643	0.004		3566.83	59.4472	52.2	12.2	40.4	2.788	0.006	0.006	0.000	0.152	0.13	
2879	6/16/2004	8:42:33 PM		26.254	26.343	24.831	27.456	26.346		48.294	53.815	16.398	32.333	-0.183	-6.288		46.786	0.041	14.643	0.004		3567.83	59.4639	52.3	11.5	40.3	2.779	0.006	0.006	0.000	0.152	0.13	
2880	6/16/2004	8:43:33 PM		26.249	26.332	24.815	27.44	26.366		48.192	53.801	16.487	32.05	-0.186	-6.282		47.704	0.041	14.643	0.004		3568.83	59.4806	52.3	11.7	40.1	2.766	0.006	0.006	0.000	0.153	0.13	
2881	6/16/2004	8:44:33 PM		26.274	26.358	24.881	27.466	26.396		48.248	53.718	16.456	32.22	-0.18	-6.285		46.863	0.04	14.643	0.004		3569.83	59.4972	52.2	11.5	40.2	2.774	0.006	0.006	0.000	0.149	0.13	
2882	6/16/2004	8:45:33 PM		26.254	26.323	24.826	27.446	26.376		48.097	53.83	16.453	32.06	-0.186	-6.291		47.168	0.039	14.643	0.004		3570.83	59.5139	52.4	11.6	40.1	2.763	0.006	0.006	0.000	0.146	0.12	
2883	6/16/2004	8:46:33 PM		26.259	26.338	24.931	27.491	26.396		47.806	53.429	16.337	31.906	-0.177	-6.276		52.036	0.041	14.643	0.004		3571.83	59.5306	52.0	12.8	39.9	2.748	0.006	0.006	0.000	0.154	0.13	
2884	6/16/2004	8:47:33 PM		26.254	26.328	24.921	27.386	26.391		47.881	53.272	16.439	31.941	-0.183	-6.276		49.423	0.041	14.643	0.003		3572.83	59.5472	51.8	12.1	39.9	2.752	0.006	0.006	0.000	0.154	0.13	
2885	6/16/2004	8:48:33 PM		26.27	26.344	24.912	27.417	26.377		48.024	53.684	16.419	31.966	-0.186	-6.273		49.225	0.041	14.643	0.004		3573.83	59.5639	52.2	12.1	40.0	2.758	0.006	0.006	0.000	0.153	0.13	
2886	6/16/2004	8:49:33 PM		26.28	26.349	24.912	27.422	26.382		47.8	53.258	16.311	31.883	-0.16	-6.285		45.414	0.04	14.643	0.003		3574.83	59.5806	51.8	11.1	39.8	2.747	0.006	0.006	0.000	0.150	0.13	
2887	6/16/2004	8:50:33 PM		26.282	26.356	24.893	27.424	26.374		47.964	53.631	16.576	31.805	-0.142	-6.268		53.317	0.04	14.643	0.004		3575.83	59.5972	52.2	13.1	39.9	2.750	0.006	0.006	0.000	0.150	0.13	
2888	6/16/2004	8:51:33 PM		26.281	26.34	24.897	27.328	26.303		47.758	53.425	16.302	31.873	-0.148	-6.271		46.83	0.04	14.643	0.004		3576.83	59.6139	52.0	11.5	39.8	2.745	0.006	0.006	0.000	0.150	0.13	
2889	6/16/2004	8:52:33 PM		26.29	26.349	24.897	27.307	26.222		48.101	53.583	16.563	32.013	-0.113	-6.273		49.348	0.04	14.643	0.004		3577.83	59.6306	52.1	12.1	40.1	2.762	0.006	0.006	0.000	0.149	0.13	
2890	6/16/2004	8:53:33 PM		26.273	26.327	24.864	27.19	26.14		48.136	53.743	16.461	32.132	-0.113	-6.273		49.725	0.04	14.643	0.004		3578.83	59.6472	52.3	12.2	40.1	2.767	0.006	0.006	0.000	0.149	0.13	
2891	6/16/2004	8:54:33 PM		26.287	26.331	24.873	27.154	26.08		48.038	53.573	16.405	32.074	-0.113	-6.259		50.011	0.041	14.643	0.004		3579.83	59.6639	52.1	12.3	40.1	2.762	0.006	0.006	0.000	0.153	0.13	
2892	6/16/2004	8:55:33 PM		26.286	26.33	24.888	27.168	26.034		48.018	53.496	16.424	32.101	-0.113	-6.262		45.989	0.04	14.643	0.004		3580.83	59.6806	52.0	11.3	40.1	2.762	0.006	0.006	0.000	0.149	0.13	
2893	6/16/2004	8:56:33 PM		26.285	26.318	24.871	27.142	26.057		48.123	53.591	16.442	32.197	-0.111	-6.25		48.482	0.041	14.643	0.004		3581.83	59.6972	52.1	11.9	40.2	2.769	0.006	0.006	0.000	0.153	0.13	
2894	6/16/2004	8:57:33 PM		26.272	26.306	24.839	27.139	26.045		48.215	53.863	16.257	32.357	-0.113	-6.245		47.183	0.04	14.643	0.004		3582.83	59.7139	52.4	11.6	40.3	2.778	0.006	0.006	0.000	0.149	0.13	
2895	6/16/2004	8:58:33 PM		26.276	26.295	24.868	27.139	26.054		48.126	53.637	16.174	32.38	-0.113	-6.245		46.966	0.041	14.643	0.003		3583.83	59.7306	52.2	11.5	40.3	2.775	0.006	0.006	0.000	0.152	0.13	
2896	6/16/2004	8:59:33 PM		26.265	26.284	24.851	27.142	26.077		48.25	53.854	16.136	32.567	-0.113	-6.245		49.886	0.039	14.643	0.004		3584.83	59.7472	52.4	12.2	40.4	2.786	0.006	0.006	0.000	0.144	0.12	
2897	6/16/2004	9:00:33 PM		26.279	26.293	24.86	27.226	26.121		48.078	53.57	16.235	32.284	-0.096	-6.239		47.078	0.04	14.643	0.004		3585.83	59.7639	52.1	11.5	40.2	2.770	0.006	0.006	0.000	0.149	0.13	
2898	6/16/2004	9:01:33 PM		26.262	26.271	24.859	27.21	26.14		48.134	53.842	16.185	32.36	-0.111	-6.236		46.584	0.041	14.643	0.004		3586.83	59.7806	52.4	11.4	40.2	2.775	0.006	0.006	0.000	0.152	0.13	
2899	6/16/2004	9:02:33 PM		26.256	26.255	24.842	27.223	26.138		48.038	53.765	16.029	32.438	-0.093	-6.236		46.315	0.041	14.643	0.004		3587.83	59.7972	52.3	11.4	40.2	2.774	0.006	0.006	0.000	0.153	0.13	
2900	6/16/2004	9:03:33 PM		26.251	26.26	24.832	27.233	26.158		48.364	54.068	16.107	32.694	-0.099	-6.245		45.157	0.04	14.643	0.004		3588.83	59.8139	52.6	11.1	40.5	2.794	0.006	0.006	0.000	0.148	0.13	
2901	6/16/2004	9:04:33 PM		26.251	26.255	24.812	27.218	26.178		48.379	54.008	16.054	32.747	-0.105	-6.23		50.299	0.042	14.643	0.004		3589.83	59.8306	52.5	12.3	40.6	2.797	0.006	0.006	0.000	0.155	0.13	
2902	6/16/2004	9:05:33 PM		26.256	26.255	24.857	27.273	26.168		48.128	53.657	16.108	32.472	-0.084	-6.23		47.216	0.04	14.643	0.004		3590.83	59.8472	52.2	11.6	40.3	2.779	0.006	0.006	0.000	0.149	0.13	
2903	6/16/2004	9:06:33 PM		26.25	26.249	24.836	27.252	26.192		48.206	53.73	16.094	32.503	-0.096	-6.227		44.969	0.042	14.643	0.004		3591.83	59.8639	52.3	11.0	40.4	2.782	0.006	0.006	0.000	0.156	0.13	
2904	6/16/2004	9:07:33 PM		26.251	26.255	24.827	27.268	26.218		48.588	54.429	16.226	32.678	-0.087	-6.221		48.457	0.042	14.643	0.004		3592.83	59.8806	53.0	11.9	40.6	2.802	0.006	0.006	0.000	0.155	0.13	
2905	6/16/2004	9:08:33 PM		26.236	26.24	24.812	27.223	26.218		48.262	53.635	16.095	32.673	-0.09	-6.216		48.718	0.041	14.643	0.004		3593.83	59.8972	52.2	11.9	40.5	2.790	0.006	0.006	0.000	0.152	0.13	
2906	6/16/2004	9:09:33 PM		26.24	26.249	24.831	27.257	26.192		48.362	54.051	16.171	32.602	-0.09	-6.227		45.408	0.041	14.643	0.003		3594.83	59.9139	52.6	11.1	40.5	2.791	0.006	0.006	0.000	0.152	0.13	
2907	6/16/2004	9:10:33 PM		26.229	26.233	24.811	27.261	26.207		48.551	54.323	16.147	32.76	-0.09	-6.236		51.219	0.041	14.643	0.003		3595.83	59.9306	52.9	12.6	40.7	2.803	0.006	0.006	0.000	0.151	0.13	
2908	6/16/2004	9:11:33 PM		26.234	26.243	24.795	27.276	26.207		48.534	53.863	16.261	32.776	-0.09	-6.23		45.478	0.041	14.643	0.004		3596.83	59.9472	52.4	11.1	40.7	2.803	0.006	0.006	0.000	0.151	0.13	
2909	6/16/2004	9:12:33 PM		26.229	26.242	24.82	27.251	26.201		48.304	54.151	15.981	32.665	-0.087	-6.23		46.617	0.04	14.643	0.004		3597.83	59.9639	52.7	11.4	40.5	2.791	0.006	0.006	0.000	0.148	0.13	
2910	6/16/2004	9:13:33 PM		26.229	26.237	24.815	27.285	26.201		48.441	54.055	16.045	32.842	-0.09	-6.23		50.115	0.04	14.643	0.003		3598.83	59.9806	52.6	12.3	40.6	2.802	0.006	0.006	0.000	0.148	0.13	
2911	6/16/2004	9:14:33 PM		26.234	26.252	24.82	27.33	26.226		48.281	53.668	16.048	32.749	-0.084	-6.242		46.676	0.039	14.643	0.004		3599.83	59.9972	52.2	11.4	40.5	2.793	0.006	0.006	0.000	0.144	0.12	
2912	6/16/2004	9:15:33 PM		26.225	26.249	24.806	27.237	26.242		48.773	54.437	16.153	33.08	-0.09	-6.221		48.419	0.043	14.643	0.004		3600.83	60.0139	53.0	11.9	40.9	2.822	0.006	0.006	0.000	0.158	0.13	
2913	6/16/2004	9:16:33 PM		26.219	26.233	24.79	27.261	26.227		48.526	54.068	16.147	32.809	-0.093	-6.227		46.546	0.04	14.643	0.003		3601.83	60.0306	52.6	11.4	40.7	2.804	0.006	0.006	0.000	0.148	0.13	
2914	6/16/2004	9:17:33 PM		26.229	26.248	24.806	27.251	26.256		48.304	53.896	16.28	32.401	-0.087	-6.187		42.806	0.044	14.643	0.004		3602.83	60.0472	52.4	10.5	40.4	2.782	0.007	0.007	0.000	0.163	0.14	
2915	6/16/2004	9:18:33 PM		26.2	26.224	24.771	27.307	26.277		48.553	54.14	16.267	32.752	-0.087	-6.216		47.316	0.04	14.643	0.004		3603.83	60.0639	52.7	11.6	40.7	2.803	0.006	0.006	0.000	0.148	0.13	
2916	6/16/2004	9:19:33 PM		26.199	26.223	24.8	27.291	26.291		48.592	54.149	16.179	32.858	-0.082	-6.213		45.153	0.04	14.643	0.004		3604.83	60.0806	52.7	11.1	40.7	2.808	0.006	0.006	0.000	0.147	0.13	
2917	6/16/2004	9:20:33 PM		26.198	26.227	24.789	27.31	26.285		48.404	53.973	16.049	32.786	-0.09	-6.21		47.836	0.041	14.643	0.004		3605.83	60.0972	52.5	11.7	40.6	2.799	0.006	0.006	0.000	0.151	0.13	
2918	6/16/2004	9:21:33 PM		26.196	26.24	24.777	27.303	26.293		48.466	53.979	16.261	32.676	-0.09	-6.207		47.781	0.041	14.643	0.004		3606.83	60.1139	52.5	11.7	40.6	2.797	0.006	0.006	0.000	0.152	0.13	
2919	6/16/2004	9:22:33 PM		26.2	26.243	24.786	27.257	26.307		48.46	54.07	16.284	32.645	-0.087	-6.219		48.601	0.039	14.643	0.004		3607.83	60.1306	52.6	11.9	40.6	2.796	0.006	0.006	0.000	0.144	0.12	
2920	6/16/2004	9:23:33 PM		26.208	26.256	24.904	27.29	26.295		48.501	54.199	16.128	32.791	-0.087	-6.216		47.988	0.042	14.643	0.004		3608.83	60.1472	52.7	11.8	40.6	2.802	0.006	0.006	0.000	0.154	0.13	
2921	6/16/2004	9:24:33 PM		26.207	26.261	24.873	27.264	26.304		48.424	54.128	16.085	32.776	-0.032	-6.12		51.137	0.041	14.643	0.004		3609.83	60.1639	52.7	12.5	40.6	2.799	0.006	0.006	0.000	0.151	0.13	
2922	6/16/2004	9:25:33 PM		26.218	26.266	24.854	27.275	26.3		48.082	53.819	15.921	32.632	-0.032	-6.126		47.525	0.041	14.643	0.003		3610.83	60.1806	52.3	11.6	40.4	2.782	0.006	0.006	0.000	0.152	0.13	
2923	6/16/2004	9:26:33 PM		26.213	26.277	24.874	27.25	26.3		48.43	54.103	16.047	32.76	-0.032	-6.123		48.336	0.04	14.643	0.004		3611.83	60.1972	52.6	11.8	40.6	2.799	0.006	0.006	0.000	0.147	0.13	
2924	6/16/2004	9:27:33 PM		26.219	26.288	24.87	27.271	26.316		48.549	54.277	16.094	32.891	-0.032	-6.117		47.577	0.041	14.643	0.004		3612.83	60.2139	52.8	11.7	40.7	2.808	0.006	0.006	0.000	0.151	0.13	
2925	6/16/2004	9:28:33 PM		26.222	26.291	24.838	27.294	26.294		48.459	54.194	16.119	32.729	-0.009	-6.1		46.811	0.04	14.643	0.003		3613.83	60.2306	52.7	11.5	40.6	2.799	0.006	0.006	0.000	0.148	0.13	
2926	6/16/2004	9:29:33 PM		26.232	26.311	24.838	27.344	26.299		48.236	53.966	16.124	32.52	-0.029	-6.094		50.395	0.042	14.643	0.004		3614.83	60.2472	52.5	12.4	40.4	2.784	0.006	0.006	0.000	0.156	0.13	
2927	6/16/2004	9:30:33 PM		26.239	26.318	24.86	27.341	26.316		48.376	53.956	16.019	32.834	-0.018	-6.094		45.337	0.041	14.643	0.004		3615.83	60.2639	52.5	11.1	40.6	2.800	0.006	0.006	0.000	0.151	0.13	
2928	6/16/2004	9:31:33 PM		26.23	26.309	24.866	27.337	26.322		47.92	53.589	17.218	31.18	-0.029	-6.088		50.641	0.038	14.643	0.004		3616.83	60.2806	52.1	12.4	39.6	2.727	0.006	0.006	0.000	0.144	0.12	
2929	6/16/2004	9:32:33 PM		26.236	26.315	24.888	27.343	26.323		48.636	54.263	17.491	31.592	-0.029	-6.088		49.884	0.039	14.643	0.004		3617.83	60.2972	52.8	12.2	40.1	2.766	0.006	0.006	0.000	0.145	0.12	
2930	6/16/2004	9:33:33 PM		26.224	26.313	24.906	27.301	26.336		48.406	53.964	17.118	31.764	0.011	-6.086		50.201	0.04	14.643	0.004		3618.83	60.3139	52.5	12.3	40.1	2.764	0.006	0.006	0.000	0.149	0.13	
2931	6/16/2004	9:34:33 PM		26.226	26.315	24.927	27.343	26.323		48.673	54.387	17.031	32.021	0.02	-6.071		48.916	0.039	14.643	0.004		3619.83	60.3306	52.9	12.0	40.3	2.782	0.006	0.006	0.000	0.144	0.12	
2932	6/16/2004	9:35:33 PM		26.223	26.311	24.924	27.384	26.319		48.7	54.551	17.049	32.044	0.023	-6.068		50.132	0.038	14.643	0.004		3620.83	60.3472	53.1	12.3	40.4	2.784	0.006	0.006	0.000	0.141	0.12	
2933	6/16/2004	9:36:33 PM		26.213	26.306	24.924	27.334	26.315		49.333	55.189	16.956	32.76	0.023	-6.062		48.686	0.039	14.643	0.004		3621.83	60.3639	53.7	11.9	41.0	2.830	0.006	0.006	0.000	0.142	0.12	
2934	6/16/2004	9:37:33 PM		26.218	26.312	24.965	27.345	26.29		48.609	54.503	16.721	32.24	0.023	-6.06		51.726	0.04	14.643	0.004		3622.83	60.3806	53.0	12.7	40.4	2.787	0.006	0.006	0.000	0.148	0.13	
2935	6/16/2004	9:38:33 PM		26.223	26.307	24.965	27.345	26.285		48.808	54.41	16.769	32.479	0.02	-6.048		47.775	0.04	14.643	0.004		3623.83	60.3972	52.9	11.7	40.6	2.802	0.006	0.006	0.000	0.147	0.12	
2936	6/16/2004	9:39:33 PM		26.23	26.314	24.976	27.377	26.307		48.835	54.511	16.728	32.591	0.026	-6.071		48.004	0.039	14.643	0.004		3624.83	60.4139	53.0	11.8	40.7	2.807	0.006	0.006	0.000	0.143	0.12	
2937	6/16/2004	9:40:33 PM		26.22	26.294	24.971	27.297	26.317		49.013	54.7	16.737	32.745	0.017	-6.083		48.278	0.04	14.643	0.003		3625.83	60.4306	53.2	11.8	40.9	2.818	0.006	0.006	0.000	0.146	0.12	
2938	6/16/2004	9:41:33 PM		26.235	26.304	25.046	27.302	26.307		48.789	54.646	16.874	32.253	0.02	-6.06		46.242	0.041	14.643	0.004		3626.83	60.4472	53.2	11.3	40.5	2.794	0.006	0.006	0.000	0.151	0.13	
2939	6/16/2004	9:42:33 PM		26.24	26.309	25.056	27.357	26.297		48.851	54.652	16.653	32.602	0.057	-6.042		51.886	0.042	14.643	0.004		3627.83	60.4639	53.2	12.7	40.7	2.808	0.006	0.006	0.000	0.154	0.13	
2940	6/16/2004	9:43:33 PM		26.241	26.309	25.037	27.372	26.278		49.181	54.965	16.67	32.864	0.072	-6.048		54.151	0.04	14.643	0.004		3628.83	60.4806	53.5	13.3	41.0	2.828	0.006	0.006	0.000	0.145	0.12	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2941	6/16/2004	9:44:33 PM		26.241	26.295	25.053	27.313	26.308		49.175	55.054	16.611	32.977	0.086	-6.031		49.352	0.042	14.643	0.004		3629.83	60.4972	53.6	12.1	41.1	2.832	0.006	0.006	0.000	0.152	0.13	
2942	6/16/2004	9:45:33 PM		26.271	26.325	25.088	27.393	26.328		49.071	54.992	16.59	32.836	0.089	-6.028		53.599	0.041	14.643	0.004		3630.83	60.5139	53.5	13.1	41.0	2.824	0.006	0.006	0.000	0.149	0.13	
2943	6/16/2004	9:46:33 PM		26.255	26.304	25.046	27.402	26.312		49.442	55.245	16.382	33.431	0.089	-6.045		52.193	0.04	14.643	0.004		3631.83	60.5306	53.8	12.8	41.4	2.857	0.006	0.006	0.000	0.144	0.12	
2944	6/16/2004	9:47:33 PM		26.265	26.309	25.041	27.422	26.337		49.127	54.876	16.312	33.223	0.121	-6.036		47.671	0.041	14.643	0.004		3632.83	60.5472	53.4	11.7	41.2	2.839	0.006	0.006	0.000	0.148	0.13	
2945	6/16/2004	9:48:33 PM		26.266	26.294	25.022	27.387	26.323		49.376	55.083	16.493	33.287	0.109	-6.031		46.638	0.039	14.643	0.004		3633.83	60.5639	53.6	11.4	41.3	2.850	0.006	0.006	0.000	0.141	0.12	
2946	6/16/2004	9:49:33 PM		26.27	26.314	25.061	27.457	26.327		49.121	55.092	16.226	33.263	0.138	-6.01		46.177	0.043	14.643	0.004		3634.83	60.5806	53.6	11.3	41.2	2.840	0.006	0.006	0.000	0.155	0.13	
2947	6/16/2004	9:50:33 PM		26.281	26.309	25.052	27.467	26.348		49.218	54.868	16.151	33.57	0.104	-6.013		51.333	0.042	14.643	0.004		3635.83	60.5972	53.4	12.6	41.4	2.854	0.006	0.006	0.000	0.151	0.13	
2948	6/16/2004	9:51:33 PM		26.276	26.309	25.032	27.487	26.357		49.476	55.44	16.351	33.501	0.112	-6.025		44.532	0.043	14.643	0.004		3636.83	60.6139	54.0	10.9	41.5	2.860	0.006	0.006	0.000	0.154	0.13	
2949	6/16/2004	9:52:33 PM		26.281	26.304	25.027	27.482	26.362		49.43	55.467	16.299	33.554	0.196	-5.747		46.405	0.039	14.643	0.004		3637.83	60.6306	54.0	11.4	41.5	2.861	0.006	0.006	0.000	0.140	0.12	
2950	6/16/2004	9:53:33 PM		26.27	26.304	25.041	27.457	26.347		48.978	54.961	16.243	33.191	0.199	-5.776		47.193	0.04	14.643	0.004		3638.83	60.6472	53.5	11.6	41.1	2.833	0.006	0.006	0.000	0.145	0.12	
2951	6/16/2004	9:54:33 PM		26.276	26.309	25.042	27.462	26.357		48.926	54.779	16.267	33.117	0.222	-5.77		47.18	0.041	14.643	0.004		3639.83	60.6639	53.3	11.6	41.0	2.828	0.006	0.006	0.000	0.149	0.13	
2952	6/16/2004	9:55:33 PM		26.276	26.314	25.032	27.427	26.362		49.059	55.142	16.265	33.152	0.231	-5.768		50.272	0.042	14.643	0.003		3640.83	60.6806	53.7	12.3	41.1	2.834	0.006	0.006	0.000	0.152	0.13	
2953	6/16/2004	9:56:33 PM		26.281	26.314	25.027	27.457	26.348		49.088	55.09	16.19	33.343	0.199	-5.759		47.012	0.042	14.643	0.004		3641.83	60.6972	53.6	11.5	41.2	2.842	0.006	0.006	0.000	0.152	0.13	
2954	6/16/2004	9:57:33 PM		26.296	26.319	25.027	27.432	26.298		49.181	55.127	16.308	33.267	0.237	-5.77		47.879	0.04	14.643	0.004		3642.83	60.7139	53.7	11.7	41.2	2.842	0.006	0.006	0.000	0.145	0.12	
2955	6/16/2004	9:58:33 PM		26.278	26.312	25.04	27.345	26.225		49.021	54.947	16.252	33.148	0.231	-5.753		46.503	0.042	14.643	0.004		3643.83	60.7306	53.5	11.4	41.1	2.833	0.006	0.006	0.000	0.152	0.13	
2956	6/16/2004	9:59:33 PM		26.281	26.305	25.032	27.313	26.148		49.03	55.052	16.322	33.102	0.254	-5.765		47.11	0.041	14.643	0.004		3644.83	60.7472	53.6	11.5	41.1	2.831	0.006	0.006	0.000	0.149	0.13	
2957	6/16/2004	10:00:33 PM		26.269	26.278	25.006	27.231	26.092		49.225	55.237	16.291	33.338	0.251	-5.765		46.955	0.041	14.643	0.004		3645.83	60.7639	53.8	11.5	41.3	2.846	0.006	0.006	0.000	0.148	0.13	
2958	6/16/2004	10:01:33 PM		26.266	26.28	25.013	27.178	26.094		49.528	55.633	15.9	33.971	0.251	-5.753		46.574	0.041	14.643	0.004		3646.83	60.7806	54.2	11.4	41.7	2.878	0.006	0.006	0.000	0.146	0.12	
2959	6/16/2004	10:02:33 PM		26.275	26.289	25.046	27.172	26.082		49.426	55.436	15.967	33.878	0.251	-5.747		46.444	0.042	14.643	0.004		3647.83	60.7972	54.0	11.4	41.7	2.872	0.006	0.006	0.000	0.150	0.13	
2960	6/16/2004	10:03:33 PM		26.273	26.272	25.05	27.165	26.096		47.821	53.817	17.649	30.508	0.254	-5.742		47.493	0.042	14.643	0.004		3648.83	60.8139	52.3	11.6	39.2	2.700	0.006	0.006	0.000	0.160	0.14	
2961	6/16/2004	10:04:33 PM		26.283	26.276	25.074	27.155	26.125		49.409	55.455	16.065	33.737	0.251	-5.75		48.322	0.041	14.643	0.004		3649.83	60.8306	54.0	11.8	41.6	2.866	0.006	0.006	0.000	0.147	0.12	
2962	6/16/2004	10:05:33 PM		26.27	26.259	25.037	27.132	26.118		49.631	55.683	15.565	34.488	0.295	-5.736		46.682	0.042	14.643	0.004		3650.83	60.8472	54.2	11.4	42.1	2.900	0.006	0.006	0.000	0.149	0.13	
2963	6/16/2004	10:05:57 PM		26.279	26.263	25.06	27.161	26.111		49.102	55.011	16.616	32.869	0.26	-5.753		52.41	0.041	14.643	0.004		3651.23	60.8539	53.5	12.8	41.0	2.826	0.006	0.006	0.000	0.149	0.13	
2964	6/16/2004	10:06:57 PM		26.267	26.251	25.069	27.114	26.1		49.357	55.15	16.077	33.683	0.251	-5.776		48.153	0.041	14.643	0.004		3652.23	60.8706	53.7	11.8	41.5	2.863	0.006	0.006	0.000	0.147	0.13	
2965	6/16/2004	10:07:57 PM		26.26	26.244	25.056	27.172	26.107		49.739	55.948	15.565	34.574	0.248	-5.77		47.435	0.043	14.643	0.004		3653.23	60.8872	54.5	11.6	42.2	2.907	0.006	0.006	0.000	0.152	0.13	
2966	6/16/2004	10:08:57 PM		26.268	26.257	25.035	27.22	26.116		50.324	56.236	15.014	35.744	0.321	-5.759		43.487	0.044	14.643	0.004		3654.23	60.9039	54.8	10.7	43.0	2.967	0.007	0.007	0.000	0.152	0.13	
2967	6/16/2004	10:09:57 PM		26.265	26.243	25.001	27.227	26.117		50.633	56.652	15.021	36.031	0.324	-5.75		45.564	0.043	14.643	0.004		3655.23	60.9206	55.2	11.2	43.3	2.988	0.006	0.006	0.000	0.148	0.13	
2968	6/16/2004	10:10:57 PM		26.273	26.257	25.014	27.19	26.155		49.046	55.096	16.823	32.593	0.251	-5.776		46.071	0.04	14.643	0.004		3656.23	60.9372	53.6	11.3	40.8	2.814	0.006	0.006	0.000	0.146	0.12	
2969	6/16/2004	10:11:57 PM		26.27	26.259	25.031	27.152	26.152		48.883	54.893	16.817	32.47	0.251	-5.77		51.075	0.041	14.643	0.004		3657.23	60.9539	53.4	12.5	40.7	2.805	0.006	0.006	0.000	0.150	0.13	
2970	6/16/2004	10:12:57 PM		26.274	26.247	25.035	27.191	26.141		48.995	54.94	16.334	33.104	0.254	-5.773		46.995	0.04	14.643	0.004		3658.23	60.9706	53.5	11.5	41.0	2.830	0.006	0.006	0.000	0.145	0.12	
2971	6/16/2004	10:13:57 PM		26.271	26.26	25.038	27.218	26.144		48.329	54.298	17.13	31.623	0.257	-5.756		48.843	0.04	14.643	0.004		3659.23	60.9872	52.8	12.0	40.0	2.756	0.006	0.006	0.000	0.149	0.13	
2972	6/16/2004	10:14:57 PM		26.274	26.268	25.045	27.261	26.136		48.839	54.797	16.686	32.604	0.257	-5.762		48.495	0.04	14.643	0.004		3660.23	61.0039	53.3	11.9	40.7	2.808	0.006	0.006	0.000	0.146	0.12	
2973	6/16/2004	10:15:57 PM		26.263	26.256	25.044	27.205	26.155		49.291	55.394	16.374	33.306	0.321	-5.742		47.416	0.041	14.643	0.004		3661.23	61.0206	53.9	11.6	41.3	2.847	0.006	0.006	0.000	0.148	0.13	
2974	6/16/2004	10:16:57 PM		26.257	26.251	25.033	27.219	26.164		48.586	54.532	16.771	32.269	0.321	-5.739		52.639	0.04	14.643	0.004		3662.23	61.0372	53.1	12.9	40.4	2.787	0.006	0.006	0.000	0.147	0.13	
2975	6/16/2004	10:17:57 PM		26.258	26.257	25.045	27.22	26.181		48.292	54.142	17.063	31.764	0.309	-5.759		53.474	0.038	14.643	0.004		3663.23	61.0539	52.7	13.1	40.0	2.760	0.006	0.006	0.000	0.141	0.12	
2976	6/16/2004	10:18:57 PM		26.27	26.274	25.061	27.227	26.182		48.673	54.762	16.992	32.132	0.306	-5.753		49.415	0.039	14.643	0.004		3664.23	61.0706	53.3	12.1	40.4	2.786	0.006	0.006	0.000	0.144	0.12	
2977	6/16/2004	10:19:57 PM		26.277	26.276	25.098	27.249	26.184		48.696	54.644	16.509	32.651	0.321	-5.747		52.627	0.04	14.643	0.004		3665.23	61.0872	53.2	12.9	40.7	2.804	0.006	0.006	0.000	0.146	0.12	
2978	6/16/2004	10:20:57 PM		26.266	26.275	25.098	27.273	26.174		49.015	55.102	16.541	32.875	0.321	-5.739		47.279	0.041	14.643	0.004		3666.23	61.1039	53.6	11.6	40.9	2.823	0.006	0.006	0.000	0.149	0.13	
2979	6/16/2004	10:21:57 PM		26.264	26.273	25.071	27.271	26.207		49.187	55.287	16.272	33.31	0.321	-5.736		47.618	0.042	14.643	0.004		3667.23	61.1206	53.8	11.7	41.2	2.844	0.006	0.006	0.000	0.152	0.13	
2980	6/16/2004	10:22:57 PM		26.277	26.28	25.073	27.289	26.204		48.845	54.853	16.202	33.094	0.321	-5.747		45.723	0.04	14.643	0.004		3668.23	61.1372	53.4	11.2	41.0	2.825	0.006	0.006	0.000	0.145	0.12	
2981	6/16/2004	10:23:57 PM		26.275	26.273	25.086	27.227	26.197		49.14	55.502	16.345	33.144	0.318	-5.744		47.093	0.041	14.643	0.004		3669.23	61.1539	54.0	11.5	41.1	2.837	0.006	0.006	0.000	0.148	0.13	
2982	6/16/2004	10:24:57 PM		26.272	26.271	25.083	27.244	26.174		49.463	55.62	16.137	33.706	0.321	-5.744		45.453	0.04	14.643	0.004		3670.23	61.1706	54.1	11.1	41.6	2.867	0.006	0.006	0.000	0.143	0.12	
2983	6/16/2004	10:25:57 PM		26.275	26.264	25.076	27.272	26.177		49.192	54.988	16.037	33.726	0.33	-5.727		46.329	0.041	14.643	0.004		3671.23	61.1872	53.5	11.4	41.5	2.858	0.006	0.006	0.000	0.147	0.13	
2984	6/16/2004	10:26:57 PM		26.272	26.261	25.059	27.269	26.174		49.287	55.363	16.056	33.648	0.324	-5.718		41.615	0.041	14.643	0.004		3672.23	61.2039	53.9	10.2	41.5	2.859	0.006	0.006	0.000	0.147	0.13	
2985	6/16/2004	10:27:57 PM		26.275	26.254	25.057	27.237	26.188		49.198	55.399	16.002	33.646	0.347	-5.721		47.9	0.041	14.643	0.004		3673.23	61.2206	53.9	11.7	41.4	2.856	0.006	0.006	0.000	0.147	0.13	
2986	6/16/2004	10:28:57 PM		26.288	26.247	25.065	27.245	26.196		49.467	55.336	16.115	33.854	0.327	-5.718		44.154	0.041	14.643	0.004		3674.23	61.2372	53.9	10.8	41.7	2.872	0.006	0.006	0.000	0.146	0.12	
2987	6/16/2004	10:29:57 PM		26.296	26.259	25.097	27.293	26.203		48.165	54.12	17.134	31.504	0.324	-5.73		48.52	0.04	14.643	0.004		3675.23	61.2539	52.6	11.9	39.8	2.746	0.006	0.006	0.000	0.149	0.13	
2988	6/16/2004	10:30:57 PM		26.287	26.236	25.064	27.289	26.204		48.348	54.474	16.619	32.144	0.344	-5.727		47.79	0.041	14.643	0.004		3676.23	61.2706	53.0	11.7	40.2	2.775	0.006	0.006	0.000	0.152	0.13	
2989	6/16/2004	10:31:57 PM		26.289	26.227	25.065	27.216	26.211		48.54	54.52	16.711	32.247	0.324	-5.727		51.19	0.039	14.643	0.004		3677.23	61.2872	53.0	12.5	40.4	2.785	0.006	0.006	0.000	0.144	0.12	
2990	6/16/2004	10:32:57 PM		26.29	26.229	25.092	27.222	26.202		48.408	54.447	16.658	32.162	0.324	-5.724		44.807	0.04	14.643	0.004		3678.23	61.3039	53.0	11.0	40.3	2.778	0.006	0.006	0.000	0.148	0.13	
2991	6/16/2004	10:33:57 PM		26.286	26.215	25.072	27.223	26.198		48.43	54.487	16.755	32.085	0.332	-5.718		48.868	0.041	14.643	0.003		3679.23	61.3206	53.0	12.0	40.3	2.776	0.006	0.006	0.000	0.152	0.13	
2992	6/16/2004	10:34:57 PM		26.312	26.241	25.109	27.29	26.18		48.715	54.941	16.877	32.236	0.356	-5.713		46.417	0.041	14.643	0.004		3680.23	61.3372	53.5	11.4	40.5	2.791	0.006	0.006	0.000	0.151	0.13	
2993	6/16/2004	10:35:57 PM		26.294	26.218	25.076	27.226	26.171		48.883	54.986	16.638	32.645	0.335	-5.721		50.057	0.04	14.643	0.004		3681.23	61.3539	53.5	12.3	40.8	2.811	0.006	0.006	0.000	0.146	0.12	
2994	6/16/2004	10:36:57 PM		26.305	26.224	25.111	27.227	26.192		48.858	54.926	16.615	32.649	0.358	-5.713		48.824	0.035	14.643	0.004		3682.23	61.3706	53.5	12.0	40.8	2.810	0.005	0.005	0.000	0.128	0.11	
2995	6/16/2004	10:37:57 PM		26.3	26.219	25.111	27.187	26.187		48.719	54.868	16.661	32.516	0.358	-5.71		47.327	0.04	14.643	0.004		3683.23	61.3872	53.4	11.6	40.6	2.800	0.006	0.006	0.000	0.146	0.12	
2996	6/16/2004	10:38:57 PM		26.301	26.22	25.108	27.173	26.194		48.725	54.762	16.679	32.485	0.358	-5.715		47.787	0.04	14.643	0.004		3684.23	61.4039	53.3	11.7	40.6	2.800	0.006	0.006	0.000	0.146	0.12	
2997	6/16/2004	10:39:57 PM		26.313	26.217	25.119	27.13	26.195		48.545	54.712	16.333	32.692	0.361	-5.713		52.385	0.04	14.643	0.004		3685.23	61.4206	53.2	12.8	40.6	2.801	0.006	0.006	0.000	0.146	0.12	
2998	6/16/2004	10:40:57 PM		26.309	26.202	25.125	27.191	26.186		49.331	55.5	16.507	33.262	0.358	-5.71		48.324	0.04	14.643	0.004		3686.23	61.4372	54.0	11.8	41.3	2.847	0.006	0.006	0.000	0.144	0.12	
2999	6/16/2004	10:41:57 PM		26.314	26.213	25.131	27.172	26.172		48.638	54.619	16.303	32.776	0.358	-5.701		46.04	0.042	14.643	0.004		3687.23	61.4539	53.1	11.3	40.7	2.807	0.006	0.006	0.000	0.153	0.13	
3000	6/16/2004	10:42:57 PM		26.304	26.198	25.101	27.187	26.182		48.775	54.667	16.349	32.883	0.364	-5.701		47.001	0.041	14.643	0.004		3688.23	61.4706	53.2	11.5	40.8	2.815	0.006	0.006	0.000	0.149	0.13	
3001	6/16/2004	10:43:57 PM		26.316	26.2	25.092	27.203	26.173		48.93	55.09	16.379	32.973	0.361	-5.692		50.868	0.041	14.643	0.004		3689.23	61.4872	53.6	12.5	41.0	2.823	0.006	0.006	0.000	0.149	0.13	
3002	6/16/2004	10:44:57 PM		26.317	26.201	25.123	27.164	26.169		48.847	54.826	16.455	32.858	0.396	-5.692		48.457	0.04	14.643	0.004		3690.23	61.5039	53.4	11.9	40.9	2.817	0.006	0.006	0.000	0.145	0.12	
3003	6/16/2004	10:45:57 PM		26.322	26.196	25.123	27.179	26.169		49.061	55.187	16.495	32.959	0.385	-5.661		47.76	0.041	14.643	0.004		3691.23	61.5206	53.7	11.7	41.0	2.827	0.006	0.006	0.000	0.149	0.13	
3004	6/16/2004	10:46:57 PM		26.322	26.201	25.113	27.199	26.204		48.945	54.907	16.469	32.983	0.416	-5.669		49.786	0.04	14.643	0.004		3692.23	61.5372	53.4	12.2	41.0	2.824	0.006	0.006	0.000	0.145	0.12	
3005	6/16/2004	10:47:57 PM		26.316	26.19	25.082	27.203	26.203		48.713	55.005	16.313	32.797	0.416	-5.661		46.738	0.042	14.643	0.003		3693.23	61.5539	53.5	11.5	40.8	2.810	0.006	0.006	0.000	0.153	0.13	
3006	6/16/2004	10:48:57 PM		26.321	26.195	25.113	27.163	26.213		48.694	54.895	16.361	32.749	0.445	-5.658		48.28	0.042	14.643	0.004		3694.23	61.5706	53.4	11.8	40.7	2.808	0.006	0.006	0.000	0.153	0.13	
3007	6/16/2004	10:49:57 PM		26.332	26.201	25.138	27.234	26.194		48.769	55.054	16.495	32.591	0.457	-5.655		48.563	0.042	14.643	0.004		3695.23	61.5872	53.6	11.9	40.7	2.805	0.006	0.006	0.000	0.153	0.13	
3008	6/16/2004	10:50:57 PM		26.301	26.165	25.113	27.228	26.179		49.219	55.39	16.516	33.1	0.468	-5.658		49.152	0.041	14.643	0.004		3696.23	61.6039	53.9	12.0	41.2	2.838	0.006	0.006	0.000	0.148	0.13	
3009	6/16/2004	10:51:57 PM		26.294	26.163	25.091	27.197	26.187		49.389	55.401	16.552	33.236	0.448	-5.666		48.576	0.039	14.643	0.004		3697.23	61.6206	53.9	11.9	41.3	2.848	0.006	0.006	0.000	0.140	0.12	
3010	6/16/2004	10:52:57 PM		26.298	26.161	25.079	27.165	26.185		49.223	55.208	16.568	33.111	0.442	-5.666		47.727	0.04	14.643	0.004		3698.23	61.6372	53.7	11.7	41.2	2.838	0.006	0.006	0.000	0.145	0.12	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3011	6/16/2004	10:53:57 PM		26.291	26.16	25.098	27.134	26.159		48.895	55.162	16.475	32.85	0.463	-5.658		50.975	0.042	14.643	0.004		3699.23	61.6539	53.7	12.5	40.9	2.818	0.006	0.006	0.000	0.153	0.13	
3012	6/16/2004	10:54:57 PM		26.3	26.178	25.131	27.162	26.157		48.999	55.316	16.58	32.889	0.474	-5.655		47.973	0.04	14.643	0.004		3700.23	61.6706	53.8	11.8	40.9	2.823	0.006	0.006	0.000	0.145	0.12	
3013	6/16/2004	10:55:57 PM		26.306	26.185	25.112	27.183	26.178		49.028	55.254	16.666	32.704	0.457	-5.646		46.757	0.041	14.643	0.004		3701.23	61.6872	53.8	11.5	40.9	2.818	0.006	0.006	0.000	0.149	0.13	
3014	6/16/2004	10:56:57 PM		26.311	26.19	25.118	27.193	26.184		49.343	55.571	16.746	32.916	0.442	-5.687		47.629	0.041	14.643	0.004		3702.23	61.7039	54.1	11.7	41.1	2.836	0.006	0.006	0.000	0.148	0.13	
3015	6/16/2004	10:57:57 PM		26.324	26.203	25.145	27.136	26.206		49.287	55.428	16.623	33.104	0.419	-5.658		50.785	0.044	14.643	0.003		3703.23	61.7206	54.0	12.4	41.2	2.840	0.007	0.007	0.000	0.159	0.13	
3016	6/16/2004	10:58:57 PM		26.321	26.21	25.157	27.183	26.203		49.227	55.411	16.725	32.975	0.474	-5.571		46.306	0.039	14.643	0.004		3704.23	61.7372	53.9	11.3	41.1	2.834	0.006	0.006	0.000	0.141	0.12	
3017	6/16/2004	10:59:57 PM		26.334	26.223	25.171	27.182	26.207		49.241	55.372	16.709	33	0.477	-5.536		46.065	0.041	14.643	0.004		3705.23	61.7539	53.9	11.3	41.1	2.835	0.006	0.006	0.000	0.148	0.13	
3018	6/16/2004	11:00:57 PM		26.333	26.227	25.154	27.17	26.2		49.088	55.486	16.815	32.647	0.474	-5.559		45.868	0.039	14.643	0.004		3706.23	61.7706	54.0	11.2	40.9	2.818	0.006	0.006	0.000	0.142	0.12	
3019	6/16/2004	11:01:57 PM		26.343	26.227	25.159	27.15	26.2		49.469	55.757	16.689	33.164	0.474	-5.548		46.371	0.041	14.643	0.004		3707.23	61.7872	54.3	11.4	41.3	2.849	0.006	0.006	0.000	0.147	0.13	
3020	6/16/2004	11:02:57 PM		26.339	26.228	25.181	27.187	26.172		49.623	55.902	16.832	33.189	0.532	-5.548		45.382	0.04	14.643	0.004		3708.23	61.8039	54.4	11.1	41.4	2.855	0.006	0.006	0.000	0.143	0.12	
3021	6/16/2004	11:03:57 PM		26.347	26.236	25.188	27.209	26.179		49.295	55.428	16.813	32.957	0.474	-5.548		47.742	0.04	14.643	0.003		3709.23	61.8206	54.0	11.7	41.1	2.835	0.006	0.006	0.000	0.144	0.12	
3022	6/16/2004	11:04:57 PM		26.337	26.231	25.178	27.214	26.184		49.457	55.515	16.818	33.109	0.544	-5.556		44.719	0.038	14.643	0.004		3710.23	61.8372	54.0	11.0	41.3	2.846	0.006	0.006	0.000	0.137	0.12	
3023	6/16/2004	11:05:57 PM		26.34	26.234	25.156	27.237	26.202		49.316	55.508	16.766	33.004	0.538	-5.554		43.247	0.039	14.643	0.003		3711.23	61.8539	54.0	10.6	41.2	2.838	0.006	0.006	0.000	0.141	0.12	
3024	6/16/2004	11:06:57 PM		26.367	26.256	25.224	27.229	26.214		49.44	55.62	16.826	33.02	0.544	-5.542		47.422	0.04	14.643	0.004		3712.23	61.8706	54.1	11.6	41.2	2.843	0.006	0.006	0.000	0.144	0.12	
3025	6/16/2004	11:07:57 PM		26.349	26.233	25.216	27.221	26.226		49.519	55.83	16.956	32.967	0.541	-5.536		51.062	0.041	14.643	0.004		3713.23	61.8872	54.4	12.5	41.2	2.844	0.006	0.006	0.000	0.147	0.13	
3026	6/16/2004	11:08:57 PM		26.346	26.23	25.262	27.253	26.213		49.658	56.064	16.638	33.351	0.544	-5.548		45.372	0.038	14.643	0.004		3714.23	61.9039	54.6	11.1	41.5	2.862	0.006	0.006	0.000	0.136	0.12	
3027	6/16/2004	11:09:57 PM		26.341	26.22	25.243	27.259	26.194		49.59	56.053	16.837	33.125	0.544	-5.548		48.319	0.038	14.643	0.004		3715.23	61.9206	54.6	11.8	41.4	2.851	0.006	0.006	0.000	0.136	0.12	
3028	6/16/2004	11:10:57 PM		26.353	26.222	25.255	27.235	26.215		48.453	54.822	17.811	31.022	0.547	-5.554		51.573	0.038	14.643	0.004		3716.23	61.9372	53.3	12.6	39.7	2.740	0.006	0.006	0.000	0.142	0.12	
3029	6/16/2004	11:11:57 PM		26.365	26.224	25.307	27.222	26.213		48.909	55.21	17.251	32.119	0.544	-5.548		48.371	0.039	14.643	0.004		3717.23	61.9539	53.7	11.9	40.5	2.793	0.006	0.006	0.000	0.142	0.12	
3030	6/16/2004	11:12:57 PM		26.368	26.221	25.309	27.26	26.19		49.181	55.372	16.992	32.596	0.544	-5.536		44.536	0.04	14.643	0.004		3718.23	61.9706	53.9	10.9	40.9	2.819	0.006	0.006	0.000	0.145	0.12	
3031	6/16/2004	11:13:57 PM		26.373	26.222	25.3	27.225	26.186		49.339	55.544	16.756	32.948	0.544	-5.533		47.326	0.04	14.643	0.004		3719.23	61.9872	54.1	11.6	41.1	2.837	0.006	0.006	0.000	0.144	0.12	
3032	6/16/2004	11:14:57 PM		26.381	26.22	25.282	27.303	26.203		49.283	55.384	16.82	32.877	0.55	-5.533		45.583	0.039	14.643	0.004		3720.23	62.0039	53.9	11.2	41.1	2.832	0.006	0.006	0.000	0.140	0.12	
3033	6/16/2004	11:15:57 PM		26.397	26.231	25.324	27.279	26.219		49.111	55.558	16.743	32.864	0.596	-5.522		46.171	0.04	14.643	0.004		3721.23	62.0206	54.1	11.3	41.0	2.826	0.006	0.006	0.000	0.144	0.12	
3034	6/16/2004	11:16:57 PM		26.392	26.216	25.304	27.274	26.209		49.366	55.705	16.633	33.146	0.593	-5.528		49.064	0.041	14.643	0.004		3722.23	62.0372	54.2	12.0	41.3	2.844	0.006	0.006	0.000	0.147	0.13	
3035	6/16/2004	11:17:57 PM		26.389	26.213	25.291	27.306	26.202		49.105	55.401	16.422	33.029	0.593	-5.53		47.03	0.04	14.643	0.004		3723.23	62.0539	53.9	11.5	41.1	2.831	0.006	0.006	0.000	0.144	0.12	
3036	6/16/2004	11:18:57 PM		26.406	26.215	25.298	27.328	26.213		48.806	55.166	17.323	31.896	0.547	-5.533		48.134	0.04	14.643	0.004		3724.23	62.0706	53.7	11.8	40.4	2.782	0.006	0.006	0.000	0.147	0.12	
3037	6/16/2004	11:19:57 PM		26.412	26.226	25.294	27.29	26.22		48.47	54.748	17.255	31.647	0.564	-5.542		48.069	0.038	14.643	0.004		3725.23	62.0872	53.3	11.8	40.1	2.762	0.006	0.006	0.000	0.140	0.12	
3038	6/16/2004	11:20:57 PM		26.408	26.217	25.305	27.2	26.211		48.957	55.266	17.323	31.988	0.587	-5.528		48.39	0.039	14.643	0.003		3726.23	62.1039	53.8	11.9	40.5	2.790	0.006	0.006	0.000	0.142	0.12	
3039	6/16/2004	11:21:57 PM		26.42	26.219	25.322	27.212	26.182		48.816	55.254	17.136	32.025	0.596	-5.525		52.137	0.04	14.643	0.004		3727.23	62.1206	53.8	12.8	40.4	2.787	0.006	0.006	0.000	0.146	0.12	
3040	6/16/2004	11:22:57 PM		26.426	26.22	25.298	27.188	26.194		48.86	55.046	16.902	32.427	0.593	-5.525		50.069	0.04	14.643	0.004		3728.23	62.1372	53.6	12.3	40.6	2.802	0.006	0.006	0.000	0.146	0.12	
3041	6/16/2004	11:23:57 PM		26.423	26.217	25.28	27.206	26.211		48.982	55.222	16.588	32.873	0.593	-5.522		48.651	0.039	14.643	0.004		3729.23	62.1539	53.7	11.9	40.9	2.822	0.006	0.006	0.000	0.141	0.12	
3042	6/16/2004	11:24:57 PM		26.429	26.208	25.251	27.167	26.197		49.223	55.562	16.722	32.942	0.59	-5.522		45.741	0.039	14.643	0.003		3730.23	62.1706	54.1	11.2	41.1	2.832	0.006	0.006	0.000	0.141	0.12	
3043	6/16/2004	11:25:57 PM		26.431	26.205	25.278	27.193	26.168		49.1	55.343	16.466	33.1	0.593	-5.519		49.671	0.039	14.643	0.004		3731.23	62.1872	53.9	12.2	41.1	2.834	0.006	0.006	0.000	0.140	0.12	
3044	6/16/2004	11:26:57 PM		26.412	26.191	25.238	27.189	26.174		49.283	55.618	16.546	33.139	0.593	-5.51		41.325	0.04	14.643	0.004		3732.23	62.2039	54.1	10.1	41.2	2.841	0.006	0.006	0.000	0.144	0.12	
3045	6/16/2004	11:27:57 PM		26.429	26.203	25.256	27.211	26.191		48.522	54.98	17.425	31.487	0.593	-5.522		50.91	0.038	14.643	0.004		3733.23	62.2206	53.5	12.5	40.0	2.758	0.006	0.006	0.000	0.141	0.12	
3046	6/16/2004	11:28:57 PM		26.432	26.206	25.274	27.234	26.199		49.104	55.355	17.681	31.847	0.593	-5.513		51.142	0.04	14.643	0.004		3734.23	62.2372	53.9	12.5	40.5	2.791	0.006	0.006	0.000	0.146	0.12	
3047	6/16/2004	11:29:57 PM		26.427	26.206	25.289	27.214	26.194		48.905	55.214	17.572	31.69	0.602	-5.513		49.343	0.04	14.643	0.004		3735.23	62.2539	53.7	12.1	40.3	2.778	0.006	0.006	0.000	0.147	0.12	
3048	6/16/2004	11:30:57 PM		26.407	26.181	25.304	27.164	26.189		49.262	55.539	17.696	32.002	0.61	-5.542		49.348	0.037	14.643	0.004		3736.23	62.2706	54.1	12.1	40.6	2.801	0.006	0.005	0.000	0.135	0.11	
3049	6/16/2004	11:31:57 PM		26.423	26.192	25.325	27.21	26.18		49.069	55.473	17.589	31.865	0.715	-5.253		45.551	0.03	14.643	0.004		3737.23	62.2872	54.0	11.2	40.5	2.790	0.004	0.004	0.000	0.110	0.09	
3050	6/16/2004	11:32:57 PM		26.423	26.192	25.34	27.166	26.186		48.945	55.384	17.474	31.836	0.787	-5.129		50.009	0.039	14.643	0.004		3738.23	62.3039	53.9	12.3	40.4	2.785	0.006	0.006	0.000	0.143	0.12	
3051	6/16/2004	11:33:57 PM		26.428	26.192	25.33	27.196	26.186		49.009	55.419	17.138	32.302	0.787	-5.12		46.92	0.041	14.643	0.004		3739.23	62.3206	53.9	11.5	40.7	2.803	0.006	0.006	0.000	0.149	0.13	
3052	6/16/2004	11:34:57 PM		26.435	26.189	25.352	27.132	26.187		48.864	55.332	17.493	31.803	0.781	-5.132		49.911	0.039	14.643	0.004		3740.23	62.3372	53.9	12.2	40.3	2.781	0.006	0.006	0.000	0.143	0.12	
3053	6/16/2004	11:35:57 PM		26.451	26.196	25.379	27.139	26.184		49.1	55.486	17.294	32.28	0.787	-5.123		49.777	0.039	14.643	0.004		3741.23	62.3539	54.0	12.2	40.7	2.805	0.006	0.006	0.000	0.141	0.12	
3054	6/16/2004	11:36:57 PM		26.427	26.176	25.354	27.129	26.164		48.941	55.338	17.276	32.044	0.79	-5.12		49.175	0.041	14.643	0.004		3742.23	62.3706	53.9	12.1	40.5	2.792	0.006	0.006	0.000	0.149	0.13	
3055	6/16/2004	11:37:57 PM		26.437	26.176	25.359	27.145	26.175		49.171	55.894	16.909	32.708	0.807	-5.12		47.448	0.039	14.643	0.004		3743.23	62.3872	54.4	11.6	40.9	2.823	0.006	0.006	0.000	0.141	0.12	
3056	6/16/2004	11:38:57 PM		26.454	26.178	25.361	27.176	26.201		49.723	56.054	17.122	33.07	0.816	-5.111		47.46	0.04	14.643	0.003		3744.23	62.4039	54.6	11.6	41.4	2.854	0.006	0.006	0.000	0.143	0.12	
3057	6/16/2004	11:39:57 PM		26.46	26.194	25.362	27.187	26.227		48.621	55.021	17.737	31.309	0.79	-5.114		46.961	0.039	14.643	0.004		3745.23	62.4206	53.5	11.5	40.0	2.755	0.006	0.006	0.000	0.144	0.12	
3058	6/16/2004	11:40:57 PM		26.461	26.19	25.403	27.164	26.214		48.941	55.338	17.373	32.002	0.79	-5.12		47.537	0.039	14.643	0.004		3746.23	62.4372	53.9	11.6	40.5	2.790	0.006	0.006	0.000	0.142	0.12	
3059	6/16/2004	11:41:57 PM		26.467	26.191	25.409	27.204	26.209		49.266	55.857	17.048	32.626	0.822	-5.103		51.21	0.04	14.643	0.004		3747.23	62.4539	54.4	12.5	40.9	2.823	0.006	0.006	0.000	0.144	0.12	
3060	6/16/2004	11:42:57 PM		26.473	26.187	25.405	27.22	26.175		49.322	55.852	17.002	32.735	0.833	-5.106		47.852	0.038	14.643	0.004		3748.23	62.4706	54.4	11.7	41.0	2.829	0.006	0.006	0.000	0.137	0.12	
3061	6/16/2004	11:43:57 PM		26.463	26.177	25.381	27.221	26.196		49.196	55.55	17.105	32.54	0.877	-5.1		46.555	0.039	14.643	0.004		3749.23	62.4872	54.1	11.4	40.9	2.818	0.006	0.006	0.000	0.141	0.12	
3062	6/16/2004	11:44:57 PM		26.49	26.194	25.397	27.262	26.203		49.482	56.085	17.063	32.786	0.868	-5.097		43.482	0.04	14.643	0.004		3750.23	62.5039	54.6	10.7	41.1	2.836	0.006	0.006	0.000	0.143	0.12	
3063	6/16/2004	11:45:57 PM		26.469	26.168	25.376	27.167	26.187		49.181	55.608	17.01	32.569	0.839	-5.1		47.988	0.04	14.643	0.003		3751.23	62.5206	54.1	11.8	40.9	2.818	0.006	0.006	0.000	0.144	0.12	
3064	6/16/2004	11:46:57 PM		26.479	26.173	25.406	27.182	26.187		49.297	55.815	16.887	32.83	0.862	-5.085		48.465	0.04	14.643	0.004		3752.23	62.5372	54.3	11.9	41.1	2.831	0.006	0.006	0.000	0.144	0.12	
3065	6/16/2004	11:47:57 PM		26.48	26.179	25.397	27.177	26.193		49.465	55.991	16.87	33.051	0.877	-5.082		43.078	0.039	14.643	0.004		3753.23	62.5539	54.5	10.6	41.3	2.845	0.006	0.006	0.000	0.139	0.12	
3066	6/16/2004	11:48:57 PM		26.475	26.169	25.412	27.187	26.193		48.65	55.14	18.05	31.022	0.859	-5.094		49.74	0.038	14.643	0.004		3754.23	62.5706	53.7	12.2	39.8	2.747	0.006	0.006	0.000	0.141	0.12	
3067	6/16/2004	11:49:57 PM		26.493	26.187	25.44	27.235	26.236		48.82	55.425	17.645	31.535	0.874	-5.082		48.622	0.04	14.643	0.004		3755.23	62.5872	54.0	11.9	40.2	2.770	0.006	0.006	0.000	0.147	0.12	
3068	6/16/2004	11:50:57 PM		26.493	26.182	25.425	27.285	26.191		49.134	55.743	17.67	31.888	0.871	-5.088		51.294	0.039	14.643	0.004		3756.23	62.6039	54.3	12.6	40.5	2.793	0.006	0.006	0.000	0.142	0.12	
3069	6/16/2004	11:51:57 PM		26.493	26.177	25.4	27.255	26.206		49.003	55.411	17.559	31.867	0.88	-5.077		48.201	0.039	14.643	0.004		3757.23	62.6206	53.9	11.8	40.4	2.788	0.006	0.006	0.000	0.142	0.12	
3070	6/16/2004	11:52:57 PM		26.503	26.177	25.405	27.215	26.216		48.688	55.254	17.485	31.612	0.88	-5.091		45.551	0.037	14.643	0.004		3758.23	62.6372	53.8	11.2	40.2	2.768	0.006	0.005	0.000	0.136	0.12	
3071	6/16/2004	11:53:57 PM		26.514	26.188	25.401	27.206	26.221		48.802	55.365	17.467	31.732	0.88	-5.062		45.382	0.038	14.643	0.004		3759.23	62.6539	53.9	11.1	40.3	2.776	0.006	0.006	0.000	0.139	0.12	
3072	6/16/2004	11:54:57 PM		26.525	26.184	25.398	27.213	26.203		48.939	55.627	17.482	31.805	0.88	-5.059		45.948	0.038	14.643	0.004		3760.23	62.6706	54.2	11.3	40.4	2.784	0.006	0.006	0.000	0.139	0.12	
3073	6/16/2004	11:55:57 PM		26.516	26.18	25.373	27.199	26.219		48.881	55.469	17.354	31.99	0.877	-5.068		50.67	0.038	14.643	0.003		3761.23	62.6872	54.0	12.4	40.4	2.788	0.006	0.006	0.000	0.139	0.12	
3074	6/16/2004	11:56:57 PM		26.521	26.185	25.373	27.224	26.209		48.822	55.446	17.354	31.945	0.877	-5.068		52.452	0.038	14.643	0.004		3762.23	62.7039	54.0	12.9	40.4	2.784	0.006	0.006	0.000	0.139	0.12	
3075	6/16/2004	11:57:57 PM		26.517	26.176	25.339	27.174	26.205		49.183	55.834	17.426	32.095	0.877	-5.059		50.211	0.039	14.643	0.004		3763.23	62.7206	54.4	12.3	40.6	2.802	0.006	0.006	0.000	0.142	0.12	
3076	6/16/2004	11:58:57 PM		26.517	26.186	25.369	27.194	26.19		49.202	55.774	16.926	32.676	0.906	-5.039		46.594	0.04	14.643	0.004		3764.23	62.7372	54.3	11.4	40.9	2.823	0.006	0.006	0.000	0.144	0.12	
3077	6/16/2004	11:59:57 PM		26.512	26.176	25.374	27.184	26.215		47.933	54.458	18.209	30.127	0.88	-5.1		55.939	0.039	14.643	0.004		3765.23	62.7539	53.0	13.7	39.0	2.691	0.006	0.006	0.000	0.147	0.13	
3078	6/17/2004	12:00:57 AM		26.507	26.171	25.394	27.194	26.205		48.09	54.503	17.915	30.605	0.877	-5.1		49.075	0.039	14.643	0.004		3766.23	62.7706	53.0	12.0	39.3	2.713	0.006	0.006	0.000	0.146	0.12	
3079	6/17/2004	12:01:16 AM		26.518	26.182	25.41	27.215	26.21		48.348	54.818	17.737	31.089	0.882	-5.1		52.973	0.038	14.643	0.004		3766.55	62.7758	53.3	13.0	39.7	2.738	0.006	0.006	0.000	0.141	0.12	
3080	6/17/2004	12:02:16 AM		26.518	26.178	25.411	27.181	26.196		48.515	55.044	17.787	31.132	0.88	-5.08		49.638	0.037	14.643	0.004		3767.55	62.7925	53.6	12.2	39.8	2.746	0.006	0.005	0.000	0.137	0.12	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3081	6/17/2004	12:03:16 AM		26.518	26.178	25.406	27.206	26.176		48.76	55.187	17.701	31.592	0.891	-5.056		49.759	0.038	14.643	0.004		3768.55	62.8092	53.7	12.2	40.2	2.770	0.006	0.006	0.000	0.139	0.12	
3082	6/17/2004	12:04:16 AM		26.508	26.162	25.38	27.21	26.185		49.314	55.782	16.883	32.907	0.932	-5.048		50.372	0.038	14.643	0.004		3769.55	62.8258	54.3	12.3	41.1	2.834	0.006	0.006	0.000	0.136	0.12	
3083	6/17/2004	12:05:16 AM		26.511	26.17	25.363	27.194	26.184		48.694	55.386	17.72	31.257	0.935	-5.03		47.055	0.041	14.643	0.004		3770.55	62.8425	53.9	11.5	40.0	2.756	0.006	0.006	0.000	0.151	0.13	
3084	6/17/2004	12:06:16 AM		26.497	26.156	25.344	27.169	26.19		49.048	55.633	17.466	31.943	0.929	-5.056		46.872	0.038	14.643	0.004		3771.55	62.8592	54.2	11.5	40.5	2.792	0.006	0.006	0.000	0.139	0.12	
3085	6/17/2004	12:07:16 AM		26.511	26.16	25.353	27.204	26.189		48.787	55.539	17.42	31.744	0.932	-5.03		51.208	0.038	14.643	0.004		3772.55	62.8758	54.1	12.5	40.3	2.776	0.006	0.006	0.000	0.139	0.12	
3086	6/17/2004	12:08:16 AM		26.522	26.171	25.359	27.194	26.185		48.833	55.51	17.473	31.74	0.935	-5.033		44.463	0.039	14.643	0.004		3773.55	62.8925	54.0	10.9	40.3	2.778	0.006	0.006	0.000	0.143	0.12	
3087	6/17/2004	12:09:16 AM		26.517	26.176	25.349	27.204	26.18		48.92	55.575	17.467	31.869	0.935	-5.039		48.034	0.039	14.643	0.004		3774.55	62.9092	54.1	11.8	40.4	2.785	0.006	0.006	0.000	0.143	0.12	
3088	6/17/2004	12:10:16 AM		26.502	26.166	25.334	27.194	26.175		48.675	55.349	17.603	31.498	0.935	-5.033		53.935	0.04	14.643	0.004		3775.55	62.9258	53.9	13.2	40.1	2.764	0.006	0.006	0.000	0.147	0.13	
3089	6/17/2004	12:11:16 AM		26.513	26.157	25.335	27.2	26.18		49.017	55.751	17.77	31.643	0.932	-5.045		50.228	0.038	14.643	0.004		3776.55	62.9425	54.3	12.3	40.3	2.781	0.006	0.006	0.000	0.139	0.12	
3090	6/17/2004	12:12:16 AM		26.508	26.172	25.33	27.215	26.17		48.632	55.237	17.466	31.532	0.935	-5.045		51.25	0.038	14.643	0.004		3777.55	62.9592	53.8	12.6	40.1	2.764	0.006	0.006	0.000	0.140	0.12	
3091	6/17/2004	12:13:16 AM		26.503	26.163	25.316	27.231	26.176		48.864	55.596	17.512	31.752	0.932	-5.019		47.199	0.04	14.643	0.004		3778.55	62.9758	54.1	11.6	40.3	2.779	0.006	0.006	0.000	0.147	0.12	
3092	6/17/2004	12:14:16 AM		26.498	26.173	25.301	27.196	26.166		48.93	55.554	17.422	31.92	0.932	-5.027		45.616	0.04	14.643	0.004		3779.55	62.9925	54.1	11.2	40.4	2.787	0.006	0.006	0.000	0.146	0.12	
3093	6/17/2004	12:15:16 AM		26.497	26.166	25.279	27.184	26.175		49.038	55.747	17.428	31.992	0.932	-5.036		46.281	0.038	14.643	0.004		3780.55	63.0092	54.3	11.3	40.5	2.793	0.006	0.006	0.000	0.139	0.12	
3094	6/17/2004	12:16:16 AM		26.493	26.167	25.27	27.2	26.18		48.642	55.338	17.409	31.623	0.932	-5.039		47.606	0.039	14.643	0.004		3781.55	63.0258	53.9	11.7	40.1	2.767	0.006	0.006	0.000	0.144	0.12	
3095	6/17/2004	12:17:16 AM		26.488	26.162	25.26	27.21	26.17		49.046	55.768	17.614	31.803	0.932	-5.042		49.15	0.04	14.643	0.004		3782.55	63.0425	54.3	12.0	40.4	2.787	0.006	0.006	0.000	0.146	0.12	
3096	6/17/2004	12:18:16 AM		26.488	26.163	25.266	27.206	26.156		48.545	55.307	17.324	31.619	0.932	-5.025		44.559	0.04	14.643	0.004		3783.55	63.0592	53.8	10.9	40.1	2.764	0.006	0.006	0.000	0.148	0.13	
3097	6/17/2004	12:19:16 AM		26.479	26.163	25.246	27.197	26.162		48.802	55.62	17.166	32.056	0.961	-5.033		46.815	0.039	14.643	0.004		3784.55	63.0758	54.1	11.5	40.4	2.787	0.006	0.006	0.000	0.143	0.12	
3098	6/17/2004	12:20:16 AM		26.476	26.165	25.233	27.168	26.179		49.061	55.875	17.249	32.195	0.935	-5.033		46.615	0.04	14.643	0.004		3785.55	63.0925	54.4	11.4	40.6	2.801	0.006	0.006	0.000	0.146	0.12	
3099	6/17/2004	12:21:16 AM		26.477	26.161	25.229	27.185	26.165		48.661	55.367	17.143	31.888	0.958	-5.025		45.737	0.04	14.643	0.004		3786.55	63.1092	53.9	11.2	40.3	2.777	0.006	0.006	0.000	0.147	0.13	
3100	6/17/2004	12:22:16 AM		26.457	26.151	25.199	27.165	26.15		49.048	55.651	17.279	32.21	0.952	-5.042		48.81	0.038	14.643	0.004		3787.55	63.1258	54.2	12.0	40.6	2.801	0.006	0.006	0.000	0.139	0.12	
3101	6/17/2004	12:23:16 AM		26.464	26.153	25.196	27.121	26.147		49.192	55.855	17.156	32.493	0.952	-5.039		49.319	0.039	14.643	0.004		3788.55	63.1425	54.4	12.1	40.8	2.816	0.006	0.006	0.000	0.142	0.12	
3102	6/17/2004	12:24:16 AM		26.458	26.157	25.18	27.126	26.146		48.953	55.71	17.034	32.292	1.001	-5.013		50.299	0.04	14.643	0.004		3789.55	63.1592	54.2	12.3	40.6	2.801	0.006	0.006	0.000	0.146	0.12	
3103	6/17/2004	12:25:16 AM		26.449	26.153	25.166	27.141	26.137		48.988	55.45	17.007	32.444	0.955	-5.025		49.462	0.039	14.643	0.004		3790.55	63.1758	54.0	12.1	40.7	2.807	0.006	0.006	0.000	0.142	0.12	
3104	6/17/2004	12:26:16 AM		26.446	26.16	25.158	27.153	26.143		49.196	55.824	17.101	32.526	0.998	-5.01		46.532	0.039	14.643	0.003		3791.55	63.1925	54.4	11.4	40.9	2.817	0.006	0.006	0.000	0.142	0.12	
3105	6/17/2004	12:27:16 AM		26.431	26.14	25.138	27.138	26.138		48.974	55.776	16.917	32.47	1.001	-5.016		43.393	0.04	14.643	0.004		3792.55	63.2092	54.3	10.6	40.7	2.808	0.006	0.006	0.000	0.146	0.12	
3106	6/17/2004	12:28:16 AM		26.437	26.151	25.139	27.135	26.15		49.034	55.637	16.969	32.489	0.998	-5.019		48.351	0.04	14.643	0.004		3793.55	63.2258	54.2	11.8	40.8	2.810	0.006	0.006	0.000	0.146	0.12	
3107	6/17/2004	12:29:16 AM		26.428	26.147	25.13	27.115	26.141		49.152	55.823	17.022	32.546	1.001	-5.013		43.328	0.039	14.643	0.004		3794.55	63.2425	54.4	10.6	40.8	2.816	0.006	0.006	0.000	0.142	0.12	
3108	6/17/2004	12:30:16 AM		26.418	26.142	25.11	27.095	26.136		49.183	55.643	17.017	32.559	1.001	-5.016		45.798	0.039	14.643	0.004		3795.55	63.2592	54.2	11.2	40.9	2.818	0.006	0.006	0.000	0.142	0.12	
3109	6/17/2004	12:31:16 AM		26.406	26.12	25.088	27.099	26.124		49.623	56.352	16.804	33.24	0.998	-5.01		48.505	0.04	14.643	0.004		3796.55	63.2758	54.9	11.9	41.4	2.857	0.006	0.006	0.000	0.144	0.12	
3110	6/17/2004	12:32:16 AM		26.406	26.13	25.088	27.129	26.114		49.105	55.817	16.889	32.6	1.001	-4.993		51.137	0.041	14.643	0.004		3797.55	63.2925	54.3	12.5	40.9	2.817	0.006	0.006	0.000	0.149	0.13	
3111	6/17/2004	12:33:16 AM		26.381	26.12	25.053	27.079	26.104		49.306	56.054	16.863	32.803	0.998	-5.056		48.978	0.038	14.643	0.004		3798.55	63.3092	54.6	12.0	41.1	2.831	0.006	0.006	0.000	0.138	0.12	
3112	6/17/2004	12:34:16 AM		26.391	26.13	25.073	27.114	26.099		49.295	56.134	16.799	32.899	0.998	-5.056		48.922	0.038	14.643	0.004		3799.55	63.3258	54.7	12.0	41.1	2.833	0.006	0.006	0.000	0.138	0.12	
3113	6/17/2004	12:35:16 AM		26.391	26.135	25.082	27.133	26.083		49.443	56.265	16.758	33.059	1.001	-5.053		48.349	0.039	14.643	0.004		3800.55	63.3425	54.8	11.8	41.3	2.844	0.006	0.006	0.000	0.141	0.12	
3114	6/17/2004	12:36:16 AM		26.385	26.134	25.072	27.127	26.098		49.403	56.217	16.85	32.922	1.001	-5.039		46.815	0.04	14.643	0.004		3801.55	63.3592	54.7	11.5	41.2	2.838	0.006	0.006	0.000	0.145	0.12	
3115	6/17/2004	12:37:16 AM		26.364	26.118	25.031	27.106	26.087		49.484	56.439	16.72	33.115	0.995	-5.033		46.342	0.04	14.643	0.003		3802.55	63.3758	55.0	11.4	41.3	2.847	0.006	0.006	0.000	0.144	0.12	
3116	6/17/2004	12:38:16 AM		26.374	26.123	25.041	27.146	26.097		49.737	56.451	16.805	33.355	0.998	-5.019		49.533	0.04	14.643	0.004		3803.55	63.3925	55.0	12.1	41.5	2.864	0.006	0.006	0.000	0.143	0.12	
3117	6/17/2004	12:39:16 AM		26.359	26.113	25.021	27.126	26.097		49.409	56.279	16.731	33.033	0.998	-5.033		47.085	0.04	14.643	0.003		3804.55	63.4092	54.8	11.5	41.2	2.842	0.006	0.006	0.000	0.145	0.12	
3118	6/17/2004	12:40:16 AM		26.343	26.111	25.019	27.09	26.085		49.345	56.126	16.726	33.057	0.998	-5.013		47.702	0.04	14.643	0.004		3805.55	63.4258	54.7	11.7	41.2	2.841	0.006	0.006	0.000	0.145	0.12	
3119	6/17/2004	12:41:16 AM		26.348	26.116	25.009	27.1	26.1		49.637	56.369	16.724	33.402	1.001	-5.004		47.831	0.04	14.643	0.004		3806.55	63.4425	54.9	11.7	41.5	2.863	0.006	0.006	0.000	0.144	0.12	
3120	6/17/2004	12:42:16 AM		26.347	26.111	25.003	27.094	26.109		49.538	56.404	16.433	33.486	0.998	-4.999		45.247	0.04	14.643	0.004		3807.55	63.4592	54.9	11.1	41.5	2.862	0.006	0.006	0.000	0.144	0.12	
3121	6/17/2004	12:43:16 AM		26.347	26.121	25.008	27.144	26.099		49.662	56.395	16.687	33.373	1.03	-5.004		46.425	0.038	14.643	0.004		3808.55	63.4758	54.9	11.4	41.5	2.862	0.006	0.006	0.000	0.136	0.12	
3122	6/17/2004	12:44:16 AM		26.332	26.116	24.978	27.094	26.109		49.741	56.597	16.5	33.626	1.03	-4.99		48.069	0.04	14.643	0.004		3809.55	63.4925	55.1	11.8	41.7	2.874	0.006	0.006	0.000	0.143	0.12	
3123	6/17/2004	12:45:16 AM		26.327	26.106	24.968	27.094	26.109		49.617	56.464	16.697	33.293	1.045	-4.99		46.352	0.04	14.643	0.004		3810.55	63.5092	55.0	11.4	41.5	2.858	0.006	0.006	0.000	0.144	0.12	
3124	6/17/2004	12:46:16 AM		26.332	26.116	24.978	27.114	26.109		50.311	57.136	16.71	33.897	1.024	-4.996		45.818	0.039	14.643	0.004		3811.55	63.5258	55.7	11.2	42.1	2.903	0.006	0.006	0.000	0.138	0.12	
3125	6/17/2004	12:47:16 AM		26.313	26.106	24.959	27.08	26.095		49.982	56.885	16.709	33.698	1.047	-4.99		50.107	0.04	14.643	0.004		3812.55	63.5425	55.4	12.3	41.8	2.885	0.006	0.006	0.000	0.143	0.12	
3126	6/17/2004	12:48:16 AM		26.318	26.111	24.999	27.16	26.105		48.752	55.834	18.478	30.533	1.05	-4.993		48.007	0.039	14.643	0.004		3813.55	63.5592	54.4	11.8	39.6	2.733	0.006	0.006	0.000	0.147	0.12	
3127	6/17/2004	12:49:16 AM		26.307	26.101	25.028	27.124	26.104		48.872	55.508	18.107	31.153	1.027	-5.016		47.902	0.037	14.643	0.004		3814.55	63.5758	54.0	11.7	40.0	2.759	0.006	0.006	0.000	0.138	0.12	
3128	6/17/2004	12:50:16 AM		26.306	26.11	25.058	27.113	26.109		49.005	55.79	17.962	31.366	1.021	-5.004		48.347	0.038	14.643	0.004		3815.55	63.5925	54.3	11.8	40.2	2.771	0.006	0.006	0.000	0.141	0.12	
3129	6/17/2004	12:51:16 AM		26.305	26.109	25.072	27.108	26.098		49.167	55.703	17.886	31.707	1.016	-5.01		44.974	0.037	14.643	0.004		3816.55	63.6092	54.2	11.0	40.4	2.788	0.006	0.006	0.000	0.136	0.12	
3130	6/17/2004	12:52:16 AM		26.304	26.113	25.085	27.106	26.091		48.854	55.504	17.732	31.58	1.027	-4.993		49.884	0.038	14.643	0.004		3817.55	63.6258	54.0	12.2	40.2	2.773	0.006	0.006	0.000	0.141	0.12	
3131	6/17/2004	12:53:16 AM		26.287	26.086	25.069	27.079	26.08		48.849	55.616	17.658	31.53	1.045	-4.993		48.526	0.038	14.643	0.004		3818.55	63.6425	54.1	11.9	40.2	2.771	0.006	0.006	0.000	0.141	0.12	
3132	6/17/2004	12:54:16 AM		26.301	26.105	25.088	27.074	26.069		48.81	55.531	17.633	31.631	1.05	-4.993		45.944	0.038	14.643	0.004		3819.55	63.6592	54.1	11.3	40.2	2.773	0.006	0.006	0.000	0.141	0.12	
3133	6/17/2004	12:55:16 AM		26.3	26.094	25.091	27.092	26.082		48.737	55.548	17.571	31.574	1.047	-4.987		49.882	0.038	14.643	0.004		3820.55	63.6758	54.1	12.2	40.2	2.769	0.006	0.006	0.000	0.141	0.12	
3134	6/17/2004	12:56:16 AM		26.3	26.104	25.081	27.117	26.077		49.121	55.915	17.58	31.951	1.045	-4.984		48.342	0.039	14.643	0.004		3821.55	63.6925	54.4	11.8	40.5	2.795	0.006	0.006	0.000	0.143	0.12	
3135	6/17/2004	12:57:16 AM		26.305	26.099	25.086	27.117	26.082		48.692	55.548	17.553	31.574	1.05	-4.99		48.444	0.037	14.643	0.004		3822.55	63.7092	54.1	11.9	40.1	2.767	0.006	0.006	0.000	0.137	0.12	
3136	6/17/2004	12:58:16 AM		26.309	26.098	25.071	27.061	26.082		48.88	55.761	17.382	31.863	1.047	-4.987		47.187	0.038	14.643	0.004		3823.55	63.7258	54.3	11.6	40.4	2.783	0.006	0.006	0.000	0.140	0.12	
3137	6/17/2004	12:59:16 AM		26.299	26.093	25.066	27.051	26.077		48.887	55.774	17.263	32.037	1.045	-4.99		50.145	0.037	14.643	0.004		3824.55	63.7425	54.3	12.3	40.5	2.790	0.006	0.006	0.000	0.136	0.12	
3138	6/17/2004	1:00:16 AM		26.293	26.081	25.039	27.07	26.05		48.791	55.799	17.282	31.851	1.047	-4.984		46.254	0.037	14.643	0.003		3825.55	63.7592	54.3	11.3	40.3	2.780	0.006	0.006	0.000	0.137	0.12	
3139	6/17/2004	1:01:16 AM		26.292	26.081	25.033	27.079	26.044		49.024	55.848	17.307	32.154	1.047	-4.975		50.812	0.038	14.643	0.004		3826.55	63.7758	54.4	12.5	40.6	2.798	0.006	0.006	0.000	0.139	0.12	
3140	6/17/2004	1:02:16 AM		26.296	26.09	25.043	27.088	26.054		49.038	56.099	17.285	32.142	1.065	-4.975		43	0.038	14.643	0.004		3827.55	63.7925	54.6	10.5	40.6	2.799	0.006	0.006	0.000	0.139	0.12	
3141	6/17/2004	1:03:16 AM		26.295	26.079	25.017	27.082	26.058		49.104	55.896	17.352	32.115	1.056	-4.973		47.504	0.038	14.643	0.004		3828.55	63.8092	54.4	11.6	40.6	2.800	0.006	0.006	0.000	0.139	0.12	
3142	6/17/2004	1:04:16 AM		26.284	26.078	25.011	27.077	26.047		49.075	55.937	17.269	32.208	1.076	-4.967		50.443	0.038	14.643	0.004		3829.55	63.8258	54.5	12.4	40.6	2.802	0.006	0.006	0.000	0.139	0.12	
3143	6/17/2004	1:05:16 AM		26.294	26.088	25.026	27.072	26.057		48.943	55.915	17.211	32.113	1.088	-4.967		49.932	0.038	14.643	0.004		3830.55	63.8425	54.4	12.2	40.5	2.794	0.006	0.006	0.000	0.140	0.12	
3144	6/17/2004	1:06:16 AM		26.284	26.077	25.005	27.076	26.051		48.99	55.937	17.236	32.043	1.065	-4.973		48.899	0.039	14.643	0.003		3831.55	63.8592	54.5	12.0	40.5	2.793	0.006	0.006	0.000	0.143	0.12	
3145	6/17/2004	1:07:16 AM		26.288	26.077	25.004	27.075	26.045		49.274	56.311	17.279	32.31	1.111	-4.967		52.57	0.038	14.643	0.004		3832.55	63.8758	54.8	12.9	40.8	2.812	0.006	0.006	0.000	0.139	0.12	
3146	6/17/2004	1:08:16 AM		26.283	26.082	24.989	27.07	26.045		49.397	56.273	17.312	32.425	1.094	-4.961		48.718	0.038	14.643	0.004		3833.55	63.8925	54.8	11.9	40.9	2.821	0.006	0.006	0.000	0.139	0.12	
3147	6/17/2004	1:09:16 AM		26.277	26.076	24.989	27.074	26.05		49.19	56.099	17.061	32.479	1.114	-4.958		54.112	0.038	14.643	0.004		3834.55	63.9092	54.6	13.3	40.8	2.815	0.006	0.006	0.000	0.139	0.12	
3148	6/17/2004	1:10:16 AM		26.283	26.072	24.984	27.08	26.036		49.046	56.085	17.07	32.31	1.071	-4.949		46.369	0.039	14.643	0.004		3835.55	63.9258	54.6	11.4	40.7	2.805	0.006	0.006	0.000	0.143	0.12	
3149	6/17/2004	1:11:16 AM		26.273	26.067	24.974	27.095	26.031		49.007	55.927	17.229	32.179	1.111	-4.97		46.44	0.037	14.643	0.004		3836.55	63.9425	54.5	11.4	40.6	2.799	0.006	0.006	0.000	0.136	0.12	
3150	6/17/2004	1:12:16 AM		26.268	26.067	24.964	27.095	26.036		49.129	56.064	17.291	32.245	1.111	-4.961		49.379	0.038	14.643	0.004		3837.55	63.9592	54.6	12.1	40.7	2.805	0.006	0.006	0.000	0.139	0.12	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3151	6/17/2004	1:13:16 AM		26.278	26.067	24.969	27.065	26.036		48.907	55.817	17.172	32.13	1.114	-4.958		49.905	0.038	14.643	0.004		3838.55	63.9758	54.3	12.2	40.5	2.794	0.006	0.006	0.000	0.140	0.12	
3152	6/17/2004	1:14:16 AM		26.279	26.077	24.98	27.121	26.021		48.889	55.933	17.175	32.029	1.114	-4.944		50.195	0.039	14.643	0.004		3839.55	63.9925	54.5	12.3	40.5	2.790	0.006	0.006	0.000	0.144	0.12	
3153	6/17/2004	1:15:16 AM		26.269	26.072	24.965	27.081	26.021		48.899	56.037	17.108	32.083	1.114	-4.952		49.339	0.039	14.643	0.004		3840.55	64.0092	54.6	12.1	40.5	2.792	0.006	0.006	0.000	0.144	0.12	
3154	6/17/2004	1:16:16 AM		26.253	26.062	24.949	27.045	26.026		48.785	55.813	17.229	31.9	1.111	-4.949		51.934	0.04	14.643	0.004		3841.55	64.0258	54.3	12.7	40.3	2.781	0.006	0.006	0.000	0.148	0.13	
3155	6/17/2004	1:17:16 AM		26.253	26.057	24.949	27.045	26.041		48.997	55.906	17.119	32.187	1.114	-4.941		45.522	0.04	14.643	0.004		3842.55	64.0425	54.4	11.2	40.6	2.799	0.006	0.006	0.000	0.147	0.13	
3156	6/17/2004	1:18:16 AM		26.259	26.072	25.005	27.036	26.046		48.746	55.6	17.171	32.029	1.114	-4.947		47.762	0.038	14.643	0.004		3843.55	64.0592	54.1	11.7	40.4	2.785	0.006	0.006	0.000	0.140	0.12	
3157	6/17/2004	1:19:16 AM		26.253	26.067	25.024	27.045	26.016		49.175	55.964	17.198	32.362	1.14	-4.938		49.59	0.039	14.643	0.004		3844.55	64.0758	54.5	12.2	40.8	2.811	0.006	0.006	0.000	0.143	0.12	
3158	6/17/2004	1:20:16 AM		26.242	26.051	25.009	27.044	26.01		49.051	56.062	16.687	32.815	1.123	-4.941		47.819	0.038	14.643	0.003		3845.55	64.0925	54.6	11.7	40.9	2.822	0.006	0.006	0.000	0.138	0.12	
3159	6/17/2004	1:21:16 AM		26.247	26.066	25.029	27.079	26.035		48.683	55.548	17.621	31.426	1.114	-4.944		51.861	0.038	14.643	0.004		3846.55	64.1092	54.1	12.7	40.1	2.762	0.006	0.006	0.000	0.141	0.12	
3160	6/17/2004	1:22:16 AM		26.241	26.05	25.033	27.044	26.019		48.86	55.71	17.495	31.725	1.111	-4.941		49.002	0.038	14.643	0.004		3847.55	64.1258	54.2	12.0	40.3	2.778	0.006	0.006	0.000	0.140	0.12	
3161	6/17/2004	1:23:16 AM		26.257	26.066	25.064	27.059	26.025		48.797	55.566	17.394	31.883	1.129	-4.932		47.831	0.038	14.643	0.004		3848.55	64.1425	54.1	11.7	40.3	2.781	0.006	0.006	0.000	0.140	0.12	
3162	6/17/2004	1:24:16 AM		26.249	26.042	25.05	27.041	26.031		48.91	55.84	17.494	31.795	1.146	-4.921		48.939	0.038	14.643	0.004		3849.55	64.1592	54.4	12.0	40.4	2.782	0.006	0.006	0.000	0.140	0.12	
3163	6/17/2004	1:25:16 AM		26.264	26.067	25.08	27.061	26.021		48.88	55.743	17.351	31.933	1.129	-4.897		47.796	0.039	14.643	0.004		3850.55	64.1758	54.3	11.7	40.4	2.786	0.006	0.006	0.000	0.144	0.12	
3164	6/17/2004	1:26:16 AM		26.248	26.047	25.054	27.055	26.016		49.013	55.94	17.39	31.963	1.163	-4.883		49.193	0.038	14.643	0.004		3851.55	64.1925	54.5	12.1	40.5	2.792	0.006	0.006	0.000	0.140	0.12	
3165	6/17/2004	1:27:16 AM		26.243	26.042	25.039	27.015	26.016		49.003	56.06	17.429	31.847	1.166	-4.894		47.904	0.037	14.643	0.003		3852.55	64.2092	54.6	11.7	40.4	2.787	0.006	0.006	0.000	0.136	0.12	
3166	6/17/2004	1:28:16 AM		26.259	26.047	25.07	27.101	26.021		48.684	55.728	17.295	31.74	1.192	-4.871		46.586	0.039	14.643	0.004		3853.55	64.2258	54.3	11.4	40.2	2.772	0.006	0.006	0.000	0.144	0.12	
3167	6/17/2004	1:29:16 AM		26.259	26.042	25.19	27.111	26.021		48.789	55.906	17.365	31.738	1.207	-4.877		47.299	0.038	14.643	0.004		3854.55	64.2425	54.4	11.6	40.3	2.776	0.006	0.006	0.000	0.140	0.12	
3168	6/17/2004	1:30:16 AM		26.244	26.027	25.145	27.106	26.021		48.941	55.942	17.559	31.69	1.204	-4.877		50.482	0.038	14.643	0.004		3855.55	64.2592	54.5	12.4	40.3	2.780	0.006	0.006	0.000	0.140	0.12	
3169	6/17/2004	1:31:16 AM		26.254	26.032	25.155	27.051	26.031		48.683	55.606	17.455	31.567	1.198	-4.866		52.247	0.038	14.643	0.004		3856.55	64.2758	54.1	12.8	40.1	2.766	0.006	0.006	0.000	0.141	0.12	
3170	6/17/2004	1:32:16 AM		26.258	26.037	25.135	27.015	26.016		49.113	55.906	17.46	32.078	1.236	-4.86		47.969	0.038	14.643	0.004		3857.55	64.2925	54.4	11.8	40.6	2.799	0.006	0.006	0.000	0.139	0.12	
3171	6/17/2004	1:33:16 AM		26.261	26.03	25.123	26.994	26.019		48.638	55.566	17.382	31.662	1.189	-4.868		51.2	0.038	14.643	0.004		3858.55	64.3092	54.1	12.5	40.2	2.768	0.006	0.006	0.000	0.141	0.12	
3172	6/17/2004	1:34:16 AM		26.271	26.03	25.123	27.024	26.024		48.615	55.357	17.374	31.651	1.221	-4.866		47.32	0.038	14.643	0.004		3859.55	64.3258	53.9	11.6	40.1	2.767	0.006	0.006	0.000	0.141	0.12	
3173	6/17/2004	1:35:16 AM		26.27	26.024	25.106	27.027	26.012		48.831	55.799	17.453	31.779	1.236	-4.863		46.334	0.038	14.643	0.004		3860.55	64.3425	54.3	11.4	40.3	2.779	0.006	0.006	0.000	0.140	0.12	
3174	6/17/2004	1:36:16 AM		26.278	26.027	25.11	27.001	26.036		48.88	55.966	17.413	31.838	1.236	-4.86		48.276	0.038	14.643	0.004		3861.55	64.3592	54.5	11.8	40.4	2.783	0.006	0.006	0.000	0.140	0.12	
3175	6/17/2004	1:37:16 AM		26.277	26.025	25.098	27.009	26.009		48.679	55.608	17.282	31.764	1.239	-4.851		52.493	0.038	14.643	0.004		3862.55	64.3758	54.1	12.9	40.2	2.773	0.006	0.006	0.000	0.140	0.12	
3176	6/17/2004	1:38:16 AM		26.266	26.01	25.062	27.013	26.004		48.364	55.262	17.195	31.619	1.236	-4.857		48.038	0.037	14.643	0.004		3863.55	64.3925	53.8	11.8	40.0	2.757	0.006	0.006	0.000	0.138	0.12	
3177	6/17/2004	1:39:16 AM		26.279	26.008	25.071	27.017	26.007		48.677	55.66	17.315	31.777	1.236	-4.857		47.337	0.037	14.643	0.004		3864.55	64.4092	54.2	11.6	40.2	2.774	0.006	0.006	0.000	0.137	0.12	
3178	6/17/2004	1:40:16 AM		26.294	26.033	25.086	27.027	26.012		48.2	55.129	17.104	31.51	1.236	-4.842		48.171	0.038	14.643	0.004		3865.55	64.4258	53.7	11.8	39.9	2.748	0.006	0.006	0.000	0.142	0.12	
3179	6/17/2004	1:41:16 AM		26.289	26.032	25.08	27.031	26.001		48.71	55.701	17.275	31.808	1.236	-4.837		49.729	0.041	14.643	0.004		3866.55	64.4425	54.2	12.2	40.3	2.776	0.006	0.006	0.000	0.151	0.13	
3180	6/17/2004	1:42:16 AM		26.282	26.016	25.074	27.014	26.01		48.881	55.832	17.319	31.984	1.239	-4.834		47.308	0.038	14.643	0.004		3867.55	64.4592	54.4	11.6	40.4	2.788	0.006	0.006	0.000	0.140	0.12	
3181	6/17/2004	1:43:16 AM		26.284	26.022	25.06	27.096	25.996		49.028	55.852	17.359	32.087	1.239	-4.866		48.05	0.039	14.643	0.004		3868.55	64.4758	54.4	11.8	40.6	2.796	0.006	0.006	0.000	0.143	0.12	
3182	6/17/2004	1:44:16 AM		26.268	26.012	25.054	27.03	25.981		48.603	55.506	17.278	31.795	1.21	-4.868		46.184	0.038	14.643	0.004		3869.55	64.4925	54.0	11.3	40.2	2.772	0.006	0.006	0.000	0.141	0.12	
3183	6/17/2004	1:45:16 AM		26.274	26.017	25.055	27.006	26.006		48.853	55.678	17.37	31.894	1.239	-4.845		47.658	0.039	14.643	0.004		3870.55	64.5092	54.2	11.7	40.4	2.784	0.006	0.006	0.000	0.144	0.12	
3184	6/17/2004	1:46:16 AM		26.263	25.997	25.029	26.98	26.001		48.584	55.359	17.173	31.885	1.236	-4.857		48.933	0.037	14.643	0.004		3871.55	64.5258	53.9	12.0	40.2	2.774	0.006	0.006	0.000	0.137	0.12	
3185	6/17/2004	1:47:16 AM		26.268	26.007	25.034	26.98	26.006		49.009	56.083	17.421	31.961	1.239	-4.753		46.951	0.038	14.643	0.004		3872.55	64.5425	54.6	11.5	40.5	2.791	0.006	0.006	0.000	0.140	0.12	
3186	6/17/2004	1:48:16 AM		26.272	25.981	25.029	27.009	25.985		48.671	55.568	17.289	31.787	1.247	-4.762		46.793	0.038	14.643	0.003		3873.55	64.5592	54.1	11.5	40.2	2.774	0.006	0.006	0.000	0.141	0.12	
3187	6/17/2004	1:49:16 AM		26.263	25.982	25.044	27.01	25.996		48.76	55.709	17.121	32.015	1.279	-4.75		45.476	0.038	14.643	0.004		3874.55	64.5758	54.2	11.1	40.4	2.785	0.006	0.006	0.000	0.140	0.12	
3188	6/17/2004	1:50:16 AM		26.258	25.957	25.024	26.995	25.981		48.783	55.786	17.136	32.021	1.27	-4.762		51.97	0.039	14.643	0.004		3875.55	64.5925	54.3	12.7	40.4	2.786	0.006	0.006	0.000	0.144	0.12	
3189	6/17/2004	1:51:16 AM		26.267	25.956	25.044	27.014	26.005		49.077	56.016	17.141	32.364	1.279	-4.77		48.634	0.037	14.643	0.004		3876.55	64.6092	54.5	11.9	40.7	2.808	0.006	0.006	0.000	0.135	0.12	
3190	6/17/2004	1:52:16 AM		26.271	25.93	25.048	27.014	25.989		48.75	55.852	17.092	32.019	1.279	-4.776		47.178	0.036	14.643	0.004		3877.55	64.6258	54.4	11.6	40.4	2.784	0.005	0.005	0.000	0.133	0.11	
3191	6/17/2004	1:53:16 AM		26.257	25.921	25.024	26.984	25.97		48.897	56.068	17.114	32.165	1.276	-4.773		50.733	0.038	14.643	0.004		3878.55	64.6425	54.6	12.4	40.5	2.794	0.006	0.006	0.000	0.140	0.12	
3192	6/17/2004	1:54:16 AM		26.236	25.879	24.987	26.978	25.953		48.781	55.904	17.026	32.138	1.276	-4.762		50.138	0.037	14.643	0.004		3879.55	64.6592	54.4	12.3	40.5	2.790	0.006	0.006	0.000	0.136	0.12	
3193	6/17/2004	1:55:16 AM		26.245	25.883	25.011	27.037	25.938		49.216	56.317	17.13	32.388	1.279	-4.77		47.99	0.039	14.643	0.004		3880.55	64.6758	54.8	11.8	40.8	2.813	0.006	0.006	0.000	0.142	0.12	
3194	6/17/2004	1:56:16 AM		26.236	25.869	24.982	26.968	25.963		49.165	56.093	17.119	32.487	1.273	-4.796		47.243	0.037	14.643	0.004		3881.55	64.6925	54.6	11.6	40.8	2.815	0.006	0.006	0.000	0.135	0.12	
3195	6/17/2004	1:57:16 AM		26.24	25.868	25.001	27.002	25.967		49.119	56.163	16.989	32.503	1.276	-4.79		50.945	0.037	14.643	0.004		3882.55	64.7092	54.7	12.5	40.8	2.814	0.006	0.006	0.000	0.135	0.12	
3196	6/17/2004	1:58:16 AM		26.251	25.859	25.017	27.018	25.973		49.125	56.163	16.953	32.635	1.279	-4.77		46.951	0.039	14.643	0.004		3883.55	64.7258	54.7	11.5	40.9	2.819	0.006	0.006	0.000	0.142	0.12	
3197	6/17/2004	1:59:16 AM		26.235	25.838	24.986	26.997	25.972		49.024	56.205	17.032	32.368	1.273	-4.776		44.761	0.038	14.643	0.004		3884.55	64.7425	54.7	11.0	40.7	2.806	0.006	0.006	0.000	0.139	0.12	
3198	6/17/2004	2:00:16 AM		26.235	25.823	25.006	27.027	25.972		49.057	56.172	17.308	32.037	1.279	-4.773		49.978	0.038	14.643	0.004		3885.55	64.7592	54.7	12.2	40.5	2.796	0.006	0.006	0.000	0.140	0.12	
3199	6/17/2004	2:01:16 AM		26.246	25.824	25.017	26.963	25.993		48.928	55.946	17.146	32.204	1.282	-4.762		45.239	0.039	14.643	0.004		3886.55	64.7758	54.5	11.1	40.6	2.797	0.006	0.006	0.000	0.143	0.12	
3200	6/17/2004	2:02:16 AM		26.224	25.788	25.03	26.901	25.972		48.986	55.995	17.143	32.304	1.276	-4.767		49.46	0.038	14.643	0.004		3887.55	64.7925	54.5	12.1	40.6	2.802	0.006	0.006	0.000	0.139	0.12	
3201	6/17/2004	2:03:16 AM		26.228	25.777	25.05	26.916	25.956		48.727	55.728	16.906	32.349	1.276	-4.762		46.841	0.039	14.643	0.004		3888.55	64.8092	54.3	11.5	40.5	2.795	0.006	0.006	0.000	0.143	0.12	
3202	6/17/2004	2:04:16 AM		26.229	25.778	25.076	26.926	25.952		49.111	55.985	17.172	32.476	1.276	-4.776		48.91	0.039	14.643	0.004		3889.55	64.8258	54.5	12.0	40.8	2.813	0.006	0.006	0.000	0.142	0.12	
3203	6/17/2004	2:05:16 AM		26.228	25.772	25.075	26.941	25.936		49.353	56.354	17.117	32.684	1.279	-4.756		50.641	0.041	14.643	0.004		3890.55	64.8425	54.9	12.4	41.0	2.828	0.006	0.006	0.000	0.149	0.13	
3204	6/17/2004	2:06:16 AM		26.228	25.752	25.085	26.946	25.946		48.717	55.801	17.181	31.89	1.343	-4.701		47.266	0.038	14.643	0.004		3891.55	64.8592	54.3	11.6	40.3	2.779	0.006	0.006	0.000	0.140	0.12	
3205	6/17/2004	2:07:16 AM		26.239	25.747	25.096	26.951	25.967		49.113	56.076	17.199	32.36	1.343	-4.686		45.677	0.037	14.643	0.004		3892.55	64.8758	54.6	11.2	40.7	2.809	0.006	0.006	0.000	0.135	0.11	
3206	6/17/2004	2:08:16 AM		26.233	25.742	25.11	26.966	25.966		48.924	56.186	17.305	31.966	1.343	-4.689		49.911	0.037	14.643	0.004		3893.55	64.8925	54.7	12.2	40.4	2.789	0.006	0.005	0.000	0.136	0.12	
3207	6/17/2004	2:09:16 AM		26.237	25.73	25.093	26.979	25.949		48.889	56.037	17.151	32.052	1.346	-4.675		47.996	0.037	14.643	0.004		3894.55	64.9092	54.6	11.8	40.5	2.790	0.006	0.006	0.000	0.136	0.12	
3208	6/17/2004	2:10:16 AM		26.232	25.71	25.083	26.964	25.964		48.866	55.969	17.155	32.089	1.34	-4.678		51.431	0.039	14.643	0.003		3895.55	64.9258	54.5	12.6	40.5	2.791	0.006	0.006	0.000	0.143	0.12	
3209	6/17/2004	2:11:16 AM		26.238	25.706	25.079	26.965	25.96		49.059	56.267	17.315	32.119	1.392	-4.689		47.698	0.037	14.643	0.004		3896.55	64.9425	54.8	11.7	40.6	2.798	0.006	0.006	0.000	0.136	0.12	
3210	6/17/2004	2:12:16 AM		26.243	25.711	25.089	26.98	25.95		49.09	56.313	17.218	32.226	1.36	-4.686		47.683	0.037	14.643	0.004		3897.55	64.9592	54.8	11.7	40.7	2.803	0.006	0.006	0.000	0.135	0.12	
3211	6/17/2004	2:12:26 AM		26.243	25.706	25.084	26.97	25.955		48.775	55.954	17.153	31.99	1.34	-4.683		46.736	0.038	14.643	0.004		3897.72	64.9619	54.5	11.5	40.4	2.784	0.006	0.006	0.000	0.140	0.12	
3212	6/17/2004	2:13:26 AM		26.241	25.694	25.097	26.928	25.949		49.127	56.342	17.034	32.481	1.395	-4.678		49.521	0.039	14.643	0.004		3898.72	64.9786	54.9	12.1	40.8	2.813	0.006	0.006	0.000	0.142	0.12	
3213	6/17/2004	2:14:26 AM		26.236	25.689	25.193	26.968	25.919		48.692	55.844	17.207	31.853	1.36	-4.678		48.296	0.038	14.643	0.004		3899.72	64.9953	54.4	11.8	40.3	2.777	0.006	0.006	0.000	0.140	0.12	
3214	6/17/2004	2:15:26 AM		26.236	25.689	25.173	26.963	25.949		49.005	56.269	17.229	32.136	1.389	-4.678		46.619	0.038	14.643	0.004		3900.72	65.0119	54.8	11.4	40.6	2.797	0.006	0.006	0.000	0.139	0.12	
3215	6/17/2004	2:16:26 AM		26.246	25.699	25.173	26.948	25.949		49.092	56.4	17.392	32.089	1.395	-4.683		52.927	0.037	14.643	0.004		3901.72	65.0286	54.9	13.0	40.6	2.799	0.006	0.005	0.000	0.135	0.12	
3216	6/17/2004	2:17:26 AM		26.25	25.694	25.152	26.962	25.933		48.88	56.348	17.139	32.017	1.392	-4.692		46.377	0.038	14.643	0.004		3902.72	65.0453	54.9	11.4	40.4	2.789	0.006	0.006	0.000	0.139	0.12	
3217	6/17/2004	2:18:26 AM		26.256	25.694	25.142	26.958	25.949		49.15	56.47	17.271	32.247	1.38	-4.689		48.326	0.039	14.643	0.004		3903.72	65.0619	55.0	11.8	40.7	2.806	0.006	0.006	0.000	0.142	0.12	
3218	6/17/2004	2:19:26 AM		26.251	25.689	25.122	26.943	25.944		49.051	56.346	17.34	32.011	1.395	-4.686		50.472	0.038	14.643	0.004		3904.72	65.0786	54.9	12.4	40.5	2.794	0.006	0.006	0.000	0.139	0.12	
3219	6/17/2004	2:20:26 AM		26.256	25.689	25.117	26.918	25.929		48.791	55.925	17.138	32.064	1.395	-4.686		43.657	0.038	14.643	0.004		3905.72	65.0953	54.5	10.7	40.4	2.787	0.006	0.006	0.000	0.140	0.12	
3220	6/17/2004	2:21:26 AM		26.25	25.689	25.097	26.923	25.898		48.468	55.707	17.105	31.691	1.395	-4.669		48.97	0.039	14.643	0.004		3906.72	65.1119	54.2	12.0	40.1	2.763	0.006	0.006	0.000	0.145	0.12	

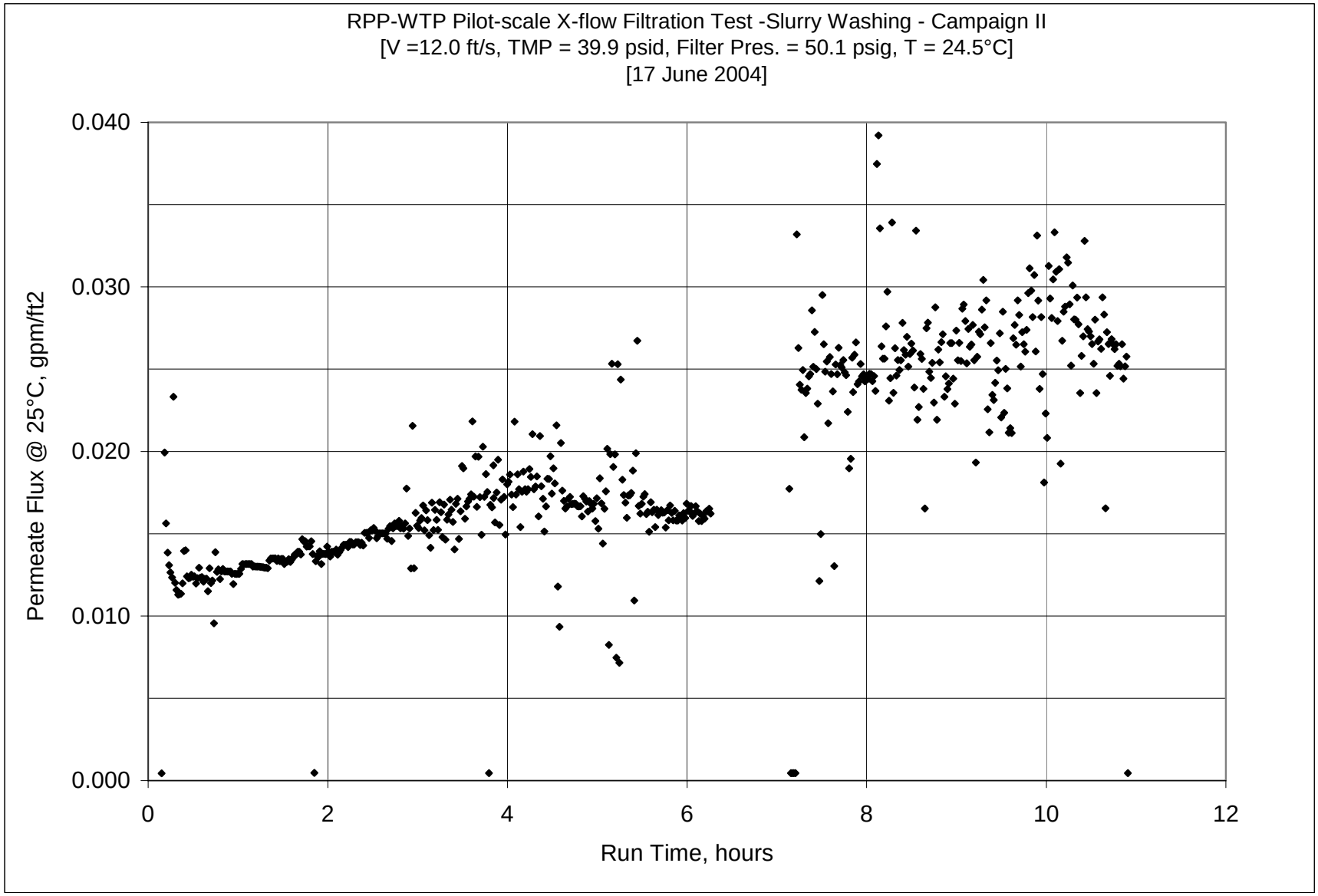
RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3221	6/17/2004	2:22:26 AM		26.254	25.693	25.096	26.912	25.907		48.771	56.058	17.181	32.009	1.395	-4.672		51.263	0.037	14.643	0.004		3907.72	65.1286	54.6	12.6	40.4	2.785	0.006	0.006	0.000	0.136	0.12	
3222	6/17/2004	2:23:26 AM		26.263	25.711	25.114	26.965	25.921		48.922	56.051	17.156	32.197	1.401	-4.692		46.38	0.037	14.643	0.004		3908.72	65.1453	54.6	11.4	40.6	2.796	0.006	0.005	0.000	0.136	0.12	
3223	6/17/2004	2:24:26 AM		26.253	25.701	25.074	26.92	25.926		48.797	55.933	17.108	32.142	1.395	-4.678		51.071	0.04	14.643	0.004		3909.72	65.1619	54.5	12.5	40.5	2.790	0.006	0.006	0.000	0.147	0.13	
3224	6/17/2004	2:25:26 AM		26.253	25.696	25.069	26.94	25.906		48.81	56.093	17.133	32.013	1.395	-4.634		51.219	0.038	14.643	0.003		3910.72	65.1786	54.6	12.6	40.4	2.786	0.006	0.006	0.000	0.140	0.12	
3225	6/17/2004	2:26:26 AM		26.253	25.706	25.074	26.96	25.926		48.939	55.96	17.163	32.193	1.395	-4.637		47.003	0.038	14.643	0.004		3911.72	65.1953	54.5	11.5	40.6	2.797	0.006	0.006	0.000	0.139	0.12	
3226	6/17/2004	2:27:26 AM		26.259	25.717	25.075	26.961	25.911		48.978	56.234	17.102	32.306	1.395	-4.626		46.184	0.038	14.643	0.004		3912.72	65.2119	54.8	11.3	40.6	2.802	0.006	0.006	0.000	0.139	0.12	
3227	6/17/2004	2:28:26 AM		26.244	25.702	25.06	26.936	25.906		48.667	55.782	17.09	31.961	1.395	-4.652		51.133	0.037	14.643	0.004		3913.72	65.2286	54.3	12.5	40.3	2.780	0.006	0.006	0.000	0.137	0.12	
3228	6/17/2004	2:29:26 AM		26.234	25.697	25.035	26.911	25.906		48.677	55.981	17.031	32.015	1.58	-4.305		48.889	0.038	14.643	0.004		3914.72	65.2453	54.5	12.0	40.3	2.782	0.006	0.006	0.000	0.140	0.12	
3229	6/17/2004	2:30:26 AM		26.249	25.717	25.05	26.911	25.906		48.549	55.78	16.864	32.103	1.577	-4.311		50.017	0.038	14.643	0.004		3915.72	65.2619	54.3	12.3	40.3	2.780	0.006	0.006	0.000	0.140	0.12	
3230	6/17/2004	2:31:26 AM		26.238	25.711	25.039	26.885	25.891		48.837	56.103	16.949	32.263	1.577	-4.319		47.923	0.038	14.643	0.004		3916.72	65.2786	54.6	11.7	40.6	2.796	0.006	0.006	0.000	0.140	0.12	
3231	6/17/2004	2:32:26 AM		26.249	25.727	25.055	26.886	25.891		48.656	55.981	16.936	32.16	1.58	-4.302		45.633	0.038	14.643	0.004		3917.72	65.2953	54.5	11.2	40.4	2.786	0.006	0.006	0.000	0.140	0.12	
3232	6/17/2004	2:33:26 AM		26.237	25.711	25.029	26.904	25.895		48.804	56.219	16.92	32.294	1.58	-4.305		48.242	0.038	14.643	0.004		3918.72	65.3119	54.7	11.8	40.5	2.796	0.006	0.006	0.000	0.140	0.12	
3233	6/17/2004	2:34:26 AM		26.236	25.715	25.033	26.889	25.904		48.853	56.153	17.055	32.241	1.592	-4.316		46.732	0.037	14.643	0.004		3919.72	65.3286	54.7	11.5	40.5	2.796	0.006	0.006	0.000	0.136	0.12	
3234	6/17/2004	2:35:26 AM		26.238	25.736	25.029	26.92	25.896		48.8	56.284	16.974	32.13	1.58	-4.322		46.378	0.038	14.643	0.004		3920.72	65.3453	54.8	11.4	40.5	2.790	0.006	0.006	0.000	0.140	0.12	
3235	6/17/2004	2:36:26 AM		26.233	25.726	25.029	26.94	25.896		49.044	56.53	16.937	32.466	1.589	-4.313		44.638	0.038	14.643	0.004		3921.72	65.3619	55.1	10.9	40.8	2.810	0.006	0.006	0.000	0.139	0.12	
3236	6/17/2004	2:37:26 AM		26.233	25.736	25.014	26.945	25.901		48.81	56.321	17.027	32.142	1.58	-4.316		48.04	0.037	14.643	0.004		3922.72	65.3786	54.8	11.8	40.5	2.791	0.006	0.006	0.000	0.136	0.12	
3237	6/17/2004	2:38:26 AM		26.223	25.736	25.009	26.925	25.896		48.965	56.306	16.957	32.429	1.6	-4.302		47.979	0.038	14.643	0.004		3923.72	65.3953	54.8	11.8	40.7	2.806	0.006	0.006	0.000	0.139	0.12	
3238	6/17/2004	2:39:26 AM		26.234	25.737	25.02	26.906	25.896		49.028	56.468	16.965	32.38	1.635	-4.308		48.551	0.038	14.643	0.004		3924.72	65.4119	55.0	11.9	40.7	2.806	0.006	0.006	0.000	0.139	0.12	
3239	6/17/2004	2:40:26 AM		26.229	25.743	25.011	26.937	25.897		48.999	56.261	16.971	32.45	1.615	-4.311		46.688	0.037	14.643	0.004		3925.72	65.4286	54.8	11.4	40.7	2.808	0.006	0.006	0.000	0.135	0.12	
3240	6/17/2004	2:41:26 AM		26.213	25.731	24.994	26.93	25.876		48.725	56.114	16.939	32.169	1.638	-4.305		47.035	0.039	14.643	0.004		3926.72	65.4453	54.6	11.5	40.4	2.789	0.006	0.006	0.000	0.144	0.12	
3241	6/17/2004	2:42:26 AM		26.204	25.727	24.965	26.851	25.881		49.075	56.294	16.985	32.52	1.627	-4.308		45.835	0.038	14.643	0.004		3927.72	65.4619	54.8	11.2	40.8	2.813	0.006	0.006	0.000	0.139	0.12	
3242	6/17/2004	2:43:26 AM		26.214	25.747	24.995	26.921	25.896		49.105	56.468	17.001	32.583	1.638	-4.299		49.231	0.038	14.643	0.004		3928.72	65.4786	55.0	12.1	40.8	2.816	0.006	0.006	0.000	0.139	0.12	
3243	6/17/2004	2:44:26 AM		26.203	25.746	24.984	26.92	25.876		49.198	56.52	16.976	32.643	1.635	-4.308		48.274	0.037	14.643	0.004		3929.72	65.4953	55.0	11.8	40.9	2.821	0.006	0.006	0.000	0.135	0.11	
3244	6/17/2004	2:45:26 AM		26.207	25.746	24.988	26.909	25.88		49.245	56.63	17.001	32.674	1.635	-4.308		46.317	0.036	14.643	0.003		3930.72	65.5119	55.2	11.4	41.0	2.824	0.005	0.005	0.000	0.131	0.11	
3245	6/17/2004	2:46:26 AM		26.212	25.751	24.983	26.899	25.885		49.088	56.565	17.103	32.308	1.635	-4.305		51.004	0.037	14.643	0.004		3931.72	65.5286	55.1	12.5	40.7	2.806	0.006	0.006	0.000	0.136	0.12	
3246	6/17/2004	2:47:26 AM		26.207	25.756	24.983	26.859	25.88		48.912	56.331	17.013	32.302	1.638	-4.299		48.032	0.038	14.643	0.003		3932.72	65.5453	54.9	11.8	40.6	2.800	0.006	0.006	0.000	0.140	0.12	
3247	6/17/2004	2:48:26 AM		26.197	25.761	24.978	26.894	25.875		49.254	56.702	17.187	32.52	1.638	-4.293		45.428	0.038	14.643	0.003		3933.72	65.5619	55.2	11.1	40.9	2.819	0.006	0.006	0.000	0.139	0.12	
3248	6/17/2004	2:49:26 AM		26.191	25.76	24.978	26.899	25.869		49.131	56.57	17.122	32.372	1.635	-4.285		43.816	0.038	14.643	0.004		3934.72	65.5786	55.1	10.7	40.8	2.810	0.006	0.006	0.000	0.139	0.12	
3249	6/17/2004	2:50:26 AM		26.201	25.76	25.003	26.884	25.874		49.347	56.671	17.17	32.579	1.641	-4.285		45.647	0.038	14.643	0.004		3935.72	65.5953	55.2	11.2	41.0	2.824	0.006	0.006	0.000	0.138	0.12	
3250	6/17/2004	2:51:26 AM		26.206	25.765	24.998	26.899	25.849		49.382	56.69	17.022	32.819	1.641	-4.285		49.152	0.038	14.643	0.004		3936.72	65.6119	55.2	12.0	41.1	2.834	0.006	0.006	0.000	0.138	0.12	
3251	6/17/2004	2:52:26 AM		26.191	25.749	25.002	26.913	25.848		49.333	56.74	17.087	32.581	1.638	-4.287		49.289	0.038	14.643	0.004		3937.72	65.6286	55.3	12.1	41.0	2.824	0.006	0.006	0.000	0.138	0.12	
3252	6/17/2004	2:53:26 AM		26.19	25.768	25.016	26.912	25.863		49.316	56.715	17.049	32.684	1.641	-4.279		46.517	0.037	14.643	0.004		3938.72	65.6453	55.2	11.4	41.0	2.827	0.006	0.006	0.000	0.134	0.11	
3253	6/17/2004	2:54:26 AM		26.2	25.768	25.021	26.907	25.873		49.096	56.653	17.24	32.191	1.641	-4.273		46.888	0.037	14.643	0.004		3939.72	65.6619	55.2	11.5	40.6	2.802	0.006	0.006	0.000	0.136	0.12	
3254	6/17/2004	2:55:26 AM		26.19	25.768	25.016	26.907	25.843		49.015	56.476	17.335	32.083	1.635	-4.279		49.348	0.037	14.643	0.003		3940.72	65.6786	55.0	12.1	40.5	2.796	0.006	0.006	0.000	0.136	0.12	
3255	6/17/2004	2:56:26 AM		26.189	25.763	25.086	26.936	25.857		49.053	56.451	17.163	32.255	1.638	-4.279		52.032	0.038	14.643	0.004		3941.72	65.6953	55.0	12.8	40.7	2.803	0.006	0.006	0.000	0.139	0.12	
3256	6/17/2004	2:57:26 AM		26.188	25.762	25.07	26.931	25.866		48.835	56.211	17.061	32.22	1.635	-4.282		47.925	0.037	14.643	0.004		3942.72	65.7119	54.7	11.7	40.5	2.794	0.006	0.006	0.000	0.136	0.12	
3257	6/17/2004	2:58:26 AM		26.192	25.755	25.053	26.919	25.86		48.862	56.259	17.158	32.048	1.638	-4.282		48.157	0.037	14.643	0.004		3943.72	65.7286	54.8	11.8	40.5	2.789	0.006	0.006	0.000	0.136	0.12	
3258	6/17/2004	2:59:26 AM		26.191	25.749	25.032	26.893	25.874		49.16	56.592	16.968	32.653	1.653	-4.279		45.378	0.037	14.643	0.003		3944.72	65.7453	55.1	11.1	40.9	2.820	0.006	0.006	0.000	0.135	0.11	
3259	6/17/2004	3:00:26 AM		26.186	25.749	25.017	26.828	25.849		49.198	56.688	16.984	32.575	1.655	-4.276		51.106	0.037	14.643	0.004		3945.72	65.7619	55.2	12.5	40.9	2.819	0.006	0.006	0.000	0.135	0.11	
3260	6/17/2004	3:01:26 AM		26.202	25.765	25.023	26.869	25.86		49.161	56.63	17.109	32.388	1.667	-4.264		45.591	0.037	14.643	0.004		3946.72	65.7786	55.2	11.2	40.8	2.811	0.006	0.006	0.000	0.135	0.12	
3261	6/17/2004	3:02:26 AM		26.202	25.765	25.003	26.919	25.84		49.109	56.642	16.936	32.579	1.705	-4.259		49.719	0.038	14.643	0.004		3947.72	65.7953	55.2	12.2	40.8	2.816	0.006	0.006	0.000	0.139	0.12	
3262	6/17/2004	3:03:26 AM		26.206	25.775	25.012	26.913	25.834		49.082	56.483	16.956	32.594	1.708	-4.25		45.846	0.039	14.643	0.004		3948.72	65.8119	55.0	11.2	40.8	2.816	0.006	0.006	0.000	0.142	0.12	
3263	6/17/2004	3:04:26 AM		26.18	25.759	24.967	26.883	25.828		49.281	56.86	16.843	32.817	1.705	-4.267		43.222	0.036	14.643	0.004		3949.72	65.8286	55.4	10.6	41.0	2.830	0.005	0.005	0.000	0.131	0.11	
3264	6/17/2004	3:05:26 AM		26.205	25.769	24.992	26.928	25.828		48.874	56.236	16.918	32.392	1.708	-4.261		49.008	0.037	14.643	0.004		3950.72	65.8453	54.8	12.0	40.6	2.802	0.006	0.006	0.000	0.136	0.12	
3265	6/17/2004	3:06:26 AM		26.195	25.769	24.982	26.908	25.818		49.059	56.501	16.891	32.577	1.71	-4.25		44.796	0.037	14.643	0.004		3951.72	65.8619	55.0	11.0	40.8	2.814	0.006	0.006	0.000	0.135	0.12	
3266	6/17/2004	3:07:26 AM		26.195	25.764	24.967	26.893	25.828		49.32	56.783	17.027	32.653	1.708	-4.238		47.917	0.038	14.643	0.004		3952.72	65.8786	55.3	11.7	41.0	2.826	0.006	0.006	0.000	0.138	0.12	
3267	6/17/2004	3:08:26 AM		26.185	25.764	24.962	26.878	25.823		48.914	56.313	16.917	32.476	1.708	-4.247		47.965	0.037	14.643	0.004		3953.72	65.8953	54.8	11.8	40.7	2.806	0.006	0.006	0.000	0.136	0.12	
3268	6/17/2004	3:09:26 AM		26.186	25.775	24.972	26.883	25.834		48.827	56.369	16.94	32.255	1.71	-4.256		48.419	0.037	14.643	0.004		3954.72	65.9119	54.9	11.9	40.5	2.795	0.006	0.006	0.000	0.136	0.12	
3269	6/17/2004	3:10:26 AM		26.176	25.764	24.947	26.838	25.834		48.748	56.232	16.857	32.325	1.708	-4.238		49.853	0.037	14.643	0.003		3955.72	65.9286	54.8	12.2	40.5	2.795	0.006	0.006	0.000	0.136	0.12	
3270	6/17/2004	3:11:26 AM		26.17	25.764	24.947	26.838	25.818		48.909	56.474	16.853	32.503	1.71	-4.238		53.313	0.038	14.643	0.004		3956.72	65.9453	55.0	13.1	40.7	2.807	0.006	0.006	0.000	0.139	0.12	
3271	6/17/2004	3:12:26 AM		26.18	25.773	24.956	26.862	25.802		48.976	56.431	16.888	32.54	1.708	-4.23		43.524	0.039	14.643	0.004		3957.72	65.9619	55.0	10.7	40.8	2.810	0.006	0.006	0.000	0.143	0.12	
3272	6/17/2004	3:13:26 AM		26.17	25.763	24.941	26.872	25.822		48.868	56.547	16.892	32.382	1.708	-4.23		48.234	0.037	14.643	0.004		3958.72	65.9786	55.1	11.8	40.6	2.801	0.006	0.006	0.000	0.136	0.12	
3273	6/17/2004	3:14:26 AM		26.164	25.767	24.935	26.856	25.822		49.312	56.883	17.042	32.686	1.708	-4.224		45.989	0.038	14.643	0.004		3959.72	65.9953	55.4	11.3	41.0	2.827	0.006	0.006	0.000	0.138	0.12	
3274	6/17/2004	3:15:26 AM		26.144	25.752	24.955	26.806	25.817		49.021	56.497	16.881	32.544	1.722	-4.221		47.564	0.038	14.643	0.004		3960.72	66.0119	55.0	11.7	40.8	2.812	0.006	0.006	0.000	0.139	0.12	
3275	6/17/2004	3:16:26 AM		26.148	25.766	24.984	26.87	25.791		48.889	56.451	16.747	32.577	1.713	-4.221		47.969	0.038	14.643	0.003		3961.72	66.0286	55.0	11.8	40.7	2.808	0.006	0.006	0.000	0.139	0.12	
3276	6/17/2004	3:17:26 AM		26.147	25.766	24.999	26.865	25.805		48.793	56.269	16.915	32.366	1.716	-4.221		44.848	0.037	14.643	0.004		3962.72	66.0453	54.8	11.0	40.6	2.798	0.006	0.006	0.000	0.136	0.12	
3277	6/17/2004	3:18:26 AM		26.141	25.759	25.002	26.883	25.804		48.937	56.611	16.944	32.358	1.734	-4.212		48.334	0.037	14.643	0.004		3963.72	66.0619	55.1	11.8	40.6	2.803	0.006	0.006	0.000	0.136	0.12	
3278	6/17/2004	3:19:26 AM		26.146	25.764	25.007	26.908	25.839		49.069	56.578	16.89	32.622	1.731	-4.215		47.276	0.036	14.643	0.004		3964.72	66.0786	55.1	11.6	40.8	2.816	0.005	0.005	0.000	0.131	0.11	
3279	6/17/2004	3:20:26 AM		26.135	25.763	24.991	26.912	25.898		48.746	56.279	16.814	32.296	1.731	-4.201		48.678	0.037	14.643	0.004		3965.72	66.0953	54.8	11.9	40.5	2.794	0.006	0.006	0.000	0.136	0.12	
3280	6/17/2004	3:21:26 AM		26.145	25.768	25.001	26.967	25.958		49.235	56.812	16.748	32.942	1.734	-4.192		46.548	0.038	14.643	0.004		3966.72	66.1119	55.3	11.4	41.1	2.833	0.006	0.006	0.000	0.138	0.12	
3281	6/17/2004	3:22:26 AM		26.157	25.78	24.998	27.039	26.039		49.065	56.738	16.873	32.513	1.728	-4.204		47.331	0.038	14.643	0.003		3967.72	66.1286	55.3	11.6	40.8	2.812	0.006	0.006	0.000	0.139	0.12	
3282	6/17/2004	3:23:26 AM		26.167	25.79	25.018	27.144	26.099		48.984	56.452	16.833	32.567	1.734	-4.206		47.433	0.037	14.643	0.004		3968.72	66.1453	55.0	11.6	40.8	2.811	0.006	0.006	0.000	0.135	0.12	
3283	6/17/2004	3:24:26 AM		26.168	25.796	25.019	27.26	26.125		49.214	56.793	17.071	32.44	1.734	-4.204		46.248	0.038	14.643	0.004		3969.72	66.1619	55.3	11.3	40.8	2.815	0.006	0.006	0.000	0.139	0.12	
3284	6/17/2004	3:25:26 AM		26.179	25.822	25.045	27.226	26.116		48.829	56.358	17.05	32.173	1.734	-4.209		49.823	0.038	14.643	0.004		3970.72	66.1786	54.9	12.2	40.5	2.792	0.006	0.006	0.000	0.140	0.12	
3285	6/17/2004	3:26:26 AM		26.175	25.829	25.027	27.197	26.103		48.652	56.141	16.95	32.152	1.731	-4.212		48.791	0.036	14.643	0.004		3971.72	66.1953	54.7	12.0	40.4	2.786	0.005	0.005	0.000	0.133	0.11	
3286	6/17/2004	3:27:26 AM		26.166	25.825	25.017	27.143	26.073		49.026	56.605	17.059	32.351	1.734	-4.212		49.06	0.036	14.643	0.003		3972.72	66.2119	55.1	12.0	40.7	2.805	0.005	0.005	0.000	0.132	0.11	
3287	6/17/2004	3:28:26 AM		26.173	25.842	25.02	27.101	26.031		49.051	56.742	17.14	32.257	1.731	-4.209		49.043	0.036	14.643	0.004		3973.72	66.2286	55.3	12.0	40.7	2.803	0.005	0.005	0.000	0.132	0.11	
3288	6/17/2004	3:29:26 AM		26.168	25.832	25.005	27.096	26.021		49.225	57.044	17.14	32.415	1.734	-4.201		47.911	0.036	14.643	0.004		3974.72	66.2453	55.6	11.7	40.8	2.814	0.005	0.005	0.000	0.131	0.11	
3289	6/17/2004	3:30:26 AM		26.18	25.848	25.016	27.057	26.002		48.959	56.727	16.898	32.384	1.734	-4.195		51.29	0.036	14.643	0.004		3975.72	66.2619	55.3	12.6	40.7	2.804	0.005	0.005	0.000	0.132	0.11	
3290	6/17/2004	3:31:26 AM		26.191	25.86	25.028	27.064	26.014		49.034	56.592	17.172	32.308	1.731	-4.201		46.373	0.037	14.643	0.004		3976.72	66.2786	55.1	11.4	40.7	2.804	0.006	0.006	0.000	0.136	0.12	

RUN # 3.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3291	6/17/2004	3:32:26 AM		26.193	25.871	25.044	27.075	26.01		49.078	56.638	17.062	32.384	1.748	-4.206		46.425	0.036	14.643	0.004		3977.72	66.2953	55.2	11.4	40.7	2.808	0.005	0.005	0.000	0.132	0.11	
3292	6/17/2004	3:33:26 AM		26.172	25.846	25.003	27.004	25.98		48.963	56.435	17.05	32.288	1.731	-4.198		47.126	0.038	14.643	0.004		3978.72	66.3119	55.0	11.5	40.6	2.801	0.006	0.006	0.000	0.139	0.12	
3293	6/17/2004	3:34:26 AM		26.183	25.856	25.014	26.995	25.986		49.301	56.849	17.314	32.321	1.737	-4.209		46.767	0.036	14.643	0.004		3979.72	66.3286	55.4	11.5	40.8	2.814	0.005	0.005	0.000	0.131	0.11	
3294	6/17/2004	3:35:26 AM		26.189	25.867	25.03	27.011	25.991		49.472	57.063	17.286	32.528	1.742	-4.201		46.784	0.036	14.643	0.004		3980.72	66.3453	55.6	11.5	41.0	2.827	0.005	0.005	0.000	0.131	0.11	
3295	6/17/2004	3:36:26 AM		26.184	25.857	25.055	27.036	25.961		49.077	56.63	17.12	32.39	1.734	-4.189		45.562	0.037	14.643	0.004		3981.72	66.3619	55.2	11.2	40.7	2.808	0.006	0.006	0.000	0.135	0.12	
3296	6/17/2004	3:37:26 AM		26.19	25.858	25.096	27.062	25.937		49.156	56.657	17.265	32.335	1.76	-4.195		49.561	0.037	14.643	0.003		3982.72	66.3786	55.2	12.1	40.7	2.809	0.006	0.006	0.000	0.135	0.11	
3297	6/17/2004	3:38:26 AM		26.195	25.863	25.091	27.007	25.967		48.982	56.566	17.203	32.218	1.742	-4.209		45.881	0.036	14.643	0.004		3983.72	66.3953	55.1	11.2	40.6	2.799	0.005	0.005	0.000	0.132	0.11	
3298	6/17/2004	3:39:26 AM		26.21	25.868	25.096	27.007	25.937		48.719	56.379	17.078	31.988	1.78	-4.183		47.546	0.037	14.643	0.004		3984.72	66.4119	54.9	11.7	40.4	2.782	0.006	0.006	0.000	0.136	0.12	
3299	6/17/2004	3:40:26 AM		26.2	25.858	25.061	27.002	25.937		49.021	56.721	17.165	32.247	1.748	-4.186		46.004	0.036	14.643	0.004		3985.72	66.4286	55.2	11.3	40.6	2.802	0.005	0.005	0.000	0.132	0.11	
3300	6/17/2004	3:41:26 AM		26.204	25.857	25.06	26.981	25.941		48.789	56.321	17.103	32.181	1.777	-4.192		47.264	0.036	14.643	0.003		3986.72	66.4453	54.8	11.6	40.5	2.791	0.005	0.005	0.000	0.132	0.11	
3301	6/17/2004	3:42:26 AM		26.219	25.862	25.06	26.991	25.926		48.965	56.59	17.101	32.236	1.789	-4.175		49.558	0.037	14.643	0.004		3987.72	66.4619	55.1	12.1	40.6	2.799	0.006	0.006	0.000	0.136	0.12	
3302	6/17/2004	3:43:26 AM		26.213	25.856	25.034	26.955	25.921		48.818	56.342	17.166	32.056	1.786	-4.178		49.74	0.037	14.643	0.003		3988.72	66.4786	54.9	12.2	40.4	2.788	0.006	0.006	0.000	0.136	0.12	
3303	6/17/2004	3:44:26 AM		26.214	25.857	25.04	26.946	25.926		49.034	56.831	17.117	32.319	1.792	-4.166		47.514	0.037	14.643	0.004		3989.72	66.4953	55.4	11.6	40.7	2.805	0.006	0.006	0.000	0.135	0.12	
3304	6/17/2004	3:45:26 AM		26.213	25.856	25.034	26.945	25.906		49.136	56.874	17.101	32.392	1.792	-4.169		47.518	0.037	14.643	0.004		3990.72	66.5119	55.4	11.6	40.8	2.811	0.006	0.006	0.000	0.135	0.12	
3305	6/17/2004	3:46:26 AM		26.218	25.846	25.024	26.98	25.906		48.684	56.284	17.043	32.105	1.792	-4.163		48.468	0.037	14.643	0.004		3991.72	66.5286	54.8	11.9	40.4	2.785	0.006	0.006	0.000	0.136	0.12	
3306	6/17/2004	3:47:26 AM		26.203	25.851	25.009	26.95	25.901		49.241	56.852	16.9	32.745	1.789	-4.163		47.498	0.037	14.643	0.004		3992.72	66.5453	55.4	11.6	41.0	2.826	0.006	0.006	0.000	0.135	0.11	
3307	6/17/2004	3:48:26 AM		26.209	25.847	25.01	26.966	25.911		49.111	56.709	17.113	32.399	1.789	-4.154		44.448	0.038	14.643	0.004		3993.72	66.5619	55.2	10.9	40.8	2.810	0.006	0.006	0.000	0.139	0.12	
3308	6/17/2004	3:49:26 AM		26.208	25.841	25.004	26.935	25.901		49.133	56.823	16.909	32.593	1.789	-4.154		47.685	0.037	14.643	0.003		3994.72	66.5786	55.4	11.7	40.9	2.817	0.006	0.006	0.000	0.135	0.11	
3309	6/17/2004	3:50:26 AM		26.213	25.846	25.009	26.955	25.886		48.849	56.514	16.852	32.431	1.789	-4.146		44.352	0.037	14.643	0.004		3995.72	66.5953	55.0	10.9	40.6	2.802	0.006	0.006	0.000	0.136	0.12	
3310	6/17/2004	3:51:26 AM		26.203	25.851	24.999	26.94	25.891		49.133	56.592	16.876	32.651	1.823	-4.149		46.936	0.037	14.643	0.003		3996.72	66.6119	55.1	11.5	40.9	2.819	0.006	0.006	0.000	0.135	0.11	
3311	6/17/2004	3:52:26 AM		26.202	25.841	24.993	26.919	25.895		49.19	56.754	16.796	32.842	1.809	-4.146		45.856	0.037	14.643	0.004		3997.72	66.6286	55.3	11.2	41.0	2.828	0.006	0.006	0.000	0.135	0.11	
3312	6/17/2004	3:53:26 AM		26.202	25.846	24.998	26.934	25.88		49.113	56.711	16.903	32.612	1.841	-4.14		45.061	0.037	14.643	0.004		3998.72	66.6453	55.2	11.0	40.9	2.817	0.006	0.006	0.000	0.135	0.11	
3313	6/17/2004	3:54:26 AM		26.198	25.851	24.994	26.955	25.896		49.055	56.7	16.984	32.503	1.826	-4.126		48.576	0.037	14.643	0.004		3999.72	66.6619	55.2	11.9	40.8	2.812	0.006	0.006	0.000	0.135	0.12	
3314	6/17/2004	3:55:26 AM		26.208	25.841	25.004	26.93	25.886		48.903	56.698	16.936	32.364	1.818	-4.143		45.666	0.037	14.643	0.004		4000.72	66.6786	55.2	11.2	40.6	2.802	0.006	0.006	0.000	0.136	0.12	
3315	6/17/2004	3:56:26 AM		26.197	25.841	24.983	26.859	25.9		49.024	56.76	17.053	32.259	1.812	-4.143		48.568	0.037	14.643	0.004		4001.72	66.6953	55.3	11.9	40.6	2.802	0.006	0.006	0.000	0.136	0.12	
3316	6/17/2004	3:57:26 AM		26.199	25.847	25	26.871	25.866		48.576	56.242	17.52	31.446	1.812	-4.14		49.74	0.036	14.643	0.004		4002.72	66.7119	54.8	12.2	40.0	2.759	0.005	0.005	0.000	0.134	0.11	
3317	6/17/2004	3:58:26 AM		26.195	25.838	25.006	26.927	25.787		48.362	55.991	17.494	31.309	1.803	-4.137		48.096	0.036	14.643	0.004		4003.72	66.7286	54.5	11.8	39.8	2.747	0.005	0.005	0.000	0.135	0.11	
3318	6/17/2004	3:59:26 AM		26.185	25.818	25.001	26.922	25.737		48.092	55.867	17.618	30.866	1.832	-4.134		47.153	0.036	14.643	0.004		4004.72	66.7453	54.4	11.6	39.5	2.722	0.005	0.005	0.000	0.136	0.12	
3319	6/17/2004	4:00:26 AM		26.18	25.818	25.011	26.982	25.717		48.567	56.238	17.688	31.272	1.835	-4.134		46.332	0.037	14.643	0.004		4005.72	66.7619	54.8	11.4	39.9	2.752	0.006	0.006	0.000	0.138	0.12	
3320	6/17/2004	4:01:26 AM		26.174	25.807	25.015	26.996	25.732		48.42	56	17.643	31.219	1.835	-4.128		49.225	0.036	14.643	0.004		4006.72	66.7786	54.5	12.1	39.8	2.745	0.005	0.005	0.000	0.135	0.11	
3321	6/17/2004	4:02:26 AM		26.18	25.813	25.026	26.997	25.737		48.955	56.59	17.721	31.635	1.87	-4.137		48.983	0.036	14.643	0.004		4007.72	66.7953	55.1	12.0	40.3	2.778	0.005	0.005	0.000	0.133	0.11	
3322	6/17/2004	4:03:26 AM		26.172	25.811	25.044	27.054	25.755		48.704	56.423	17.743	31.305	1.844	-4.123		47.051	0.036	14.643	0.004		4008.72	66.8119	55.0	11.5	40.0	2.758	0.005	0.005	0.000	0.134	0.11	
3323	6/17/2004	4:04:26 AM		26.178	25.806	25.049	27.1	25.821		48.289	55.919	17.581	31.18	1.844	-4.12		50.537	0.036	14.643	0.004		4009.72	66.8286	54.4	12.4	39.7	2.740	0.005	0.005	0.000	0.135	0.11	
3324	6/17/2004	4:05:26 AM		26.162	25.786	25.034	27.129	25.88		48.399	56.143	17.52	31.311	1.902	-4.12		47.934	0.037	14.643	0.004		4010.72	66.8453	54.7	11.7	39.9	2.748	0.006	0.006	0.000	0.138	0.12	
3325	6/17/2004	4:06:26 AM		26.185	25.803	25.066	27.207	25.967		48.184	55.861	17.511	31.114	1.884	-4.117		48.92	0.036	14.643	0.004		4011.72	66.8619	54.4	12.0	39.6	2.734	0.005	0.005	0.000	0.135	0.11	
3326	6/17/2004	4:07:26 AM		26.185	25.804	25.072	27.237	26.063		48.603	56.223	17.3	31.691	1.902	-4.12		46.002	0.036	14.643	0.003		4012.72	66.8786	54.8	11.3	40.1	2.768	0.005	0.005	0.000	0.133	0.11	
3327	6/17/2004	4:08:26 AM		26.191	25.809	25.087	27.288	26.118		48.594	56.29	17.547	31.346	1.907	-4.105		46.914	0.035	14.643	0.004		4013.72	66.8953	54.8	11.5	40.0	2.756	0.005	0.005	0.000	0.130	0.11	
3328	6/17/2004	4:09:26 AM		26.214	25.833	25.126	27.331	26.131		48.277	56.304	17.511	31.091	2.02	-3.773		46.976	0.037	14.643	0.004		4014.72	66.9119	54.8	11.5	39.7	2.736	0.006	0.005	0.000	0.139	0.12	
3329	6/17/2004	4:10:26 AM		26.217	25.841	25.124	27.334	26.12		48.258	56.016	17.39	31.247	1.841	-4.192		47.806	0.038	14.643	0.004		4015.72	66.9286	54.5	11.7	39.8	2.741	0.006	0.006	0.000	0.142	0.12	
3330	6/17/2004	4:11:26 AM		26.206	25.83	25.118	27.328	26.129		48.669	56.321	17.67	31.29	1.794	-4.227		49.01	0.036	14.643	0.004		4016.72	66.9453	54.8	12.0	40.0	2.756	0.005	0.005	0.000	0.134	0.11	
3331	6/17/2004	4:12:26 AM		26.226	25.845	25.123	27.318	26.074		-4.353	2.883	3.895	-7.733	1.392	-4.004		-0.062	0.003	14.643	0.004		4017.72	66.9619	1.4	0.0	-6.0	-0.417	0.000	0.000	0.000	-0.074	-0.06	
3332	6/17/2004	4:13:26 AM		26.238	25.842	25.13	27.32	26.016		-4.272	0.889	1.941	-5.707	-0.614	-3.495		-0.07	0.003	14.643	0.004		4018.72	66.9786	-0.6	0.0	-5.0	-0.344	0.000	0.000	0.000	-0.089	-0.08	
3333	6/17/2004	4:14:26 AM		26.258	25.861	25.139	27.13	25.99		-3.224	0.723	1.806	-4.579	-1.216	-3.307		-0.07	0.003	14.643	0.004		4019.72	66.9953	-0.7	0.0	-3.9	-0.269	0.000	0.000	0.000	-0.114	-0.10	
3334																																	
3335																																	
3336																																	
3337																																	
3338		Averages		26.4	26.6	25.0	27.7	26.6		46.9	51.5	14.1	33.3	-0.5	-6.3		48.5	0.1	14.6	0.0				50.1	11.9	40.1	2.763	0.011	0.011	0.000	0.3	0.2	
3339		Maximum		28.9	28.1	28.7	29.2	28.0		52.0	57.1	18.5	41.5	74.0	90.9		63.4	0.5	14.6	2.4				55.7	15.5	46.8	3.225	0.074	0.069	0.002	2.1	1.8	
3340		Median		26.3	26.6	24.9	27.7	26.5		47.3	52.1	14.7	33.3	-1.2	-7.0		48.5	0.1	14.6	0.0				50.6	11.9	40.4	2.785	0.009	0.009	0.000	0.2	0.2	
3341		Minimum		25.4	24.9	24.0	26.7	25.3		-7.3	-0.8	1.3	-18.5	-1.2	-8.0		-0.1	0.0	0.7	0.0				-2.3	0.0	-12.9	-0.886	0.000	0.000	0.000	-0.1	-0.1	
3342		2 x Std Dev		0.765	1.086	1.159	1.165	0.919		8.097	6.803	5.046	7.019	6.216	10.515		8.072	0.106	0.485	0.084				6.803	1.978	7.108	0.490	0.016	0.015	0.000	0.375	0.319	
3343	Number of Points Used*			3303	3303	3303	3303	3303		3303	3303	3303	3303	3303	3303		3303	3303	3303	3303				3303	3303	3303	3303	3303	3303	3303	3303	3303	
3344		* Backpulse points in box are not included																															
3345																																	
3346																																	
3347																									Average flux to 17% UDS =		0.018						
3348																									Average flux to 20% UDS=		0.014						

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING



RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A		6.707	FT2						
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux >	<< PERMIABILITY >>			
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000	
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	6/17/2004	10:09:44 AM		24.904	24.615	24.649	26.251	25.377		49.432	54.333	18.433	31.352	-0.82	-6.08		56.492	0.038	14.643	0.004		0.0	0	52.9	13.8	40.4	2.785	0.006	0.006	0.000	0.142	0.12	
18	6/17/2004	10:10:44 AM		24.951	24.637	24.74	26.258	25.393		49.88	54.911	18.274	32.08	-0.817	-6.068		51.74	0.038	14.643	0.003		1.0	0.01667	53.4	12.7	41.0	2.825	0.006	0.006	0.000	0.139	0.12	
19	6/17/2004	10:11:44 AM		25.019	24.655	24.833	26.301	25.461		48.609	54.725	17.842	31.202	0.361	-2.793		48.935	0.003	14.643	0.004		2.0	0.03333	53.3	12.0	39.9	2.751	0.000	0.000	0.000	0.011	0.01	
20	6/17/2004	10:12:44 AM		25.097	24.678	24.921	26.313	25.484		45.371	54.389	17.781	27.968	3.326	6.062		40.996	0.003	14.643	0.004		3.0	0.05	52.9	10.0	36.7	2.528	0.000	0.000	0.000	0.012	0.01	
21	6/17/2004	10:13:44 AM		25.13	24.696	24.99	26.352	25.507		41.894	54.914	17.711	24.586	7.197	5.975		47.475	0.003	14.643	0.004		4.0	0.06667	53.4	11.6	33.2	2.292	0.000	0.000	0.000	0.013	0.01	
22	6/17/2004	10:14:44 AM		25.162	24.709	25.047	26.334	25.525		36.725	54.646	17.722	19.431	12.182	5.966		53.198	0.003	14.643	0.004		5.0	0.08333	53.2	13.0	28.1	1.936	0.000	0.000	0.000	0.016	0.01	
23	6/17/2004	10:15:44 AM		25.203	24.739	25.128	26.379	25.545		30.987	54.943	17.59	13.994	18.288	69.221		50.059	0.003	14.643	0.004		6.0	0.1	53.5	12.3	22.5	1.551	0.000	0.000	0.000	0.020	0.02	
24	6/17/2004	10:16:44 AM		25.212	24.743	25.177	26.408	25.589		23.933	54.302	17.482	7.131	24.775	93.981		45.099	0.003	14.643	0.004		7.0	0.11667	52.8	11.1	15.5	1.071	0.000	0.000	0.000	0.029	0.02	
25	6/17/2004	10:17:44 AM		25.362	24.773	25.242	26.449	25.624		9.171	53.401	12.141	-2.177	38.793	54.044		51.724	0.003	14.643	0.005		8.0	0.13333	51.9	12.7	3.5	0.241	0.000	0.000	0.000	0.127	0.11	
26	6/17/2004	10:18:44 AM		25.344	24.771	25.249	26.471	25.676		9.142	53.541	12.135	-2.276	38.863	0.329		55.878	0.003	14.643	0.005		9.0	0.15	52.1	13.7	3.4	0.237	0.000	0.000	0.000	0.129	0.11	
27	6/17/2004	10:19:44 AM		25.76	24.801	25.3	26.491	25.682		37.387	53.819	13.038	24.805	10.992	0.361		49.875	0.366	14.643	0.004		10.0	0.16667	52.3	12.2	31.1	2.144	0.055	0.054	0.002	1.740	1.48	
28	6/17/2004	10:20:44 AM		25.643	24.814	25.343	26.51	25.715		48.184	54.491	15.277	33.423	0.544	0.436		60.061	0.135	14.643	0.004		11.0	0.18333	53.0	14.7	40.8	2.813	0.020	0.020	0.000	0.489	0.42	
29	6/17/2004	10:21:44 AM		25.681	24.838	25.402	26.558	25.753		48.576	54.872	16.25	32.869	0.477	0.471		43.136	0.106	14.643	0.004		12.0	0.2	53.4	10.6	40.7	2.808	0.016	0.016	0.000	0.384	0.33	
30	6/17/2004	10:22:44 AM		25.713	24.86	25.429	26.595	25.78		48.559	54.779	16.876	32.202	0.477	0.506		46.19	0.094	14.643	0.004		13.0	0.21667	53.3	11.3	40.4	2.784	0.014	0.014	0.000	0.343	0.29	
31	6/17/2004	10:23:44 AM		25.762	24.879	25.478	26.609	25.834		48.522	54.88	17.114	31.927	0.477	0.537		49.867	0.089	14.643	0.004		14.0	0.23333	53.4	12.2	40.2	2.773	0.013	0.013	0.000	0.325	0.28	
32	6/17/2004	10:24:44 AM		25.812	24.903	25.492	26.669	25.884		48.688	55.102	17.25	31.877	0.474	0.561		51.684	0.086	14.643	0.004		15.0	0.25	53.6	12.7	40.3	2.777	0.013	0.013	0.000	0.314	0.27	
33	6/17/2004	10:25:44 AM		25.858	24.93	25.524	26.7	25.9		48.669	55.026	17.232	31.998	0.544	0.589		57.808	0.084	14.643	0.004		16.0	0.26667	53.6	14.2	40.3	2.781	0.013	0.012	0.000	0.306	0.26	
34	6/17/2004	10:26:44 AM		25.845	24.942	25.576	26.712	25.927		53.501	55.034	17.345	36.768	-1.219	-5.418		55.003	0.159	14.643	0.004		17.0	0.28333	53.6	13.5	45.1	3.112	0.024	0.023	0.001	0.517	0.44	
35	6/17/2004	10:27:44 AM		25.935	24.967	25.611	26.792	26.007		51.373	52.43	20.202	31.701	-1.219	-6.143		53.763	0.082	14.643	0.004		18.0	0.3	51.0	13.2	41.5	2.864	0.012	0.012	0.000	0.289	0.25	
36	6/17/2004	10:28:44 AM		25.977	24.984	25.627	26.809	25.978		48.87	50.03	18.263	31.077	-1.216	-6.213		52.96	0.079	14.643	0.004		19.0	0.31667	48.6	13.0	40.0	2.756	0.012	0.012	0.000	0.290	0.25	
37	6/17/2004	10:29:44 AM		26.006	24.988	25.597	26.798	25.968		47.178	48.289	17.254	30.469	-1.219	-6.288		43.731	0.077	14.643	0.004		20.0	0.33333	46.8	10.7	38.8	2.677	0.011	0.011	0.000	0.291	0.25	
38	6/17/2004	10:30:44 AM		26.039	25.001	25.5	26.776	25.941		47.238	48.314	17.061	30.781	-1.219	-6.291		54.508	0.077	14.643	0.004		21.0	0.35	46.8	13.4	39.0	2.690	0.011	0.011	0.000	0.290	0.25	
39	6/17/2004	10:31:44 AM		26.039	25.006	25.41	26.746	25.911		47.572	48.59	16.865	31.266	-1.219	-6.288		53.901	0.077	14.643	0.004		22.0	0.36667	47.1	13.2	39.4	2.718	0.011	0.011	0.000	0.288	0.25	
40	6/17/2004	10:32:44 AM		26.034	25.016	25.255	26.731	25.896		47.085	48.03	16.23	31.479	-1.222	-6.279		52.151	0.081	14.643	0.003		23.0	0.38333	46.6	12.8	39.3	2.708	0.012	0.012	0.000	0.305	0.26	
41	6/17/2004	10:33:44 AM		26.067	25.07	25.158	26.764	25.87		47.116	48.003	16.232	31.37	-1.222	-7.037		48.862	0.094	14.643	0.004		24.0	0.4	46.5	12.0	39.2	2.706	0.014	0.014	0.000	0.356	0.30	
42	6/17/2004	10:34:44 AM		26.064	25.101	25.045	26.781	25.851		47.698	48.322	16.257	31.99	-1.219	-7.641		51.185	0.094	14.643	0.004		25.0	0.41667	46.8	12.5	39.8	2.747	0.014	0.014	0.000	0.351	0.30	
43	6/17/2004	10:35:44 AM		26.035	25.117	24.9	26.777	25.877		48.038	48.513	16.229	32.382	-1.222	-7.808		44.723	0.083	14.643	0.004		26.0	0.43333	47.0	11.0	40.2	2.772	0.012	0.012	0.000	0.309	0.26	
44	6/17/2004	10:36:44 AM		25.969	25.101	24.794	26.716	25.911		48.018	48.507	16.232	32.335	-1.222	-7.985		57.837	0.082	14.643	0.004		27.0	0.45	47.0	14.2	40.2	2.770	0.012	0.012	0.000	0.306	0.26	
45	6/17/2004	10:37:44 AM		25.925	25.128	24.71	26.782	25.957		48.051	48.503	16.179	32.44	-1.219	-8.002		48.419	0.082	14.643	0.004		28.0	0.46667	47.0	11.9	40.2	2.775	0.012	0.012	0.000	0.306	0.26	
46	6/17/2004	10:38:44 AM		25.875	25.152	24.61	26.837	26.012		47.899	48.385	16.169	32.202	-1.219	-7.973		44.769	0.083	14.643	0.004		29.0	0.48333	46.9	11.0	40.1	2.761	0.012	0.013	0.000	0.312	0.27	
47	6/17/2004	10:39:44 AM		25.825	25.167	24.534	26.852	26.047		48.285	48.602	16.204	32.725	-1.219	-8.008		47.487	0.082	14.643	0.004		30.0	0.5	47.1	11.6	40.5	2.793	0.012	0.012	0.000	0.306	0.26	
48	6/17/2004	10:40:44 AM		25.781	25.198	24.47	26.922	26.102		47.924	48.206	16.163	32.345	-1.222	-8.008		50.989	0.082	14.643	0.004		31.0	0.51667	46.7	12.5	40.1	2.767	0.012	0.012	0.000	0.309	0.26	
49	6/17/2004	10:41:44 AM		25.751	25.213	24.405	26.957	26.142		48.171	48.735	16.143	32.53	-1.216	-8.022		52.241	0.079	14.643	0.004		32.0	0.53333	47.3	12.8	40.4	2.782	0.012	0.012	0.000	0.297	0.25	
50	6/17/2004	10:42:44 AM		25.716	25.239	24.36	27.013	26.168		48.372	48.899	16.223	32.659	-1.219	-8.046		50.278	0.081	14.643	0.004		33.0	0.55	47.4	12.3	40.5	2.793	0.012	0.012	0.000	0.303	0.26	
51	6/17/2004	10:43:44 AM		25.673	25.265	24.282	27.059	26.194		48.376	48.824	16.241	32.645	-1.216	-7.988		41.618	0.085	14.643	0.004		34.0	0.56667	47.4	10.2	40.5	2.793	0.013	0.013	0.000	0.319	0.27	
52	6/17/2004	10:44:44 AM		25.619	25.276	24.223	27.016	26.21		48.215	48.635	16.145	32.594	-1.222	-8.008		48.409	0.081	14.643	0.004		35.0	0.58333	47.2	11.9	40.4	2.786	0.012	0.012	0.000	0.306	0.26	
53	6/17/2004	10:45:44 AM		25.586	25.304	24.17	27.083	26.228		48.084	48.447	16.071	32.604	-1.222	-7.982		51.82	0.081	14.643	0.004		36.0	0.6	47.0	12.7	40.3	2.782	0.012	0.012	0.000	0.306	0.26	
54	6/17/2004	10:46:44 AM		25.553	25.321	24.087	27.075	26.265		48.206	48.861	16.072	32.626	-1.219	-8.037		54.448	0.079	14.643	0.004		37.0	0.61667	47.4	13.3	40.4	2.787	0.012	0.012	0.000	0.299	0.25	
55	6/17/2004	10:47:44 AM		25.517	25.34	24.056	27.094	26.229		48.387	48.932	16.191	32.68	-1.219	-8.048		47.525	0.08	14.643	0.004		38.0	0.63333	47.5	11.6	40.5	2.795	0.012	0.012	0.000	0.302	0.26	
56	6/17/2004	10:48:44 AM		25.49	25.368	24.008	27.132	26.281		48.451	48.894	16.246	32.69	-1.225	-8.017		49.513	0.08	14.643	0.004		39.0	0.65	47.4	12.1	40.6	2.797	0.012	0.012	0.000	0.302	0.26	
57	6/17/2004	10:49:44 AM		25.177	25.384	23.995	27.143	26.243		42.29	48.495	16.102	26.786	0.634	0.639		48.703	0.075	14.643	0.004		40.0	0.66667	47.0	11.9	34.5	2.381	0.011	0.012	0.000	0.333	0.28	
58	6/17/2004	10:50:44 AM		25.462	25.4	23.925	27.144	26.219		47.435	48.731	16.176	31.73	-1.219	-6.112		49.974	0.084	14.643	0.004		41.0	0.68333	47.3	12.2	39.6	2.729	0.013	0.013	0.000	0.326	0.28	
59	6/17/2004	10:51:44 AM		25.432	25.419	23.894	27.088	26.188		47.495	48.49	16.068	31.929	-1.222	-6.201		53.342	0.078	14.643	0.003		42.0	0.7	47.0	13.1	39.7	2.738	0.012	0.012	0.000	0.302	0.26	
60	6/17/2004	10:52:44 AM		25.372	25.414	23.889	27.033	26.113		47.217	48.486	15.75	31.996	-1.225	-6.201		50.987	0.079	14.643	0.003		43.0	0.71667	47.0	12.5	39.6	2.731	0.012	0.012	0.000	0.307	0.26	
61	6/17/2004	10:53:44 AM		25.352	25.434	23.824	27.033	26.103		47.099	48.476	15.747	31.818	-1.222	-5.866		51.296	0.062	14.643	0.004		44.0	0.73333	47.0	12.6	39.5	2.721	0.009	0.010	0.000	0.242	0.21	
62	6/17/2004	10:54:44 AM		25.401	25.463	23.803	27.012	26.067		47.804	48.488	15.75	32.581	-1.216	-7.834		48.82	0.09	14.643	0.004		45.0	0.75	47.0	12.0	40.2	2.771	0.013	0.014	0.000	0.345	0.29	
63	6/17/2004	10:55:44 AM		25.289	25.462	23.717	26.981	26.036		47.715	48.312	15.725	32.579	-1.216	-7.947		52.727	0.082	14.643	0.004		46.0	0.76667	46.8	12.9	40.1	2.768	0.012	0.013	0.000	0.316	0.27	
64	6/17/2004	10:56:44 AM		25.243	25.491	23.71	26.97	26.05		47.852	48.592	15.731	32.608	-1.216	-7.967		48.638	0.083	14.643	0.004		47.0	0.78333	47.1	11.9	40.2	2.774	0.012	0.013	0.000	0.319	0.27	
65	6/17/2004	10:57:44 AM		25.192	25.5	23.624	26.999	26.094		47.873	48.465	15.713	32.69	-1.216	-7.941		43.987	0.079	14.643	0.004		48.0	0.8	47.0	10.8	40.3	2.777	0.012	0.012	0.000	0.304	0.26	
66	6/17/2004	10:58:44 AM		25.157	25.52	23.614	27.004	26.159		47.73	48.349	15.688	32.518	-1.219	-7.988		54.627	0.082	14.643	0.004		49.0	0.81667	46.9	13.4	40.1	2.766	0.012	0.013	0.000	0.317	0.27	
67	6/17/2004	10:59:44 AM		25.143	25.541	23.635	27.015	26.199		47.651	48.331	15.705	32.39	-1.219	-7.996		47.696	0.083	14.643	0.004		50.0	0.83333	46.9	11.7	40.0	2.759	0.012	0.013	0.000	0.321	0.27	
68	6/17/2004	11:00:44 AM		25.119	25.546	23.616	27.05	26.21		47.819	48.385	15.666	32.692	-1.222	-8.008		44.323	0.082	14.643	0.003		51.0	0.85	46.9	10.9	40.3	2.775	0.012	0.013	0.000	0.316	0.27	
69	6/17/2004	11:01:44 AM		25.119	25.561	23.621	27.105	26.26		47.588	48.403	15.722	32.337	-1.216	-8.008		53.519	0.082	14.643	0.004		52.0	0.86667	46.9	13.1	40.0	2.755	0.012	0.013	0.000	0.318	0.27	
70	6/17/2004	11:02:44 AM		25.111	25.584	23.623	27.147	26.327		47.841	48.565	15.769	32.624	-1.219	-8.017		50.641	0.082	14.643	0.004		53.0	0.88333	47.1	12.4	40.2	2.774	0.012	0.013	0.000	0.316	0.27	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	6/17/2004	11:03:44 AM		25.087	25.605	23.624	27.194	26.338		47.742	48.38	15.748	32.524	-1.216	-8.014		47.097	0.082	14.643	0.004		54.0	0.9	46.9	11.5	40.1	2.767	0.012	0.013	0.000	0.317	0.27	
72	6/17/2004	11:04:44 AM		25.084	25.627	23.631	27.271	26.395		47.524	48.202	15.739	32.333	-1.216	-8.011		47.523	0.082	14.643	0.004		55.0	0.91667	46.7	11.6	39.9	2.753	0.012	0.013	0.000	0.318	0.27	
73	6/17/2004	11:05:44 AM		25.071	25.634	23.603	27.283	26.412		47.862	48.772	15.805	32.481	-1.219	-7.999		45.111	0.081	14.643	0.004		56.0	0.93333	47.3	11.1	40.2	2.770	0.012	0.013	0.000	0.313	0.27	
74	6/17/2004	11:06:44 AM		25.084	25.661	23.616	27.29	26.429		47.207	48.223	15.679	32.117	-1.216	-6.771		54.448	0.077	14.643	0.004		57.0	0.95	46.7	13.3	39.7	2.735	0.011	0.012	0.000	0.301	0.26	
75	6/17/2004	11:07:44 AM		25.116	25.659	23.593	27.253	26.392		47.814	48.648	15.807	32.435	-1.222	-8.008		49.592	0.081	14.643	0.004		58.0	0.96667	47.2	12.2	40.1	2.766	0.012	0.013	0.000	0.313	0.27	
76	6/17/2004	11:08:44 AM		25.098	25.696	23.635	27.239	26.364		47.844	48.72	15.832	32.472	-1.219	-8.008		46.592	0.081	14.643	0.004		59.0	0.98333	47.2	11.4	40.2	2.769	0.012	0.013	0.000	0.313	0.27	
77	6/17/2004	11:09:44 AM		25.053	25.691	23.595	27.184	26.284		47.827	48.652	15.812	32.518	-1.219	-8.008		49.706	0.081	14.643	0.004		60.0	1	47.2	12.2	40.2	2.770	0.012	0.013	0.000	0.313	0.27	
78	6/17/2004	11:10:44 AM		25.049	25.697	23.611	27.171	26.25		47.63	48.461	15.764	32.388	-1.219	-7.993		46.346	0.081	14.643	0.004		61.0	1.01667	47.0	11.4	40.0	2.758	0.012	0.013	0.000	0.314	0.27	
79	6/17/2004	11:11:44 AM		25.024	25.692	23.641	27.131	26.23		46.966	47.777	15.33	32.158	-1.222	-7.988		53.06	0.083	14.643	0.004		62.0	1.03333	46.3	13.0	39.6	2.728	0.012	0.013	0.000	0.325	0.28	
80	6/17/2004	11:12:44 AM		25.05	25.728	23.682	27.156	26.221		47.35	48.092	15.407	32.507	-1.219	-7.973		49.999	0.085	14.643	0.004		63.0	1.05	46.6	12.3	39.9	2.753	0.013	0.013	0.000	0.329	0.28	
81	6/17/2004	11:13:44 AM		25.095	25.753	23.702	27.151	26.181		47.211	48.206	15.482	32.193	-1.216	-7.973		56.16	0.085	14.643	0.004		64.0	1.06667	46.7	13.8	39.7	2.737	0.013	0.013	0.000	0.331	0.28	
82	6/17/2004	11:14:44 AM		25.117	25.76	23.679	27.094	26.079		47.167	48.067	15.401	32.23	-1.219	-7.941		46.899	0.085	14.643	0.004		65.0	1.08333	46.6	11.5	39.7	2.737	0.013	0.013	0.000	0.331	0.28	
83	6/17/2004	11:15:44 AM		25.153	25.781	23.671	27.07	25.99		47.209	48.132	15.437	32.263	-1.219	-7.962		41.884	0.085	14.643	0.004		66.0	1.1	46.7	10.3	39.7	2.740	0.013	0.013	0.000	0.331	0.28	
84	6/17/2004	11:16:44 AM		25.175	25.788	23.653	27.087	26.017		47.325	48.316	15.45	32.362	-1.219	-7.965		51.046	0.085	14.643	0.004		67.0	1.11667	46.8	12.5	39.8	2.747	0.013	0.013	0.000	0.330	0.28	
85	6/17/2004	11:17:44 AM		25.174	25.797	23.651	27.096	26.076		47.184	48.13	15.51	32.134	-1.219	-7.962		44.456	0.085	14.643	0.004		68.0	1.13333	46.7	10.9	39.7	2.734	0.013	0.013	0.000	0.332	0.28	
86	6/17/2004	11:18:44 AM		25.192	25.815	23.674	27.138	26.099		47.294	48.258	15.502	32.263	-1.216	-7.976		48.077	0.085	14.643	0.004		69.0	1.15	46.8	11.8	39.8	2.743	0.013	0.013	0.000	0.331	0.28	
87	6/17/2004	11:19:44 AM		25.178	25.806	23.656	27.15	26.13		47.097	47.964	15.411	32.222	-1.222	-7.947		53.764	0.084	14.643	0.004		70.0	1.16667	46.5	13.2	39.7	2.734	0.013	0.013	0.000	0.328	0.28	
88	6/17/2004	11:20:44 AM		25.186	25.819	23.644	27.228	26.193		46.952	47.968	15.43	32	-1.222	-7.965		54.531	0.084	14.643	0.004		71.0	1.18333	46.5	13.4	39.5	2.722	0.013	0.013	0.000	0.330	0.28	
89	6/17/2004	11:21:44 AM		25.194	25.827	23.657	27.281	26.236		46.844	47.883	15.4	31.9	-1.219	-7.965		52.224	0.084	14.643	0.004		72.0	1.2	46.4	12.8	39.4	2.715	0.013	0.013	0.000	0.330	0.28	
90	6/17/2004	11:22:44 AM		25.197	25.845	23.659	27.328	26.268		47.051	47.983	15.477	32.083	-1.219	-7.962		43.806	0.084	14.643	0.004		73.0	1.21667	46.5	10.7	39.6	2.728	0.013	0.013	0.000	0.329	0.28	
91	6/17/2004	11:23:44 AM		25.204	25.852	23.662	27.33	26.29		47.012	48.153	15.512	31.926	-1.225	-7.956		51.262	0.084	14.643	0.003		74.0	1.23333	46.7	12.6	39.5	2.721	0.013	0.013	0.000	0.330	0.28	
92	6/17/2004	11:24:44 AM		25.209	25.872	23.717	27.356	26.296		46.916	47.775	15.482	31.984	-1.219	-7.956		48.324	0.084	14.643	0.004		75.0	1.25	46.3	11.8	39.5	2.720	0.013	0.013	0.000	0.329	0.28	
93	6/17/2004	11:25:44 AM		25.226	25.884	23.754	27.382	26.282		46.923	48.229	15.543	31.791	-1.219	-7.924		57.775	0.084	14.643	0.004		76.0	1.26667	46.8	14.2	39.4	2.714	0.013	0.013	0.000	0.330	0.28	
94	6/17/2004	11:26:44 AM		25.246	25.899	23.789	27.338	26.258		47.165	48.308	15.542	32.132	-1.219	-7.944		49.346	0.084	14.643	0.004		77.0	1.28333	46.8	12.1	39.6	2.734	0.013	0.013	0.000	0.327	0.28	
95	6/17/2004	11:27:44 AM		25.281	25.914	23.845	27.343	26.243		46.933	47.999	15.532	31.924	-1.222	-7.944		44.932	0.084	14.643	0.004		78.0	1.3	46.5	11.0	39.4	2.718	0.013	0.013	0.000	0.328	0.28	
96	6/17/2004	11:28:44 AM		25.285	25.913	23.863	27.297	26.192		46.823	48.038	15.516	31.75	-1.222	-7.947		44.171	0.084	14.643	0.004		79.0	1.31667	46.6	10.8	39.3	2.709	0.013	0.013	0.000	0.329	0.28	
97	6/17/2004	11:29:44 AM		25.293	25.926	23.957	27.23	26.155		46.224	47.294	15.049	31.701	-1.219	-7.91		52.068	0.084	14.643	0.004		80.0	1.33333	45.8	12.8	39.0	2.686	0.013	0.013	0.000	0.331	0.28	
98	6/17/2004	11:30:44 AM		25.295	25.928	23.939	27.177	26.102		46.728	48.117	15.216	31.892	-1.222	-7.915		48.591	0.087	14.643	0.003		81.0	1.35	46.6	11.9	39.3	2.710	0.013	0.013	0.000	0.340	0.29	
99	6/17/2004	11:31:44 AM		25.329	25.952	23.978	27.171	26.056		46.292	47.392	15.182	31.695	-1.219	-7.915		42.844	0.088	14.643	0.004		82.0	1.36667	45.9	10.5	39.0	2.688	0.013	0.014	0.000	0.346	0.29	
100	6/17/2004	11:32:44 AM		25.342	25.96	23.981	27.134	26.054		46.554	47.935	15.271	31.672	-1.219	-7.884		51.959	0.088	14.643	0.004		83.0	1.38333	46.5	12.7	39.1	2.697	0.013	0.014	0.000	0.345	0.29	
101	6/17/2004	11:33:44 AM		25.35	25.948	23.983	27.106	26.021		46.61	47.968	15.246	31.777	-1.222	-7.913		48.883	0.088	14.643	0.003		84.0	1.4	46.5	12.0	39.2	2.702	0.013	0.014	0.000	0.345	0.29	
102	6/17/2004	11:34:44 AM		25.352	25.95	23.975	27.083	26.019		46.263	47.363	15.172	31.623	-1.219	-7.904		53.594	0.088	14.643	0.003		85.0	1.41667	45.9	13.1	38.9	2.685	0.013	0.014	0.000	0.347	0.30	
103	6/17/2004	11:35:44 AM		25.375	25.963	23.998	27.106	26.002		46.46	47.939	15.262	31.608	-1.219	-7.904		46.05	0.087	14.643	0.004		86.0	1.43333	46.5	11.3	39.0	2.691	0.013	0.013	0.000	0.342	0.29	
104	6/17/2004	11:36:44 AM		25.387	25.96	24.006	27.154	26.054		46.634	48.161	15.246	31.791	-1.222	-7.875		50.63	0.088	14.643	0.003		87.0	1.45	46.7	12.4	39.2	2.704	0.013	0.013	0.000	0.344	0.29	
105	6/17/2004	11:37:44 AM		25.399	25.967	24.038	27.241	26.126		46.649	48.08	15.261	31.808	-1.219	-7.892		50.103	0.087	14.643	0.004		88.0	1.46667	46.6	12.3	39.2	2.705	0.013	0.013	0.000	0.340	0.29	
106	6/17/2004	11:38:44 AM		25.422	25.97	24.056	27.314	26.199		46.298	47.752	15.186	31.571	-1.222	-7.884		46.277	0.088	14.643	0.004		89.0	1.48333	46.3	11.3	38.9	2.684	0.013	0.013	0.000	0.346	0.29	
107	6/17/2004	11:39:44 AM		25.45	25.978	24.069	27.366	26.261		46.348	47.856	15.126	31.67	-1.222	-7.872		50.455	0.088	14.643	0.004		90.0	1.5	46.4	12.4	39.0	2.690	0.013	0.013	0.000	0.345	0.29	
108	6/17/2004	11:40:44 AM		25.484	25.997	24.097	27.37	26.345		46.307	47.574	15.243	31.535	-1.222	-7.898		48.812	0.086	14.643	0.004		91.0	1.51667	46.1	12.0	38.9	2.683	0.013	0.013	0.000	0.338	0.29	
109	6/17/2004	11:41:44 AM		25.502	26.005	24.106	27.419	26.364		46.653	48.219	15.232	31.83	-1.222	-7.904		51.164	0.087	14.643	0.004		92.0	1.53333	46.7	12.5	39.2	2.706	0.013	0.013	0.000	0.339	0.29	
110	6/17/2004	11:42:44 AM		25.51	26.018	24.104	27.421	26.371		46.186	47.572	15.244	31.426	-1.222	-7.907		48.034	0.087	14.643	0.004		93.0	1.55	46.1	11.8	38.8	2.676	0.013	0.013	0.000	0.343	0.29	
111	6/17/2004	11:43:44 AM		25.523	26.036	24.122	27.439	26.394		46.41	47.918	15.264	31.606	-1.219	-7.91		41.469	0.088	14.643	0.004		94.0	1.56667	46.4	10.2	39.0	2.689	0.013	0.013	0.000	0.345	0.29	
112	6/17/2004	11:44:44 AM		25.536	26.059	24.145	27.452	26.392		46.456	47.914	15.282	31.67	-1.219	-7.91		47.452	0.087	14.643	0.004		95.0	1.58333	46.4	11.6	39.1	2.693	0.013	0.013	0.000	0.340	0.29	
113	6/17/2004	11:45:44 AM		25.539	26.057	24.153	27.45	26.395		46.502	48.096	15.369	31.541	-1.222	-7.869		50.387	0.088	14.643	0.003		96.0	1.6	46.6	12.3	39.0	2.690	0.013	0.013	0.000	0.344	0.29	
114	6/17/2004	11:46:44 AM		25.552	26.075	24.191	27.458	26.353		45.72	47.464	14.931	31.208	-1.222	-7.887		51.609	0.089	14.643	0.004		97.0	1.61667	46.0	12.6	38.5	2.652	0.013	0.014	0.000	0.353	0.30	
115	6/17/2004	11:47:44 AM		25.56	26.088	24.179	27.481	26.361		45.749	47.452	15.006	31.161	-1.219	-7.872		44.63	0.09	14.643	0.004		98.0	1.63333	46.0	10.9	38.5	2.651	0.013	0.014	0.000	0.357	0.30	
116	6/17/2004	11:48:44 AM		25.573	26.096	24.162	27.429	26.3		45.741	47.261	14.965	31.239	-1.222	-7.872		40.963	0.09	14.643	0.004		99.0	1.65	45.8	10.0	38.5	2.654	0.013	0.014	0.000	0.357	0.30	
117	6/17/2004	11:49:44 AM		25.581	26.094	24.14	27.363	26.273		45.641	47.367	15.007	31.056	-1.225	-7.861		50.532	0.091	14.643	0.003		100.0	1.66667	45.9	12.4	38.3	2.644	0.014	0.014	0.000	0.362	0.31	
118	6/17/2004	11:50:44 AM		25.588	26.111	24.137	27.364	26.234		45.828	47.595	15.019	31.257	-1.222	-7.892		53.928	0.091	14.643	0.004		101.0	1.68333	46.1	13.2	38.5	2.657	0.014	0.014	0.000	0.361	0.31	
119	6/17/2004	11:51:44 AM		25.594	26.118	24.149	27.356	26.266		45.902	47.384	15.204	31.155	-1.222	-7.829		59.391	0.09	14.643	0.004		102.0	1.7	45.9	14.6	38.5	2.656	0.013	0.014	0.000	0.357	0.30	
120	6/17/2004	11:52:44 AM		25.582	26.115	24.111	27.293	26.219		47.551	49.56	13.621	34.278	-1.219	-7.84		44.454	0.096	14.643	0.004		103.0	1.71667	48.1	10.9	40.9	2.821	0.014	0.015	0.000	0.359	0.31	
121	6/17/2004	11:53:44 AM		25.589	26.127	24.103	27.285	26.19		47.692	49.784	13.702	34.326	-1.219	-7.855		42.929	0.095	14.643	0.004		104.0	1.73333	48.3	10.5	41.0	2.827	0.014	0.015	0.000	0.354	0.30	
122	6/17/2004	11:54:44 AM		25.583	26.121	24.077	27.229	26.145		47.985	49.85	13.774	34.59	-1.222	-7.861		50.487	0.095	14.643	0.004		105.0	1.75	48.4	12.4	41.3	2.847	0.014	0.015	0.000	0.352	0.30	
123	6/17/2004	11:55:44 AM		25.614	26.143	24.099	27.241	26.166		47.756	49.458	13.934	34.227	-1.222	-7.861		46.027	0.093	14.643	0.004		106.0	1.76667	48.0	11.3	41.0	2.826	0.014	0.014	0.000	0.347	0.30	
124	6/17/2004	11:56:44 AM		25.601	26.144	24.06	27.237	26.158		47.478	49.549	14.237	33.542	-1.219	-7.858		43.962	0.093	14.643	0.004		107.0	1.78333	48.1	10.8	40.5	2.793	0.014	0.014	0.000	0.351	0.30	
125	6/17/2004	11:57:44 AM		25.613	26.146	24.067	27.21	26.185		47.947	50.105	13.557	34.668	-1.219	-7.855		46.052	0.093	14.643	0.004		108.0	1.8	48.6	11.3	41.3	2.848	0.014	0.014	0.000	0.345	0.29	
126	6/17/2004	11:58:44 AM		25.619	26.137	24.063	27.181	26.131		48.385	50.766	13.918	34.726	-1.222	-7.852		43.186	0.095	14.643	0.004		109.0	1.81667	49.3	10.6	41.6	2.865	0.014	0.015	0.000	0.350	0.30	
127	6/17/2004	11:59:44 AM		25.635	26.143	24.079	27.216	26.157		48.132	50.196	13.939	34.519	-1.219	-7.858		48.668	0.09	14.643	0.004		110.0	1.83333	48.7	11.9	41.3	2.849	0.013	0.014	0.000	0.333	0.28	
128	6/17/2004	12:00:44 PM		25.665	26.143	24.059	27.261	26.202		45.477	50.252	14.057	31.764	-1.216	-0.307		38.921	0.003	14.643	0.004		111.0	1.85	48.8	9.5	38.6	2.663	0.000	0.000	0.000	0.012	0.01	
129	6/17/2004	12:01:44 PM		25.388	26.131	24.047	27.319	26.269		47.64	50.426	13.757	34.268	-1.216	-5.872		44.529	0.087	14.643	0.004		112.0	1.86667	49.0	10.9	41.0	2.824	0.013	0.013	0.000	0.325	0.28	
130	6/17/2004	12:02:44 PM		25.443	26.136	24.027	27.395	26.325		47.678	50.389	14.003	33.995	-1.222	-6.077		47.047	0.089	14.643	0.004		113.0	1.88333	48.9	11.5	40.8	2.816	0.013	0.014	0.000	0.334	0.28	
131	6/17/2004	12:03:44 PM		25.503	26.156	24.082	27.489	26.385		47.982	50.093	13.57	34.75	-1.216	-7.69		40.794	0.089	14.643	0.004		114.0	1.9	48.6	10.0	41.4	2.852	0.013	0.014	0.000	0.329	0.28	
132	6/17/2004	12:04:24 PM		25.469	26.152	24.058	27.525	26.45		47.962	50.246	13.418	34.796	-1.225	-7.722		35.952	0.091	14.643	0.004		114.7	1.91111	48.8	8.8	41.4	2.853	0.014	0.014	0.000	0.337	0.29	
133	6/17/2004	12:05:24 PM		25.506	26.17	24.065	27.592	26.507		47.236	49.57	14.452	33.066	-1.219	-7.806		47.754	0.086	14.643	0.004		115.7	1.92778	48.1	11.7	40.2	2.768	0.013	0.013	0.000	0.328	0.28	
134	6/17/2004	12:06:24 PM		25.505	26.193	24.074	27.646	26.551		47.543	49.927	14.309	33.587	-1.222	-7.762		48.303	0.09	14.643	0.003		116.7	1.94444	48.5	11.8	40.6	2.797	0.013	0.014	0.000	0.340	0.29	
135	6/17/2004	12:07:24 PM		25.539	26.212	24.073	27.659	26.594		47.373	49.51	15.105	32.649	-1.222	-7.808		44.988	0.09	14.643	0.004		117.7	1.96111	48.0	11.0	40.0	2.759	0.013	0.014	0.000	0.344	0.29	
136	6/17/2004	12:08:24 PM		25.567	26.231	24.092	27.683	26.568		47.877	49.867	14.537	33.847	-1.219	-7.811		48.015	0.09	14.643	0.004		118.7	1.97778	48.4	11.8	40.9	2.817	0.013	0.014	0.000	0.337	0.29	
137	6/17/2004	12:09:24 PM		25.591	26.245	24.111	27.617	26.498		48.223	50.646	14.19	34.317	-1.219	-7.814		44.7	0.093	14.643	0.004		119.7	1.99444	49.2	11.0	41.3	2.845	0.014	0.014	0.000	0.345	0.29	
138	6/17/2004	12:10:24 PM		25.587	26.23	24.071	27.538	26.448		47.466	49.703	14.76	33.098	-1.225	-7.817		43.847	0.091	14.643	0.003		120.7	2.01111	48.2	10.7	40.3	2.777	0.014	0.014	0.000	0.346	0.29	
139	6/17/2004	12:11:24 PM		25.592	26.235	24.091	27.523	26.404		47.98	50.339	14.54	33.761	-1.219	-7.782		42.193	0.089	14.643	0.003		121.7	2.02778	48.9	10.3	40.9	2.818	0.013	0.014	0.000	0.333	0.28	
140	6/17/2004	12:12:24 PM		25.619	26.247	24.118	27.51	26.395		46.61	49.006	15.081	31.881	-1.222	-7.817		46.211	0.091	14.643	0.004		122.7	2.04444	47.5	11.3	39.2	2.706	0.014	0.014	0.000	0.354	0.30	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	6/17/2004	12:13:24 PM		25.624	26.262	24.138	27.475	26.355		47.348	49.518	14.558	33.279	-1.219	-7.8		49.648	0.091	14.643	0.004		123.7	2.06111	48.0	12.2	40.3	2.779	0.014	0.014	0.000	0.345	0.29	
142	6/17/2004	12:14:24 PM		25.646	26.284	24.186	27.477	26.333		47.931	50.432	14.665	33.593	-1.216	-7.806		44.141	0.091	14.643	0.004		124.7	2.07778	49.0	10.8	40.8	2.810	0.014	0.014	0.000	0.341	0.29	
143	6/17/2004	12:15:24 PM		25.644	26.292	24.173	27.4	26.29		47.785	50.182	14.256	33.835	-1.222	-7.756		44.767	0.092	14.643	0.004		125.7	2.09444	48.7	11.0	40.8	2.814	0.014	0.014	0.000	0.344	0.29	
144	6/17/2004	12:16:24 PM		25.65	26.288	24.195	27.406	26.312		46.968	49.208	14.696	32.71	-1.222	-7.808		53.465	0.09	14.643	0.004		126.7	2.11111	47.7	13.1	39.8	2.747	0.013	0.014	0.000	0.345	0.29	
145	6/17/2004	12:17:24 PM		25.655	26.263	24.195	27.416	26.302		47.522	50.051	14.687	33.16	-1.222	-7.78		47.143	0.091	14.643	0.004		127.7	2.12778	48.6	11.6	40.3	2.781	0.014	0.014	0.000	0.344	0.29	
146	6/17/2004	12:18:24 PM		25.671	26.284	24.23	27.382	26.302		46.95	49.63	14.324	32.942	-1.219	-7.794		47.279	0.092	14.643	0.004		128.7	2.14444	48.2	11.6	39.9	2.754	0.014	0.014	0.000	0.351	0.30	
147	6/17/2004	12:19:24 PM		25.666	26.279	24.21	27.357	26.322		46.697	49.218	14.325	32.702	-1.222	-7.806		44.15	0.093	14.643	0.004		129.7	2.16111	47.7	10.8	39.7	2.737	0.014	0.014	0.000	0.357	0.30	
148	6/17/2004	12:20:24 PM		25.687	26.285	24.221	27.403	26.308		46.807	49.085	14.279	32.936	-1.219	-7.8		45.282	0.094	14.643	0.004		130.7	2.17778	47.6	11.1	39.9	2.749	0.014	0.014	0.000	0.359	0.31	
149	6/17/2004	12:21:24 PM		25.687	26.28	24.211	27.383	26.263		46.554	48.982	14.215	32.712	-1.219	-7.759		49.379	0.094	14.643	0.004		131.7	2.19444	47.5	12.1	39.6	2.733	0.014	0.014	0.000	0.362	0.31	
150	6/17/2004	12:22:24 PM		25.697	26.28	24.206	27.373	26.233		46.848	49.398	14.248	32.889	-1.216	-7.774		49.352	0.094	14.643	0.004		132.7	2.21111	47.9	12.1	39.9	2.749	0.014	0.014	0.000	0.359	0.31	
151	6/17/2004	12:23:24 PM		25.686	26.284	24.185	27.337	26.203		46.664	49.355	14.187	32.821	-1.222	-7.725		44.008	0.093	14.643	0.004		133.7	2.22778	47.9	10.8	39.7	2.740	0.014	0.014	0.000	0.357	0.30	
152	6/17/2004	12:24:24 PM		25.68	26.263	24.175	27.332	26.217		46.69	49.462	13.941	33.08	-1.222	-7.759		43.368	0.095	14.643	0.004		134.7	2.24444	48.0	10.6	39.9	2.750	0.014	0.014	0.000	0.363	0.31	
153	6/17/2004	12:25:24 PM		25.684	26.273	24.174	27.326	26.206		46.68	49.178	13.866	33.209	-1.222	-7.762		50.935	0.095	14.643	0.003		135.7	2.26111	47.7	12.5	39.9	2.754	0.014	0.014	0.000	0.363	0.31	
154	6/17/2004	12:26:24 PM		25.689	26.278	24.189	27.371	26.211		46.954	49.558	13.959	33.408	-1.219	-7.733		48.176	0.094	14.643	0.004		136.7	2.27778	48.1	11.8	40.2	2.770	0.014	0.014	0.000	0.357	0.30	
155	6/17/2004	12:27:24 PM		25.704	26.278	24.189	27.396	26.221		47.483	50.472	13.994	33.759	-1.222	-7.745		49.314	0.094	14.643	0.004		137.7	2.29444	49.0	12.1	40.6	2.801	0.014	0.014	0.000	0.353	0.30	
156	6/17/2004	12:28:24 PM		25.709	26.273	24.194	27.441	26.276		46.892	49.722	13.834	33.361	-1.222	-7.707		44.828	0.095	14.643	0.004		138.7	2.31111	48.2	11.0	40.1	2.767	0.014	0.014	0.000	0.361	0.31	
157	6/17/2004	12:29:24 PM		25.714	26.273	24.204	27.441	26.356		46.952	49.755	13.824	33.494	-1.219	-7.73		51.655	0.095	14.643	0.004		139.7	2.32778	48.3	12.7	40.2	2.773	0.014	0.014	0.000	0.360	0.31	
158	6/17/2004	12:30:24 PM		25.714	26.273	24.199	27.466	26.391		47.615	50.37	13.994	33.971	-1.219	-7.733		42.491	0.095	14.643	0.004		140.7	2.34444	48.9	10.4	40.8	2.813	0.014	0.014	0.000	0.355	0.30	
159	6/17/2004	12:31:24 PM		25.727	26.275	24.236	27.523	26.443		47.393	50.352	14.855	32.823	-1.225	-7.693		43.862	0.094	14.643	0.003		141.7	2.36111	48.9	10.7	40.1	2.765	0.014	0.014	0.000	0.357	0.30	
160	6/17/2004	12:32:24 PM		25.743	26.287	24.268	27.604	26.494		47.495	50.188	14.519	33.375	-1.222	-7.736		54.491	0.095	14.643	0.004		142.7	2.37778	48.7	13.4	40.4	2.788	0.014	0.014	0.000	0.358	0.30	
161	6/17/2004	12:33:24 PM		25.739	26.292	24.319	27.64	26.535		46.813	49.759	14.346	32.776	-1.222	-7.69		51.198	0.094	14.643	0.004		143.7	2.39444	48.3	12.5	39.8	2.744	0.014	0.014	0.000	0.359	0.31	
162	6/17/2004	12:34:24 PM		25.754	26.297	24.304	27.64	26.535		46.929	50.093	14.049	33.133	-1.222	-7.71		45.445	0.099	14.643	0.004		144.7	2.41111	48.6	11.1	40.0	2.760	0.015	0.015	0.000	0.376	0.32	
163	6/17/2004	12:35:24 PM		25.771	26.315	24.311	27.652	26.513		46.977	49.997	14.152	33.104	-1.219	-7.707		49.421	0.099	14.643	0.004		145.7	2.42778	48.5	12.1	40.0	2.761	0.015	0.015	0.000	0.376	0.32	
164	6/17/2004	12:36:24 PM		25.802	26.321	24.307	27.623	26.469		46.684	49.674	14.003	33.047	-1.222	-7.693		46.955	0.099	14.643	0.004		146.7	2.44444	48.2	11.5	39.9	2.749	0.015	0.015	0.000	0.378	0.32	
165	6/17/2004	12:37:24 PM		25.807	26.336	24.322	27.623	26.424		47.19	50.252	14.073	33.421	-1.222	-7.73		46.442	0.097	14.643	0.003		147.7	2.46111	48.8	11.4	40.3	2.779	0.014	0.015	0.000	0.366	0.31	
166	6/17/2004	12:38:24 PM		25.785	26.328	24.31	27.581	26.416		47.149	50.209	13.904	33.626	-1.222	-7.71		41.401	0.1	14.643	0.004		148.7	2.47778	48.7	10.1	40.4	2.785	0.015	0.015	0.000	0.376	0.32	
167	6/17/2004	12:39:24 PM		25.772	26.336	24.317	27.544	26.374		47.445	50.843	14.013	33.558	-1.222	-7.719		48.394	0.1	14.643	0.004		149.7	2.49444	49.4	11.9	40.5	2.792	0.015	0.015	0.000	0.375	0.32	
168	6/17/2004	12:40:24 PM		25.788	26.357	24.338	27.504	26.355		47.325	50.447	13.887	33.773	-1.222	-7.678		45.624	0.101	14.643	0.003		150.7	2.51111	49.0	11.2	40.5	2.796	0.015	0.015	0.000	0.378	0.32	
169	6/17/2004	12:41:24 PM		25.782	26.346	24.337	27.484	26.329		47.337	50.617	14.056	33.546	-1.219	-7.713		47.4	0.1	14.643	0.004		151.7	2.52778	49.1	11.6	40.4	2.788	0.015	0.015	0.000	0.376	0.32	
170	6/17/2004	12:42:24 PM		25.788	26.362	24.373	27.45	26.355		46.522	49.844	14.578	32.15	-1.222	-7.704		43.366	0.097	14.643	0.004		152.7	2.54444	48.4	10.6	39.3	2.712	0.014	0.015	0.000	0.374	0.32	
171	6/17/2004	12:43:24 PM		25.799	26.372	24.379	27.425	26.311		46.701	49.96	14.385	32.608	-1.219	-7.722		46.29	0.098	14.643	0.004		153.7	2.56111	48.5	11.3	39.7	2.734	0.015	0.015	0.000	0.375	0.32	
172	6/17/2004	12:44:24 PM		25.796	26.369	24.376	27.422	26.282		46.547	49.562	14.322	32.563	-1.222	-7.699		45.835	0.099	14.643	0.004		154.7	2.57778	48.1	11.2	39.6	2.727	0.015	0.015	0.000	0.380	0.32	
173	6/17/2004	12:45:24 PM		25.785	26.353	24.37	27.421	26.272		46.821	50.163	14.145	32.885	-1.219	-7.675		52.091	0.099	14.643	0.004		155.7	2.59444	48.7	12.8	39.9	2.748	0.015	0.015	0.000	0.377	0.32	
174	6/17/2004	12:46:24 PM		25.801	26.354	24.376	27.422	26.262		46.9	50.178	14.256	32.91	-1.219	-7.681		53.294	0.099	14.643	0.004		156.7	2.61111	48.7	13.1	39.9	2.751	0.015	0.015	0.000	0.376	0.32	
175	6/17/2004	12:47:24 PM		25.786	26.345	24.361	27.398	26.268		46.802	50.039	13.951	33.205	-1.225	-7.684		49.11	0.099	14.643	0.004		157.7	2.62778	48.6	12.0	40.0	2.758	0.015	0.015	0.000	0.376	0.32	
176	6/17/2004	12:48:24 PM		25.806	26.35	24.396	27.428	26.238		46.912	49.927	14.133	33.201	-1.219	-7.681		47.472	0.099	14.643	0.004		158.7	2.64444	48.5	11.6	40.1	2.762	0.015	0.015	0.000	0.375	0.32	
177	6/17/2004	12:49:24 PM		25.811	26.34	24.422	27.383	26.218		46.164	49.634	13.729	32.712	-1.222	-7.696		44.045	0.097	14.643	0.004		159.7	2.66111	48.2	10.8	39.4	2.719	0.014	0.015	0.000	0.373	0.32	
178	6/17/2004	12:50:24 PM		25.816	26.345	24.412	27.393	26.243		46.369	49.912	13.873	32.766	-1.222	-7.681		43.032	0.101	14.643	0.004		160.7	2.67778	48.4	10.5	39.6	2.728	0.015	0.015	0.000	0.387	0.33	
179	6/17/2004	12:51:24 PM		25.811	26.34	24.407	27.363	26.218		46.479	50.001	13.788	32.918	-1.219	-7.67		43.101	0.102	14.643	0.004		161.7	2.69444	48.5	10.6	39.7	2.737	0.015	0.015	0.000	0.390	0.33	
180	6/17/2004	12:52:24 PM		25.832	26.351	24.417	27.404	26.254		46.344	49.881	13.873	32.786	-1.216	-7.623		52.864	0.096	14.643	0.004		162.7	2.71111	48.4	13.0	39.6	2.728	0.014	0.015	0.000	0.368	0.31	
181	6/17/2004	12:53:24 PM		25.813	26.326	24.368	27.389	26.32		45.834	49.46	13.753	32.321	-1.222	-7.673		52.161	0.101	14.643	0.003		163.7	2.72778	48.0	12.8	39.1	2.694	0.015	0.015	0.000	0.392	0.33	
182	6/17/2004	12:54:24 PM		25.829	26.332	24.369	27.48	26.395		46.12	49.477	13.834	32.604	-1.222	-7.644		45.835	0.103	14.643	0.004		164.7	2.74444	48.0	11.2	39.4	2.714	0.015	0.016	0.000	0.397	0.34	
183	6/17/2004	12:55:24 PM		25.825	26.339	24.375	27.547	26.452		46.336	50.124	13.748	32.897	-1.222	-7.673		47.318	0.102	14.643	0.003		165.7	2.76111	48.7	11.6	39.6	2.731	0.015	0.015	0.000	0.391	0.33	
184	6/17/2004	12:56:24 PM		25.831	26.345	24.366	27.647	26.482		46.352	50.064	13.749	32.875	-1.222	-7.684		54.404	0.102	14.643	0.004		166.7	2.77778	48.6	13.3	39.6	2.731	0.015	0.015	0.000	0.391	0.33	
185	6/17/2004	12:57:24 PM		25.828	26.356	24.378	27.714	26.569		46.301	50.09	13.492	33.037	-1.222	-7.644		46.638	0.104	14.643	0.004		167.7	2.79444	48.6	11.4	39.7	2.735	0.016	0.016	0.000	0.398	0.34	
186	6/17/2004	12:58:24 PM		25.819	26.352	24.369	27.744	26.615		46.431	50.337	13.579	33.016	-1.222	-7.658		49.95	0.101	14.643	0.004		168.7	2.81111	48.9	12.2	39.7	2.739	0.015	0.015	0.000	0.386	0.33	
187	6/17/2004	12:59:24 PM		25.814	26.353	24.349	27.78	26.645		46.51	50.15	13.583	33.25	-1.225	-7.649		41.958	0.102	14.643	0.004		169.7	2.82778	48.7	10.3	39.9	2.750	0.015	0.015	0.000	0.388	0.33	
188	6/17/2004	1:00:24 PM		25.851	26.399	24.411	27.802	26.617		46.469	50.092	13.549	33.148	-1.219	-7.589		51.242	0.101	14.643	0.004		170.7	2.84444	48.6	12.6	39.8	2.745	0.015	0.015	0.000	0.385	0.33	
189	6/17/2004	1:01:24 PM		25.832	26.385	24.372	27.768	26.583		46.388	50.144	13.534	33.146	-1.222	-7.386		43.678	0.103	14.643	0.004		171.7	2.86111	48.7	10.7	39.8	2.742	0.015	0.016	0.000	0.393	0.33	
190	6/17/2004	1:02:24 PM		25.833	26.396	24.378	27.733	26.584		45.62	50.368	13.513	32.347	-0.884	-5.698		51.183	0.117	14.643	0.004		172.7	2.87778	48.9	12.5	39.0	2.688	0.017	0.018	0.000	0.455	0.39	
191	6/17/2004	1:03:24 PM		25.824	26.403	24.374	27.7	26.54		45.861	50.59	13.532	32.536	-0.982	-5.944		49.867	0.098	14.643	0.004		173.7	2.89444	49.1	12.2	39.2	2.703	0.015	0.015	0.000	0.379	0.32	
192	6/17/2004	1:04:24 PM		25.82	26.413	24.38	27.681	26.496		46.272	50.068	13.525	33.033	-1.219	-7.467		51.603	0.101	14.643	0.004		174.7	2.91111	48.6	12.6	39.7	2.734	0.015	0.015	0.000	0.386	0.33	
193	6/17/2004	1:05:24 PM		25.826	26.419	24.386	27.667	26.472		46.664	50.126	13.328	33.591	-1.219	-7.164		46.048	0.085	14.643	0.004		175.7	2.92778	48.7	11.3	40.1	2.767	0.013	0.013	0.000	0.321	0.27	
194	6/17/2004	1:06:24 PM		25.837	26.42	24.362	27.643	26.438		45.873	49.91	13.312	32.85	-1.219	-6.979		45.159	0.142	14.643	0.004		176.7	2.94444	48.4	11.1	39.4	2.714	0.021	0.022	0.001	0.548	0.47	
195	6/17/2004	1:07:24 PM		25.838	26.427	24.343	27.604	26.395		45.933	49.69	13.259	32.955	-1.222	-6.938		42.108	0.085	14.643	0.003		177.7	2.96111	48.2	10.3	39.4	2.720	0.013	0.013	0.000	0.327	0.28	
196	6/17/2004	1:08:24 PM		25.836	26.424	24.326	27.577	26.382		46.126	49.908	13.283	33.055	-1.225	-7.456		46.054	0.107	14.643	0.003		178.7	2.97778	48.4	11.3	39.6	2.730	0.016	0.016	0.000	0.411	0.35	
197	6/17/2004	1:09:24 PM		25.841	26.44	24.347	27.573	26.373		46.296	50.078	13.333	33.289	-1.219	-7.479		46.313	0.102	14.643	0.004		179.7	2.99444	48.6	11.3	39.8	2.744	0.015	0.015	0.000	0.389	0.33	
198	6/17/2004	1:10:24 PM		25.832	26.436	24.327	27.509	26.359		46.209	50.182	13.318	33.074	-1.222	-7.511		48.972	0.101	14.643	0.004		180.7	3.01111	48.7	12.0	39.6	2.733	0.015	0.015	0.000	0.387	0.33	
199	6/17/2004	1:11:24 PM		25.829	26.437	24.324	27.52	26.356		46.276	49.985	13.253	33.302	-1.222	-7.592		47.4	0.104	14.643	0.004		181.7	3.02778	48.5	11.6	39.8	2.743	0.016	0.016	0.000	0.397	0.34	
200	6/17/2004	1:12:24 PM		25.824	26.422	24.314	27.505	26.346		46.072	49.896	13.299	32.953	-1.225	-7.519		48.276	0.105	14.643	0.004		182.7	3.04444	48.4	11.8	39.5	2.724	0.016	0.016	0.000	0.404	0.34	
201	6/17/2004	1:13:24 PM		25.825	26.428	24.31	27.561	26.356		46.002	49.813	13.314	33.039	-1.219	-7.164		44.248	0.11	14.643	0.004		183.7	3.06111	48.3	10.8	39.5	2.725	0.016	0.017	0.000	0.423	0.36	
202	6/17/2004	1:14:24 PM		25.821	26.414	24.29	27.537	26.342		46.228	50.246	13.408	32.994	-1.222	-7.213		37.805	0.1	14.643	0.004		184.7	3.07778	48.8	9.3	39.6	2.731	0.015	0.015	0.000	0.384	0.33	
203	6/17/2004	1:15:24 PM		25.831	26.42	24.291	27.562	26.358		46.323	50.119	13.457	33.148	-1.222	-7.389		44.686	0.108	14.643	0.004		185.7	3.09444	48.6	11.0	39.7	2.740	0.016	0.016	0.000	0.413	0.35	
204	6/17/2004	1:16:24 PM		25.821	26.41	24.271	27.592	26.348		45.994	49.78	13.329	32.957	-1.222	-7.436		52.472	0.104	14.643	0.004		186.7	3.11111	48.3	12.9	39.5	2.722	0.016	0.016	0.000	0.401	0.34	
205	6/17/2004	1:17:24 PM		25.811	26.399	24.27	27.587	26.372		46.193	50.034	13.367	33.098	-1.222	-7.45		44.801	0.098	14.643	0.004		187.7	3.12778	48.6	11.0	39.6	2.733	0.015	0.015	0.000	0.376	0.32	
206	6/17/2004	1:18:24 PM		25.816	26.399	24.295	27.587	26.342		45.552	49.605	13.206	32.507	-1.222	-7.063		39.306	0.093	14.643	0.003		188.7	3.14444	48.1	9.6	39.0	2.691	0.014	0.014	0.000	0.362	0.31	
207	6/17/2004	1:19:24 PM		25.81	26.398	24.29	27.586	26.376		45.859	49.695	13.279	32.869	-1.219	-7.178		47.944	0.111	14.643	0.004		189.7	3.16111	48.2	11.7	39.4	2.714	0.017	0.017	0.000	0.429	0.37	
208	6/17/2004	1:20:24 PM		25.804	26.397	24.264	27.565	26.331		45.838	50.01	13.14	32.805	-1.222	-7.317		49.012	0.1	14.643	0.003		190.7	3.17778	48.5	12.0	39.3	2.711	0.015	0.015	0.000	0.387	0.33	
209	6/17/2004	1:21:24 PM		25.805	26.403	24.255	27.581	26.351		45.853	49.593	13.121	33.065	-1.222	-7.398		41.184	0.108	14.643	0.003		191.7	3.19444	48.1	10.1	39.5	2.721	0.016	0.016	0.000	0.417	0.35	
210	6/17/2004	1:22:24 PM		25.81	26.408	24.245	27.601	26.336		45.965	49.96	13.155	33	-1.219	-7.239		48.372	0.104	14.643	0.004		192.7	3.21111	48.5	11.9	39.5	2.722	0.016	0.016	0.000	0.401	0.34	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	6/17/2004	1:23:24 PM		25.816	26.399	24.235	27.647	26.372		45.448	49.174	13.088	32.682	-1.219	-7.19		44.763	0.1	14.643	0.004		193.7	3.22778	47.7	11.0	39.1	2.693	0.015	0.015	0.000	0.390	0.33	
212	6/17/2004	1:24:24 PM		25.827	26.41	24.227	27.683	26.394		46.099	50.107	13.223	33.07	-1.219	-7.259		57.153	0.111	14.643	0.004		194.7	3.24444	48.6	14.0	39.6	2.729	0.017	0.017	0.000	0.427	0.36	
213	6/17/2004	1:25:24 PM		25.827	26.4	24.207	27.658	26.424		46.189	50.148	13.24	33.137	-1.222	-7.41		49.519	0.107	14.643	0.004		195.7	3.26111	48.7	12.1	39.7	2.735	0.016	0.016	0.000	0.411	0.35	
214	6/17/2004	1:26:24 PM		25.829	26.412	24.198	27.65	26.405		45.998	49.949	13.167	33.094	-1.222	-6.635		46.949	0.097	14.643	0.004		196.7	3.27778	48.5	11.5	39.5	2.727	0.014	0.015	0.000	0.374	0.32	
215	6/17/2004	1:27:24 PM		25.82	26.413	24.204	27.641	26.411		45.805	49.769	13.185	32.795	-1.222	-7.268		45.941	0.11	14.643	0.004		197.7	3.29444	48.3	11.3	39.3	2.710	0.016	0.017	0.000	0.427	0.36	
216	6/17/2004	1:28:24 PM		25.81	26.403	24.194	27.676	26.406		45.956	49.431	13.189	33.082	-1.219	-6.985		48.876	0.096	14.643	0.004		198.7	3.31111	48.0	12.0	39.5	2.725	0.014	0.015	0.000	0.371	0.32	
217	6/17/2004	1:29:24 PM		25.816	26.405	24.196	27.657	26.413		46.504	50.42	13.304	33.406	-1.222	-7.167		46.225	0.104	14.643	0.004		199.7	3.32778	48.9	11.3	40.0	2.755	0.016	0.016	0.000	0.397	0.34	
218	6/17/2004	1:30:24 PM		25.808	26.411	24.198	27.654	26.394		46.008	49.775	13.117	33.164	-1.222	-7.424		47.164	0.106	14.643	0.003		200.7	3.34444	48.3	11.6	39.6	2.729	0.016	0.016	0.000	0.408	0.35	
219	6/17/2004	1:31:24 PM		25.814	26.422	24.233	27.635	26.37		45.72	49.67	12.923	33.09	-1.219	-6.982		44.077	0.112	14.643	0.004		201.7	3.36111	48.2	10.8	39.4	2.717	0.017	0.017	0.000	0.433	0.37	
220	6/17/2004	1:32:24 PM		25.789	26.407	24.203	27.58	26.37		45.753	49.429	12.905	33.037	-1.222	-7.363		42.631	0.108	14.643	0.004		202.7	3.37778	48.0	10.4	39.4	2.716	0.016	0.016	0.000	0.418	0.36	
221	6/17/2004	1:33:24 PM		25.8	26.419	24.19	27.551	26.372		46.018	49.912	12.724	33.499	-1.222	-6.953		44.882	0.103	14.643	0.004		203.7	3.39444	48.4	11.0	39.8	2.741	0.015	0.016	0.000	0.395	0.34	
222	6/17/2004	1:34:24 PM		25.796	26.409	24.151	27.517	26.368		45.927	49.96	12.577	33.611	-1.222	-6.921		46.008	0.092	14.643	0.004		204.7	3.41111	48.5	11.3	39.8	2.742	0.014	0.014	0.000	0.353	0.30	
223	6/17/2004	1:35:24 PM		25.771	26.394	24.116	27.537	26.328		45.958	49.923	12.693	33.46	-1.222	-7.282		44.369	0.11	14.643	0.003		205.7	3.42778	48.5	10.9	39.7	2.738	0.016	0.017	0.000	0.423	0.36	
224	6/17/2004	1:36:24 PM		25.76	26.394	24.11	27.561	26.332		46.187	50.192	12.759	33.607	-1.219	-7.32		48.119	0.112	14.643	0.004		206.7	3.44444	48.7	11.8	39.9	2.751	0.017	0.017	0.000	0.429	0.37	
225	6/17/2004	1:37:24 PM		25.755	26.394	24.095	27.576	26.302		46.404	50.484	12.562	33.919	-1.222	-7.057		55.918	0.096	14.643	0.004		207.7	3.46111	49.0	13.7	40.2	2.769	0.014	0.015	0.000	0.366	0.31	
226	6/17/2004	1:38:24 PM		25.75	26.398	24.089	27.616	26.326		45.933	49.821	12.467	33.755	-1.225	-6.748		44.588	0.107	14.643	0.003		208.7	3.47778	48.3	10.9	39.8	2.747	0.016	0.016	0.000	0.411	0.35	
227	6/17/2004	1:39:24 PM		25.75	26.404	24.09	27.636	26.347		46.338	50.138	12.562	34.046	-1.219	-7.334		42.923	0.125	14.643	0.004		209.7	3.49444	48.7	10.5	40.2	2.771	0.019	0.019	0.000	0.476	0.40	
228	6/17/2004	1:40:24 PM		25.741	26.404	24.086	27.627	26.388		46.328	50.248	12.663	33.841	-1.222	-7.294		44.465	0.124	14.643	0.004		210.7	3.51111	48.8	10.9	40.1	2.764	0.018	0.019	0.000	0.473	0.40	
229	6/17/2004	1:41:24 PM		25.741	26.404	24.076	27.632	26.408		46.493	50.405	12.694	33.983	-1.219	-6.779		45.251	0.104	14.643	0.004		211.7	3.52778	48.9	11.1	40.2	2.774	0.016	0.016	0.000	0.396	0.34	
230	6/17/2004	1:42:24 PM		25.733	26.406	24.107	27.619	26.379		46.166	50.128	13.633	32.727	-1.222	-7.199		48.221	0.109	14.643	0.004		212.7	3.54444	48.7	11.8	39.4	2.720	0.016	0.017	0.000	0.422	0.36	
231	6/17/2004	1:43:24 PM		25.744	26.407	24.128	27.655	26.375		46.439	50.289	13.655	32.967	-1.222	-7.277		46.561	0.111	14.643	0.003		213.7	3.56111	48.8	11.4	39.7	2.737	0.017	0.017	0.000	0.427	0.36	
232	6/17/2004	1:44:24 PM		25.729	26.397	24.123	27.689	26.38		46.077	49.782	13.556	32.77	-1.222	-7.277		52.241	0.112	14.643	0.004		214.7	3.57778	48.3	12.8	39.4	2.718	0.017	0.017	0.000	0.434	0.37	
233	6/17/2004	1:45:24 PM		25.745	26.403	24.175	27.666	26.427		46.07	50.115	13.324	32.953	-1.219	-6.75		55.691	0.114	14.643	0.004		215.7	3.59444	48.6	13.6	39.5	2.724	0.017	0.017	0.000	0.440	0.37	
234	6/17/2004	1:46:24 PM		25.746	26.409	24.161	27.657	26.422		45.83	49.912	13.349	32.723	-1.222	-6.814		48.184	0.143	14.643	0.004		216.7	3.61111	48.4	11.8	39.3	2.708	0.021	0.022	0.001	0.556	0.47	
235	6/17/2004	1:47:24 PM		25.731	26.394	24.156	27.682	26.412		45.983	49.618	13.308	32.996	-1.219	-7.199		48.857	0.113	14.643	0.004		217.7	3.62778	48.1	12.0	39.5	2.723	0.017	0.017	0.000	0.437	0.37	
236	6/17/2004	1:48:24 PM		25.736	26.399	24.156	27.632	26.412		45.958	49.925	13.27	32.754	-1.222	-7.219		54.195	0.129	14.643	0.003		218.7	3.64444	48.5	13.3	39.4	2.713	0.019	0.020	0.001	0.500	0.43	
237	6/17/2004	1:49:24 PM		25.742	26.4	24.177	27.658	26.398		45.906	49.686	13.327	32.899	-1.222	-6.681		49.721	0.109	14.643	0.004		219.7	3.66111	48.2	12.2	39.4	2.717	0.016	0.017	0.000	0.422	0.36	
238	6/17/2004	1:50:24 PM		25.748	26.411	24.187	27.619	26.399		46.112	49.993	13.289	33.014	-1.222	-7.199		45.232	0.129	14.643	0.004		220.7	3.67778	48.5	11.1	39.6	2.728	0.019	0.020	0.000	0.497	0.42	
239	6/17/2004	1:51:24 PM		25.758	26.422	24.208	27.664	26.38		46.298	50.262	13.338	33.152	-1.219	-7.274		48.565	0.113	14.643	0.004		221.7	3.69444	48.8	11.9	39.7	2.739	0.017	0.017	0.000	0.434	0.37	
240	6/17/2004	1:52:24 PM		25.753	26.426	24.212	27.644	26.384		46.41	49.981	13.22	33.486	-1.219	-7.222		50.849	0.098	14.643	0.004		222.7	3.71111	48.5	12.5	39.9	2.754	0.015	0.015	0.000	0.374	0.32	
241	6/17/2004	1:53:24 PM		25.743	26.411	24.187	27.604	26.384		46.112	49.956	13.148	33.1	-1.219	-7.048		56.331	0.133	14.643	0.004		223.7	3.72778	48.5	13.8	39.6	2.731	0.020	0.020	0.001	0.512	0.44	
242	6/17/2004	1:54:24 PM		25.733	26.411	24.187	27.574	26.404		46.278	50.155	13.242	33.203	-1.222	-6.987		49.886	0.113	14.643	0.003		224.7	3.74444	48.7	12.2	39.7	2.740	0.017	0.017	0.000	0.434	0.37	
243	6/17/2004	1:55:24 PM		25.732	26.405	24.177	27.578	26.413		46.307	49.974	13.298	33.287	-1.225	-7.132		55.553	0.122	14.643	0.003		225.7	3.76111	48.5	13.6	39.8	2.744	0.018	0.019	0.000	0.468	0.40	
244	6/17/2004	1:56:24 PM		25.743	26.417	24.203	27.659	26.41		46.207	50.175	13.336	33.063	-1.219	-7.259		48.192	0.115	14.643	0.004		226.7	3.77778	48.7	11.8	39.6	2.733	0.017	0.018	0.000	0.442	0.38	
245	6/17/2004	1:57:24 PM		25.801	26.429	24.201	27.722	26.447		42.709	50.034	13.298	29.48	1.731	0.237		45.796	0.003	14.643	0.004		227.7	3.79444	48.6	11.2	36.1	2.489	0.000	0.000	0.000	0.013	0.01	
246	6/17/2004	1:58:24 PM		25.755	26.433	24.22	27.771	26.536		45.645	50.453	13.428	32.312	-0.82	-5.577		49.187	0.11	14.643	0.004		228.7	3.81111	49.0	12.1	39.0	2.687	0.016	0.017	0.000	0.430	0.37	
247	6/17/2004	1:59:24 PM		25.775	26.438	24.25	27.856	26.501		45.409	49.978	13.271	32.325	-0.884	-5.799		41.615	0.109	14.643	0.004		229.7	3.82778	48.5	10.2	38.9	2.680	0.016	0.017	0.000	0.427	0.36	
248	6/17/2004	2:00:24 PM		25.786	26.459	24.311	27.926	26.582		45.56	49.562	13.027	32.557	-1.222	-7.118		47.56	0.126	14.643	0.004		230.7	3.84444	48.1	11.7	39.1	2.693	0.019	0.019	0.000	0.490	0.42	
249	6/17/2004	2:00:31 PM		25.776	26.449	24.321	27.921	26.582		45.788	49.547	13.062	32.987	-1.222	-7.135		51.957	0.113	14.643	0.004		230.8	3.84639	48.1	12.7	39.4	2.716	0.017	0.017	0.000	0.436	0.37	
250	6/17/2004	2:01:31 PM		25.795	26.448	24.26	27.885	26.596		45.705	49.943	13.046	32.834	-1.225	-6.253		50.599	0.103	14.643	0.003		231.8	3.86306	48.5	12.4	39.3	2.707	0.015	0.016	0.000	0.399	0.34	
251	6/17/2004	2:02:31 PM		25.787	26.455	24.251	27.842	26.548		46.099	49.978	12.996	33.33	-1.222	-7.126		50.956	0.115	14.643	0.004		232.8	3.87972	48.5	12.5	39.7	2.738	0.017	0.018	0.000	0.441	0.38	
252	6/17/2004	2:03:31 PM		25.783	26.456	24.238	27.789	26.505		46.286	50.146	13.12	33.326	-1.222	-7.144		44.815	0.128	14.643	0.004		233.8	3.89639	48.7	11.0	39.8	2.744	0.019	0.019	0.000	0.490	0.42	
253	6/17/2004	2:04:31 PM		25.789	26.467	24.249	27.745	26.47		45.906	49.97	13.037	33.072	-1.216	-6.539		49.698	0.102	14.643	0.004		234.8	3.91306	48.5	12.2	39.5	2.723	0.015	0.016	0.000	0.393	0.33	
254	6/17/2004	2:05:31 PM		25.779	26.462	24.219	27.77	26.46		46.151	50.024	13.101	33.224	-1.222	-7.048		45.814	0.112	14.643	0.004		235.8	3.92972	48.6	11.2	39.7	2.736	0.017	0.017	0.000	0.430	0.37	
255	6/17/2004	2:06:31 PM		25.78	26.463	24.2	27.736	26.456		46.168	50.148	12.865	33.41	-1.222	-7.123		43.549	0.12	14.643	0.004		236.8	3.94639	48.7	10.7	39.8	2.743	0.018	0.018	0.000	0.460	0.39	
256	6/17/2004	2:07:31 PM		25.785	26.473	24.19	27.726	26.446		46.458	50.416	12.816	33.755	-1.222	-7.141		45.107	0.113	14.643	0.003		237.8	3.96306	48.9	11.1	40.1	2.765	0.017	0.017	0.000	0.430	0.37	
257	6/17/2004	2:08:31 PM		25.764	26.477	24.194	27.685	26.426		46.78	50.503	12.849	34.081	-1.219	-6.95		50.103	0.098	14.643	0.004		238.8	3.97972	49.0	12.3	40.4	2.788	0.015	0.015	0.000	0.370	0.31	
258	6/17/2004	2:09:31 PM		25.759	26.472	24.179	27.695	26.45		46.045	49.979	12.649	33.628	-1.222	-6.458		45.435	0.118	14.643	0.004		239.8	3.99639	48.5	11.1	39.8	2.747	0.018	0.018	0.000	0.452	0.38	
259	6/17/2004	2:10:31 PM		25.754	26.467	24.179	27.735	26.45		46.929	50.922	12.984	34.048	-1.225	-7.08		52.572	0.119	14.643	0.003		240.8	4.01306	49.4	12.9	40.5	2.792	0.018	0.018	0.000	0.448	0.38	
260	6/17/2004	2:11:31 PM		25.743	26.471	24.208	27.854	26.485		46.444	50.076	12.732	33.893	-1.225	-7.135		47.47	0.122	14.643	0.004		241.8	4.02972	48.6	11.6	40.2	2.769	0.018	0.019	0.000	0.463	0.39	
261	6/17/2004	2:12:31 PM		25.746	26.484	24.206	27.901	26.562		46.425	50.343	12.619	33.987	-1.225	-7.118		51.642	0.114	14.643	0.003		242.8	4.04639	48.9	12.7	40.2	2.772	0.017	0.017	0.000	0.432	0.37	
262	6/17/2004	2:13:31 PM		25.692	26.49	24.201	27.957	26.588		46.272	50.358	12.618	33.825	-1.222	-6.247		47.656	0.109	14.643	0.004		243.8	4.06306	48.9	11.7	40.0	2.761	0.016	0.017	0.000	0.415	0.35	
263	6/17/2004	2:14:31 PM		25.658	26.486	24.188	27.964	26.624		46.493	50.329	12.75	33.956	-1.228	-6.831		50.307	0.143	14.643	0.003		244.8	4.07972	48.9	12.3	40.2	2.773	0.021	0.022	0.001	0.542	0.46	
264	6/17/2004	2:15:31 PM		25.636	26.509	24.196	27.986	26.607		46.298	50.457	12.733	33.659	-1.219	-7.057		49.421	0.114	14.643	0.004		245.8	4.09639	49.0	12.1	40.0	2.756	0.017	0.017	0.000	0.435	0.37	
265	6/17/2004	2:16:31 PM		25.627	26.51	24.181	27.932	26.583		46.344	50.182	12.651	33.858	-1.219	-7.141		46.002	0.122	14.643	0.004		246.8	4.11306	48.7	11.3	40.1	2.765	0.018	0.019	0.000	0.464	0.40	
266	6/17/2004	2:17:31 PM		25.614	26.512	24.159	27.92	26.56		46.836	50.546	12.717	34.321	-1.222	-6.99		56.319	0.116	14.643	0.004		247.8	4.12972	49.1	13.8	40.6	2.798	0.017	0.018	0.000	0.436	0.37	
267	6/17/2004	2:18:31 PM		25.637	26.535	24.191	27.857	26.553		46.427	50.652	12.681	33.925	-1.222	-6.499		53.914	0.101	14.643	0.003		248.8	4.14639	49.2	13.2	40.2	2.770	0.015	0.015	0.000	0.383	0.33	
268	6/17/2004	2:19:31 PM		25.607	26.526	24.172	27.783	26.504		46.572	50.406	12.593	34.248	-1.222	-6.985		49.982	0.115	14.643	0.004		249.8	4.16306	48.9	12.2	40.4	2.786	0.017	0.018	0.000	0.434	0.37	
269	6/17/2004	2:20:31 PM		25.592	26.52	24.171	27.797	26.483		46.929	50.791	12.779	34.231	-1.219	-7.057		50.53	0.123	14.643	0.004		250.8	4.17972	49.3	12.4	40.6	2.798	0.018	0.019	0.000	0.463	0.39	
270	6/17/2004	2:21:31 PM		25.597	26.526	24.167	27.858	26.524		46.678	50.478	12.715	34.055	-1.225	-6.846		52.293	0.116	14.643	0.004		251.8	4.19639	49.0	12.8	40.4	2.783	0.017	0.018	0.000	0.439	0.37	
271	6/17/2004	2:22:31 PM		25.614	26.537	24.174	27.905	26.555		46.748	50.816	12.736	34.225	-1.225	-6.75		49.608	0.115	14.643	0.003		252.8	4.21306	49.3	12.2	40.5	2.791	0.017	0.018	0.000	0.433	0.37	
272	6/17/2004	2:23:31 PM		25.61	26.528	24.17	27.865	26.551		46.57	50.677	12.61	34.003	-1.222	-7.048		44.876	0.116	14.643	0.004		253.8	4.22972	49.2	11.0	40.3	2.778	0.017	0.018	0.000	0.439	0.37	
273	6/17/2004	2:24:31 PM		25.604	26.527	24.164	27.88	26.555		46.759	50.638	12.706	34.213	-1.222	-7.037		51.027	0.124	14.643	0.004		254.8	4.24639	49.2	12.5	40.5	2.791	0.018	0.019	0.000	0.468	0.40	
274	6/17/2004	2:25:31 PM		25.624	26.542	24.199	27.84	26.565		46.213	50.41	12.544	33.761	-1.219	-6.236		41.903	0.121	14.643	0.004		255.8	4.26306	48.9	10.3	40.0	2.757	0.018	0.018	0.000	0.461	0.39	
275	6/17/2004	2:26:31 PM		25.634	26.542	24.179	27.84	26.545		46.021	50.063	12.399	33.802	-1.219	-6.522		46.348	0.138	14.643	0.004		256.8	4.27972	48.6	11.4	39.9	2.752	0.021	0.021	0.001	0.528	0.45	
276	6/17/2004	2:27:31 PM		25.63	26.548	24.165	27.836	26.561		46.437	50.374	12.56	34.028	-1.222	-6.898		55.174	0.116	14.643	0.004		257.8	4.29639	48.9	13.5	40.2	2.774	0.017	0.018	0.000	0.440	0.37	
277	6/17/2004	2:28:31 PM		25.602	26.535	24.146	27.852	26.518		46.659	50.613	12.43	34.27	-1.219	-7.045		45.063	0.117	14.643	0.004		258.8	4.31306	49.1	11.0	40.5	2.790	0.017	0.018	0.000	0.442	0.38	
278	6/17/2004	2:29:31 PM		25.576	26.529	24.13	27.891	26.507		46.294	49.935	12.337	34.178	-1.219	-7.068		55.165	0.121	14.643	0.004		259.8	4.32972	48.5	13.5	40.2	2.774	0.018	0.018	0.000	0.460	0.39	
279	6/17/2004	2:30:31 PM		25.585	26.518	24.114	28.03	26.531		46.412	50.548	12.414	34.246	-1.222	-6.369		46.549	0.105	14.643	0.004		260.8	4.34639	49.1	11.4	40.3	2.781	0.016	0.016	0.000	0.398	0.34	
280	6/17/2004	2:31:31 PM		25.607	26.54	24.126	28.002	26.588		46.616	50.814	12.469	34.233	-1.219	-6.713		47.521	0.137	14.643	0.004		261.8	4.36306	49.3	11.6	40.4	2.787	0.020	0.021	0.001	0.518	0.44	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	6/17/2004	2:32:31 PM		25.583	26.536	24.113	27.969	26.599		46.193	50.109	12.447	33.915	-1.222	-6.973		51.196	0.117	14.643	0.004		262.8	4.37972	48.6	12.5	40.1	2.762	0.017	0.018	0.000	0.447	0.38	
282	6/17/2004	2:33:31 PM		25.595	26.558	24.104	27.995	26.566		46.514	50.248	12.435	34.233	-1.222	-7.057		49.089	0.112	14.643	0.004		263.8	4.39639	48.8	12.0	40.4	2.784	0.017	0.017	0.000	0.424	0.36	
283	6/17/2004	2:34:31 PM		25.593	26.566	24.107	28.043	26.603		46.67	50.536	12.595	34.213	-1.222	-6.84		44.435	0.099	14.643	0.004		264.8	4.41306	49.1	10.9	40.4	2.788	0.015	0.015	0.000	0.374	0.32	
284	6/17/2004	2:35:31 PM		25.631	26.584	24.105	28.116	26.627		46.539	51.164	12.401	34.143	-1.222	-6.019		44.661	0.109	14.643	0.004		265.8	4.42972	49.7	10.9	40.3	2.781	0.016	0.017	0.000	0.413	0.35	
285	6/17/2004	2:36:31 PM		25.643	26.596	24.132	28.167	26.688		46.278	50.323	12.063	34.272	-1.222	-6.771		39.367	0.12	14.643	0.004		266.8	4.44639	48.9	9.6	40.3	2.777	0.018	0.018	0.000	0.455	0.39	
286	6/17/2004	2:37:31 PM		25.661	26.619	24.15	28.171	26.711		46.348	50.308	12.178	34.235	-1.222	-7.011		49.047	0.12	14.643	0.004		267.8	4.46306	48.8	12.0	40.3	2.778	0.018	0.018	0.000	0.455	0.39	
287	6/17/2004	2:38:31 PM		25.651	26.614	24.125	28.111	26.711		46.678	50.642	12.091	34.666	-1.219	-6.892		52.485	0.129	14.643	0.004		268.8	4.47972	49.2	12.9	40.7	2.804	0.019	0.020	0.000	0.485	0.41	
288	6/17/2004	2:39:31 PM		25.666	26.609	24.095	28.031	26.632		46.081	50.294	12.095	34.092	-1.219	-6.369		50.783	0.114	14.643	0.004		269.8	4.49639	48.8	12.4	40.1	2.764	0.017	0.017	0.000	0.435	0.37	
289	6/17/2004	2:40:31 PM		25.65	26.608	24.079	28.005	26.646		46.431	50.403	12.076	34.519	-1.222	-6.641		48.002	0.124	14.643	0.004		270.8	4.51306	48.9	11.8	40.5	2.791	0.018	0.019	0.000	0.469	0.40	
290	6/17/2004	2:41:31 PM		25.674	26.632	24.069	28.039	26.615		46.805	50.832	12.06	34.904	-1.222	-6.927		53.54	0.118	14.643	0.004		271.8	4.52972	49.4	13.1	40.9	2.817	0.018	0.018	0.000	0.442	0.38	
291	6/17/2004	2:42:31 PM		25.65	26.633	24.054	28.065	26.666		48.163	50.835	12.167	36.041	-1.222	-5.805		40.727	0.141	14.643	0.004		272.8	4.54639	49.4	10.0	42.1	2.903	0.021	0.022	0.001	0.513	0.44	
292	6/17/2004	2:43:31 PM		25.761	26.644	24.04	28.061	26.731		45.284	50.911	12.165	33.154	0.063	-0.856		44.838	0.077	14.643	0.004		273.8	4.56306	49.4	11.0	39.2	2.704	0.011	0.012	0.000	0.301	0.26	
293	6/17/2004	2:44:31 PM		25.707	26.65	24.026	28.022	26.687		47.57	50.497	12.173	35.489	-1.222	-6.057		48.128	0.061	14.643	0.004		274.8	4.57972	49.0	11.8	41.5	2.863	0.009	0.009	0.000	0.225	0.19	
294	6/17/2004	2:45:31 PM		25.737	26.665	24.056	28.042	26.657		47.323	49.931	12.785	34.66	-1.219	-6.733		45.566	0.134	14.643	0.004		275.8	4.59639	48.5	11.2	41.0	2.826	0.020	0.021	0.001	0.501	0.43	
295	6/17/2004	2:46:31 PM		25.724	26.657	24.023	27.994	26.62		47.184	49.852	12.798	34.523	-1.222	-6.956		44.744	0.115	14.643	0.004		276.8	4.61306	48.4	11.0	40.9	2.817	0.017	0.018	0.000	0.431	0.37	
296	6/17/2004	2:47:31 PM		25.751	26.679	24.055	28.076	26.702		46.881	49.86	13.289	33.56	-1.219	-6.964		41.713	0.111	14.643	0.004		277.8	4.62972	48.4	10.2	40.2	2.773	0.017	0.017	0.000	0.423	0.36	
297	6/17/2004	2:48:31 PM		25.754	26.682	24.069	28.134	26.7		46.06	49.355	13.185	33.043	-1.222	-5.658		50.13	0.108	14.643	0.004		278.8	4.64639	47.9	12.3	39.6	2.727	0.016	0.017	0.000	0.418	0.36	
298	6/17/2004	2:49:31 PM		25.771	26.709	24.105	28.126	26.672		46.075	49.51	13.181	33.057	-1.219	-5.713		50.374	0.109	14.643	0.004		279.8	4.66306	48.0	12.3	39.6	2.728	0.016	0.017	0.000	0.421	0.36	
299	6/17/2004	2:50:31 PM		25.753	26.691	24.093	28.009	26.674		46.307	49.328	13.301	33.057	-1.225	-6.99		51.788	0.112	14.643	0.003		280.8	4.67972	47.9	12.7	39.7	2.736	0.017	0.017	0.000	0.432	0.37	
300	6/17/2004	2:51:31 PM		25.772	26.716	24.172	28.028	26.693		45.809	48.872	12.991	32.932	-1.222	-6.996		50.295	0.113	14.643	0.004		281.8	4.69639	47.4	12.3	39.4	2.714	0.017	0.017	0.000	0.438	0.37	
301	6/17/2004	2:52:31 PM		25.76	26.708	24.14	28.005	26.696		45.871	48.805	12.96	33.08	-1.225	-7.028		47.723	0.11	14.643	0.003		282.8	4.71306	47.3	11.7	39.5	2.722	0.016	0.017	0.000	0.426	0.36	
302	6/17/2004	2:53:31 PM		25.751	26.704	24.115	28.001	26.692		45.96	48.936	13.144	32.975	-1.222	-7.013		51.918	0.11	14.643	0.004		283.8	4.72972	47.5	12.7	39.5	2.721	0.016	0.017	0.000	0.426	0.36	
303	6/17/2004	2:54:31 PM		25.752	26.7	24.091	27.992	26.647		45.94	49.481	13.166	32.766	-1.225	-7.008		42.533	0.11	14.643	0.003		284.8	4.74639	48.0	10.4	39.4	2.713	0.016	0.017	0.000	0.428	0.36	
304	6/17/2004	2:55:31 PM		25.752	26.705	24.101	28.022	26.628		45.794	49.011	13.057	32.848	-1.222	-7.005		52.431	0.11	14.643	0.004		285.8	4.76306	47.5	12.8	39.3	2.711	0.016	0.017	0.000	0.428	0.36	
305	6/17/2004	2:56:31 PM		25.752	26.706	24.097	28.092	26.653		45.855	49.191	13.071	32.836	-1.222	-6.996		40.564	0.109	14.643	0.004		286.8	4.77972	47.7	9.9	39.3	2.713	0.016	0.017	0.000	0.424	0.36	
306	6/17/2004	2:57:31 PM		25.763	26.721	24.108	28.158	26.679		45.728	48.787	13.003	32.881	-1.222	-6.993		52.318	0.109	14.643	0.004		287.8	4.79639	47.3	12.8	39.3	2.710	0.016	0.017	0.000	0.424	0.36	
307	6/17/2004	2:58:31 PM		25.757	26.71	24.091	28.166	26.687		46.176	49.465	12.96	33.386	-1.222	-6.987		46.786	0.109	14.643	0.004		288.8	4.81306	48.0	11.5	39.8	2.743	0.016	0.017	0.000	0.419	0.36	
308	6/17/2004	2:59:31 PM		25.755	26.713	24.094	28.17	26.691		46.203	50.119	12.913	33.25	-1.219	-6.866		48.186	0.105	14.643	0.004		289.8	4.82972	48.6	11.8	39.7	2.739	0.016	0.016	0.000	0.404	0.34	
309	6/17/2004	3:00:31 PM		25.752	26.721	24.102	28.087	26.688		46.155	49.767	12.832	33.384	-1.219	-6.866		45.341	0.113	14.643	0.004		290.8	4.84639	48.3	11.1	39.8	2.742	0.017	0.017	0.000	0.435	0.37	
310	6/17/2004	3:01:31 PM		25.745	26.723	24.089	28.02	26.661		46.135	49.641	12.882	33.326	-1.219	-6.909		47.829	0.112	14.643	0.004		291.8	4.86306	48.2	11.7	39.7	2.739	0.017	0.017	0.000	0.431	0.37	
311	6/17/2004	3:02:31 PM		25.764	26.737	24.129	27.989	26.65		45.345	48.942	12.511	32.926	-1.222	-6.953		51.611	0.111	14.643	0.004		292.8	4.87972	47.5	12.6	39.1	2.698	0.017	0.017	0.000	0.433	0.37	
312	6/17/2004	3:03:31 PM		25.773	26.746	24.138	27.994	26.649		45.367	49.017	12.57	32.934	-1.216	-6.817		51.121	0.107	14.643	0.004		293.8	4.89639	47.5	12.5	39.2	2.699	0.016	0.016	0.000	0.418	0.36	
313	6/17/2004	3:04:31 PM		25.752	26.73	24.076	27.932	26.618		45.228	48.946	12.666	32.637	-1.222	-6.808		52.185	0.111	14.643	0.004		294.8	4.91306	47.5	12.8	38.9	2.684	0.017	0.017	0.000	0.436	0.37	
314	6/17/2004	3:05:31 PM		25.768	26.751	24.108	27.964	26.609		45.544	49.603	12.68	32.842	-1.219	-6.834		48.055	0.11	14.643	0.004		295.8	4.92972	48.1	11.8	39.2	2.702	0.016	0.017	0.000	0.429	0.37	
315	6/17/2004	3:06:31 PM		25.739	26.732	24.069	27.944	26.615		45.658	49.562	12.621	33.057	-1.222	-6.935		49.298	0.108	14.643	0.004		296.8	4.94639	48.1	12.1	39.4	2.714	0.016	0.017	0.000	0.420	0.36	
316	6/17/2004	3:07:31 PM		25.763	26.766	24.108	27.984	26.579		45.255	49.187	12.633	32.653	-1.216	-6.927		44.707	0.11	14.643	0.004		297.8	4.96306	47.7	11.0	39.0	2.686	0.016	0.017	0.000	0.432	0.37	
317	6/17/2004	3:08:31 PM		25.739	26.742	24.064	27.929	26.6		45.176	48.967	12.582	32.743	-1.222	-6.814		46.323	0.103	14.643	0.003		298.8	4.97972	47.5	11.4	39.0	2.686	0.015	0.016	0.000	0.405	0.34	
318	6/17/2004	3:09:31 PM		25.717	26.725	24.041	27.862	26.583		45.307	49.226	12.738	32.692	-1.225	-6.695		53.229	0.112	14.643	0.003		299.8	4.99639	47.8	13.0	39.0	2.689	0.017	0.017	0.000	0.440	0.37	
319	6/17/2004	3:10:31 PM		25.734	26.737	24.074	27.86	26.625		43.996	48.196	13.656	30.418	-1.222	-6.409		50.484	0.1	14.643	0.004		300.8	5.01306	46.7	12.4	37.2	2.565	0.015	0.015	0.000	0.411	0.35	
320	6/17/2004	3:11:31 PM		25.708	26.736	24.063	27.869	26.624		45.216	49.272	12.589	32.692	-1.222	-6.782		51.363	0.12	14.643	0.004		301.8	5.02972	47.8	12.6	39.0	2.686	0.018	0.018	0.000	0.472	0.40	
321	6/17/2004	3:12:31 PM		25.712	26.726	24.042	27.878	26.633		45.649	49.549	12.544	33.18	-1.219	-6.808		42.078	0.11	14.643	0.004		302.8	5.04639	48.1	10.3	39.4	2.717	0.016	0.017	0.000	0.428	0.36	
322	6/17/2004	3:13:31 PM		25.688	26.731	24.033	27.839	26.589		45.992	50.115	12.239	33.792	-1.219	-6.088		44.298	0.094	14.643	0.004		303.8	5.06306	48.6	10.9	39.9	2.750	0.014	0.014	0.000	0.361	0.31	
323	6/17/2004	3:14:31 PM		25.697	26.721	24.102	27.778	26.603		45.962	50.275	11.844	34.116	-1.219	-6.473		48.349	0.108	14.643	0.004		304.8	5.07972	48.8	11.8	40.0	2.761	0.016	0.017	0.000	0.412	0.35	
324	6/17/2004	3:15:31 PM		25.657	26.726	24.127	27.823	26.593		45.351	49.757	11.75	33.597	-1.222	-6.337		47.516	0.115	14.643	0.004		305.8	5.09639	48.3	11.6	39.5	2.722	0.017	0.018	0.000	0.445	0.38	
325	6/17/2004	3:16:31 PM		25.702	26.726	24.137	27.818	26.569		46.282	50.155	11.699	34.584	-1.225	-6.681		36.782	0.132	14.643	0.003		306.8	5.11306	48.7	9.0	40.4	2.788	0.020	0.020	0.000	0.499	0.42	
326	6/17/2004	3:17:31 PM		25.598	26.726	24.153	27.824	26.589		46.195	50.209	11.494	34.664	-1.222	-3.715		40.952	0.054	14.643	0.004		307.8	5.12972	48.7	10.0	40.4	2.787	0.008	0.008	0.000	0.204	0.17	
327	6/17/2004	3:18:31 PM		25.661	26.734	24.17	27.891	26.612		47.269	50.227	11.378	35.955	-1.222	-5.669		46.282	0.13	14.643	0.004		308.8	5.14639	48.8	11.3	41.6	2.869	0.019	0.020	0.000	0.477	0.41	
328	6/17/2004	3:19:31 PM		25.677	26.726	24.182	27.913	26.623		47.605	50.712	11.247	36.458	-1.222	-5.692		44.773	0.166	14.643	0.004		309.8	5.16306	49.2	11.0	42.0	2.898	0.025	0.025	0.001	0.603	0.51	
329	6/17/2004	3:20:31 PM		25.697	26.73	24.191	27.877	26.618		47.833	50.665	11.245	36.632	-1.222	-6.655		56.752	0.125	14.643	0.003		310.8	5.17972	49.2	13.9	42.2	2.912	0.019	0.019	0.000	0.451	0.38	
330	6/17/2004	3:21:31 PM		25.733	26.731	24.193	27.874	26.609		48.236	50.698	11.254	37.096	-1.222	-6.727		44.302	0.13	14.643	0.004		311.8	5.19639	49.2	10.9	42.7	2.942	0.019	0.020	0.000	0.465	0.40	
331	6/17/2004	3:22:31 PM		25.734	26.732	24.224	27.87	26.595		48.563	51.019	11.386	37.209	-1.219	-5.169		44.807	0.049	14.643	0.004		312.8	5.21306	49.5	11.0	42.9	2.957	0.007	0.007	0.000	0.174	0.15	
332	6/17/2004	3:23:31 PM		25.665	26.728	24.215	27.87	26.586		48.515	50.901	11.304	37.236	-1.219	-5.75		46.853	0.166	14.643	0.004		313.8	5.22972	49.4	11.5	42.9	2.956	0.025	0.025	0.001	0.590	0.50	
333	6/17/2004	3:24:31 PM		25.665	26.713	24.215	27.841	26.541		49.376	51.029	11.467	37.956	-1.225	-5.973		44.536	0.047	14.643	0.004		314.8	5.24639	49.6	10.9	43.7	3.011	0.007	0.007	0.000	0.164	0.14	
334	6/17/2004	3:25:31 PM		25.7	26.718	24.24	27.89	26.541		48.889	51.054	11.512	37.466	-1.222	-5.903		42.329	0.16	14.643	0.004		315.8	5.26306	49.6	10.4	43.2	2.977	0.024	0.024	0.001	0.564	0.48	
335	6/17/2004	3:26:31 PM		25.704	26.702	24.234	27.82	26.575		49.326	50.928	11.694	37.623	-1.222	-6.641		42.206	0.12	14.643	0.004		316.8	5.27972	49.5	10.3	43.5	2.997	0.018	0.018	0.000	0.421	0.36	
336	6/17/2004	3:27:31 PM		25.673	26.701	24.278	27.794	26.574		46.946	48.644	12.877	34.094	-1.222	-6.736		53.766	0.114	14.643	0.004		317.8	5.29639	47.2	13.2	40.5	2.794	0.017	0.017	0.000	0.428	0.36	
337	6/17/2004	3:28:31 PM		25.687	26.695	24.282	27.792	26.548		46.844	48.598	12.189	34.693	-1.225	-6.768		52.328	0.111	14.643	0.003		318.8	5.31306	47.1	12.8	40.8	2.811	0.017	0.017	0.000	0.414	0.35	
338	6/17/2004	3:29:31 PM		25.699	26.687	24.294	27.895	26.535		47.089	48.963	11.771	35.389	-1.222	-6.817		43.272	0.105	14.643	0.004		319.8	5.32972	47.5	10.6	41.2	2.843	0.016	0.016	0.000	0.387	0.33	
339	6/17/2004	3:30:31 PM		25.749	26.702	24.314	27.925	26.58		47.414	49.44	11.917	35.532	-1.222	-6.782		45.672	0.114	14.643	0.004		320.8	5.34639	48.0	11.2	41.5	2.859	0.017	0.017	0.000	0.418	0.36	
340	6/17/2004	3:31:31 PM		25.787	26.691	24.302	27.923	26.549		47.396	49.39	11.876	35.499	-1.222	-6.8		54.827	0.114	14.643	0.004		321.8	5.36306	47.9	13.4	41.4	2.858	0.017	0.017	0.000	0.418	0.36	
341	6/17/2004	3:32:31 PM		25.787	26.68	24.322	27.857	26.543		47.69	49.578	11.774	36.074	-1.219	-6.791		48.265	0.115	14.643	0.004		322.8	5.37972	48.1	11.8	41.9	2.888	0.017	0.017	0.000	0.417	0.36	
342	6/17/2004	3:33:31 PM		25.792	26.68	24.327	27.852	26.543		48.117	50.113	11.924	36.207	-1.222	-6.756		47.858	0.124	14.643	0.004		323.8	5.39639	48.6	11.7	42.2	2.907	0.018	0.019	0.000	0.447	0.38	
343	6/17/2004	3:34:31 PM		25.782	26.685	24.337	27.917	26.518		48.186	50.105	11.931	36.271	-1.222	-6.071		50.144	0.072	14.643	0.004		324.8	5.41306	48.6	12.3	42.2	2.912	0.011	0.011	0.000	0.259	0.22	
344	6/17/2004	3:35:31 PM		25.821	26.679	24.336	27.856	26.537		48.109	50.151	11.754	36.437	-1.222	-5.773		45.232	0.131	14.643	0.004		325.8	5.42972	48.7	11.1	42.3	2.915	0.020	0.020	0.000	0.471	0.40	
345	6/17/2004	3:36:31 PM		25.86	26.668	24.345	27.86	26.541		47.987	50.82	11.422	36.601	-1.222	-5.568		44.78	0.176	14.643	0.004		326.8	5.44639	49.3	11.0	42.3	2.916	0.026	0.027	0.001	0.632	0.54	
346	6/17/2004	3:37:31 PM		25.809	26.672	24.374	27.85	26.555		46.514	48.36	13.729	32.801	-1.219	-6.649		53.497	0.11	14.643	0.004		327.8	5.46306	46.9	13.1	39.7	2.734	0.016	0.017	0.000	0.421	0.36	
347	6/17/2004	3:38:31 PM		25.778	26.666	24.393	27.864	26.559		47.284	49.04	12.835	34.543	-1.219	-6.713		52.216	0.107	14.643	0.004		328.8	5.47972	47.6	12.8	40.9	2.821	0.016	0.016	0.000	0.397	0.34	
348	6/17/2004	3:39:31 PM		25.862	26.666	24.443	27.838	26.554		46.89	48.739	12.853	34.038	-1.219	-6.739		45.866	0.111	14.643	0.004		329.8	5.49639	47.3	11.2	40.5	2.790	0.017	0.017	0.000	0.415	0.35	
349	6/17/2004	3:40:31 PM		25.842	26.681	24.463	27.843	26.564		46.637	48.673	12.399	34.256	-1.222	-6.378		45.364	0.114	14.643	0.004		330.8	5.51306	47.2	11.1	40.4	2.789	0.017	0.017	0.000	0.427	0.36	
350	6/17/2004	3:41:31 PM		25.876	26.67	24.452	27.852	26.558		46.842	48.861	12.26	34.621	-1.222	-6.609		49.139	0.115	14.643	0.004		331.8	5.52972	47.4	12.0	40.7	2.808	0.017	0.017	0.000	0.427	0.36	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	6/17/2004	3:42:31 PM		25.916	26.66	24.472	27.847	26.568		46.556	48.37	13.216	33.39	-1.222	-6.733		60.326	0.107	14.643	0.004		332.8	5.54639	46.9	14.8	40.0	2.756	0.016	0.016	0.000	0.405	0.34	
352	6/17/2004	3:43:31 PM		25.886	26.66	24.487	27.832	26.568		46.62	48.654	12.83	33.821	-1.222	-6.756		46.922	0.108	14.643	0.003		333.8	5.56306	47.2	11.5	40.2	2.773	0.016	0.016	0.000	0.406	0.35	
353	6/17/2004	3:44:31 PM		25.892	26.671	24.508	27.883	26.573		46.381	48.536	12.889	33.652	-1.219	-6.577		64.03	0.1	14.643	0.004		334.8	5.57972	47.1	15.7	40.0	2.759	0.015	0.015	0.000	0.378	0.32	
354	6/17/2004	3:45:31 PM		25.922	26.676	24.528	27.953	26.593		47.008	49.156	12.653	34.445	-1.222	-6.669		46.196	0.112	14.643	0.004		335.8	5.59639	47.7	11.3	40.7	2.808	0.017	0.017	0.000	0.416	0.35	
355	6/17/2004	3:46:31 PM		25.948	26.676	24.534	27.949	26.619		46.257	48.559	12.823	33.377	-1.219	-6.742		51.803	0.108	14.643	0.004		336.8	5.61306	47.1	12.7	39.8	2.745	0.016	0.016	0.000	0.410	0.35	
356	6/17/2004	3:47:31 PM		25.939	26.672	24.55	27.959	26.605		46.502	48.789	12.825	33.691	-1.219	-6.768		46.037	0.109	14.643	0.004		337.8	5.62972	47.3	11.3	40.1	2.765	0.016	0.016	0.000	0.410	0.35	
357	6/17/2004	3:48:31 PM		25.933	26.666	24.549	27.954	26.624		45.907	48.942	12.569	33.343	-1.219	-5.776		56.734	0.102	14.643	0.004		338.8	5.64639	47.5	13.9	39.6	2.732	0.015	0.015	0.000	0.389	0.33	
358	6/17/2004	3:49:31 PM		25.951	26.66	24.547	27.937	26.613		45.878	49.141	12.58	33.273	-1.225	-5.58		50.591	0.109	14.643	0.003		339.8	5.66306	47.7	12.4	39.6	2.729	0.016	0.016	0.000	0.416	0.35	
359	6/17/2004	3:50:31 PM		25.978	26.686	24.579	27.934	26.619		45.917	49.031	12.585	33.384	-1.222	-5.571		47.502	0.107	14.643	0.003		340.8	5.67972	47.6	11.6	39.7	2.734	0.016	0.016	0.000	0.407	0.35	
360	6/17/2004	3:51:31 PM		25.986	26.674	24.586	27.926	26.667		45.695	48.992	12.565	33.133	-1.222	-5.441		55.073	0.108	14.643	0.004		341.8	5.69639	47.5	13.5	39.4	2.717	0.016	0.016	0.000	0.413	0.35	
361	6/17/2004	3:52:31 PM		25.986	26.685	24.602	27.932	26.638		46.205	49.255	12.563	33.657	-1.219	-5.556		51.265	0.109	14.643	0.004		342.8	5.71306	47.8	12.6	39.9	2.753	0.016	0.016	0.000	0.412	0.35	
362	6/17/2004	3:53:31 PM		25.986	26.675	24.597	27.912	26.603		46.033	49.162	12.604	33.423	-1.222	-5.548		44.744	0.108	14.643	0.004		343.8	5.72972	47.7	11.0	39.7	2.739	0.016	0.016	0.000	0.410	0.35	
363	6/17/2004	3:54:31 PM		25.996	26.67	24.592	27.907	26.603		45.851	49.006	12.537	33.326	-1.222	-5.585		44.715	0.108	14.643	0.003		344.8	5.74639	47.5	11.0	39.6	2.729	0.016	0.016	0.000	0.411	0.35	
364	6/17/2004	3:55:31 PM		26.032	26.681	24.608	28.077	26.623		45.517	48.751	12.439	33.059	-1.222	-5.319		46.323	0.102	14.643	0.004		345.8	5.76306	47.3	11.4	39.3	2.709	0.015	0.015	0.000	0.391	0.33	
365	6/17/2004	3:56:31 PM		26.038	26.676	24.614	28.158	26.694		45.695	49.052	12.461	33.191	-1.228	-5.551		47.45	0.109	14.643	0.003		346.8	5.77972	47.6	11.6	39.4	2.719	0.016	0.016	0.000	0.417	0.35	
366	6/17/2004	3:57:31 PM		26.015	26.698	24.646	28.23	26.726		45.678	48.924	12.49	33.221	-1.222	-5.516		49.437	0.105	14.643	0.004		347.8	5.79639	47.5	12.1	39.4	2.720	0.016	0.016	0.000	0.401	0.34	
367	6/17/2004	3:58:31 PM		26.04	26.699	24.627	28.215	26.672		45.722	49.066	12.47	33.23	-1.222	-5.481		-25.023	0.111	14.643	0.004		348.8	5.81306	47.6	-6.1	39.5	2.722	0.017	0.017	0.000	0.424	0.36	
368	6/17/2004	3:59:31 PM		26.07	26.704	24.647	28.225	26.672		45.705	49.023	12.457	33.275	-1.222	-5.565		52.107	0.108	14.643	0.003		349.8	5.82972	47.6	12.8	39.5	2.723	0.016	0.016	0.000	0.412	0.35	
369	6/17/2004	4:00:31 PM		26.065	26.694	24.647	28.111	26.687		45.906	49.612	12.519	33.295	-1.222	-5.444		50.28	0.105	14.643	0.004		350.8	5.84639	48.1	12.3	39.6	2.730	0.016	0.016	0.000	0.399	0.34	
370	6/17/2004	4:01:31 PM		26.091	26.71	24.682	28.097	26.648		45.556	49.176	12.531	33.115	-1.219	-5.496		46.135	0.109	14.643	0.004		351.8	5.86306	47.7	11.3	39.3	2.712	0.016	0.016	0.000	0.417	0.35	
371	6/17/2004	4:02:31 PM		26.082	26.706	24.663	28.058	26.663		45.49	49.058	12.455	33.043	-1.225	-5.542		46.74	0.105	14.643	0.003		352.8	5.87972	47.6	11.5	39.3	2.707	0.016	0.016	0.000	0.402	0.34	
372	6/17/2004	4:03:31 PM		26.076	26.7	24.667	28.027	26.652		45.714	49.249	12.553	33.172	-1.222	-5.435		46.411	0.105	14.643	0.004		353.8	5.89639	47.8	11.4	39.4	2.719	0.016	0.016	0.000	0.401	0.34	
373	6/17/2004	4:04:31 PM		26.091	26.71	24.667	28.032	26.657		45.531	49.321	12.402	33.148	-1.222	-5.51		54.535	0.107	14.643	0.003		354.8	5.91306	47.8	13.4	39.3	2.712	0.016	0.016	0.000	0.409	0.35	
374	6/17/2004	4:05:31 PM		26.082	26.706	24.673	27.983	26.643		45.483	49.332	12.193	33.217	-1.222	-5.571		53.108	0.107	14.643	0.004		355.8	5.92972	47.9	13.0	39.4	2.713	0.016	0.016	0.000	0.409	0.35	
375	6/17/2004	4:06:31 PM		26.084	26.722	24.685	28.044	26.665		45.546	49.315	12.224	33.302	-1.222	-5.467		51.749	0.105	14.643	0.004		356.8	5.94639	47.8	12.7	39.4	2.718	0.016	0.016	0.000	0.401	0.34	
376	6/17/2004	4:07:31 PM		26.093	26.701	24.669	28.108	26.664		45.369	49.118	12.172	33.187	-1.222	-5.389		49.575	0.108	14.643	0.004		357.8	5.96306	47.6	12.1	39.3	2.708	0.016	0.016	0.000	0.414	0.35	
377	6/17/2004	4:08:31 PM		26.108	26.711	24.664	28.223	26.734		45.641	49.465	12.185	33.492	-1.222	-5.244		46.626	0.106	14.643	0.004		358.8	5.97972	48.0	11.4	39.6	2.728	0.016	0.016	0.000	0.403	0.34	
378	6/17/2004	4:09:31 PM		26.129	26.742	24.71	28.309	26.795		45.834	49.693	12.274	33.519	-1.219	-5.406		47.483	0.112	14.643	0.004		359.8	5.99639	48.2	11.6	39.7	2.736	0.017	0.017	0.000	0.424	0.36	
379	6/17/2004	4:10:31 PM		26.131	26.73	24.698	28.271	26.812		45.527	49.56	12.313	33.102	-1.225	-5.476		43.728	0.109	14.643	0.004		360.8	6.01306	48.1	10.7	39.3	2.711	0.016	0.016	0.000	0.417	0.35	
380	6/17/2004	4:11:31 PM		26.133	26.736	24.714	28.313	26.814		45.262	49.301	12.207	33.068	-1.222	-5.314		54.32	0.109	14.643	0.004		361.8	6.02972	47.8	13.3	39.2	2.700	0.016	0.016	0.000	0.418	0.36	
381	6/17/2004	4:12:31 PM		26.135	26.739	24.707	28.29	26.826		45.212	49.154	12.236	32.922	-1.222	-5.504		42.692	0.111	14.643	0.004		362.8	6.04639	47.7	10.5	39.1	2.694	0.017	0.017	0.000	0.427	0.36	
382	6/17/2004	4:13:31 PM		26.143	26.756	24.724	28.288	26.839		45.909	49.877	12.431	33.482	-1.222	-5.525		50.681	0.107	14.643	0.004		363.8	6.06306	48.4	12.4	39.7	2.737	0.016	0.016	0.000	0.405	0.34	
383	6/17/2004	4:14:31 PM		26.143	26.751	24.724	28.328	26.834		45.297	49.224	12.163	33.178	-1.222	-5.458		45.31	0.108	14.643	0.004		364.8	6.07972	47.8	11.1	39.2	2.705	0.016	0.016	0.000	0.414	0.35	
384	6/17/2004	4:15:31 PM		26.16	26.773	24.736	28.275	26.83		45.309	49.477	12.262	33.055	-1.211	-5.221		48.993	0.111	14.643	0.004		365.8	6.09639	48.0	12.0	39.2	2.701	0.017	0.017	0.000	0.426	0.36	
385	6/17/2004	4:16:31 PM		26.155	26.779	24.722	28.256	26.836		45.544	49.734	12.336	33.258	-1.219	-5.461		51.144	0.109	14.643	0.004		366.8	6.11306	48.3	12.5	39.4	2.717	0.016	0.016	0.000	0.416	0.35	
386	6/17/2004	4:17:31 PM		26.155	26.779	24.737	28.206	26.811		45.303	49.518	12.231	33.104	-1.222	-5.504		49.442	0.105	14.643	0.003		367.8	6.12972	48.0	12.1	39.2	2.703	0.016	0.016	0.000	0.402	0.34	
387	6/17/2004	4:18:31 PM		26.167	26.796	24.744	28.197	26.808		45.176	49.574	12.191	32.969	-1.222	-5.502		49.187	0.108	14.643	0.004		368.8	6.14639	48.1	12.1	39.1	2.694	0.016	0.016	0.000	0.415	0.35	
388	6/17/2004	4:19:31 PM		26.179	26.797	24.74	28.184	26.78		45.222	49.692	12.21	32.959	-1.098	-5.322		50.714	0.105	14.643	0.004		369.8	6.16306	48.2	12.4	39.1	2.695	0.016	0.016	0.000	0.403	0.34	
389	6/17/2004	4:20:31 PM		26.175	26.803	24.746	28.175	26.806		44.959	49.147	12.19	32.811	-1.159	-5.513		48.953	0.107	14.643	0.004		370.8	6.17972	47.7	12.0	38.9	2.681	0.016	0.016	0.000	0.413	0.35	
390	6/17/2004	4:21:31 PM		26.176	26.799	24.747	28.166	26.811		44.76	48.884	12.186	32.616	-1.159	-5.49		55.461	0.106	14.643	0.003		371.8	6.19639	47.4	13.6	38.7	2.667	0.016	0.016	0.000	0.411	0.35	
391	6/17/2004	4:22:31 PM		26.181	26.804	24.747	28.186	26.831		45.139	49.535	12.084	33.078	-0.936	-5.377		49.243	0.109	14.643	0.004		372.8	6.21306	48.1	12.1	39.1	2.696	0.016	0.016	0.000	0.419	0.36	
392	6/17/2004	4:23:31 PM		26.181	26.805	24.748	28.246	26.887		45.382	49.792	12.314	33.022	-1.08	-5.522		46.06	0.109	14.643	0.003		373.8	6.22972	48.3	11.3	39.2	2.703	0.016	0.016	0.000	0.417	0.36	
393	6/17/2004	4:24:31 PM		26.185	26.803	24.746	28.265	26.885		44.851	49.388	12.246	32.645	-0.884	-5.319		49.577	0.11	14.643	0.004		374.8	6.24639	47.9	12.1	38.7	2.672	0.016	0.017	0.000	0.426	0.36	
394	6/17/2004	4:25:31 PM		26.179	26.802	24.735	28.239	26.88		45.454	50.041	12.327	33.084	-0.892	-5.47		45.343	0.108	14.643	0.004		375.8	6.26306	48.6	11.1	39.3	2.707	0.016	0.016	0.000	0.413	0.35	
395	6/17/2004	5:18:07 PM		26.017	26.711	24.708	27.758	26.529		47.313	50.358	11.99	35.497	-1.228	-5.215		46.186	0.118	14.643	0.003		428.4	7.13972	48.9	11.3	41.4	2.855	0.018	0.018	0.000	0.428	0.36	
396	6/17/2004	5:19:07 PM		26.111	26.72	24.728	27.792	26.513		45.616	50.198	11.948	33.866	-0.901	19.244		44.719	0.003	14.643	0.004		429.4	7.15639	48.7	11.0	39.7	2.740	0.000	0.000	0.000	0.011	0.01	
397	6/17/2004	5:20:07 PM		25.549	26.692	24.705	27.755	26.466		29.873	50.252	11.92	18.076	14.99	20.123		49.262	0.003	14.643	0.004		430.4	7.17306	48.8	12.1	24.0	1.653	0.000	0.000	0.000	0.019	0.02	
398	6/17/2004	5:21:07 PM		25.696	26.704	24.712	27.747	26.452		9.878	50.383	11.845	-1.763	35.282	18.943		38.629	0.003	14.643	0.004		431.4	7.18972	48.9	9.5	4.1	0.280	0.000	0.000	0.000	0.111	0.09	
399	6/17/2004	5:22:07 PM		26.149	26.672	24.695	27.71	26.485		5.671	50.175	7.899	-2.009	39.497	7.571		44.974	0.003	14.643	0.004		432.4	7.20639	48.7	11.0	1.8	0.126	0.000	0.000	0.000	0.246	0.21	
400	6/17/2004	5:23:07 PM		25.57	26.693	24.741	27.746	26.501		43.955	50.041	12.13	31.968	0.576	0.439		47.969	0.221	14.643	0.004		433.4	7.22306	48.6	11.8	38.0	2.617	0.033	0.033	0.001	0.874	0.74	
401	6/17/2004	5:24:07 PM		25.56	26.673	24.726	27.761	26.521		44.067	50.016	13.015	31.184	0.474	0.48		48.413	0.175	14.643	0.004		434.4	7.23972	48.5	11.9	37.6	2.594	0.026	0.026	0.001	0.699	0.59	
402	6/17/2004	5:25:07 PM		25.506	26.664	24.707	27.757	26.557		44.252	50.343	13.522	30.831	0.541	0.555		45.383	0.16	14.643	0.004		435.4	7.25639	48.9	11.1	37.5	2.588	0.024	0.024	0.001	0.641	0.55	
403	6/17/2004	5:26:07 PM		25.691	26.664	24.707	27.797	26.577		47.655	50.188	13.75	34.061	-1.225	-4.73		44.337	0.158	14.643	0.004		436.4	7.27306	48.7	10.9	40.9	2.817	0.024	0.024	0.001	0.581	0.49	
404	6/17/2004	5:27:07 PM		25.726	26.664	24.712	27.846	26.627		47.499	49.73	14.527	33.228	-1.222	-5.314		48.186	0.166	14.643	0.004		437.4	7.28972	48.3	11.8	40.4	2.783	0.025	0.025	0.001	0.618	0.53	
405	6/17/2004	5:28:07 PM		25.719	26.662	24.75	27.845	26.66		47.611	49.976	14.648	33.137	-1.222	-5.123		46.05	0.139	14.643	0.004		438.4	7.30639	48.5	11.3	40.4	2.784	0.021	0.021	0.001	0.517	0.44	
406	6/17/2004	5:29:07 PM		25.714	26.657	24.775	27.91	26.67		47.091	49.564	14.4	32.825	-1.222	-5.302		52.212	0.157	14.643	0.004		439.4	7.32306	48.1	12.8	40.0	2.755	0.023	0.024	0.001	0.590	0.50	
407	6/17/2004	5:30:07 PM		25.75	26.663	24.831	27.955	26.686		46.636	49.268	13.902	32.92	-1.222	-5.224		53.494	0.159	14.643	0.004		440.4	7.33972	47.8	13.1	39.8	2.743	0.024	0.024	0.001	0.599	0.51	
408	6/17/2004	5:31:07 PM		25.816	26.674	24.837	27.971	26.751		46.734	49.514	13.751	33.16	-1.222	-5.325		55.042	0.164	14.643	0.004		441.4	7.35639	48.0	13.5	39.9	2.754	0.024	0.025	0.001	0.615	0.52	
409	6/17/2004	5:32:07 PM		25.86	26.663	24.846	27.945	26.666		46.724	49.693	13.589	33.281	-1.222	-5.337		46.129	0.165	14.643	0.004		442.4	7.37306	48.2	11.3	40.0	2.758	0.025	0.025	0.001	0.618	0.53	
410	6/17/2004	5:33:07 PM		25.916	26.689	24.867	27.896	26.612		46.695	49.465	13.386	33.458	-1.219	-5.429		48.253	0.191	14.643	0.004		443.4	7.38972	48.0	11.8	40.1	2.763	0.028	0.029	0.001	0.713	0.61	
411	6/17/2004	5:34:07 PM		25.93	26.668	24.851	27.826	26.571		47.462	49.719	13.245	34.436	-1.219	-6.707		47.752	0.168	14.643	0.004		444.4	7.40639	48.2	11.7	40.9	2.823	0.025	0.025	0.001	0.614	0.52	
412	6/17/2004	5:35:07 PM		25.932	26.656	24.829	27.738	26.519		47.132	49.742	13.31	33.903	-1.222	-6.291		44.023	0.182	14.643	0.004		445.4	7.42306	48.3	10.8	40.5	2.794	0.027	0.027	0.001	0.673	0.57	
413	6/17/2004	5:36:07 PM		25.951	26.674	24.842	27.712	26.497		47.385	49.813	13.431	34.088	-1.222	-6.759		56.826	0.167	14.643	0.004		446.4	7.43972	48.3	13.9	40.7	2.809	0.025	0.025	0.001	0.614	0.52	
414	6/17/2004	5:37:07 PM		25.835	26.668	24.851	27.666	26.431		47.638	49.835	13.36	34.399	-1.219	-6.623		47.406	0.153	14.643	0.004		447.4	7.45639	48.4	11.6	41.0	2.828	0.023	0.023	0.001	0.558	0.48	
415	6/17/2004	5:38:07 PM		25.758	26.661	24.859	27.658	26.384		46.253	49.576	13.457	32.893	-1.216	-4.25		44.673	0.081	14.643	0.004		448.4	7.47306	48.1	10.9	39.6	2.728	0.012	0.012	0.000	0.306	0.26	
416	6/17/2004	5:39:07 PM		25.771	26.644	24.842	27.582	26.347		48.188	49.864	13.427	34.925	-1.222	-4.912		50.309	0.1	14.643	0.004		449.4	7.48972	48.4	12.3	41.6	2.865	0.015	0.015	0.000	0.360	0.31	
417	6/17/2004	5:40:07 PM		25.789	26.627	24.835	27.55	26.331		48.455	49.817	13.594	35.058	-1.225	-5.033		42.827	0.197	14.643	0.004		450.4	7.50639	48.3	10.5	41.8	2.879	0.029	0.030	0.001	0.707	0.60	
418	6/17/2004	5:41:07 PM		25.818	26.632	24.834	27.599	26.385		48.128	49.773	13.492	34.804	-1.222	-5.181		52.547	0.177	14.643	0.004		451.4	7.52306	48.3	12.9	41.5	2.859	0.026	0.027	0.001	0.639	0.54	
419	6/17/2004	5:42:07 PM		25.828	26.617	24.859	27.614	26.435		49.011	49.86	13.239	35.937	-1.222	-6.672		46.279	0.166	14.643	0.004		452.4	7.53972	48.4	11.3	42.5	2.928	0.025	0.025	0.001	0.585	0.50	
420	6/17/2004	5:43:07 PM		25.838	26.606	24.829	27.624	26.419		49.017	49.912	13.117	36.047	-1.222	-6.739		47.992	0.17	14.643	0.004		453.4	7.55639	48.4	11.8	42.5	2.932	0.025	0.025	0.001	0.599	0.51	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	6/17/2004	5:44:07 PM		25.848	26.606	24.839	27.679	26.459		48.424	49.562	13.122	35.462	-1.222	-6.204		46.651	0.145	14.643	0.004		454.4	7.57306	48.1	11.4	41.9	2.892	0.022	0.022	0.001	0.518	0.44	
422	6/17/2004	5:45:07 PM		25.86	26.613	24.866	27.721	26.531		47.192	48.252	14.217	33.164	-1.219	-6.328		52.825	0.172	14.643	0.004		455.4	7.58972	46.8	12.9	40.2	2.770	0.026	0.026	0.001	0.641	0.55	
423	6/17/2004	5:46:07 PM		25.889	26.602	24.85	27.73	26.53		47.402	48.698	14.185	33.289	-1.222	-6.47		57.739	0.165	14.643	0.004		456.4	7.60639	47.2	14.1	40.3	2.782	0.025	0.025	0.001	0.612	0.52	
424	6/17/2004	5:47:07 PM		25.88	26.588	24.856	27.771	26.566		47.393	48.515	13.979	33.585	-1.222	-6.424		53.653	0.158	14.643	0.004		457.4	7.62306	47.0	13.1	40.5	2.792	0.024	0.024	0.001	0.584	0.50	
425	6/17/2004	5:48:07 PM		25.881	26.579	24.842	27.772	26.612		47.479	48.747	13.985	33.622	-1.222	-5.869		49.039	0.087	14.643	0.004		458.4	7.63972	47.3	12.0	40.6	2.796	0.013	0.013	0.000	0.321	0.27	
426	6/17/2004	5:49:07 PM		25.962	26.605	24.868	27.797	26.608		47.972	48.716	13.81	34.375	-1.222	-6.652		50.386	0.169	14.643	0.004		459.4	7.65639	47.2	12.3	41.2	2.839	0.025	0.025	0.001	0.614	0.52	
427	6/17/2004	5:50:07 PM		25.987	26.586	24.869	27.823	26.648		47.147	47.829	14.372	32.969	-1.225	-6.606		51.142	0.165	14.643	0.003		460.4	7.67306	46.4	12.5	40.1	2.762	0.025	0.025	0.001	0.616	0.52	
428	6/17/2004	5:51:07 PM		26.017	26.611	24.914	27.878	26.693		47.298	47.976	14.063	33.396	-1.225	-6.609		51.778	0.176	14.643	0.003		461.4	7.68972	46.5	12.7	40.3	2.782	0.026	0.026	0.001	0.652	0.55	
429	6/17/2004	5:52:07 PM		26.048	26.617	24.925	27.929	26.719		47.111	48.125	13.753	33.494	-1.222	-6.453		47.977	0.169	14.643	0.004		462.4	7.70639	46.7	11.8	40.3	2.779	0.025	0.025	0.001	0.627	0.53	
430	6/17/2004	5:53:07 PM		26.08	26.628	24.926	27.98	26.746		47.651	48.416	13.927	33.952	-1.219	-6.672		51.008	0.168	14.643	0.004		463.4	7.72306	46.9	12.5	40.8	2.813	0.025	0.025	0.001	0.615	0.52	
431	6/17/2004	5:54:07 PM		26.084	26.617	24.915	27.979	26.765		47.085	48.08	13.857	33.34	-1.225	-6.693		53.553	0.171	14.643	0.003		464.4	7.73972	46.6	13.1	40.2	2.773	0.025	0.026	0.001	0.636	0.54	
432	6/17/2004	5:55:07 PM		26.059	26.637	24.925	27.975	26.765		47.311	48.438	13.876	33.562	-1.222	-6.508		48.891	0.166	14.643	0.003		465.4	7.75639	47.0	12.0	40.4	2.788	0.025	0.025	0.001	0.613	0.52	
433	6/17/2004	5:56:07 PM		26.115	26.664	24.947	27.991	26.717		47.389	48.582	13.845	33.693	-1.222	-6.641		50.693	0.165	14.643	0.004		466.4	7.77306	47.1	12.4	40.5	2.795	0.025	0.025	0.001	0.608	0.52	
434	6/17/2004	5:57:07 PM		26.126	26.655	24.938	27.932	26.653		46.973	47.954	13.774	33.386	-1.219	-6.51		50.284	0.15	14.643	0.004		467.4	7.78972	46.5	12.3	40.2	2.770	0.022	0.022	0.001	0.558	0.47	
435	6/17/2004	5:58:07 PM		26.096	26.665	24.923	27.882	26.593		45.757	47.435	13.652	32.277	-1.225	-5.129		44.056	0.127	14.643	0.004		468.4	7.80639	46.0	10.8	39.0	2.690	0.019	0.019	0.000	0.486	0.41	
436	6/17/2004	5:59:07 PM		26.106	26.664	24.952	27.851	26.537		46.749	47.448	13.525	33.345	-1.222	-6.482		37.365	0.131	14.643	0.004		469.4	7.82306	46.0	9.2	40.0	2.761	0.020	0.020	0.000	0.488	0.42	
437	6/17/2004	6:00:07 PM		26.139	26.657	24.92	27.77	26.456		47.23	47.815	13.494	33.929	-1.219	-6.716		51.496	0.172	14.643	0.004		470.4	7.83972	46.3	12.6	40.6	2.798	0.026	0.026	0.001	0.633	0.54	
438	6/17/2004	6:00:39 PM		26.185	26.664	24.917	27.762	26.457		46.649	47.477	13.387	33.361	-1.222	-6.545		54.352	0.158	14.643	0.004		470.9	7.84861	46.0	13.3	40.0	2.758	0.024	0.024	0.001	0.590	0.50	
439	6/17/2004	6:01:39 PM		26.18	26.643	24.881	27.686	26.421		47.087	48.115	13.552	33.613	-1.222	-6.577		51.945	0.173	14.643	0.004		471.9	7.86528	46.6	12.7	40.4	2.782	0.026	0.026	0.001	0.641	0.55	
440	6/17/2004	6:02:39 PM		26.224	26.647	24.88	27.68	26.406		47.072	47.783	13.4	33.776	-1.222	-6.678		51.254	0.178	14.643	0.004		472.9	7.88194	46.3	12.6	40.4	2.787	0.027	0.027	0.001	0.659	0.56	
441	6/17/2004	6:03:39 PM		26.114	26.647	24.875	27.665	26.401		46.601	47.813	13.43	33.236	-1.222	-6.372		49.921	0.161	14.643	0.004		473.9	7.89861	46.3	12.2	39.9	2.752	0.024	0.024	0.001	0.603	0.51	
442	6/17/2004	6:04:39 PM		26.069	26.632	24.855	27.745	26.441		47.039	48.072	13.523	33.611	-1.219	-6.375		47.281	0.162	14.643	0.004		474.9	7.91528	46.6	11.6	40.3	2.780	0.024	0.024	0.001	0.601	0.51	
443	6/17/2004	6:05:39 PM		26.085	26.628	24.841	27.836	26.501		46.699	47.725	13.412	33.437	-1.222	-6.649		55.466	0.169	14.643	0.004		475.9	7.93194	46.3	13.6	40.1	2.763	0.025	0.025	0.001	0.632	0.54	
444	6/17/2004	6:06:39 PM		26.145	26.628	24.841	27.886	26.586		46.896	47.922	13.483	33.503	-1.219	-6.782		50.923	0.164	14.643	0.004		476.9	7.94861	46.4	12.5	40.2	2.772	0.024	0.025	0.001	0.611	0.52	
445	6/17/2004	6:07:39 PM		26.096	26.629	24.857	27.936	26.637		46.516	47.62	13.386	33.246	-1.222	-6.811		53.972	0.165	14.643	0.004		477.9	7.96528	46.1	13.2	39.9	2.750	0.025	0.025	0.001	0.619	0.53	
446	6/17/2004	6:08:39 PM		26.061	26.625	24.838	27.997	26.682		45.969	47.29	13.274	32.706	-1.222	-6.73		51.602	0.162	14.643	0.004		478.9	7.98194	45.8	12.6	39.3	2.712	0.024	0.024	0.001	0.617	0.52	
447	6/17/2004	6:09:39 PM		26.083	26.647	24.839	28.029	26.714		46.157	47.454	13.34	32.879	-1.219	-6.698		52.293	0.163	14.643	0.004		479.9	7.99861	46.0	12.8	39.5	2.725	0.024	0.024	0.001	0.618	0.53	
448	6/17/2004	6:10:39 PM		26.09	26.649	24.842	28.036	26.751		45.778	47.087	13.245	32.635	-1.222	-6.672		52.33	0.163	14.643	0.004		480.9	8.01528	45.6	12.8	39.2	2.703	0.024	0.024	0.001	0.623	0.53	
449	6/17/2004	6:11:39 PM		26.092	26.646	24.828	28.088	26.793		46.037	47.421	13.192	32.918	-1.222	-6.652		42.953	0.165	14.643	0.004		481.9	8.03194	45.9	10.5	39.5	2.722	0.025	0.025	0.001	0.626	0.53	
450	6/17/2004	6:12:39 PM		26.104	26.672	24.84	28.169	26.834		46.224	47.682	13.313	33.008	-1.216	-6.649		54.771	0.165	14.643	0.004		482.9	8.04861	46.2	13.4	39.6	2.731	0.025	0.025	0.001	0.624	0.53	
451	6/17/2004	6:13:39 PM		26.082	26.681	24.823	28.197	26.878		45.9	47.415	13.206	32.784	-1.225	-6.638		46.663	0.162	14.643	0.004		483.9	8.06528	45.9	11.4	39.3	2.712	0.024	0.024	0.001	0.617	0.53	
452	6/17/2004	6:14:39 PM		26.064	26.687	24.815	28.219	26.889		45.942	47.4	13.335	32.737	-1.219	-6.641		62.497	0.164	14.643	0.004		484.9	8.08194	45.9	15.3	39.3	2.712	0.024	0.025	0.001	0.625	0.53	
453	6/17/2004	6:15:39 PM		26.066	26.705	24.813	28.191	26.857		44.581	47.288	13.14	31.457	-1.222	-5.273		53.763	0.158	14.643	0.004		485.9	8.09861	45.8	13.2	38.0	2.621	0.024	0.024	0.001	0.623	0.53	
454	6/17/2004	6:16:39 PM		26.077	26.706	24.808	28.172	26.833		46.541	47.657	13.317	33.318	-1.222	-5.912		52.938	0.25	14.643	0.003		486.9	8.11528	46.2	13.0	39.9	2.753	0.037	0.037	0.001	0.939	0.80	
455	6/17/2004	6:17:39 PM		26.039	26.717	24.87	28.184	26.78		44.451	47.122	13.031	31.383	-1.222	-4.62		57.195	0.262	14.643	0.004		487.9	8.13194	45.6	14.0	37.9	2.614	0.039	0.039	0.001	1.034	0.88	
456	6/17/2004	6:18:39 PM		26.06	26.723	24.826	28.105	26.731		45.554	47.458	13.057	32.518	-1.219	-5.343		51.87	0.224	14.643	0.004		488.9	8.14861	46.0	12.7	39.0	2.691	0.033	0.034	0.001	0.860	0.73	
457	6/17/2004	6:19:39 PM		26.165	26.724	24.802	28.061	26.697		46.543	47.184	13.128	33.603	-1.222	-6.597		52.157	0.176	14.643	0.004		489.9	8.16528	45.7	12.8	40.1	2.763	0.026	0.026	0.001	0.658	0.56	
458	6/17/2004	6:20:39 PM		26.202	26.726	24.793	28.018	26.658		46.697	47.27	13.162	33.751	-1.225	-6.701		52.137	0.171	14.643	0.003		490.9	8.18194	45.8	12.8	40.2	2.773	0.025	0.026	0.001	0.638	0.54	
459	6/17/2004	6:21:39 PM		26.14	26.734	24.792	27.941	26.652		46.369	47.489	13.094	33.283	-1.222	-6.45		48.136	0.171	14.643	0.004		491.9	8.19861	46.0	11.8	39.8	2.746	0.025	0.026	0.001	0.644	0.55	
460	6/17/2004	6:22:39 PM		26.086	26.735	24.783	27.927	26.598		46.313	47.495	13.084	33.343	-1.222	-5.927		44.828	0.184	14.643	0.003		492.9	8.21528	46.0	11.0	39.8	2.746	0.027	0.028	0.001	0.693	0.59	
461	6/17/2004	6:23:39 PM		26.086	26.73	24.768	27.887	26.593		46.568	47.709	13.093	33.566	-1.225	-6.291		57.17	0.198	14.643	0.003		493.9	8.23194	46.2	14.0	40.1	2.762	0.030	0.030	0.001	0.742	0.63	
462	6/17/2004	6:24:39 PM		26.117	26.741	24.803	27.888	26.643		46.224	47.062	12.835	33.478	-1.222	-6.745		48.945	0.154	14.643	0.004		494.9	8.24861	45.6	12.0	39.9	2.748	0.023	0.023	0.001	0.579	0.49	
463	6/17/2004	6:25:39 PM		26.063	26.746	24.784	27.959	26.724		45.96	46.743	12.822	33.271	-1.219	-6.427		50.608	0.163	14.643	0.004		495.9	8.26528	45.3	12.4	39.6	2.731	0.024	0.024	0.001	0.617	0.53	
464	6/17/2004	6:26:39 PM		26.085	26.738	24.771	28.02	26.78		46.074	47.611	12.987	33.076	-1.219	-5.883		47.466	0.226	14.643	0.004		496.9	8.28194	46.1	11.6	39.6	2.729	0.034	0.034	0.001	0.857	0.73	
465	6/17/2004	6:27:39 PM		26.095	26.749	24.752	28.036	26.821		45.973	47.131	12.939	33.066	-1.222	-6.048		54.913	0.157	14.643	0.004		497.9	8.29861	45.7	13.5	39.5	2.725	0.023	0.024	0.001	0.596	0.51	
466	6/17/2004	6:28:39 PM		26.167	26.756	24.753	28.097	26.853		46.809	47.815	13.069	33.718	-1.222	-6.626		49.677	0.175	14.643	0.004		498.9	8.31528	46.3	12.2	40.3	2.776	0.026	0.026	0.001	0.653	0.56	
467	6/17/2004	6:29:39 PM		26.204	26.772	24.765	28.129	26.894		46.242	47.042	12.965	33.363	-1.222	-6.49		48.063	0.164	14.643	0.004		499.9	8.33194	45.6	11.8	39.8	2.744	0.024	0.025	0.001	0.618	0.53	
468	6/17/2004	6:30:39 PM		26.165	26.754	24.702	28.086	26.916		46.056	47.127	12.805	33.252	-1.225	-6.415		51.448	0.17	14.643	0.004		500.9	8.34861	45.7	12.6	39.7	2.734	0.025	0.026	0.001	0.645	0.55	
469	6/17/2004	6:31:39 PM		26.187	26.781	24.718	28.122	26.878		46.369	47.332	12.891	33.613	-1.222	-6.45		55.063	0.166	14.643	0.004		501.9	8.36528	45.9	13.5	40.0	2.757	0.025	0.025	0.001	0.624	0.53	
470	6/17/2004	6:32:39 PM		26.174	26.787	24.735	28.094	26.845		46.143	46.911	12.835	33.414	-1.219	-6.574		54.151	0.17	14.643	0.004		502.9	8.38194	45.4	13.3	39.8	2.743	0.025	0.026	0.001	0.642	0.55	
471	6/17/2004	6:33:39 PM		26.134	26.787	24.71	28.089	26.8		45.848	46.919	12.737	33.242	-1.222	-6.213		47.994	0.185	14.643	0.004		503.9	8.39861	45.4	11.8	39.5	2.726	0.028	0.028	0.001	0.703	0.60	
472	6/17/2004	6:34:39 PM		26.14	26.798	24.706	28.03	26.751		45.817	46.87	12.702	33.133	-1.216	-6.421		53.97	0.174	14.643	0.004		504.9	8.41528	45.4	13.2	39.5	2.722	0.026	0.026	0.001	0.663	0.56	
473	6/17/2004	6:35:39 PM		26.165	26.804	24.677	27.961	26.747		45.627	46.486	12.724	32.998	-1.222	-6.311		58.624	0.172	14.643	0.004		505.9	8.43194	45.0	14.4	39.3	2.710	0.026	0.026	0.001	0.658	0.56	
474	6/17/2004	6:36:39 PM		26.051	26.789	24.622	27.896	26.712		45.359	46.525	12.626	32.809	-1.225	-6.473		47.844	0.179	14.643	0.003		506.9	8.44861	45.1	11.7	39.1	2.695	0.027	0.027	0.001	0.690	0.59	
475	6/17/2004	6:37:39 PM		26.072	26.816	24.628	27.913	26.703		45.521	46.6	12.692	32.924	-1.222	-6.43		46.296	0.167	14.643	0.004		507.9	8.46528	45.1	11.3	39.2	2.704	0.025	0.025	0.001	0.641	0.55	
476	6/17/2004	6:38:39 PM		26.044	26.812	24.61	27.925	26.66		45.295	46.434	12.648	32.661	-1.222	-6.632		43.317	0.172	14.643	0.004		508.9	8.48194	45.0	10.6	39.0	2.687	0.026	0.026	0.001	0.665	0.57	
477	6/17/2004	6:39:39 PM		26.027	26.791	24.563	27.928	26.713		46.327	47.618	12.004	34.307	-1.222	-6.632		51.246	0.176	14.643	0.004		509.9	8.49861	46.1	12.6	40.3	2.780	0.026	0.027	0.001	0.659	0.56	
478	6/17/2004	6:40:39 PM		25.992	26.8	24.532	27.932	26.663		46.471	47.748	12.196	34.338	-1.219	-6.563		42.948	0.173	14.643	0.004		510.9	8.51528	46.3	10.5	40.4	2.786	0.026	0.026	0.001	0.647	0.55	
479	6/17/2004	6:41:39 PM		25.991	26.799	24.501	27.931	26.667		45.965	48.598	12.422	33.449	-1.222	-5.184		44.709	0.158	14.643	0.004		511.9	8.53194	47.1	11.0	39.7	2.738	0.024	0.024	0.001	0.602	0.51	
480	6/17/2004	6:42:39 PM		25.976	26.819	24.491	27.961	26.677		46.86	48.567	12.615	34.239	-1.222	-6.005		49.364	0.221	14.643	0.004		512.9	8.54861	47.1	12.1	40.5	2.796	0.033	0.033	0.001	0.824	0.70	
481	6/17/2004	6:43:39 PM		26.02	26.803	24.486	27.935	26.626		46.234	48.623	12.077	34.129	-1.222	-4.629		47.662	0.145	14.643	0.004		513.9	8.56528	47.2	11.7	40.2	2.770	0.022	0.022	0.001	0.546	0.46	
482	6/17/2004	6:44:39 PM		26.071	26.814	24.466	27.956	26.612		47.566	48.401	11.999	35.6	-1.219	-6.161		48.299	0.15	14.643	0.004		514.9	8.58194	46.9	11.8	41.6	2.867	0.022	0.023	0.001	0.546	0.46	
483	6/17/2004	6:45:39 PM		26.03	26.788	24.415	27.915	26.591		46.103	46.94	13.148	33.018	-1.222	-6.513		41.826	0.171	14.643	0.004		515.9	8.59861	45.5	10.3	39.6	2.728	0.025	0.026	0.001	0.655	0.56	
484	6/17/2004	6:46:39 PM		26.031	26.804	24.396	27.891	26.657		47.329	48.295	12.275	35.062	-1.219	-6.58		47.281	0.169	14.643	0.004		516.9	8.61528	46.8	11.6	41.2	2.840	0.025	0.026	0.001	0.622	0.53	
485	6/17/2004	6:47:39 PM		25.948	26.812	24.399	27.994	26.714		46.889	47.823	12.546	34.395	-1.219	-6.302		46.603	0.157	14.643	0.004		517.9	8.63194	46.4	11.4	40.6	2.802	0.023	0.024	0.001	0.586	0.50	
486	6/17/2004	6:48:39 PM		25.96	26.808	24.375	28.045	26.786		46.863	48.057	12.603	34.231	-1.222	-5.808		51.394	0.109	14.643	0.004		518.9	8.64861	46.6	12.6	40.5	2.796	0.016	0.017	0.000	0.408	0.35	
487	6/17/2004	6:49:39 PM		25.951	26.804	24.336	28.081	26.871		47.74	48.586	12.462	35.268	-1.225	-6.441		46.269	0.181	14.643	0.003		519.9	8.66528	47.1	11.3	41.5	2.862	0.027	0.027	0.001	0.662	0.56	
488	6/17/2004	6:50:39 PM		25.896	26.799	24.306	28.136	26.951		46.688	48.441	12.504	34.2	-1.228	-5.247		51.133	0.183	14.643	0.003		520.9	8.68194	47.0	12.5	40.4	2.788	0.027	0.028	0.001	0.688	0.59	
489	6/17/2004	6:51:39 PM		25.948	26.832	24.419	28.168	26.998		47.387	48.337	12.288	35.077	-1.222	-6.591		49.928	0.164	14.643	0.004		521.9	8.69861	46.9	12.2	41.2	2.843	0.024	0.025	0.001	0.603	0.51	
490	6/17/2004	6:52:39 PM		25.945	26.828	24.325	28.215	27		47.058	48.051	12.601	34.479	-1.222	-6.369		51.262	0.161	14.643	0.004		522.9	8.71528	46.6	12.6	40.8	2.811	0.024	0.024	0.001	0.600	0.51	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	6/17/2004	6:53:39 PM		25.873	26.846	24.313	28.237	26.978		46.431	47.585	12.705	33.673	-1.222	-6.276		47.028	0.167	14.643	0.004		523.9	8.73194	46.1	11.5	40.1	2.761	0.025	0.025	0.001	0.634	0.54	
492	6/17/2004	6:54:39 PM		25.921	26.854	24.291	28.161	26.921		47.163	47.825	12.332	34.867	-1.222	-6.207		38.587	0.151	14.643	0.004		524.9	8.74861	46.4	9.5	41.0	2.828	0.023	0.023	0.001	0.560	0.48	
493	6/17/2004	6:55:39 PM		25.889	26.863	24.275	28.115	26.885		46.649	47.539	12.26	34.441	-1.222	-6.349		53.912	0.189	14.643	0.004		525.9	8.76528	46.1	13.2	40.5	2.795	0.028	0.029	0.001	0.709	0.60	
494	6/17/2004	6:56:39 PM		25.92	26.863	24.255	28.1	26.821		46.085	47.089	12.816	33.263	-1.219	-6.175		50.751	0.144	14.643	0.004		526.9	8.78194	45.6	12.4	39.7	2.735	0.021	0.022	0.001	0.553	0.47	
495	6/17/2004	6:57:39 PM		25.922	26.865	24.247	28.067	26.838		46.471	47.216	12.418	34.137	-1.222	-6.525		56.694	0.172	14.643	0.004		527.9	8.79861	45.7	13.9	40.3	2.779	0.026	0.026	0.001	0.650	0.55	
496	6/17/2004	6:58:39 PM		25.937	26.865	24.267	28.092	26.808		46.678	47.506	12.199	34.535	-1.225	-6.369		52.652	0.167	14.643	0.003		528.9	8.81528	46.0	12.9	40.6	2.800	0.025	0.025	0.001	0.626	0.53	
497	6/17/2004	6:59:39 PM		25.908	26.871	24.263	28.078	26.789		46.473	47.473	12.02	34.516	-1.219	-6.19		43.828	0.175	14.643	0.004		529.9	8.83194	46.0	10.7	40.5	2.792	0.026	0.027	0.001	0.658	0.56	
498	6/17/2004	7:00:39 PM		25.87	26.878	24.22	28.04	26.77		46.622	47.734	11.985	34.609	-1.225	-6.325		50.81	0.178	14.643	0.004		530.9	8.84861	46.3	12.5	40.6	2.800	0.027	0.027	0.001	0.668	0.57	
499	6/17/2004	7:01:39 PM		25.901	26.879	24.216	28.057	26.762		46.917	48.005	11.751	35.179	-1.222	-6.25		52.668	0.153	14.643	0.004		531.9	8.86528	46.5	12.9	41.0	2.830	0.023	0.023	0.001	0.568	0.48	
500	6/17/2004	7:02:39 PM		25.786	26.859	24.171	27.972	26.742		46.711	47.678	12.243	34.541	-1.228	-6.158		43.922	0.161	14.643	0.003		532.9	8.88194	46.2	10.8	40.6	2.801	0.024	0.025	0.001	0.605	0.51	
501	6/17/2004	7:03:39 PM		25.828	26.886	24.188	27.948	26.719		46.61	47.823	11.943	34.631	-1.222	-6.036		51.077	0.156	14.643	0.004		533.9	8.89861	46.4	12.5	40.6	2.801	0.023	0.024	0.001	0.586	0.50	
502	6/17/2004	7:04:39 PM		25.828	26.876	24.153	27.983	26.714		47.541	48.449	12.127	35.454	-1.222	-6.262		45.91	0.158	14.643	0.004		534.9	8.91528	47.0	11.3	41.5	2.861	0.024	0.024	0.001	0.581	0.49	
503	6/17/2004	7:05:39 PM		25.852	26.87	24.137	27.938	26.718		47.443	48.343	12.191	35.284	-1.222	-6.461		47.009	0.174	14.643	0.004		535.9	8.93194	46.9	11.5	41.4	2.852	0.026	0.027	0.001	0.643	0.55	
504	6/17/2004	7:06:39 PM		25.792	26.88	24.132	27.918	26.698		46.541	47.587	12.785	33.757	-1.222	-6.314		51.544	0.174	14.643	0.003		536.9	8.94861	46.1	12.6	40.1	2.768	0.026	0.027	0.001	0.662	0.56	
505	6/17/2004	7:07:39 PM		25.796	26.864	24.171	27.892	26.652		46.506	47.564	12.165	34.344	-1.222	-6.273		50.566	0.16	14.643	0.004		537.9	8.96528	46.1	12.4	40.4	2.787	0.024	0.024	0.001	0.604	0.51	
506	6/17/2004	7:08:39 PM		25.805	26.863	24.155	27.895	26.651		46.823	47.404	12.166	34.742	-1.222	-6.245		45.334	0.15	14.643	0.004		538.9	8.98194	45.9	11.1	40.8	2.812	0.022	0.023	0.001	0.562	0.48	
507	6/17/2004	7:09:39 PM		25.784	26.867	24.129	27.884	26.625		46.699	47.568	12.044	34.656	-1.225	-6.383		53.403	0.179	14.643	0.003		539.9	8.99861	46.1	13.1	40.7	2.805	0.027	0.027	0.001	0.672	0.57	
508	6/17/2004	7:10:39 PM		25.791	26.849	24.101	27.857	26.632		46.562	47.286	12.336	34.334	-1.225	-6.224		53.763	0.167	14.643	0.004		540.9	9.01528	45.8	13.2	40.4	2.789	0.025	0.026	0.001	0.631	0.54	
509	6/17/2004	7:11:39 PM		25.826	26.864	24.111	27.897	26.607		46.238	47.129	12.248	33.985	-1.219	-6.47		44.162	0.174	14.643	0.004		541.9	9.03194	45.7	10.8	40.1	2.766	0.026	0.027	0.001	0.663	0.56	
510	6/17/2004	7:12:39 PM		25.812	26.865	24.157	27.803	26.583		46.083	47.172	12.181	33.862	-1.228	-6.181		52.199	0.167	14.643	0.003		542.9	9.04861	45.7	12.8	40.0	2.756	0.025	0.025	0.001	0.638	0.54	
511	6/17/2004	7:13:39 PM		25.791	26.849	24.196	27.762	26.552		46.858	47.771	12.127	34.72	-1.225	-6.343		50.387	0.188	14.643	0.004		543.9	9.06528	46.3	12.3	40.8	2.812	0.028	0.029	0.001	0.703	0.60	
512	6/17/2004	7:14:39 PM		25.706	26.844	24.251	27.797	26.533		46.413	47.609	12.215	34.268	-1.222	-5.984		46.974	0.19	14.643	0.004		544.9	9.08194	46.1	11.5	40.3	2.781	0.028	0.029	0.001	0.717	0.61	
513	6/17/2004	7:15:39 PM		25.704	26.837	24.359	27.809	26.5		46.386	47.512	12.207	34.139	-1.222	-6.123		43.04	0.184	14.643	0.004		545.9	9.09861	46.0	10.5	40.3	2.776	0.027	0.028	0.001	0.694	0.59	
514	6/17/2004	7:16:39 PM		25.728	26.821	24.353	27.804	26.514		46.103	47.129	11.987	34.075	-1.228	-6.146		47.041	0.167	14.643	0.003		546.9	9.11528	45.7	11.5	40.1	2.764	0.025	0.025	0.001	0.633	0.54	
515	6/17/2004	7:17:39 PM		25.85	26.833	24.401	27.816	26.532		46.398	47.473	11.905	34.453	-1.225	-6.285		48.073	0.181	14.643	0.003		547.9	9.13194	46.0	11.8	40.4	2.787	0.027	0.027	0.001	0.679	0.58	
516	6/17/2004	7:18:39 PM		25.872	26.835	24.428	27.843	26.603		46.34	47.477	11.919	34.401	-1.222	-6.109		45.875	0.174	14.643	0.003		548.9	9.14861	46.0	11.2	40.4	2.783	0.026	0.026	0.001	0.653	0.56	
517	6/17/2004	7:19:39 PM		25.854	26.822	24.449	27.864	26.685		46.421	47.404	11.923	34.451	-1.222	-6.259		50.612	0.175	14.643	0.004		549.9	9.16528	45.9	12.4	40.4	2.788	0.026	0.026	0.001	0.655	0.56	
518	6/17/2004	7:20:39 PM		25.766	26.824	24.487	27.907	26.722		46.294	47.707	11.966	34.225	-1.222	-6.227		51.112	0.183	14.643	0.004		550.9	9.18194	46.2	12.5	40.3	2.776	0.027	0.028	0.001	0.688	0.59	
519	6/17/2004	7:21:39 PM		25.804	26.822	24.52	27.969	26.775		46.187	47.321	12.003	34.163	-1.222	-6.198		48.515	0.169	14.643	0.004		551.9	9.19861	45.8	11.9	40.2	2.770	0.025	0.026	0.001	0.636	0.54	
520	6/17/2004	7:22:39 PM		25.835	26.823	24.541	27.99	26.81		46.021	47.873	12.156	33.843	-1.219	-5.259		42.402	0.128	14.643	0.004		552.9	9.21528	46.4	10.4	39.9	2.753	0.019	0.019	0.000	0.484	0.41	
521	6/17/2004	7:23:39 PM		25.854	26.812	24.64	28.029	26.869		46.703	47.84	12.198	34.484	-1.222	-5.973		43.747	0.171	14.643	0.003		553.9	9.23194	46.4	10.7	40.6	2.799	0.025	0.026	0.001	0.634	0.54	
522	6/17/2004	7:24:39 PM		25.893	26.821	24.609	28.088	26.873		46.274	47.24	11.851	34.443	-1.225	-6.337		44.944	0.181	14.643	0.004		554.9	9.24861	45.8	11.0	40.4	2.783	0.027	0.027	0.001	0.676	0.58	
523	6/17/2004	7:25:39 PM		25.914	26.822	24.615	28.064	26.869		46.539	47.419	11.868	34.697	-1.219	-6.366		45.113	0.18	14.643	0.004		555.9	9.26528	45.9	11.1	40.6	2.800	0.027	0.027	0.001	0.668	0.57	
524	6/17/2004	7:26:39 PM		25.967	26.845	24.633	28.067	26.843		46.375	47.384	11.936	34.416	-1.222	-6.169		52.595	0.19	14.643	0.004		556.9	9.28194	45.9	12.9	40.4	2.785	0.028	0.029	0.001	0.709	0.60	
525	6/17/2004	7:27:39 PM		25.92	26.843	24.636	28.04	26.801		46.278	47.545	11.955	34.28	-1.219	-5.932		41.636	0.202	14.643	0.004		557.9	9.29861	46.1	10.2	40.3	2.777	0.030	0.030	0.001	0.755	0.64	
526	6/17/2004	7:28:39 PM		25.972	26.861	24.659	27.968	26.803		46.717	47.663	11.854	34.888	-1.222	-6.299		50.875	0.183	14.643	0.004		558.9	9.31528	46.2	12.5	40.8	2.813	0.027	0.028	0.001	0.675	0.57	
527	6/17/2004	7:29:39 PM		25.949	26.852	24.68	27.925	26.76		46.056	47.292	12.24	33.845	-1.219	-6.045		51.098	0.194	14.643	0.004		559.9	9.33194	45.8	12.5	40.0	2.754	0.029	0.029	0.001	0.731	0.62	
528	6/17/2004	7:30:39 PM		26.003	26.841	24.689	27.984	26.684		45.89	47.187	12.232	33.589	-1.225	-6.013		47.942	0.15	14.643	0.004		560.9	9.34861	45.7	11.7	39.7	2.740	0.022	0.023	0.001	0.568	0.48	
529	6/17/2004	7:31:39 PM		25.966	26.824	24.767	27.921	26.657		45.863	47.066	12.073	33.73	-1.225	-6.103		45.116	0.141	14.643	0.003		561.9	9.36528	45.6	11.1	39.8	2.744	0.021	0.021	0.001	0.532	0.45	
530	6/17/2004	7:32:39 PM		25.964	26.827	24.735	27.91	26.645		46.052	47.184	12.042	33.962	-1.225	-6.002		56.085	0.177	14.643	0.004		562.9	9.38194	45.7	13.7	40.0	2.758	0.026	0.027	0.001	0.665	0.57	
531	6/17/2004	7:33:39 PM		25.967	26.825	24.733	27.868	26.603		45.674	47.162	12.025	33.616	-1.219	-5.493		49.043	0.156	14.643	0.004		563.9	9.39861	45.7	12.0	39.6	2.733	0.023	0.023	0.001	0.591	0.50	
532	6/17/2004	7:34:39 PM		26.02	26.833	24.751	27.895	26.621		46.004	47.064	12.084	33.958	-1.222	-6.227		56.679	0.154	14.643	0.004		564.9	9.41528	45.6	13.9	40.0	2.757	0.023	0.023	0.001	0.578	0.49	
533	6/17/2004	7:35:39 PM		26.026	26.834	24.758	27.882	26.573		45.676	46.832	11.977	33.663	-1.219	-5.981		48.611	0.161	14.643	0.004		565.9	9.43194	45.4	11.9	39.7	2.735	0.024	0.024	0.001	0.609	0.52	
534	6/17/2004	7:36:39 PM		26.003	26.816	24.744	27.829	26.564		46.139	47.085	12.079	34.003	-1.222	-6.184		47.047	0.17	14.643	0.003		566.9	9.44861	45.6	11.5	40.1	2.763	0.025	0.026	0.001	0.637	0.54	
535	6/17/2004	7:37:39 PM		25.999	26.813	24.736	27.805	26.526		46.122	47.257	12.01	34.075	-1.222	-6.152		37.56	0.166	14.643	0.004		567.9	9.46528	45.8	9.2	40.1	2.765	0.025	0.025	0.001	0.622	0.53	
536	6/17/2004	7:38:39 PM		25.941	26.804	24.752	27.757	26.512		46.224	47.249	12.225	33.975	-1.222	-6.077		51.106	0.181	14.643	0.004		568.9	9.48194	45.8	12.5	40.1	2.765	0.027	0.027	0.001	0.678	0.58	
537	6/17/2004	7:39:39 PM		25.968	26.797	24.75	27.739	26.48		45.612	47.106	12.077	33.515	-1.225	-5.493		45.403	0.147	14.643	0.003		569.9	9.49861	45.6	11.1	39.6	2.728	0.022	0.022	0.001	0.558	0.47	
538	6/17/2004	7:40:39 PM		25.99	26.803	24.801	27.756	26.487		45.992	46.845	11.897	34.112	-1.222	-6.288		51.071	0.19	14.643	0.003		570.9	9.51528	45.4	12.5	40.1	2.761	0.028	0.028	0.001	0.711	0.61	
539	6/17/2004	7:41:39 PM		25.977	26.791	24.779	27.679	26.444		45.821	47.18	11.836	33.878	-1.225	-5.886		41.782	0.149	14.643	0.004		571.9	9.53194	45.7	10.2	39.8	2.747	0.022	0.022	0.001	0.561	0.48	
540	6/17/2004	7:42:39 PM		25.94	26.793	24.821	27.701	26.486		45.913	47.044	11.938	33.985	-1.219	-5.984		46.851	0.167	14.643	0.004		572.9	9.54861	45.6	11.5	39.9	2.754	0.025	0.025	0.001	0.626	0.53	
541	6/17/2004	7:43:39 PM		25.992	26.786	24.814	27.748	26.549		45.635	47.176	11.973	33.628	-1.219	-5.556		51.928	0.159	14.643	0.004		573.9	9.56528	45.7	12.7	39.6	2.732	0.024	0.024	0.001	0.601	0.51	
542	6/17/2004	7:44:39 PM		25.996	26.779	24.807	27.777	26.597		45.824	47.22	11.96	33.784	-1.225	-5.652		46.644	0.141	14.643	0.003		574.9	9.58194	45.7	11.4	39.8	2.744	0.021	0.021	0.001	0.531	0.45	
543	6/17/2004	7:45:39 PM		26.011	26.8	24.838	27.867	26.643		46.172	47.493	12.079	33.966	-1.222	-6.201		48.553	0.143	14.643	0.004		575.9	9.59861	46.0	11.9	40.1	2.763	0.021	0.021	0.001	0.535	0.45	
544	6/17/2004	7:46:39 PM		25.986	26.789	24.837	27.906	26.677		46.466	47.454	12.228	34.12	-1.222	-6.071		46.761	0.141	14.643	0.004		576.9	9.61528	46.0	11.5	40.3	2.778	0.021	0.021	0.001	0.524	0.45	
545	6/17/2004	7:47:39 PM		25.976	26.789	24.932	27.931	26.727		46.027	47.079	12.017	33.987	-1.222	-6.129		49.521	0.18	14.643	0.004		577.9	9.63194	45.6	12.1	40.0	2.758	0.027	0.027	0.001	0.672	0.57	
546	6/17/2004	7:48:39 PM		25.972	26.78	24.863	27.967	26.782		45.859	46.963	11.866	33.954	-1.222	-6.216		45.66	0.185	14.643	0.004		578.9	9.64861	45.5	11.2	39.9	2.751	0.028	0.028	0.001	0.694	0.59	
547	6/17/2004	7:49:39 PM		25.992	26.8	24.873	28.032	26.777		46.141	47.296	11.874	34.137	-1.222	-6.112		47.556	0.177	14.643	0.004		579.9	9.66528	45.8	11.7	40.1	2.767	0.026	0.026	0.001	0.660	0.56	
548	6/17/2004	7:50:39 PM		25.987	26.801	24.869	28.013	26.788		45.942	47.104	11.901	33.987	-1.219	-5.979		49.715	0.195	14.643	0.004		580.9	9.68194	45.6	12.2	40.0	2.755	0.029	0.029	0.001	0.730	0.62	
549	6/17/2004	7:51:39 PM		25.983	26.792	24.85	27.984	26.719		46.137	47.236	11.93	34.137	-1.219	-6.138		53.303	0.189	14.643	0.004		581.9	9.69861	45.8	13.1	40.1	2.767	0.028	0.028	0.001	0.705	0.60	
550	6/17/2004	7:52:39 PM		26.072	26.791	24.839	27.918	26.688		45.792	46.867	11.826	33.929	-1.222	-6.019		49.719	0.168	14.643	0.004		582.9	9.71528	45.4	12.2	39.9	2.748	0.025	0.025	0.001	0.631	0.54	
551	6/17/2004	7:53:39 PM		26.07	26.788	24.846	27.881	26.651		45.944	47.129	11.975	33.893	-1.222	-5.953		49.905	0.182	14.643	0.004		583.9	9.73194	45.7	12.2	39.9	2.752	0.027	0.027	0.001	0.683	0.58	
552	6/17/2004	7:54:39 PM		25.973	26.766	24.824	27.864	26.624		46.072	47.299	12.074	33.921	-1.222	-6.074		34.015	0.177	14.643	0.004		584.9	9.74861	45.8	8.3	40.0	2.758	0.026	0.027	0.001	0.663	0.56	
553	6/17/2004	7:55:39 PM		25.972	26.771	24.834	27.828	26.643		45.577	47.404	12.284	33.187	-1.222	-4.811		47.537	0.174	14.643	0.004		585.9	9.76528	45.9	11.6	39.4	2.715	0.026	0.026	0.001	0.662	0.56	
554	6/17/2004	7:56:39 PM		26.02	26.763	24.861	27.751	26.571		45.994	47.141	12.003	33.907	-1.222	-6.245		50.507	0.183	14.643	0.004		586.9	9.78194	45.7	12.4	40.0	2.754	0.027	0.027	0.001	0.686	0.58	
555	6/17/2004	7:57:39 PM		25.993	26.781	24.869	27.744	26.514		46.027	47.015	11.879	34.067	-1.225	-5.909		46.263	0.198	14.643	0.004		587.9	9.79861	45.5	11.3	40.0	2.761	0.030	0.030	0.001	0.740	0.63	
556	6/17/2004	7:58:39 PM		25.973	26.791	24.859	27.694	26.5		45.958	46.988	11.769	34.178	-1.222	-5.941		50.261	0.208	14.643	0.004		588.9	9.81528	45.5	12.3	40.1	2.763	0.031	0.031	0.001	0.777	0.66	
557	6/17/2004	7:59:39 PM		25.982	26.801	24.874	27.713	26.529		46.979	48.194	11.431	35.504	-1.216	-6.161		41.369	0.199	14.643	0.004		589.9	9.83194	46.7	10.1	41.2	2.843	0.030	0.030	0.001	0.722	0.61	
558	6/17/2004	8:00:39 PM		25.975	26.793	24.831	27.686	26.551		47.074	48.202	11.587	35.423	-1.222	-6.094		44.671	0.188	14.643	0.004		590.9	9.84861	46.7	10.9	41.2	2.844	0.028	0.028	0.001	0.683	0.58	
559	6/17/2004	8:01:39 PM		25.97	26.798	24.816	27.746	26.576		46.931	47.868	11.89	35.023	-1.222	-5.97		42.068	0.205	14.643	0.004		591.9	9.86528	46.4	10.3	41.0	2.825	0.031	0.031	0.001	0.750	0.64	
560	6/17/2004	8:02:39 PM		25.981	26.804	24.822	27.816	26.627		46.86	48.196	12.116	34.664	-1.222	-6.158		39.244	0.174	14.643	0.003		592.9	9.88194	46.7	9.6	40.8	2.810	0.026	0.026	0.001	0.640	0.54	

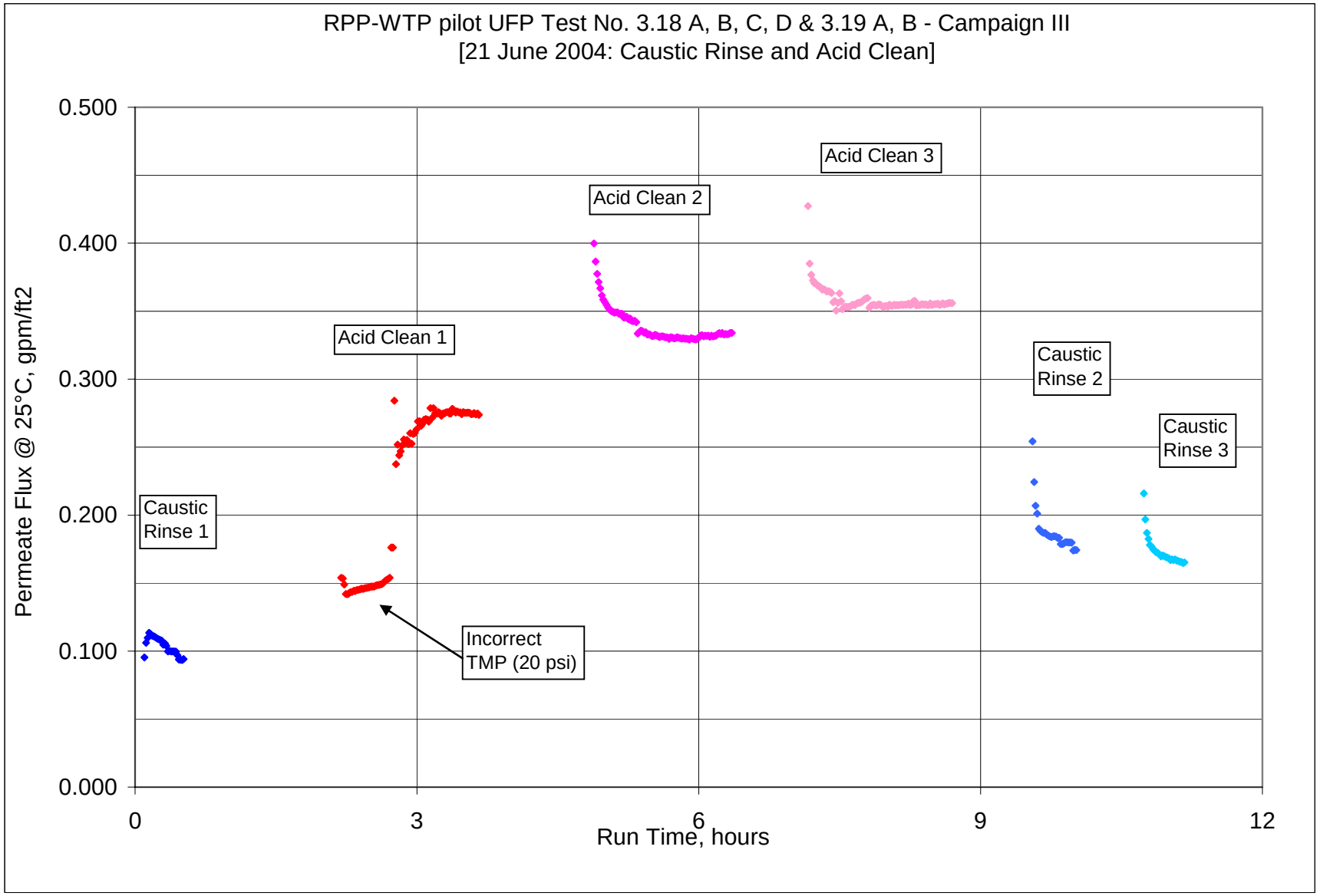
RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	6/17/2004	8:03:39 PM		25.981	26.799	24.812	27.861	26.657		47.808	48.907	12.236	35.547	-1.222	-5.877		43.899	0.221	14.643	0.004		593.9	9.89861	47.4	10.8	41.7	2.874	0.033	0.033	0.001	0.795	0.68	
562	6/17/2004	8:04:19 PM		26.011	26.81	24.883	27.902	26.662		46.299	48.439	11.624	34.603	-1.222	-5.039		50.551	0.195	14.643	0.004		594.6	9.90972	47.0	12.4	40.5	2.789	0.029	0.029	0.001	0.721	0.61	
563	6/17/2004	8:05:19 PM		25.979	26.802	24.845	27.93	26.73		46.325	47.655	12.395	33.86	-1.219	-5.718		45.635	0.159	14.643	0.004		595.6	9.92639	46.2	11.2	40.1	2.764	0.024	0.024	0.001	0.594	0.51	
564	6/17/2004	8:06:19 PM		25.962	26.801	24.833	27.953	26.743		46.539	47.636	11.789	34.697	-1.219	-6.013		48.317	0.188	14.643	0.004		596.6	9.94306	46.2	11.8	40.6	2.800	0.028	0.028	0.001	0.693	0.59	
565	6/17/2004	8:07:19 PM		26.002	26.801	24.838	27.958	26.773		46.35	47.798	12.321	34.022	-1.219	-5.739		47.55	0.165	14.643	0.004		597.6	9.95972	46.3	11.7	40.2	2.771	0.025	0.025	0.001	0.615	0.52	
566	6/17/2004	8:08:19 PM		26.013	26.816	24.864	28.013	26.829		45.747	47.137	13.06	32.647	-1.219	-5.545		48.674	0.121	14.643	0.004		598.6	9.97639	45.7	11.9	39.2	2.702	0.018	0.018	0.000	0.462	0.39	
567	6/17/2004	8:09:19 PM		26.001	26.8	24.843	27.967	26.822		46.663	47.854	12.548	34.104	-1.222	-5.869		46.736	0.149	14.643	0.004		599.6	9.99306	46.4	11.5	40.4	2.784	0.022	0.022	0.001	0.553	0.47	
568	6/17/2004	8:10:19 PM		25.991	26.794	24.837	27.931	26.811		46.593	48.094	12.308	34.204	-1.225	-6.097		48.05	0.139	14.643	0.004		600.6	10.0097	46.6	11.8	40.4	2.785	0.021	0.021	0.001	0.515	0.44	
569	6/17/2004	8:11:19 PM		25.991	26.795	24.873	27.952	26.732		46.945	47.757	12.258	34.677	-1.216	-5.967		48.399	0.209	14.643	0.004		601.6	10.0264	46.3	11.9	40.8	2.814	0.031	0.031	0.001	0.766	0.65	
570	6/17/2004	8:12:19 PM		25.992	26.796	24.904	27.863	26.643		46.477	47.419	11.968	34.5	-1.222	-5.953		58.73	0.196	14.643	0.004		602.6	10.0431	45.9	14.4	40.5	2.792	0.029	0.029	0.001	0.724	0.62	
571	6/17/2004	8:13:19 PM		25.996	26.79	24.903	27.837	26.613		46.439	47.684	12.374	33.989	-1.225	-6.005		46.44	0.188	14.643	0.004		603.6	10.0597	46.2	11.4	40.2	2.773	0.028	0.028	0.001	0.699	0.59	
572	6/17/2004	8:14:19 PM		26.023	26.806	24.945	27.789	26.529		46.118	47.541	12.568	33.445	-1.216	-6.06		45.433	0.204	14.643	0.004		604.6	10.0764	46.1	11.1	39.8	2.743	0.030	0.030	0.001	0.766	0.65	
573	6/17/2004	8:15:19 PM		26.018	26.781	24.92	27.684	26.47		46.269	47.28	12.429	33.831	-1.222	-5.794		44.711	0.223	14.643	0.003		605.6	10.0931	45.8	11.0	40.1	2.761	0.033	0.033	0.001	0.832	0.71	
574	6/17/2004	8:16:19 PM		26.03	26.778	24.936	27.646	26.441		46.655	47.875	12.43	34.153	-1.222	-5.979		50.455	0.207	14.643	0.003		606.6	10.1097	46.4	12.4	40.4	2.786	0.031	0.031	0.001	0.765	0.65	
575	6/17/2004	8:17:19 PM		26.006	26.77	24.943	27.623	26.403		47.084	48.289	12.182	34.851	-1.222	-6.019		53.555	0.187	14.643	0.004		607.6	10.1264	46.8	13.1	41.0	2.825	0.028	0.028	0.001	0.682	0.58	
576	6/17/2004	8:18:19 PM		26.001	26.75	24.923	27.578	26.398		47.176	48.749	12.172	34.812	-1.222	-5.953		48.399	0.208	14.643	0.003		608.6	10.1431	47.3	11.9	41.0	2.826	0.031	0.031	0.001	0.758	0.65	
577	6/17/2004	8:19:19 PM		26.051	26.755	24.948	27.608	26.423		47.192	48.242	12.158	34.999	-1.222	-5.788		48.628	0.129	14.643	0.004		609.6	10.1597	46.8	11.9	41.1	2.833	0.019	0.019	0.000	0.469	0.40	
578	6/17/2004	8:20:19 PM		26.051	26.73	24.943	27.618	26.453		46.962	48.049	12.485	34.401	-1.222	-6.019		46.674	0.179	14.643	0.004		610.6	10.1764	46.6	11.4	40.7	2.805	0.027	0.027	0.001	0.657	0.56	
579	6/17/2004	8:21:19 PM		26.014	26.707	24.98	27.615	26.446		46.276	47.39	12.24	34.046	-1.219	-5.958		56.974	0.191	14.643	0.004		611.6	10.1931	45.9	14.0	40.2	2.769	0.028	0.028	0.001	0.709	0.60	
580	6/17/2004	8:22:19 PM		26.034	26.707	24.97	27.64	26.475		46.077	48.061	12.102	33.812	-1.222	-5.403		44.901	0.193	14.643	0.004		612.6	10.2097	46.6	11.0	39.9	2.754	0.029	0.029	0.001	0.721	0.61	
581	6/17/2004	8:23:19 PM		26.035	26.688	24.961	27.691	26.521		46.63	47.779	11.965	34.615	-1.219	-5.727		50.975	0.213	14.643	0.004		613.6	10.2264	46.3	12.5	40.6	2.801	0.032	0.032	0.001	0.783	0.67	
582	6/17/2004	8:24:19 PM		26.057	26.701	24.984	27.683	26.559		46.939	48.275	11.872	34.99	-1.219	-5.993		43.445	0.211	14.643	0.004		614.6	10.2431	46.8	10.6	41.0	2.824	0.031	0.031	0.001	0.768	0.65	
583	6/17/2004	8:25:19 PM		26.038	26.686	24.975	27.659	26.584		45.962	47.384	12.176	33.667	-1.219	-5.545		46.793	0.194	14.643	0.004		615.6	10.2597	45.9	11.5	39.8	2.745	0.029	0.029	0.001	0.727	0.62	
584	6/17/2004	8:26:19 PM		26.026	26.685	24.963	27.668	26.573		46.804	48.422	12.029	34.676	-1.225	-5.892		47.587	0.169	14.643	0.003		616.6	10.2764	46.9	11.7	40.7	2.809	0.025	0.025	0.001	0.619	0.53	
585	6/17/2004	8:27:19 PM		26.04	26.673	25.026	27.706	26.591		46.452	48.032	12.211	34.19	-1.222	-5.143		45.781	0.202	14.643	0.003		617.6	10.2931	46.6	11.2	40.3	2.780	0.030	0.030	0.001	0.746	0.64	
586	6/17/2004	8:28:19 PM		26.073	26.666	25.005	27.749	26.599		46.487	47.68	12.316	34.077	-1.222	-6.057		51.029	0.188	14.643	0.004		618.6	10.3097	46.2	12.5	40.3	2.777	0.028	0.028	0.001	0.696	0.59	
587	6/17/2004	8:29:19 PM		26.068	26.681	25.015	27.779	26.639		46.22	47.526	12.204	33.948	-1.219	-5.863		54.517	0.188	14.643	0.004		619.6	10.3264	46.1	13.4	40.1	2.764	0.028	0.028	0.001	0.699	0.59	
588	6/17/2004	8:30:19 PM		26.063	26.686	25.015	27.839	26.649		46.116	47.79	11.929	34.114	-1.219	-5.23		46.215	0.197	14.643	0.004		620.6	10.3431	46.3	11.3	40.1	2.766	0.029	0.029	0.001	0.732	0.62	
589	6/17/2004	8:31:19 PM		26.082	26.681	24.994	27.823	26.663		46.317	48.09	11.821	34.346	-1.222	-5.955		53.294	0.186	14.643	0.003		621.6	10.3597	46.6	13.1	40.3	2.781	0.028	0.028	0.001	0.688	0.59	
590	6/17/2004	8:32:19 PM		26.102	26.691	25.004	27.808	26.663		46.367	47.439	11.937	34.414	-1.222	-5.724		40.641	0.158	14.643	0.004		622.6	10.3764	46.0	10.0	40.4	2.785	0.024	0.024	0.001	0.583	0.50	
591	6/17/2004	8:33:19 PM		26.082	26.681	24.969	27.758	26.584		46.715	48.096	12.118	34.492	-1.225	-5.713		39.382	0.173	14.643	0.004		623.6	10.3931	46.6	9.7	40.6	2.799	0.026	0.026	0.001	0.636	0.54	
592	6/17/2004	8:34:19 PM		26.067	26.681	24.989	27.718	26.539		46.13	47.752	12.35	33.669	-1.219	-5.825		43.562	0.181	14.643	0.004		624.6	10.4097	46.3	10.7	39.9	2.751	0.027	0.027	0.001	0.677	0.58	
593	6/17/2004	8:35:19 PM		26.038	26.686	25	27.654	26.465		45.676	47.686	12.157	33.404	-1.222	-4.868		44.354	0.22	14.643	0.004		625.6	10.4264	46.2	10.9	39.5	2.726	0.033	0.033	0.001	0.830	0.71	
594	6/17/2004	8:36:19 PM		26.044	26.677	25.005	27.605	26.436		45.896	47.8	12.14	33.661	-1.219	-4.9		48.545	0.197	14.643	0.004		626.6	10.4431	46.3	11.9	39.8	2.743	0.029	0.029	0.001	0.738	0.63	
595	6/17/2004	8:37:19 PM		26.045	26.653	24.996	27.531	26.367		46.168	48.186	12.187	33.89	-1.222	-5.053		37.296	0.184	14.643	0.004		627.6	10.4597	46.7	9.1	40.0	2.760	0.027	0.027	0.001	0.685	0.58	
596	6/17/2004	8:38:19 PM		26.036	26.635	24.988	27.448	26.263		45.575	47.622	12.169	33.304	-1.225	-5.019		57.19	0.183	14.643	0.003		628.6	10.4764	46.1	14.0	39.4	2.719	0.027	0.027	0.001	0.692	0.59	
597	6/17/2004	8:39:19 PM		26.039	26.627	24.99	27.415	26.216		45.826	47.827	12.255	33.515	-1.222	-4.987		52.178	0.181	14.643	0.004		629.6	10.4931	46.4	12.8	39.7	2.735	0.027	0.027	0.001	0.680	0.58	
598	6/17/2004	8:40:19 PM		26.047	26.636	25.009	27.419	26.214		45.919	48.239	12.143	33.677	-1.222	-4.808		53.225	0.178	14.643	0.004		630.6	10.5097	46.8	13.0	39.8	2.744	0.027	0.027	0.001	0.667	0.57	
599	6/17/2004	8:41:19 PM		26.057	26.631	25.024	27.544	26.115		45.805	48.014	12.113	33.605	-1.222	-4.941		43.309	0.17	14.643	0.004		631.6	10.5264	46.5	10.6	39.7	2.738	0.025	0.025	0.001	0.638	0.54	
600	6/17/2004	8:42:19 PM		26.036	26.605	25.018	27.608	26.029		45.853	48.258	12.191	33.519	-1.222	-4.741		41.013	0.188	14.643	0.004		632.6	10.5431	46.8	10.1	39.7	2.736	0.028	0.028	0.001	0.706	0.60	
601	6/17/2004	8:43:19 PM		26.051	26.585	25.013	27.643	26.049		45.264	47.873	12.169	32.93	-1.222	-4.698		50.568	0.158	14.643	0.004		633.6	10.5597	46.4	12.4	39.1	2.696	0.024	0.024	0.001	0.602	0.51	
602	6/17/2004	8:44:19 PM		26.051	26.575	25.008	27.692	26.009		46.143	48.563	12.211	33.813	-1.222	-4.793		48.242	0.179	14.643	0.004		634.6	10.5764	47.1	11.8	40.0	2.756	0.027	0.027	0.001	0.667	0.57	
603	6/17/2004	8:45:19 PM		26.081	26.57	25.023	27.762	26.029		45.822	48.177	12.208	33.488	-1.219	-5.007		48.803	0.18	14.643	0.004		635.6	10.5931	46.7	12.0	39.7	2.734	0.027	0.027	0.001	0.676	0.58	
604	6/17/2004	8:46:19 PM		26.09	26.539	25.002	27.776	26.063		45.822	48.25	12.151	33.542	-1.222	-5.03		48.841	0.176	14.643	0.004		636.6	10.6097	46.8	12.0	39.7	2.736	0.026	0.026	0.001	0.661	0.56	
605	6/17/2004	8:47:19 PM		26.149	26.527	25.005	27.8	26.091		46.075	48.376	12.105	33.839	-1.222	-4.978		46.634	0.197	14.643	0.004		637.6	10.6264	46.9	11.4	40.0	2.755	0.029	0.029	0.001	0.735	0.63	
606	6/17/2004	8:48:19 PM		26.154	26.517	25.005	27.84	26.101		44.787	48.219	12.181	32.479	-1.222	-3.952		49.391	0.19	14.643	0.004		638.6	10.6431	46.7	12.1	38.6	2.664	0.028	0.028	0.001	0.733	0.62	
607	6/17/2004	8:49:19 PM		26.127	26.496	24.994	27.843	26.144		45.172	48.258	12.274	32.715	-1.222	-3.232		45.309	0.111	14.643	0.004		639.6	10.6597	46.8	11.1	38.9	2.685	0.017	0.017	0.000	0.425	0.36	
608	6/17/2004	8:50:19 PM		26.113	26.501	25.035	27.894	26.145		46.593	48.468	12.334	34.204	-1.219	-4.975		48.248	0.183	14.643	0.004		640.6	10.6764	47.0	11.8	40.4	2.785	0.027	0.027	0.001	0.675	0.57	
609	6/17/2004	8:51:19 PM		26.07	26.469	25.002	27.896	26.188		46.276	48.438	12.22	33.962	-1.225	-4.637		44.379	0.178	14.643	0.004		641.6	10.6931	47.0	10.9	40.1	2.766	0.027	0.027	0.001	0.661	0.56	
610	6/17/2004	8:52:19 PM		26.064	26.472	25.005	27.925	26.176		46.267	48.211	12.291	33.845	-1.222	-4.938		46.782	0.165	14.643	0.004		642.6	10.7097	46.7	11.5	40.1	2.762	0.025	0.025	0.001	0.614	0.52	
611	6/17/2004	8:53:19 PM		26.073	26.466	25.02	27.949	26.21		46.263	48.312	12.226	33.901	-1.219	-4.996		48.2	0.18	14.643	0.004		643.6	10.7264	46.8	11.8	40.1	2.764	0.027	0.027	0.001	0.669	0.57	
612	6/17/2004	8:54:19 PM		26.063	26.451	25.01	27.929	26.235		46.236	48.163	12.132	34.046	-1.219	-5.001		48.607	0.178	14.643	0.004		644.6	10.7431	46.7	11.9	40.1	2.768	0.027	0.027	0.001	0.661	0.56	
613	6/17/2004	8:55:19 PM		26.068	26.461	25.03	27.959	26.245		46.518	48.718	12.099	34.239	-1.219	-5.001		48.678	0.176	14.643	0.004		645.6	10.7597	47.2	11.9	40.4	2.784	0.026	0.026	0.001	0.649	0.55	
614	6/17/2004	8:56:19 PM		26.047	26.451	25.029	27.973	26.264		45.913	48.26	12.19	33.661	-1.222	-4.842		49.834	0.178	14.643	0.004		646.6	10.7764	46.8	12.2	39.8	2.743	0.027	0.027	0.001	0.666	0.57	
615	6/17/2004	8:57:19 PM		26.036	26.43	24.993	27.957	26.293		46.201	48.666	12.187	33.87	-1.222	-5.094		41.972	0.169	14.643	0.004		647.6	10.7931	47.2	10.3	40.0	2.760	0.025	0.025	0.001	0.629	0.54	
616	6/17/2004	8:58:19 PM		26.096	26.435	25.013	27.987	26.258		46.06	48.615	12.206	33.749	-1.222	-5.065		50.109	0.17	14.643	0.004		648.6	10.8097	47.1	12.3	39.9	2.751	0.025	0.025	0.001	0.635	0.54	
617	6/17/2004	8:59:19 PM		26.096	26.445	25.023	28.017	26.253		45.877	48.594	12.178	33.542	-1.222	-4.978		49.145	0.169	14.643	0.004		649.6	10.8264	47.1	12.0	39.7	2.738	0.025	0.025	0.001	0.634	0.54	
618	6/17/2004	9:00:19 PM		26.066	26.445	25.028	28.012	26.268		45.938	48.604	12.252	33.529	-1.219	-4.923		46.148	0.178	14.643	0.004		650.6	10.8431	47.1	11.3	39.7	2.739	0.027	0.027	0.001	0.667	0.57	
619	6/17/2004	9:01:19 PM		26.051	26.445	25.033	28.032	26.298		45.768	48.42	12.091	33.525	-1.219	-4.984		42.494	0.164	14.643	0.004		651.6	10.8597	46.9	10.4	39.6	2.733	0.024	0.024	0.001	0.616	0.52	
620	6/17/2004	9:02:19 PM		26.031	26.449	25.032	28.046	26.322		45.718	48.532	12.195	33.361	-1.216	-4.938		46.423	0.169	14.643	0.004		652.6	10.8764	47.1	11.4	39.5	2.726	0.025	0.025	0.001	0.637	0.54	
621	6/17/2004	9:03:19 PM		26.027	26.456	25.039	28.053	26.294		45.84	48.615	12.155	33.56	-1.216	-5.027		45.75	0.173	14.643	0.004		653.6	10.8931	47.1	11.2	39.7	2.737	0.026	0.026	0.001	0.649	0.55	
622	6/17/2004	9:04:19 PM		26.066	26.439	25.012	28.031	26.208		-2.756	0.582	1.265	-4.068	-1.222	-5.201		-0.064	0.003	14.643	0.004		654.6	10.9097	-0.9	0.0	-3.4	-0.235	0.000	0.000	0.000	-0.131	-0.11	
623	6/17/2004	9:05:19 PM		26.13	26.418	24.991	27.846	26.122		-2.635	0.128	1.025	-3.717	-1.222	-5.198		-0.068	0.003	14.643	0.004		655.6	10.9264	-1.3	0.0	-3.2	-0.219	0.000	0.000	0.000	-0.141	-0.12	
624	6/17/2004	9:06:19 PM		26.2	26.423	25.016	27.626	26.012		-2.279	-0.01	0.985	-3.333	-1.216	-5.189		-0.066	0.003	14.643	0.004		656.6	10.9431	-1.5	0.0	-2.8	-0.193	0.000	0.000	0.000	-0.159	-0.14	
625	6/17/2004	9:07:19 PM		26.222	26.391	24.999	27.369	25.82		-1.961	-0.104	0.967	-3.015	-1.219	-5.186		-0.073	0.003	14.643	0.004		657.6	10.9597	-1.6	0.0	-2.5	-0.172	0.000	0.000	0.000	-0.180	-0.15	
626	6/17/2004	9:08:19 PM		26.241	26.369	24.987	27.163	25.719		-1.692	-0.18	0.952	-2.75	-1.225	-5.186		-0.075	0.003	14.643	0.004		658.6	10.9764	-1.7	0.0	-2.2	-0.153	0.000	0.000	0.000	-0.201	-0.17	
627	6/17/2004	9:09:19 PM		26.281	26.38	25.027	27.113	25.684		-1.47	-0.251	0.94	-2.528	-1.222	-5.178		-0.072	0.003	14.643	0.004		659.6	10.9931	-1.7	0.0	-2.0	-0.138	0.000	0.000	0.000	-0.224	-0.19	
628	6/17/2004	9:10:19 PM		26.278	26.342	25.03	26.961	25.642		-1.292	-0.325	0.928	-2.346	-1.222	-5.175		-0.073	0.003	14.643	0.004		660.6	11.0097	-1.8	0.0	-1.8	-0.125	0.000	0.000	0.000	-0.246	-0.21	

RUN # WASH1 AND WASH 2; CAMPAIGN III SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	Wash 1 and 2																																
632		Averages		25.809	26.430	24.456	27.693	26.470		45.657	48.431	13.149	32.668	-0.799	-5.880		47.728	0.125	14.643	0.004				46.96	11.70	39.16	2.700	0.019	0.019	0.000	0.473	0.402	
633		Maximum		26.281	26.886	25.627	28.328	27.000		53.501	55.102	20.202	37.956	39.497	93.981		64.030	0.366	14.643	0.005				53.63	15.69	45.13	3.112	0.055	0.054	0.002	1.740	1.481	
634		Median		25.815	26.614	24.369	27.778	26.523		46.411	48.889	12.918	33.343	-1.222	-6.579		48.232	0.111	14.643	0.004				47.42	11.82	39.95	2.754	0.017	0.017	0.000	0.427	0.364	
635		Minimum		25.024	24.739	23.593	26.379	25.545		-2.756	-0.325	0.928	-4.068	-1.228	-8.048		-25.023	0.003	14.643	0.003				-1.80	-6.13	-3.41	-0.235	0.000	0.000	0.000	-0.246	-0.209	
636		2 x Std Dev		0.510	0.922	0.814	0.735	0.507		12.451	10.832	3.792	10.326	7.083	12.245		14.629	0.090	0.000	0.001				10.83	3.59	11.30	0.779	0.013	0.013	0.000	0.351	0.298	
637	Number of Points Used*			606	606	606	606	606		606	606	606	606	606	606		606	606	606	606				606	606	606	606	606	606	606	606	606	
638		* Backpulse points in box are not included																															
639																																	
640	Wash 1																																
641		Averages		25.695	26.252	24.264	27.587	26.406		46.332	49.626	13.745	32.842	-0.799	-6.163		48.123	0.101	14.643	0.004				48.15	11.79	39.59	2.729	0.015	0.015	0.000	0.386	0.328	
642		Maximum		26.185	26.805	25.627	28.328	26.887		53.501	55.102	20.202	37.956	38.863	93.981		64.030	0.366	14.643	0.005				53.63	15.69	45.13	3.112	0.055	0.054	0.002	1.740	1.481	
643		Median		25.743	26.404	24.194	27.634	26.412		46.474	49.680	13.313	33.064	-1.222	-7.074		48.185	0.102	14.643	0.004				48.21	11.81	39.76	2.742	0.015	0.015	0.000	0.389	0.331	
644		Minimum		25.024	24.739	23.593	26.379	25.545		9.142	47.261	11.245	-2.276	-1.228	-8.048		-25.023	0.003	14.643	0.003				45.79	-6.13	3.43	0.237	0.000	0.000	0.000	0.012	0.010	
645		2 x Std Dev		0.496	1.009	0.742	0.823	0.488		6.577	2.519	2.945	6.654	6.862	14.799		11.290	0.050	0.000	0.001				2.52	2.77	6.48	0.447	0.007	0.007	0.000	0.204	0.174	
646	Number of Points Used*			372	372	372	372	372		372	372	372	372	372	372		372	372	372	372				372	372	372	372	372	372	372	372	372	
647		* Backpulse points in box are not included																															
648																																	
649	Wash 2																																
650		Averages		25.991	26.713	24.762	27.863	26.573		44.954	46.450	12.226	32.733	-1.199	-5.814		47.152	0.167	14.643	0.004				44.98	11.56	38.84	2.678	0.025	0.025	0.001	0.616	0.525	
651		Maximum		26.281	26.886	25.039	28.237	27.000		49.017	50.343	14.648	36.047	0.576	0.555		62.497	0.262	14.643	0.004				48.87	15.32	42.53	2.932	0.039	0.039	0.001	1.034	0.880	
652		Median		26.013	26.741	24.838	27.892	26.621		46.317	47.725	12.240	33.862	-1.222	-6.045		48.317	0.171	14.643	0.004				46.25	11.84	40.08	2.764	0.025	0.026	0.001	0.639	0.544	
653		Minimum		25.506	26.342	24.101	26.961	25.642		-2.756	-0.325	0.928	-4.068	-1.228	-6.811		-0.075	0.003	14.643	0.003				-1.80	-0.02	-3.41	-0.235	0.000	0.000	0.000	-0.246	-0.209	
654		2 x Std Dev		0.256	0.247	0.491	0.376	0.474		16.743	16.581	4.203	12.823	0.399	1.929		18.846	0.074	0.000	0.001				16.58	4.62	14.77	1.018	0.011	0.011	0.000	0.342	0.291	
655	Number of Points Used*			229	229	229	229	229		229	229	229	229	229	229		229	229	229	229				229	229	229	229	229	229	229	231	231	
656		* Backpulse points in box are not included																															

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING



RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A	6.707	FT2							
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	6/21/2004	9:27:16 AM		24.782	24.021	25.317	25.107	24.404		7.605	26.986	8.631	-1.057	14.272	67.403		44.227	0.003	14.643	0.004		0	0	25.5	10.8	3.3	0.226	0.000	0.000	0.000	0.135	0.12	
18	6/21/2004	9:28:16 AM		24.782	24.031	25.423	25.058	24.41		7.311	27.019	8.587	-1.541	14.382	66.935		53.375	0.003	14.643	0.011		1.00	0.01667	25.5	13.1	2.9	0.199	0.000	0.000	0.000	0.153	0.13	
19	6/21/2004	9:29:16 AM		24.368	24.043	25.514	25.129	24.451		4.488	26.242	5.474	-1.026	16.637	30.712		52.333	0.003	14.643	0.004		2.00	0.03333	24.8	12.8	1.7	0.119	0.000	0.000	0.000	0.255	0.22	
20	6/21/2004	9:30:16 AM		24.394	24.058	25.61	25.165	24.532		4.26	26.168	5.422	-1.24	16.782	21.3		52.176	0.003	14.643	0.004		3.00	0.05	24.7	12.8	1.5	0.104	0.000	0.000	0.000	0.291	0.25	
21	6/21/2004	9:31:16 AM		24.409	24.063	25.675	25.16	24.572		4.381	26.298	5.367	-0.999	16.866	0.341		57.07	0.003	14.643	0.005		4.00	0.06667	24.8	14.0	1.7	0.117	0.000	0.000	0.000	0.260	0.22	
22	6/21/2004	9:32:16 AM		25.536	24.08	25.771	25.176	24.628		11.695	26.12	5.427	6.177	9.31	0.402		49.496	0.397	14.643	0.004		5.00	0.08333	24.6	12.1	8.9	0.616	0.059	0.058	0.006	6.482	5.52	
23	6/21/2004	9:33:16 AM		25.943	24.087	25.868	25.204	24.62		18.288	26.074	5.415	12.744	2.562	0.561		52.232	0.655	14.643	0.004		6.00	0.1	24.6	12.8	15.5	1.070	0.098	0.095	0.006	6.142	5.23	
24	6/21/2004	9:34:16 AM		26.095	24.095	25.926	25.236	24.693		20.153	28.387	4.312	15.745	3.057	0.451		45.216	0.73	14.643	0.004		7.00	0.11667	26.9	11.1	17.9	1.238	0.109	0.106	0.006	5.908	5.03	
25	6/21/2004	9:35:16 AM		26.209	24.103	25.949	25.26	24.672		21.382	30.224	4.277	17.027	3.659	0.803		41.336	0.756	14.643	0.003		8.00	0.13333	28.8	10.1	19.2	1.324	0.113	0.110	0.006	5.715	4.86	
26	6/21/2004	9:36:16 AM		26.335	24.145	26.051	25.306	24.698		22.527	31.915	4.534	17.899	4.299	1.165		48.649	0.784	14.643	0.004		9.00	0.15	30.4	11.9	20.2	1.394	0.117	0.113	0.006	5.615	4.78	
27	6/21/2004	9:37:16 AM		26.42	24.155	26.141	25.316	24.713		22.917	32.191	4.493	18.322	4.183	1.09		42.126	0.779	14.643	0.004		10.00	0.16667	30.7	10.3	20.6	1.422	0.116	0.112	0.005	5.455	4.64	
28	6/21/2004	9:38:16 AM		26.503	24.179	26.239	25.355	24.722		23.181	32.433	4.486	18.595	4	0.977		42.118	0.772	14.643	0.004		11.00	0.18333	31.0	10.3	20.9	1.440	0.115	0.111	0.005	5.322	4.53	
29	6/21/2004	9:39:16 AM		26.569	24.174	26.3	25.341	24.692		23.291	32.363	4.393	18.798	3.986	0.954		41.549	0.771	14.643	0.004		12.00	0.2	30.9	10.2	21.0	1.451	0.115	0.111	0.005	5.267	4.48	
30	6/21/2004	9:40:16 AM		26.648	24.199	26.384	25.4	24.702		23.4	32.342	4.436	18.856	3.867	0.899		45.149	0.768	14.643	0.004		13.00	0.21667	30.9	11.1	21.1	1.457	0.115	0.110	0.005	5.213	4.44	
31	6/21/2004	9:41:16 AM		26.702	24.198	26.428	25.434	24.72		23.5	32.502	4.387	18.989	3.772	0.827		42.033	0.763	14.643	0.004		14.00	0.23333	31.0	10.3	21.2	1.465	0.114	0.109	0.005	5.145	4.38	
32	6/21/2004	9:42:16 AM		26.776	24.213	26.488	25.499	24.73		23.463	32.367	4.367	18.987	3.725	0.792		45.987	0.76	14.643	0.004		15.00	0.25	30.9	11.3	21.2	1.463	0.113	0.109	0.005	5.121	4.36	
33	6/21/2004	9:43:16 AM		26.831	24.228	26.533	25.514	24.73		23.629	32.398	4.347	19.158	3.604	0.751		42.491	0.757	14.643	0.003		16.00	0.26667	30.9	10.4	21.4	1.475	0.113	0.108	0.005	5.054	4.30	
34	6/21/2004	9:44:16 AM		26.922	24.253	26.613	25.505	24.746		23.645	32.386	4.33	19.201	3.549	0.717		46.461	0.755	14.643	0.004		17.00	0.28333	30.9	11.4	21.4	1.477	0.113	0.108	0.005	5.022	4.27	
35	6/21/2004	9:45:16 AM		26.967	24.274	26.679	25.535	24.852		23.595	31.695	4.614	18.915	3.158	0.477		50.416	0.736	14.643	0.004		18.00	0.3	30.2	12.4	21.3	1.465	0.110	0.105	0.005	4.926	4.19	
36	6/21/2004	9:46:16 AM		27.038	24.3	26.764	25.586	24.852		23.672	32.048	4.47	19.092	3.332	0.566		42.056	0.744	14.643	0.004		19.00	0.31667	30.6	10.3	21.4	1.474	0.111	0.106	0.005	4.938	4.20	
37	6/21/2004	9:47:16 AM		27.085	24.317	26.831	25.593	24.864		23.649	31.832	4.58	18.946	3.097	0.439		44.258	0.734	14.643	0.004		20.00	0.33333	30.4	10.8	21.3	1.468	0.109	0.104	0.005	4.882	4.15	
38	6/21/2004	9:48:16 AM		27.127	24.314	26.859	25.565	24.862		23.243	30.694	4.788	18.349	2.414	0.049		46.743	0.705	14.643	0.003		21.00	0.35	29.2	11.5	20.8	1.434	0.105	0.100	0.005	4.798	4.08	
39	6/21/2004	9:49:16 AM		27.187	24.345	26.909	25.586	24.857		23.002	30.51	4.725	18.144	2.481	0.084		44.385	0.708	14.643	0.004		22.00	0.36667	29.0	10.9	20.6	1.418	0.106	0.100	0.005	4.864	4.14	
40	6/21/2004	9:50:16 AM		27.219	24.351	26.941	25.597	24.874		23.183	30.823	4.617	18.486	2.481	0.084		51.408	0.707	14.643	0.004		23.00	0.38333	29.4	12.6	20.8	1.436	0.105	0.100	0.005	4.792	4.08	
41	6/21/2004	9:51:16 AM		27.27	24.363	26.972	25.624	24.895		23.475	30.924	4.763	18.579	2.417	0.066		44.356	0.707	14.643	0.004		24.00	0.4	29.5	10.9	21.0	1.450	0.105	0.100	0.005	4.744	4.04	
42	6/21/2004	9:52:16 AM		27.311	24.379	27.028	25.66	24.901		23.21	30.788	4.606	18.48	2.481	0.101		46.959	0.709	14.643	0.003		25.00	0.41667	29.3	11.5	20.8	1.437	0.106	0.100	0.005	4.791	4.08	
43	6/21/2004	9:53:16 AM		27.352	24.385	27.034	25.661	24.917		23.421	30.931	4.63	18.671	2.411	0.066		52.118	0.707	14.643	0.003		26.00	0.43333	29.5	12.8	21.0	1.451	0.105	0.100	0.005	4.732	4.03	
44	6/21/2004	9:54:16 AM		27.404	24.417	27.101	25.713	24.954		23.002	30.273	4.994	17.858	2.035	-0.185		50.22	0.689	14.643	0.003		27.00	0.45	28.8	12.3	20.4	1.409	0.103	0.097	0.005	4.741	4.03	
45	6/21/2004	9:55:16 AM		27.427	24.431	27.144	25.722	24.953		22.438	29.165	4.647	17.709	1.647	-0.469		47.168	0.668	14.643	0.004		28.00	0.46667	27.7	11.6	20.1	1.384	0.100	0.094	0.005	4.673	3.98	
46	6/21/2004	9:56:16 AM		27.45	24.449	27.172	25.75	24.956		22.324	28.997	4.653	17.54	1.647	-0.448		45.912	0.668	14.643	0.004		29.00	0.48333	27.5	11.3	19.9	1.374	0.100	0.094	0.005	4.702	4.00	
47	6/21/2004	9:57:16 AM		27.469	24.468	27.186	25.759	24.995		22.392	29.125	4.68	17.549	1.586	-0.492		46.573	0.666	14.643	0.003		30.00	0.5	27.7	11.4	20.0	1.377	0.099	0.093	0.005	4.677	3.98	
48	6/21/2004	9:58:16 AM		27.497	24.476	27.2	25.787	24.983		22.594	29.345	4.542	17.951	1.716	-0.425		44.719	0.671	14.643	0.004		31.00	0.51667	27.9	11.0	20.3	1.398	0.100	0.094	0.005	4.641	3.95	
49	6/21/2004	11:29:54 AM		26.529	24.776	26.345	25.651	24.897		21.383	33.165	4.27	17.309	6.615	2.445		47.274	0.917	14.643	0.004		122.63	2.04389	31.7	11.6	19.3	1.334	0.137	0.132	0.007	6.805	5.79	
50	6/21/2004	11:30:54 AM		26.659	24.786	26.455	25.686	24.952		21.254	33.354	4.361	17.036	6.69	2.518		49.419	0.92	14.643	0.004		123.63	2.06056	31.9	12.1	19.1	1.320	0.137	0.132	0.007	6.878	5.85	
51	6/21/2004	11:31:54 AM		26.654	24.796	26.585	25.736	25.037		2.85	33.492	4.238	-1.291	25.554	9.502		40.295	0.003	14.643	0.004		124.63	2.07722	32.0	9.9	0.8	0.054	0.000	0.000	0.001	0.549	0.47	
52	6/21/2004	11:32:54 AM		26.568	24.785	26.699	25.741	25.107		2.869	33.213	4.258	-1.287	25.299	4.047		40.401	0.003	14.643	0.004		125.63	2.09389	31.7	9.9	0.8	0.055	0.000	0.000	0.001	0.539	0.46	
53	6/21/2004	11:33:54 AM		26.547	24.804	26.833	25.779	25.14		3.273	33.383	4.286	-0.844	25.134	4.015		48.866	0.003	14.643	0.004		126.63	2.11056	31.9	12.0	1.2	0.084	0.000	0.000	0.000	0.350	0.30	
54	6/21/2004	11:34:54 AM		26.526	24.804	26.927	25.799	25.25		3.124	33.339	4.268	-0.981	25.227	4.813		44.216	0.003	14.643	0.004		127.63	2.12722	31.9	10.8	1.1	0.074	0.000	0.000	0.000	0.396	0.34	
55	6/21/2004	11:35:54 AM		26.468	24.816	27.024	25.816	25.212		-2.121	33.953	4.22	-6.46	31.616	35.447		44.715	0.003	14.643	1.887		128.63	2.14389	32.5	11.0	-4.3	-0.296	0.000	0.000	0.000	-0.099	-0.08	
56	6/21/2004	11:36:54 AM		26.467	24.829	27.082	25.874	25.235		3.422	33.71	4.308	-0.782	25.143	31.475		47.491	0.003	14.643	0.004		129.63	2.16056	32.2	11.6	1.3	0.091	0.000	0.000	0.000	0.320	0.27	
57	6/21/2004	11:37:54 AM		26.449	24.826	27.139	25.896	25.227		5.138	33.523	4.309	0.958	23.328	0.335		44.88	0.33	14.643	0.004		130.63	2.17722	32.1	11.0	3.0	0.210	0.049	0.046	0.015	15.205	12.94	
58	6/21/2004	11:38:54 AM		27.282	24.841	27.204	25.941	25.187		21.125	33.022	4.246	17.025	6.684	0.633		45.201	1.098	14.643	0.004		131.63	2.19389	31.6	11.1	19.1	1.315	0.164	0.154	0.008	8.069	6.87	
59	6/21/2004	11:39:54 AM		27.475	24.85	27.222	25.965	25.251		21.297	38.258	3.194	18.298	11.779	5.562		41.423	1.095	14.643	0.004		132.63	2.21056	36.8	10.2	19.8	1.365	0.163	0.153	0.008	7.750	6.60	
60	6/21/2004	11:40:54 AM		27.619	24.864	27.352	25.975	25.28		22.724	38.836	4.919	17.988	10.908	5.033		56.114	1.067	14.643	0.004		133.63	2.22722	37.4	13.8	20.4	1.403	0.159	0.149	0.007	7.318	6.23	
61	6/21/2004	11:41:54 AM		27.701	24.856	27.429	26.002	25.267		21.926	36.647	4.418	17.737	9.458	4.163		47.714	1.019	14.643	0.004		134.63	2.24389	35.2	11.7	19.8	1.367	0.152	0.142	0.007	7.158	6.09	
62	6/21/2004	11:42:54 AM		27.793	24.879	27.54	26.054	25.289		21.806	36.583	4.419	17.577	9.51	4.212		44.481	1.021	14.643	0.003		135.63	2.26056	35.1	10.9	19.7	1.358	0.152	0.142	0.007	7.201	6.13	
63	6/21/2004	11:43:54 AM		27.859	24.885	27.517	26.2	25.336		21.745	36.57	4.346	17.604	9.591	4.255		46.759	1.025	14.643	0.004		136.63	2.27722	35.1	11.5	19.7	1.356	0.153	0.142	0.007	7.240	6.16	
64	6/21/2004	11:44:54 AM		27.871	24.897	27.439	26.327	25.363		21.859	36.831	4.306	17.744	9.727	4.327		46.344	1.029	14.643	0.003		137.63	2.29389	35.4	11.4	19.8	1.365	0.153	0.143	0.007	7.238	6.16	
65	6/21/2004	11:45:54 AM		27.868	24.934	27.416	26.439	25.42		21.499	36.591	4.239	17.407	9.779	4.376		45.466	1.03	14.643	0.004		138.63	2.31056	35.1	11.1	19.5	1.341	0.154	0.144	0.007	7.379	6.28	
66	6/21/2004	11:46:54 AM		27.821	24.932	27.33	26.473	25.458		21.965	37.225	4.185	17.982	9.846	4.423		45.309	1.034	14.643	0.004		139.63	2.32722	35.8	11.1	20.0	1.377	0.154	0.144	0.007	7.232	6.15	
67	6/21/2004	11:47:54 AM		27.779	24.945	27.263	26.48	25.481		21.571	36.589	4.179	17.586	9.817	4.368		45.948	1.031	14.643	0.004		140.63	2.34389	35.1	11.3	19.6	1.350	0.154	0.144	0.007	7.370	6.27	
68	6/21/2004	11:48:54 AM		27.749	24.98	27.218	26.545	25.511		21.627	36.689	4.221	17.602	9.846	4.394		46.154	1.034	14.643	0.004		141.63	2.36056	35.2	11.3	19.6	1.352	0.154	0.145	0.007	7.387	6.29	
69	6/21/2004	11:49:54 AM		27.686	24.982	27.13	26.517	25.498		21.814	37.057	4.246	17.721	9.84	4.385		43.722	1.033	14.643	0.003		142.63	2.37722	35.6	10.7	19.8	1.363	0.154	0.145	0.007	7.341	6.25	
70	6/21/2004	11:50:54 AM		27.65	24.996	27.103	26.526	25.486		21.671	36.678	4.224	17.703	9.834	4.397		44.504	1.034	14.643	0.004		143.63	2.39389	35.2	10.9	19.7	1.357	0.154	0.145	0.007	7.383	6.28	

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	6/21/2004	11:51:54 AM		27.603	25.023	27.031	26.498	25.429		21.393	36.498	4.21	17.362	9.883	4.437		39.267	1.036	14.643	0.003		144.63	2.41056	35.0	9.6	19.4	1.336	0.154	0.146	0.008	7.531	6.41	
72	6/21/2004	11:52:54 AM		27.566	25.032	27.01	26.432	25.377		21.88	37.124	4.281	17.842	9.889	4.417		45.088	1.034	14.643	0.004		145.63	2.42722	35.7	11.0	19.9	1.369	0.154	0.146	0.007	7.338	6.24	
73	6/21/2004	11:53:54 AM		27.529	25.039	26.987	26.419	25.335		21.424	36.583	4.239	17.393	9.921	4.46		43.028	1.037	14.643	0.004		146.63	2.44389	35.1	10.5	19.4	1.338	0.155	0.146	0.008	7.535	6.41	
74	6/21/2004	11:54:54 AM		27.485	25.045	26.938	26.37	25.301		21.779	37.122	4.342	17.616	9.964	4.469		41.044	1.037	14.643	0.004		147.63	2.46056	35.7	10.1	19.7	1.358	0.155	0.146	0.007	7.435	6.33	
75	6/21/2004	11:55:54 AM		27.452	25.042	26.905	26.322	25.277		21.718	36.904	4.228	17.705	9.961	4.478		47.879	1.037	14.643	0.004		148.63	2.47722	35.4	11.7	19.7	1.359	0.155	0.147	0.007	7.436	6.33	
76	6/21/2004	11:56:54 AM		27.422	25.052	26.89	26.337	25.323		21.449	36.763	4.24	17.405	10.031	4.512		37.296	1.039	14.643	0.004		149.63	2.49389	35.3	9.1	19.4	1.339	0.155	0.147	0.008	7.563	6.44	
77	6/21/2004	11:57:54 AM		27.378	25.053	26.846	26.328	25.344		21.383	36.668	4.173	17.409	10.074	4.559		41.887	1.042	14.643	0.004		150.63	2.51056	35.2	10.3	19.4	1.337	0.155	0.148	0.008	7.606	6.47	
78	6/21/2004	11:58:54 AM		27.36	25.07	26.818	26.344	25.37		21.903	37.335	4.24	17.879	10.092	4.556		50.708	1.041	14.643	0.004		151.63	2.52722	35.9	12.4	19.9	1.371	0.155	0.148	0.007	7.416	6.31	
79	6/21/2004	11:59:54 AM		27.331	25.076	26.744	26.421	25.421		21.513	36.709	4.275	17.436	10.031	4.507		42.692	1.039	14.643	0.004		152.63	2.54389	35.2	10.5	19.5	1.343	0.155	0.148	0.008	7.575	6.45	
80	6/21/2004	12:00:54 PM		27.278	25.092	26.686	26.482	25.438		21.519	36.966	4.259	17.409	10.097	4.561		40.719	1.042	14.643	0.004		153.63	2.56056	35.5	10.0	19.5	1.342	0.155	0.148	0.008	7.614	6.48	
81	6/21/2004	12:01:54 PM		27.214	25.084	26.592	26.494	25.489		21.509	36.73	4.252	17.491	10.074	4.561		43.778	1.042	14.643	0.004		154.63	2.57722	35.3	10.7	19.5	1.344	0.155	0.149	0.008	7.619	6.48	
82	6/21/2004	12:02:54 PM		27.178	25.127	26.581	26.567	25.533		21.212	36.446	4.259	17.148	10.129	4.564		48.541	1.042	14.643	0.004		155.63	2.59389	35.0	11.9	19.2	1.322	0.155	0.149	0.008	7.749	6.59	
83	6/21/2004	12:03:54 PM		27.115	25.124	26.528	26.574	25.56		21.366	36.776	4.278	17.255	10.196	4.605		50.553	1.043	14.643	0.004		156.63	2.61056	35.3	12.4	19.3	1.331	0.156	0.149	0.008	7.715	6.57	
84	6/21/2004	12:04:54 PM		27.054	25.133	26.456	26.593	25.613		21.443	36.991	4.282	17.389	10.196	4.599		43.735	1.044	14.643	0.004		157.63	2.62722	35.5	10.7	19.4	1.339	0.156	0.149	0.008	7.696	6.55	
85	6/21/2004	12:05:54 PM		27.018	25.167	26.421	26.677	25.632		21.105	36.612	4.23	17.042	10.309	4.694		47.437	1.048	14.643	0.004		158.63	2.64389	35.1	11.6	19.1	1.315	0.156	0.150	0.008	7.872	6.70	
86	6/21/2004	12:06:54 PM		26.971	25.175	26.373	26.735	25.665		21.559	37.439	4.125	17.627	10.584	4.848		44.002	1.057	14.643	0.004		159.63	2.66056	36.0	10.8	19.6	1.351	0.158	0.152	0.008	7.740	6.59	
87	6/21/2004	12:07:54 PM		26.915	25.183	26.242	26.833	25.694		21.227	37.105	4.095	17.315	10.558	4.851		45.305	1.059	14.643	0.004		160.63	2.67722	35.6	11.1	19.3	1.329	0.158	0.152	0.008	7.913	6.73	
88	6/21/2004	12:08:54 PM		26.818	25.197	26.056	26.902	25.802		21.295	37.202	4.112	17.428	10.601	4.862		40.007	1.058	14.643	0.004		161.63	2.69389	35.7	9.8	19.4	1.335	0.158	0.153	0.008	7.909	6.73	
89	6/21/2004	12:09:54 PM		26.711	25.225	25.899	26.974	25.72		21.268	37.124	4.066	17.421	10.627	4.882		46.2	1.059	14.643	0.004		162.63	2.71056	35.7	11.3	19.3	1.334	0.158	0.154	0.008	7.959	6.77	
90	6/21/2004	12:10:54 PM		26.615	25.233	25.672	26.963	25.673		25.302	51.9	1.825	23.707	21.487	11.39		27.398	1.204	14.643	0.003		163.63	2.72722	50.4	6.7	24.5	1.689	0.180	0.176	0.007	7.188	6.12	
91	6/21/2004	12:11:54 PM		26.609	25.242	25.651	26.917	25.652		28.123	57.971	2.031	26.355	24.639	13.338		30.696	1.204	14.643	0.004		164.63	2.74389	56.5	7.5	27.2	1.878	0.180	0.176	0.006	6.471	5.51	
92	6/21/2004	12:12:54 PM		26.597	25.266	25.694	26.92	25.611		45.965	49.989	5.515	40.739	-1.211	-4.23		51.767	0.003	1.944	0.004		165.63	2.76056	48.5	12.7	43.4	2.989	0.290	0.284	0.007	6.557	5.58	
93	6/21/2004	12:13:54 PM		26.445	25.263	25.702	26.828	25.574		41.856	44.393	3.833	38.252	-1.214	-4.276		41.259	0.003	1.625	0.003		166.63	2.77722	42.9	10.1	40.1	2.762	0.242	0.238	0.006	5.931	5.05	
94	6/21/2004	12:14:54 PM		26.363	25.271	25.639	26.81	25.591		42.723	45.773	3.711	39.187	-1.216	-4.221		41.278	0.003	1.72	0.004		167.63	2.79389	44.3	10.1	41.0	2.824	0.256	0.252	0.006	6.150	5.23	
95	6/21/2004	12:15:54 PM		26.306	25.288	25.602	26.808	25.624		42.302	45.245	3.942	38.594	-1.214	-4.215		42.464	0.003	1.665	0.004		168.63	2.81056	43.8	10.4	40.4	2.789	0.248	0.244	0.006	6.034	5.14	
96	6/21/2004	12:16:54 PM		26.242	25.29	25.548	26.799	25.635		42.252	45.039	3.853	38.635	-1.216	-4.204		40.078	0.003	1.682	0.004		169.63	2.82722	43.6	9.8	40.4	2.788	0.251	0.247	0.006	6.106	5.20	
97	6/21/2004	12:17:54 PM		26.201	25.308	25.502	26.813	25.668		42.153	44.9	3.929	38.451	-1.214	-4.186		40.414	0.003	1.71	0.004		170.63	2.84389	43.4	9.9	40.3	2.779	0.255	0.251	0.006	6.237	5.31	
98	6/21/2004	12:18:54 PM		26.163	25.316	25.459	26.88	25.691		42.447	45.446	3.767	38.91	-1.219	-4.146		45.948	0.003	1.737	0.005		171.63	2.86056	44.0	11.3	40.7	2.805	0.259	0.256	0.006	6.285	5.35	
99	6/21/2004	12:19:54 PM		26.117	25.334	25.433	26.904	25.749		42.132	45.039	3.955	38.364	-1.214	-4.146		45.018	0.003	1.72	0.004		172.63	2.87722	43.6	11.0	40.2	2.775	0.256	0.253	0.006	6.294	5.36	
100	6/21/2004	12:20:54 PM		26.074	25.346	25.395	26.951	25.786		42.476	45.528	3.995	38.664	-1.214	-4.128		45.599	0.003	1.732	0.004		173.63	2.89389	44.1	11.2	40.6	2.797	0.258	0.255	0.006	6.295	5.36	
101	6/21/2004	12:21:54 PM		26.042	25.37	25.394	26.994	25.835		42.296	45.3	4.402	38.118	-1.214	-4.108		44.559	0.003	1.71	0.006		174.63	2.91056	43.8	10.9	40.2	2.772	0.255	0.252	0.006	6.271	5.34	
102	6/21/2004	12:22:54 PM		26.014	25.367	25.365	26.981	25.841		42.491	45.562	4.304	38.401	-1.216	-4.088		48.1	0.003	1.764	0.004		175.63	2.92722	44.1	11.8	40.4	2.789	0.263	0.260	0.006	6.436	5.48	
103	6/21/2004	12:23:54 PM		25.992	25.384	25.343	27.054	25.879		42.348	45.342	4.294	38.258	-1.219	-4.082		46.156	0.003	1.71	0.004		176.63	2.94389	43.9	11.3	40.3	2.779	0.255	0.252	0.006	6.265	5.33	
104	6/21/2004	12:24:54 PM		25.99	25.412	25.346	27.112	25.902		42.534	45.543	4.174	38.613	-1.216	-4.065		45.602	0.003	1.759	0.006		177.63	2.96056	44.1	11.2	40.6	2.797	0.262	0.260	0.006	6.401	5.45	
105	6/21/2004	12:25:54 PM		25.983	25.426	25.334	27.15	25.931		43.013	46.316	4.171	39.077	-1.214	-4.053		44.208	0.003	1.763	0.004		178.63	2.97722	44.8	10.8	41.0	2.830	0.263	0.260	0.006	6.344	5.40	
106	6/21/2004	12:26:54 PM		25.961	25.449	25.312	27.173	25.904		42.655	46.059	4.139	38.744	-1.219	-4.047		42.364	0.003	1.78	0.005		179.63	2.99389	44.6	10.4	40.7	2.806	0.265	0.263	0.006	6.464	5.50	
107	6/21/2004	12:27:54 PM		25.934	25.457	25.285	27.146	25.867		42.854	46.214	4.182	38.935	-1.216	-4.036		42.473	0.003	1.818	0.005		180.63	3.01056	44.7	10.4	40.9	2.820	0.271	0.269	0.007	6.575	5.60	
108	6/21/2004	12:28:54 PM		25.901	25.459	25.242	27.098	25.834		42.802	46.225	4.158	38.857	-1.219	-4.03		38.772	0.003	1.818	0.005		181.63	3.02722	44.8	9.5	40.8	2.815	0.271	0.269	0.007	6.593	5.61	
109	6/21/2004	12:29:54 PM		25.889	25.487	25.24	27.116	25.807		42.399	45.564	4.019	38.611	-1.216	-4.016		41.576	0.003	1.794	0.006		182.63	3.04389	44.1	10.2	40.5	2.793	0.267	0.266	0.007	6.559	5.58	
110	6/21/2004	12:30:54 PM		25.862	25.494	25.217	27.058	25.794		42.669	46.038	4.146	38.746	-1.216	-4.01		44.788	0.003	1.804	0.006		183.63	3.06056	44.6	11.0	40.7	2.807	0.269	0.267	0.007	6.567	5.59	
111	6/21/2004	12:31:54 PM		25.847	25.485	25.203	27.024	25.77		42.458	45.802	4.158	38.555	-1.216	-4.004		48.584	0.003	1.822	0.006		184.63	3.07722	44.3	11.9	40.5	2.793	0.272	0.270	0.007	6.668	5.67	
112	6/21/2004	12:32:54 PM		25.829	25.502	25.195	26.996	25.741		42.522	46.003	4.14	38.604	-1.216	-3.995		49.656	0.003	1.826	0.004		185.63	3.09389	44.5	12.2	40.6	2.797	0.272	0.271	0.007	6.675	5.68	
113	6/21/2004	12:33:54 PM		25.826	25.514	25.192	27.023	25.728		42.219	45.46	4.148	38.293	-1.214	-3.981		50.681	0.003	1.823	0.005		186.63	3.11056	44.0	12.4	40.3	2.776	0.272	0.270	0.007	6.715	5.71	
114	6/21/2004	12:34:54 PM		25.797	25.509	25.138	26.954	25.709		42.387	45.864	4.203	38.405	-1.216	-3.981		38.9	0.003	1.81	0.005		187.63	3.12722	44.4	9.5	40.4	2.785	0.270	0.269	0.007	6.654	5.66	
115	6/21/2004	12:35:54 PM		25.808	25.545	25.183	26.964	25.7		42.37	45.601	4.169	38.364	-1.211	-3.969		45.489	0.003	1.879	0.005		188.63	3.14389	44.1	11.1	40.4	2.783	0.280	0.279	0.007	6.904	5.88	
116	6/21/2004	12:36:54 PM		25.769	25.527	25.135	26.901	25.666		42.254	45.657	4.203	38.274	-1.216	-3.967		42.861	0.003	1.828	0.006		189.63	3.16056	44.2	10.5	40.3	2.776	0.273	0.272	0.007	6.743	5.74	
117	6/21/2004	12:37:54 PM		25.773	25.541	25.154	26.9	25.676		42.294	45.713	4.169	38.356	-1.211	-3.955		49.926	0.003	1.878	0.006		190.63	3.17722	44.2	12.2	40.3	2.780	0.280	0.279	0.007	6.913	5.88	
118	6/21/2004	12:38:54 PM		25.746	25.518	25.106	26.857	25.773		42.451	45.935	4.203	38.481	-1.216	-3.955		43.276	0.003	1.85	0.005		191.63	3.19389	44.5	10.6	40.5	2.790	0.276	0.275	0.007	6.796	5.78	
119	6/21/2004	12:39:54 PM		25.761	25.553	25.126	26.937	25.818		42.453	45.908	4.192	38.487	-1.216	-3.946		46.413	0.003	1.848	0.004		192.63	3.21056	44.4	11.4	40.5	2.790	0.276	0.275	0.007	6.784	5.77	
120	6/21/2004	12:40:54 PM		25.738	25.546	25.109	26.97	25.8		42.273	45.674	4.189	38.332	-1.214	-3.938		41.044	0.003	1.856	0.005		193.63	3.22722	44.2	10.1	40.3	2.779	0.277	0.276	0.007	6.845	5.83	
121	6/21/2004	12:41:54 PM		25.73	25.548	25.101	26.992	25.792		42.314	45.756	4.207	38.288	-1.216	-3.938		43.374	0.003	1.851	0.006		194.63	3.24389	44.3	10.6	40.3	2.779	0.276	0.275	0.007	6.828	5.81	
122	6/21/2004	12:42:54 PM		25.722	25.549	25.102	27.008	25.829		42.155	45.506	4.159	38.18	-1.214	-3.926		43.985	0.003	1.837	0.006		195.63	3.26056	44.0	10.8	40.2	2.769	0.274	0.273	0.007	6.799	5.79	
123	6/21/2004	12:43:54 PM		25.713	25.561	25.099	27.03	25.84		42.159	45.524	4.171	38.221	-1.216	-3.92		41.645	0.003	1.848	0.004		196.63	3.27722	44.1	10.2	40.2	2.771	0.276	0.275	0.007	6.836	5.82	
124	6/21/2004	12:44:54 PM		25.71	25.568	25.081	27.057	25.878		42.248	45.398	4.169	38.303	-1.216	-3.917		46.509	0.003	1.848	0.007		197.63	3.29389	43.9	11.4	40.3	2.777	0.276	0.275	0.007	6.825	5.81	
125	6/21/2004	12:45:54 PM		25.701	25.569	25.072	27.078	25.903		42.549	45.931	4.208	38.607	-1.214	-3.906		38.854	0.003	1.853	0.005		198.63	3.31056	44.5	9.5	40.6	2.798	0.276	0.276	0.007	6.794	5.78	
126	6/21/2004	12:46:54 PM		25.693	25.585	25.063	27.124	25.915		42.238	45.576	4.138	38.34	-1.214	-3.903		44.965	0.003	1.853	0.006		199.63	3.32722	44.1	11.0	40.3	2.778	0.276	0.276	0.007	6.845	5.83	
127	6/21/2004	12:47:54 PM		25.694	25.602	25.08	27.136	25.961		42.321	45.671	4.191	38.334	-1.216	-3.897		40.456	0.003	1.848	0.004		200.63	3.34389	44.2	9.9	40.3	2.780	0.276	0.275	0.007	6.817	5.80	
128	6/21/2004	12:48:54 PM		25.69	25.603	25.066	27.146	25.987		42.173	45.56	4.148	38.262	-1.216	-3.894		39.757	0.003	1.846	0.006		201.63	3.36056	44.1	9.7	40.2	2.773	0.275	0.275	0.007	6.831	5.81	
129	6/21/2004	12:49:54 PM		25.692	25.645	25.078	27.194	26.029		42.08	45.454	4.176	38.095	-1.216	-3.888		43.082	0.003	1.87	0.005		202.63	3.37722	44.0	10.6	40.1	2.764	0.279	0.278	0.007	6.940	5.91	
130	6/21/2004	12:50:54 PM		25.667	25.625	25.028	27.199	26.039		42.2	45.506	4.128	38.204	-1.219	-3.886		43.259	0.003	1.861	0.005		203.63	3.39389	44.0	10.6	40.2	2.772	0.277	0.277	0.007	6.896	5.87	
131	6/21/2004	12:51:54 PM		25.673	25.651	25.039	27.314	26.03		42.325	45.717	4.168	38.393	-1.216	-3.877		41.298	0.003	1.85	0.005		204.63	3.41056	44.2	10.1	40.4	2.783	0.276	0.276	0.007	6.827	5.81	
132	6/21/2004	12:52:54 PM		25.674	25.667	25.06	27.296	25.961		42.138	45.535	4.191	38.149	-1.211	-3.871		44.972	0.003	1.856	0.004		205.63	3.42722	44.1	11.0	40.1	2.768	0.277	0.276	0.007	6.881	5.86	
133	6/21/2004	12:53:54 PM		25.67	25.678	25.051	27.267	25.927		42.205	45.51	4.16	38.313	-1.216	-3.871		46.031	0.003	1.851	0.005		206.63	3.44389	44.0	11.3	40.3	2.776	0.276	0.276	0.007	6.845	5.83	
134	6/21/2004	12:54:54 PM		25.672	25.689	25.047	27.238	25.904		42.175	45.439	4.152	38.252	-1.214	-3.865		47.087	0.003	1.851	0.007		207.63	3.46056	44.0	11.5	40.2	2.773	0.276	0.276	0.007	6.853	5.83	
135	6/21/2004	12:55:54 PM		25.667	25.69	25.038	27.239	25.89		42.4	45.703	4.141	38.529	-1.214	-3.86		44.592	0.003	1.842	0.005		208.63	3.47722	44.2	10.9	40.5	2.790	0.275	0.274	0.007	6.780	5.77	
136	6/21/2004	12:56:54 PM		25.647	25.689	25.012	27.163	25.874		42.223	45.692	4.149	38.258	-1.219	-3.86		43.343	0.003	1.851	0.004		209.63	3.49389	44.2	10.6	40.2	2.774	0.276	0.276	0.007	6.856	5.83	
137	6/21/2004	12:57:54 PM		25.647	25.694	25.022	27.128	25.844		42.493	45.904	4.178	38.524	-1.214	-3.854		45.581	0.003	1.848	0.004		210.63	3.51056	44.4	11.2	40.5	2.793	0.276	0.275	0.007	6.797	5.78	
138	6/21/2004	12:58:54 PM		25.647	25.705	25.033	27.109	25.82		42.132	45.387	4.157	38.176	-1.216	-3.851		45.445	0.003	1.848	0.004		211.63	3.52722	43.9	11.1	40.2	2.768	0.276	0.275	0.007	6.855	5.83	
139	6/21/2004	12:59:54 PM		25.653	25.716	25.039	27.13	25.795		42.244	45.644	4.175	38.297	-1.214	-3.845		44.79	0.003	1.85	0.006		212.63	3.54389	44.2	11.0	40.3	2.777	0.276	0.276	0.007	6.842	5.82	
140	6/21/2004	1:00:54 PM		25.639	25.712	25.015	27.11	25.816		42.574	45.931	4.179	38.645	-1.216	-3.845		45.116	0.003	1.847	0.005		213.63	3.56056	44.5	11.1	40.6	2.800	0.275	0.275	0.007	6.778	5.77	

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	6/21/2004	1:01:54 PM		25.65	25.728	25.036	27.182	25.853		42.431	45.723	4.162	38.565	-1.211	-3.836		45.526	0.003	1.842	0.005		214.63	3.57722	44.3	11.2	40.5	2.792	0.275	0.274	0.007	6.774	5.77	
142	6/21/2004	1:02:54 PM		25.637	25.73	25.023	27.148	25.914		42.52	45.843	4.205	38.555	-1.214	-3.839		44.233	0.003	1.842	0.005		215.63	3.59389	44.4	10.8	40.5	2.795	0.275	0.274	0.007	6.770	5.76	
143	6/21/2004	1:03:54 PM		25.633	25.726	25.024	27.175	25.955		42.331	45.864	4.168	38.344	-1.216	-3.834		48.103	0.003	1.846	0.005		216.63	3.61056	44.4	11.8	40.3	2.781	0.275	0.275	0.007	6.818	5.80	
144	6/21/2004	1:04:54 PM		25.628	25.726	25.024	27.21	25.99		42.42	45.881	4.147	38.485	-1.214	-3.831		44.5	0.003	1.84	0.006		217.63	3.62722	44.4	10.9	40.5	2.789	0.274	0.274	0.007	6.777	5.77	
145	6/21/2004	1:05:54 PM		25.636	25.749	25.007	27.258	26.018		42.343	45.752	4.157	38.371	-1.222	-3.831		51.74	0.003	1.843	0.005		218.63	3.64389	44.3	12.7	40.4	2.782	0.275	0.275	0.007	6.807	5.79	
146	6/21/2004	1:06:54 PM		25.632	25.75	25.008	27.319	26.044		42.499	45.924	4.175	38.508	-1.214	-3.825		45.723	0.003	1.837	0.006		219.63	3.66056	44.5	11.2	40.5	2.793	0.274	0.274	0.007	6.760	5.75	
147	6/21/2004	2:15:20 PM		24.64	25.293	24.215	26.648	25.658		20.146	48.561	4.069	16.41	24.289	13.269		46.148	0.697	-0.013	0.004		288.07	4.80111	47.1	11.3	18.3	1.260	-0.002	-0.002	0.000	-0.108	-0.09	
148	6/21/2004	2:16:20 PM		24.728	25.326	24.348	26.736	25.646		3.184	48.998	4.029	-0.69	40.716	21.658		42.663	0.003	-0.01	0.004		289.07	4.81778	47.5	10.5	1.2	0.086	-0.001	-0.002	-0.001	-1.218	-1.04	
149	6/21/2004	2:17:20 PM		24.741	25.323	24.425	26.738	25.608		2.891	48.476	4.039	-1.002	40.776	21.508		42.295	0.003	-0.013	0.004		290.07	4.83444	47.0	10.4	0.9	0.065	-0.002	-0.002	-0.002	-2.086	-1.77	
150	6/21/2004	2:18:20 PM		24.788	25.33	24.513	26.71	25.526		3.203	48.845	4.048	-0.677	40.562	92.576		42.711	0.003	0.834	0.004		291.07	4.85111	47.4	10.5	1.3	0.087	0.124	0.126	0.100	99.811	84.94	
151	6/21/2004	2:19:20 PM		25.026	25.323	24.601	26.653	25.469		4.607	48.383	4.026	0.796	38.984	0.433		45.441	0.476	-0.007	0.004		292.07	4.86778	46.9	11.1	2.7	0.186	-0.001	-0.001	0.000	-0.391	-0.33	
152	6/21/2004	2:20:20 PM		25.168	25.336	24.688	26.555	25.406		40.585	47.817	4.098	37.098	1.398	1.786		42.88	0.004	2.658	0.004		293.07	4.88444	46.3	10.5	38.8	2.678	0.396	0.400	0.010	10.293	8.76	
153	6/21/2004	2:21:20 PM		25.275	25.338	24.766	26.482	25.338		41.311	47.893	4.105	37.781	0.932	1.723		45.518	0.003	2.575	0.004		294.07	4.90111	46.4	11.2	39.5	2.727	0.384	0.386	0.010	9.772	8.32	
154	6/21/2004	2:22:20 PM		25.378	25.345	24.823	26.569	25.295		41.779	48.101	4.109	38.196	0.668	1.688		44.951	0.003	2.519	0.004		295.07	4.91778	46.6	11.0	40.0	2.757	0.376	0.377	0.009	9.439	8.03	
155	6/21/2004	2:23:20 PM		25.385	25.312	24.785	26.472	25.298		42.084	48.409	4.142	38.395	0.454	1.648		46.523	0.003	2.477	0.004		296.07	4.93444	46.9	11.4	40.2	2.774	0.369	0.372	0.009	9.233	7.86	
156	6/21/2004	2:24:20 PM		25.422	25.314	24.837	26.449	25.315		42.01	48.024	4.09	38.43	0.327	1.63		46.857	0.003	2.449	0.004		297.07	4.95111	46.6	11.5	40.2	2.773	0.365	0.367	0.009	9.120	7.76	
157	6/21/2004	2:25:20 PM		25.444	25.307	24.86	26.466	25.412		42.315	48.271	4.152	38.627	0.202	1.613		44.206	0.003	2.416	0.005		298.07	4.96778	46.8	10.8	40.5	2.790	0.360	0.362	0.009	8.935	7.60	
158	6/21/2004	2:26:20 PM		25.477	25.299	24.877	26.493	25.409		42.371	48.105	4.087	38.816	0.127	1.595		44.06	0.003	2.396	0.005		299.07	4.98444	46.6	10.8	40.6	2.799	0.357	0.358	0.009	8.831	7.51	
159	6/21/2004	2:27:20 PM		25.494	25.296	24.904	26.546	25.426		42.476	48.281	4.043	38.927	-0.006	1.593		44.696	0.003	2.386	0.006		300.07	5.00111	46.8	11.0	40.7	2.806	0.356	0.357	0.009	8.764	7.46	
160	6/21/2004	2:28:20 PM		25.515	25.297	24.916	26.567	25.468		42.69	48.264	4.088	39.077	-0.021	1.587		40.789	0.003	2.374	0.007		301.07	5.01778	46.8	10.0	40.9	2.819	0.354	0.355	0.009	8.678	7.38	
161	6/21/2004	2:29:20 PM		25.528	25.275	24.909	26.61	25.481		42.7	48.457	4.105	39.077	-0.076	1.567		43.587	0.003	2.36	0.005		302.07	5.03444	47.0	10.7	40.9	2.819	0.352	0.353	0.009	8.627	7.34	
162	6/21/2004	2:30:20 PM		25.566	25.308	24.982	26.723	25.474		42.798	48.387	4.058	39.235	-0.079	1.569		46.815	0.003	2.355	0.006		303.07	5.05111	46.9	11.5	41.0	2.828	0.351	0.351	0.009	8.565	7.29	
163	6/21/2004	2:31:20 PM		25.58	25.302	24.975	26.602	25.463		42.943	48.492	4.087	39.331	-0.102	1.561		45.403	0.003	2.347	0.004		304.07	5.06778	47.0	11.1	41.1	2.836	0.350	0.350	0.009	8.512	7.24	
164	6/21/2004	2:32:20 PM		25.597	25.284	24.983	26.539	25.43		42.69	48.366	4.114	39.038	-0.108	1.561		45.343	0.003	2.344	0.006		305.07	5.08444	46.9	11.1	40.9	2.817	0.349	0.350	0.009	8.556	7.28	
165	6/21/2004	2:33:20 PM		25.614	25.297	24.995	26.541	25.427		42.876	48.482	4.063	39.3	-0.102	1.474		45.752	0.003	2.34	0.005		306.07	5.10111	47.0	11.2	41.1	2.833	0.349	0.349	0.008	8.492	7.23	
166	6/21/2004	2:34:20 PM		25.61	25.267	24.976	26.497	25.453		42.926	48.298	4.072	39.38	-0.111	1.465		47.79	0.003	2.34	0.006		307.07	5.11778	46.8	11.7	41.2	2.837	0.349	0.349	0.008	8.483	7.22	
167	6/21/2004	2:35:20 PM		25.629	25.277	25.01	26.521	25.467		42.603	48.153	4.08	38.925	-0.108	1.468		46.265	0.003	2.342	0.005		308.07	5.13444	46.7	11.3	40.8	2.811	0.349	0.349	0.009	8.563	7.29	
168	6/21/2004	2:36:20 PM		25.634	25.266	25.024	26.525	25.436		42.578	48.13	4.061	38.992	-0.116	1.468		43.011	0.003	2.336	0.005		309.07	5.15111	46.7	10.5	40.8	2.812	0.348	0.348	0.009	8.534	7.26	
169	6/21/2004	2:37:20 PM		25.649	25.266	25.034	26.53	25.471		42.947	48.582	4.106	39.251	-0.171	1.471		42.54	0.003	2.337	0.004		310.07	5.16778	47.1	10.4	41.1	2.834	0.348	0.348	0.008	8.470	7.21	
170	6/21/2004	2:38:20 PM		25.675	25.287	25.056	26.587	25.503		42.723	48.167	4.082	39.072	-0.145	1.477		45.725	0.003	2.338	0.006		311.07	5.18444	46.7	11.2	40.9	2.820	0.349	0.348	0.009	8.510	7.24	
171	6/21/2004	2:39:20 PM		25.678	25.29	25.064	26.635	25.505		42.599	47.949	4.226	38.814	-0.247	1.474		45.153	0.003	2.321	0.007		312.07	5.20111	46.5	11.1	40.7	2.807	0.346	0.345	0.008	8.486	7.22	
172	6/21/2004	2:40:20 PM		25.692	25.294	25.063	26.644	25.545		42.47	47.804	4.194	38.76	-0.154	1.471		44.869	0.003	2.322	0.005		313.07	5.21778	46.3	11.0	40.6	2.800	0.346	0.346	0.009	8.509	7.24	
173	6/21/2004	2:41:20 PM		25.716	25.309	25.107	26.693	25.544		42.893	48.476	4.179	39.226	-0.189	1.471		43.557	0.003	2.327	0.005		314.07	5.23444	47.0	10.7	41.1	2.831	0.347	0.346	0.008	8.424	7.17	
174	6/21/2004	2:42:20 PM		25.722	25.314	25.108	26.664	25.56		42.42	47.734	4.17	38.728	-0.293	1.468		45.745	0.003	2.315	0.006		315.07	5.25111	46.3	11.2	40.6	2.797	0.345	0.344	0.008	8.481	7.22	
175	6/21/2004	2:43:20 PM		25.752	25.334	25.148	26.699	25.55		42.35	47.721	4.153	38.648	-0.232	1.477		45.086	0.003	2.321	0.005		316.07	5.26778	46.2	11.0	40.5	2.792	0.346	0.345	0.009	8.509	7.24	
176	6/21/2004	2:44:20 PM		25.741	25.328	25.121	26.677	25.578		42.46	47.85	4.261	38.645	-0.351	1.471		48.868	0.003	2.308	0.006		317.07	5.28444	46.4	12.0	40.6	2.796	0.344	0.343	0.008	8.457	7.20	
177	6/21/2004	2:45:20 PM		25.746	25.323	25.117	26.688	25.584		42.48	47.792	4.276	38.623	-0.325	1.474		48.468	0.003	2.306	0.005		318.07	5.30111	46.3	11.9	40.6	2.796	0.344	0.343	0.008	8.450	7.19	
178	6/21/2004	2:46:20 PM		25.743	25.315	25.109	26.66	25.576		42.234	47.601	4.256	38.403	-0.304	1.477		44.894	0.003	2.307	0.006		319.07	5.31778	46.1	11.0	40.3	2.780	0.344	0.343	0.009	8.505	7.24	
179	6/21/2004	2:47:20 PM		25.756	25.324	25.147	26.638	25.519		42.468	47.771	4.279	38.627	-0.342	1.48		41.668	0.003	2.303	0.004		320.07	5.33444	46.3	10.2	40.5	2.796	0.343	0.342	0.008	8.433	7.18	
180	6/21/2004	2:48:20 PM		25.745	25.317	25.126	26.602	25.527		41.545	46.426	4.42	37.537	-0.565	1.457		44.554	0.003	2.245	0.005		321.07	5.35111	45.0	10.9	39.5	2.726	0.335	0.334	0.008	8.435	7.18	
181	6/21/2004	2:49:20 PM		25.77	25.327	25.14	26.622	25.512		41.721	46.716	4.463	37.675	-0.553	1.468		50.38	0.003	2.254	0.006		322.07	5.36778	45.2	12.3	39.7	2.737	0.336	0.335	0.008	8.432	7.18	
182	6/21/2004	2:50:20 PM		25.784	25.331	25.139	26.601	25.491		41.811	47.021	4.406	37.818	-0.484	1.468		42.03	0.003	2.261	0.005		323.07	5.38444	45.5	10.3	39.8	2.745	0.337	0.336	0.008	8.434	7.18	
183	6/21/2004	2:51:20 PM		25.783	25.335	25.144	26.575	25.486		42.231	47.508	4.461	38.233	-0.522	1.468		45.975	0.003	2.258	0.005		324.07	5.40111	46.0	11.3	40.2	2.774	0.337	0.335	0.008	8.334	7.09	
184	6/21/2004	2:52:20 PM		25.792	25.334	25.168	26.579	25.505		42.09	47.236	4.424	38.079	-0.553	1.477		44.976	0.003	2.253	0.004		325.07	5.41778	45.8	11.0	40.1	2.764	0.336	0.334	0.008	8.340	7.10	
185	6/21/2004	2:53:20 PM		25.791	25.339	25.162	26.543	25.494		42.001	47.093	4.382	38.061	-0.536	1.468		52.698	0.003	2.254	0.005		326.07	5.43444	45.6	12.9	40.0	2.760	0.336	0.335	0.008	8.357	7.11	
186	6/21/2004	2:54:20 PM		25.813	25.355	25.168	26.555	25.48		41.659	46.801	4.292	37.763	-0.611	1.468		47.936	0.003	2.243	0.005		327.07	5.45111	45.3	11.7	39.7	2.738	0.334	0.333	0.008	8.381	7.13	
187	6/21/2004	2:55:20 PM		25.808	25.356	25.164	26.565	25.471		41.862	46.876	4.25	38.024	-0.536	1.471		45.287	0.003	2.244	0.005		328.07	5.46778	45.4	11.1	39.9	2.754	0.335	0.333	0.008	8.337	7.10	
188	6/21/2004	2:56:20 PM		25.81	25.357	25.16	26.552	25.482		41.726	46.894	4.265	37.872	-0.556	1.471		44.192	0.003	2.242	0.006		329.07	5.48444	45.4	10.8	39.8	2.744	0.334	0.333	0.008	8.361	7.12	
189	6/21/2004	2:57:20 PM		25.811	25.369	25.192	26.603	25.429		41.831	46.998	4.319	37.95	-0.626	1.471		43.486	0.003	2.237	0.006		330.07	5.50111	45.5	10.7	39.9	2.750	0.334	0.332	0.008	8.316	7.08	
190	6/21/2004	2:58:20 PM		25.785	25.343	25.151	26.542	25.373		41.688	46.756	4.289	37.845	-0.646	1.471		42.544	0.003	2.235	0.004		331.07	5.51778	45.3	10.4	39.8	2.742	0.333	0.332	0.008	8.344	7.10	
191	6/21/2004	2:59:20 PM		25.783	25.335	25.138	26.489	25.305		41.759	46.884	4.287	37.876	-0.571	1.465		44.709	0.003	2.24	0.006		332.07	5.53444	45.4	11.0	39.8	2.745	0.334	0.333	0.008	8.355	7.11	
192	6/21/2004	3:00:20 PM		25.797	25.334	25.157	26.459	25.22		42.066	47.106	4.332	38.18	-0.646	1.471		47.362	0.003	2.238	0.004		333.07	5.55111	45.6	11.6	40.1	2.766	0.334	0.332	0.008	8.279	7.05	
193	6/21/2004	3:01:20 PM		25.815	25.352	25.165	26.392	25.182		41.804	46.768	4.269	37.958	-0.643	1.468		45.942	0.003	2.234	0.006		334.07	5.56778	45.3	11.3	39.9	2.750	0.333	0.332	0.008	8.313	7.07	
194	6/21/2004	3:02:20 PM		25.794	25.326	25.16	26.306	25.162		41.717	46.741	4.225	37.925	-0.637	1.468		44.483	0.003	2.23	0.005		335.07	5.58444	45.3	10.9	39.8	2.746	0.332	0.331	0.008	8.312	7.07	
195	6/21/2004	3:03:20 PM		25.789	25.316	25.17	26.296	25.177		41.759	46.687	4.272	37.919	-0.646	1.468		46.801	0.003	2.234	0.005		336.07	5.60111	45.2	11.5	39.8	2.747	0.333	0.331	0.008	8.321	7.08	
196	6/21/2004	3:04:20 PM		25.789	25.301	25.175	26.291	25.207		41.709	46.822	4.278	37.823	-0.655	1.468		46.747	0.003	2.234	0.004		337.07	5.61778	45.3	11.5	39.8	2.742	0.333	0.331	0.008	8.335	7.09	
197	6/21/2004	3:05:20 PM		25.784	25.281	25.165	26.311	25.202		41.811	46.642	4.245	37.974	-0.669	1.468		45.758	0.003	2.23	0.004		338.07	5.63444	45.2	11.2	39.9	2.750	0.332	0.331	0.008	8.296	7.06	
198	6/21/2004	3:06:20 PM		25.795	25.277	25.176	26.362	25.213		41.864	46.801	4.272	38.013	-0.646	1.471		41.751	0.003	2.23	0.005		339.07	5.65111	45.3	10.2	39.9	2.754	0.332	0.331	0.008	8.284	7.05	
199	6/21/2004	3:07:20 PM		25.779	25.257	25.165	26.326	25.227		41.611	46.745	4.274	37.716	-0.646	1.468		45.503	0.003	2.228	0.004		340.07	5.66778	45.3	11.2	39.7	2.735	0.332	0.331	0.008	8.336	7.09	
200	6/21/2004	3:08:20 PM		25.769	25.241	25.164	26.315	25.231		41.806	46.903	4.295	37.905	-0.687	1.468		46.188	0.003	2.221	0.005		341.07	5.68444	45.4	11.3	39.9	2.748	0.331	0.330	0.008	8.270	7.04	
201	6/21/2004	3:09:20 PM		25.767	25.229	25.168	26.329	25.22		41.609	46.55	4.274	37.704	-0.678	1.474		48.958	0.003	2.23	0.006		342.07	5.70111	45.1	12.0	39.7	2.734	0.332	0.331	0.008	8.344	7.10	
202	6/21/2004	3:10:20 PM		25.77	25.217	25.151	26.342	25.223		41.931	46.936	4.275	38.095	-0.669	1.468		45.295	0.003	2.227	0.005		343.07	5.71778	45.5	11.1	40.0	2.759	0.332	0.331	0.008	8.263	7.03	
203	6/21/2004	3:11:20 PM		25.764	25.211	25.15	26.351	25.227		41.875	46.843	4.274	37.993	-0.69	1.471		40.704	0.003	2.223	0.006		344.07	5.73444	45.4	10.0	39.9	2.753	0.331	0.330	0.008	8.264	7.03	
204	6/21/2004	3:12:20 PM		25.768	25.2	25.149	26.345	25.241		41.823	46.675	4.308	37.962	-0.661	1.471		49.256	0.003	2.224	0.005		345.07	5.75111	45.2	12.1	39.9	2.750	0.332	0.330	0.008	8.277	7.04	
205	6/21/2004	3:13:20 PM		25.762	25.194	25.143	26.369	25.255		41.767	46.741	4.241	37.942	-0.666	1.471		47.619	0.003	2.228	0.006		346.07	5.76778	45.3	11.7	39.9	2.748	0.332	0.331	0.008	8.301	7.06	
206	6/21/2004	3:14:20 PM		25.744	25.176	25.125	26.316	25.212		41.754	46.639	4.218	37.983	-0.701	1.471		43.288	0.003	2.224	0.004		347.07	5.78444	45.2	10.6	39.9	2.749	0.332	0.330	0.008	8.288	7.05	
207	6/21/2004	3:15:20 PM		25.758	25.18	25.144	26.31	25.231		41.773	46.843	4.26	37.921	-0.661	1.474		45.71	0.003	2.223	0.006		348.07	5.80111	45.4	11.2	39.8	2.747	0.331	0.330	0.008	8.284	7.05	
208	6/21/2004	3:16:20 PM		25.756	25.178	25.142	26.338	25.204		41.698	46.677	4.268	37.831	-0.69	1.477		48.234	0.003	2.221	0.005		349.07	5.81778	45.2	11.8	39.8	2.742	0.331	0.330	0.008	8.294	7.06	
209	6/21/2004	3:17:20 PM		25.773	25.19	25.154	26.33	25.216		41.746	46.751	4.273	37.849	-0.698	1.474		47.673	0.003	2.224	0.005		350.07	5.83444	45.3	11.7	39.8	2.744	0.332	0.330	0.008	8.296	7.06	
210	6/21/2004	3:18:20 PM		25.761	25.168	25.132	26.323	25.244		41.829	46.743	4.317	37.888	-0.704	1.471		48.979	0.003	2.22	0.005		351.07	5.85111	45.3	12.0	39.9	2.748	0.331	0.330	0.008	8.273	7.04	

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	6/21/2004	3:19:20 PM		25.753	25.16	25.129	26.33	25.226		42.005	46.927	4.338	38.116	-0.704	1.471		44.369	0.003	2.22	0.005		352.07	5.86778	45.5	10.9	40.1	2.762	0.331	0.330	0.008	8.232	7.01	
212	6/21/2004	3:20:20 PM		25.751	25.163	25.137	26.343	25.224		41.844	46.774	4.325	37.97	-0.704	1.471		47.477	0.003	2.22	0.005		353.07	5.88444	45.3	11.6	39.9	2.751	0.331	0.330	0.008	8.262	7.03	
213	6/21/2004	3:21:20 PM		25.754	25.166	25.139	26.37	25.236		41.84	46.727	4.249	38.034	-0.698	1.477		45.422	0.003	2.216	0.006		354.07	5.90111	45.3	11.1	39.9	2.754	0.330	0.329	0.008	8.240	7.01	
214	6/21/2004	3:22:20 PM		25.751	25.153	25.122	26.358	25.239		41.864	47.019	4.282	38.022	-0.672	1.477		43.451	0.003	2.222	0.004		355.07	5.91778	45.5	10.6	39.9	2.754	0.331	0.330	0.008	8.265	7.03	
215	6/21/2004	3:23:20 PM		25.758	25.155	25.129	26.345	25.236		41.858	46.764	4.263	37.987	-0.681	1.474		45.833	0.003	2.22	0.005		356.07	5.93444	45.3	11.2	39.9	2.753	0.331	0.330	0.008	8.261	7.03	
216	6/21/2004	3:24:20 PM		25.745	25.147	25.12	26.316	25.227		41.73	46.619	4.249	37.874	-0.701	1.477		48.883	0.003	2.217	0.005		357.07	5.95111	45.1	12.0	39.8	2.744	0.331	0.329	0.008	8.276	7.04	
217	6/21/2004	3:25:20 PM		25.746	25.138	25.122	26.328	25.209		41.987	47.06	4.304	38.085	-0.704	1.474		45.464	0.003	2.216	0.005		358.07	5.96778	45.6	11.1	40.0	2.760	0.330	0.329	0.008	8.224	7.00	
218	6/21/2004	3:26:20 PM		25.753	25.14	25.138	26.334	25.205		41.788	46.903	4.26	37.925	-0.701	1.477		43.015	0.003	2.22	0.004		359.07	5.98444	45.4	10.5	39.9	2.748	0.331	0.330	0.008	8.272	7.04	
219	6/21/2004	3:27:20 PM		25.753	25.13	25.123	26.334	25.19		41.796	46.892	4.26	37.925	-0.649	1.48		46.546	0.003	2.224	0.005		360.07	6.00111	45.4	11.4	39.9	2.748	0.332	0.330	0.008	8.290	7.05	
220	6/21/2004	3:28:20 PM		25.754	25.131	25.115	26.351	25.197		41.831	46.826	4.154	38.098	-0.643	1.486		42.106	0.003	2.234	0.004		361.07	6.01778	45.4	10.3	40.0	2.755	0.333	0.332	0.008	8.307	7.07	
221	6/21/2004	3:29:20 PM		25.744	25.121	25.1	26.361	25.217		41.84	46.816	4.161	38.087	-0.643	1.486		46.273	0.003	2.236	0.004		362.07	6.03444	45.3	11.3	40.0	2.755	0.333	0.332	0.008	8.318	7.08	
222	6/21/2004	3:30:20 PM		25.766	25.143	25.147	26.358	25.209		42.184	47.419	4.21	38.381	-0.64	1.491		38.61	0.003	2.233	0.006		363.07	6.05111	45.9	9.5	40.3	2.777	0.333	0.332	0.008	8.231	7.00	
223	6/21/2004	3:31:20 PM		25.742	25.119	25.098	26.294	25.205		42.146	47.093	4.176	38.424	-0.649	1.483		46.761	0.003	2.233	0.004		364.07	6.06778	45.6	11.5	40.3	2.778	0.333	0.332	0.008	8.241	7.01	
224	6/21/2004	3:32:20 PM		25.749	25.126	25.115	26.336	25.207		41.759	46.585	4.149	38.056	-0.606	1.486		47.285	0.003	2.233	0.006		365.07	6.08444	45.1	11.6	39.9	2.751	0.333	0.332	0.008	8.315	7.08	
225	6/21/2004	3:33:20 PM		25.749	25.126	25.11	26.356	25.232		42.213	47.222	4.14	38.52	-0.646	1.486		44.515	0.003	2.234	0.005		366.07	6.10111	45.7	10.9	40.4	2.783	0.333	0.332	0.008	8.226	7.00	
226	6/21/2004	3:34:20 PM		25.739	25.111	25.089	26.341	25.197		41.879	46.77	4.149	38.13	-0.646	1.486		47.539	0.003	2.227	0.005		367.07	6.11778	45.3	11.7	40.0	2.758	0.332	0.331	0.008	8.279	7.05	
227	6/21/2004	3:35:20 PM		25.745	25.127	25.106	26.347	25.208		41.8	46.87	4.221	37.942	-0.62	1.486		42.187	0.003	2.234	0.005		368.07	6.13444	45.4	10.3	39.9	2.749	0.333	0.332	0.008	8.329	7.09	
228	6/21/2004	3:36:20 PM		25.746	25.123	25.112	26.308	25.214		42.188	47.315	4.209	38.354	-0.649	1.483		46.427	0.003	2.23	0.006		369.07	6.15111	45.8	11.4	40.3	2.777	0.332	0.331	0.008	8.230	7.00	
229	6/21/2004	3:37:20 PM		25.73	25.107	25.106	26.312	25.208		42.035	47.141	4.185	38.243	-0.643	1.491		42.26	0.003	2.233	0.004		370.07	6.16778	45.7	10.4	40.1	2.767	0.333	0.332	0.008	8.269	7.04	
230	6/21/2004	3:38:20 PM		25.735	25.112	25.091	26.297	25.208		42.047	47.234	4.211	38.241	-0.652	1.483		41.346	0.003	2.233	0.005		371.07	6.18444	45.8	10.1	40.1	2.768	0.333	0.332	0.008	8.272	7.04	
231	6/21/2004	3:39:20 PM		25.736	25.113	25.097	26.333	25.194		42.149	47.282	4.167	38.346	-0.582	1.489		44.085	0.003	2.241	0.005		372.07	6.20111	45.8	10.8	40.2	2.775	0.334	0.333	0.008	8.279	7.05	
232	6/21/2004	3:40:20 PM		25.742	25.104	25.093	26.294	25.19		42.144	47.241	4.155	38.407	-0.623	1.491		42.333	0.003	2.246	0.005		373.07	6.21778	45.8	10.4	40.3	2.777	0.335	0.334	0.008	8.292	7.06	
233	6/21/2004	3:41:20 PM		25.737	25.104	25.098	26.309	25.18		41.925	46.919	4.088	38.256	-0.643	1.491		44.333	0.003	2.241	0.004		374.07	6.23444	45.4	10.9	40.1	2.764	0.334	0.333	0.008	8.311	7.07	
234	6/21/2004	3:42:20 PM		25.727	25.104	25.103	26.289	25.195		42.285	47.313	4.128	38.633	-0.568	1.491		43.968	0.003	2.247	0.004		375.07	6.25111	45.8	10.8	40.5	2.790	0.335	0.334	0.008	8.256	7.03	
235	6/21/2004	3:43:20 PM		25.733	25.11	25.104	26.295	25.201		41.991	47.039	4.141	38.293	-0.577	1.491		49.339	0.003	2.239	0.005		376.07	6.26778	45.6	12.1	40.1	2.768	0.334	0.333	0.008	8.292	7.06	
236	6/21/2004	3:44:20 PM		25.74	25.112	25.111	26.317	25.203		42.024	47.075	4.16	38.247	-0.568	1.494		43.852	0.003	2.242	0.005		377.07	6.28444	45.6	10.7	40.1	2.767	0.334	0.333	0.008	8.302	7.07	
237	6/21/2004	3:45:20 PM		25.736	25.113	25.092	26.323	25.174		41.991	47.267	4.189	38.21	-0.637	1.489		46.319	0.003	2.24	0.005		378.07	6.30111	45.8	11.4	40.1	2.765	0.334	0.333	0.008	8.307	7.07	
238	6/21/2004	3:46:20 PM		25.738	25.12	25.109	26.34	25.186		41.885	46.957	4.132	38.178	-0.629	1.497		41.668	0.003	2.242	0.006		379.07	6.31778	45.5	10.2	40.0	2.760	0.334	0.333	0.008	8.324	7.08	
239	6/21/2004	3:47:20 PM		25.714	25.09	25.084	26.265	25.206		42.333	47.265	4.143	38.648	-0.571	1.497		47.281	0.003	2.246	0.006		380.07	6.33444	45.8	11.6	40.5	2.792	0.335	0.334	0.008	8.251	7.02	
240	6/21/2004	3:48:20 PM		25.72	25.097	25.091	26.297	25.193		41.923	46.965	4.105	38.243	-0.556	1.497		44.534	0.003	2.247	0.005		381.07	6.35111	45.5	10.9	40.1	2.764	0.335	0.334	0.008	8.336	7.09	
241	6/21/2004	4:32:06 PM		24.788	24.744	24.217	25.68	24.751		42.379	49.122	4.264	38.781	0.935	-3.998		44.454	0.003	2.572	0.004		424.83	7.08056	47.6	10.9	40.6	2.798	0.383	0.392	0.010	9.661	8.22	
242	6/21/2004	4:33:06 PM		24.798	24.709	24.252	25.67	24.811		3.172	49.622	4.208	-0.87	41.732	20.137		41.828	0.004	-0.013	0.004		425.83	7.09722	48.1	10.3	1.2	0.079	-0.002	-0.002	-0.002	-1.720	-1.46	
243	6/21/2004	4:34:06 PM		24.82	24.711	24.345	25.707	24.848		3.364	49.883	4.177	-0.636	41.604	19.808		44.569	0.003	-0.012	0.004		426.83	7.11389	48.4	10.9	1.4	0.094	-0.002	-0.002	-0.001	-1.336	-1.14	
244	6/21/2004	4:35:06 PM		24.837	24.713	24.386	25.718	24.88		3.356	49.902	4.194	-0.685	41.474	56.238		43.491	0.003	-0.012	0.004		427.83	7.13056	48.4	10.7	1.3	0.092	-0.002	-0.002	-0.001	-1.363	-1.16	
245	6/21/2004	4:36:06 PM		24.953	24.719	24.447	25.749	24.885		3.723	49.448	4.163	-0.273	40.973	0.433		45.368	0.315	14.643	0.004		428.83	7.14722	48.0	11.1	1.7	0.119	2.183	2.217	1.285	######	######	
246	6/21/2004	4:37:06 PM		25.043	24.719	24.488	25.775	24.881		40.993	48.95	4.253	37.502	2.214	-1.553		46.784	0.004	2.825	0.004		429.83	7.16389	47.5	11.5	39.2	2.706	0.421	0.427	0.011	10.888	9.27	
247	6/21/2004	4:38:06 PM		25.124	24.72	24.549	25.816	24.852		42.252	48.754	4.265	38.619	0.807	-1.622		44.957	0.003	2.55	0.004		430.83	7.18056	47.3	11.0	40.4	2.788	0.380	0.385	0.010	9.523	8.10	
248	6/21/2004	4:39:06 PM		25.175	24.721	24.58	25.826	24.853		42.478	48.783	4.208	38.863	0.596	-1.645		46.765	0.003	2.498	0.004		431.83	7.19722	47.3	11.5	40.7	2.804	0.372	0.377	0.009	9.266	7.89	
249	6/21/2004	4:40:06 PM		25.211	24.717	24.635	25.822	24.848		42.659	49.069	4.214	38.988	0.477	-1.645		46.588	0.003	2.474	0.003		432.83	7.21389	47.6	11.4	40.8	2.815	0.369	0.373	0.009	9.129	7.77	
250	6/21/2004	4:41:06 PM		25.261	24.727	24.681	25.843	24.854		42.75	48.901	4.192	39.167	0.425	-1.645		46.298	0.003	2.464	0.004		433.83	7.23056	47.4	11.3	41.0	2.824	0.367	0.371	0.009	9.050	7.70	
251	6/21/2004	4:42:06 PM		25.301	24.727	24.716	25.872	24.858		42.682	48.745	4.196	39.031	0.367	-1.642		45.414	0.003	2.464	0.004		434.83	7.24722	47.3	11.1	40.9	2.817	0.367	0.370	0.009	9.064	7.71	
252	6/21/2004	4:43:06 PM		25.345	24.731	24.76	25.911	24.863		42.932	49.008	4.24	39.23	0.37	-1.645		46.092	0.003	2.458	0.005		435.83	7.26389	47.5	11.3	41.1	2.832	0.366	0.369	0.009	8.981	7.64	
253	6/21/2004	4:44:06 PM		25.387	24.743	24.787	25.899	24.88		42.706	48.722	4.183	39.052	0.367	-1.645		47.128	0.003	2.456	0.005		436.83	7.28056	47.2	11.5	40.9	2.818	0.366	0.368	0.009	9.011	7.67	
254	6/21/2004	4:45:06 PM		25.423	24.749	24.819	25.91	24.886		42.76	48.795	4.215	39.076	0.364	-1.645		45.376	0.003	2.453	0.004		437.83	7.29722	47.3	11.1	40.9	2.821	0.366	0.368	0.009	8.984	7.65	
255	6/21/2004	4:46:06 PM		25.449	24.74	24.849	25.896	24.887		42.932	49.197	4.282	39.152	0.324	-1.648		48.259	0.003	2.444	0.005		438.83	7.31389	47.7	11.8	41.0	2.830	0.364	0.366	0.009	8.916	7.59	
256	6/21/2004	4:47:06 PM		25.469	24.74	24.879	25.896	24.892		42.648	48.729	4.264	38.882	0.327	-1.645		44.046	0.003	2.448	0.006		439.83	7.33056	47.3	10.8	40.8	2.811	0.365	0.366	0.009	8.984	7.65	
257	6/21/2004	4:48:06 PM		25.516	24.757	24.926	25.907	24.898		42.557	48.565	4.169	38.925	0.327	-1.636		44.899	0.003	2.447	0.007		440.83	7.34722	47.1	11.0	40.7	2.809	0.365	0.366	0.009	8.973	7.64	
258	6/21/2004	4:49:06 PM		25.552	24.763	24.952	25.944	24.89		42.771	48.816	4.273	39.058	0.341	-1.636		48.213	0.003	2.441	0.006		441.83	7.36389	47.3	11.8	40.9	2.821	0.364	0.364	0.009	8.907	7.58	
259	6/21/2004	4:50:06 PM		25.562	24.748	24.957	25.934	24.905		42.675	48.836	4.217	38.974	0.309	-1.636		44.669	0.003	2.444	0.004		442.83	7.38056	47.4	10.9	40.8	2.815	0.364	0.365	0.009	8.936	7.60	
260	6/21/2004	4:51:06 PM		25.582	24.748	24.982	25.914	24.915		42.717	48.739	4.204	39.037	0.263	-1.636		45.097	0.003	2.441	0.005		443.83	7.39722	47.3	11.1	40.9	2.818	0.364	0.364	0.009	8.908	7.58	
261	6/21/2004	4:52:06 PM		25.611	24.757	25.002	25.893	24.904		42.783	49.002	4.224	39.04	0.257	-1.634		45.994	0.003	2.438	0.006		444.83	7.41389	47.5	11.3	40.9	2.821	0.363	0.363	0.009	8.884	7.56	
262	6/21/2004	4:53:06 PM		25.636	24.757	25.037	25.918	24.914		42.455	48.24	4.602	38.391	0.089	-1.651		47.001	0.003	2.394	0.006		445.83	7.43056	46.8	11.5	40.4	2.787	0.357	0.357	0.009	8.821	7.51	
263	6/21/2004	4:54:06 PM		25.656	24.762	25.071	25.927	24.908		42.464	48.374	4.457	38.578	0.141	-1.648		46.49	0.003	2.402	0.005		446.83	7.44722	46.9	11.4	40.5	2.794	0.358	0.357	0.009	8.820	7.51	
264	6/21/2004	4:55:06 PM		25.676	24.767	25.076	25.952	24.928		41.779	47.442	4.367	37.859	-0.09	-1.668		46.158	0.003	2.356	0.004		447.83	7.46389	46.0	11.3	39.8	2.745	0.351	0.351	0.009	8.803	7.49	
265	6/21/2004	4:56:06 PM		25.694	24.77	25.06	25.961	24.952		41.92	47.871	3.935	38.473	0.028	-1.645		44.519	0.003	2.393	0.004		448.83	7.48056	46.4	10.9	40.2	2.771	0.357	0.356	0.009	8.861	7.54	
266	6/21/2004	4:57:06 PM		25.706	24.782	25.047	25.973	24.949		42.478	48.513	3.6	39.397	0.272	-1.619		41.86	0.003	2.439	0.004		449.83	7.49722	47.0	10.3	40.9	2.822	0.364	0.363	0.009	8.871	7.55	
267	6/21/2004	4:58:06 PM		25.693	24.794	25.053	25.974	24.996		41.74	47.471	3.971	38.235	0.086	-1.639		43.716	0.003	2.4	0.005		450.83	7.51389	46.0	10.7	40.0	2.757	0.358	0.357	0.009	8.935	7.60	
268	6/21/2004	4:59:06 PM		25.678	24.789	25.058	25.979	24.966		41.991	47.896	4.117	38.334	-0.07	-1.654		44.217	0.003	2.361	0.004		451.83	7.53056	46.4	10.8	40.2	2.769	0.352	0.351	0.009	8.750	7.45	
269	6/21/2004	5:00:06 PM		25.672	24.778	25.038	25.969	24.96		42.008	47.831	4.025	38.483	-0.064	-1.651		46.025	0.003	2.37	0.005		452.83	7.54722	46.4	11.3	40.2	2.775	0.353	0.353	0.009	8.770	7.46	
270	6/21/2004	5:01:06 PM		25.682	24.798	25.048	25.994	24.94		42.032	47.593	4.004	38.529	-0.021	-1.645		42.792	0.003	2.373	0.006		453.83	7.56389	46.1	10.5	40.3	2.777	0.354	0.353	0.009	8.771	7.46	
271	6/21/2004	5:02:06 PM		25.668	24.8	25.024	25.98	24.921		42.037	47.634	3.999	38.537	-0.056	-1.648		43.772	0.003	2.369	0.004		454.83	7.58056	46.2	10.7	40.3	2.778	0.353	0.353	0.009	8.761	7.46	
272	6/21/2004	5:03:06 PM		25.669	24.8	25.03	25.956	24.937		42.003	47.744	3.965	38.549	-0.027	-1.642		44.579	0.003	2.371	0.005		455.83	7.59722	46.3	10.9	40.3	2.777	0.353	0.353	0.009	8.769	7.46	
273	6/21/2004	5:04:06 PM		25.658	24.805	25.034	25.985	24.946		41.782	47.483	4.002	38.278	-0.021	-1.636		43.924	0.003	2.374	0.006		456.83	7.61389	46.0	10.8	40.0	2.760	0.354	0.354	0.009	8.833	7.52	
274	6/21/2004	5:05:06 PM		25.67	24.821	25.04	25.977	24.958		42.339	47.98	4.02	38.795	0.06	-1.636		42.957	0.003	2.381	0.006		457.83	7.63056	46.5	10.5	40.6	2.797	0.355	0.355	0.009	8.741	7.44	
275	6/21/2004	5:06:06 PM		25.654	24.795	25.02	25.966	24.977		42.275	47.871	4.095	38.666	-0.003	-1.634		44.294	0.003	2.381	0.005		458.83	7.64722	46.4	10.9	40.5	2.790	0.355	0.355	0.009	8.767	7.46	
276	6/21/2004	5:07:06 PM		25.66	24.816	25.02	26.007	24.983		42.045	47.788	4.039	38.496	-0.012	-1.631		45.85	0.003	2.379	0.006		459.83	7.66389	46.3	11.2	40.3	2.777	0.355	0.354	0.009	8.803	7.49	
277	6/21/2004	5:08:06 PM		25.687	24.833	25.038	26.044	24.985		42.196	48.182	3.993	38.662	0.026	-1.628		45.018	0.003	2.389	0.005		460.83	7.68056	46.7	11.0	40.4	2.787	0.356	0.356	0.009	8.801	7.49	
278	6/21/2004	5:09:06 PM		25.678	24.829	25.038	26.02	25.006		42.341	48.266	4.02	38.763	0.028	-1.628		43.791	0.003	2.391	0.005		461.83	7.69722	46.8	10.7	40.6	2.796	0.356	0.356	0.009	8.781	7.47	
279	6/21/2004	5:10:06 PM		25.679	24.836	25.05	26.031	24.997		42.283	48.148	3.991	38.758	0.052	-1.625		44.836	0.003	2.393	0.005		462.83	7.71389	46.7	11.0	40.5	2.794	0.357	0.356	0.009	8.792	7.48	
280	6/21/2004	5:11:06 PM		25.681	24.838	25.047	26.018	25.014		42.472	48.128	3.905	39.056	0.098	-1.619		42.867	0.003	2.396	0.006		463.83	7.73056	46.7	10.5	40.8	2.811	0.357	0.357	0.009	8.752	7.45	

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	6/21/2004	5:12:06 PM		25.683	24.844	25.023	26.01	25.021		42.528	48.401	3.986	38.994	0.031	-1.622		42.437	0.003	2.4	0.006		464.83	7.74722	46.9	10.4	40.8	2.810	0.358	0.358	0.009	8.773	7.47	
282	6/21/2004	5:13:06 PM		25.683	24.844	25.023	26.035	25.006		42.775	48.952	3.849	39.403	0.141	-1.61		42.139	0.003	2.409	0.005		465.83	7.76389	47.5	10.3	41.1	2.833	0.359	0.359	0.009	8.735	7.43	
283	6/21/2004	5:14:06 PM		25.684	24.845	25.009	26.01	25.001		42.592	48.304	3.805	39.319	0.185	-1.613		40.965	0.003	2.411	0.004		466.83	7.78056	46.8	10.0	41.0	2.824	0.359	0.359	0.009	8.775	7.47	
284	6/21/2004	5:15:06 PM		25.704	24.866	25.065	26.051	24.997		42.528	48.358	3.827	39.185	0.199	-1.605		42.262	0.003	2.417	0.004		467.83	7.79722	46.9	10.4	40.9	2.817	0.360	0.360	0.009	8.804	7.49	
285	6/21/2004	5:16:06 PM		25.69	24.851	25.046	26.027	25.023		42.08	47.684	4.058	38.516	-0.029	-1.631		43.699	0.003	2.368	0.005		468.83	7.81389	46.2	10.7	40.3	2.778	0.353	0.353	0.009	8.750	7.45	
286	6/21/2004	5:17:06 PM		25.675	24.856	25.046	26.022	25.013		42.234	48.086	4.052	38.641	-0.015	-1.622		45.727	0.003	2.377	0.005		469.83	7.83056	46.6	11.2	40.4	2.788	0.354	0.354	0.009	8.753	7.45	
287	6/21/2004	5:18:06 PM		25.692	24.868	25.032	26.058	24.994		42.043	47.759	3.98	38.559	-0.006	-1.625		41.019	0.003	2.379	0.006		470.83	7.84722	46.3	10.1	40.3	2.779	0.355	0.354	0.009	8.793	7.48	
288	6/21/2004	5:19:06 PM		25.692	24.869	25.043	26.034	24.995		42.362	48.026	3.983	38.921	0.023	-1.619		44.337	0.003	2.382	0.005		471.83	7.86389	46.6	10.9	40.6	2.802	0.355	0.355	0.009	8.728	7.43	
289	6/21/2004	5:20:06 PM		25.694	24.87	25.054	26.07	25.007		42.155	47.991	3.98	38.66	0.02	-1.616		43.699	0.003	2.38	0.005		472.83	7.88056	46.5	10.7	40.4	2.786	0.355	0.354	0.009	8.768	7.46	
290	6/21/2004	5:21:06 PM		25.7	24.872	25.056	26.047	25.013		42.445	48.221	4.027	38.853	0.026	-1.616		43.236	0.003	2.38	0.005		473.83	7.89722	46.7	10.6	40.6	2.803	0.355	0.354	0.009	8.716	7.42	
291	6/21/2004	5:22:06 PM		25.709	24.88	25.085	26.086	25.012		42.507	48.215	3.943	39.027	0.072	-1.608		42.452	0.003	2.387	0.005		474.83	7.91389	46.7	10.4	40.8	2.811	0.356	0.355	0.009	8.709	7.41	
292	6/21/2004	5:23:06 PM		25.71	24.872	25.071	26.087	25.023		42.393	48.324	3.965	38.886	0.031	-1.608		40.858	0.003	2.384	0.006		475.83	7.93056	46.9	10.0	40.6	2.802	0.355	0.355	0.009	8.729	7.43	
293	6/21/2004	5:24:06 PM		25.707	24.878	25.062	26.104	25.01		42.669	48.441	3.974	39.218	0.026	-1.613		44.166	0.003	2.379	0.005		476.83	7.94722	47.0	10.8	40.9	2.823	0.355	0.354	0.009	8.648	7.36	
294	6/21/2004	5:25:06 PM		25.708	24.875	25.069	26.12	25.021		42.25	47.974	4.087	38.643	-0.021	-1.616		43.428	0.003	2.372	0.004		477.83	7.96389	46.5	10.6	40.4	2.789	0.354	0.353	0.009	8.727	7.43	
295	6/21/2004	5:26:06 PM		25.71	24.866	25.07	26.077	25.038		42.144	47.846	4.023	38.588	0.02	-1.61		43.693	0.003	2.377	0.005		478.83	7.98056	46.4	10.7	40.4	2.783	0.354	0.354	0.009	8.762	7.46	
296	6/21/2004	5:27:06 PM		25.718	24.879	25.088	26.125	25.036		42.277	48.132	4.045	38.765	0.002	-1.61		43.881	0.003	2.379	0.006		479.83	7.99722	46.7	10.8	40.5	2.794	0.355	0.354	0.009	8.732	7.43	
297	6/21/2004	5:28:06 PM		25.725	24.881	25.101	26.127	25.038		42.221	47.873	4.005	38.701	0.023	-1.608		43.305	0.003	2.377	0.004		480.83	8.01389	46.4	10.6	40.5	2.790	0.354	0.353	0.009	8.734	7.43	
298	6/21/2004	5:29:06 PM		25.716	24.873	25.072	26.088	25.029		42.138	47.81	3.951	38.641	0.014	-1.605		43.551	0.003	2.384	0.005		481.83	8.03056	46.3	10.7	40.4	2.785	0.355	0.355	0.009	8.782	7.47	
299	6/21/2004	5:30:06 PM		25.723	24.879	25.079	26.11	25.021		42.472	48.368	3.975	38.959	0.026	-1.605		43.032	0.003	2.38	0.006		482.83	8.04722	46.9	10.5	40.7	2.807	0.355	0.354	0.009	8.696	7.40	
300	6/21/2004	5:31:06 PM		25.719	24.88	25.069	26.1	25.027		42.265	47.808	3.952	38.855	0.026	-1.605		43.685	0.003	2.38	0.006		483.83	8.06389	46.3	10.7	40.6	2.796	0.355	0.354	0.009	8.731	7.43	
301	6/21/2004	5:32:06 PM		25.714	24.865	25.069	26.08	25.027		42.331	48.121	3.969	38.855	0.008	-1.599		44.433	0.003	2.384	0.004		484.83	8.08056	46.6	10.9	40.6	2.799	0.355	0.355	0.009	8.739	7.44	
302	6/21/2004	5:33:06 PM		25.725	24.882	25.086	26.102	25.028		42.225	47.922	3.981	38.664	-0.006	-1.602		43.593	0.003	2.382	0.005		485.83	8.09722	46.4	10.7	40.4	2.789	0.355	0.354	0.009	8.760	7.45	
303	6/21/2004	5:34:06 PM		25.721	24.882	25.087	26.093	25.024		42.493	48.273	3.95	39.066	-0.003	-1.599		43.991	0.003	2.384	0.007		486.83	8.11389	46.8	10.8	40.8	2.812	0.355	0.355	0.009	8.695	7.40	
304	6/21/2004	5:35:06 PM		25.732	24.884	25.088	26.109	25.035		42.501	48.211	3.979	39.062	0.028	-1.596		42.888	0.003	2.382	0.006		487.83	8.13056	46.7	10.5	40.8	2.812	0.355	0.354	0.009	8.687	7.39	
305	6/21/2004	5:36:06 PM		25.732	24.889	25.078	26.119	25.02		42.182	47.808	3.94	38.752	0.028	-1.596		43.801	0.003	2.385	0.006		488.83	8.14722	46.3	10.7	40.5	2.790	0.356	0.355	0.009	8.768	7.46	
306	6/21/2004	5:37:06 PM		25.728	24.885	25.079	26.1	25.026		42.302	48.244	3.989	38.76	0.046	-1.59		48.027	0.003	2.385	0.005		489.83	8.16389	46.8	11.8	40.5	2.794	0.356	0.355	0.009	8.754	7.45	
307	6/21/2004	5:38:06 PM		25.735	24.901	25.095	26.111	25.078		42.391	48.065	4.005	38.845	0.026	-1.596		44.536	0.003	2.385	0.007		490.83	8.18056	46.6	10.9	40.6	2.800	0.356	0.355	0.009	8.731	7.43	
308	6/21/2004	5:39:06 PM		25.725	24.886	25.085	26.146	25.113		42.59	48.152	3.963	39.167	0.026	-1.59		45.22	0.003	2.386	0.006		491.83	8.19722	46.7	11.1	40.9	2.818	0.356	0.355	0.009	8.681	7.39	
309	6/21/2004	5:40:06 PM		25.74	24.912	25.121	26.247	25.178		42.534	48.26	4.029	38.996	0.023	-1.587		45.733	0.003	2.387	0.007		492.83	8.21389	46.8	11.2	40.8	2.811	0.356	0.355	0.009	8.700	7.40	
310	6/21/2004	5:41:06 PM		25.71	24.886	25.055	26.211	25.232		42.315	48.126	3.94	38.879	0.026	-1.59		44.849	0.003	2.389	0.005		493.83	8.23056	46.7	11.0	40.6	2.799	0.356	0.356	0.009	8.760	7.45	
311	6/21/2004	5:42:06 PM		25.735	24.916	25.08	26.291	25.317		42.24	48.173	4.013	38.713	0.052	-1.587		42.89	0.003	2.384	0.006		494.83	8.24722	46.7	10.5	40.5	2.791	0.355	0.355	0.009	8.761	7.46	
312	6/21/2004	5:43:06 PM		25.73	24.921	25.075	26.291	25.322		42.294	48.111	3.992	38.783	0.026	-1.582		44.688	0.003	2.384	0.004		495.83	8.26389	46.6	11.0	40.5	2.795	0.355	0.355	0.009	8.749	7.45	
313	6/21/2004	5:44:06 PM		25.736	24.943	25.097	26.353	25.299		42.746	48.468	3.824	39.47	0.13	-1.573		43.197	0.003	2.402	0.005		496.83	8.28056	47.0	10.6	41.1	2.834	0.358	0.357	0.009	8.688	7.39	
314	6/21/2004	5:45:06 PM		25.741	24.968	25.087	26.348	25.264		42.426	48.208	3.815	39.126	0.098	-1.576		43.728	0.003	2.405	0.006		497.83	8.29722	46.7	10.7	40.8	2.811	0.359	0.358	0.009	8.772	7.47	
315	6/21/2004	5:46:06 PM		25.747	24.978	25.093	26.354	25.265		42.46	48.325	3.991	38.986	0.026	-1.584		43.67	0.003	2.382	0.006		498.83	8.31389	46.9	10.7	40.7	2.808	0.355	0.354	0.009	8.698	7.40	
316	6/21/2004	5:47:06 PM		25.743	25	25.094	26.355	25.271		42.254	47.887	3.987	38.762	0.031	-1.579		44.15	0.003	2.385	0.007		499.83	8.33056	46.4	10.8	40.5	2.793	0.356	0.355	0.009	8.755	7.45	
317	6/21/2004	5:48:06 PM		25.735	24.992	25.086	26.292	25.248		42.493	48.144	3.972	39.052	0.026	-1.584		44.442	0.003	2.383	0.006		500.83	8.34722	46.7	10.9	40.8	2.811	0.355	0.354	0.009	8.693	7.40	
318	6/21/2004	5:49:06 PM		25.737	25.014	25.103	26.289	25.21		42.19	47.808	3.939	38.799	0.026	-1.576		42.606	0.003	2.386	0.007		501.83	8.36389	46.3	10.4	40.5	2.792	0.356	0.355	0.009	8.759	7.45	
319	6/21/2004	5:50:06 PM		25.724	25.001	25.085	26.206	25.207		42.344	48.011	3.96	38.916	0.023	-1.582		41.949	0.003	2.388	0.006		502.83	8.38056	46.5	10.3	40.6	2.801	0.356	0.355	0.009	8.742	7.44	
320	6/21/2004	5:51:06 PM		25.742	25.023	25.102	26.258	25.219		42.431	48.25	3.989	38.976	0.028	-1.576		42.977	0.003	2.386	0.006		503.83	8.39722	46.8	10.5	40.7	2.806	0.356	0.355	0.009	8.715	7.42	
321	6/21/2004	5:52:06 PM		25.732	25.019	25.083	26.224	25.205		42.447	48.123	3.993	39.021	0.028	-1.573		44.081	0.003	2.387	0.006		504.83	8.41389	46.7	10.8	40.7	2.808	0.356	0.355	0.009	8.716	7.42	
322	6/21/2004	5:53:06 PM		25.734	25.031	25.09	26.221	25.172		42.545	48.136	3.976	39.111	0.026	-1.576		43.42	0.003	2.384	0.004		505.83	8.43056	46.7	10.6	40.8	2.815	0.355	0.355	0.009	8.684	7.39	
323	6/21/2004	5:54:06 PM		25.73	25.021	25.095	26.176	25.167		42.364	48.022	3.977	38.914	0.005	-1.573		43.655	0.003	2.384	0.005		506.83	8.44722	46.5	10.7	40.6	2.802	0.355	0.354	0.009	8.723	7.42	
324	6/21/2004	5:55:06 PM		25.737	25.029	25.098	26.174	25.155		42.441	48.428	3.984	38.943	0.028	-1.567		45.349	0.003	2.393	0.007		507.83	8.46389	47.0	11.1	40.7	2.806	0.357	0.356	0.009	8.744	7.44	
325	6/21/2004	5:56:06 PM		25.738	25.02	25.089	26.17	25.146		42.265	48.235	3.959	38.816	0.023	-1.57		43.887	0.003	2.383	0.005		508.83	8.48056	46.8	10.8	40.5	2.795	0.355	0.354	0.009	8.742	7.44	
326	6/21/2004	5:57:06 PM		25.745	25.042	25.116	26.207	25.143		42.424	48.291	4.008	38.935	0.028	-1.561		42.969	0.003	2.388	0.005		509.83	8.49722	46.8	10.5	40.7	2.805	0.356	0.355	0.009	8.724	7.42	
327	6/21/2004	5:58:06 PM		25.742	25.029	25.093	26.194	25.145		42.489	48.171	4.004	39.001	0.037	-1.567		42.779	0.003	2.389	0.006		510.83	8.51389	46.7	10.5	40.7	2.809	0.356	0.355	0.009	8.719	7.42	
328	6/21/2004	5:59:06 PM		25.732	25.029	25.088	26.179	25.135		42.422	48.316	3.981	38.923	0.034	-1.564		41.572	0.003	2.389	0.005		511.83	8.53056	46.8	10.2	40.7	2.804	0.356	0.355	0.009	8.736	7.43	
329	6/21/2004	6:00:06 PM		25.726	25.018	25.087	26.138	25.109		42.194	48.082	3.979	38.687	0.026	-1.561		44.4	0.003	2.391	0.005		512.83	8.54722	46.6	10.9	40.4	2.788	0.356	0.356	0.009	8.793	7.48	
330	6/21/2004	6:01:06 PM		25.726	25.017	25.086	26.147	25.109		42.418	48.146	3.984	38.972	0.028	-1.561		44.012	0.003	2.384	0.005		513.83	8.56389	46.7	10.8	40.7	2.806	0.355	0.355	0.009	8.713	7.41	
331	6/21/2004	6:02:06 PM		25.731	25.013	25.082	26.163	25.099		42.327	47.991	3.987	38.892	0.043	-1.558		44.961	0.003	2.387	0.006		514.83	8.58056	46.5	11.0	40.6	2.800	0.356	0.355	0.009	8.743	7.44	
332	6/21/2004	6:03:06 PM		25.742	25.024	25.088	26.194	25.105		42.742	48.575	3.994	39.31	0.028	-1.558		43.105	0.003	2.392	0.005		515.83	8.59722	47.1	10.6	41.0	2.829	0.357	0.356	0.009	8.671	7.38	
333	6/21/2004	6:04:06 PM		25.737	25.019	25.088	26.204	25.105		42.495	48.41	3.997	39.038	0.037	-1.556		44.734	0.003	2.387	0.006		516.83	8.61389	46.9	11.0	40.8	2.811	0.356	0.355	0.009	8.708	7.41	
334	6/21/2004	6:05:06 PM		25.72	25.002	25.081	26.167	25.103		42.424	48.165	4.035	38.935	0.034	-1.556		43.964	0.003	2.39	0.005		517.83	8.63056	46.7	10.8	40.7	2.805	0.356	0.356	0.009	8.739	7.44	
335	6/21/2004	6:06:06 PM		25.74	25.017	25.096	26.182	25.108		42.325	48.179	3.985	38.918	0.026	-1.556		42.339	0.003	2.392	0.005		518.83	8.64722	46.7	10.4	40.6	2.801	0.357	0.356	0.009	8.756	7.45	
336	6/21/2004	6:07:06 PM		25.729	24.996	25.07	26.206	25.102		42.186	47.893	3.995	38.74	0.026	-1.553		43.207	0.003	2.393	0.006		519.83	8.66389	46.4	10.6	40.5	2.790	0.357	0.356	0.009	8.800	7.49	
337	6/21/2004	6:08:06 PM		25.735	25.012	25.081	26.192	25.103		42.29	48.298	3.989	38.826	0.037	-1.55		44.581	0.003	2.393	0.007		520.83	8.68056	46.8	10.9	40.6	2.796	0.357	0.356	0.009	8.777	7.47	
338	6/21/2004	6:09:06 PM		25.74	25.012	25.076	26.167	25.088		42.335	48.173	3.995	38.886	0.028	-1.55		45.216	0.003	2.393	0.006		521.83	8.69722	46.7	11.1	40.6	2.800	0.357	0.356	0.009	8.767	7.46	
339	6/21/2004	6:54:26 PM		24.409	24.756	23.833	25.806	24.833		22.243	23.689	4.058	18.326	-1.214	-5.108		46.01	0.003	1.188	0.004		567.17	9.45278	22.2	11.3	20.3	1.399	0.177	0.183	0.009	9.025	7.68	
340	6/21/2004	6:55:26 PM		24.383	24.745	23.782	25.635	24.852		2.962	23.95	3.961	-1.018	16.024	19.918		43.601	0.003	-0.011	0.004		568.17	9.46944	22.5	10.7	1.0	0.067	-0.002	-0.002	-0.002	-1.746	-1.49	
341	6/21/2004	6:56:26 PM		24.422	24.744	23.745	25.629	24.745		2.966	24.022	3.955	-1.022	16.096	20.473		45.164	0.003	-0.01	0.004		569.17	9.48611	22.5	11.1	1.0	0.067	-0.001	-0.002	-0.002	-1.589	-1.35	
342	6/21/2004	6:57:26 PM		24.454	24.736	23.687	25.586	24.743		2.854	24.105	3.864	-1.034	16.194	19.071		43.474	0.003	-0.01	0.004		570.17	9.50278	22.6	10.7	0.9	0.063	-0.001	-0.002	-0.002	-1.700	-1.45	
343	6/21/2004	6:58:26 PM		24.785	24.721	23.618	25.562	24.788		2.493	24.126	3.849	-1.35	16.579	22.389		43.489	0.003	14.643	0.006		571.17	9.51944	22.7	10.7	0.6	0.039	2.183	2.270	3.972	######	######	
344	6/21/2004	6:59:26 PM		24.15	24.757	23.623	25.612	24.774		17.784	23.755	3.782	14.466	0.269	0.769		44.471	0.004	2.457	0.004		572.17	9.53611	22.3	10.9	16.1	1.112	0.366	0.381	0.024	23.620	20.10	
345	6/21/2004	7:00:26 PM		24.059	24.732	23.562	25.567	24.718		21.339	24.045	3.776	17.776	-1.214	0.682		45.441	0.003	1.638	0.004		573.17	9.55278	22.6	11.1	19.6	1.348	0.244	0.254	0.013	13.005	11.07	
346	6/21/2004	7:01:26 PM		24.028	24.746	23.557	25.611	24.688		22.169	24.165	3.706	18.626	-1.211	0.676		44.212	0.003	1.445	0.004		574.17	9.56944	22.7	10.8	20.4	1.406	0.215	0.224	0.011	11.002	9.36	
347	6/21/2004	7:02:26 PM		23.973	24.73	23.496	25.59	24.707		22.193	23.95	3.882	18.488	-1.214	0.668		44.346	0.003	1.33	0.004		575.17	9.58611	22.5	10.9	20.3	1.402	0.198	0.207	0.010	10.172	8.66	
348	6/21/2004	7:03:26 PM		23.965	24.717	23.568	25.427	24.669		22.169	23.828	3.842	18.48	-1.214	0.665		44.815	0.003	1.295	0.004		576.17	9.60278	22.4	11.0	20.3	1.401	0.193	0.201	0.010	9.892	8.42	
349	6/21/2004	7:04:26 PM		24.009	24.711	23.628	25.396	24.618		22.139	23.705	4.145	18.148	-1.214	0.665		45.967	0.003	1.226	0.004		577.17	9.61944	22.2	11.3	20.1	1.389	0.183	0.190	0.009	9.433	8.03	
350	6/21/2004	7:05:26 PM		24.053	24.705	23.706	25.445	24.587		22.092	23.57	4.148	18.076	-1.216	0.665		46.244	0.003	1.219	0.004		578.17	9.63611	22.1	11.3	20.1	1.385	0.182	0.189	0.009	9.386	7.99	

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	6/21/2004	7:06:26 PM		24.101	24.688	23.775	25.428	24.595		21.907	23.28	4.114	17.91	-1.214	0.668		48.282	0.003	1.216	0.007		579.17	9.65278	21.8	11.8	19.9	1.373	0.181	0.188	0.009	9.427	8.02	
352	6/21/2004	7:07:26 PM		24.154	24.686	23.823	25.406	24.597		22.057	23.473	4.034	18.17	-1.211	0.668		47.118	0.003	1.213	0.005		580.17	9.66944	22.0	11.5	20.1	1.387	0.181	0.187	0.009	9.295	7.91	
353	6/21/2004	7:08:26 PM		24.197	24.673	23.85	25.454	24.585		22.063	23.313	3.974	18.242	-1.214	0.665		46.355	0.003	1.214	0.004		581.17	9.68611	21.8	11.4	20.2	1.389	0.181	0.187	0.009	9.278	7.90	
354	6/21/2004	7:09:26 PM		24.24	24.662	23.889	25.442	24.594		22.212	23.649	4.008	18.328	-1.214	0.673		44.988	0.003	1.209	0.005		582.17	9.70278	22.2	11.0	20.3	1.398	0.180	0.186	0.009	9.176	7.81	
355	6/21/2004	7:10:26 PM		24.285	24.656	23.929	25.466	24.603		22.266	23.614	3.985	18.429	-1.214	0.668		45.422	0.003	1.204	0.006		583.17	9.71944	22.1	11.1	20.3	1.403	0.180	0.185	0.009	9.093	7.74	
356	6/21/2004	7:11:26 PM		24.308	24.63	23.937	25.45	24.637		22.108	23.525	3.995	18.24	-1.214	0.668		44.333	0.003	1.2	0.005		584.17	9.73611	22.1	10.9	20.2	1.391	0.179	0.184	0.009	9.139	7.78	
357	6/21/2004	7:12:26 PM		24.358	24.639	24.007	25.509	24.691		22.318	23.821	3.977	18.431	-1.214	0.668		45.766	0.003	1.199	0.005		585.17	9.75278	22.3	11.2	20.4	1.405	0.179	0.184	0.009	9.023	7.68	
358	6/21/2004	7:13:26 PM		24.388	24.644	24.052	25.549	24.761		22.44	23.867	3.949	18.626	-1.214	0.67		44.479	0.003	1.204	0.006		586.17	9.76944	22.4	10.9	20.5	1.416	0.180	0.184	0.009	8.980	7.64	
359	6/21/2004	7:14:26 PM		24.433	24.649	24.102	25.625	24.831		22.268	23.6	3.886	18.509	-1.214	0.673		43.411	0.003	1.207	0.005		587.17	9.78611	22.1	10.6	20.4	1.406	0.180	0.185	0.009	9.053	7.70	
360	6/21/2004	7:15:26 PM		24.442	24.628	24.091	25.619	24.88		22.463	23.846	3.847	18.745	-1.216	0.67		44.849	0.003	1.204	0.005		588.17	9.80278	22.4	11.0	20.6	1.421	0.180	0.184	0.009	8.939	7.61	
361	6/21/2004	7:16:26 PM		24.473	24.639	24.112	25.675	24.916		22.561	23.925	3.895	18.776	-1.219	0.67		43.67	0.003	1.198	0.005		589.17	9.81944	22.5	10.7	20.7	1.425	0.179	0.183	0.009	8.861	7.54	
362	6/21/2004	7:17:26 PM		24.514	24.66	24.158	25.73	24.897		22.446	23.801	3.881	18.686	-1.214	0.673		43.841	0.003	1.201	0.006		590.17	9.83611	22.3	10.7	20.6	1.418	0.179	0.183	0.009	8.916	7.59	
363	6/21/2004	7:18:26 PM		24.544	24.671	24.178	25.731	24.862		22.231	23.556	4.095	18.234	-1.214	0.67		44.805	0.003	1.171	0.004		591.17	9.85278	22.1	11.0	20.2	1.395	0.175	0.179	0.009	8.832	7.52	
364	6/21/2004	7:19:26 PM		24.566	24.677	24.2	25.687	24.844		22.337	23.713	4.039	18.435	-1.214	0.67		45.689	0.003	1.172	0.005		592.17	9.86944	22.2	11.2	20.4	1.406	0.175	0.179	0.009	8.767	7.46	
365	6/21/2004	7:20:26 PM		24.591	24.678	24.226	25.698	24.815		22.214	23.591	3.952	18.382	-1.216	0.668		45.12	0.003	1.176	0.006		593.17	9.88611	22.1	11.1	20.3	1.399	0.175	0.179	0.009	8.829	7.51	
366	6/21/2004	7:21:26 PM		24.623	24.694	24.272	25.675	24.826		22.502	23.85	3.888	18.745	-1.214	0.676		44.594	0.003	1.184	0.005		594.17	9.90278	22.4	10.9	20.6	1.422	0.177	0.180	0.009	8.737	7.44	
367	6/21/2004	7:22:26 PM		24.622	24.678	24.276	25.613	24.8		22.654	24.087	3.916	18.899	-1.214	0.673		44.855	0.003	1.184	0.005		595.17	9.91944	22.6	11.0	20.8	1.432	0.177	0.180	0.009	8.672	7.38	
368	6/21/2004	7:23:26 PM		24.658	24.694	24.307	25.61	24.791		22.565	23.836	3.885	18.811	-1.214	0.673		44.667	0.003	1.183	0.006		596.17	9.93611	22.4	10.9	20.7	1.426	0.176	0.180	0.009	8.694	7.40	
369	6/21/2004	7:24:26 PM		24.662	24.683	24.302	25.594	24.78		22.5	23.825	3.806	18.841	-1.214	0.673		43.735	0.003	1.183	0.006		597.17	9.95278	22.4	10.7	20.7	1.425	0.176	0.180	0.009	8.702	7.41	
370	6/21/2004	7:25:26 PM		24.683	24.689	24.307	25.589	24.771		22.475	23.898	3.825	18.751	-1.216	0.673		44.073	0.003	1.182	0.005		598.17	9.96944	22.4	10.8	20.6	1.421	0.176	0.180	0.009	8.718	7.42	
371	6/21/2004	7:26:26 PM		24.707	24.704	24.327	25.634	24.805		22.177	23.473	4.086	18.203	-1.216	0.67		46.361	0.003	1.145	0.006		599.17	9.98611	22.0	11.4	20.2	1.392	0.171	0.174	0.009	8.617	7.33	
372	6/21/2004	7:27:26 PM		24.723	24.694	24.347	25.635	24.761		22.2	23.452	4.081	18.222	-1.214	0.676		45.155	0.003	1.149	0.005		600.17	10.0028	22.0	11.1	20.2	1.393	0.171	0.174	0.009	8.633	7.35	
373	6/21/2004	7:28:26 PM		24.737	24.689	24.372	25.614	24.75		22.108	23.313	4.077	18.142	-1.214	0.676		46.169	0.003	1.149	0.004		601.17	10.0194	21.8	11.3	20.1	1.388	0.171	0.174	0.009	8.664	7.37	
374	6/21/2004	7:29:26 PM		24.757	24.689	24.387	25.604	24.74		15.35	23.599	4.106	11.306	3.094	0.572		45.172	0.764	-0.009	0.004		602.17	10.0361	22.1	11.1	13.3	0.919	-0.001	-0.001	0.000	-0.102	-0.09	
375	6/21/2004	8:04:29 PM		26.086	24.477	25.697	25.502	24.654		21.658	22.833	3.938	17.764	-1.214	-4.351		45.307	0.003	1.17	0.004		637.22	10.6203	21.4	11.1	19.7	1.359	0.174	0.171	0.009	8.678	7.39	
376	6/21/2004	8:05:29 PM		26.057	24.482	25.628	25.558	24.65		15.097	23.03	4.012	11.018	2.787	0.315		45.251	0.765	-0.01	0.004		638.22	10.6369	21.6	11.1	13.1	0.900	-0.001	-0.001	0.000	-0.112	-0.10	
377	6/21/2004	8:06:29 PM		26.053	24.483	25.534	25.599	24.685		2.993	23.187	3.991	-1.047	15.271	20.088		44.715	0.003	-0.013	0.004		639.22	10.6536	21.7	11.0	1.0	0.067	-0.002	-0.002	-0.002	-1.962	-1.67	
378	6/21/2004	8:07:29 PM		26.033	24.484	25.419	25.59	24.761		2.923	23.229	3.99	-1.125	15.309	18.941		44.951	0.003	-0.014	0.003		640.22	10.6703	21.8	11.0	0.9	0.062	-0.002	-0.002	-0.002	-2.295	-1.95	
379	6/21/2004	8:08:29 PM		25.761	24.486	25.296	25.577	24.788		2.761	23.199	3.975	-1.149	15.453	26.966		45.128	0.003	14.643	0.006		641.22	10.6869	21.7	11.1	0.8	0.056	2.183	2.165	2.686	######	######	
380	6/21/2004	8:09:29 PM		25.791	24.491	25.221	25.567	24.748		8.659	23.1	3.936	4.854	9.157	0.491		45.366	1.204	14.643	0.004		642.22	10.7036	21.6	11.1	6.8	0.466	2.183	2.170	0.321	321.115	273.27	
381	6/21/2004	8:10:29 PM		25.646	24.521	25.151	25.582	24.688		19.51	22.864	3.933	15.788	-1.211	0.855		46.131	0.003	1.855	0.004		643.22	10.7203	21.4	11.3	17.6	1.217	0.277	0.275	0.016	15.604	13.28	
382	6/21/2004	8:11:29 PM		25.556	24.507	25.047	25.553	24.689		20.932	22.878	3.949	17.038	-1.219	0.812		45.622	0.003	1.451	0.003		644.22	10.7369	21.4	11.2	19.0	1.309	0.216	0.216	0.011	11.380	9.68	
383	6/21/2004	8:12:29 PM		25.491	24.517	24.977	25.578	24.634		21.302	22.897	3.889	17.44	-1.214	0.803		46.548	0.003	1.32	0.004		645.22	10.7536	21.4	11.4	19.4	1.336	0.197	0.197	0.010	10.166	8.65	
384	6/21/2004	8:13:29 PM		25.416	24.512	24.907	25.568	24.634		21.536	22.978	3.96	17.567	-1.216	0.798		46.567	0.003	1.251	0.004		646.22	10.7703	21.5	11.4	19.6	1.348	0.187	0.187	0.010	9.565	8.14	
385	6/21/2004	8:14:29 PM		25.336	24.507	24.811	25.497	24.629		21.557	22.828	3.899	17.69	-1.216	0.792		45.818	0.003	1.218	0.004		647.22	10.7869	21.4	11.2	19.6	1.353	0.182	0.183	0.009	9.303	7.92	
386	6/21/2004	8:15:29 PM		25.292	24.528	24.792	25.543	24.62		21.621	22.936	3.89	17.705	-1.214	0.792		45.065	0.003	1.187	0.004		648.22	10.8036	21.5	11.0	19.7	1.356	0.177	0.178	0.009	9.053	7.70	
387	6/21/2004	8:16:29 PM		25.228	24.523	24.738	25.519	24.605		21.789	23.032	3.946	17.822	-1.214	0.795		45.163	0.003	1.178	0.004		649.22	10.8203	21.6	11.1	19.8	1.366	0.176	0.177	0.009	8.933	7.60	
388	6/21/2004	8:17:29 PM		25.171	24.501	24.68	25.497	24.573		21.814	23.104	3.915	17.883	-1.219	0.786		46.025	0.003	1.162	0.003		650.22	10.8369	21.6	11.3	19.8	1.368	0.173	0.175	0.009	8.807	7.50	
389	6/21/2004	8:18:29 PM		25.129	24.5	24.654	25.445	24.562		21.93	23.1	3.948	17.947	-1.214	0.792		45.118	0.003	1.155	0.006		651.22	10.8536	21.6	11.1	19.9	1.375	0.172	0.174	0.009	8.721	7.42	
390	6/21/2004	8:19:29 PM		25.092	24.498	24.617	25.443	24.555		21.66	22.847	3.91	17.661	-1.216	0.789		45.526	0.003	1.145	0.005		652.22	10.8703	21.4	11.2	19.7	1.356	0.171	0.173	0.009	8.777	7.47	
391	6/21/2004	8:20:29 PM		25.072	24.508	24.607	25.473	24.58		21.891	22.988	3.951	17.924	-1.216	0.792		45.36	0.003	1.143	0.006		653.22	10.8869	21.5	11.1	19.9	1.373	0.170	0.172	0.009	8.656	7.37	
392	6/21/2004	8:21:29 PM		25.031	24.497	24.576	25.417	24.589		21.888	23.03	3.88	18.037	-1.214	0.792		45.143	0.003	1.134	0.005		654.22	10.9036	21.6	11.1	20.0	1.376	0.169	0.171	0.009	8.571	7.29	
393	6/21/2004	8:22:29 PM		25.001	24.497	24.561	25.432	24.634		21.774	22.845	3.912	17.815	-1.216	0.792		45.33	0.003	1.124	0.004		655.22	10.9203	21.4	11.1	19.8	1.365	0.168	0.170	0.009	8.571	7.29	
394	6/21/2004	8:23:29 PM		24.981	24.512	24.541	25.493	24.684		21.961	22.878	3.922	18.012	-1.214	0.792		45.237	0.003	1.128	0.005		656.22	10.9369	21.4	11.1	20.0	1.378	0.168	0.170	0.009	8.524	7.25	
395	6/21/2004	8:24:29 PM		24.956	24.517	24.521	25.553	24.744		21.957	22.969	3.935	17.93	-1.214	0.792		45.264	0.003	1.124	0.007		657.22	10.9536	21.5	11.1	19.9	1.375	0.168	0.170	0.009	8.517	7.25	
396	6/21/2004	8:25:29 PM		24.932	24.523	24.497	25.613	24.79		22	23.011	3.938	17.967	-1.214	0.792		44.143	0.003	1.119	0.005		658.22	10.9703	21.5	10.8	20.0	1.378	0.167	0.169	0.008	8.468	7.21	
397	6/21/2004	8:26:29 PM		24.908	24.533	24.462	25.669	24.841		21.957	22.94	3.9	18.004	-1.211	0.795		45.693	0.003	1.115	0.005		659.22	10.9869	21.5	11.2	20.0	1.378	0.166	0.169	0.008	8.447	7.19	
398	6/21/2004	8:27:29 PM		24.885	24.546	24.449	25.681	24.853		21.98	23.011	3.897	17.994	-1.211	0.795		44.592	0.003	1.111	0.004		660.22	11.0036	21.5	10.9	20.0	1.378	0.166	0.168	0.008	8.417	7.16	
399	6/21/2004	8:28:29 PM		24.866	24.542	24.416	25.688	24.824		21.824	22.831	3.893	17.869	-1.214	0.789		44.88	0.003	1.102	0.005		661.22	11.0203	21.4	11.0	19.8	1.368	0.164	0.167	0.008	8.416	7.16	
400	6/21/2004	8:29:29 PM		24.843	24.558	24.407	25.714	24.806		21.93	22.926	3.911	17.961	-1.211	0.795		45.533	0.003	1.105	0.004		662.22	11.0369	21.5	11.2	19.9	1.375	0.165	0.168	0.008	8.399	7.15	
401	6/21/2004	8:30:29 PM		24.83	24.571	24.384	25.676	24.783		22.059	23.115	3.976	18.019	-1.214	0.792		44.932	0.003	1.101	0.005		663.22	11.0536	21.6	11.0	20.0	1.382	0.164	0.167	0.008	8.335	7.09	
402	6/21/2004	8:31:29 PM		24.805	24.576	24.369	25.681	24.773		21.889	22.814	3.9	17.945	-1.216	0.786		46.669	0.003	1.103	0.005		664.22	11.0703	21.3	11.4	19.9	1.373	0.164	0.167	0.008	8.405	7.15	
403	6/21/2004	8:32:29 PM		24.79	24.581	24.365	25.642	24.758		21.98	22.949	3.928	17.984	-1.214	0.792		45.495	0.003	1.098	0.006		665.22	11.0869	21.5	11.1	20.0	1.378	0.164	0.167	0.008	8.341	7.10	
404	6/21/2004	8:33:29 PM		24.771	24.582	24.355	25.593	24.734		21.889	22.843	3.905	17.887	-1.214	0.792		45.62	0.003	1.095	0.005		666.22	11.1036	21.4	11.2	19.9	1.371	0.163	0.166	0.008	8.359	7.11	
405	6/21/2004	8:34:29 PM		24.751	24.597	24.335	25.567	24.724		21.901	22.793	3.884	17.992	-1.216	0.786		44.659	0.003	1.091	0.004		667.22	11.1203	21.3	10.9	19.9	1.375	0.163	0.166	0.008	8.309	7.07	
406	6/21/2004	8:35:29 PM		24.742	24.588	24.326	25.543	24.71		21.853	22.799	3.896	17.904	-1.214	0.789		45.385	0.003	1.09	0.005		668.22	11.1369	21.3	11.1	19.9	1.371	0.163	0.166	0.008	8.332	7.09	
407	6/21/2004	8:36:29 PM		24.732	24.598	24.307	25.544	24.685		22.025	23.141	3.968	17.91	-1.211	0.792		45.316	0.003	1.084	0.005		669.22	11.1536	21.7	11.1	20.0	1.377	0.162	0.165	0.008	8.254	7.02	
408	6/21/2004	8:37:29 PM		24.712	24.593	24.297	25.559	24.675		21.986	22.893	3.894	18.031	-1.214	0.792		45.282	0.003	1.087	0.005		670.22	11.1703	21.4	11.1	20.0	1.380	0.162	0.165	0.008	8.262	7.03	
409																																	
410	Caustic Rinse 1																																
411																																	
412		Averages		27.0	24.3	26.7	25.5	24.8		23.0	31.1	4.5	18.3	3.0	0.4		45.6	0.7	14.6	0.0				29.6	11.2	20.6	1.423	0.109	0.104	0.005	5.0	4.3	
413		Maximum		27.5	24.5	27.2	25.8	25.0		23.7	32.5	5.0	19.2	4.3	1.2		52.1	0.8	14.6	0.0				31.0	12.8	21.4	1.477	0.117	0.113	0.006	5.9	5.0	
414		Median		27.0	24.3	26.8	25.6	24.9		23.2	30.9	4.5	18.5	3.1	0.5		45.2	0.7	14.6	0.0				29.5	11.1	20.8	1.437	0.109	0.105	0.005	4.9	4.2	
415		Minimum		26.1	24.1	25.9	25.2	24.7		20.2	28.4	4.3	15.7	1.6	-0.5		41.3	0.7	14.6	0.0				26.9	10.1	17.9	1.238	0.099	0.093	0.005	4.6	3.9	
416		2 x Std Dev		0.831	0.228	0.802	0.321	0.211		1.578	2.534	0.339	1.548	1.709	1.029		6.162	0.074	0.000	0.001				2.534	1.510	1.553	0.107	0.011	0.013	0.001	0.688	0.586	
417		Number of Points Used*		25	25	25	25	25		25	25	25	25	25	25		25	25	25	25				25	25	25	25	25	25	25	25	25	
418		* Backpulse points in box are not included																															

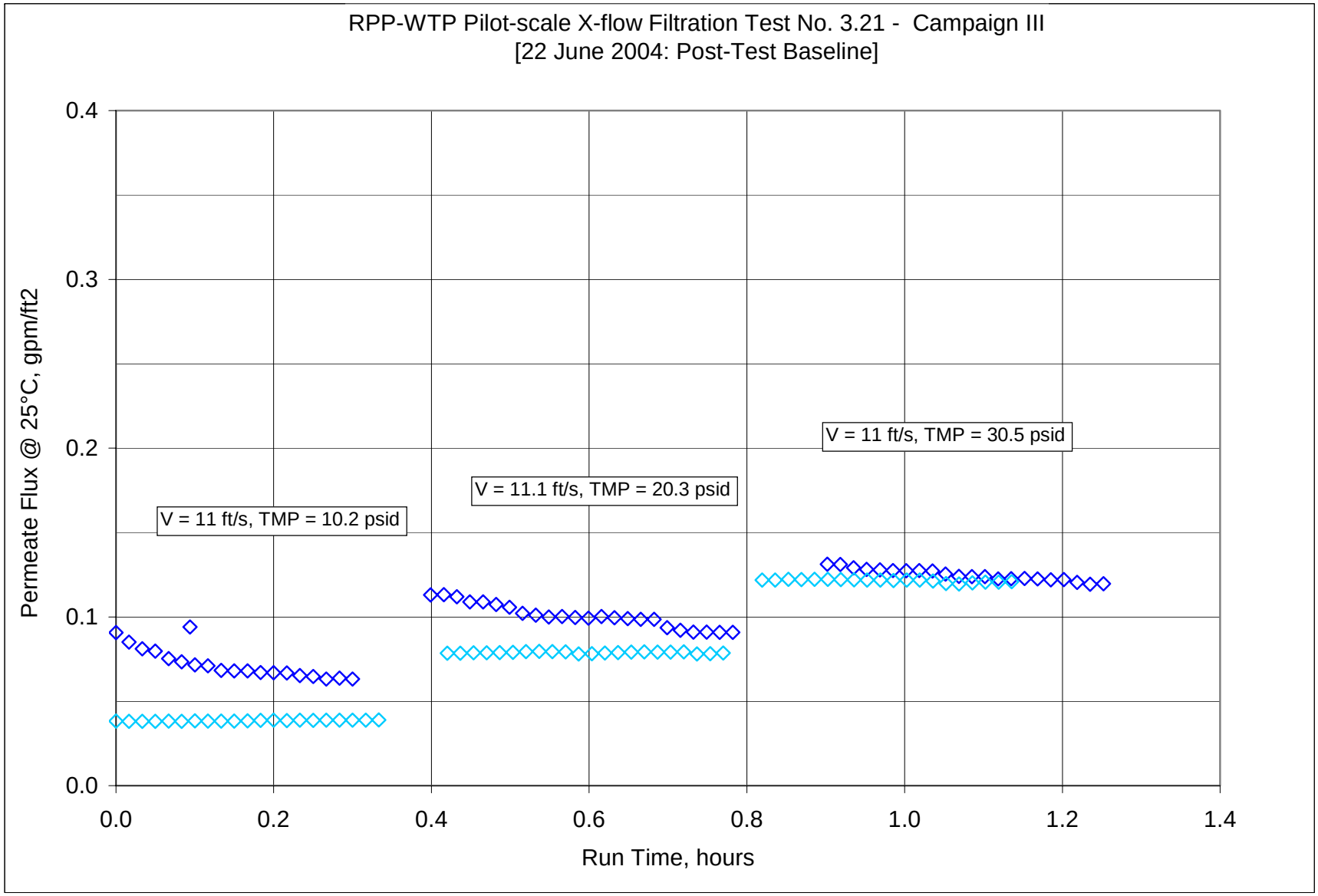
RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
420	Acid Clean 1																																
421																																	
422		Averages		26.4	25.3	25.8	26.8	25.7		34.6	42.7	4.1	30.7	3.4	-0.6		44.3	0.4	6.7	0.0				41.3	10.8	32.6	2.249	0.227	0.223	0.007	7.0	5.9	
423		Maximum		27.9	25.8	27.5	27.3	26.0		46.0	58.0	5.5	40.7	24.6	13.3		56.1	1.2	14.6	0.0				56.5	13.8	43.4	2.989	0.290	0.284	0.008	8.1	6.9	
424		Median		26.0	25.4	25.4	27.0	25.7		42.2	45.5	4.2	38.3	-1.2	-3.9		44.6	0.0	1.9	0.0				44.0	10.9	40.2	2.774	0.262	0.260	0.007	6.8	5.8	
425		Minimum		25.6	24.8	25.0	25.9	25.2		21.1	33.0	1.8	17.0	-1.2	-4.3		27.4	0.0	1.6	0.0				31.6	6.7	19.1	1.315	0.152	0.142	0.006	5.9	5.0	
426		2 x Std Dev		1.598	0.554	1.740	0.710	0.453		20.053	9.402	0.808	20.067	12.287	8.980		8.020	1.021	12.468	0.002				9.402	1.965	#####	1.383	0.111	0.118	0.001	0.994	0.846	
427	Number of Points Used*			89	89	89	89	89		89	89	89	89	89	89		89	89	89	89				89	89	89	89	89	89	89	89	89	
428		* Backpulse points in box are not included																															
429																																	
430	Acid Clean 2																																
431																																	
432		Averages		25.7	25.2	25.1	26.4	25.3		42.1	47.3	4.2	38.3	-0.4	1.5		45.3	0.0	2.3	0.0				45.8	11.1	40.2	2.769	0.340	0.339	0.008	8.4	7.2	
433		Maximum		25.8	25.4	25.2	26.7	25.6		42.9	48.6	4.5	39.4	1.4	1.8		52.7	0.0	2.7	0.0				47.1	12.9	41.2	2.837	0.396	0.400	0.010	10.3	8.8	
434		Median		25.7	25.3	25.1	26.4	25.2		41.9	47.1	4.2	38.1	-0.6	1.5		45.3	0.0	2.2	0.0				45.6	11.1	40.0	2.760	0.334	0.333	0.008	8.3	7.1	
435		Minimum		25.2	25.1	24.7	26.3	25.2		40.6	46.4	4.0	37.1	-0.7	1.5		38.6	0.0	2.2	0.0				45.0	9.5	38.8	2.678	0.330	0.329	0.008	8.2	7.0	
436		2 x Std Dev		0.244	0.180	0.205	0.267	0.272		0.807	1.220	0.194	0.936	0.759	0.118		4.758	0.000	0.164	0.002				1.220	1.166	0.865	0.060	0.024	0.026	0.001	0.646	0.550	
437	Number of Points Used*			89	89	89	89	89		89	89	89	89	89	89		89	89	89	89				89	89	89	89	89	89	89	89	89	
438		* Backpulse points in box are not included																															
439																																	
440	Acid Clean 3																																
441																																	
442		Averages		25.7	24.9	25.0	26.1	25.0		42.4	48.2	4.0	38.8	0.1	-1.6		44.2	0.0	2.4	0.0				46.8	10.8	40.6	2.799	0.358	0.358	0.009	8.8	7.5	
443		Maximum		25.7	25.0	25.1	26.4	25.3		42.9	49.2	4.6	39.5	2.2	-1.6		48.3	0.0	2.8	0.0				47.7	11.8	41.1	2.834	0.421	0.427	0.011	10.9	9.3	
444		Median		25.7	24.9	25.1	26.1	25.0		42.4	48.2	4.0	38.9	0.0	-1.6		44.0	0.0	2.4	0.0				46.7	10.8	40.6	2.801	0.356	0.355	0.009	8.8	7.5	
445		Minimum		25.0	24.7	24.5	25.8	24.8		41.0	47.4	3.6	37.5	-0.1	-1.7		40.9	0.0	2.4	0.0				46.0	10.0	39.2	2.706	0.351	0.351	0.009	8.6	7.4	
446		2 x Std Dev		0.293	0.200	0.256	0.270	0.237		0.566	0.760	0.281	0.603	0.534	0.063		3.074	0.000	0.108	0.002				0.760	0.753	0.569	0.039	0.016	0.019	0.001	0.503	0.428	
447	Number of Points Used*			93	93	93	93	93		93	93	93	93	93	93		93	93	93	93				93	93	93	93	93	93	93	93	93	
448		* Backpulse points in box are not included																															
449																																	
450	Acid Cleans																																
451																																	
452		Averages		25.9	25.1	25.3	26.4	25.3		39.7	46.1	4.1	36.0	1.0	-0.3		44.6	0.1	3.8	0.0				44.6	10.9	37.8	2.609	0.309	0.307	0.008	8.1	6.9	
453		Maximum		27.9	25.8	27.5	27.3	26.0		46.0	58.0	5.5	40.7	24.6	13.3		56.1	1.2	14.6	0.0				56.5	13.8	43.4	2.989	0.421	0.427	0.011	10.9	9.3	
454		Median		25.7	25.1	25.1	26.3	25.2		42.2	47.1	4.2	38.5	-0.1	-1.6		44.6	0.0	2.4	0.0				45.7	10.9	40.3	2.781	0.334	0.333	0.008	8.3	7.1	
455		Minimum		25.0	24.7	24.5	25.8	24.8		21.1	33.0	1.8	17.0	-1.2	-4.3		27.4	0.0	1.6	0.0				31.6	6.7	19.1	1.315	0.152	0.142	0.006	5.9	5.0	
456		2 x Std Dev		1.178	0.537	1.249	0.775	0.630		13.558	7.260	0.525	13.709	7.807	5.760		5.722	0.696	8.243	0.002				7.260	1.402	#####	0.940	0.133	0.138	0.002	1.756	1.494	
457	Number of Points Used*			271	271	271	271	271		271	271	271	271	271	271		271	271	271	271				271	271	271	271	271	271	271	271	271	
458		* Backpulse points in box are not included																															
459																																	
460	Caustic Rinse 2																																
461																																	
462		Averages		24.4	24.7	24.0	25.6	24.7		21.9	23.7	4.0	18.1	-1.0	0.7		45.1	0.0	1.2	0.0				22.2	11.1	20.0	1.377	0.183	0.188	0.009	9.4	8.0	
463		Maximum		24.8	24.8	24.4	25.7	24.9		22.7	24.2	4.1	18.9	3.1	0.8		48.3	0.8	2.5	0.0				22.7	11.8	20.8	1.432	0.366	0.381	0.024	23.6	20.1	
464		Median		24.4	24.7	24.1	25.6	24.8		22.2	23.7	4.0	18.4	-1.2	0.7		44.9	0.0	1.2	0.0				22.2	11.0	20.3	1.401	0.179	0.184	0.009	9.0	7.6	
465		Minimum		24.0	24.6	23.5	25.4	24.6		15.4	23.3	3.7	11.3	-1.2	0.6		43.4	0.0	0.0	0.0				21.8	10.6	13.3	0.919	-0.001	-0.001	0.000	-0.1	-0.1	
466		2 x Std Dev		0.515	0.064	0.562	0.197	0.198		2.899	0.445	0.234	2.891	1.594	0.051		2.109	0.269	0.654	0.002				0.445	0.517	2.891	0.199	0.098	0.102	0.006	6.381	5.430	
467	Number of Points Used*			31	31	31	31	31		31	31	31	31	31	31		31	31	31	31				31	31	31	31	31	31	31	31	31	
468		* Backpulse points in box are not included																															
469																																	
470	Caustic Rinse 3																																
471																																	
472		Averages		25.0	24.5	24.6	25.6	24.7		21.7	22.9	3.9	17.8	-1.2	0.8		45.4	0.0	1.2	0.0				21.5	11.1	19.8	1.362	0.175	0.177	0.009	9.0	7.7	
473		Maximum		25.6	24.6	25.2	25.7	24.9		22.1	23.1	4.0	18.0	-1.2	0.9		46.7	0.0	1.9	0.0				21.7	11.4	20.0	1.382	0.277	0.275	0.016	15.6	13.3	
474		Median		25.0	24.5	24.5	25.6	24.7		21.9	22.9	3.9	17.9	-1.2	0.8		45.3	0.0	1.1	0.0				21.5	11.1	19.9	1.373	0.168	0.170	0.009	8.5	7.3	
475		Minimum		24.7	24.5	24.3	25.4	24.6		19.5	22.8	3.9	15.8	-1.2	0.8		44.1	0.0	1.1	0.0				21.3	10.8	17.6	1.217	0.162	0.165	0.008	8.3	7.0	
476		2 x Std Dev		0.526	0.069	0.464	0.166	0.175		0.978	0.200	0.054	0.875	0.004	0.025		1.149	0.000	0.305	0.002				0.200	0.282	0.925	0.064	0.046	0.044	0.003	2.865	2.438	
477	Number of Points Used*			28	28	28	28	28		28	28	28	28	28	28		28	28	28	28				28	28	28	28	28	28	28	28	28	
478		* Backpulse points in box are not included																															

RUN # 3.18 AND 19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
480	Caustic Rinses 2 & 3																																
481																																	
482		Averages		24.7	24.6	24.3	25.6	24.7		21.8	23.3	3.9	17.9	-1.1	0.7		45.3	0.0	1.2	0.0				21.9	11.1	19.9	1.370	0.179	0.183	0.009	9.2	7.8	
483		Maximum		25.6	24.8	25.2	25.7	24.9		22.7	24.2	4.1	18.9	3.1	0.9		48.3	0.8	2.5	0.0				22.7	11.8	20.8	1.432	0.366	0.381	0.024	23.6	20.1	
484		Median		24.7	24.6	24.3	25.6	24.7		22.0	23.3	3.9	18.0	-1.2	0.7		45.2	0.0	1.2	0.0				21.8	11.1	20.0	1.378	0.176	0.179	0.009	8.8	7.5	
485		Minimum		24.0	24.5	23.5	25.4	24.6		15.4	22.8	3.7	11.3	-1.2	0.6		43.4	0.0	0.0	0.0				21.3	10.6	13.3	0.919	-0.001	-0.001	0.000	-0.1	-0.1	
486		2 x Std Dev		0.830	0.161	0.766	0.183	0.193		2.212	0.845	0.177	2.200	1.170	0.131		1.751	0.196	0.521	0.002				0.845	0.429	2.202	0.152	0.078	0.081	0.005	5.045	4.293	
487	Number of Points Used*			59	59	59	59	59		59	59	59	59	59	59		59	59	59	59				59	59	59	59	59	59	59	59	59	
488																																	
489	All																																
490																																	
491		Averages		25.8	25.0	25.2	26.2	25.2		35.6	41.3	4.1	31.7	0.8	0.0		44.8	0.2	4.1	0.0				39.8	11.0	33.6	2.319	0.273	0.272	0.008	8.1	6.9	
492		Maximum		27.9	25.8	27.5	27.3	26.0		46.0	58.0	5.5	40.7	24.6	13.3		56.1	1.2	14.6	0.0				56.5	13.8	43.4	2.989	0.421	0.427	0.024	23.6	20.1	
493		Median		25.7	25.0	25.1	26.3	25.2		42.0	46.7	4.1	38.2	-0.3	0.7		44.8	0.0	2.3	0.0				45.2	11.0	40.1	2.768	0.331	0.330	0.008	8.4	7.1	
494		Minimum		24.0	24.1	23.5	25.2	24.6		15.4	22.8	1.8	11.3	-1.2	-4.3		27.4	0.0	0.0	0.0				21.3	6.7	13.3	0.919	-0.001	-0.001	0.000	-0.1	-0.1	
495		2 x Std Dev		1.567	0.732	1.593	1.019	0.756		19.084	18.855	0.545	19.408	7.132	5.097		5.353	0.695	9.441	0.002				18.855	1.312	####	1.327	0.179	0.181	0.003	3.176	2.703	
496	Number of Points Used*			355	355	355	355	355		355	355	355	355	355	355		355	355	355	355				355	355	355	355	355	355	355	355	355	

RUN # 3.21A, B, AND C; POST-TEST BASELINE, CAUSTIC RINSE 3 AND 0.1 M NAOH



RUN # 3.21A, B, AND C; POST-TEST BASELINE WITH CAUSTIC RINSE 3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros																																
7	6/8/2004	9:09:09 AM		22.545	24.705	27.987	26.054	24.911		-0.004	0.128	-0.01	-0.003	-0.129	0.111		45.741	0.293	-0.013	0.003				Filter Surface A		6.707	FT2						
8	6/10/2004	1:47:47 PM		25.596	26.216	26.68	26.834	26		-0.019	0.196	-0.012	-0.02	-0.106	0.073		-0.071	0.003	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	6/14/2004	7:41:41 AM		23.83	23.885	66.603	24.174	24.204		-0.012	0.12	-0.01	-0.016	-0.163	0.107		-0.083	0.003	14.643	0.005													
10	6/15/2004	12:06:06 PM		25.175	24.315	23.747	26.127	23.997		-0.012	0.139	-0.002	-0.012	-0.177	0.043		-0.073	0.003	14.643	0.006				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	6/17/2004	7:28:28 AM		24.492	23.951	23.799	24.225	23.743		-0.01	0.164	-0.001	-0.014	-0.18	0.032		-0.075	0.003	14.643	0.006													
12	6/17/2004	4:57:57 PM		26.259	26.737	24.765	27.805	26.456		-0.002	0.197	0	-0.012	-0.183	-0.009		47.043	0.098	14.643	0.004				Pressure P1is corrected for 40.88 inches of water tubing									
13	6/21/2004	6:52:52 AM		23.109	23.008	22.621	23.418	22.888		-0.01	0.075	0	-0.01	-0.197	0.055		-0.079	0.003	14.643	0.006				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14	6/22/2004	8:12:12 AM		23.36	23.555	23.63	23.829	24.45		-0.008	0.108	-0.004	-0.012	-0.194	0.06		-0.083	0.003	14.643	0.005									at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
107	Baseline 2A																																
108	6/22/2004	8:26:20 AM		24.052	23.606	23.721	24.367	23.675		12.104	16.103	3.984	8.102	-1.211	-2.197		44.846	0.534	14.643	0.004		0.00	0	14.6	11.0	10.1	0.697	0.080	0.083	0.008	8.170	6.95	
109	6/22/2004	8:27:58 AM		24.052	23.606	23.721	24.367	23.675		12.104	16.103	3.984	8.102	-1.211	-2.197		44.846	0.534	14.643	0.004		1.63	0.02722	14.6	11.0	10.1	0.697	0.080	0.083	0.008	8.170	6.95	
110	6/22/2004	8:28:58 AM		24.037	23.581	23.71	24.327	23.715		2.829	16.347	3.914	-1.08	8.566	19.181		44.34	0.003	14.643	0.003		2.63	0.04389	14.9	10.9	0.9	0.060	0.000	0.000	0.001	0.530	0.45	
111	6/22/2004	8:29:58 AM		24.037	23.586	23.715	24.357	23.74		2.906	16.467	3.9	-1.04	8.566	19.516		41.745	0.003	14.643	0.004		3.63	0.06056	15.0	10.2	0.9	0.064	0.000	0.000	0.000	0.497	0.42	
112	6/22/2004	8:30:58 AM		24.046	23.589	23.744	24.38	23.799		-6.215	16.679	3.98	-10.302	18.386	21.583		42.913	0.003	14.643	1.619		4.63	0.07722	15.2	10.5	-8.3	-0.569	0.000	0.000	0.000	-0.056	-0.05	
113	6/22/2004	8:31:58 AM		24.07	23.604	23.759	24.405	23.753		9.24	16.322	3.994	5.149	1.939	0.485		44.703	0.609	14.643	0.004		5.63	0.09389	14.8	11.0	7.2	0.496	0.091	0.094	0.013	13.071	11.12	
114	6/22/2004	8:32:58 AM		24.059	23.577	23.722	24.419	23.767		11.278	16.242	3.699	7.441	-0.111	-1.394		44.3	0.587	14.643	0.004		0.00	0	14.8	10.9	9.4	0.645	0.088	0.091	0.010	9.695	8.25	
115	6/22/2004	8:33:58 AM		24.09	23.604	23.764	24.465	23.833		12.199	16.376	3.834	8.221	-0.95	-2.015		44.421	0.551	14.643	0.004		1.00	0.01667	14.9	10.9	10.2	0.704	0.082	0.085	0.008	8.332	7.09	
116	6/22/2004	8:34:58 AM		24.105	23.609	23.834	24.43	23.908		12.407	16.302	3.959	8.264	-1.214	-2.203		44.202	0.526	14.643	0.003		2.00	0.03333	14.8	10.8	10.3	0.713	0.078	0.081	0.008	7.842	6.67	
117	6/22/2004	8:35:58 AM		24.141	23.624	23.955	24.416	23.959		12.566	16.258	3.904	8.467	-1.211	-2.353		44.068	0.519	14.643	0.004		3.00	0.05	14.8	10.8	10.5	0.725	0.077	0.080	0.008	7.578	6.45	
118	6/22/2004	8:36:58 AM		24.228	23.636	24.027	24.483	24.016		12.687	16.018	4.069	8.469	-1.214	-2.64		46.181	0.491	14.643	0.004		4.00	0.06667	14.5	11.3	10.6	0.729	0.073	0.075	0.007	7.113	6.05	
119	6/22/2004	8:37:58 AM		24.253	23.647	24.077	24.578	24.056		12.392	15.499	3.953	8.275	-1.211	-2.747		45.02	0.479	14.643	0.004		5.00	0.08333	14.0	11.0	10.3	0.712	0.071	0.073	0.007	7.093	6.04	
120	6/22/2004	8:38:58 AM		24.315	23.668	24.174	24.584	24.117		12.346	15.329	3.931	8.256	-1.211	-2.836		45.41	0.469	14.643	0.004		6.00	0.1	13.9	11.1	10.3	0.710	0.070	0.072	0.007	6.948	5.91	
121	6/22/2004	8:39:58 AM		24.373	23.691	24.232	24.688	24.166		12.452	15.338	3.86	8.41	-1.216	-2.868		45.579	0.466	14.643	0.003		7.00	0.11667	13.9	11.2	10.4	0.719	0.069	0.071	0.007	6.807	5.79	
122	6/22/2004	8:40:58 AM		24.451	23.71	24.296	24.782	24.174		12.317	15.046	3.995	8.254	-1.214	-3.021		44.965	0.449	14.643	0.004		8.00	0.13333	13.6	11.0	10.3	0.709	0.067	0.068	0.007	6.639	5.65	
123	6/22/2004	8:41:58 AM		24.49	23.733	24.354	24.76	24.187		12.201	14.818	3.896	8.067	-1.211	-3.033		45.04	0.448	14.643	0.004		9.00	0.15	13.3	11.0	10.1	0.699	0.067	0.068	0.007	6.712	5.71	
124	6/22/2004	8:42:58 AM		24.542	23.746	24.397	24.752	24.175		12.222	14.9	3.919	8.125	-1.214	-3.041		44.515	0.448	14.643	0.003		10.00	0.16667	13.4	10.9	10.2	0.701	0.067	0.068	0.007	6.678	5.68	
125	6/22/2004	8:43:58 AM		24.585	23.753	24.429	24.769	24.142		12.214	14.828	3.95	8.049	-1.214	-3.091		45.226	0.442	14.643	0.003		11.00	0.18333	13.4	11.1	10.1	0.699	0.066	0.067	0.007	6.610	5.63	
126	6/22/2004	8:44:58 AM		24.627	23.775	24.486	24.771	24.129		12.396	14.948	3.84	8.469	-1.208	-3.088		44.663	0.442	14.643	0.004		12.00	0.2	13.5	10.9	10.4	0.719	0.066	0.067	0.006	6.409	5.45	
127	6/22/2004	8:45:58 AM		24.684	23.782	24.524	24.784	24.172		12.22	14.832	3.967	8.071	-1.214	-3.093		44.456	0.442	14.643	0.004		13.00	0.21667	13.4	10.9	10.1	0.699	0.066	0.067	0.007	6.583	5.60	
128	6/22/2004	8:46:58 AM		24.726	23.794	24.54	24.765	24.203		12.154	14.691	3.974	7.92	-1.214	-3.18		45.197	0.432	14.643	0.004		14.00	0.23333	13.2	11.1	10.0	0.692	0.064	0.065	0.007	6.501	5.53	
129	6/22/2004	8:47:58 AM		24.756	23.815	24.586	24.761	24.229		12.537	15.025	3.955	8.402	-1.214	-3.206		44.972	0.429	14.643	0.003		15.00	0.25	13.6	11.0	10.5	0.722	0.064	0.065	0.006	6.181	5.26	
130	6/22/2004	8:48:58 AM		24.818	23.836	24.622	24.772	24.2		12.154	14.44	4.019	7.998	-1.214	-3.29		45.207	0.419	14.643	0.004		16.00	0.26667	13.0	11.1	10.1	0.695	0.062	0.063	0.006	6.266	5.33	
131	6/22/2004	8:49:58 AM		24.84	23.838	24.659	24.825	24.172		12.376	14.751	3.98	8.231	-1.214	-3.264		45.33	0.423	14.643	0.004		17.00	0.28333	13.3	11.1	10.3	0.710	0.063	0.064	0.006	6.180	5.26	
132	6/22/2004	8:50:58 AM		24.865	23.849	24.685	24.79	24.143		12.324	14.6	3.927	8.281	-1.214	-3.284		45.464	0.42	14.643	0.003		18.00	0.3	13.1	11.1	10.3	0.710	0.063	0.063	0.006	6.132	5.22	
133																																	
134																																	
135																																	
136																																	
137		Averages		24.5	23.7	24.3	24.7	24.1		12.3	15.3	3.9	8.2	-1.1	-2.8		45.0	0.5	14.6	0.0				13.8	11.0	10.2	0.7	0.1	0.1	0.0	7.0	5.9	
138		Maximum		24.9	23.8	24.7	24.8	24.2		12.7	16.4	4.1	8.5	-0.1	-1.4		46.2	0.6	14.6	0.0				14.9	11.3	10.6	0.7	0.1	0.1	0.0	9.7	8.3	
139		Median		24.5	23.7	24.4	24.8	24.1		12.3	15.0	4.0	8.3	-1.2	-3.0		45.0	0.4	14.6	0.0				13.6	11.0	10.3	0.7	0.1	0.1	0.0	6.7	5.7	
140		Minimum		24.1	23.6	23.7	24.4	23.8		11.3	14.4	3.7	7.4	-1.2	-3.3		44.1	0.4	14.6	0.0				13.0	10.8	9.4	0.6	0.1	0.1	0.0	6.1	5.2	
141		2 x Std Dev		0.532	0.171	0.604	0.292	0.260		0.555	1.258	0.157	0.477	0.500	0.983		1.057	0.092	0.000	0.001				1.257	0.259	0.509	0.035	0.014	0.015	0.002	1.716	1.461	
142	Number of Points Used*			19	19	19	19	19		19	19	19	19	19	19		19	19	19	19				19	19	19	19	19	19	19	19	19	
143		* Backpulse points in box are not included																															

RUN # 3.21A, B, AND C; POST-TEST BASELINE WITH CAUSTIC RINSE 3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
147	Baseline 2B																																
148	6/22/2004	8:56:54 AM		25.37	23.909	25.205	24.895	24.207		22.144	29.971	3.969	18.117	2.753	0.254		44.899	0.762	14.643	0.004		23.93	0.39889	28.5	11.0	20.1	1.388	0.114	0.113	0.006	5.611	4.78	
149	6/22/2004	8:57:54 AM		25.519	23.933	25.32	24.959	24.222		22.44	30.363	3.821	18.55	2.822	0.277		44.579	0.766	14.643	0.004		24.93	0.41556	28.9	10.9	20.5	1.413	0.114	0.113	0.006	5.522	4.70	
150	6/22/2004	8:58:54 AM		25.596	23.919	25.391	24.981	24.208		22.444	30.22	3.899	18.384	2.701	0.208		45.339	0.759	14.643	0.004		25.93	0.43222	28.7	11.1	20.4	1.407	0.113	0.112	0.005	5.483	4.67	
151	6/22/2004	8:59:54 AM		25.668	23.937	25.429	25.094	24.256		22.484	29.759	4.04	18.396	2.307	-0.029		46.288	0.739	14.643	0.004		26.93	0.44889	28.3	11.3	20.4	1.409	0.110	0.109	0.005	5.326	4.53	
152	6/22/2004	9:00:54 AM		25.67	23.944	25.416	25.126	24.253		22.534	29.884	3.934	18.384	2.298	-0.047		45.624	0.739	14.643	0.004		27.93	0.46556	28.4	11.2	20.5	1.411	0.110	0.109	0.005	5.323	4.53	
153	6/22/2004	9:01:54 AM		25.702	23.945	25.392	25.147	24.284		22.716	29.903	4.066	18.503	2.075	-0.171		45.683	0.728	14.643	0.004		28.93	0.48222	28.4	11.2	20.6	1.421	0.109	0.107	0.005	5.209	4.43	
154	6/22/2004	9:02:54 AM		25.724	23.948	25.37	25.13	24.307		22.594	29.503	3.924	18.573	1.847	-0.31		44.821	0.716	14.643	0.003		29.93	0.49889	28.0	11.0	20.6	1.419	0.107	0.106	0.005	5.132	4.37	
155	6/22/2004	9:03:54 AM		25.732	23.971	25.393	25.158	24.345		22.351	28.893	4.12	18.095	1.433	-0.55		45.556	0.693	14.643	0.004		30.93	0.51556	27.4	11.2	20.2	1.394	0.103	0.102	0.005	5.053	4.30	
156	6/22/2004	9:04:54 AM		25.733	23.977	25.368	25.173	24.34		22.195	28.549	3.982	18.111	1.285	-0.636		46.548	0.685	14.643	0.004		31.93	0.53222	27.1	11.4	20.2	1.389	0.102	0.101	0.005	5.015	4.27	
157	6/22/2004	9:05:54 AM		25.735	23.994	25.355	25.205	24.352		22.077	28.304	3.994	17.906	1.12	-0.709		45.633	0.677	14.643	0.004		32.93	0.54889	26.8	11.2	20.0	1.378	0.101	0.100	0.005	4.999	4.25	
158	6/22/2004	9:06:54 AM		25.743	24.016	25.363	25.208	24.35		22.482	28.582	3.983	18.378	1.12	-0.709		46.747	0.679	14.643	0.004		33.93	0.56556	27.1	11.5	20.4	1.409	0.101	0.100	0.005	4.905	4.17	
159	6/22/2004	9:07:54 AM		25.725	24.013	25.315	25.2	24.352		22.251	28.394	3.911	18.236	1.053	-0.743		44.554	0.674	14.643	0.003		34.93	0.58222	26.9	10.9	20.2	1.396	0.100	0.100	0.005	4.920	4.19	
160	6/22/2004	9:08:54 AM		25.722	24.031	25.307	25.177	24.344		22.436	28.628	3.965	18.304	1.004	-0.795		45.641	0.671	14.643	0.003		35.93	0.59889	27.2	11.2	20.4	1.404	0.100	0.099	0.005	4.869	4.14	
161	6/22/2004	9:09:54 AM		25.704	24.028	25.275	25.175	24.372		22.641	28.858	3.766	18.733	1.114	-0.726		44.098	0.677	14.643	0.003		36.93	0.61556	27.4	10.8	20.7	1.426	0.101	0.100	0.005	4.842	4.12	
162	6/22/2004	9:10:54 AM		25.707	24.045	25.272	25.197	24.379		22.768	29.046	3.815	18.788	1.056	-0.749		42.844	0.673	14.643	0.004		37.93	0.63222	27.6	10.5	20.8	1.433	0.100	0.100	0.005	4.792	4.08	
163	6/22/2004	9:11:54 AM		25.694	24.043	25.254	25.179	24.361		22.758	28.852	3.84	18.823	0.998	-0.81		44.089	0.669	14.643	0.003		38.93	0.64889	27.4	10.8	20.8	1.433	0.100	0.099	0.005	4.763	4.05	
164	6/22/2004	9:12:54 AM		25.696	24.065	25.266	25.226	24.373		22.928	28.928	3.816	19.016	0.94	-0.839		43.918	0.666	14.643	0.004		39.93	0.66556	27.5	10.8	21.0	1.446	0.099	0.099	0.005	4.699	4.00	
165	6/22/2004	9:13:54 AM		25.681	24.07	25.247	25.242	24.409		22.903	28.961	3.836	18.95	0.932	-0.847		44.379	0.666	14.643	0.004		40.93	0.68222	27.5	10.9	20.9	1.443	0.099	0.099	0.005	4.712	4.01	
166	6/22/2004	9:14:54 AM		25.678	24.087	25.263	25.303	24.49		22.005	27.301	4.127	17.776	0.33	-1.191		46.442	0.632	14.643	0.004		41.93	0.69889	25.8	11.4	19.9	1.371	0.094	0.094	0.005	4.702	4.00	
167	6/22/2004	9:15:54 AM		25.675	24.099	25.255	25.371	24.537		21.905	27.092	4.089	17.702	0.141	-1.313		47.226	0.622	14.643	0.003		42.93	0.71556	25.6	11.6	19.8	1.365	0.093	0.092	0.005	4.649	3.96	
168	6/22/2004	9:16:54 AM		25.667	24.116	25.242	25.383	24.605		21.671	26.744	4.035	17.518	0.028	-1.385		45.543	0.614	14.643	0.004		43.93	0.73222	25.3	11.2	19.6	1.351	0.092	0.091	0.005	4.640	3.95	
169	6/22/2004	9:17:54 AM		25.655	24.139	25.24	25.426	24.657		21.752	26.966	3.941	17.678	0.028	-1.394		45.249	0.614	14.643	0.004		44.93	0.74889	25.5	11.1	19.7	1.359	0.092	0.091	0.005	4.612	3.92	
170	6/22/2004	9:18:54 AM		25.647	24.157	25.233	25.478	24.7		21.849	26.868	3.998	17.746	-0.024	-1.408		45.718	0.613	14.643	0.003		45.93	0.76556	25.4	11.2	19.8	1.365	0.091	0.091	0.005	4.586	3.90	
171	6/22/2004	9:19:54 AM		25.64	24.18	25.231	25.526	24.688		21.847	27.011	3.958	17.725	-0.024	-1.408		45.839	0.613	14.643	0.003		46.93	0.78222	25.5	11.2	19.8	1.364	0.091	0.091	0.005	4.589	3.91	
172																																	
173		Averages		25.7	24.0	25.3	25.2	24.4		22.3	28.6	4.0	18.3	1.2	-0.7		45.3	0.7	14.6	0.0				27.2	11.1	20.3	1.4	0.1	0.1	0.0	5.0	4.2	
174		Maximum		25.7	24.2	25.4	25.5	24.7		22.9	30.4	4.1	19.0	2.8	0.3		47.2	0.8	14.6	0.0				28.9	11.6	21.0	1.4	0.1	0.1	0.0	5.6	4.8	
175		Median		25.7	24.0	25.3	25.2	24.4		22.4	28.9	4.0	18.3	1.1	-0.7		45.5	0.7	14.6	0.0				27.4	11.2	20.4	1.4	0.1	0.1	0.0	4.9	4.2	
176		Minimum		25.4	23.9	25.2	24.9	24.2		21.7	26.7	3.8	17.5	0.0	-1.4		42.8	0.6	14.6	0.0				25.3	10.5	19.6	1.4	0.1	0.1	0.0	4.6	3.9	
177		2 x Std Dev		0.159	0.154	0.134	0.299	0.288		0.724	2.215	0.197	0.852	1.773	1.052		1.995	0.096	0.000	0.001				2.215	0.489	0.783	0.054	0.014	0.014	0.001	0.615	0.523	
178	Number of Points Used*			24	24	24	24	24		24	24	24	24	24	24		24	24	24	24				24	24	24	24	24	24	24	24	24	
179		* Backpulse points in box are not included																															
180																																	
181																																	
182																																	
183	Baseline 2C																																
184	6/22/2004	9:27:05 AM		26.03	24.305	25.611	25.712	24.758		32.789	43.785	3.954	28.782	5.781	2.026		45.756	0.895	14.643	0.003		54.12	0.90194	42.3	11.2	30.8	2.123	0.133	0.131	0.004	4.261	3.63	
185	6/22/2004	9:28:05 AM		26.058	24.323	25.564	25.84	24.766		32.652	43.634	3.9	28.688	5.694	2.006		44.559	0.893	14.643	0.004		55.12	0.91861	42.2	10.9	30.7	2.115	0.133	0.131	0.004	4.273	3.64	
186	6/22/2004	9:29:05 AM		26.057	24.347	25.518	25.878	24.815		32.372	42.679	3.976	28.347	5.399	1.786		46.352	0.879	14.643	0.003		56.12	0.93528	41.2	11.4	30.4	2.093	0.131	0.129	0.004	4.254	3.62	
187	6/22/2004	9:30:05 AM		26.015	24.345	25.426	25.877	24.828		32.134	42.533	3.963	28.109	5.158	1.665		44.823	0.87	14.643	0.003		57.12	0.95194	41.1	11.0	30.1	2.077	0.130	0.128	0.004	4.255	3.62	
188	6/22/2004	9:31:05 AM		25.999	24.379	25.39	25.916	24.867		32.517	42.647	3.861	28.624	5.147	1.619		44.826	0.867	14.643	0.004		58.12	0.96861	41.2	11.0	30.6	2.108	0.129	0.128	0.004	4.182	3.56	
189	6/22/2004	9:32:05 AM		25.957	24.397	25.338	25.918	24.86		32.631	42.757	3.874	28.725	5.031	1.569		44.217	0.863	14.643	0.004		59.12	0.98528	41.3	10.8	30.7	2.115	0.129	0.127	0.004	4.154	3.54	
190	6/22/2004	9:33:05 AM		25.914	24.404	25.305	25.936	24.872		32.719	42.656	3.893	28.86	4.979	1.541		44.321	0.861	14.643	0.004		60.12	1.00194	41.2	10.9	30.8	2.123	0.128	0.127	0.004	4.134	3.52	
191	6/22/2004	9:34:05 AM		25.882	24.432	25.258	25.913	24.91		32.828	42.873	3.836	28.98	4.967	1.535		44.903	0.861	14.643	0.004		61.12	1.01861	41.4	11.0	30.9	2.131	0.128	0.127	0.004	4.124	3.51	
192	6/22/2004	9:35:05 AM		25.837	24.438	25.208	25.914	24.885		32.687	42.473	3.826	28.822	4.904	1.48		45.551	0.858	14.643	0.004		62.12	1.03528	41.0	11.2	30.8	2.120	0.128	0.127	0.004	4.135	3.52	
193	6/22/2004	9:36:05 AM		25.799	24.459	25.15	25.931	24.877		32.783	42.339	4.077	28.702	4.571	1.295		45.698	0.845	14.643	0.004		63.12	1.05194	40.9	11.2	30.7	2.120	0.126	0.125	0.004	4.081	3.47	
194	6/22/2004	9:37:05 AM		25.757	24.472	25.122	25.928	24.86		32.401	42.026	4.015	28.347	4.354	1.159		45.334	0.835	14.643	0.004		64.12	1.06861	40.6	11.1	30.4	2.094	0.124	0.124	0.004	4.085	3.48	
195	6/22/2004	9:38:05 AM		25.72	24.485	25.095	25.906	24.888		32.441	41.601	3.89	28.555	4.267	1.136		45.057	0.833	14.643	0.003		65.12	1.08528	40.1	11.0	30.5	2.103	0.124	0.124	0.004	4.061	3.46	
196	6/22/2004	9:39:05 AM		25.696	24.507	25.077	25.908	24.869		32.727	42.424	3.763	28.912	4.299	1.147		44.504	0.833	14.643	0.004		66.12	1.10194	41.0	10.9	30.8	2.125	0.124	0.124	0.004	4.021	3.42	
197	6/22/2004	9:40:05 AM		25.649	24.52	25.03	25.936	24.857		32.036	40.981	3.986	28.074	4.064	0.983		43.603	0.822	14.643	0.004		67.12	1.11861	39.5	10.7	30.1	2.072	0.123	0.122	0.004	4.074	3.47	
198	6/22/2004	9:41:05 AM		25.612	24.517	24.977	25.914	24.875		32.418	41.68	4.014	28.358	4.061	0.991		45.339	0.822	14.643	0.004		68.12	1.13528	40.2	11.1	30.4	2.095	0.123	0.123	0.004	4.036	3.43	
199	6/22/2004	9:42:05 AM		25.569	24.54	24.935	25.896	24.857		32.621	41.868	3.93	28.631	4.055	0.994		44.913	0.822	14.643	0.003		69.12	1.15194	40.4	11.0	30.6	2.112	0.123	0.123	0.004	4.009	3.41	
200	6/22/2004	9:43:05 AM		25.542	24.548	24.917	25.929	24.86		32.578	41.646	4.001	28.542	4.035	0.98		45.07	0.82	14.643	0.004		70.12	1.16861	40.2	11.0	30.6	2.107	0.122	0.123	0.004	4.010	3.41	
201	6/22/2004	9:44:05 AM		25.526	24.561	24.916	25.937	24.869		32.577	41.404	3.94	28.631	3.899	0.931		46.017	0.816	14.643	0.004		71.12	1.18528	39.9	11.3	30.6	2.110	0.122	0.122	0.004	3.985	3.39	
202	6/22/2004	9:45:05 AM		25.488	24.563	24.893	25.93	24.866		32.584	41.497	3.964	28.581	3.89	0.896		45.85	0.816	14.643	0.004		72.12	1.20194	40.0	11.2	30.6	2.109	0.122	0.122	0.004	3.990	3.40	
203	6/22/2004	9:46:05 AM		25.466	24.581	24.861	25.932	24.879		32.592	41.398	4.027	28.561	3.659	0.769		45.376	0.805	14.643	0.004		73.12	1.21861	39.9	11.1	30.6	2.108	0.120	0.120	0.004	3.941	3.35	
204	6/22/2004	9:47:05 AM		25.444	24.589	24.879	25.925	24.872		31.796	40.233	3.901	27.869	3.52	0.682		44.63	0.798	14.643	0.003		74.12	1.23528	38.8	10.9	29.8	2.057	0.119	0.119	0.004	4.002	3.41	
205	6/22/2004	9:48:05 AM		25.426	24.582	24.871	25.868	24.874		32.022	40.508	3.827	28.212	3.523	0.688		44.498	0.799	14.643	0.003		75.12	1.25194	39.0	10.9	30.1	2.076	0.119	0.120	0.004	3.970	3.38	
206																																	
207																																	
208																																	
209																																	
210																																	
211		Averages		25.7	24.5	25.2	25.9	24.9		32.5	42.1	3.9	28.5	4.5	1.3		45.1	0.8	14.6	0.0				40.6	11.0	30.5	2.1	0.1	0.1	0.0	4.1	3.5	
212		Maximum		26.1	24.6	25.6	25.9	24.9		32.8	43.8	4.1	29.0	5.8	2.0		46.4	0.9	14.6	0.0				42.3	11.4	30.9	2.1	0.1	0.1	0.0	4.3	3.6	
213		Median		25.7	24.5	25.1	25.9	24.9		32.6	42.2	3.9	28.6	4.3	1.2		45.0	0.8	14.6	0.0				40.7	11.0	30.6	2.1	0.1	0.1	0.0	4.1	3.5	
214		Minimum		25.4	24.3	24.9	25.7	24.8		31.8	40.2	3.8	27.9	3.5	0.7		43.6	0.8	14.6	0.0				38.8	10.7	29.8	2.1	0.1	0.1	0.0	3.9	3.4	
215		2 x Std Dev		0.427	0.178	0.474	0.097	0.071		0.539	1.755	0.153	0.564	1.341	0.797		1.293	0.057	0.000	0.001				1.755	0.317	0.546	0.038	0.009	0.007	0.000	0.201	0.171	
216	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
217		* Backpulse points in box are not included																															

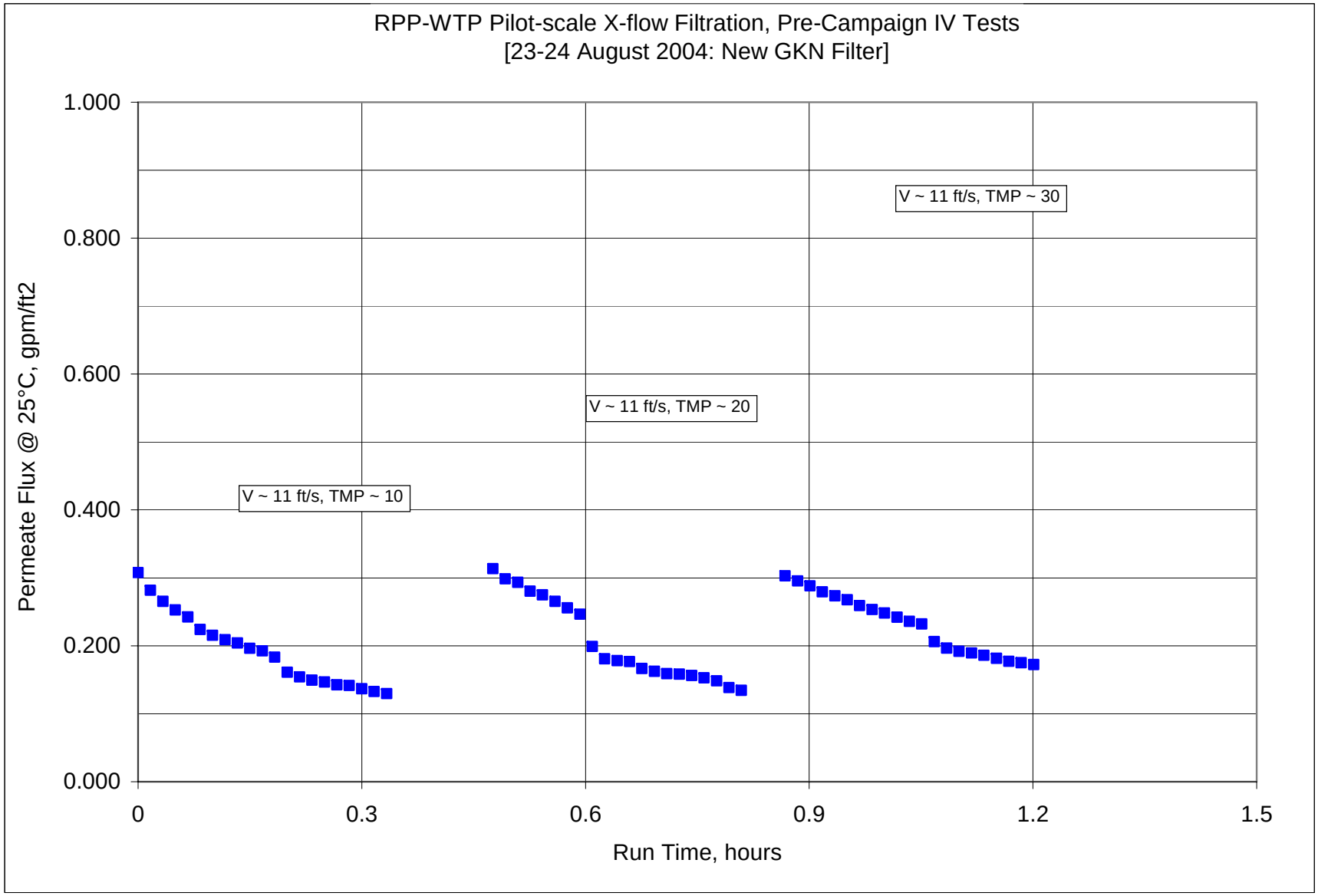
RUN # 3.21A, B, AND C; POST-TEST BASELINE WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
225	Baseline 3A																																
226	6/22/2004	12:12:33 PM		24.623	24.268	24.126	25.103	24.516		12.17	12.732	3.974	8.018	-1.216	-4.49		44.776	0.25	14.643	0.004		0.00	0	11.3	11.0	10.1	0.696	0.037	0.038	0.004	3.785	3.22	
227	6/22/2004	12:13:33 PM		24.596	24.276	24.17	25.117	24.624		12.249	12.84	4.038	8.03	-1.216	-4.49		44.83	0.25	14.643	0.003		1.00	0.01667	11.4	11.0	10.1	0.699	0.037	0.038	0.004	3.763	3.20	
228	6/22/2004	12:14:33 PM		24.594	24.274	24.178	25.225	24.647		12.106	12.654	3.926	7.987	-1.214	-4.487		46.088	0.25	14.643	0.004		2.00	0.03333	11.2	11.3	10.0	0.693	0.037	0.038	0.004	3.797	3.23	
229	6/22/2004	12:15:33 PM		24.564	24.289	24.167	25.38	24.707		12.193	12.747	3.969	8.037	-1.214	-4.49		45.43	0.25	14.643	0.004		3.00	0.05	11.3	11.1	10.1	0.697	0.037	0.038	0.004	3.773	3.21	
230	6/22/2004	12:16:33 PM		24.568	24.303	24.192	25.494	24.776		12.189	12.791	3.928	8.102	-1.214	-4.484		45.139	0.251	14.643	0.004		4.00	0.06667	11.3	11.1	10.1	0.699	0.037	0.038	0.004	3.774	3.21	
231	6/22/2004	12:17:33 PM		24.552	24.317	24.186	25.508	24.83		12.207	12.801	3.948	8.1	-1.219	-4.493		44.669	0.25	14.643	0.003		5.00	0.08333	11.3	10.9	10.2	0.700	0.037	0.038	0.004	3.756	3.20	
232	6/22/2004	12:18:33 PM		24.562	24.337	24.226	25.563	24.87		12.089	12.664	3.926	7.987	-1.214	-4.478		44.709	0.252	14.643	0.004		6.00	0.1	11.2	11.0	10.0	0.692	0.038	0.038	0.004	3.826	3.26	
233	6/22/2004	12:19:33 PM		24.551	24.361	24.21	25.622	24.909		12.237	12.826	3.995	8.032	-1.214	-4.493		44.846	0.251	14.643	0.004		7.00	0.11667	11.4	11.0	10.1	0.699	0.037	0.038	0.004	3.776	3.21	
234	6/22/2004	12:20:33 PM		24.564	24.385	24.228	25.691	24.897		12.197	12.751	3.987	8.024	-1.214	-4.49		44.947	0.251	14.643	0.004		8.00	0.13333	11.3	11.0	10.1	0.697	0.037	0.038	0.004	3.783	3.22	
235	6/22/2004	12:21:33 PM		24.553	24.399	24.218	25.68	24.852		12.093	12.672	3.95	7.971	-1.211	-4.49		46.015	0.251	14.643	0.004		9.00	0.15	11.2	11.3	10.0	0.692	0.037	0.038	0.004	3.814	3.25	
236	6/22/2004	12:22:33 PM		24.557	24.423	24.226	25.684	24.84		12.255	12.857	4.001	8.049	-1.214	-4.49		44.638	0.252	14.643	0.003		10.00	0.16667	11.4	10.9	10.2	0.700	0.038	0.038	0.004	3.783	3.22	
237	6/22/2004	12:23:33 PM		24.55	24.436	24.235	25.717	24.808		12.241	12.801	3.839	8.223	-1.214	-4.475		44.573	0.254	14.643	0.004		11.00	0.18333	11.3	10.9	10.2	0.705	0.038	0.039	0.004	3.782	3.22	
238	6/22/2004	12:24:33 PM		24.553	24.439	24.207	25.72	24.826		12.33	12.907	3.902	8.273	-1.216	-4.472		44.644	0.255	14.643	0.003		12.00	0.2	11.4	10.9	10.3	0.710	0.038	0.039	0.004	3.774	3.21	
239	6/22/2004	12:25:33 PM		24.561	24.457	24.215	25.718	24.809		12.253	12.921	3.874	8.137	-1.214	-4.475		44.757	0.253	14.643	0.004		13.00	0.21667	11.4	11.0	10.2	0.703	0.038	0.039	0.004	3.783	3.22	
240	6/22/2004	12:26:33 PM		24.559	24.48	24.218	25.701	24.752		12.317	12.929	3.893	8.238	-1.214	-4.47		44.563	0.255	14.643	0.003		14.00	0.23333	11.5	10.9	10.3	0.709	0.038	0.039	0.004	3.782	3.22	
241	6/22/2004	12:27:33 PM		24.555	24.471	24.244	25.702	24.728		12.131	12.772	3.898	8.024	-1.208	-4.47		44.775	0.254	14.643	0.004		15.00	0.25	11.3	11.0	10.1	0.695	0.038	0.039	0.004	3.839	3.27	
242	6/22/2004	12:28:33 PM		24.553	24.479	24.232	25.645	24.741		12.048	12.635	3.861	8	-1.214	-4.467		44.386	0.255	14.643	0.004		16.00	0.26667	11.2	10.9	10.0	0.691	0.038	0.039	0.004	3.876	3.30	
243	6/22/2004	12:29:33 PM		24.565	24.491	24.229	25.657	24.818		12.104	12.72	3.911	7.998	-1.214	-4.475		44.798	0.255	14.643	0.003		17.00	0.28333	11.2	11.0	10.1	0.693	0.038	0.039	0.004	3.866	3.29	
244	6/22/2004	12:30:33 PM		24.568	24.504	24.227	25.7	24.841		12.181	12.813	3.884	8.076	-1.211	-4.47		44.479	0.255	14.643	0.004		18.00	0.3	11.3	10.9	10.1	0.698	0.038	0.039	0.004	3.836	3.26	
245	6/22/2004	12:31:33 PM		24.566	24.502	24.226	25.688	24.89		12.313	12.946	3.877	8.246	-1.216	-4.47		44.567	0.255	14.643	0.003		19.00	0.31667	11.5	10.9	10.3	0.709	0.038	0.039	0.004	3.780	3.22	
246	6/22/2004	12:32:33 PM		24.569	24.53	24.263	25.745	24.897		12.328	12.915	3.923	8.24	-1.211	-4.467		42.516	0.256	14.643	0.004		20.00	0.33333	11.4	10.4	10.3	0.709	0.038	0.039	0.004	3.789	3.22	
247																																	
248																																	
249		Averages		24.6	24.4	24.2	25.6	24.8		12.2	12.8	3.9	8.1	-1.2	-4.5		44.8	0.3	14.6	0.0				11.3	11.0	10.1	0.699	0.038	0.039	0.004	3.8	3.2	
250		Maximum		24.6	24.5	24.3	25.7	24.9		12.3	12.9	4.0	8.3	-1.2	-4.5		46.1	0.3	14.6	0.0				11.5	11.3	10.3	0.710	0.038	0.039	0.004	3.9	3.3	
251		Median		24.6	24.4	24.2	25.7	24.8		12.2	12.8	3.9	8.0	-1.2	-4.5		44.8	0.3	14.6	0.0				11.3	11.0	10.1	0.699	0.038	0.038	0.004	3.8	3.2	
252		Minimum		24.6	24.3	24.1	25.1	24.5		12.0	12.6	3.8	8.0	-1.2	-4.5		42.5	0.3	14.6	0.0				11.2	10.4	10.0	0.691	0.037	0.038	0.004	3.8	3.2	
253		2 x Std Dev		0.035	0.171	0.061	0.392	0.197		0.165	0.187	0.101	0.195	0.004	0.019		1.337	0.004	0.000	0.001				0.187	0.328	0.173	0.012	0.001	0.001	0.000	0.064	0.055	
254	Number of Points Used*			21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
255		* Backpulse po		s in box are not included																													
256																																	
257																																	
258																																	
259	Baseline 3B																																
260	6/22/2004	12:37:45 PM		24.737	24.603	24.436	26.099	25.175		22.156	25.805	3.854	18.177	-1.214	-2.388		44.477	0.518	14.643	0.004		25.20	0.42	24.3	10.9	20.2	1.390	0.077	0.078	0.004	3.891	3.31	
261	6/22/2004	12:38:45 PM		24.781	24.642	24.481	26.133	25.214		22.191	25.751	3.85	18.216	-1.211	-2.371		44.552	0.519	14.643	0.004		26.20	0.43667	24.3	10.9	20.2	1.393	0.077	0.079	0.004	3.886	3.31	
262	6/22/2004	12:39:45 PM		24.794	24.65	24.474	26.146	25.292		22.067	25.656	3.854	18.051	-1.214	-2.371		44.838	0.52	14.643	0.003		27.20	0.45333	24.2	11.0	20.1	1.383	0.078	0.079	0.004	3.923	3.34	
263	6/22/2004	12:40:45 PM		24.833	24.679	24.492	26.204	25.28		22.235	25.966	3.83	18.273	-1.216	-2.365		44.256	0.521	14.643	0.003		28.20	0.47	24.5	10.8	20.3	1.396	0.078	0.079	0.004	3.890	3.31	
264	6/22/2004	12:41:45 PM		24.851	24.692	24.506	26.228	25.214		22.505	26.155	3.866	18.532	-1.216	-2.353		44.517	0.522	14.643	0.003		29.20	0.48667	24.7	10.9	20.5	1.415	0.078	0.079	0.004	3.846	3.27	
265	6/22/2004	12:42:45 PM		24.88	24.716	24.52	26.202	25.173		22.127	25.736	3.766	18.23	-1.214	-2.339		43.831	0.523	14.643	0.004		30.20	0.50333	24.3	10.7	20.2	1.391	0.078	0.079	0.004	3.917	3.33	
266	6/22/2004	12:43:45 PM		24.903	24.73	24.533	26.175	25.141		22.193	25.938	3.706	18.369	-1.214	-2.313		42.857	0.526	14.643	0.003		31.20	0.52	24.5	10.5	20.3	1.398	0.078	0.079	0.004	3.918	3.33	
267	6/22/2004	12:44:45 PM		24.933	24.759	24.573	26.19	25.126		22.332	26.08	3.705	18.532	-1.216	-2.313		43.584	0.527	14.643	0.004		32.20	0.53667	24.6	10.7	20.4	1.409	0.079	0.080	0.004	3.892	3.31	
268	6/22/2004	12:45:45 PM		24.94	24.756	24.58	26.132	25.118		22.21	25.902	3.746	18.296	-1.216	-2.313		44.064	0.526	14.643	0.004		33.20	0.55333	24.4	10.8	20.3	1.396	0.078	0.079	0.004	3.918	3.33	
269	6/22/2004	12:46:45 PM		24.942	24.763	24.592	26.099	25.07		22.225	25.904	3.719	18.357	-1.214	-2.307		43.403	0.526	14.643	0.004		34.20	0.57	24.4	10.6	20.3	1.399	0.078	0.079	0.004	3.910	3.33	
270	6/22/2004	12:47:45 PM		24.964	24.771	24.619	26.076	25.017		22.326	26.037	4.01	18.25	-1.214	-2.394		45.126	0.518	14.643	0.004		35.20	0.58667	24.6	11.1	20.3	1.399	0.077	0.078	0.004	3.848	3.27	
271	6/22/2004	12:48:45 PM		24.971	24.777	24.621	26.013	25.009		22.112	25.651	3.848	18.109	-1.216	-2.385		44.502	0.519	14.643	0.004		36.20	0.60333	24.2	10.9	20.1	1.387	0.077	0.078	0.004	3.889	3.31	
272	6/22/2004	12:49:45 PM		24.992	24.784	24.632	25.989	25.04		22.2	25.871	3.806	18.294	-1.214	-2.356		44.348	0.522	14.643	0.004		37.20	0.62	24.4	10.9	20.2	1.396	0.078	0.079	0.004	3.884	3.31	
273	6/22/2004	12:50:45 PM		25.009	24.79	24.634	26.021	25.077		22.424	26.066	3.725	18.538	-1.214	-2.342		44.204	0.524	14.643	0.004		38.20	0.63667	24.6	10.8	20.5	1.412	0.078	0.079	0.004	3.854	3.28	
274	6/22/2004	12:51:45 PM		25.02	24.796	24.635	26.071	25.127		22.289	26.076	3.782	18.413	-1.211	-2.33		44.438	0.525	14.643	0.003		39.20	0.65333	24.6	10.9	20.4	1.403	0.078	0.079	0.004	3.886	3.31	
275	6/22/2004	12:52:45 PM		25.027	24.803	24.632	26.114	25.175		22.044	25.622	3.76	18.168	-1.216	-2.319		44.062	0.526	14.643	0.003		40.20	0.67	24.1	10.8	20.1	1.386	0.078	0.079	0.004	3.941	3.35	
276	6/22/2004	12:53:45 PM		25.038	24.809	24.643	26.149	25.19		22.272	25.981	3.698	18.458	-1.216	-2.316		43.829	0.526	14.643	0.004		41.20	0.68667	24.5	10.7	20.4	1.404	0.078	0.079	0.004	3.890	3.31	
277	6/22/2004	12:54:45 PM		25.061	24.827	24.676	26.192	25.223		22.158	25.803	3.762	18.228	-1.214	-2.313		43.795	0.526	14.643	0.003		42.20	0.70333	24.3	10.7	20.2	1.392	0.078	0.079	0.004	3.919	3.34	
278	6/22/2004	12:55:45 PM		25.072	24.848	24.682	26.179	25.235		22.096	25.778	3.781	18.144	-1.214	-2.304		43.916	0.527	14.643	0.004		43.20	0.72	24.3	10.8	20.1	1.387	0.079	0.079	0.004	3.940	3.35	
279	6/22/2004	12:56:45 PM		25.069	24.851	24.704	26.206	25.262		21.974	25.486	3.845	18.107	-1.216	-2.382		45.937	0.519	14.643	0.003		44.20	0.73667	24.0	11.3	20.0	1.382	0.077	0.078	0.004	3.893	3.31	
280	6/22/2004	12:57:45 PM		25.086	24.862	24.716	26.233	25.303		22.108	25.672	3.892	18.082	-1.216	-2.377		44.452	0.52	14.643	0.004		45.20	0.75333	24.2	10.9	20.1	1.385	0.078	0.078	0.004	3.889	3.31	
281	6/22/2004	12:58:45 PM		25.097	24.879	24.722	26.259	25.335		22.175	25.786	3.842	18.187	-1.214	-2.351		44.521	0.523	14.643	0.003		46.20	0.77	24.3	10.9	20.2	1.391	0.078	0.079	0.004	3.894	3.31	
282																																	
283		Averages		25.0	24.8	24.6	26.1	25.2		22.2	25.9	3.8	18.3	-1.2	-2.3		44.3	0.5	14.6	0.0				24.4	10.8	20.2	1.395	0.078	0.079	0.004	3.9	3.3	
284		Maximum		25.1	24.9	24.7	26.3	25.3		22.5	26.2	4.0	18.5	-1.2	-2.3		45.9	0.5	14.6	0.0				24.7	11.3	20.5	1.415	0.079	0.080	0.004	3.9	3.4	
285		Median		25.0	24.8	24.6	26.1	25.2		22.2	25.8	3.8	18.2	-1.2	-2.3		44.3	0.5	14.6	0.0				24.4	10.9	20.2	1.394	0.078	0.079	0.004	3.9	3.3	
286		Minimum		24.7	24.6	24.4	26.0	25.0		22.0	25.5	3.7	18.1	-1.2	-2.4		42.9	0.5	14.6	0.0				24.0	10.5	20.0	1.382	0.077	0.078	0.004	3.8	3.3	
287		2 x Std Dev		0.207	0.146	0.164	0.146	0.183		0.242	0.344	0.148	0.292	0.003	0.059		1.224	0.006	0.000	0.001				0.344	0.300	0.258	0.018	0.001	0.001	0.000	0.050	0.043	
288	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
289		* Backpulse po		s in box are not included																													

RUN # 3.21A, B, AND C; POST-TEST BASELINE WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
294	Baseline 3C																																
295	6/22/2004	1:01:42 PM		25.311	24.923	24.992	26.548	25.394		32.219	41.281	3.823	28.343	3.998	0.962		44.786	0.817	14.643	0.004		49.15	0.81917	39.8	11.0	30.3	2.088	0.122	0.122	0.004	4.023	3.42	
296	6/22/2004	1:02:42 PM		25.399	24.941	25.055	26.581	25.407		32.194	41.29	3.842	28.325	3.995	0.957		44.652	0.818	14.643	0.004		50.15	0.83583	39.8	10.9	30.3	2.086	0.122	0.122	0.004	4.024	3.42	
297	6/22/2004	1:03:42 PM		25.477	24.964	25.118	26.604	25.35		32.327	41.344	3.819	28.483	4.096	1.023		44.264	0.823	14.643	0.004		51.15	0.8525	39.9	10.8	30.4	2.096	0.123	0.122	0.004	4.022	3.42	
298	6/22/2004	1:04:42 PM		25.53	24.957	25.146	26.512	25.333		32.036	40.921	3.79	28.224	4.053	0.988		44.692	0.822	14.643	0.003		52.15	0.86917	39.4	11.0	30.1	2.077	0.123	0.122	0.004	4.051	3.45	
299	6/22/2004	1:05:42 PM		25.603	24.975	25.219	26.515	25.286		32.32	41.677	3.807	28.481	4.116	1.049		44.05	0.825	14.643	0.004		53.15	0.88583	40.2	10.8	30.4	2.096	0.123	0.122	0.004	4.021	3.42	
300	6/22/2004	1:06:42 PM		25.662	24.983	25.263	26.444	25.255		32.54	41.874	3.785	28.768	4.137	1.064		43.351	0.826	14.643	0.004		54.15	0.9025	40.4	10.6	30.7	2.113	0.123	0.122	0.004	3.988	3.39	
301	6/22/2004	1:07:42 PM		25.714	24.996	25.31	26.391	25.217		32.264	41.584	3.764	28.454	4.142	1.049		44.348	0.826	14.643	0.004		55.15	0.91917	40.1	10.9	30.4	2.093	0.123	0.122	0.004	4.021	3.42	
302	6/22/2004	1:08:42 PM		25.746	24.992	25.332	26.297	25.189		32.573	41.997	3.835	28.702	4.134	1.055		44.048	0.826	14.643	0.003		56.15	0.93583	40.5	10.8	30.6	2.112	0.123	0.122	0.004	3.982	3.39	
303	6/22/2004	1:09:42 PM		25.798	24.995	25.384	26.26	25.191		32.078	41.379	3.792	28.245	4.116	1.052		44.404	0.826	14.643	0.003		57.15	0.9525	39.9	10.9	30.2	2.080	0.123	0.122	0.004	4.039	3.44	
304	6/22/2004	1:10:42 PM		25.845	24.997	25.436	26.327	25.258		32.179	41.354	3.736	28.473	4.128	1.064		44.252	0.827	14.643	0.004		58.15	0.96917	39.9	10.8	30.3	2.091	0.123	0.122	0.004	4.016	3.42	
305	6/22/2004	1:11:42 PM		25.887	25.008	25.478	26.369	25.315		32.432	41.692	3.803	28.661	4.113	1.049		44.431	0.826	14.643	0.004		59.15	0.98583	40.2	10.9	30.5	2.106	0.123	0.122	0.004	3.978	3.39	
306	6/22/2004	1:12:42 PM		25.918	25.015	25.529	26.44	25.351		32.212	41.624	3.783	28.401	4.209	1.09		44.241	0.829	14.643	0.004		60.15	1.0025	40.2	10.8	30.3	2.090	0.124	0.122	0.004	4.018	3.42	
307	6/22/2004	1:13:42 PM		25.96	25.027	25.547	26.472	25.403		32.15	41.512	3.724	28.37	4.209	1.104		44	0.83	14.643	0.004		61.15	1.01917	40.0	10.8	30.3	2.086	0.124	0.122	0.004	4.027	3.43	
308	6/22/2004	1:14:42 PM		25.993	25.019	25.554	26.505	25.49		32.026	41.267	3.873	28.138	4.113	1.038		44.552	0.826	14.643	0.004		62.15	1.03583	39.8	10.9	30.1	2.074	0.123	0.121	0.004	4.031	3.43	
309	6/22/2004	1:15:42 PM		26.02	25.032	25.586	26.567	25.513		31.796	40.637	3.959	27.845	3.96	0.933		45.687	0.817	14.643	0.004		63.15	1.0525	39.2	11.2	29.8	2.056	0.122	0.120	0.004	4.018	3.42	
310	6/22/2004	1:16:42 PM		26.046	25.038	25.598	26.623	25.564		31.764	40.66	4.06	27.672	3.873	0.884		46.19	0.815	14.643	0.004		64.15	1.06917	39.2	11.3	29.7	2.049	0.122	0.119	0.004	4.021	3.42	
311	6/22/2004	1:17:42 PM		26.084	25.056	25.63	26.671	25.601		31.893	40.931	3.998	27.886	3.998	0.948		45.32	0.82	14.643	0.004		65.15	1.08583	39.5	11.1	29.9	2.061	0.122	0.120	0.004	4.018	3.42	
312	6/22/2004	1:18:42 PM		26.111	25.073	25.667	26.738	25.649		32.173	41.246	3.869	28.386	4.113	1.006		44.915	0.824	14.643	0.004		66.15	1.1025	39.8	11.0	30.3	2.088	0.123	0.121	0.004	3.982	3.39	
313	6/22/2004	1:19:42 PM		26.15	25.102	25.701	26.812	25.687		31.92	41.335	3.904	27.953	4.116	1.035		45.074	0.825	14.643	0.004		67.15	1.11917	39.9	11.0	29.9	2.064	0.123	0.121	0.004	4.029	3.43	
314	6/22/2004	1:20:42 PM		26.161	25.113	25.723	26.853	25.684		31.901	41.049	3.874	27.964	4.119	1.046		44.623	0.827	14.643	0.004		68.15	1.13583	39.6	10.9	29.9	2.064	0.123	0.121	0.004	4.036	3.44	
315																																	
316																																	
317																																	
318		Averages		25.8	25.0	25.4	26.5	25.4		32.1	41.3	3.8	28.3	4.1	1.0		44.6	0.8	14.6	0.0				39.9	10.9	30.2	2.084	0.123	0.121	0.004	4.0	3.4	
319		Maximum		26.2	25.1	25.7	26.9	25.7		32.6	42.0	4.1	28.8	4.2	1.1		46.2	0.8	14.6	0.0				40.5	11.3	30.7	2.113	0.124	0.122	0.004	4.1	3.4	
320		Median		25.9	25.0	25.5	26.5	25.4		32.2	41.3	3.8	28.4	4.1	1.0		44.5	0.8	14.6	0.0				39.9	10.9	30.3	2.087	0.123	0.122	0.004	4.0	3.4	
321		Minimum		25.3	24.9	25.0	26.3	25.2		31.8	40.6	3.7	27.7	3.9	0.9		43.4	0.8	14.6	0.0				39.2	10.6	29.7	2.049	0.122	0.119	0.004	4.0	3.4	
322		2 x Std Dev		0.502	0.097	0.437	0.316	0.318		0.444	0.711	0.167	0.582	0.163	0.111		1.235	0.008	0.000	0.001				0.711	0.303	0.510	0.035	0.001	0.002	0.000	0.039	0.033	
323		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
324		* Backpulse points in box are not included																															

CAMPAIGN IV NEW GKN BASELINE #1 WITH DIF WATER



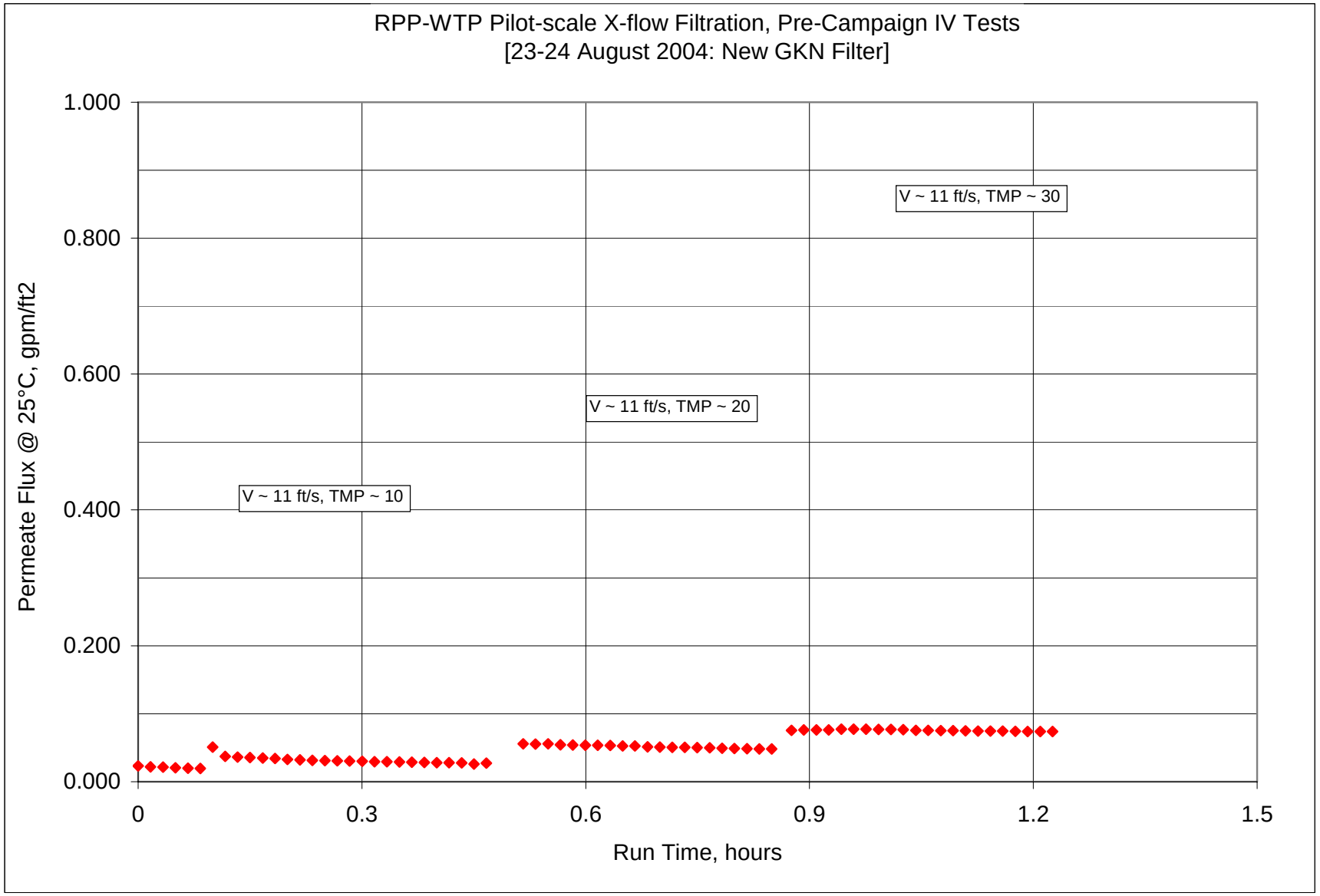
CAMPAIGN IV NEW GKN BASELINE #1 WITH DIF WATER

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >< PERMIABILITY >>					
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
17	Monday, 8/23/04																																
18	Baseline XXA, water																																
19	8/23/2004	8:59:50 AM		24.302	22.672	24.189	23.398	22.648		10.674	14.97	3.951	7.112	-1.085	0.614		44.545	0.003	2.1	0.004		0	0	13.8	10.6	8.9	0.613	0.301	0.308	0.035	34.590	29.44	
20	8/23/2004	9:00:50 AM		24.32	22.686	24.157	23.376	22.616		11.129	14.78	3.688	7.68	-1.209	0.608		44.564	0.003	1.921	0.003		1.00	0.01667	13.7	10.6	9.4	0.648	0.275	0.282	0.030	29.948	25.49	
21	8/23/2004	9:01:50 AM		24.317	22.698	24.144	23.454	22.614		11.757	14.784	3.794	8.21	-1.212	0.602		44.583	0.003	1.81	0.003		2.00	0.03333	13.7	10.6	10.0	0.688	0.259	0.265	0.027	26.591	22.63	
22	8/23/2004	9:02:50 AM		24.294	22.7	24.141	23.461	22.606		12.288	15.028	4.045	8.337	-1.212	0.602		43.657	0.003	1.722	0.003		3.00	0.05	13.9	10.4	10.3	0.711	0.247	0.253	0.024	24.493	20.84	
23	8/23/2004	9:03:50 AM		24.282	22.717	24.174	23.559	22.734		12.508	15.057	3.869	8.883	-1.209	0.599		43.857	0.003	1.655	0.003		4.00	0.06667	13.9	10.4	10.7	0.737	0.237	0.243	0.023	22.676	19.30	
24	8/23/2004	9:04:50 AM		24.305	22.731	24.257	23.572	22.817		12.698	14.858	3.865	8.994	-1.209	0.594		45.488	0.003	1.531	0.003		5.00	0.08333	13.7	10.8	10.8	0.748	0.219	0.224	0.021	20.637	17.56	
25	8/23/2004	9:05:50 AM		24.357	22.738	24.325	23.539	22.709		12.75	14.72	4.152	8.67	-1.209	0.594		45.434	0.003	1.477	0.004		6.00	0.1	13.6	10.8	10.7	0.738	0.211	0.216	0.020	20.123	17.13	
26	8/23/2004	9:06:50 AM		24.389	22.745	24.392	23.571	22.596		12.933	14.832	4.2	8.844	-1.209	0.591		44.712	0.003	1.434	0.003		7.00	0.11667	13.7	10.6	10.9	0.751	0.205	0.209	0.019	19.181	16.32	
27	8/23/2004	9:07:50 AM		24.442	22.753	24.434	23.634	22.493		12.883	14.504	4.152	8.842	-1.206	0.594		44.652	0.003	1.403	0.004		8.00	0.13333	13.4	10.6	10.9	0.749	0.201	0.204	0.019	18.789	15.99	
28	8/23/2004	9:08:50 AM		24.497	22.763	24.5	23.615	22.418		13.232	14.738	4.235	9.031	-1.209	0.588		44.896	0.003	1.351	0.003		9.00	0.15	13.6	10.7	11.1	0.767	0.193	0.196	0.018	17.622	15.00	
29	8/23/2004	9:09:50 AM		24.547	22.763	24.54	23.64	22.383		13.271	14.649	4.33	9.09	-1.212	0.582		44.812	0.003	1.328	0.003		10.00	0.16667	13.5	10.7	11.2	0.771	0.190	0.193	0.017	17.227	14.66	
30	8/23/2004	9:10:50 AM		24.572	22.773	24.545	23.629	22.347		13.041	14.361	4.208	8.782	-1.209	0.579		45.254	0.003	1.264	0.003		11.00	0.18333	13.2	10.8	10.9	0.752	0.181	0.183	0.017	16.799	14.30	
31	8/23/2004	9:11:50 AM		24.627	22.788	24.625	23.614	22.377		12.701	13.53	4.266	8.553	-1.206	0.573		44.122	0.003	1.112	0.003		12.00	0.2	12.4	10.5	10.6	0.733	0.159	0.161	0.015	15.140	12.88	
32	8/23/2004	9:12:50 AM		24.656	22.782	24.639	23.623	22.291		12.522	13.262	4.332	8.171	-1.209	0.573		44.816	0.003	1.065	0.003		13.00	0.21667	12.1	10.7	10.3	0.713	0.152	0.154	0.015	14.887	12.67	
33	8/23/2004	9:13:50 AM		24.659	22.77	24.617	23.641	22.294		12.356	13.101	4.241	7.867	-1.215	0.57		44.846	0.003	1.032	0.003		14.00	0.23333	12.0	10.7	10.1	0.697	0.148	0.149	0.015	14.770	12.57	
34	8/23/2004	9:14:50 AM		24.701	22.782	24.664	23.653	22.347		12.603	13.209	3.924	8.741	-1.209	0.573		45.025	0.003	1.014	0.003		15.00	0.25	12.1	10.7	10.7	0.736	0.145	0.147	0.014	13.732	11.69	
35	8/23/2004	9:15:50 AM		24.723	22.779	24.696	23.67	22.348		12.369	12.987	4.194	8.128	-1.209	0.57		45.282	0.003	0.988	0.003		16.00	0.26667	11.9	10.8	10.2	0.707	0.141	0.143	0.014	13.920	11.85	
36	8/23/2004	9:16:50 AM		24.746	22.792	24.689	23.698	22.361		12.862	13.466	4.313	8.331	-1.209	0.57		44.942	0.003	0.979	0.003		17.00	0.28333	12.3	10.7	10.6	0.731	0.140	0.141	0.013	13.343	11.36	
37	8/23/2004	9:17:50 AM		24.768	22.789	24.691	23.72	22.353		12.439	12.995	3.932	8.438	-1.206	0.57		44.983	0.003	0.946	0.004		18.00	0.3	11.9	10.7	10.4	0.720	0.135	0.137	0.013	13.088	11.14	
38	8/23/2004	9:18:50 AM		24.785	22.801	24.698	23.737	22.39		12.761	13.178	4.194	8.61	-1.212	0.568		44.985	0.003	0.918	0.003		19.00	0.31667	12.1	10.7	10.7	0.737	0.131	0.133	0.012	12.405	10.56	
39	8/23/2004	9:19:50 AM		24.787	22.783	24.715	23.755	22.433		12.672	13.14	4.451	8.005	-1.212	0.562		44.973	0.003	0.897	0.003		20.00	0.33333	12.0	10.7	10.3	0.713	0.128	0.129	0.013	12.522	10.66	
40	8/23/2004	9:20:50 AM		24.796	22.796	24.698	23.793	22.501		12.898	13.32	4.383	8.292	-1.215	0.539		44.741	0.003	0.899	0.003		21.00	0.35	12.2	10.7	10.6	0.730	0.129	0.130	0.012	12.252	10.43	
41	8/23/2004	9:21:50 AM		24.814	22.805	24.712	23.862	22.54		12.821	13.227	4.382	8.105	-1.212	0.542		45.092	0.003	0.876	0.004		22.00	0.36667	12.1	10.7	10.5	0.721	0.125	0.126	0.012	12.084	10.28	
42	8/23/2004	9:22:50 AM		24.828	22.809	24.721	23.901	22.599		12.854	13.128	3.98	8.936	-1.209	0.542		45.275	0.003	0.877	0.004		23.00	0.38333	12.0	10.8	10.9	0.751	0.126	0.127	0.012	11.615	9.88	
43	8/23/2004	9:23:50 AM		24.833	22.823	24.75	23.936	22.613		12.701	12.991	4.3	8.302	-1.209	0.542		45.323	0.003	0.861	0.005		24.00	0.4	11.9	10.8	10.5	0.724	0.123	0.124	0.012	11.821	10.06	
44																																	
45		Averages		24.6	22.8	24.5	23.6	22.5		12.5	14.0	4.1	8.4	-1.2	0.6		44.8	0.0	1.3	0.0				12.8	10.7	10.5	0.7	0.2	0.2	0.0	17.6	15.0	
46		Maximum		24.8	22.8	24.8	23.9	22.8		13.3	15.1	4.5	9.1	-1.1	0.6		45.5	0.0	2.1	0.0				13.9	10.8	11.2	0.8	0.3	0.3	0.0	34.6	29.4	
47		Median		24.6	22.8	24.6	23.6	22.5		12.7	13.5	4.2	8.4	-1.2	0.6		44.9	0.0	1.1	0.0				12.4	10.7	10.6	0.7	0.2	0.2	0.0	15.1	12.9	
48		Minimum		24.3	22.7	24.1	23.4	22.3		10.7	13.0	3.7	7.1	-1.2	0.5		43.7	0.0	0.9	0.0				11.9	10.4	8.9	0.6	0.1	0.1	0.0	11.6	9.9	
49		2 x Std Dev		0.399	0.080	0.429	0.278	0.294		1.156	1.618	0.405	0.930	0.049	0.042		0.886	0.000	0.722	0.001				1.617	0.211	0.990	0.068	0.103	0.107	0.012	11.899	10.126	
50	Number of Points Used*			25	25	25	25	25		25	25	25	25	25	25		25	25	25	25				25	25	25	25	25	25	25	25	25	
51		* Backpulse points in box are not included																															

CAMPAIGN IV NEW GKN BASELINE #1 WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
53	Monday, 8/23/04																																
54	Baseline XXB, water																																
55	8/23/2004	9:28:23 AM		25.003	22.848	24.81	24.011	22.96		22.226	26.805	3.938	18.678	-0.807	0.599		45.052	0.003	2.177	0.003		28.55	0.47583	25.7	10.7	20.5	1.410	0.312	0.313	0.015	15.321	13.04	
56	8/23/2004	9:29:23 AM		25.013	22.859	24.785	24.081	23.005		22.423	26.534	4.059	18.613	-1.209	0.594		44.841	0.003	2.073	0.003		29.55	0.4925	25.4	10.7	20.5	1.415	0.297	0.299	0.015	14.552	12.38	
57	8/23/2004	9:30:23 AM		25.013	22.874	24.756	24.127	23.02		22.904	26.88	3.773	19.261	-1.212	0.591		44.084	0.003	2.035	0.005		30.55	0.50917	25.8	10.5	21.1	1.454	0.291	0.293	0.014	13.914	11.84	
58	8/23/2004	9:31:23 AM		24.989	22.875	24.716	24.158	23.046		23.437	27.044	3.966	19.694	-1.209	0.588		43.746	0.003	1.942	0.004		31.55	0.52583	25.9	10.4	21.6	1.487	0.278	0.280	0.013	12.996	11.06	
59	8/23/2004	9:32:23 AM		24.981	22.907	24.703	24.155	23.073		23.711	27.22	3.815	19.959	-1.212	0.582		43.555	0.003	1.903	0.004		32.55	0.5425	26.1	10.4	21.8	1.505	0.272	0.275	0.013	12.582	10.71	
60	8/23/2004	9:33:23 AM		24.967	22.918	24.69	24.161	23.099		23.939	26.809	3.748	20.552	-1.212	0.582		42.987	0.003	1.836	0.004		33.55	0.55917	25.7	10.2	22.2	1.534	0.263	0.265	0.012	11.920	10.14	
61	8/23/2004	9:34:23 AM		24.938	22.929	24.68	24.171	23.12		24.18	27.191	3.814	20.443	-1.209	0.579		43.5	0.003	1.771	0.004		34.55	0.57583	26.1	10.4	22.3	1.538	0.254	0.256	0.011	11.467	9.76	
62	8/23/2004	9:35:23 AM		24.929	22.956	24.652	24.198	23.127		24.665	27.307	3.855	21.028	-1.212	0.579		43.185	0.003	1.705	0.005		35.55	0.5925	26.2	10.3	22.8	1.575	0.244	0.247	0.011	10.790	9.18	
63	8/23/2004	9:36:23 AM		24.894	22.966	24.652	24.208	23.147		22.317	23.891	4.193	18.128	-1.209	0.568		44.985	0.003	1.376	0.006		36.55	0.60917	22.8	10.7	20.2	1.394	0.197	0.199	0.010	9.837	8.37	
64	8/23/2004	9:37:23 AM		24.861	22.983	24.594	24.255	23.189		22.027	23.342	4.105	17.804	-1.212	0.562		45.108	0.003	1.25	0.004		37.55	0.62583	22.2	10.7	19.9	1.373	0.179	0.181	0.009	9.089	7.74	
65	8/23/2004	9:38:23 AM		24.827	22.999	24.555	24.267	23.175		22.469	23.601	3.96	18.539	-1.209	0.562		44.881	0.003	1.229	0.005		38.55	0.6425	22.5	10.7	20.5	1.414	0.176	0.178	0.009	8.690	7.39	
66	8/23/2004	9:39:23 AM		24.794	23.015	24.521	24.278	23.216		22.402	23.58	4.006	18.331	-1.209	0.562		43.874	0.003	1.217	0.005		39.55	0.65917	22.5	10.5	20.4	1.404	0.174	0.177	0.009	8.671	7.38	
67	8/23/2004	9:40:23 AM		24.75	23.027	24.477	24.309	23.238		22.628	23.52	4.24	18.278	-1.212	0.559		45.599	0.003	1.147	0.005		40.55	0.67583	22.4	10.9	20.5	1.410	0.164	0.167	0.008	8.148	6.93	
68	8/23/2004	9:41:23 AM		24.726	23.043	24.448	24.331	23.229		22.51	23.28	4.238	18.297	-1.212	0.556		45.571	0.003	1.116	0.004		41.55	0.6925	22.2	10.9	20.4	1.407	0.160	0.162	0.008	7.954	6.77	
69	8/23/2004	9:42:23 AM		24.687	23.064	24.409	24.342	23.235		22.365	23.118	4.198	18.036	-1.206	0.556		45.484	0.003	1.091	0.004		42.55	0.70917	22.0	10.8	20.2	1.393	0.156	0.159	0.008	7.862	6.69	
70	8/23/2004	9:43:23 AM		24.658	23.081	24.371	24.343	23.251		22.807	23.427	4.234	18.617	-1.212	0.556		45.367	0.003	1.087	0.004		43.55	0.72583	22.3	10.8	20.7	1.428	0.156	0.158	0.008	7.648	6.51	
71	8/23/2004	9:44:23 AM		24.64	23.102	24.342	24.364	23.283		22.796	23.454	4.2	18.563	-1.209	0.556		44.937	0.003	1.072	0.004		44.55	0.7425	22.3	10.7	20.7	1.426	0.153	0.156	0.008	7.561	6.43	
72	8/23/2004	9:45:23 AM		24.601	23.108	24.298	24.366	23.289		22.684	23.34	4.253	18.319	-1.212	0.553		45.058	0.003	1.047	0.004		45.55	0.75917	22.2	10.7	20.5	1.414	0.150	0.153	0.007	7.458	6.35	
73	8/23/2004	9:46:23 AM		24.588	23.136	24.27	24.403	23.326		22.691	23.141	4.11	18.65	-1.212	0.553		45.476	0.003	1.015	0.004		46.55	0.77583	22.0	10.8	20.7	1.425	0.145	0.148	0.007	7.176	6.11	
74	8/23/2004	9:47:23 AM		24.554	23.142	24.236	24.409	23.347		22.487	23.033	4.281	18.132	-1.209	0.553		45.077	0.003	0.947	0.005		47.55	0.7925	21.9	10.7	20.3	1.400	0.136	0.139	0.007	6.821	5.80	
75	8/23/2004	9:48:23 AM		24.534	23.162	24.221	24.46	23.348		22.305	22.751	4.217	17.962	-1.209	0.55		45.501	0.003	0.919	0.005		48.55	0.80917	21.6	10.8	20.1	1.388	0.132	0.134	0.007	6.680	5.68	
76	8/23/2004	9:49:23 AM		24.501	23.169	24.168	24.446	23.365		22.404	22.824	4.204	18.05	-1.212	0.55		45.004	0.003	0.912	0.005		49.55	0.82583	21.7	10.7	20.2	1.395	0.131	0.134	0.007	6.608	5.62	
77	8/23/2004	9:50:23 AM		24.482	23.19	24.164	24.468	23.396		22.431	22.836	4.282	18.005	-1.212	0.544		44.428	0.003	0.883	0.005		50.55	0.8425	21.7	10.6	20.2	1.394	0.126	0.129	0.006	6.402	5.45	
78		Averages		24.8	23.0	24.5	24.3	23.2		22.8	24.6	4.1	18.8	-1.2	0.6		44.7	0.0	1.4	0.0				23.4	10.6	20.8	1.4	0.2	0.2	0.0	9.6	8.1	
79		Maximum		25.0	23.2	24.8	24.5	23.4		24.7	27.3	4.3	21.0	-0.8	0.6		45.6	0.0	2.2	0.0				26.2	10.9	22.8	1.6	0.3	0.3	0.0	15.3	13.0	
80		Median		24.8	23.0	24.5	24.3	23.2		22.5	23.5	4.1	18.5	-1.2	0.6		45.0	0.0	1.2	0.0				22.4	10.7	20.5	1.4	0.2	0.2	0.0	8.7	7.4	
81		Minimum		24.5	22.8	24.2	24.0	23.0		22.0	22.8	3.7	17.8	-1.2	0.5		43.0	0.0	0.9	0.0				21.6	10.2	19.9	1.4	0.1	0.1	0.0	6.4	5.4	
82		2 x Std Dev		0.359	0.212	0.412	0.249	0.243		1.348	3.570	0.352	1.801	0.165	0.032		1.600	0.000	0.851	0.001				3.571	0.381	1.561	0.108	0.122	0.121	0.005	5.442	4.631	
83		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
84		* Backpulse points in box are not included																															
85	Monday, 8/23/04																																
86	Baseline XXC, water																																
87	8/23/2004	9:51:54 AM		24.53	23.213	24.317	24.505	23.398		31.312	35.413	3.92	27.607	-1.212	0.602		44.881	0.003	2.076	0.005		52.07	0.86778	34.3	10.7	29.5	2.031	0.297	0.303	0.010	10.285	8.75	
88	8/23/2004	9:52:54 AM		24.642	23.24	24.444	24.577	23.395		31.924	35.898	3.809	28.385	-1.209	0.602		43.563	0.003	2.031	0.004		53.07	0.88444	34.8	10.4	30.2	2.079	0.291	0.295	0.010	9.795	8.34	
89	8/23/2004	9:53:54 AM		24.739	23.252	24.542	24.584	23.432		32.131	35.989	3.87	28.365	-1.212	0.602		43.815	0.003	1.987	0.003		54.07	0.90111	34.9	10.4	30.2	2.085	0.284	0.288	0.010	9.527	8.11	
90	8/23/2004	9:54:54 AM		24.82	23.268	24.613	24.591	23.444		32.421	36.012	3.892	28.589	-1.212	0.599		43.675	0.003	1.931	0.004		55.07	0.91778	34.9	10.4	30.5	2.103	0.276	0.279	0.009	9.162	7.80	
91	8/23/2004	9:55:54 AM		24.943	23.291	24.736	24.683	23.466		32.538	35.967	3.759	28.876	-1.212	0.594		43.417	0.003	1.896	0.004		56.07	0.93444	34.8	10.3	30.7	2.117	0.271	0.273	0.009	8.906	7.58	
92	8/23/2004	9:56:54 AM		25.025	23.303	24.813	24.71	23.503		32.579	35.886	3.737	28.907	-1.206	0.599		43.033	0.003	1.86	0.004		57.07	0.95111	34.8	10.2	30.7	2.120	0.266	0.268	0.009	8.707	7.41	
93	8/23/2004	9:57:54 AM		25.092	23.315	24.88	24.712	23.54		33.112	36.018	3.816	29.338	-1.209	0.594		42.405	0.003	1.805	0.004		58.07	0.96778	34.9	10.1	31.2	2.153	0.258	0.259	0.008	8.304	7.07	
94	8/23/2004	9:58:54 AM		25.184	23.342	24.952	24.749	23.577		33.336	36.313	3.84	29.455	-1.212	0.594		43.517	0.003	1.767	0.004		59.07	0.98444	35.2	10.4	31.4	2.165	0.253	0.253	0.008	8.069	6.87	
95	8/23/2004	9:59:54 AM		25.24	23.349	24.994	24.776	23.614		33.328	36.292	3.74	29.526	-1.212	0.591		43.828	0.003	1.733	0.006		60.07	1.00111	35.2	10.4	31.4	2.167	0.248	0.248	0.008	7.896	6.72	
96	8/23/2004	10:00:54 AM		25.303	23.356	25.036	24.774	23.637		33.583	36.35	3.782	29.769	-1.215	0.588		42.52	0.003	1.692	0.005		61.07	1.01778	35.2	10.1	31.7	2.184	0.242	0.242	0.008	7.640	6.50	
97	8/23/2004	10:01:54 AM		25.37	23.388	25.108	24.841	23.633		33.591	36.135	3.615	30.019	-1.212	0.591		42.605	0.003	1.653	0.005		62.07	1.03444	35.0	10.1	31.8	2.193	0.237	0.236	0.007	7.418	6.31	
98	8/23/2004	10:02:54 AM		25.416	23.4	25.159	24.862	23.66		33.975	36.524	3.753	30.138	-1.209	0.591		42.184	0.003	1.629	0.004		63.07	1.05111	35.4	10.0	32.1	2.210	0.233	0.232	0.007	7.243	6.16	
99	8/23/2004	10:03:54 AM		25.474	23.427	25.252	24.91	23.737		32.098	33.884	4.174	27.961	-1.206	0.585		45.786	0.003	1.451	0.005		64.07	1.06778	32.8	10.9	30.0	2.070	0.208	0.206	0.007	6.869	5.85	
100	8/23/2004	10:04:54 AM		25.501	23.434	25.249	24.952	23.759		32.569	33.952	4.107	28.617	-1.215	0.573		46.066	0.003	1.382	0.004		65.07	1.08444	32.8	11.0	30.6	2.109	0.198	0.196	0.006	6.422	5.47	
101	8/23/2004	10:05:54 AM		25.537	23.466	25.295	25.018	23.796		32.776	34.441	4.37	28.235	-1.212	0.576		45.517	0.003	1.35	0.004		66.07	1.10111	33.3	10.8	30.5	2.103	0.193	0.192	0.006	6.283	5.35	
102	8/23/2004	10:06:54 AM		25.579	23.488	25.338	25.056	23.818		32.701	34.182	4.284	28.439	-1.212	0.579		45.14	0.003	1.336	0.004		67.07	1.11778	33.1	10.8	30.6	2.108	0.191	0.189	0.006	6.198	5.27	
103	8/23/2004	10:07:54 AM		25.606	23.51	25.379	25.067	23.835		32.589	33.917	4.163	28.301	-1.209	0.576		45.321	0.003	1.312	0.004		68.07	1.13444	32.8	10.8	30.4	2.099	0.188	0.186	0.006	6.104	5.19	
104	8/23/2004	10:08:54 AM		25.628	23.527	25.367	25.095	23.847		32.378	33.691	3.99	28.281	-1.212	0.576		44.587	0.003	1.281	0.005		69.07	1.15111	32.6	10.6	30.3	2.091	0.183	0.182	0.006	5.985	5.09	
105	8/23/2004	10:09:54 AM		25.659	23.549	25.388	25.156	23.843		32.114	33.137	3.996	28.137	-1.212	0.576		44.875	0.003	1.25	0.005		70.07	1.16778	32.0	10.7	30.1	2.077	0.179	0.177	0.006	5.876	5.00	
106	8/23/2004	10:10:54 AM		25.666	23.555	25.389	25.142	23.744		32.886	33.969	4.144	28.72	-1.212	0.573		44.783	0.003	1.236	0.005		71.07	1.18444	32.8	10.7	30.8	2.124	0.177	0.175	0.006	5.682	4.84	
107	8/23/2004	10:11:54 AM		25.691	23.576	25.42	25.143	23.7		32.828	33.794	4.01	28.818	-1.209	0.576		44.535	0.003	1.217	0.005		72.07	1.20111	32.7	10.6	30.8	2.125	0.174	0.172	0.006	5.586	4.75	
108	8/23/2004	10:12:54 AM		25.707	23.586	25.436	25.093	23.641		33.006	34.062	4.069	28.87	-1.212	0.576		44.716	0.003	1.219	0.005		73.07	1.21778	32.9	10.7	30.9	2.133	0.175	0.172	0.006	5.572	4.74	
109	8/23/2004	10:13:54 AM		25.722	23.586	25.456	25.083	23.605		32.977	34.049	4.161	28.666	-1.212	0.576		44.91	0.003	1.18	0.003		74.07	1.23444	32.9	10.7	30.8	2.125	0.169	0.167	0.005	5.411	4.61	
110	8/23/2004	10:14:54 AM		25.736	23.596	25.455	25.053	23.55		32.992	34.024	4.065	28.87	-1.212	0.576		45.134	0.003	1.178	0.004		75.07	1.25111	32.9	10.8	30.9	2.133	0.169	0.167	0.005	5.383	4.58	
111	8/23/2004	10:15:54 AM		25.751	23.601	25.48	25.068	23.49		32.938	33.861	4.13	28.759	-1.209	0.576		45.054	0.003	1.159	0.004		76.07	1.26778	32.7	10.7	30.8	2.127	0.166	0.164	0.005	5.307	4.52	
112	8/23/2004	10:16:54 AM		25.766	23.591	25.49	25.043	23.46		32.961	33.958	4.008	28.839	-1.212	0.57		44.716	0.003	1.144	0.005		77.07	1.28444	32.8	10.7	30.9	2.130	0.164	0.162	0.005	5.228	4.45	
113		Averages		25.4	23.4	25.1	24.9	23.6		32.8	34.9	4.0	28.8	-1.2	0.6		44.3	0.0	1.5	0.0				33.8	10.5	30.8	2.1	0.2	0.2	0.0	7.1	6.1	
114		Maximum		25.8	23.6	25.5	25.2	23.8		34.0	36.5	4.4	30.1	-1.2	0.6		46.1	0.0	2.1	0.0				35.4	11.0	32.1	2.2	0.3	0.3	0.0	10.3	8.8	
115		Median		25.5	23.4	25.3	24.9	23.6		32.8	34.3	4.0	28.7	-1.2	0.6		44.7	0.0	1.4	0.0				33.2	10.6	30.8	2.1	0.2	0.2	0.0	6.6	5.7	
116		Minimum		24.5	23.2	24.3	24.5	23.4		31.3	33.1	3.6	27.6	-1.2	0.6		42.2	0.0	1.1	0.0				32.0	10.0	29.5	2.0	0.2	0.2	0.0	5.2	4.4	
117		2 x Std Dev		0.738	0.253	0.692	0.405	0.287		1.132	2.208	0.376	1.208	0.004	0.021		2.149	0.000	0.618	0.001				2.208	0.512	1.144	0.079	0.089	0.093	0.003	3.081	2.622	
118		Number of Points Used*		26	26	26	26	26		26	26	26	26	26	26		26	26	26	26				26	26	26	26	26	26	26	26	26	
119		* Backpulse points in box are not included																										Calc	0.108				
120																										Avg St Dv (all pts)		0.077					
121																										Max St Dv (all pts)		0.121					
122																										Min St Dv (all pts)		0.003					

CAMPAIGN IV NEW GKN BASELINE #2 WITH 0.1 M NAOH



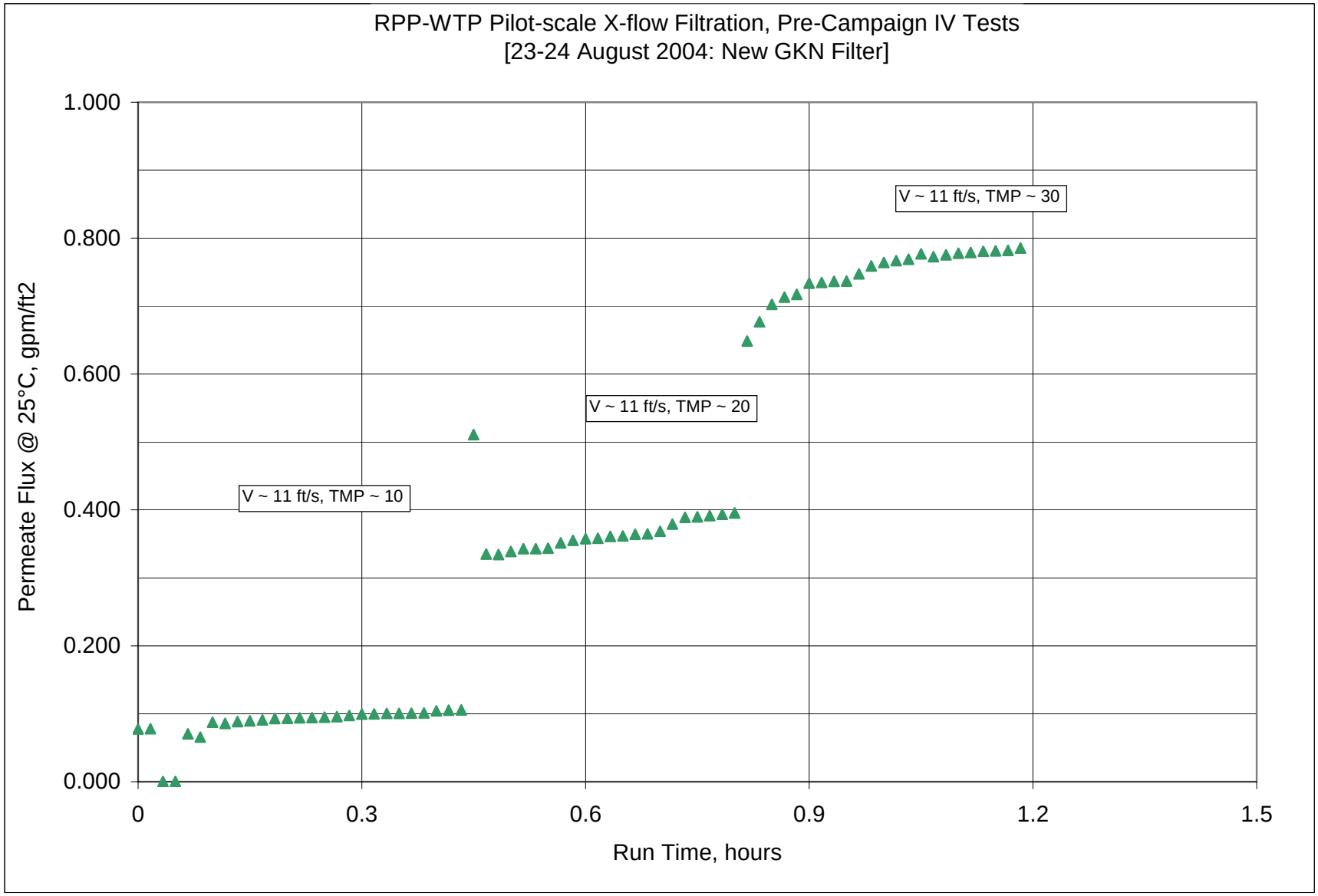
CAMPAIGN IV NEW GKN BASELINE #2 WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux		<< PERMIABILITY		>>	
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
124	Monday, 8/23/04																																
125	Baseline YYA, 0.1 M NaOH																																
126	8/23/2004	10:38:04 AM		25.332	23.707	25.1	25.208	23.726		7.97	13.329	4.216	3.56	0.259	0.339		44.698	0.163	-0.013	0.003		0.00	0	12.2	10.6	5.8	0.397	0.023	0.023	0.004	4.036	3.44	
127	8/23/2004	10:39:04 AM		25.436	23.706	25.024	25.208	23.57		7.928	13.267	4.111	3.66	0.259	0.368		44.591	0.152	-0.013	0.003		1.00	0.01667	12.1	10.6	5.8	0.399	0.022	0.022	0.004	3.753	3.19	
128	8/23/2004	10:40:04 AM		25.446	23.706	24.964	25.178	23.565		7.624	13.035	4.17	3.186	0.262	0.406		44.654	0.151	-0.013	0.003		2.00	0.03333	11.9	10.6	5.4	0.373	0.022	0.022	0.004	4.004	3.41	
129	8/23/2004	10:41:04 AM		25.511	23.701	24.914	25.138	23.509		7.833	13.229	4.402	3.262	0.311	0.446		44.842	0.142	-0.013	0.003		3.00	0.05	12.1	10.7	5.5	0.382	0.020	0.020	0.004	3.674	3.13	
130	8/23/2004	10:42:04 AM		25.561	23.706	24.889	25.103	23.489		7.928	13.316	4.28	3.693	0.331	0.484		44.662	0.139	-0.013	0.003		4.00	0.06667	12.2	10.6	5.8	0.401	0.020	0.020	0.003	3.436	2.92	
131	8/23/2004	10:43:04 AM		25.516	23.681	24.814	25.077	23.504		7.817	13.204	4.202	3.547	0.363	0.527		44.756	0.135	-0.013	0.003		5.00	0.08333	12.1	10.7	5.7	0.392	0.019	0.019	0.003	3.419	2.91	
132	8/23/2004	10:44:04 AM		25.45	23.685	24.773	25.086	23.398		10.197	13.001	4.392	5.755	-1.212	-2.595		44.844	0.354	-0.013	0.003		6.00	0.1	11.9	10.7	8.0	0.550	0.051	0.051	0.006	6.395	5.44	
133	8/23/2004	10:45:04 AM		25.31	23.664	24.713	25.056	23.418		12.692	13.408	4.247	8.237	-1.212	-4.477		44.965	0.258	-0.013	0.003		7.00	0.11667	12.3	10.7	10.5	0.721	0.037	0.037	0.004	3.558	3.03	
134	8/23/2004	10:46:04 AM		25.235	23.654	24.668	25.026	23.468		12.319	13.001	4.139	7.767	-1.212	-4.515		44.894	0.25	-0.013	0.003		8.00	0.13333	11.9	10.7	10.0	0.692	0.036	0.036	0.004	3.597	3.06	
135	8/23/2004	10:47:04 AM		25.18	23.659	24.643	24.996	23.538		13.003	13.609	4.472	8.226	-1.212	-4.549		45.058	0.245	-0.013	0.003		9.00	0.15	12.5	10.7	10.6	0.732	0.035	0.035	0.003	3.338	2.84	
136	8/23/2004	10:48:05 AM		25.12	23.645	24.623	24.997	23.594		12.707	13.246	4.327	8.132	-1.209	-4.567		44.687	0.241	-0.013	0.003		10.02	0.16694	12.1	10.6	10.4	0.718	0.035	0.035	0.003	3.347	2.85	
137	8/23/2004	10:49:05 AM		25.071	23.641	24.584	25.027	23.64		12.599	13.097	4.265	8.126	-1.212	-4.567		44.756	0.237	-0.013	0.003		11.02	0.18361	12.0	10.7	10.4	0.714	0.034	0.034	0.003	3.313	2.82	
138	8/23/2004	10:50:05 AM		25.032	23.636	24.549	25.078	23.69		12.506	12.941	4.319	8.001	-1.212	-4.65		44.581	0.227	-0.013	0.003		12.02	0.20028	11.8	10.6	10.3	0.707	0.032	0.033	0.003	3.210	2.73	
139	8/23/2004	10:51:05 AM		24.977	23.642	24.505	25.089	23.716		12.477	12.871	4.333	7.98	-1.212	-4.682		45.01	0.221	-0.013	0.003		13.02	0.21694	11.7	10.7	10.2	0.705	0.032	0.032	0.003	3.137	2.67	
140	8/23/2004	10:52:05 AM		24.944	23.648	24.481	25.11	23.747		12.421	12.823	4.208	8.009	-1.212	-4.705		45.123	0.217	-0.013	0.003		14.02	0.23361	11.7	10.7	10.2	0.704	0.031	0.032	0.003	3.086	2.63	
141	8/23/2004	10:53:05 AM		24.914	23.649	24.452	25.096	23.758		12.587	12.889	4.153	8.269	-1.212	-4.723		45.035	0.215	-0.013	0.003		15.02	0.25028	11.8	10.7	10.4	0.719	0.031	0.031	0.003	2.998	2.55	
142	8/23/2004	10:54:05 AM		24.86	23.655	24.452	25.131	23.784		12.68	12.902	4.407	8.12	-1.212	-4.734		45.035	0.211	-0.013	0.003		16.02	0.26694	11.8	10.7	10.4	0.717	0.030	0.031	0.003	2.950	2.51	
143	8/23/2004	10:55:05 AM		24.84	23.66	24.428	25.157	23.805		12.466	12.887	4.102	8.128	-1.209	-4.752		44.977	0.208	-0.013	0.003		17.02	0.28361	11.8	10.7	10.3	0.710	0.030	0.030	0.003	2.939	2.50	
144	8/23/2004	10:56:05 AM		24.827	23.687	24.424	25.209	23.841		12.595	12.831	4.198	8.368	-1.206	-4.757		44.825	0.206	-0.012	0.004		18.02	0.30028	11.7	10.7	10.5	0.723	0.029	0.030	0.003	2.860	2.43	
145	8/23/2004	10:57:05 AM		24.788	23.693	24.365	25.21	23.872		12.522	12.908	4.312	7.898	-1.212	-4.697		45.063	0.201	-0.013	0.003		19.02	0.31694	11.8	10.7	10.2	0.704	0.029	0.029	0.003	2.869	2.44	
146	8/23/2004	10:58:05 AM		24.759	23.699	24.351	25.236	23.878		12.923	13.211	4.25	8.647	-1.212	-4.786		45.012	0.202	-0.013	0.003		20.02	0.33361	12.1	10.7	10.8	0.744	0.029	0.029	0.003	2.731	2.32	
147	8/23/2004	10:59:05 AM		24.745	23.715	24.347	25.237	23.904		12.734	12.912	4.118	8.446	-1.212	-4.801		44.969	0.2	-0.013	0.003		21.02	0.35028	11.8	10.7	10.6	0.730	0.029	0.029	0.003	2.754	2.34	
148	8/23/2004	11:00:05 AM		24.716	23.736	24.349	25.253	23.941		12.558	12.705	4.199	8.171	-1.209	-4.807		44.921	0.197	-0.013	0.003		22.02	0.36694	11.6	10.7	10.4	0.715	0.028	0.029	0.003	2.772	2.36	
149	8/23/2004	11:01:05 AM		24.687	23.732	24.319	25.274	23.916		12.294	12.481	4.159	7.949	-1.212	-4.827		45.073	0.195	-0.013	0.003		23.02	0.38361	11.4	10.7	10.1	0.698	0.028	0.028	0.003	2.812	2.39	
150	8/23/2004	11:02:05 AM		24.673	23.748	24.3	25.325	23.837		12.715	12.978	4.323	8.222	-1.215	-4.833		45.01	0.193	-0.013	0.003		24.02	0.40028	11.9	10.7	10.5	0.722	0.028	0.028	0.003	2.692	2.29	
151	8/23/2004	11:03:05 AM		24.653	23.758	24.27	25.305	23.737		12.657	12.877	4.368	8.062	-1.212	-4.844		44.921	0.192	-0.013	0.003		25.02	0.41694	11.8	10.7	10.4	0.714	0.027	0.028	0.003	2.709	2.31	
152	8/23/2004	11:04:05 AM		24.623	23.758	24.265	25.245	23.672		12.709	12.883	4.289	8.2	-1.212	-4.853		44.819	0.19	-0.013	0.003		26.02	0.43361	11.8	10.7	10.5	0.721	0.027	0.028	0.003	2.656	2.26	
153	8/23/2004	11:05:05 AM		24.603	23.748	24.255	25.18	23.602		12.487	12.661	4.19	8.163	-1.215	-4.809		44.85	0.178	-0.013	0.003		27.02	0.45028	11.5	10.7	10.3	0.712	0.025	0.026	0.003	2.521	2.15	
154	8/23/2004	11:06:05 AM		24.602	23.763	24.265	25.164	23.581		12.618	12.771	4.084	8.489	-1.212	-4.87		44.979	0.187	-0.013	0.003		28.02	0.46694	11.6	10.7	10.6	0.728	0.027	0.027	0.003	2.590	2.20	
155																																	
156		Averages		24.9	23.7	24.4	25.2	23.7		12.6	12.9	4.2	8.2	-1.2	-4.7		44.9	0.2	0.0	0.0				11.8	10.7	10.4	0.716	0.030	0.031	0.003	3.0	2.5	
157		Maximum		25.3	23.8	24.7	25.3	23.9		13.0	13.6	4.5	8.6	-1.2	-4.5		45.1	0.3	0.0	0.0				12.5	10.7	10.8	0.744	0.037	0.037	0.004	3.6	3.1	
158		Median		24.8	23.7	24.4	25.2	23.7		12.6	12.9	4.2	8.1	-1.2	-4.7		45.0	0.2	0.0	0.0				11.8	10.7	10.4	0.716	0.030	0.030	0.003	2.9	2.5	
159		Minimum		24.6	23.6	24.3	25.0	23.4		12.3	12.5	4.1	7.8	-1.2	-4.9		44.6	0.2	0.0	0.0				11.4	10.6	10.0	0.692	0.025	0.026	0.003	2.5	2.1	
160		2 x Std Dev		0.417	0.089	0.279	0.197	0.288		0.332	0.482	0.202	0.395	0.004	0.231		0.264	0.044	0.000	0.000				0.482	0.063	0.334	0.023	0.006	0.006	0.001	0.605	0.515	
161		Number of Points Used*		22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
162		* Backpulse points in box are not included																															

CAMPAIGN IV NEW GKN BASELINE #2 WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
164	Monday, 8/23/04																																
165	Baseline YYB, 0.1 M NaOH																																
166	8/23/2004	11:09:02 AM		24.577	23.747	24.374	25.124	23.576		22.158	24.061	4.358	17.613	-1.212	-3.624		45.277	0.383	-0.013	0.003		30.97	0.51611	22.9	10.8	19.9	1.371	0.055	0.056	0.003	2.807	2.39	
167	8/23/2004	11:10:02 AM		24.622	23.742	24.47	25.174	23.646		22.104	23.991	4.212	17.679	-1.212	-3.65		45.357	0.38	-0.013	0.003		31.97	0.53278	22.9	10.8	19.9	1.371	0.054	0.055	0.003	2.776	2.36	
168	8/23/2004	11:11:02 AM		24.667	23.738	24.56	25.164	23.686		22.131	24.059	4.267	17.788	-1.212	-3.615		44.552	0.385	-0.013	0.003		32.97	0.54944	22.9	10.6	20.0	1.376	0.055	0.056	0.003	2.796	2.38	
169	8/23/2004	11:12:02 AM		24.717	23.738	24.651	25.189	23.732		22.309	24.231	4.312	17.771	-1.212	-3.691		45.183	0.376	-0.013	0.003		33.97	0.56611	23.1	10.8	20.0	1.382	0.054	0.054	0.003	2.713	2.31	
170	8/23/2004	11:13:02 AM		24.764	23.729	24.697	25.191	23.798		22.498	24.308	4.379	17.837	-1.212	-3.708		44.923	0.373	-0.013	0.003		34.97	0.58278	23.2	10.7	20.2	1.390	0.053	0.054	0.003	2.671	2.27	
171	8/23/2004	11:14:02 AM		24.815	23.735	24.748	25.257	23.824		22.34	24.078	4.292	17.89	-1.212	-3.72		44.939	0.372	-0.013	0.003		35.97	0.59944	23.0	10.7	20.1	1.387	0.053	0.054	0.003	2.667	2.27	
172	8/23/2004	11:15:02 AM		24.861	23.726	24.774	25.258	23.86		22.624	24.409	4.174	18.204	-1.218	-3.72		44.397	0.372	-0.013	0.003		36.97	0.61611	23.3	10.6	20.4	1.407	0.053	0.054	0.003	2.626	2.23	
173	8/23/2004	11:16:02 AM		24.922	23.752	24.825	25.309	23.886		22.506	24.26	4.079	18.214	-1.212	-3.734		44.481	0.37	-0.013	0.003		37.97	0.63278	23.1	10.6	20.4	1.404	0.053	0.053	0.003	2.615	2.23	
174	8/23/2004	11:17:02 AM		24.963	23.763	24.876	25.345	23.932		22.547	24.2	4.11	18.268	-1.209	-3.748		44.335	0.367	-0.013	0.003		38.97	0.64944	23.1	10.6	20.4	1.407	0.053	0.053	0.003	2.584	2.20	
175	8/23/2004	11:18:02 AM		25.004	23.779	24.937	25.401	23.973		22.693	24.426	4.177	18.282	-1.209	-3.763		44.372	0.366	-0.013	0.003		39.97	0.66611	23.3	10.6	20.5	1.413	0.052	0.052	0.003	2.562	2.18	
176	8/23/2004	11:19:02 AM		25.035	23.79	24.983	25.432	24.034		22.647	24.277	4.283	18.196	-1.212	-3.827		45.033	0.358	-0.013	0.003		40.97	0.68278	23.2	10.7	20.4	1.408	0.051	0.051	0.003	2.511	2.14	
177	8/23/2004	11:20:02 AM		25.087	23.807	25.035	25.454	24.101		22.597	24.25	4.295	18.095	-1.212	-3.838		45.136	0.356	-0.013	0.003		41.97	0.69944	23.1	10.8	20.3	1.403	0.051	0.051	0.003	2.503	2.13	
178	8/23/2004	11:21:02 AM		25.144	23.844	25.077	25.521	24.108		22.697	24.214	4.321	18.223	-1.206	-3.844		44.731	0.354	-0.012	0.004		42.97	0.71611	23.1	10.7	20.5	1.411	0.051	0.051	0.002	2.472	2.10	
179	8/23/2004	11:22:02 AM		25.171	23.846	25.079	25.533	24.085		22.46	23.895	4.239	18.069	-1.212	-3.853		44.835	0.354	-0.012	0.004		43.97	0.73278	22.8	10.7	20.3	1.397	0.051	0.051	0.002	2.495	2.12	
180	8/23/2004	11:23:02 AM		25.202	23.858	25.091	25.519	23.991		22.56	24.161	4.211	18.12	-1.212	-3.87		44.964	0.352	-0.013	0.003		44.97	0.74944	23.0	10.7	20.3	1.402	0.050	0.050	0.002	2.471	2.10	
181	8/23/2004	11:24:02 AM		25.223	23.868	25.116	25.51	23.942		22.593	24.136	4.33	18.052	-1.212	-3.893		45.171	0.349	-0.013	0.003		45.97	0.76611	23.0	10.8	20.3	1.401	0.050	0.050	0.002	2.451	2.09	
182	8/23/2004	11:25:02 AM		25.248	23.868	25.126	25.46	23.842		22.479	23.987	4.299	17.97	-1.215	-3.931		44.771	0.344	-0.013	0.003		46.97	0.78278	22.9	10.7	20.2	1.394	0.049	0.049	0.002	2.426	2.06	
183	8/23/2004	11:26:02 AM		25.283	23.874	25.152	25.39	23.787		22.404	23.846	4.107	18.198	-1.212	-3.942		44.758	0.342	-0.013	0.003		47.97	0.79944	22.7	10.7	20.3	1.400	0.049	0.049	0.002	2.402	2.04	
184	8/23/2004	11:27:02 AM		25.313	23.889	25.187	25.345	23.777		22.427	23.79	4.248	18.032	-1.212	-3.954		44.771	0.341	-0.013	0.003		48.97	0.81611	22.7	10.7	20.2	1.395	0.049	0.049	0.002	2.401	2.04	
185	8/23/2004	11:28:02 AM		25.333	23.874	25.222	25.32	23.737		22.417	23.773	4.137	18.171	-1.212	-3.959		44.827	0.339	-0.013	0.003		49.97	0.83278	22.6	10.7	20.3	1.399	0.049	0.048	0.002	2.377	2.02	
186	8/23/2004	11:29:02 AM		25.348	23.864	25.232	25.305	23.762		22.612	24.169	4.248	18.056	-1.212	-3.974		44.783	0.338	-0.013	0.003		50.97	0.84944	23.0	10.7	20.3	1.402	0.048	0.048	0.002	2.364	2.01	
187																																	
188		Averages		25.0	23.8	24.9	25.3	23.9		22.5	24.1	4.2	18.0	-1.2	-3.8		44.8	0.4	0.0	0.0				23.0	10.7	20.3	1.4	0.1	0.1	0.0	2.6	2.2	
189		Maximum		25.3	23.9	25.2	25.5	24.1		22.7	24.4	4.4	18.3	-1.2	-3.6		45.4	0.4	0.0	0.0				23.3	10.8	20.5	1.4	0.1	0.1	0.0	2.8	2.4	
190		Median		25.0	23.8	25.0	25.3	23.8		22.5	24.2	4.2	18.1	-1.2	-3.8		44.8	0.4	0.0	0.0				23.0	10.7	20.3	1.4	0.1	0.1	0.0	2.5	2.1	
191		Minimum		24.6	23.7	24.4	25.1	23.6		22.1	23.8	4.1	17.6	-1.2	-4.0		44.3	0.3	0.0	0.0				22.6	10.6	19.9	1.4	0.0	0.0	0.0	2.4	2.0	
192		2 x Std Dev		0.487	0.117	0.499	0.254	0.296		0.344	0.366	0.167	0.389	0.004	0.225		0.578	0.030	0.001	0.001				0.366	0.138	0.350	0.024	0.004	0.005	0.000	0.274	0.234	
193	Number of Points Used*			21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
194		* Backpulse points in box are not included																															
195																																	
196	Monday, 8/23/04																																
197	Baseline YYC, 0.1 M NaOH																																
198	8/23/2004	11:30:37 AM		25.43	23.865	25.318	25.322	23.859		31.976	36.153	4.203	27.449	-1.157	-2.346		44.833	0.532	-0.013	0.003		52.55	0.87583	35.0	10.7	29.7	2.049	0.076	0.075	0.003	2.541	2.16	
199	8/23/2004	11:31:37 AM		25.525	23.871	25.494	25.352	23.874		32.293	36.356	4.18	27.94	-1.09	-2.274		44.781	0.539	-0.013	0.003		53.55	0.8925	35.2	10.7	30.1	2.076	0.077	0.076	0.003	2.527	2.15	
200	8/23/2004	11:32:37 AM		25.647	23.867	25.626	25.354	23.911		31.926	36.002	4.141	27.671	-0.957	-2.239		44.57	0.543	-0.013	0.003		54.55	0.90917	34.9	10.6	29.8	2.055	0.078	0.076	0.003	2.563	2.18	
201	8/23/2004	11:33:37 AM		25.763	23.884	25.782	25.405	23.967		32.034	36.271	4.151	27.622	-0.954	-2.231		44.502	0.544	-0.012	0.004		55.55	0.92583	35.1	10.6	29.8	2.057	0.078	0.076	0.003	2.554	2.17	
202	8/23/2004	11:34:37 AM		25.854	23.875	25.878	25.441	24.054		32.32	36.479	4.098	28.116	-0.859	-2.15		44.595	0.553	-0.013	0.003		56.55	0.9425	35.4	10.6	30.2	2.083	0.079	0.077	0.003	2.556	2.18	
203	8/23/2004	11:35:37 AM		25.96	23.881	25.915	25.533	24.09		32.328	36.667	4.079	27.965	-0.81	-2.135		44.362	0.554	-0.013	0.003		57.55	0.95917	35.5	10.6	30.1	2.078	0.079	0.077	0.003	2.564	2.18	
204	8/23/2004	11:36:37 AM		26.027	23.898	25.951	25.609	24.101		32.531	36.864	4.076	28.246	-0.81	-2.135		44.403	0.554	-0.013	0.003		58.55	0.97583	35.7	10.6	30.4	2.095	0.079	0.077	0.003	2.541	2.16	
205	8/23/2004	11:37:37 AM		26.098	23.909	25.987	25.646	24.173		32.363	36.561	4.045	28.143	-0.839	-2.158		44.399	0.552	-0.013	0.003		59.55	0.9925	35.4	10.6	30.3	2.086	0.079	0.077	0.003	2.541	2.16	
206	8/23/2004	11:38:37 AM		26.145	23.927	26.015	25.693	24.246		32.766	37.094	4.168	28.252	-0.876	-2.164		44.36	0.552	-0.013	0.003		60.55	1.00917	36.0	10.6	30.5	2.103	0.079	0.077	0.003	2.518	2.14	
207	8/23/2004	11:39:37 AM		26.202	23.948	26.046	25.735	24.247		32.527	36.721	3.98	28.369	-0.876	-2.161		44.009	0.552	-0.013	0.003		61.55	1.02583	35.6	10.5	30.4	2.099	0.079	0.077	0.003	2.520	2.14	
208	8/23/2004	11:40:37 AM		26.244	23.96	26.068	25.772	24.294		32.26	36.464	4.111	27.895	-0.957	-2.248		44.879	0.545	-0.013	0.003		62.55	1.0425	35.3	10.7	30.1	2.074	0.078	0.076	0.003	2.518	2.14	
209	8/23/2004	11:41:37 AM		26.281	23.977	26.095	25.804	24.311		32.529	36.611	4.194	28.207	-0.989	-2.245		44.829	0.545	-0.013	0.003		63.55	1.05917	35.5	10.7	30.4	2.094	0.078	0.076	0.002	2.492	2.12	
210	8/23/2004	11:42:37 AM		26.332	24.009	26.132	25.825	24.232		32.587	36.64	4.16	28.309	-1.009	-2.263		45.786	0.543	-0.013	0.003		64.55	1.07583	35.5	10.9	30.4	2.099	0.078	0.075	0.002	2.473	2.10	
211	8/23/2004	11:43:37 AM		26.348	24.005	26.138	25.812	24.163		32.544	36.678	4.119	28.252	-1.015	-2.268		44.72	0.542	-0.013	0.003		65.55	1.0925	35.6	10.7	30.4	2.096	0.078	0.075	0.002	2.472	2.10	
212	8/23/2004	11:44:37 AM		26.379	24.031	26.174	25.802	24.084		32.571	36.584	4.043	28.396	-1.085	-2.286		44.693	0.541	-0.013	0.004		66.55	1.10917	35.5	10.6	30.5	2.102	0.077	0.075	0.002	2.459	2.09	
213	8/23/2004	11:45:37 AM		26.414	24.021	26.179	25.747	24.004		32.494	36.798	4.177	28.014	-1.093	-2.3		44.599	0.539	-0.013	0.003		67.55	1.12583	35.7	10.6	30.3	2.086	0.077	0.075	0.002	2.468	2.10	
214	8/23/2004	11:46:37 AM		26.439	24.031	26.199	25.732	24.009		32.896	36.796	4.213	28.472	-1.09	-2.297		44.547	0.539	14.643	0.004		68.55	1.1425	35.7	10.6	30.7	2.116	0.077	0.075	0.002	2.432	2.07	
215	8/23/2004	11:47:37 AM		26.452	24.034	26.172	25.756	23.952		32.789	36.866	4.183	28.373	-1.143	-2.32		44.426	0.537	14.643	0.004		69.55	1.15917	35.7	10.6	30.6	2.108	0.077	0.074	0.002	2.433	2.07	
216	8/23/2004	11:48:37 AM		26.452	24.024	26.122	25.731	23.937		32.575	36.667	4.116	28.314	-1.16	-2.352		44.543	0.535	14.643	0.003		70.55	1.17583	35.5	10.6	30.4	2.099	0.077	0.074	0.002	2.438	2.07	
217	8/23/2004	11:49:37 AM		26.447	24.024	26.112	25.725	23.927		32.677	36.686	4.204	28.184	-1.212	-2.361		44.597	0.533	14.643	0.003		71.55	1.1925	35.6	10.6	30.4	2.098	0.076	0.074	0.002	2.431	2.07	
218	8/23/2004	11:50:37 AM		26.425	24.007	26.065	25.689	23.88		32.936	36.962	4.095	28.64	-1.212	-2.355		44.531	0.531	14.643	0.003		72.55	1.20917	35.8	10.6	30.8	2.123	0.076	0.074	0.002	2.396	2.04	
219	8/23/2004	11:51:37 AM		26.41	24.012	26.025	25.668	23.875		32.486	36.273	4.096	28.33	-1.212	-2.396		44.533	0.53	14.643	0.003		73.55	1.22583	35.1	10.6	30.4	2.097	0.076	0.074	0.002	2.425	2.06	
220																																	
221																																	
222		Averages		26.1	24.0	26.0	25.6	24.1		32.5	36.6	4.1	28.1	-1.0	-2.3		44.6	0.5	4.0	0.0				35.5	10.6	30.3	2.1	0.1	0.1	0.0	2.5	2.1	
223		Maximum		26.5	24.0	26.2	25.8	24.3		32.9	37.1	4.2	28.6	-0.8	-2.1		45.8	0.6	14.6	0.0				36.0	10.9	30.8	2.1	0.1	0.1	0.0	2.6	2.2	
224		Median		26.3	24.0	26.1	25.7	24.0		32.5	36.7	4.1	28.2	-1.0	-2.3		44.6	0.5	0.0	0.0				35.5	10.6	30.4	2.1	0.1	0.1	0.0	2.5	2.1	
225		Minimum		25.4	23.9	25.3	25.3	23.9		31.9	36.0	4.0	27.4	-1.2	-2.4		44.0	0.5	0.0	0.0				34.9	10.5	29.7	2.0	0.1	0.1	0.0	2.4	2.0	
226		2 x Std Dev		0.629	0.128	0.455	0.322	0.291		0.529	0.522	0.120	0.569	0.265	0.157		0.638	0.015	13.054	0.001				0.522	0.152	0.538	0.037	0.002	0.002	0.000	0.103	0.088	
227	Number of Points Used*			22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
228		* Backpulse points in box are not included																										Calc	0.005				
229																										Avg St Dv (all pts)			0.004				
230																										Max St Dv (all pts)			0.006				
231																										Min St Dv (all pts)			0.002				

CAMPAIGN IV NEW GKN BASELINE #3 WITH 0.5 M HNO3



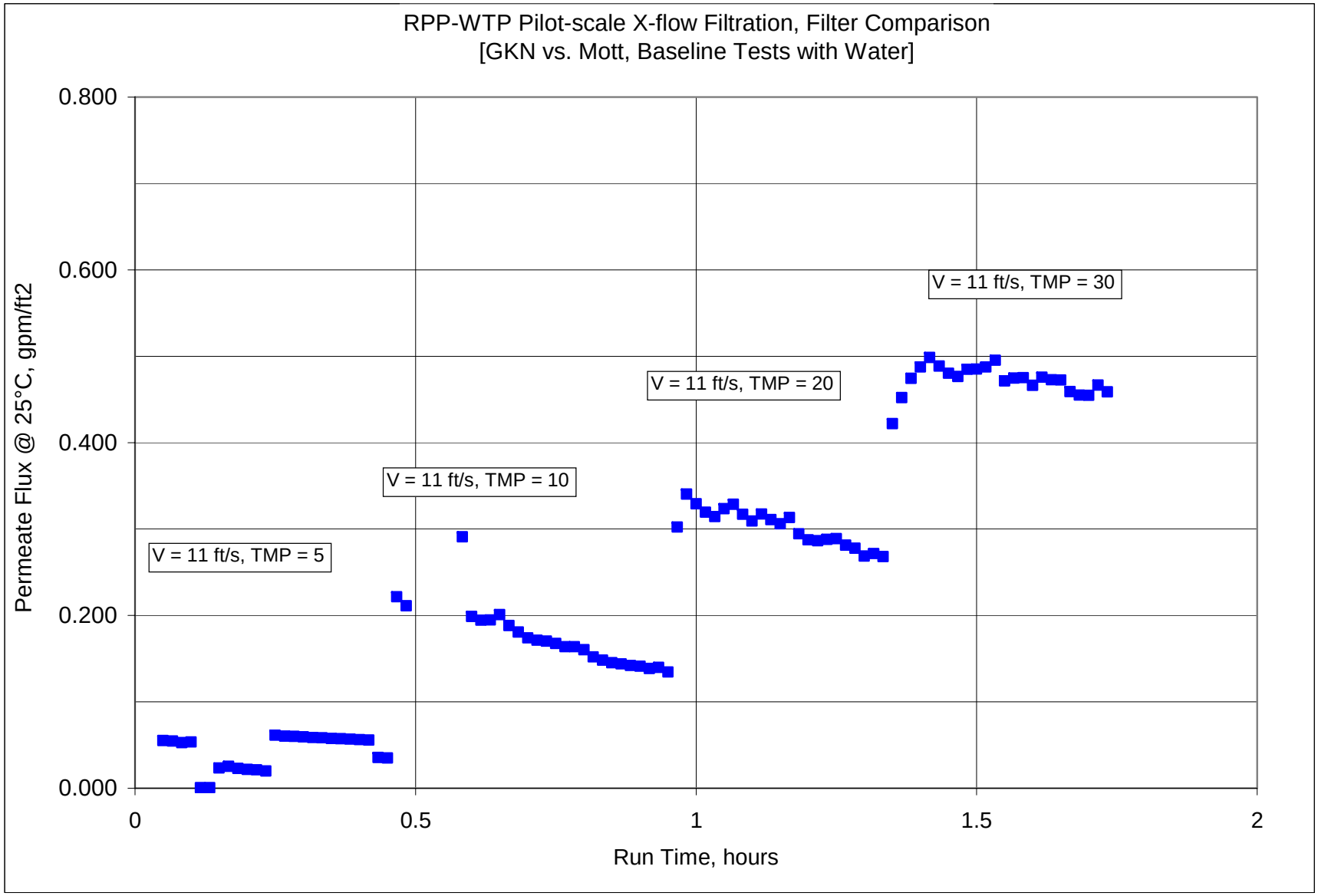
CAMPAIGN IV NEW GKN BASELINE #3 WITH 0.5 M HNO3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >< PERMIABILITY >>					
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
232	Monday, 8/23/04																																
233	Baseline ZZ, 0.5 M HNO3																																
234	8/23/2004	3:50:11 PM		26.885	24.229	26.146	26.59	24.837		12.427	16.912	4.345	8.212	-0.876	-2.127		44.841	0.56	14.643	0.003		0.00	0	15.8	10.7	10.3	0.711	0.080	0.078	0.008	7.523	6.40	
235	8/23/2004	3:51:11 PM		26.696	24.25	25.927	26.546	24.993		11.941	16.429	4.035	8.001	-0.914	-2.153		44.808	0.559	14.643	0.003		1.00	0.01667	15.3	10.7	10.0	0.687	0.080	0.078	0.008	7.820	6.66	
236	8/23/2004	3:52:11 PM		26.673	24.276	25.713	26.607	24.929		2.345	16.877	4.244	-1.828	9.338	19.988		44.282	0.003	14.643	0.003		2.00	0.03333	15.8	10.5	0.3	0.018	0.000	0.000	0.002	1.629	1.39	
237	8/23/2004	3:53:11 PM		26.689	24.297	25.524	26.633	25.025		2.304	16.774	4.319	-1.912	9.34	21.847		44.501	0.003	14.643	0.003		3.00	0.05	15.6	10.6	0.2	0.014	0.000	0.000	0.002	2.159	1.84	
238	8/23/2004	3:54:11 PM		26.616	24.329	25.356	26.63	25.057		10.314	16.79	4.193	6.234	1.211	0.362		44.347	0.498	14.643	0.004		4.00	0.06667	15.7	10.6	8.3	0.570	0.071	0.071	0.009	8.531	7.26	
239	8/23/2004	3:55:11 PM		26.178	24.351	25.193	26.742	25.134		10.127	16.686	4.209	6.057	1.243	0.437		44.908	0.462	14.643	0.003		5.00	0.08333	15.6	10.7	8.1	0.558	0.066	0.066	0.008	8.130	6.92	
240	8/23/2004	3:56:11 PM		26.011	24.384	25.025	26.864	25.206		11.45	16.827	4.22	7.325	0.12	-1.459		44.405	0.611	14.643	0.003		6.00	0.1	15.7	10.6	9.4	0.647	0.087	0.087	0.009	9.312	7.92	
241	8/23/2004	3:57:11 PM		25.769	24.422	24.913	26.902	25.284		11.649	16.937	4.121	7.473	-0.213	-1.728		44.47	0.599	14.643	0.003		7.00	0.11667	15.8	10.6	9.6	0.659	0.086	0.086	0.009	8.991	7.65	
242	8/23/2004	3:58:11 PM		25.576	24.443	24.779	26.973	25.23		11.751	17.186	4.396	7.377	0.027	-1.56		45.325	0.615	14.643	0.003		8.00	0.13333	16.1	10.8	9.6	0.659	0.088	0.089	0.009	9.264	7.88	
243	8/23/2004	3:59:11 PM		25.417	24.479	24.685	26.995	25.202		11.811	17.37	4.312	7.535	0.125	-1.502		45.133	0.619	14.643	0.003		9.00	0.15	16.2	10.7	9.7	0.667	0.089	0.089	0.009	9.243	7.87	
244	8/23/2004	4:00:11 PM		25.284	24.502	24.587	27.072	25.209		11.892	17.545	4.524	7.448	0.325	-1.392		45.211	0.629	14.643	0.003		10.00	0.16667	16.4	10.8	9.7	0.667	0.090	0.091	0.009	9.421	8.02	
245	8/23/2004	4:01:11 PM		25.146	24.529	24.489	26.994	25.196		11.823	17.684	4.265	7.693	0.479	-1.28		44.923	0.64	14.643	0.003		11.00	0.18333	16.6	10.7	9.8	0.673	0.092	0.093	0.010	9.526	8.11	
246	8/23/2004	4:02:11 PM		25.052	24.56	24.435	26.965	25.147		12.031	17.967	4.411	7.606	0.551	-1.236		44.915	0.642	14.643	0.003		12.00	0.2	16.8	10.7	9.8	0.677	0.092	0.093	0.010	9.511	8.09	
247	8/23/2004	4:03:11 PM		24.958	24.586	24.341	26.921	25.073		11.809	17.758	4.384	7.529	0.6	-1.202		44.912	0.645	14.643	0.003		13.00	0.21667	16.6	10.7	9.7	0.667	0.092	0.094	0.010	9.729	8.28	
248	8/23/2004	4:04:11 PM		24.859	24.602	24.267	26.842	25.074		11.485	17.427	4.194	7.411	0.6	-1.205		44.94	0.646	14.643	0.003		14.00	0.23333	16.3	10.7	9.4	0.651	0.092	0.094	0.010	9.993	8.50	
249	8/23/2004	4:05:11 PM		24.779	24.622	24.202	26.777	25.024		11.641	17.665	4.23	7.531	0.667	-1.141		44.873	0.649	14.643	0.003		15.00	0.25	16.5	10.7	9.6	0.661	0.093	0.095	0.010	9.914	8.44	
250	8/23/2004	4:06:11 PM		24.674	24.617	24.116	26.712	24.924		11.581	17.617	4.195	7.549	0.664	-1.132		44.837	0.651	14.643	0.003		16.00	0.26667	16.5	10.7	9.6	0.659	0.093	0.096	0.010	9.990	8.50	
251	8/23/2004	4:07:11 PM		24.61	24.648	24.072	26.783	24.885		11.879	18.152	4.366	7.65	0.916	-0.996		45.476	0.662	14.643	0.003		17.00	0.28333	17.0	10.8	9.8	0.673	0.095	0.097	0.010	9.964	8.48	
252	8/23/2004	4:08:11 PM		24.535	24.664	24.027	26.819	24.916		11.774	18.253	4.246	7.578	1.118	-0.843		44.942	0.675	14.643	0.003		18.00	0.3	17.1	10.7	9.7	0.667	0.097	0.099	0.010	10.266	8.74	
253	8/23/2004	4:09:11 PM		24.476	24.675	23.973	26.854	24.961		11.915	18.446	4.339	7.604	1.176	-0.829		44.894	0.677	14.643	0.003		19.00	0.31667	17.3	10.7	9.8	0.673	0.097	0.100	0.010	10.223	8.70	
254	8/23/2004	4:10:11 PM		24.396	24.68	23.923	27.044	24.961		11.533	18.179	4.262	7.346	1.243	-0.788		44.869	0.68	14.643	0.003		20.00	0.33333	17.1	10.7	9.4	0.651	0.097	0.100	0.011	10.632	9.05	
255	8/23/2004	4:11:11 PM		24.373	24.697	23.995	27.196	24.939		11.682	18.318	4.304	7.545	1.283	-0.748		44.829	0.683	14.643	0.003		21.00	0.35	17.2	10.7	9.6	0.663	0.098	0.101	0.010	10.464	8.91	
256	8/23/2004	4:12:11 PM		24.363	24.702	24.031	27.222	24.944		11.628	18.254	4.415	7.303	1.367	-0.71		44.794	0.686	14.643	0.003		22.00	0.36667	17.1	10.7	9.5	0.653	0.098	0.101	0.011	10.664	9.07	
257	8/23/2004	4:13:11 PM		24.371	24.725	24.073	27.214	24.961		11.491	18.33	4.277	7.276	1.405	-0.687		44.764	0.689	14.643	0.003		23.00	0.38333	17.2	10.7	9.4	0.647	0.099	0.101	0.011	10.791	9.18	
258	8/23/2004	4:14:11 PM		24.366	24.715	24.089	27.305	24.997		11.722	18.852	4.276	7.598	1.799	-0.433		45.071	0.71	14.643	0.003		24.00	0.4	17.7	10.7	9.7	0.666	0.102	0.104	0.011	10.797	9.19	
259	8/23/2004	4:15:11 PM		24.377	24.716	24.135	27.265	24.923		11.796	19.163	4.214	7.545	1.984	-0.323		44.869	0.718	14.643	0.004		25.00	0.41667	18.0	10.7	9.7	0.667	0.103	0.105	0.011	10.892	9.27	
260	8/23/2004	4:16:11 PM		24.413	24.742	24.181	27.322	24.914		11.643	18.975	4.384	7.399	2.074	-0.279		44.618	0.722	14.643	0.003		26.00	0.43333	17.8	10.6	9.5	0.656	0.103	0.106	0.011	11.110	9.46	
261	8/23/2004	4:17:11 PM		24.449	24.728	24.232	27.207	24.96		24.597	30.733	3.591	21.482	0.238	-4.382		41.64	0.006	3.492	0.003		27.00	0.45	29.6	9.9	23.0	1.588	0.500	0.511	0.022	22.174	18.87	
262	8/23/2004	4:18:11 PM		24.555	24.749	24.373	27.178	24.955		21.876	27.464	4.092	18.284	-0.199	-4.515		45.138	0.003	2.3	0.004		28.00	0.46667	26.3	10.8	20.1	1.384	0.329	0.335	0.017	16.691	14.20	
263	8/23/2004	4:19:11 PM		24.635	24.739	24.428	27.083	24.925		21.842	27.323	4.076	18.364	-0.297	-4.506		45.058	0.003	2.297	0.003		29.00	0.48333	26.2	10.7	20.1	1.386	0.329	0.334	0.017	16.624	14.15	
264	8/23/2004	4:20:11 PM		24.715	24.724	24.478	26.928	24.91		21.44	27.116	3.984	17.89	-0.086	-4.489		44.389	0.003	2.333	0.003		30.00	0.5	26.0	10.6	19.7	1.356	0.334	0.339	0.017	17.237	14.67	
265	8/23/2004	4:21:11 PM		24.79	24.729	24.553	26.898	24.895		21.469	27.22	4.062	18.056	0.027	-4.468		43.93	0.003	2.366	0.003		31.00	0.51667	26.1	10.5	19.8	1.363	0.339	0.343	0.017	17.357	14.77	

CAMPAIGN IV NEW GKN BASELINE #3 WITH 0.5 M HNO3 – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
266	8/23/2004	4:22:11 PM		24.855	24.719	24.593	26.828	24.825		21.376	27.166	3.999	17.962	0.027	-4.474		44.466	0.003	2.368	0.003		32.00	0.53333	26.0	10.6	19.7	1.356	0.339	0.343	0.017	17.435	14.84	
267	8/23/2004	4:23:11 PM		24.925	24.723	24.668	26.803	24.9		21.347	27.143	3.932	18.081	0.027	-4.468		44.585	0.003	2.378	0.003		33.00	0.55	26.0	10.6	19.7	1.359	0.340	0.344	0.017	17.432	14.83	
268	8/23/2004	4:24:11 PM		24.984	24.717	24.737	26.747	24.874		21.538	27.659	4.13	18.009	0.328	-4.416		45.052	0.003	2.437	0.003		34.00	0.56667	26.5	10.7	19.8	1.363	0.349	0.351	0.018	17.776	15.13	
269	8/23/2004	4:25:11 PM		24.972	24.65	24.761	26.65	24.697		21.428	27.719	4.003	18.001	0.377	-4.405		45.211	0.003	2.464	0.003		35.00	0.58333	26.6	10.8	19.7	1.359	0.353	0.355	0.018	18.014	15.33	
270	8/23/2004	4:26:11 PM		24.911	24.574	24.784	26.589	24.621		21.438	27.804	4.192	17.786	0.502	-4.393		45.236	0.003	2.482	0.003		36.00	0.6	26.7	10.8	19.6	1.352	0.355	0.358	0.018	18.229	15.51	
271	8/23/2004	4:27:11 PM		24.983	24.596	24.871	26.651	24.648		21.461	27.788	4.135	18.024	0.6	-4.384		45.106	0.003	2.494	0.003		37.00	0.61667	26.7	10.7	19.7	1.361	0.357	0.358	0.018	18.151	15.45	
272	8/23/2004	4:28:11 PM		25.064	24.632	24.947	26.717	24.644		21.15	27.608	4.038	17.823	0.722	-4.373		45.088	0.003	2.519	0.003		38.00	0.63333	26.5	10.7	19.5	1.344	0.361	0.361	0.019	18.534	15.77	
273	8/23/2004	4:29:11 PM		25.144	24.677	25.027	26.777	24.699		21.355	27.844	4.061	18.079	0.742	-4.364		44.754	0.003	2.529	0.003		39.00	0.65	26.7	10.7	19.7	1.359	0.362	0.362	0.018	18.349	15.62	
274	8/23/2004	4:30:11 PM		25.219	24.722	25.082	26.882	24.758		21.129	27.865	3.984	17.708	0.841	-4.356		44.885	0.003	2.549	0.003		40.00	0.66667	26.7	10.7	19.4	1.339	0.365	0.364	0.019	18.749	15.96	
275	8/23/2004	4:31:11 PM		25.344	24.797	25.157	27.052	24.888		21.145	27.877	3.966	17.896	0.89	-4.344		44.867	0.003	2.559	0.003		41.00	0.68333	26.8	10.7	19.5	1.346	0.366	0.365	0.019	18.685	15.90	
276	8/23/2004	4:32:11 PM		25.359	24.792	25.177	27.087	25.009		21.052	27.848	3.957	17.816	1.003	-4.335		44.887	0.003	2.586	0.003		42.00	0.7	26.7	10.7	19.4	1.340	0.370	0.368	0.019	18.956	16.13	
277	8/23/2004	4:33:11 PM		25.402	24.806	25.22	27.215	25.082		21.426	28.602	4.119	17.941	1.399	-4.286		45.231	0.003	2.664	0.003		43.00	0.71667	27.5	10.8	19.7	1.357	0.381	0.379	0.019	19.257	16.39	
278	8/23/2004	4:34:11 PM		25.43	24.814	25.248	27.302	25.154		21.753	29.201	3.947	18.635	1.735	-4.26		44.593	0.003	2.736	0.003		44.00	0.73333	28.1	10.6	20.2	1.392	0.392	0.389	0.019	19.262	16.39	
279	8/23/2004	4:35:11 PM		25.484	24.833	25.323	27.317	25.234		21.334	28.988	3.857	18.225	1.758	-4.26		44.794	0.003	2.746	0.003		45.00	0.75	27.9	10.7	19.8	1.364	0.393	0.390	0.020	19.696	16.76	
280	8/23/2004	4:36:11 PM		25.518	24.857	25.371	27.33	25.272		21.494	29.205	3.956	18.391	1.854	-4.243		44.787	0.003	2.763	0.003		46.00	0.76667	28.1	10.7	19.9	1.375	0.396	0.391	0.020	19.629	16.70	
281	8/23/2004	4:37:11 PM		25.554	24.872	25.407	27.341	25.298		21.496	29.346	3.996	18.268	1.915	-4.237		44.568	0.003	2.78	0.003		47.00	0.78333	28.2	10.6	19.9	1.371	0.398	0.393	0.020	19.790	16.84	
282	8/23/2004	4:38:11 PM		25.605	24.889	25.448	27.363	25.349		21.143	29.102	3.808	18.073	1.961	-4.223		44.591	0.003	2.799	0.003		48.00	0.8	28.0	10.6	19.6	1.352	0.401	0.396	0.020	20.181	17.17	
283	8/23/2004	4:39:11 PM		25.717	24.896	25.525	27.385	25.336		30.516	50.726	3.992	28.51	13.31	-2.346		45.667	0.003	4.598	0.003		49.00	0.81667	49.6	10.9	29.5	2.035	0.658	0.649	0.022	21.978	18.70	
284	8/23/2004	4:40:11 PM		26.031	24.92	25.83	27.404	25.296		30.202	52.299	3.745	28.642	15.232	-2.026		44.729	0.003	4.839	0.004		50.00	0.83333	51.2	10.7	29.4	2.029	0.693	0.677	0.023	23.004	19.58	
285	8/23/2004	4:41:11 PM		26.309	24.958	26.013	27.517	25.279		30.542	54.366	3.66	29.35	16.775	-1.76		44.923	0.003	5.05	0.003		51.00	0.85	53.2	10.7	29.9	2.065	0.723	0.703	0.023	23.466	19.97	
286	8/23/2004	4:42:11 PM		26.447	24.922	26.121	27.48	25.227		30.737	55.305	3.756	29.393	17.557	-1.635		45.081	0.003	5.141	0.003		52.00	0.86667	54.2	10.7	30.1	2.073	0.736	0.713	0.024	23.723	20.19	
287	8/23/2004	4:43:11 PM		26.618	24.938	26.287	27.466	25.234		30.582	55.738	3.602	29.413	17.979	-1.56		44.161	0.003	5.193	0.003		53.00	0.88333	54.6	10.5	30.0	2.068	0.743	0.717	0.024	23.906	20.34	
288	8/23/2004	4:44:11 PM		26.782	24.987	26.351	27.625	25.243		31.15	57.313	3.65	30.105	18.909	-1.387		44.56	0.003	5.323	0.004		54.00	0.9	56.2	10.6	30.6	2.112	0.762	0.734	0.024	23.957	20.39	
289	8/23/2004	4:45:11 PM		26.805	24.991	26.38	27.644	25.196		30.797	57.071	3.682	29.707	19.14	-1.361		44.668	0.003	5.333	0.004		55.00	0.91667	55.9	10.6	30.3	2.086	0.763	0.735	0.024	24.281	20.66	
290	8/23/2004	4:46:11 PM		26.808	24.974	26.373	27.622	25.214		30.607	57.035	3.624	29.61	19.23	-1.358		44.585	0.003	5.345	0.003		56.00	0.93333	55.9	10.6	30.1	2.076	0.765	0.736	0.024	24.456	20.81	
291	8/23/2004	4:47:11 PM		26.855	25.011	26.42	27.669	25.201		31.026	57.786	3.678	30.041	19.244	-1.343		44.495	0.003	5.355	0.004		57.00	0.95	56.7	10.6	30.5	2.105	0.767	0.737	0.024	24.129	20.53	
292	8/23/2004	4:48:11 PM		26.858	25.034	26.363	27.732	25.21		30.532	57.527	3.544	29.789	19.893	-1.245		44.666	0.003	5.423	0.004		58.00	0.96667	56.4	10.6	30.2	2.079	0.776	0.747	0.025	24.777	21.09	
293	8/23/2004	4:49:11 PM		26.801	25.031	26.28	27.699	25.182		30.903	58.959	3.658	29.935	20.498	-1.124		44.852	0.003	5.496	0.003		59.00	0.98333	57.8	10.7	30.4	2.097	0.787	0.759	0.025	24.955	21.24	
294	8/23/2004	4:50:11 PM		26.758	25.054	26.267	27.711	25.154		30.596	58.654	3.575	29.766	20.756	-1.077		44.777	0.003	5.529	0.004		60.00	1	57.5	10.7	30.2	2.081	0.792	0.764	0.025	25.312	21.54	
295	8/23/2004	4:51:11 PM		26.708	25.059	26.233	27.702	25.169		30.65	58.897	3.608	29.732	21.016	-1.063		44.574	0.003	5.544	0.004		61.00	1.01667	57.8	10.6	30.2	2.082	0.794	0.767	0.025	25.396	21.61	
296	8/23/2004	4:52:11 PM		26.685	25.07	26.194	27.698	25.155		30.652	59.019	3.605	29.773	21.08	-1.048		44.272	0.003	5.553	0.004		62.00	1.03333	57.9	10.5	30.2	2.083	0.795	0.769	0.025	25.447	21.66	
297	8/23/2004	4:53:11 PM		26.684	25.104	26.183	27.717	25.184		30.627	59.208	3.765	29.676	21.358	-0.979		44.708	0.003	5.609	0.005		63.00	1.05	58.1	10.6	30.2	2.079	0.803	0.777	0.026	25.764	21.93	
298	8/23/2004	4:54:11 PM		26.685	25.136	26.159	27.713	25.246		30.503	58.901	3.762	29.582	21.1	-1.002		46.141	0.003	5.574	0.005		64.00	1.06667	57.8	11.0	30.0	2.071	0.798	0.772	0.026	25.713	21.88	
299	8/23/2004	4:55:11 PM		26.639	25.115	26.148	27.737	25.3		30.656	59.467	3.743	29.68	21.366	-0.976		45.027	0.003	5.592	0.004		65.00	1.08333	58.3	10.7	30.2	2.080	0.801	0.775	0.026	25.697	21.87	
300	8/23/2004	4:56:11 PM		26.612	25.117	26.121	27.73	25.397		30.715	59.516	3.643	29.865	21.517	-0.947		44.585	0.003	5.606	0.004		66.00	1.1	58.4	10.6	30.3	2.088	0.803	0.778	0.026	25.677	21.85	
301	8/23/2004	4:57:11 PM		26.595	25.131	26.109	27.753	25.54		30.642	59.784	3.604	29.729	21.589	-0.956		44.529	0.003	5.612	0.004		67.00	1.11667	58.7	10.6	30.2	2.081	0.803	0.779	0.026	25.802	21.96	
302	8/23/2004	4:58:11 PM		26.594	25.17	26.119	27.847	25.6		30.466	59.309	3.67	29.545	21.563	-0.936		44.516	0.003	5.626	0.005		68.00	1.13333	58.2	10.6	30.0	2.069	0.805	0.781	0.026	26.014	22.14	
303	8/23/2004	4:59:11 PM		26.586	25.186	26.115	27.888	25.601		30.505	59.566	3.639	29.635	21.618	-0.924		44.545	0.003	5.631	0.004		69.00	1.15	58.4	10.6	30.1	2.073	0.806	0.781	0.026	25.984	22.11	
304	8/23/2004	5:00:11 PM		26.587	25.202	26.121	27.954	25.662		30.387	59.651	3.605	29.684	21.821	-0.924		44.543	0.003	5.636	0.004		70.00	1.16667	58.5	10.6	30.0	2.071	0.807	0.782	0.026	26.033	22.15	
305	8/23/2004	5:01:11 PM		26.579	25.225	26.113	28.007	25.754		30.298	59.815	3.639	29.452	21.922	-0.869		44.451	0.003	5.658	0.005		71.00	1.18333	58.7	10.6	29.9	2.060	0.810	0.785	0.026	26.281	22.37	
306																																	
307																																	
308	A	Averages		24.8	24.6	24.3	27.0	25.0		11.7	17.9	4.3	7.5	0.9	-1.0		44.9	0.7	14.6	0.0				16.8	10.7	9.6	0.7	0.1	0.1	0.0	10.0	8.5	
309		Maximum		26.0	24.7	25.0	27.3	25.3		12.0	19.2	4.5	7.7	2.1	-0.3		45.5	0.7	14.6	0.0				18.0	10.8	9.8	0.7	0.1	0.1	0.0	11.1	9.5	
310		Median		24.7	24.6	24.2	27.0	25.0		11.7	18.0	4.3	7.5	0.7	-1.1		44.9	0.7	14.6	0.0				16.8	10.7	9.6	0.7	0.1	0.1	0.0	10.0	8.5	
311		Minimum		24.4	24.4	23.9	26.7	24.9		11.5	16.8	4.1	7.3	-0.2	-1.7		44.4	0.6	14.6	0.0				15.7	10.6	9.4	0.6	0.1	0.1	0.0	9.0	7.7	
312		2 x Std Dev		1.000	0.212	0.638	0.366	0.254		0.305	1.241	0.188	0.233	1.260	0.799		0.487	0.069	0.000	0.000				1.241	0.116	0.248	0.017	0.010	0.011	0.001	1.229	1.046	
313		Number of Points Used*		21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
314		* Backpulse points in box are not included																															
315																																	
316																																	
317	B	Averages		25.1	24.7	24.9	27.0	24.9		21.4	28.0	4.0	18.1	0.8	-4.4		44.8	0.0	2.5	0.0				26.9	10.7	19.7	1.4	0.4	0.4	0.0	18.4	15.6	
318		Maximum		25.6	24.9	25.4	27.4	25.3		21.9	29.3	4.2	18.6	2.0	-4.2		45.2	0.0	2.8	0.0				28.2	10.8	20.2	1.4	0.4	0.4	0.0	20.2	17.2	
319		Median		25.1	24.7	24.9	26.9	24.9		21.4	27.8	4.0	18.0	0.7	-4.4		44.9	0.0	2.5	0.0				26.7	10.7	19.7	1.4	0.4	0.4	0.0	18.3	15.6	
320		Minimum		24.6	24.6	24.4	26.6	24.6		21.1	27.1	3.8	17.7	-0.3	-4.5		43.9	0.0	2.3	0.0				26.0	10.5	19.4	1.3	0.3	0.3	0.0	16.6	14.1	
321		2 x Std Dev		0.625	0.170	0.670	0.506	0.439		0.434	1.470	0.183	0.448	1.461	0.183		0.648	0.000	0.321	0.000				1.470	0.154	0.409	0.028	0.046	0.039	0.002	2.015	1.715	
322		Number of Points Used*		21	21	21	21	21		21	21	21	21	21	21		21	21	21	21				21	21	21	21	21	21	21	21	21	
323		* Backpulse points in box are not included																															
324																																	
325																																	
326	C	Averages		26.6	25.1	26.2	27.7	25.3		30.6	57.6	3.7	29.6	19.8	-1.3		44.7	0.0	5.4	0.0				56.5	10.7	30.1	2.1	0.8	0.7	0.0	24.9	21.2	
327		Maximum		26.9	25.2	26.4	28.0	25.8		31.2	59.8	4.0	30.1	21.9	-0.9		46.1	0.0	5.7	0.0				58.7	11.0	30.6	2.1	0.8	0.8	0.0	26.3	22.4	
328		Median		26.6	25.1	26.2	27.7	25.2		30.6	58.9	3.7	29.7	20.8	-1.1		44.6	0.0	5.5	0.0				57.8	10.6	30.2	2.1	0.8	0.8	0.0	25.3	21.5	
329		Minimum		25.7	24.9	25.5	27.4	25.2		30.2	50.7	3.5	28.5	13.3	-2.3		44.2	0.0	4.6	0.0				49.6	10.5	29.4	2.0	0.7	0.6	0.0	22.0	18.7	
330		2 x Std Dev		0.521	0.189	0.381	0.311	0.353		0.416	4.827	0.182	0.730	4.464	0.760		0.840	0.000	0.544	0.001				4.827	0.200	0.524	0.036	0.078	0.072	0.002	2.222	1.891	
331		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
332		* Backpulse points in box are not included																										Calc	0.049				
333																										Avg St Dv (all pts)		0.041					
334																										Max St Dv (all pts)		0.072					
335																										Min St Dv (all pts)		0.011					

CAMPAIGN IV NEW GKN BASELINE #4 WITH DIF WATER



CAMPAIGN IV NEW GKN BASELINE #4 WITH DIF WATER

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
336	Tuesday, 8/24/04																																
337	Baseline XYZ, water																																
338	8/24/2004	8:42:31 AM		24.822	23.079	24.655	23.935	22.954		11.933	14.208	4.164	7.875	-1.209	-3.948		44.829	0.003	1.532	0.003		0.00	0	13.1	10.7	9.9	0.683	0.219	0.221	0.022	22.362	19.03	
339	8/24/2004	8:43:31 AM		24.771	23.083	24.599	24.049	22.903		12.112	14.206	4.137	8.331	-1.209	-3.954		44.62	0.003	1.458	0.003		1.00	0.01667	13.1	10.6	10.2	0.705	0.209	0.211	0.021	20.653	17.58	
340	8/24/2004	8:44:31 AM		24.745	23.087	24.538	23.989	22.912		7.563	14.295	3.963	3.57	1.278	-0.317		44.349	0.6	-0.007	0.003		2.00	0.03333	13.2	10.6	5.6	0.384	-0.001	-0.001	0.000	-0.182	-0.16	
341	8/24/2004	8:45:31 AM		24.73	23.102	24.487	24.058	22.866		2.599	14.637	4.107	-1.356	6.813	21.255		43.855	0.003	-0.013	0.003		3.00	0.05	13.5	10.4	0.6	0.043	-0.002	-0.002	-0.003	-3.038	-2.59	
342	8/24/2004	8:46:31 AM		24.703	23.106	24.446	24.087	22.895		2.401	14.581	4.134	-1.811	6.926	20.526		43.817	0.003	-0.013	0.003		4.00	0.06667	13.5	10.4	0.3	0.020	-0.002	-0.002	-0.006	-6.408	-5.45	
343	8/24/2004	8:47:31 AM		24.453	23.116	24.421	24.082	22.875		7.151	14.595	4.162	3.139	2.149	0.403		44.089	0.65	14.643	0.003		5.00	0.08333	13.5	10.5	5.1	0.355	2.096	2.131	0.414	414.166	352.46	
344	8/24/2004	8:48:31 AM		24.608	23.125	24.39	24.051	22.915		7.118	14.547	4.281	2.995	2.088	0.547		44.191	0.62	14.643	0.003		6.00	0.1	13.4	10.5	5.1	0.349	2.096	2.133	0.422	421.785	358.94	
345	8/24/2004	8:49:31 AM		24.577	23.125	24.354	24.106	22.909		12.418	14.371	4.162	8.483	-1.206	-4.448		44.464	0.003	1.996	0.003		7.00	0.11667	13.2	10.6	10.5	0.721	0.286	0.291	0.028	27.847	23.70	
346	8/24/2004	8:50:31 AM		24.542	23.13	24.324	24.081	22.924		12.607	14.514	4.265	8.485	-1.209	-4.465		44.531	0.003	1.361	0.003		8.00	0.13333	13.4	10.6	10.5	0.727	0.195	0.199	0.019	18.832	16.03	
347	8/24/2004	8:51:31 AM		24.501	23.109	24.273	24.07	22.918		12.36	13.992	4.043	8.524	-1.212	-4.474		44.814	0.003	1.331	0.003		9.00	0.15	12.9	10.7	10.4	0.720	0.191	0.195	0.019	18.627	15.85	
348	8/24/2004	8:52:31 AM		24.482	23.13	24.294	24.076	22.909		12.385	14.062	3.89	8.663	-1.209	-4.474		44.422	0.003	1.333	0.003		10.00	0.16667	12.9	10.6	10.5	0.726	0.191	0.195	0.018	18.499	15.74	
349	8/24/2004	8:53:31 AM		24.446	23.129	24.268	24.145	22.883		12.661	14.259	3.941	9.008	-1.209	-4.477		44.464	0.003	1.374	0.003		11.00	0.18333	13.1	10.6	10.8	0.747	0.197	0.201	0.019	18.535	15.77	
350	8/24/2004	8:54:31 AM		24.431	23.139	24.243	24.125	22.883		12.74	14.282	3.989	8.91	-1.212	-4.486		44.57	0.003	1.287	0.003		12.00	0.2	13.2	10.6	10.8	0.746	0.184	0.188	0.017	17.389	14.80	
351	8/24/2004	8:55:31 AM		24.415	23.138	24.223	24.1	22.898		12.553	13.94	4.364	8.39	-1.209	-4.497		45.561	0.003	1.235	0.003		13.00	0.21667	12.8	10.9	10.5	0.722	0.177	0.181	0.017	17.259	14.69	
352	8/24/2004	8:56:31 AM		24.38	23.133	24.178	24.115	22.928		12.553	13.725	4.237	8.538	-1.212	-4.503		44.745	0.003	1.188	0.003		14.00	0.23333	12.6	10.7	10.5	0.727	0.170	0.174	0.017	16.507	14.05	
353	8/24/2004	8:57:31 AM		24.39	23.158	24.268	24.155	22.918		12.377	13.594	4.115	8.413	-1.206	-4.503		45.119	0.003	1.172	0.003		15.00	0.25	12.5	10.7	10.4	0.717	0.168	0.171	0.016	16.478	14.02	
354	8/24/2004	8:58:31 AM		24.405	23.148	24.333	23.999	22.963		12.371	13.598	4.172	8.222	-1.212	-4.509		45.125	0.003	1.167	0.003		16.00	0.26667	12.5	10.7	10.3	0.710	0.167	0.170	0.017	16.535	14.07	
355	8/24/2004	8:59:31 AM		24.435	23.153	24.348	23.984	22.938		12.75	13.932	4.167	8.598	-1.209	-4.509		44.337	0.003	1.149	0.003		17.00	0.28333	12.8	10.6	10.7	0.736	0.164	0.168	0.016	15.697	13.36	
356	8/24/2004	9:00:31 AM		24.466	23.158	24.343	24.049	22.868		12.313	13.399	4.076	8.237	-1.212	-4.506		44.725	0.003	1.123	0.003		18.00	0.3	12.3	10.7	10.3	0.708	0.161	0.164	0.016	15.940	13.57	
357	8/24/2004	9:01:31 AM		24.511	23.163	24.453	24.09	22.958		12.587	13.692	3.884	8.725	-1.212	-4.509		44.825	0.003	1.127	0.003		19.00	0.31667	12.6	10.7	10.7	0.735	0.161	0.164	0.015	15.377	13.09	
358	8/24/2004	9:02:31 AM		24.556	23.169	24.478	24.095	22.928		12.47	13.335	3.9	8.856	-1.209	-4.506		44.796	0.003	1.103	0.003		20.00	0.33333	12.2	10.7	10.7	0.735	0.158	0.160	0.015	15.029	12.79	
359	8/24/2004	9:03:31 AM		24.591	23.179	24.478	24.155	22.933		12.317	13.14	4.218	8.329	-1.206	-4.52		45.82	0.003	1.046	0.003		21.00	0.35	12.0	10.9	10.3	0.712	0.150	0.152	0.015	14.722	12.53	
360	8/24/2004	9:04:31 AM		24.616	23.179	24.489	24.171	22.933		12.547	13.362	4.178	8.647	-1.212	-4.523		44.791	0.003	1.02	0.003		22.00	0.36667	12.2	10.7	10.6	0.731	0.146	0.148	0.014	13.980	11.90	
361	8/24/2004	9:05:31 AM		24.636	23.189	24.528	24.14	22.918		12.53	13.262	4.189	8.472	-1.209	-4.523		44.965	0.003	1.001	0.003		23.00	0.38333	12.1	10.7	10.5	0.724	0.143	0.145	0.014	13.830	11.77	
362	8/24/2004	9:06:31 AM		24.645	23.178	24.548	24.159	22.912		12.394	13.117	4.204	8.298	-1.212	-4.526		45.019	0.003	0.992	0.003		24.00	0.4	12.0	10.7	10.3	0.713	0.142	0.144	0.014	13.903	11.83	
363	8/24/2004	9:07:31 AM		24.681	23.199	24.553	24.21	22.918		12.433	13.117	4.28	8.557	-1.212	-4.523		45.092	0.003	0.98	0.003		25.00	0.41667	12.0	10.7	10.5	0.724	0.140	0.142	0.014	13.538	11.52	
364	8/24/2004	9:08:31 AM		24.7	23.193	24.558	24.189	22.922		12.103	12.767	4.256	7.847	-1.209	-4.52		45.015	0.003	0.973	0.003		26.00	0.43333	11.6	10.7	10.0	0.688	0.139	0.141	0.014	14.140	12.03	
365	8/24/2004	9:09:31 AM		24.705	23.187	24.557	24.214	22.927		12.118	12.751	4.318	7.886	-1.215	-4.526		45.117	0.003	0.955	0.003		27.00	0.45	11.6	10.7	10.0	0.690	0.137	0.138	0.014	13.841	11.78	
366	8/24/2004	9:10:31 AM		24.72	23.207	24.617	24.274	22.997		12.248	13.045	4.229	7.81	-1.212	-4.52		44.783	0.003	0.966	0.003		28.00	0.46667	11.9	10.7	10.0	0.691	0.138	0.140	0.014	13.939	11.86	
367	8/24/2004	9:11:31 AM		24.73	23.202	24.607	24.279	23.057		12.404	12.999	4.095	8.466	-1.212	-4.52		45.054	0.003	0.929	0.003		29.00	0.48333	11.9	10.7	10.4	0.719	0.133	0.134	0.013	12.888	10.97	
368	8/24/2004	9:12:31 AM		24.81	23.208	24.678	24.305	23.048		20.733	25.251	3.951	17.227	-1.088	-4.173		43.822	0.003	2.092	0.003		30.00	0.5	24.1	10.4	19.0	1.309	0.300	0.302	0.016	15.924	13.55	
369	8/24/2004	9:13:31 AM		24.95	23.223	24.803	24.38	23.093		21.776	27.228	4.001	18.319	-0.118	-4.078		45.826	0.003	2.364	0.004		31.00	0.51667	26.1	10.9	20.0	1.382	0.338	0.340	0.017	16.976	14.45	
370	8/24/2004	9:14:31 AM		25.015	23.228	24.803	24.475	23.087		21.774	27.079	3.924	18.485	-0.341	-4.092		44.985	0.003	2.286	0.004		32.00	0.53333	26.0	10.7	20.1	1.388	0.327	0.329	0.016	16.349	13.91	
371	8/24/2004	9:15:31 AM		25.025	23.218	24.758	24.54	23.077		21.907	27.185	3.964	18.477	-0.419	-4.104		44.781	0.003	2.216	0.003		33.00	0.55	26.1	10.7	20.2	1.392	0.317	0.319	0.016	15.819	13.46	

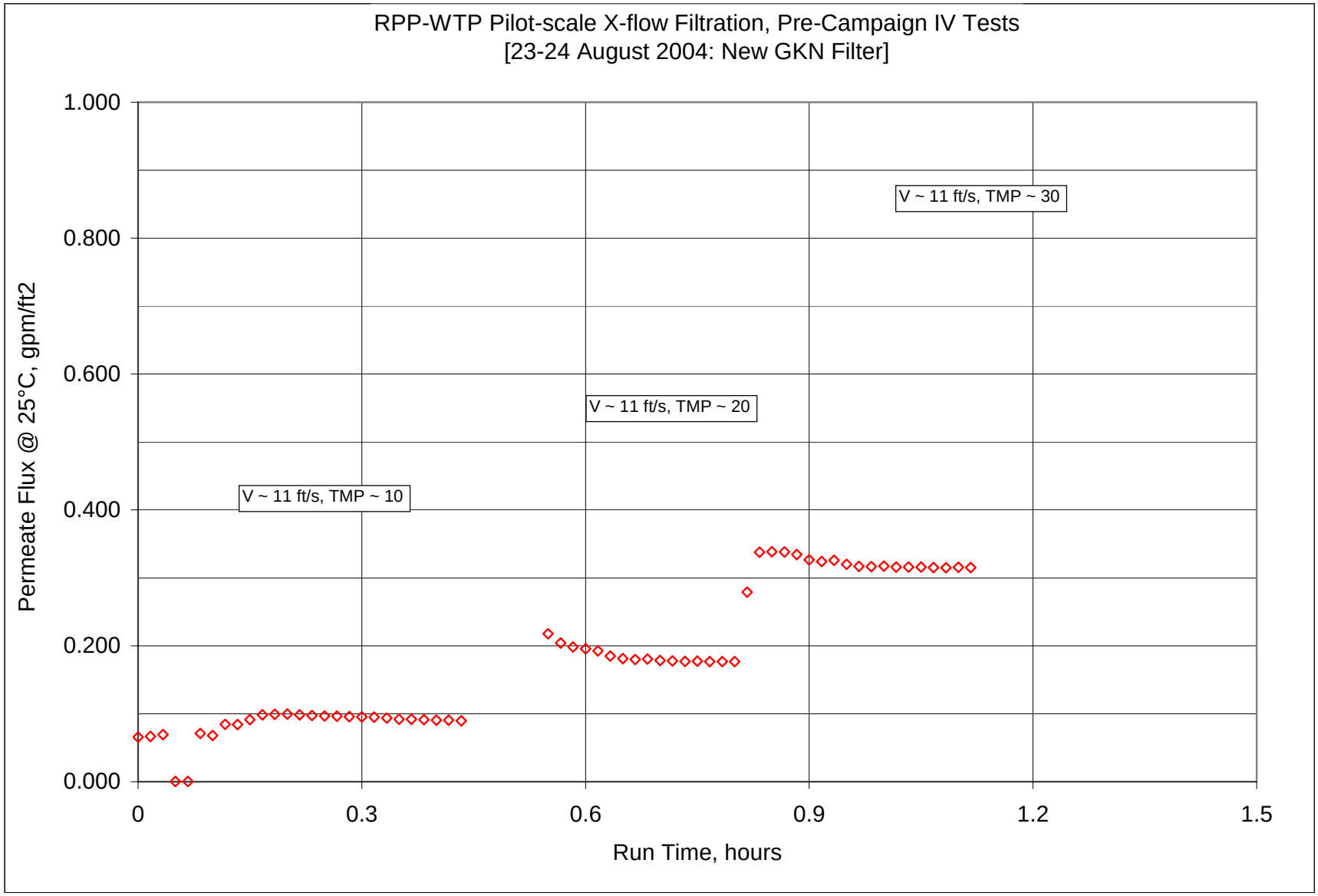
CAMPAIGN IV NEW GKN BASELINE #4 WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
372	8/24/2004	9:16:31 AM		25.015	23.223	24.733	24.57	23.117		21.927	27.056	4.111	18.426	-0.471	-4.107		44.818	0.003	2.179	0.003		34.00	0.56667	25.9	10.7	20.2	1.391	0.312	0.314	0.016	15.578	13.26	
373	8/24/2004	9:17:31 AM		25.001	23.234	24.714	24.616	23.179		22.211	27.483	3.913	18.725	-0.456	-4.101		43.874	0.003	2.242	0.003		35.00	0.58333	26.4	10.5	20.5	1.411	0.321	0.324	0.016	15.809	13.45	
374	8/24/2004	9:18:31 AM		24.992	23.245	24.684	24.642	23.219		22.326	27.406	3.926	18.91	-0.514	-4.107		44.013	0.003	2.275	0.003		36.00	0.6	26.3	10.5	20.6	1.422	0.326	0.329	0.016	15.938	13.56	
375	8/24/2004	9:19:31 AM		24.962	23.25	24.69	24.663	23.13		22.16	27	4.078	18.545	-0.76	-4.13		45.234	0.003	2.196	0.003		37.00	0.61667	25.9	10.8	20.4	1.403	0.314	0.317	0.016	15.583	13.26	
376	8/24/2004	9:20:31 AM		24.943	23.256	24.666	24.643	23.17		22.425	27.272	3.931	19	-0.807	-4.133		44.735	0.003	2.139	0.003		38.00	0.63333	26.1	10.7	20.7	1.428	0.306	0.309	0.015	14.925	12.70	
377	8/24/2004	9:21:31 AM		24.928	23.266	24.641	24.694	23.191		22.489	27.222	4.096	18.855	-0.83	-4.139		45.035	0.003	2.195	0.003		39.00	0.65	26.1	10.7	20.7	1.425	0.314	0.317	0.015	15.356	13.07	
378	8/24/2004	9:22:31 AM		24.914	23.282	24.637	24.755	23.142		22.502	27.035	3.941	19.021	-0.975	-4.142		44.779	0.003	2.15	0.003		40.00	0.66667	25.9	10.7	20.8	1.431	0.308	0.311	0.015	14.978	12.75	
379	8/24/2004	9:23:31 AM		24.895	23.273	24.598	24.751	23.178		22.666	27.251	4.113	19.058	-1.015	-4.15		44.67	0.003	2.113	0.003		41.00	0.68333	26.1	10.6	20.9	1.438	0.303	0.306	0.015	14.666	12.48	
380	8/24/2004	9:24:31 AM		24.881	23.289	24.599	24.792	23.234		22.633	26.998	3.814	19.557	-1.114	-4.15		44.606	0.003	2.164	0.004		42.00	0.7	25.9	10.6	21.1	1.454	0.310	0.313	0.015	14.853	12.64	
381	8/24/2004	9:25:31 AM		24.861	23.284	24.563	24.777	23.244		22.176	26.488	3.986	18.492	-1.212	-4.179		44.614	0.003	2.031	0.003		43.00	0.71667	25.4	10.6	20.3	1.402	0.291	0.294	0.014	14.477	12.32	
382	8/24/2004	9:26:31 AM		24.852	23.295	24.559	24.787	23.249		22.118	26.233	4.109	18.321	-1.209	-4.197		44.958	0.003	1.984	0.003		44.00	0.73333	25.1	10.7	20.2	1.394	0.284	0.288	0.014	14.224	12.10	
383	8/24/2004	9:27:31 AM		24.827	23.295	24.549	24.787	23.35		22.241	26.045	4.046	18.767	-1.212	-4.199		45.198	0.003	1.975	0.003		45.00	0.75	24.9	10.8	20.5	1.414	0.283	0.286	0.014	13.967	11.89	
384	8/24/2004	9:28:31 AM		24.812	23.31	24.53	24.818	23.315		22.344	26.26	4.2	18.452	-1.212	-4.199		45.063	0.003	1.985	0.003		46.00	0.76667	25.1	10.7	20.4	1.406	0.284	0.288	0.014	14.118	12.01	
385	8/24/2004	9:29:31 AM		24.792	23.305	24.51	24.843	23.255		22.334	26.068	4.07	18.773	-1.212	-4.208		44.854	0.003	1.99	0.003		47.00	0.78333	24.9	10.7	20.6	1.417	0.285	0.289	0.014	14.054	11.96	
386	8/24/2004	9:30:31 AM		24.788	23.322	24.511	24.869	23.316		22.491	26.239	3.984	19.003	-1.212	-4.208		44.973	0.003	1.938	0.003		48.00	0.8	25.1	10.7	20.7	1.430	0.277	0.281	0.014	13.559	11.54	
387	8/24/2004	9:31:31 AM		24.763	23.327	24.501	24.885	23.316		22.16	25.8	4.065	18.489	-1.209	-4.22		45.384	0.003	1.913	0.004		49.00	0.81667	24.7	10.8	20.3	1.401	0.274	0.278	0.014	13.666	11.63	
388	8/24/2004	9:32:31 AM		24.754	23.332	24.496	24.92	23.292		22.102	25.603	4.013	18.372	-1.209	-4.225		45.075	0.003	1.85	0.004		50.00	0.83333	24.5	10.7	20.2	1.395	0.265	0.269	0.013	13.275	11.30	
389	8/24/2004	9:33:31 AM		24.735	23.338	24.457	24.901	23.298		22.23	25.591	4.121	18.492	-1.215	-4.234		44.927	0.003	1.869	0.003		51.00	0.85	24.5	10.7	20.4	1.404	0.268	0.272	0.013	13.344	11.36	
390	8/24/2004	9:34:31 AM		24.72	23.343	24.462	24.911	23.338		22.33	25.858	4.061	18.615	-1.209	-4.231		44.91	0.003	1.845	0.003		52.00	0.86667	24.7	10.7	20.5	1.412	0.264	0.268	0.013	13.099	11.15	
391	8/24/2004	9:35:31 AM		24.725	23.354	24.458	24.947	23.398		30.632	38.912	4.385	27.047	2.384	-3.783		47.58	0.003	2.903	0.003		53.00	0.88333	37.8	11.3	28.8	1.988	0.416	0.422	0.015	14.633	12.45	
392	8/24/2004	9:36:31 AM		24.85	23.359	24.603	24.942	23.464		30.909	41.233	3.969	28.022	4.373	-3.569		45.09	0.003	3.122	0.003		54.00	0.9	40.1	10.7	29.5	2.032	0.447	0.452	0.015	15.340	13.05	
393	8/24/2004	9:37:31 AM		25.027	23.365	24.784	24.983	23.49		30.75	41.642	3.811	28.201	4.934	-3.497		44.733	0.003	3.294	0.003		55.00	0.91667	40.5	10.7	29.5	2.032	0.472	0.474	0.016	16.097	13.70	
394	8/24/2004	9:38:31 AM		25.157	23.381	24.865	25.039	23.44		30.594	41.664	3.799	27.919	5.059	-3.485		44.8	0.003	3.392	0.003		56.00	0.93333	40.5	10.7	29.3	2.017	0.486	0.487	0.017	16.662	14.18	
395	8/24/2004	9:39:31 AM		25.228	23.386	24.901	25.134	23.476		30.685	41.781	3.802	27.952	5.105	-3.483		44.698	0.003	3.472	0.003		57.00	0.95	40.7	10.6	29.3	2.021	0.497	0.498	0.017	17.001	14.47	
396	8/24/2004	9:40:31 AM		25.284	23.402	24.947	25.225	23.517		31.239	42.359	3.832	28.556	5.053	-3.477		44.26	0.003	3.408	0.003		58.00	0.96667	41.2	10.5	29.9	2.061	0.488	0.489	0.016	16.344	13.91	
397	8/24/2004	9:41:31 AM		25.305	23.408	24.928	25.257	23.553		31.316	42.487	3.821	28.662	5.053	-3.485		44.358	0.003	3.348	0.003		59.00	0.98333	41.4	10.6	30.0	2.068	0.479	0.480	0.016	16.016	13.63	
398	8/24/2004	9:42:31 AM		25.315	23.404	24.938	25.277	23.549		31.366	42.452	3.759	28.786	4.972	-3.491		44.049	0.003	3.323	0.003		60.00	1	41.3	10.5	30.1	2.074	0.476	0.477	0.016	15.845	13.48	
399	8/24/2004	9:43:31 AM		25.341	23.43	24.989	25.343	23.554		31.683	42.701	3.911	29.015	5.105	-3.471		45.152	0.003	3.386	0.003		61.00	1.01667	41.6	10.8	30.3	2.092	0.485	0.485	0.016	15.978	13.60	
400	8/24/2004	9:44:31 AM		25.357	23.436	25.005	25.354	23.606		31.957	43.047	3.869	29.27	5.117	-3.471		45.286	0.003	3.388	0.003		62.00	1.03333	41.9	10.8	30.6	2.111	0.485	0.485	0.016	15.842	13.48	
401	8/24/2004	9:45:31 AM		25.388	23.442	25.041	25.39	23.641		31.679	42.746	3.876	28.925	5.047	-3.471		45.046	0.003	3.409	0.004		63.00	1.05	41.6	10.7	30.3	2.089	0.488	0.487	0.016	16.088	13.69	
402	8/24/2004	9:46:31 AM		25.414	23.448	25.062	25.421	23.643		31.722	42.755	3.798	28.991	4.986	-3.483		44.806	0.003	3.465	0.003		64.00	1.06667	41.6	10.7	30.4	2.093	0.496	0.495	0.016	16.313	13.88	
403	8/24/2004	9:47:31 AM		25.445	23.469	25.089	25.413	23.584		31.837	42.949	3.914	28.958	4.914	-3.488		44.818	0.003	3.3	0.003		65.00	1.08333	41.8	10.7	30.4	2.096	0.472	0.471	0.016	15.503	13.19	
404	8/24/2004	9:48:31 AM		25.487	23.491	25.115	25.444	23.645		31.946	42.701	3.879	29.319	4.842	-3.491		44.846	0.003	3.326	0.003		66.00	1.1	41.6	10.7	30.6	2.112	0.476	0.475	0.015	15.494	13.19	
405	8/24/2004	9:49:31 AM		25.492	23.476	25.096	25.449	23.651		32.407	43.418	3.878	29.645	4.81	-3.494		44.952	0.003	3.327	0.003		67.00	1.11667	42.3	10.7	31.0	2.139	0.476	0.475	0.015	15.311	13.03	
406	8/24/2004	9:50:31 AM		25.509	23.488	25.102	25.466	23.677		32.098	42.981	3.844	29.272	4.734	-3.503		44.589	0.003	3.266	0.003		68.00	1.13333	41.9	10.6	30.7	2.116	0.468	0.466	0.015	15.194	12.93	
407	8/24/2004	9:51:31 AM		25.54	23.509	25.133	25.502	23.744		32.28	43.078	3.87	29.475	4.752	-3.503		44.529	0.003	3.335	0.003		69.00	1.15	42.0	10.6	30.9	2.129	0.477	0.476	0.015	15.405	13.11	
408	8/24/2004	9:52:31 AM		25.55	23.52	25.149	25.518	23.699		32.202	42.927	3.852	29.426	4.668	-3.514		44.818	0.003	3.315	0.003		70.00	1.16667	41.8	10.7	30.8	2.125	0.475	0.473	0.015	15.337	13.05	
409	8/24/2004	9:53:31 AM		25.567	23.531	25.165	25.539	23.68		32.025	42.599	3.704	29.494	4.569	-3.517		44.631	0.003	3.316	0.003		71.00	1.18333	41.5	10.6	30.8	2.121	0.475	0.473	0.015	15.362	13.07	
410	8/24/2004	9:54:31 AM		25.583	23.537	25.176	25.57	23.752		32.473	43.074	3.776	29.863	4.485	-3.52		44.599	0.003	3.223	0.003		72.00	1.2	41.9	10.6	31.2	2.149	0.461	0.459	0.015	14.731	12.54	
411	8/24/2004	9:55:31 AM		25.594	23.559	25.188	25.577	23.863		32.052	42.328	3.942	29.065	4.071	-3.563		44.689	0.003	3.194	0.003		73.00	1.21667	41.2	10.6	30.6	2.107	0.457	0.455	0.015	14.885	12.67	
412	8/24/2004	9:56:31 AM		25.596	23.57	25.195	25.609	23.81		32.168	41.973	3.822	29.422	4.042	-3.572		44.673	0.003	3.193	0.003		74.00	1.23333	40.8	10.6	30.8	2.123	0.457	0.455	0.015	14.763	12.56	
413	8/24/2004	9:57:31 AM		25.603	23.577	25.196	25.615	23.787		32.258	42.27	3.848	29.348	4.002	-3.575		44.554	0.003	3.276	0.003		75.00	1.25	41.1	10.6	30.8	2.124	0.469	0.466	0.015	15.142	12.89	
414	8/24/2004	9:58:31 AM		25.599	23.584	25.193	25.642	23.793		31.957	41.843	3.786	29.178	3.935	-3.581		44.533	0.003	3.222	0.003		76.00	1.26667	40.7	10.6	30.6	2.108	0.461	0.459	0.015	15.009	12.77	
415																																	
416	A	Averages		24.5	23.2	24.4	24.1	22.9		12.4	13.6	4.1	8.5	-1.2	-4.5		44.9	0.0	1.2	0.0				12.5	10.7	10.4	0.7	0.2	0.2	0.0	16.2	13.8	
417		Maximum		24.7	23.2	24.6	24.3	23.1		12.8	14.5	4.4	9.0	-1.2	-4.4		45.8	0.0	2.0	0.0				13.4	10.9	10.8	0.7	0.3	0.3	0.0	27.8	23.7	
418		Median		24.5	23.2	24.4	24.1	22.9		12.4	13.6	4.2	8.5	-1.2	-4.5		44.8	0.0	1.1	0.0				12.5	10.7	10.5	0.7	0.2	0.2	0.0	15.7	13.4	
419		Minimum		24.4	23.1	24.2	24.0	22.9		12.1	12.8	3.9	7.8	-1.2	-4.5		44.3	0.0	0.9	0.0				11.6	10.6	10.0	0.7	0.1	0.1	0.0	12.9	11.0	
420		2 x Std Dev		0.227	0.056	0.267	0.146	0.077		0.333	1.020	0.273	0.608	0.005	0.043		0.696	0.000	0.449	0.000				1.019	0.166	0.450	0.031	0.064	0.066	0.006	6.120	5.208	
421		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
422		* Backpulse points in box are not included																															
423																																	
424	B	Averages		24.9	23.3	24.6	24.7	23.2		22.2	26.7	4.0	18.7	-0.9	-4.2		44.9	0.0	2.1	0.0				25.5	10.7	20.5	1.4	0.3	0.3	0.0	14.8	12.6	
425		Maximum		25.0	23.3	24.8	24.9	23.4		22.7	27.5	4.2	19.6	-0.1	-4.1		45.8	0.0	2.4	0.0				26.4	10.9	21.1	1.5	0.3	0.3	0.0	17.0	14.4	
426		Median		24.9	23.3	24.6	24.8	23.2		22.2	27.0	4.0	18.6	-1.1	-4.2		44.9	0.0	2.1	0.0				25.9	10.7	20.4	1.4	0.3	0.3	0.0	14.8	12.6	
427		Minimum		24.7	23.2	24.5	24.4	23.1		21.8	25.6	3.8	18.3	-1.2	-4.2		43.9	0.0	1.8	0.0				24.5	10.5	20.0	1.4	0.3	0.3	0.0	13.1	11.1	
428		2 x Std Dev		0.193	0.079	0.211	0.289	0.170		0.485	1.243	0.179	0.605	0.707	0.099		0.798	0.000	0.301	0.001				1.243	0.190	0.519	0.036	0.043	0.042	0.002	2.104	1.791	
429		Number of Points Used*		22	22	22	22	22		22	22	22	22	22	22		22	22	22	22				22	22	22	22	22	22	22	22	22	
430		* Backpulse points in box are not included																															
431																																	
432	C	Averages		25.4	23.5	25.0	25.4	23.6		31.7	42.5	3.8	29.0	4.7	-3.5		44.7	0.0	3.3	0.0				41.4	10.7	30.4	2.1	0.5	0.5	0.0	15.6	13.3	
433		Maximum		25.6	23.6	25.2	25.6	23.9		32.5	43.4	4.0	29.9	5.1	-3.5		45.3	0.0	3.5	0.0				42.3	10.8	31.2	2.1	0.5	0.5	0.0	17.0	14.5	
434		Median		25.4	23.5	25.1	25.4	23.6		31.9	42.6	3.8	29.1	4.8	-3.5		44.7	0.0	3.3	0.0				41.5	10.6	30.6	2.1	0.5	0.5	0.0	15.5	13.2	
435		Minimum		24.9	23.4	24.6	24.9	23.4		30.6	41.2	3.7	27.9	3.9	-3.6		44.0	0.0	3.1	0.0				40.1	10.5	29.3	2.0	0.4	0.5	0.0	14.7	12.5	
436		2 x Std Dev		0.386	0.139	0.297	0.397	0.235		1.108	1.103	0.120	1.073	0.764	0.072		0.558	0.000	0.172	0.000				1.103	0.133	1.085	0.075	0.025	0.025	0.001	1.184	1.008	
437		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
438		* Backpulse points in box are not included																										Calc	0.048				
439																										Avg St Dv (all pts)		0.044					
440																										Max St Dv (all pts)		0.066					
441																										Min St Dv (all pts)		0.025					

CAMPAIGN IV NEW GKN BASELINE #4 WITH DIF WATER – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
443	Tuesday, 8/24/04																																
444	Baseline base1; water, 5 psid TMP, 11 ft/s																																
445	8/24/2004	10:43:11 AM		25.725	23.986	25.499	25.211	23.879		7.344	9.814	4.357	3.301	-1.212	-3.454		44.844	0.399	14.643	0.003		0.00	0	8.7	10.7	5.3	0.367	0.057	0.056	0.011	10.583	9.01	
446	8/24/2004	10:44:11 AM		25.683	23.984	25.397	25.3	23.702		7.35	9.813	4.083	3.194	-1.212	-3.509		45.023	0.392	14.643	0.003		1.00	0.01667	8.7	10.7	5.3	0.363	0.056	0.055	0.011	10.527	8.96	
447	8/24/2004	10:45:11 AM		25.625	23.981	25.304	25.382	23.619		7.192	9.552	4.196	3.174	-1.212	-3.546		44.789	0.389	14.643	0.003		2.00	0.03333	8.4	10.7	5.2	0.357	0.056	0.055	0.011	10.654	9.07	
448	8/24/2004	10:46:11 AM		25.572	23.983	25.2	25.399	23.54		7.273	9.586	4.085	3.282	-1.209	-3.569		44.764	0.388	14.643	0.004		3.00	0.05	8.5	10.7	5.3	0.364	0.056	0.055	0.010	10.466	8.91	
449	8/24/2004	10:47:11 AM		25.516	23.986	25.104	25.423	23.519		7.325	9.575	4.188	3.287	-1.212	-3.601		44.706	0.383	14.643	0.003		4.00	0.06667	8.4	10.6	5.3	0.366	0.055	0.055	0.010	10.304	8.77	
450	8/24/2004	10:48:11 AM		25.469	24	25.058	25.446	23.543		7.474	9.722	4.111	3.574	-1.206	-3.561		45.013	0.368	14.643	0.004		5.00	0.08333	8.6	10.7	5.5	0.381	0.053	0.053	0.010	9.522	8.10	
451	8/24/2004	10:49:11 AM		25.413	23.989	24.991	25.45	23.612		7.574	9.787	4.332	3.319	-1.215	-3.668		44.61	0.373	14.643	0.003		6.00	0.1	8.7	10.6	5.4	0.376	0.053	0.053	0.010	9.807	8.35	
452	8/24/2004	10:50:11 AM		25.412	24.003	24.946	25.494	23.671		2.41	9.625	4.106	-1.501	1.981	19.948		44.685	0.003	14.643	0.003		7.00	0.11667	8.5	10.6	0.5	0.031	0.000	0.000	0.001	0.946	0.81	
453	8/24/2004	10:51:11 AM		25.411	24.012	24.909	25.528	23.74		2.458	9.724	4.232	-1.741	1.984	48.822		44.599	0.003	14.643	0.003		8.00	0.13333	8.6	10.6	0.4	0.025	0.000	0.000	0.001	1.201	1.02	
454	8/24/2004	10:52:11 AM		25.262	24.013	24.835	25.539	23.745		4.164	9.697	4.19	0.062	0.23	0.328		44.714	0.162	14.643	0.004		9.00	0.15	8.6	10.7	2.1	0.146	0.023	0.023	0.011	11.027	9.38	
455	8/24/2004	10:53:11 AM		25.247	24.003	24.765	25.554	23.826		4.378	9.961	4.402	-0.034	0.259	0.374		44.814	0.175	14.643	0.003		10.00	0.16667	8.8	10.7	2.2	0.150	0.025	0.025	0.012	11.612	9.88	
456	8/24/2004	10:54:11 AM		25.247	24.008	24.77	25.549	23.936		4.137	9.718	4.029	0.368	0.331	0.429		44.579	0.159	14.643	0.003		11.00	0.18333	8.6	10.6	2.3	0.155	0.023	0.023	0.010	10.171	8.66	
457	8/24/2004	10:55:11 AM		25.213	24.019	24.826	25.515	23.977		4.195	9.834	4.135	0.179	0.328	0.464		44.7	0.151	14.643	0.003		12.00	0.2	8.7	10.6	2.2	0.151	0.022	0.022	0.010	9.933	8.45	
458	8/24/2004	10:56:11 AM		25.214	24.04	24.857	25.561	23.953		4.081	9.954	4.013	0.079	0.372	0.498		45.061	0.147	14.643	0.003		13.00	0.21667	8.8	10.7	2.1	0.143	0.021	0.021	0.010	10.159	8.65	
459	8/24/2004	10:57:11 AM		25.179	24.035	24.807	25.612	23.943		3.944	9.664	4.104	-0.063	0.369	0.547		44.56	0.139	14.643	0.003		14.00	0.23333	8.5	10.6	1.9	0.134	0.020	0.020	0.010	10.311	8.77	
460	8/24/2004	10:58:11 AM		25.105	24.046	24.868	25.582	24.064		6.873	9.619	4.218	2.802	-1.209	-3.24		45.179	0.426	14.643	0.003		15.00	0.25	8.5	10.8	4.8	0.334	0.061	0.061	0.013	12.654	10.77	
461	8/24/2004	10:59:11 AM		25.081	24.052	24.879	25.644	23.985		7.033	9.834	4.283	2.78	-1.215	-3.251		45.025	0.419	14.643	0.003		16.00	0.26667	8.7	10.7	4.9	0.338	0.060	0.060	0.012	12.268	10.44	
462	8/24/2004	11:00:11 AM		25.072	24.068	24.875	25.734	24.051		7.037	9.629	4.218	3.034	-1.206	-3.312		45.134	0.418	14.643	0.004		17.00	0.28333	8.5	10.8	5.0	0.347	0.060	0.060	0.012	11.926	10.15	
463	8/24/2004	11:01:11 AM		25.067	24.069	24.866	25.715	24.047		6.833	9.459	4.031	2.942	-1.212	-3.35		44.881	0.414	14.643	0.003		18.00	0.3	8.3	10.7	4.9	0.337	0.059	0.059	0.012	12.173	10.36	
464	8/24/2004	11:02:11 AM		25.054	24.075	24.857	25.706	24.048		7.138	9.785	4.218	2.973	-1.218	-3.399		45.094	0.407	14.643	0.003		19.00	0.31667	8.7	10.7	5.1	0.349	0.058	0.059	0.012	11.572	9.85	
465	8/24/2004	11:03:11 AM		25.044	24.075	24.882	25.766	24.048		7.213	9.896	4.043	3.124	-1.212	-3.41		45.094	0.407	14.643	0.003		20.00	0.33333	8.8	10.7	5.2	0.356	0.058	0.058	0.011	11.311	9.63	
466	8/24/2004	11:04:11 AM		25.044	24.086	24.873	25.832	24.034		7.273	9.737	4.454	2.94	-1.212	-3.456		44.998	0.4	14.643	0.003		21.00	0.35	8.6	10.7	5.1	0.352	0.057	0.057	0.011	11.255	9.58	
467	8/24/2004	11:05:11 AM		25.049	24.096	24.858	25.822	23.954		7.238	9.793	4.399	2.856	-1.212	-3.462		44.741	0.399	14.643	0.003		22.00	0.36667	8.7	10.7	5.0	0.348	0.057	0.057	0.011	11.364	9.67	
468	8/24/2004	11:06:11 AM		25.034	24.095	24.852	25.816	23.928		7.48	9.899	4.263	3.367	-1.212	-3.506		45.259	0.395	14.643	0.003		23.00	0.38333	8.8	10.8	5.4	0.374	0.057	0.057	0.010	10.470	8.91	
469	8/24/2004	11:07:11 AM		25.044	24.105	24.892	25.801	23.948		7.476	9.789	4.277	3.323	-1.209	-3.523		45.211	0.392	14.643	0.004		24.00	0.4	8.7	10.8	5.4	0.372	0.056	0.056	0.010	10.425	8.87	
470	8/24/2004	11:08:11 AM		25.038	24.1	24.871	25.746	23.897		7.261	9.569	4.269	3.126	-1.212	-3.563		44.958	0.387	14.643	0.003		25.00	0.41667	8.4	10.7	5.2	0.358	0.055	0.056	0.011	10.707	9.11	
471	8/24/2004	11:09:11 AM		25.087	24.118	25.521	25.719	23.796		8.582	9.755	4.223	4.581	-1.212	-4.506		45.2	0.252	14.643	0.003		26.00	0.43333	8.6	10.8	6.6	0.454	0.036	0.036	0.005	5.402	4.60	
472	8/24/2004	11:10:11 AM		25.16	24.111	25.929	25.672	23.674		8.544	9.635	4.246	4.36	-1.215	-4.436		44.929	0.25	14.643	0.003		27.00	0.45	8.5	10.7	6.5	0.445	0.036	0.035	0.005	5.405	4.60	
473	8/24/2004	11:11:11 AM		25.249	24.126	25.688	25.707	23.668		8.696	9.801	4.326	4.542	-1.212	-4.428		45.152	0.253	14.643	0.003		28.00	0.46667	8.7	10.8	6.6	0.456	0.036	0.036	0.005	5.368	4.57	
474																																	
475																																	
476		Averages		25.1	24.1	25.1	25.7	23.9		7.5	9.7	4.2	3.3	-1.2	-3.6		45.1	0.4	14.6	0.0				8.6	10.7	5.4	0.4	0.1	0.1	0.0	10.2	8.6	
477		Maximum		25.2	24.1	25.9	25.8	24.1		8.7	9.9	4.5	4.6	-1.2	-3.2		45.3	0.4	14.6	0.0				8.8	10.8	6.6	0.5	0.1	0.1	0.0	12.7	10.8	
478		Median		25.1	24.1	24.9	25.7	24.0		7.2	9.8	4.3	3.1	-1.2	-3.5		45.1	0.4	14.6	0.0				8.6	10.7	5.1	0.4	0.1	0.1	0.0	11.3	9.6	
479		Minimum		25.0	24.0	24.9	25.6	23.7		6.8	9.5	4.0	2.8	-1.2	-4.5		44.7	0.3	14.6	0.0				8.3	10.7	4.8	0.3	0.0	0.0	0.0	5.4	4.6	
480		2 x Std Dev		0.114	0.047	0.709	0.138	0.262		1.236	0.247	0.218	1.254	0.006	0.882		0.282	0.128	0.000	0.001				0.247	0.067	1.239	0.085	0.018	0.019	0.005	5.141	4.375	
481	Number of Points Used*			14	14	14	14	14		14	14	14	14	14	14		14	14	14	14				14	14	14	14	14	14	14	14	14	
482		* Backpulse points in box are not included																															
483																												Calc	0.0443				

CAMPAIGN IV NEW GKN BASELINE #5 WITH 0.1 M NAOH



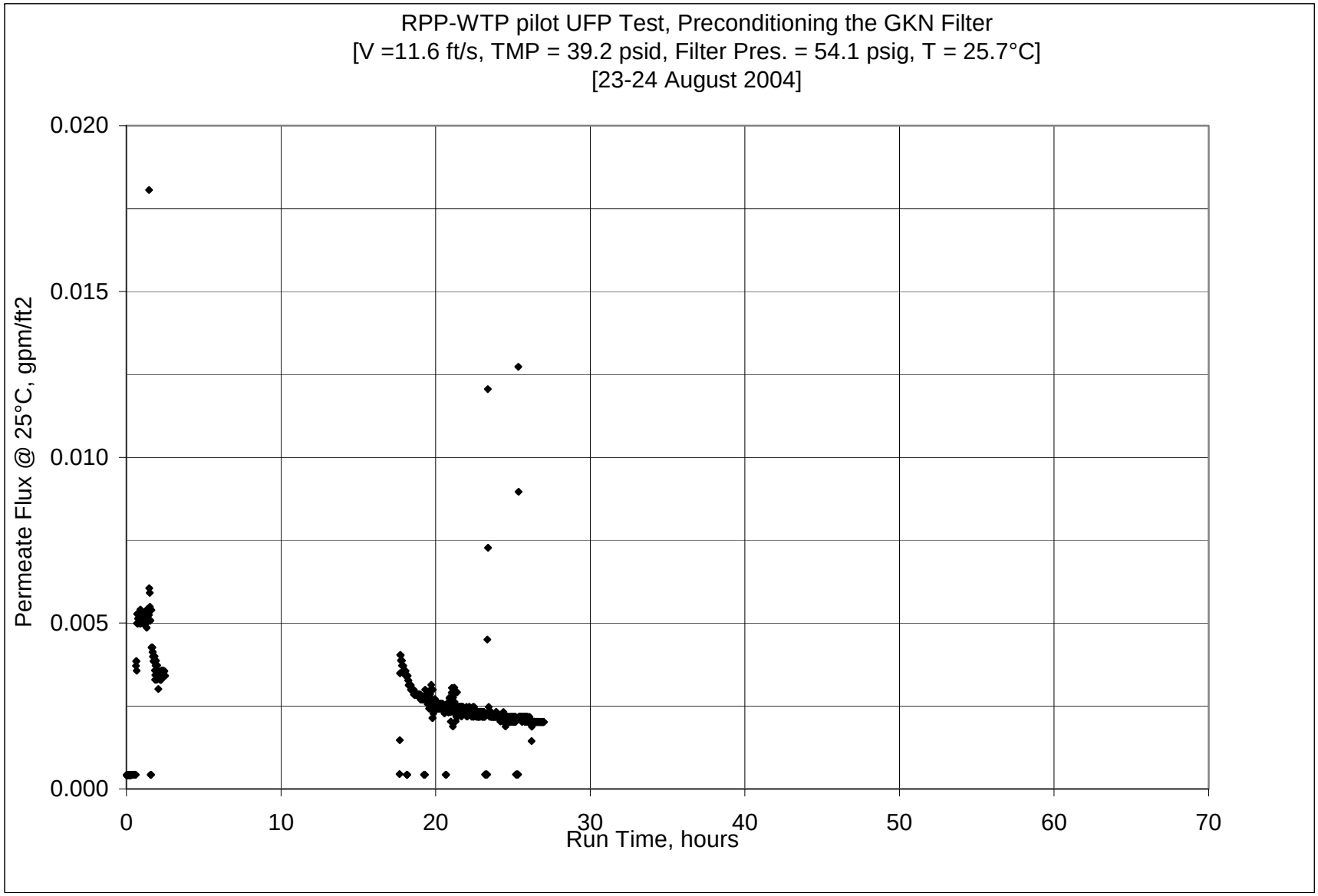
CAMPAIGN IV NEW GKN BASELINE #5 WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux		<< PERMIABILITY		>>	
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
485	Tuesday, 8/24/04																																
486	Baseline base2; 0.1 M NaOH																																
487	8/24/2004	11:13:15 AM		25.563	24.124	25.547	25.725	23.827		11.448	14.678	4.409	7.202	-1.215	-2.962		44.445	0.465	14.643	0.003		0.00	0	13.6	10.6	9.3	0.643	0.067	0.066	0.007	7.030	5.98	
488	8/24/2004	11:14:15 AM		25.617	24.134	25.496	25.805	23.841		11.817	15.076	4.091	7.918	-1.209	-2.896		44.259	0.471	14.643	0.003		1.00	0.01667	14.0	10.5	9.9	0.680	0.067	0.066	0.007	6.739	5.74	
489	8/24/2004	11:15:15 AM		25.627	24.129	25.446	25.835	23.981		12.031	15.511	4.282	7.873	-1.212	-2.768		44.841	0.49	14.643	0.003		2.00	0.03333	14.4	10.7	10.0	0.686	0.070	0.069	0.007	6.961	5.92	
490	8/24/2004	11:16:15 AM		25.613	24.144	25.452	25.891	24.012		2.518	15.408	4.268	-1.629	7.774	19.896		44.72	0.003	14.643	0.003		3.00	0.05	14.3	10.7	0.4	0.031	0.000	0.000	0.001	0.954	0.81	
491	8/24/2004	11:17:15 AM		25.574	24.145	25.427	25.906	24.013		2.613	15.594	4.263	-1.67	7.803	30.54		44.52	0.003	14.643	0.003		4.00	0.06667	14.5	10.6	0.5	0.033	0.000	0.000	0.001	0.900	0.77	
492	8/24/2004	11:18:15 AM		25.484	24.156	25.443	25.917	24.029		8.916	15.501	4.233	4.783	1.249	0.336		44.996	0.503	14.643	0.004		5.00	0.08333	14.4	10.7	6.8	0.472	0.072	0.071	0.010	10.383	8.84	
493	8/24/2004	11:19:15 AM		25.596	24.162	25.439	25.988	24.08		8.916	15.532	4.258	4.733	1.289	0.466		44.819	0.48	14.643	0.003		6.00	0.1	14.4	10.7	6.8	0.471	0.069	0.068	0.010	9.946	8.46	
494	8/24/2004	11:20:15 AM		25.601	24.168	25.4	25.999	24.126		10.235	15.397	4.149	6.125	-0.257	-1.621		45.111	0.597	14.643	0.003		7.00	0.11667	14.3	10.7	8.2	0.564	0.085	0.085	0.010	10.332	8.79	
495	8/24/2004	11:21:15 AM		25.602	24.174	25.381	26.05	24.132		10.533	15.493	4.26	6.412	-0.346	-1.693		45.092	0.594	14.643	0.003		8.00	0.13333	14.4	10.7	8.5	0.584	0.085	0.084	0.010	9.930	8.45	
496	8/24/2004	11:22:15 AM		25.594	24.186	25.353	26.067	24.144		11.373	17.101	4.122	7.422	0.484	-1.167		43.59	0.643	14.643	0.003		9.00	0.15	16.0	10.4	9.4	0.648	0.092	0.091	0.010	9.699	8.25	
497	8/24/2004	11:23:15 AM		25.581	24.192	25.375	26.084	24.285		11.751	18.631	4.387	7.315	1.532	-0.537		45.388	0.696	14.643	0.003		10.00	0.16667	17.5	10.8	9.5	0.657	0.100	0.099	0.010	10.343	8.80	
498	8/24/2004	11:24:15 AM		25.577	24.189	25.416	26.095	24.327		12.035	18.929	4.093	8.021	1.59	-0.499		44.399	0.7	14.643	0.003		11.00	0.18333	17.8	10.6	10.0	0.691	0.100	0.099	0.010	9.877	8.41	
499	8/24/2004	11:25:15 AM		25.584	24.191	25.423	26.147	24.259		12.217	19.081	4.183	8.21	1.645	-0.464		44.793	0.703	14.643	0.003		12.00	0.2	18.0	10.7	10.2	0.704	0.101	0.099	0.010	9.738	8.29	
500	8/24/2004	11:26:15 AM		25.595	24.196	25.434	26.173	24.239		12.381	19.205	4.174	8.333	1.472	-0.566		45.15	0.696	14.643	0.003		13.00	0.21667	18.1	10.8	10.4	0.714	0.100	0.098	0.010	9.504	8.09	
501	8/24/2004	11:27:15 AM		25.605	24.202	25.429	26.178	24.2		12.236	18.832	4.189	8.128	1.356	-0.629		44.952	0.689	14.643	0.003		14.00	0.23333	17.7	10.7	10.2	0.702	0.099	0.097	0.010	9.572	8.15	
502	8/24/2004	11:28:15 AM		25.64	24.222	25.449	26.138	24.165		12.414	18.993	4.152	8.37	1.278	-0.684		45.534	0.685	14.643	0.003		15.00	0.25	17.9	10.8	10.4	0.716	0.098	0.097	0.009	9.319	7.93	
503	8/24/2004	11:29:15 AM		25.655	24.232	25.474	26.138	24.065		12.367	19.037	4.176	8.21	1.243	-0.73		44.977	0.682	14.643	0.003		16.00	0.26667	17.9	10.7	10.3	0.709	0.098	0.096	0.009	9.364	7.97	
504	8/24/2004	11:30:15 AM		25.67	24.232	25.514	26.088	24.025		12.468	19.024	4.109	8.429	1.121	-0.759		45.061	0.678	14.643	0.003		17.00	0.28333	17.9	10.7	10.4	0.720	0.097	0.096	0.009	9.157	7.79	
505	8/24/2004	11:31:15 AM		25.675	24.237	25.534	26.093	23.959		12.576	19.161	4.289	8.29	1.121	-0.771		44.91	0.677	14.643	0.003		18.00	0.3	18.0	10.7	10.4	0.719	0.097	0.095	0.009	9.152	7.79	
506	8/24/2004	11:32:15 AM		25.699	24.246	25.528	26.062	23.913		12.528	18.919	4.162	8.425	1.052	-0.811		44.833	0.675	14.643	0.003		19.00	0.31667	17.8	10.7	10.5	0.722	0.097	0.095	0.009	9.088	7.73	
507	8/24/2004	11:33:15 AM		25.728	24.26	25.552	26.051	23.847		12.354	18.537	4.283	8.138	0.89	-0.921		45.037	0.664	14.643	0.003		20.00	0.33333	17.4	10.7	10.2	0.706	0.095	0.094	0.009	9.135	7.77	
508	8/24/2004	11:34:15 AM		25.721	24.253	25.53	26.024	23.83		12.132	18.162	4.155	8.093	0.67	-1.051		45.413	0.653	14.643	0.004		21.00	0.35	17.0	10.8	10.1	0.697	0.093	0.092	0.009	9.108	7.75	
509	8/24/2004	11:35:15 AM		25.726	24.253	25.525	26.019	23.926		12.224	18.282	4.136	8.167	0.664	-1.066		45.083	0.652	14.643	0.003		22.00	0.36667	17.2	10.7	10.2	0.703	0.093	0.092	0.009	9.021	7.68	
510	8/24/2004	11:36:15 AM		25.746	24.278	25.575	26.039	23.996		12.263	18.084	4.144	8.005	0.554	-1.129		44.962	0.647	14.643	0.003		23.00	0.38333	17.0	10.7	10.1	0.699	0.093	0.091	0.009	8.994	7.65	
511	8/24/2004	11:37:15 AM		25.747	24.284	25.591	26.07	24.046		12.483	18.173	4.084	8.682	0.484	-1.167		45.061	0.643	14.643	0.003		24.00	0.4	17.0	10.7	10.6	0.730	0.092	0.091	0.009	8.556	7.28	
512	8/24/2004	11:38:15 AM		25.758	24.29	25.602	26.096	24.082		12.659	18.542	4.312	8.364	0.487	-1.17		45.038	0.643	14.643	0.004		25.00	0.41667	17.4	10.7	10.5	0.725	0.092	0.091	0.009	8.611	7.33	
513	8/24/2004	11:39:15 AM		25.773	24.285	25.662	26.116	24.213		13.482	19.35	5.955	7.582	0.369	-1.228		55.089	0.637	14.643	0.003		26.00	0.43333	18.2	13.1	10.5	0.726	0.091	0.090	0.008	8.499	7.23	
514	8/24/2004	11:40:15 AM		25.86	24.297	25.669	26.133	24.339		18.356	38.974	3.213	15.261	15.377	7.873		38.769	1.205	14.643	0.003		27.00	0.45	37.8	9.2	16.8	1.159	0.173	0.169	0.010	10.072	8.57	

CAMPAIGN IV NEW GKN BASELINE #5 WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
515	8/24/2004	11:41:15 AM		26.03	24.302	25.939	26.198	24.445		20.204	48.359	3.816	16.608	23.205	12.611		43.434	1.205	14.643	0.004		28.00	0.46667	47.2	10.3	18.4	1.269	0.173	0.168	0.009	9.129	7.77	
516	8/24/2004	11:42:15 AM		26.315	24.298	26.285	26.244	24.586		29.377	50.948	3.537	26.475	16.199	8.538		42.57	1.205	4.74	0.004		29.00	0.48333	49.8	10.1	27.9	1.925	0.679	0.655	0.023	23.440	19.95	
517	8/24/2004	11:43:15 AM		26.746	24.294	26.551	26.28	24.622		28.271	36.704	5.925	22.941	2.528	-4.014		52.851	0.003	2.929	0.003		30.00	0.5	35.6	12.6	25.6	1.765	0.419	0.402	0.016	15.680	13.34	
518	8/24/2004	11:44:15 AM		26.868	24.316	26.733	26.347	24.634		23.292	27.313	4.281	19.479	-1.212	-4.726		47.397	0.003	1.948	0.003		31.00	0.51667	26.2	11.3	21.4	1.474	0.279	0.266	0.012	12.423	10.57	
519	8/24/2004	11:45:15 AM		26.908	24.322	26.743	26.408	24.5		22.854	26.136	5.011	18.132	-1.212	-4.804		50.346	0.003	1.748	0.003		32.00	0.53333	25.0	12.0	20.5	1.413	0.250	0.238	0.012	11.630	9.90	
520	8/24/2004	11:46:15 AM		26.934	24.333	26.76	26.424	24.476		21.743	24.49	4.186	17.907	-1.215	-4.882		46.012	0.003	1.597	0.003		33.00	0.55	23.4	11.0	19.8	1.367	0.229	0.218	0.011	10.978	9.34	
521	8/24/2004	11:47:15 AM		26.929	24.343	26.73	26.449	24.366		21.919	24.411	4.069	18.137	-1.212	-4.89		44.914	0.003	1.497	0.003		34.00	0.56667	23.3	10.7	20.0	1.381	0.214	0.204	0.010	10.195	8.68	
522	8/24/2004	11:48:15 AM		26.914	24.354	26.69	26.419	24.316		21.9	24.165	4.149	18.02	-1.212	-4.908		44.645	0.003	1.451	0.003		35.00	0.58333	23.0	10.6	20.0	1.376	0.208	0.198	0.010	9.927	8.45	
523	8/24/2004	11:49:15 AM		26.895	24.359	26.645	26.399	24.216		22.07	24.445	3.976	18.411	-1.212	-4.913		44.389	0.003	1.43	0.005		36.00	0.6	23.3	10.6	20.2	1.396	0.205	0.196	0.010	9.659	8.22	
524	8/24/2004	11:50:15 AM		26.879	24.363	26.624	26.364	24.125		22.207	24.451	3.952	18.483	-1.212	-4.925		44.211	0.003	1.407	0.004		37.00	0.61667	23.3	10.5	20.3	1.403	0.201	0.192	0.009	9.461	8.05	
525	8/24/2004	11:51:15 AM		26.858	24.367	26.594	26.353	24.084		21.822	23.966	4.085	17.87	-1.212	-4.945		45.292	0.003	1.351	0.005		38.00	0.63333	22.8	10.8	19.8	1.368	0.193	0.185	0.009	9.320	7.93	
526	8/24/2004	11:52:15 AM		26.843	24.377	26.578	26.312	24.069		21.873	23.773	4.053	18.098	-1.212	-4.963		44.889	0.003	1.323	0.004		39.00	0.65	22.6	10.7	20.0	1.378	0.189	0.181	0.009	9.068	7.72	
527	8/24/2004	11:53:15 AM		26.816	24.36	26.527	26.296	24.077		21.678	23.605	4.044	17.9	-1.215	-4.963		44.954	0.003	1.312	0.006		40.00	0.66667	22.5	10.7	19.8	1.364	0.188	0.180	0.009	9.094	7.74	
528	8/24/2004	11:54:15 AM		26.806	24.38	26.531	26.3	24.197		22.118	23.939	4.009	18.52	-1.215	-4.96		44.539	0.003	1.317	0.005		41.00	0.68333	22.8	10.6	20.3	1.401	0.189	0.181	0.009	8.890	7.57	
529	8/24/2004	11:55:15 AM		26.81	24.394	26.56	26.335	24.136		22.261	24.271	4.062	18.448	-1.206	-4.968		45.013	0.003	1.302	0.005		42.00	0.7	23.1	10.7	20.4	1.403	0.186	0.178	0.009	8.766	7.46	
530	8/24/2004	11:56:15 AM		26.796	24.4	26.561	26.325	24.237		22.336	24.306	4.049	18.59	-1.209	-4.963		44.954	0.003	1.298	0.005		43.00	0.71667	23.2	10.7	20.5	1.411	0.186	0.178	0.009	8.693	7.40	
531	8/24/2004	11:57:15 AM		26.776	24.405	26.551	26.35	24.292		22.149	23.955	4.107	18.331	-1.209	-4.971		44.892	0.003	1.292	0.005		44.00	0.73333	22.8	10.7	20.2	1.395	0.185	0.177	0.009	8.750	7.45	
532	8/24/2004	11:58:15 AM		26.762	24.41	26.482	26.461	24.268		22.097	23.928	4.098	18.319	-1.212	-4.96		44.616	0.003	1.292	0.005		45.00	0.75	22.8	10.6	20.2	1.393	0.185	0.177	0.009	8.781	7.47	
533	8/24/2004	11:59:15 AM		26.718	24.407	26.363	26.562	24.299		22.106	23.881	4.08	18.354	-1.212	-4.971		44.904	0.003	1.282	0.004		46.00	0.76667	22.8	10.7	20.2	1.395	0.184	0.177	0.009	8.733	7.43	
534	8/24/2004	12:00:15 PM		26.654	24.422	26.259	26.643	24.325		22.274	24.103	4.278	18.161	-1.209	-4.971		44.827	0.003	1.278	0.004		47.00	0.78333	23.0	10.7	20.2	1.394	0.183	0.177	0.009	8.736	7.43	
535	8/24/2004	12:01:15 PM		26.566	24.429	26.146	26.67	24.402		22.075	23.81	4.002	18.418	-1.212	-4.963		44.814	0.003	1.275	0.004		48.00	0.8	22.7	10.7	20.2	1.396	0.183	0.177	0.009	8.731	7.43	
536	8/24/2004	12:02:15 PM		26.437	24.411	25.982	26.666	24.523		29.752	34.004	3.661	26.487	-1.218	-4.728		42.23	0.003	2.004	0.004		49.00	0.81667	32.9	10.1	28.1	1.939	0.287	0.279	0.010	9.926	8.45	
537	8/24/2004	12:03:15 PM		26.42	24.433	26.055	26.739	24.596		31.679	37.747	3.971	28.313	0.262	-4.486		44.95	0.003	2.43	0.004		50.00	0.83333	36.6	10.7	30.0	2.068	0.348	0.338	0.011	11.260	9.58	
538	8/24/2004	12:04:15 PM		26.457	24.44	26.137	26.751	24.613		31.507	37.625	3.816	28.361	0.288	-4.468		44.72	0.003	2.441	0.005		51.00	0.85	36.5	10.7	29.9	2.064	0.349	0.338	0.011	11.308	9.62	
539	8/24/2004	12:05:15 PM		26.503	24.457	26.193	26.742	24.564		31.579	37.645	3.843	28.207	0.328	-4.474		44.62	0.003	2.443	0.004		52.00	0.86667	36.5	10.6	29.9	2.061	0.350	0.338	0.011	11.315	9.63	
540	8/24/2004	12:06:15 PM		26.539	24.452	26.234	26.748	24.5		32.085	38.218	4.151	28.396	0.204	-4.494		45.891	0.003	2.417	0.005		53.00	0.88333	37.1	10.9	30.2	2.085	0.346	0.334	0.011	11.054	9.41	
541	8/24/2004	12:07:15 PM		26.579	24.453	26.259	26.694	24.495		31.463	37.154	4.007	28.063	-0.028	-4.532		45.023	0.003	2.362	0.005		54.00	0.9	36.0	10.7	29.8	2.052	0.338	0.326	0.011	10.968	9.33	
542	8/24/2004	12:08:15 PM		26.63	24.479	26.335	26.719	24.361		31.77	37.449	3.944	28.385	-0.031	-4.535		44.837	0.003	2.349	0.005		55.00	0.91667	36.3	10.7	30.1	2.074	0.336	0.324	0.011	10.770	9.17	
543	8/24/2004	12:09:15 PM		26.664	24.478	26.344	26.684	24.375		31.841	37.486	3.831	28.515	-0.022	-4.526		44.17	0.003	2.362	0.004		56.00	0.93333	36.4	10.5	30.2	2.081	0.338	0.326	0.011	10.791	9.18	
544	8/24/2004	12:10:15 PM		26.678	24.472	26.353	26.647	24.324		31.739	37.434	4.13	28.055	-0.173	-4.552		45.259	0.003	2.322	0.005		57.00	0.95	36.3	10.8	29.9	2.061	0.332	0.320	0.011	10.705	9.11	
545	8/24/2004	12:11:15 PM		26.667	24.481	26.272	26.701	24.227		31.814	37.283	4.115	28.209	-0.306	-4.569		45.35	0.003	2.295	0.005		58.00	0.96667	36.2	10.8	30.0	2.069	0.329	0.317	0.011	10.564	8.99	
546	8/24/2004	12:12:15 PM		26.616	24.49	26.176	26.76	24.177		31.907	37.478	4.099	28.332	-0.355	-4.572		45.215	0.003	2.286	0.006		59.00	0.98333	36.4	10.8	30.1	2.077	0.327	0.317	0.011	10.513	8.95	
547	8/24/2004	12:13:15 PM		26.535	24.484	26.065	26.734	24.105		32.025	37.39	4.062	28.447	-0.349	-4.575		45.021	0.003	2.284	0.005		60.00	1	36.3	10.7	30.2	2.085	0.327	0.317	0.010	10.496	8.93	
548	8/24/2004	12:14:15 PM		26.469	24.507	26.019	26.788	24.149		31.723	37.032	4.042	28.158	-0.422	-4.575		45.28	0.003	2.27	0.004		61.00	1.01667	35.9	10.8	29.9	2.064	0.325	0.316	0.011	10.548	8.98	
549	8/24/2004	12:15:15 PM		26.388	24.497	25.933	26.727	24.198		32.34	37.592	4.059	28.79	-0.448	-4.584		45.158	0.003	2.265	0.005		62.00	1.03333	36.5	10.8	30.6	2.107	0.324	0.316	0.010	10.335	8.80	
550	8/24/2004	12:16:15 PM		26.322	24.495	25.882	26.741	24.057		31.996	37.276	3.961	28.644	-0.442	-4.584		44.837	0.003	2.262	0.005		63.00	1.05	36.2	10.7	30.3	2.090	0.324	0.316	0.010	10.420	8.87	
551	8/24/2004	12:17:15 PM		26.251	24.504	25.81	26.714	24.011		31.953	37.227	3.947	28.543	-0.471	-4.587		44.91	0.003	2.252	0.005		64.00	1.06667	36.1	10.7	30.2	2.085	0.322	0.315	0.010	10.419	8.87	
552	8/24/2004	12:18:15 PM		26.19	24.508	25.74	26.689	23.89		32.098	37.19	3.979	28.736	-0.474	-4.593		44.812	0.003	2.246	0.005		65.00	1.08333	36.1	10.7	30.4	2.097	0.322	0.315	0.010	10.354	8.81	
553	8/24/2004	12:19:15 PM		26.129	24.502	25.673	26.657	23.949		32.272	37.645	4.045	28.591	-0.532	-4.59		44.762	0.003	2.245	0.004		66.00	1.1	36.5	10.7	30.4	2.098	0.321	0.315	0.010	10.364	8.82	
554	8/24/2004	12:20:15 PM		26.077	24.5	25.616	26.64	23.876		32.017	37.231	3.9	28.552	-0.535	-4.595		44.716	0.004	2.239	0.004		67.00	1.11667	36.1	10.7	30.3	2.088	0.321	0.315	0.010	10.403	8.85	
555																																	
556																																	
557	A	Averages		25.7	24.2	25.5	26.1	24.1		12.4	18.8	4.3	8.2	1.0	-0.9		45.6	0.7	14.6	0.0				17.6	10.9	10.3	0.7	0.1	0.1	0.0	9.2	7.8	
558		Maximum		25.8	24.3	25.7	26.2	24.3		13.5	19.4	6.0	8.7	1.6	-0.5		55.1	0.7	14.6	0.0				18.2	13.1	10.6	0.7	0.1	0.1	0.0	9.9	8.4	
559		Median		25.7	24.2	25.5	26.1	24.1		12.4	18.9	4.2	8.2	1.1	-0.8		45.0	0.7	14.6	0.0				17.8	10.7	10.3	0.7	0.1	0.1	0.0	9.1	7.8	
560		Minimum		25.6	24.2	25.4	26.0	23.8		12.0	18.1	4.1	7.6	0.4	-1.2		44.4	0.6	14.6	0.0				17.0	10.6	10.0	0.7	0.1	0.1	0.0	8.5	7.2	
561		2 x Std Dev		0.128	0.066	0.141	0.097	0.296		0.633	0.799	0.871	0.471	0.813	0.494		4.902	0.043	0.000	0.001				0.799	1.168	0.326	0.023	0.006	0.006	0.001	0.768	0.654	
562		Number of Points Used*		16	16	16	16	16		16	16	16	16	16	16		16	16	16	16				16	16	16	16	16	16	16	16	16	
563		* Backpulse points in box are not included																															
564																																	
565																																	
566	B	Averages		26.8	24.4	26.5	26.4	24.3		22.1	24.2	4.1	18.2	-1.2	-4.9		45.2	0.0	1.4	0.0				22.9	10.7	20.2	1.4	0.2	0.2	0.0	9.0	7.7	
567		Maximum		26.9	24.4	26.8	26.7	24.5		22.9	26.1	5.0	18.6	-1.2	-4.8		50.3	0.0	1.7	0.0				23.3	10.8	20.5	1.4	0.2	0.2	0.0	9.9	8.4	
568		Median		26.8	24.4	26.6	26.4	24.3		22.1	24.1	4.1	18.3	-1.2	-5.0		44.9	0.0	1.3	0.0				22.8	10.7	20.2	1.4	0.2	0.2	0.0	8.8	7.5	
569		Minimum		26.6	24.3	26.1	26.3	24.1		21.7	23.6	4.0	17.9	-1.2	-5.0		44.2	0.0	1.3	0.0				22.5	10.5	19.8	1.4	0.2	0.2	0.0	8.7	7.4	
570		2 x Std Dev		0.195	0.061	0.321	0.220	0.260		0.531	1.092	0.466	0.448	0.005	0.088		2.687	0.000	0.255	0.002				0.493	0.127	0.387	0.027	0.016	0.014	0.001	0.771	0.656	
571		Number of Points Used*		17	17	17	17	17		17	17	17	17	17	17		17	17	17	17				14	14	14	14	14	14	14	14	14	
572		* Backpulse points in box are not included																															
573																																	
574																																	
575	C	Averages		26.5	24.5	26.1	26.7	24.2		31.9	37.5	4.0	28.4	-0.2	-4.5		45.0	0.0	2.3	0.0				36.2	10.7	30.2	2.1	0.3	0.3	0.0	10.5	9.0	
576		Maximum		26.7	24.5	26.4	26.8	24.6		32.3	38.2	4.2	28.8	0.3	-4.5		45.9	0.0	2.4	0.0				36.5	10.8	30.6	2.1	0.3	0.3	0.0	11.0	9.3	
577		Median		26.5	24.5	26.1	26.7	24.2		31.9	37.4	4.0	28.4	-0.3	-4.6		44.9	0.0	2.3	0.0				36.2	10.7	30.2	2.1	0.3	0.3	0.0	10.5	8.9	
578		Minimum		26.1	24.4	25.6	26.6	23.9		31.5	37.0	3.8	28.1	-0.5	-4.6		44.2	0.0	2.2	0.0				35.9	10.5	29.8	2.1	0.3	0.3	0.0	10.3	8.8	
579		2 x Std Dev		0.368	0.046	0.461	0.079	0.471		0.476	0.537	0.200	0.421	0.593	0.084		0.710	0.000	0.141	0.001				0.339	0.141	0.434	0.030	0.012	0.008	0.000	0.372	0.317	
580		Number of Points Used*		18	18	18	18	18		18	18	18	18	18	18		18	18	18	18				14	14	14	14	14	14	14	14	14	
581		* Backpulse points in box are not included																										Calc	0.010				
582																												Avg St Dv (all pts)	0.010				
583																												Max St Dv (all pts)	0.014				
584																												Min St Dv (all pts)	0.006				

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT



CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 40.88 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	8/24/2004	1:44:56 PM	0	26.086	24.569	29.415	27.194	23.945	#	45.531	48.544	9.93	33.448	-0.08	0.108		46.902	0.003	14.643	0.007		0	0	47.4	11.2	39.5	2.723	0.000	0.000	0.000	0.011	0.01	
18	8/24/2004	1:45:56 PM	0	26.104	24.577	29.374	27.362	23.948	#	45.51	48.593	10.048	33.44	-0.077	0.105		47.399	0.003	14.643	0.005		1.00	0.01667	47.5	11.3	39.5	2.722	0.000	0.000	0.000	0.011	0.01	
19	8/24/2004	1:46:56 PM	0	26.107	24.565	29.207	27.529	24.046	#	45.062	48.463	10.224	32.913	-0.08	0.099		47.082	0.003	14.643	0.005		2.00	0.03333	47.3	11.2	39.0	2.688	0.000	0.000	0.000	0.011	0.01	
20	8/24/2004	1:47:56 PM	0	26.131	24.564	29.018	27.713	24.131	#	46.062	49.485	10.546	33.549	-0.083	0.108		48.488	0.003	14.643	0.005		3.00	0.05	48.4	11.5	39.8	2.744	0.000	0.000	0.000	0.010	0.01	
21	8/24/2004	1:48:56 PM	0	26.165	24.563	28.768	27.712	24.21	#	46.103	49.41	10.367	34.064	-0.097	0.105		48.498	0.003	14.643	0.005		4.00	0.06667	48.3	11.6	40.1	2.764	0.000	0.000	0.000	0.010	0.01	
22	8/24/2004	1:49:56 PM	0	26.185	24.583	28.509	27.597	24.3	#	45.97	49.313	10.472	33.857	-0.083	0.111		48.932	0.003	14.643	0.005		5.00	0.08333	48.2	11.7	39.9	2.752	0.000	0.000	0.000	0.010	0.01	
23	8/24/2004	1:50:56 PM	0	26.21	24.599	28.235	27.483	24.395	#	46.008	49.536	10.615	33.916	-0.103	0.111		49.345	0.003	14.643	0.005		6.00	0.1	48.4	11.8	40.0	2.755	0.000	0.000	0.000	0.010	0.01	
24	8/24/2004	1:51:56 PM	0	26.227	24.605	27.943	27.4	24.442	#	45.705	49.321	10.612	33.672	-0.083	0.099		49.063	0.003	14.643	0.005		7.00	0.11667	48.2	11.7	39.7	2.736	0.000	0.000	0.000	0.010	0.01	
25	8/24/2004	1:52:56 PM	0	26.237	24.616	27.664	27.315	24.497	#	45.939	49.578	10.47	34.208	-0.1	0.108		48.342	0.003	14.643	0.005		8.00	0.13333	48.5	11.5	40.1	2.763	0.000	0.000	0.000	0.010	0.01	
26	8/24/2004	1:53:56 PM	0	26.254	24.628	27.372	27.297	24.509	#	45.914	49.648	10.46	34.333	-0.08	0.105		48.907	0.003	14.643	0.005		9.00	0.15	48.5	11.6	40.1	2.766	0.000	0.000	0.000	0.010	0.01	
27	8/24/2004	1:54:56 PM	0	26.271	24.645	27.089	27.344	24.486	#	45.408	49.481	10.362	33.797	-0.103	0.105		47.482	0.003	14.643	0.005		10.00	0.16667	48.4	11.3	39.6	2.730	0.000	0.000	0.000	0.010	0.01	
28	8/24/2004	1:55:56 PM	0	26.282	24.651	26.831	27.37	24.488	#	45.506	49.7	10.598	33.77	-0.08	0.105		48.473	0.003	14.643	0.006		11.00	0.18333	48.6	11.5	39.6	2.733	0.000	0.000	0.000	0.010	0.01	
29	8/24/2004	1:56:56 PM	0	26.279	24.647	26.538	27.277	24.479	#	45.817	49.924	10.61	34.257	-0.109	0.102		48.488	0.003	14.643	0.005		12.00	0.2	48.8	11.5	40.0	2.760	0.000	0.000	0.000	0.010	0.01	
30	8/24/2004	1:57:56 PM	0	26.301	24.674	26.315	27.334	24.486	#	45.416	49.841	10.488	34.019	-0.077	0.102		49.142	0.003	14.643	0.007		13.00	0.21667	48.7	11.7	39.7	2.738	0.000	0.000	0.000	0.010	0.01	
31	8/24/2004	1:58:56 PM	0	26.317	24.681	26.097	27.295	24.507	#	45.321	49.58	10.595	33.969	-0.103	0.102		48.327	0.003	14.643	0.006		14.00	0.23333	48.5	11.5	39.6	2.733	0.000	0.000	0.000	0.011	0.01	
32	8/24/2004	1:59:56 PM	0	26.323	24.692	25.953	27.267	24.494	#	44.958	49.526	10.595	33.647	-0.086	0.102		48.068	0.003	14.643	0.007		15.00	0.25	48.4	11.4	39.3	2.710	0.000	0.000	0.000	0.011	0.01	
33	8/24/2004	2:00:56 PM	0	26.336	24.705	25.831	27.359	24.566	#	45.197	49.63	10.47	34.197	-0.086	0.117		47.751	0.003	14.643	0.005		16.00	0.26667	48.5	11.4	39.7	2.737	0.000	0.000	0.000	0.011	0.01	
34	8/24/2004	2:01:56 PM	0	26.342	24.711	25.677	27.415	24.533	#	45.441	50.09	10.507	34.351	-0.106	0.102		47.47	0.003	14.643	0.006		17.00	0.28333	49.0	11.3	39.9	2.751	0.000	0.000	0.000	0.011	0.01	
35	8/24/2004	2:02:56 PM	0	26.36	24.729	25.51	27.458	24.555	#	47.291	51.758	10.71	36.221	-0.083	0.105		48.763	0.003	14.643	0.006		18.00	0.3	50.6	11.6	41.8	2.879	0.000	0.000	0.000	0.010	0.01	
36	8/24/2004	2:03:56 PM	0	26.362	24.741	25.491	27.425	24.502	#	46.52	51.387	11.442	34.595	-0.086	0.105		50.694	0.003	14.643	0.006		19.00	0.31667	50.3	12.1	40.6	2.796	0.000	0.000	0.000	0.010	0.01	
37	8/24/2004	2:04:56 PM	0	26.378	24.747	25.443	27.316	24.494	#	46.785	51.537	11.132	35.478	-0.106	0.102		50.334	0.003	14.643	0.006		20.00	0.33333	50.4	12.0	41.1	2.836	0.000	0.000	0.000	0.010	0.01	
38	8/24/2004	2:05:56 PM	0	26.39	24.759	25.415	27.274	24.536	#	46.634	51.63	11.351	35.131	-0.083	0.099		50.2	0.003	14.643	0.007		21.00	0.35	50.5	12.0	40.9	2.819	0.000	0.000	0.000	0.010	0.01	
39	8/24/2004	2:06:56 PM	0	26.406	24.781	25.351	27.345	24.512	#	47.324	52.444	10.739	36.461	-0.095	0.108		49.059	0.003	14.643	0.006		22.00	0.36667	51.3	11.7	41.9	2.888	0.000	0.000	0.000	0.010	0.01	
40	8/24/2004	2:07:56 PM	0	26.408	24.783	25.288	27.297	24.484	#	47.393	52.635	10.873	36.403	-0.103	0.099		48.871	0.003	14.643	0.007		23.00	0.38333	51.5	11.6	41.9	2.889	0.000	0.000	0.000	0.010	0.01	
41	8/24/2004	2:08:56 PM	0	26.415	24.789	25.259	27.433	24.54	#	47.109	52.527	10.768	36.338	-0.103	0.102		48.592	0.003	14.643	0.006		24.00	0.4	51.4	11.6	41.7	2.877	0.000	0.000	0.000	0.010	0.01	
42	8/24/2004	2:09:56 PM	0	26.421	24.805	25.171	27.424	24.507	#	47.235	52.496	10.625	36.9	-0.106	0.099		48.711	0.003	14.643	0.005		25.00	0.41667	51.4	11.6	42.1	2.900	0.000	0.000	0.000	0.010	0.01	
43	8/24/2004	2:10:56 PM	0	26.428	24.812	25.143	27.356	24.509	#	47.295	52.716	10.587	36.937	-0.106	0.096		48.135	0.003	14.643	0.006		26.00	0.43333	51.6	11.5	42.1	2.904	0.000	0.000	0.000	0.010	0.01	
44	8/24/2004	2:11:56 PM	0	26.454	24.834	25.154	27.388	24.56	#	47.381	52.954	10.702	37.038	-0.1	0.105		47.989	0.003	14.643	0.006		27.00	0.45	51.8	11.4	42.2	2.910	0.000	0.000	0.000	0.010	0.01	
45	8/24/2004	2:12:56 PM	0	26.461	24.836	25.091	27.41	24.597	#	47.254	52.838	10.563	37.159	-0.089	0.102		48.834	0.003	14.643	0.005		28.00	0.46667	51.7	11.6	42.2	2.910	0.000	0.000	0.000	0.010	0.01	
46	8/24/2004	2:13:56 PM	0	26.474	24.859	25.109	27.477	24.71	#	45.796	51.371	11.55	34.78	-0.089	0.114		50.997	0.003	14.643	0.009		29.00	0.48333	50.2	12.1	40.3	2.778	0.000	0.000	0.000	0.011	0.01	
47	8/24/2004	2:14:56 PM	0	26.467	24.857	25.087	27.481	24.783	#	45.491	51.298	11.629	34.499	-0.08	0.096		51.827	0.003	14.643	0.006		30.00	0.5	50.2	12.3	40.0	2.758	0.000	0.000	0.000	0.011	0.01	
48	8/24/2004	2:15:56 PM	0	26.481	24.88	25.09	27.614	24.867	#	45.614	51.487	11.475	34.727	-0.089	0.105		50.867	0.003	14.643	0.004		31.00	0.51667	50.4	12.1	40.2	2.770	0.000	0.000	0.000	0.011	0.01	
49	8/24/2004	2:16:56 PM	0	26.499	24.894	25.099	27.587	24.965	#	45.688	51.914	11.57	34.645	-0.077	0.117		51.233	0.003	14.643	0.005		32.00	0.53333	50.8	12.2	40.2	2.769	0.000	0.000	0.000	0.011	0.01	
50	8/24/2004	2:17:56 PM	0	26.508	24.912	25.087	27.666	25.033	#	45.723	51.744	11.49	34.965	-0.097	0.105		51.566	0.003	14.643	0.005		33.00	0.55	50.6	12.3	40.3	2.782	0.000	0.000	0.000	0.011	0.01	
51	8/24/2004	2:18:56 PM	0	26.527	24.931	25.101	27.735	25.128	#	45.195	51.309	11.446	34.542	-0.1	0.099		51.164	0.003	14.643	0.005		34.00	0.56667	50.2	12.2	39.9	2.749	0.000	0.000	0.000	0.011	0.01	
52	8/24/2004	2:19:56 PM	0	26.534	24.949	25.094	27.757	25.1	#	45.709	51.976	11.416	35.156	-0.097	0.099		49.939	0.003	14.643	0.004		35.00	0.58333	50.9	11.9	40.4	2.788	0.000	0.000	0.000	0.011	0.01	
53	8/24/2004	2:20:56 PM	0	26.548	24.968	25.087	27.771	25.029	#	45.363	51.439	11.465	34.991	-0.106	0.102		50.367	0.003	14.643	0.005		36.00	0.6	50.3	12.0	40.2	2.770	0.000	0.000	0.000	0.011	0.01	
54	8/24/2004	2:21:56 PM	0	26.486	24.98	25.095	27.718	24.981	#	45.103	51.414	11.299	34.838	0.094	0.099		50.49	0.026	14.643	0.003		37.00	0.61667	50.3	12.0	40.0	2.756	0.004	0.004	0.000	0.093	0.08	
55	8/24/2004	2:22:56 PM	0	26.384	25.004	25.129	27.682	24.98	#	45.014	51.686	11.292	34.784	0.273	0.102		50.732	0.027	14.643	0.003		38.00	0.63333	50.6	12.1	39.9	2.751	0.004	0.004	0.000	0.097	0.08	
56	8/24/2004	2:23:56 PM	0	26.302	25.022	25.121	27.635	24.913	#	43.867	51.624	11.364	33.313	1.286	0.102		50.411	0.027	14.643	0.003		39.00	0.65	50.5	12.0	38.6	2.661	0.004	0.004	0.000	0.100	0.08	
57	8/24/2004	2:24:56 PM	0	26.255	25.039	25.099	27.623	24.89	#	43.1	51.783	11.404	32.545	2.3	0.096		50.302	0.025	14.643	0.003		40.00	0.66667	50.7	12.0	37.8	2.608	0.004	0.004	0.000	0.094	0.08	
58	8/24/2004	2:25:56 PM	0	26.211	25.05	25.12	27.588	24.861	#	42.447	51.895	11.497	31.642	3.29	0.105		50.87	0.035	14.643	0.003		41.00	0.68333	50.8	12.1	37.0	2.554	0.005	0.005	0.000	0.135	0.11	
59	8/24/2004	2:26:56 PM	0	26.172	25.062	25.131	27.59	24.852	#	42.028	51.367	11.219	31.714	3.374	0.137		51.155	0.037	14.643	0.003		42.00	0.7	50.2	12.2	36.9	2.542	0.005	0.005	0.000	0.143	0.12	
60	8/24/2004	2:27:56 PM	0	26.158	25.088	25.143	27.606	24.854	#	42.422	51.663	11.447	31.997	3.365	0.154		50.625	0.037	14.643	0.003		43.00	0.71667	50.5	12.1	37.2	2.565	0.005	0.005	0.000	0.142	0.12	
61	8/24/2004	2:28:56 PM	0	26.14	25.094	25.154	27.602	24.805	#	42.098	51.433	11.322	31.657	3.391	0.166		50.382	0.035	14.643	0.004		44.00	0.73333	50.3	12.0	36.9	2.543	0.005	0.005	0.000	0.135	0.12	
62	8/24/2004	2:29:56 PM	0	26.106	25.085	25.145	27.508	24.791	#	42.144	51.367	11.371	31.761	3.391	0.177		50.55	0.036	14.643	0.003		45.00	0.75	50.2	12.0	37.0	2.548	0.005	0.005	0.000	0.139	0.12	
63	8/24/2004	2:30:56 PM	0	26.107	25.091	25.146	27.5	24.792	#	42.169	51.601	11.287	31.747	3.394	0.192		49.864	0.037	14.643	0.003		46.00	0.76667	50.5	11.9	37.0	2.548	0.005	0.005	0.000	0.143	0.12	
64	8/24/2004	2:31:56 PM	0	26.113	25.113	25.138	27.491	24.819	#	41.897	51.238	11.276	31.691	3.394	0.206		50.377	0.036	14.643	0.003		47.00	0.78333	50.1	12.0	36.8	2.537	0.005	0.005	0.000	0.140	0.12	
65	8/24/2004	2:32:56 PM	0	26.099	25.114	25.133	27.477	24.749	#	42.304	51.713	11.422	31.856	3.394	0.212		50.29	0.036	14.643	0.003		48.00	0.8	50.6	12.0	37.1	2.557	0.005	0.005	0.000	0.138	0.12	
66	8/24/2004	2:33:56 PM	0	26.105	25.135	25.16	27.463	24.751	#	42.463	51.905	11.366	31.977	3.397	0.235		50.417	0.037	14.643	0.003		49.00	0.81667	50.8	12.0	37.2	2.566	0.005	0.005	0.000	0.142	0.12	
67	8/24/2004	2:34:56 PM	0	26.101	25.136	25.17	27.444	24.706	#	42.329	51.937	11.388	31.772	3.394	0.241		50.636	0.036	14.643	0.004		50.00	0.83333	50.8	12.1	37.1	2.555	0.005	0.005	0.000	0.138	0.12	
68	8/24/2004	2:35:56 PM	0	26.107	25.141	25.161	27.42	24.687	#	42.239	51.692	11.398	31.71	3.406	0.247		51.235	0.036	14.643	0.003		51.00	0.85	50.6	12.2	37.0	2.549	0.005	0.005	0.000	0.139	0.12	
69	8/24/2004	2:36:56 PM	0	26.112	25.141	25.161	27.445	24.662	#	42.065	51.363	11.294	31.767	3.423	0.264		50.575	0.035	14.643	0.003		52.00	0.86667	50.2	12.0	36.9	2.545	0.005	0.005	0.000	0.135	0.11	
70	8/24/2004	2:37:56 PM	0	26.123	25.148	25.178	27.491	24.704	#	42.285	51.68	11.448	31.655	3.4	0.281		50.256	0.037	14.643	0.003		53.00	0.88333	50.6	12.0	37.0	2.549	0.005	0.005	0.000	0.143	0.12	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	8/24/2004	2:38:56 PM	0	26.143	25.163	25.193	27.506	24.694	#	42.105	51.443	11.241	31.968	3.449	0.29		49.993	0.038	14.643	0.003		54.00	0.9	50.3	11.9	37.0	2.554	0.005	0.005	0.000	0.146	0.12	
72	8/24/2004	2:39:56 PM	0	26.149	25.154	25.158	27.497	24.749	#	41.389	51.149	11.727	30.501	3.449	0.307		51.806	0.035	14.643	0.003		55.00	0.91667	50.0	12.3	35.9	2.478	0.005	0.005	0.000	0.139	0.12	
73	8/24/2004	2:40:56 PM	0	26.158	25.158	25.147	27.426	24.719	#	43.139	52.913	10.908	32.954	3.455	0.313		49.224	0.037	14.643	0.003		56.00	0.93333	51.8	11.7	38.0	2.623	0.005	0.005	0.000	0.139	0.12	
74	8/24/2004	2:41:56 PM	0	26.147	25.142	25.252	27.46	24.698	#	43.347	53.296	10.742	33.319	3.455	0.322		48.362	0.037	14.643	0.003		57.00	0.95	52.2	11.5	38.3	2.643	0.005	0.005	0.000	0.137	0.12	
75	8/24/2004	2:42:56 PM	0	26.182	25.167	25.217	27.555	24.698	#	43.212	52.911	10.68	33.456	3.461	0.336		48.266	0.037	14.643	0.003		58.00	0.96667	51.8	11.5	38.3	2.643	0.005	0.005	0.000	0.137	0.12	
76	8/24/2004	2:43:56 PM	0	26.181	25.156	25.17	27.584	24.641	#	43.424	53.273	10.531	33.694	3.498	0.348		47.234	0.037	14.643	0.003		59.00	0.98333	52.1	11.3	38.6	2.659	0.005	0.005	0.000	0.137	0.12	
77	8/24/2004	2:44:56 PM	0	26.18	25.16	25.16	27.523	24.661	#	43.117	52.865	10.718	33.249	3.466	0.359		48.536	0.036	14.643	0.003		60.00	1	51.7	11.6	38.2	2.633	0.005	0.005	0.000	0.134	0.11	
78	8/24/2004	2:45:56 PM	0	26.194	25.179	25.123	27.542	24.664	#	43.189	53.178	10.759	33.107	3.484	0.38		48.381	0.036	14.643	0.004		61.00	1.01667	52.1	11.5	38.1	2.630	0.005	0.005	0.000	0.135	0.11	
79	8/24/2004	2:46:56 PM	0	26.188	25.173	25.088	27.421	24.684	#	43.312	53.091	10.706	33.415	3.492	0.391		48.118	0.036	14.643	0.003		62.00	1.03333	52.0	11.5	38.4	2.645	0.005	0.005	0.000	0.134	0.11	
80	8/24/2004	2:47:56 PM	0	26.214	25.194	25.108	27.407	24.704	#	43.177	52.772	10.661	33.315	3.521	0.397		48.239	0.035	14.643	0.003		63.00	1.05	51.6	11.5	38.2	2.637	0.005	0.005	0.000	0.131	0.11	
81	8/24/2004	2:48:56 PM	0	26.22	25.204	25.059	27.447	24.705	#	42.835	52.303	10.735	33.146	3.521	0.414		48.316	0.036	14.643	0.003		64.00	1.06667	51.2	11.5	38.0	2.619	0.005	0.005	0.000	0.135	0.12	
82	8/24/2004	2:49:56 PM	0	26.21	25.189	25.054	27.388	24.73	#	43.351	53.133	10.751	33.393	3.521	0.426		48.352	0.035	14.643	0.003		65.00	1.08333	52.0	11.5	38.4	2.646	0.005	0.005	0.000	0.130	0.11	
83	8/24/2004	2:50:56 PM	0	26.22	25.205	25.08	27.318	24.691	#	43.088	52.861	10.833	33.069	3.518	0.435		48.842	0.036	14.643	0.003		66.00	1.1	51.7	11.6	38.1	2.625	0.005	0.005	0.000	0.135	0.11	
84	8/24/2004	2:51:56 PM	0	26.236	25.211	25.075	27.284	24.666	#	43.067	52.822	10.594	33.426	3.521	0.443		47.954	0.036	14.643	0.003		67.00	1.11667	51.7	11.4	38.2	2.637	0.005	0.005	0.000	0.134	0.11	
85	8/24/2004	2:52:56 PM	0	26.237	25.217	25.056	27.32	24.692	#	43.309	53.157	10.709	33.399	3.53	0.455		48.333	0.037	14.643	0.003		68.00	1.13333	52.0	11.5	38.4	2.644	0.005	0.005	0.000	0.138	0.12	
86	8/24/2004	2:53:56 PM	0	26.242	25.222	25.071	27.285	24.682	#	43.311	53.066	10.605	33.604	3.53	0.478		47.812	0.037	14.643	0.003		69.00	1.15	51.9	11.4	38.5	2.652	0.005	0.005	0.000	0.137	0.12	
87	8/24/2004	2:54:56 PM	0	26.247	25.227	25.097	27.26	24.698	#	43.083	53.074	10.63	33.253	3.536	0.484		48.957	0.035	14.643	0.003		70.00	1.16667	51.9	11.7	38.2	2.632	0.005	0.005	0.000	0.131	0.11	
88	8/24/2004	2:55:56 PM	0	26.243	25.213	25.047	27.206	24.704	#	43.285	53.16	10.67	33.389	3.53	0.495		48.513	0.035	14.643	0.003		71.00	1.18333	52.0	11.6	38.3	2.643	0.005	0.005	0.000	0.131	0.11	
89	8/24/2004	2:56:56 PM	0	26.238	25.213	25.032	27.196	24.664	#	43.444	53.236	10.641	33.66	3.547	0.51		48.116	0.036	14.643	0.004		72.00	1.2	52.1	11.5	38.6	2.658	0.005	0.005	0.000	0.134	0.11	
90	8/24/2004	2:57:56 PM	0	26.222	25.202	25.027	27.166	24.673	#	43.258	52.965	10.626	33.508	3.547	0.516		47.046	0.035	14.643	0.003		73.00	1.21667	51.8	11.2	38.4	2.646	0.005	0.005	0.000	0.130	0.11	
91	8/24/2004	2:58:56 PM	0	26.243	25.218	25.062	27.161	24.679	#	43.272	52.944	10.675	33.575	3.547	0.533		48.36	0.035	14.643	0.003		74.00	1.23333	51.8	11.5	38.4	2.649	0.005	0.005	0.000	0.130	0.11	
92	8/24/2004	2:59:56 PM	0	26.233	25.218	25.037	27.161	24.664	#	43.077	52.687	10.742	33.358	3.547	0.547		49.061	0.037	14.643	0.004		75.00	1.25	51.6	11.7	38.2	2.635	0.005	0.005	0.000	0.138	0.12	
93	8/24/2004	3:00:56 PM	0	26.228	25.213	25.032	27.181	24.644	#	43.498	53.168	10.799	33.559	3.545	0.55		48.154	0.035	14.643	0.003		76.00	1.26667	52.0	11.5	38.5	2.656	0.005	0.005	0.000	0.130	0.11	
94	8/24/2004	3:01:56 PM	0	26.228	25.218	25.042	27.186	24.649	#	43.351	52.9	10.687	33.565	3.55	0.576		48.002	0.036	14.643	0.003		77.00	1.28333	51.8	11.4	38.5	2.652	0.005	0.005	0.000	0.134	0.11	
95	8/24/2004	3:02:56 PM	0	26.228	25.218	25.047	27.196	24.654	#	43.224	53.141	10.823	33.224	3.547	0.582		47.516	0.035	14.643	0.003		78.00	1.3	52.0	11.3	38.2	2.635	0.005	0.005	0.000	0.131	0.11	
96	8/24/2004	3:03:56 PM	0	26.223	25.218	25.022	27.151	24.674	#	43.28	53.101	10.588	33.596	3.588	0.596		48.093	0.034	14.643	0.003		79.00	1.31667	52.0	11.5	38.4	2.650	0.005	0.005	0.000	0.127	0.11	
97	8/24/2004	3:04:56 PM	0	26.223	25.223	25.047	27.126	24.659	#	44.404	54.413	10.797	34.433	3.556	0.602		48.617	0.036	14.643	0.003		80.00	1.33333	53.3	11.6	39.4	2.718	0.005	0.005	0.000	0.131	0.11	
98	8/24/2004	3:05:56 PM	0	26.212	25.207	25.111	27.15	24.612	#	45.524	55.466	10.979	35.478	3.614	0.625		49.324	0.038	14.643	0.004		81.00	1.35	54.3	11.7	40.5	2.792	0.005	0.005	0.000	0.134	0.11	
99	8/24/2004	3:06:56 PM	0	26.206	25.216	25.135	27.149	24.586	#	45.545	55.222	11.049	35.377	3.655	0.62		49.272	0.037	14.643	0.004		82.00	1.36667	54.1	11.7	40.5	2.790	0.005	0.005	0.000	0.130	0.11	
100	8/24/2004	3:07:56 PM	0	26.201	25.206	25.195	27.124	24.621	#	45.224	55.077	11.125	34.891	3.66	0.651		48.692	0.038	14.643	0.003		83.00	1.38333	54.0	11.6	40.1	2.762	0.005	0.005	0.000	0.135	0.11	
101	8/24/2004	3:08:56 PM	0	26.196	25.206	25.256	27.119	24.626	#	45.485	55.274	11.05	35.234	3.657	0.651		49.067	0.037	14.643	0.003		84.00	1.4	54.1	11.7	40.4	2.783	0.005	0.005	0.000	0.130	0.11	
102	8/24/2004	3:09:56 PM	0	26.207	25.212	25.286	27.095	24.652	#	45.541	55.491	11.044	35.449	3.837	0.888		49.08	0.037	14.643	0.003		85.00	1.41667	54.4	11.7	40.5	2.792	0.005	0.005	0.000	0.130	0.11	
103	8/24/2004	3:10:56 PM	0	26.182	25.192	25.302	27.076	24.773	#	45.269	55.015	11.063	35.143	3.776	0.912		49.539	0.037	14.643	0.003		86.00	1.43333	53.9	11.8	40.2	2.772	0.005	0.005	0.000	0.131	0.11	
104	8/24/2004	3:11:56 PM	0	26.194	25.219	25.394	27.113	24.845	#	45.232	55.195	10.982	35.168	3.825	0.9		49.293	0.037	14.643	0.003		87.00	1.45	54.1	11.7	40.2	2.772	0.005	0.005	0.000	0.130	0.11	
105	8/24/2004	3:12:56 PM	0	26.251	25.236	25.526	27.195	24.917	#	47.553	55.377	10.929	37.61	1.651	-3.488		48.775	0.128	14.643	0.003		88.00	1.46667	54.3	11.6	42.6	2.936	0.018	0.018	0.000	0.424	0.36	
106	8/24/2004	3:13:56 PM	0	26.228	25.238	25.603	27.271	24.973	#	48.895	55.769	11.022	38.757	0.331	-5.388		49.812	0.043	14.643	0.003		89.00	1.48333	54.6	11.9	43.8	3.022	0.006	0.006	0.000	0.138	0.12	
107	8/24/2004	3:14:56 PM	0	26.221	25.241	25.606	27.265	25.072	#	48.872	55.263	10.864	39.071	0.03	-5.911		48.79	0.042	14.643	0.003		90.00	1.5	54.1	11.6	44.0	3.032	0.006	0.006	0.000	0.134	0.11	
108	8/24/2004	3:15:56 PM	0	26.208	25.228	25.568	27.291	25.093	#	48.982	55.222	10.993	38.965	-0.014	-6		49.159	0.039	14.643	0.003		91.00	1.51667	54.1	11.7	44.0	3.032	0.006	0.005	0.000	0.125	0.11	
109	8/24/2004	3:16:56 PM	0	26.226	25.261	25.586	27.374	25.212	#	45.672	51.974	11.091	35.574	-0.025	-5.977		49.737	0.036	14.643	0.003		92.00	1.53333	50.8	11.8	40.6	2.801	0.005	0.005	0.000	0.125	0.11	
110	8/24/2004	3:17:56 PM	0	26.228	25.263	25.518	27.446	25.269	#	45.099	51.445	11.182	34.868	-0.022	-5.98		49.276	0.036	14.643	0.003		93.00	1.55	50.3	11.7	40.0	2.757	0.005	0.005	0.000	0.127	0.11	
111	8/24/2004	3:18:56 PM	0	26.236	25.261	25.466	27.459	25.207	#	43.811	52.067	11.058	33.621	1.712	22.128		49.405	0.003	14.643	0.003		94.00	1.56667	50.9	11.8	38.7	2.669	0.000	0.000	0.000	0.011	0.01	
112	8/24/2004	3:19:56 PM	0	26.268	25.278	25.432	27.436	25.163	#	40.462	51.553	10.646	30.704	4.873	21.784		48.83	0.003	14.643	0.003		95.00	1.58333	50.4	11.6	35.6	2.453	0.000	0.000	0.000	0.012	0.01	
113	8/24/2004	3:20:56 PM	0	26.304	25.289	25.394	27.422	25.175	#	36.934	51.872	10.425	27.392	9.129	92.89		47.709	0.003	14.643	0.004		96.00	1.6	50.7	11.4	32.2	2.218	0.000	0.000	0.000	0.013	0.01	
114	8/24/2004	3:21:56 PM	0	26.138	25.283	25.307	27.346	25.063	#	41.742	51.508	10.279	32.412	3.724	0.423		48.239	0.038	14.643	0.003		97.00	1.61667	50.4	11.5	37.1	2.556	0.005	0.005	0.000	0.145	0.12	
115	8/24/2004	3:22:56 PM	0	26.243	25.293	25.263	27.296	24.969	#	42.138	52.131	10.358	32.578	3.628	0.455		49.126	0.03	14.643	0.003		98.00	1.63333	51.0	11.7	37.4	2.576	0.004	0.004	0.000	0.114	0.10	
116	8/24/2004	3:23:56 PM	0	26.229	25.304	25.234	27.297	24.915	#	41.474	51.437	10.295	32.026	3.608	0.472		49.118	0.03	14.643	0.003		99.00	1.65	50.3	11.7	36.8	2.534	0.004	0.004	0.000	0.116	0.10	
117	8/24/2004	3:24:56 PM	0	26.229	25.319	25.239	27.262	24.87	#	41.557	50.981	10.292	32.432	3.608	0.492		49.053	0.03	14.643	0.004		100.00	1.66667	49.9	11.7	37.0	2.551	0.004	0.004	0.000	0.115	0.10	
118	8/24/2004	3:25:56 PM	0	26.224	25.329	25.199	27.247	24.845	#	41.974	51.781	10.263	32.504	3.617	0.51		48.909	0.029	14.643	0.003		101.00	1.68333	50.7	11.6	37.2	2.567	0.004	0.004	0.000	0.111	0.09	
119	8/24/2004	3:26:56 PM	0	26.203	25.298	25.133	27.182	24.809	#	41.768	51.508	10.563	32.055	3.62	0.516		49.57	0.029	14.643	0.003		102.00	1.7	50.4	11.8	36.9	2.545	0.004	0.004	0.000	0.112	0.10	
120	8/24/2004	3:27:56 PM	0	26.208	25.308	25.153	27.172	24.774	#	41.802	51.74	10.379	32.266	3.611	0.527		48.362	0.028	14.643	0.003		103.00	1.71667	50.6	11.5	37.0	2.553	0.004	0.004	0.000	0.108	0.09	
121	8/24/2004	3:28:56 PM	0	26.219	25.309	25.144	27.182	24.855	#	41.63	51.348	10.433	32.19	3.623	0.542		49.854	0.028	14.643	0.003		104.00	1.73333	50.2	11.9	36.9	2.545	0.004	0.004	0.000	0.108	0.09	
122	8/24/2004	3:29:56 PM	0	26.214	25.314	25.119	27.227	24.915	#	41.615	51.408	10.455	32.11	3.6	0.559		48.711	0.027	14.643	0.003		105.00	1.75	50.3	11.6	36.9	2.542	0.004	0.004	0.000	0.105	0.09	
123	8/24/2004	3:30:56 PM	0	26.215	25.315	25.104	27.253	24.99	#	42.038	51.962	10.52	32.301	3.608	0.559		49.345	0.027	14.643	0.003		106.00	1.76667	50.8	11.8	37.2	2.563	0.004	0.004	0.000	0.104	0.09	
124	8/24/2004	3:31:56 PM	0	26.216	25.331	25.086	27.269	25.032	#	42.042	51.986	10.42	32.506	3.637	0.57		49.176	0.027	14.643	0.003		107.00	1.78333	50.9	11.7	37.3	2.570	0.004	0.004	0.000	0.103	0.09	
125	8/24/2004	3:32:56 PM	0	26.213	25.328	25.047	27.331	25.083	#	41.692	51.348	10.591	32.085	3.634	0.591		49.514	0.027	14.643	0.003		108.00	1.8	50.2	11.8	36.9	2.543	0.004	0.004	0.000	0.105	0.09	
126	8/24/2004	3:33:56 PM	0	26.214	25.324	25.048	27.382	25.165	#	41.746	51.487	10.533	32.211	3.628	0.594		50.398	0.028	14.643	0.003		109.00	1.81667	50.4	12.0	37.0	2.550	0.004	0.004	0.000	0.108	0.09	
127	8/24/2004	3:34:56 PM	0	26.221	25.336	25.061	27.444	25.232	#	42.189	52.076	10.34	32.773	3.623	0.602		49.145	0.025	14.643	0.003		110.00	1.83333	51.0	11.7	37.5	2.584	0.004	0.004	0.000	0.095	0.08	
128	8/24/2004	3:35:56 PM	0	26.223	25.343	25.013	27.426	25.264	#	42.264	51.868	10.339	33.097	3.628	0.599		49.08	0.023	14.643	0.003		111.00	1.85	50.7	11.7	37.7	2.598	0.003	0.003	0.000	0.087	0.07	
129	8/24/2004	3:36:56 PM	0	26.24	25.366	25.03	27.468	25.301	#	41.822	51.466	10.321	32.484	3.663	0.631		49.228	0.024	14.643	0.003		112.00	1.86667	50.3	11.7	37.2	2.562	0.003	0.003	0.000	0.092	0.08	
130	8/24/2004	3:37:56 PM	0	26.218	25.353	25.002	27.396	25.293	#	42.022	51.837	10.372	32.48	3.643	0.62		48.725	0.026	14.643	0.003		113.00	1.88333	50.7	11.6	37.3	2.568	0.004	0.004	0.000	0.100	0.09	
131	8/24/2004	3:38:56 PM	0	26.224	25.374	24.973	27.407	25.205	#	41.822	51.775	10.288	32.461	3.663	0.637		48.769	0.024	14.643	0.003		114.00	1.9	50.6	11.6	37.1	2.561	0.003	0.003	0.000	0.093	0.08	
132	8/24/2004	3:39:56 PM	0	26.22	25.375	24.974	27.338	25.12	#	41.928	51.677	10.452	32.441	3.657	0.649		49.172	0.027	14.643	0.003		115.00	1.91667	50.6	11.7	37.2	2.564	0.004	0.004	0.000	0.104	0.09	
133	8/24/2004	3:40:56 PM	0	26.222	25.392	24.991	27.32	25.082	#	41.988	51.775	10.38	32.527	3.657	0.651		49.168	0.025	14.643	0.003		116.00	1.93333	50.6	11.7	37.3	2.569	0.004	0.004	0.000	0.096	0.08	
134	8/24/2004	3:41:56 PM	0	26.212	25.387	24.966	27.275	24.977	#	41.949	51.928	10.44	32.332	3.66	0.651		48.996	0.023	14.643	0.003		117.00	1.95	50.8	11.7	37.1	2.561	0.003	0.003	0.000	0.089	0.08	
135	8/24/2004	3:42:56 PM	0	26.191	25.371	24.92	27.224	24.892	#	41.822	51.7	10.481	32.207	3.655	0.66		49.09	0.023	14.643	0.003		118.00	1.96667	50.6	11.7	37.0	2.552	0.003	0.003	0.000	0.089	0.08	
136	8/24/2004	3:43:56 PM	0	26.201	25.386	24.95	27.159	24.852	#	41.945	51.649	10.287	32.658	3.657	0.68		48.458	0.026	14.643	0.003		119.00	1.98333	50.5	11.5	37.3	2.572	0.004	0.004	0.000	0.100	0.09	
137	8/24/2004	3:44:56 PM	0	26.201	25.391	24.975	27.109	24.822	#	41.974	51.779	10.4	32.475	3.66	0.689		48.511	0.025	14.643	0.004		120.00	2	50.7	11.6	37.2	2.566	0.004	0.004	0.000	0.096	0.08	
138	8/24/2004	3:45:56 PM	0	26.18	25.385	24.959	27.048	24.76	#	41.856	51.725	10.361	32.418	3.657	0.692		48.684	0.025	14.643	0.003		121.00	2.01667	50.6	11.6	37.1	2.560	0.004	0.004	0.000	0.096	0.08	
139	8/24/2004	3:46:56 PM	0	26.154	25.369	24.913	27.017	24.77	#	42.142	51.823	10.294	32.871	3.657	0.701		48.955	0.024	14.643	0.003		122.00	2.03333	50.7	11.7	37.5	2.586	0.003	0.003	0.000	0.092	0.08	
140	8/24/2004	3:47:56 PM	0	26.152	25.377	24.951	26.995	24.727	#	42.196	52.289	10.577	32.266	3.663	0.706		49.257	0.024	14.643	0.004		123.00	2.05	51.2	11.7	37.2	2.567	0.003	0.003	0.000	0.092	0.08	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	8/24/2004	3:48:56 PM	0	26.157	25.377	24.971	26.96	24.737	#	41.851	51.816	10.339	32.43	3.727	0.822		47.976	0.021	14.643	0.003		124.00	2.06667	50.7	11.4	37.1	2.561	0.003	0.003	0.000	0.081	0.07	
142	8/24/2004	3:49:56 PM	0	26.146	25.371	24.975	26.975	24.787	#	41.727	51.605	10.35	32.363	3.773	0.894		49.462	0.024	14.643	0.004		125.00	2.08333	50.5	11.8	37.0	2.554	0.003	0.003	0.000	0.093	0.08	
143	8/24/2004	3:50:56 PM	0	26.125	25.345	24.945	26.954	24.871	#	42.005	51.81	10.465	32.443	3.773	0.894		48.817	0.024	14.643	0.003		126.00	2.1	50.7	11.6	37.2	2.566	0.003	0.003	0.000	0.092	0.08	
144	8/24/2004	3:51:56 PM	0	26.15	25.371	24.995	27.054	24.916	#	41.905	52.071	10.503	32.143	3.773	0.897		48.802	0.024	14.643	0.003		127.00	2.11667	50.9	11.6	37.0	2.553	0.003	0.003	0.000	0.093	0.08	
145	8/24/2004	3:52:56 PM	0	26.12	25.371	24.995	27.054	24.986	#	41.723	51.506	10.367	32.389	3.773	0.897		48.598	0.024	14.643	0.003		128.00	2.13333	50.4	11.6	37.1	2.555	0.003	0.003	0.000	0.093	0.08	
146	8/24/2004	3:53:56 PM	0	26.136	25.371	25.021	27.109	25.047	#	41.883	51.758	10.382	32.408	3.773	0.897		48.961	0.024	14.643	0.003		129.00	2.15	50.6	11.7	37.1	2.561	0.003	0.003	0.000	0.092	0.08	
147	8/24/2004	3:54:56 PM	0	26.128	25.373	24.997	27.141	25.118	#	41.825	51.862	10.351	32.375	3.773	0.897		48.69	0.024	14.643	0.003		130.00	2.16667	50.7	11.6	37.1	2.558	0.003	0.003	0.000	0.093	0.08	
148	8/24/2004	3:55:56 PM	0	26.113	25.373	24.987	27.146	25.113	#	41.88	51.802	10.347	32.322	3.773	0.894		48.757	0.023	14.643	0.003		131.00	2.18333	50.7	11.6	37.1	2.558	0.003	0.003	0.000	0.089	0.08	
149	8/24/2004	3:56:56 PM	0	26.115	25.375	25.009	27.198	25.16	#	41.625	51.506	10.357	32.225	3.77	0.894		48.775	0.023	14.643	0.003		132.00	2.2	50.4	11.6	36.9	2.546	0.003	0.003	0.000	0.089	0.08	
150	8/24/2004	3:57:56 PM	0	26.116	25.381	25.026	27.209	25.232	#	41.943	51.876	10.365	32.512	3.773	0.894		48.951	0.023	14.643	0.003		133.00	2.21667	50.8	11.7	37.2	2.567	0.003	0.003	0.000	0.088	0.08	
151	8/24/2004	3:58:56 PM	0	26.108	25.388	24.992	27.251	25.223	#	42.125	52.181	10.348	32.736	3.77	0.891		49.059	0.023	14.643	0.003		134.00	2.23333	51.1	11.7	37.4	2.581	0.003	0.003	0.000	0.088	0.07	
152	8/24/2004	3:59:56 PM	0	26.11	25.395	24.999	27.278	25.295	#	41.719	51.702	10.306	32.33	3.77	0.891		48.729	0.023	14.643	0.004		135.00	2.25	50.6	11.6	37.0	2.553	0.003	0.003	0.000	0.089	0.08	
153	8/24/2004	4:00:56 PM	0	26.1	25.401	25.05	27.313	25.351	#	44.633	54.561	10.449	35.09	3.822	0.903		49.199	0.025	14.643	0.003		136.00	2.26667	53.4	11.7	39.9	2.748	0.004	0.004	0.000	0.090	0.08	
154	8/24/2004	4:01:56 PM	0	26.102	25.417	25.096	27.31	25.332	#	44.724	54.735	10.373	35.299	3.782	0.9		49.22	0.025	14.643	0.003		137.00	2.28333	53.6	11.7	40.0	2.759	0.004	0.004	0.000	0.089	0.08	
155	8/24/2004	4:02:56 PM	0	26.113	25.423	25.123	27.316	25.229	#	44.411	54.472	10.224	35.071	3.791	0.897		48.563	0.025	14.643	0.003		138.00	2.3	53.3	11.6	39.7	2.740	0.004	0.004	0.000	0.090	0.08	
156	8/24/2004	4:03:56 PM	0	26.099	25.429	25.159	27.247	25.14	#	45.006	55.29	10.233	35.55	3.796	0.891		47.891	0.025	14.643	0.003		139.00	2.31667	54.2	11.4	40.3	2.777	0.004	0.004	0.000	0.088	0.08	
157	8/24/2004	4:04:56 PM	0	26.1	25.43	25.139	27.193	25.065	#	44.888	54.675	10.068	35.87	3.817	0.897		48.498	0.025	14.643	0.003		140.00	2.33333	53.5	11.6	40.4	2.784	0.004	0.004	0.000	0.088	0.08	
158	8/24/2004	4:05:56 PM	0	26.11	25.45	25.184	27.213	25	#	44.981	55.019	10.151	35.743	3.805	0.897		48.139	0.025	14.643	0.003		141.00	2.35	53.9	11.5	40.4	2.783	0.004	0.004	0.000	0.088	0.08	
159	8/24/2004	4:06:56 PM	0	26.11	25.445	25.229	27.123	24.92	#	45.203	55.224	10.012	36.104	3.811	0.9		48.183	0.025	14.643	0.003		142.00	2.36667	54.1	11.5	40.7	2.803	0.004	0.004	0.000	0.087	0.07	
160	8/24/2004	4:07:56 PM	0	26.108	25.438	25.198	27.077	24.859	#	45.441	55.649	10.077	36.089	3.825	0.9		47.78	0.025	14.643	0.003		143.00	2.38333	54.5	11.4	40.8	2.811	0.004	0.004	0.000	0.087	0.07	
161	8/24/2004	4:08:56 PM	0	26.108	25.438	25.227	27.026	24.833	#	45.304	55.719	10.085	35.94	3.828	0.897		47.695	0.025	14.643	0.003		144.00	2.4	54.6	11.4	40.6	2.801	0.004	0.004	0.000	0.088	0.07	
162	8/24/2004	4:09:56 PM	0	26.102	25.427	25.242	26.95	24.772	#	45.265	55.174	9.849	36.381	3.785	0.897		47.672	0.025	14.643	0.003		145.00	2.41667	54.0	11.4	40.8	2.815	0.004	0.004	0.000	0.087	0.07	
163	8/24/2004	4:10:56 PM	0	26.11	25.436	25.24	26.949	24.726	#	45.423	55.516	9.995	36.313	3.825	0.9		47.482	0.025	14.643	0.003		146.00	2.43333	54.4	11.3	40.9	2.818	0.004	0.004	0.000	0.087	0.07	
164	8/24/2004	4:11:56 PM	0	26.099	25.409	25.239	26.887	24.695	#	45.238	55.323	9.963	36.208	3.779	0.897		47.428	0.025	14.643	0.003		147.00	2.45	54.2	11.3	40.7	2.808	0.004	0.004	0.000	0.087	0.07	
165	8/24/2004	4:12:56 PM	0	26.088	25.393	25.222	26.826	24.718	#	45.087	55.002	9.984	36.024	3.805	0.894		47.655	0.024	14.643	0.003		148.00	2.46667	53.9	11.4	40.6	2.796	0.003	0.003	0.000	0.084	0.07	
166	8/24/2004	4:13:56 PM	0	26.098	25.398	25.232	26.871	24.793	#	45.352	55.097	10.203	36.135	3.773	0.894		48.045	0.024	14.643	0.003		149.00	2.48333	54.0	11.4	40.7	2.809	0.003	0.003	0.000	0.084	0.07	
167	8/24/2004	4:14:56 PM	0	26.087	25.387	25.221	26.86	24.867	#	45.518	55.33	10.016	36.446	3.788	0.894		47.557	0.024	14.643	0.003		150.00	2.5	54.2	11.3	41.0	2.826	0.003	0.003	0.000	0.083	0.07	
168	8/25/2004	7:24:57 AM	0	22.515	22.726	23.475	22.492	22.185	#	48.807	55.906	9.731	39.935	0.794	-0.349		46.673	0.003	14.643	0.003		1060.02	17.6669	54.8	11.1	44.4	3.059	0.000	0.000	0.000	0.010	0.01	
169	8/25/2004	7:25:57 AM	0	22.5	22.726	24.062	22.819	22.301	#	45.499	54.034	11.105	35.166	2.482	0.634		50.868	0.01	14.643	0.003		1061.02	17.6836	52.9	12.1	40.3	2.781	0.001	0.001	0.000	0.036	0.03	
170	8/25/2004	7:26:57 AM	0	22.56	22.716	24.484	23.121	22.411	#	44.21	54.084	10.854	34.078	3.666	0.995		50.002	0.024	14.643	0.003		1062.02	17.7003	53.0	11.9	39.1	2.699	0.003	0.003	0.000	0.089	0.08	
171	8/25/2004	7:27:57 AM	0	22.728	22.713	24.715	23.368	22.588	#	44.348	54.304	10.706	34.372	3.736	0.99		49.614	0.028	14.643	0.004		1063.02	17.7169	53.2	11.8	39.4	2.714	0.004	0.004	0.000	0.103	0.09	
172	8/25/2004	7:28:57 AM	0	22.885	22.725	24.847	23.571	22.716	#	44.406	54.101	10.629	34.558	3.73	0.99		49.724	0.028	14.643	0.003		1064.02	17.7336	53.0	11.8	39.5	2.722	0.004	0.004	0.000	0.102	0.09	
173	8/25/2004	7:29:57 AM	0	23.019	22.743	24.911	23.695	22.819	#	44.178	54.018	10.696	34.228	3.73	0.987		50.377	0.027	14.643	0.004		1065.02	17.7503	52.9	12.0	39.2	2.703	0.004	0.004	0.000	0.099	0.08	
174	8/25/2004	7:30:57 AM	0	23.122	22.746	24.909	23.818	22.903	#	44.363	54.015	10.657	34.601	3.73	0.987		50.056	0.027	14.643	0.003		1066.02	17.7669	52.9	11.9	39.5	2.722	0.004	0.004	0.000	0.098	0.08	
175	8/25/2004	7:31:57 AM	0	23.228	22.762	24.919	23.935	22.989	#	44.425	54.501	10.585	34.583	3.733	0.984		49.455	0.027	14.643	0.003		1067.02	17.7836	53.4	11.8	39.5	2.724	0.004	0.004	0.000	0.098	0.08	
176	8/25/2004	7:32:57 AM	0	23.308	22.766	24.934	24.024	23.118	#	44.867	54.575	10.708	34.965	3.73	0.987		49.301	0.027	14.643	0.003		1068.02	17.8003	53.4	11.7	39.9	2.752	0.004	0.004	0.000	0.097	0.08	
177	8/25/2004	7:33:57 AM	0	23.394	22.788	24.97	24.101	23.14	#	44.857	54.621	10.598	35.201	3.73	0.984		48.221	0.027	14.643	0.003		1069.02	17.8169	53.5	11.5	40.0	2.760	0.004	0.004	0.000	0.097	0.08	
178	8/25/2004	7:34:57 AM	0	23.466	22.794	25.011	24.147	23.141	#	44.819	54.83	10.648	34.932	3.733	0.987		50.352	0.026	14.643	0.003		1070.02	17.8336	53.7	12.0	39.9	2.749	0.004	0.004	0.000	0.093	0.08	
179	8/25/2004	7:35:57 AM	0	23.518	22.801	25.033	24.169	23.012	#	44.772	54.459	10.399	35.176	3.733	0.984		49.966	0.026	14.643	0.003		1071.02	17.8503	53.3	11.9	40.0	2.756	0.004	0.004	0.000	0.093	0.08	
180	8/25/2004	7:36:57 AM	0	23.574	22.807	25.05	24.205	22.953	#	44.755	54.362	10.467	35.139	3.73	0.984		49.224	0.026	14.643	0.003		1072.02	17.8669	53.2	11.7	39.9	2.754	0.004	0.004	0.000	0.093	0.08	
181	8/25/2004	7:37:57 AM	0	23.636	22.813	25.066	24.227	22.955	#	44.699	54.349	10.544	35.088	3.727	0.984		49.599	0.026	14.643	0.003		1073.02	17.8836	53.2	11.8	39.9	2.751	0.004	0.004	0.000	0.093	0.08	
182	8/25/2004	7:38:57 AM	0	23.671	22.824	25.091	24.252	22.94	#	44.807	54.608	10.703	34.93	3.73	0.978		49.772	0.026	14.643	0.003		1074.02	17.9003	53.5	11.9	39.9	2.749	0.004	0.004	0.000	0.093	0.08	
183	8/25/2004	7:39:57 AM	0	23.718	22.825	25.118	24.304	22.941	#	44.51	54.293	10.51	34.807	3.727	0.978		49.435	0.025	14.643	0.003		1075.02	17.9169	53.2	11.8	39.7	2.734	0.004	0.004	0.000	0.090	0.08	
184	8/25/2004	7:40:57 AM	0	23.763	22.841	25.138	24.35	22.887	#	44.382	54.161	10.337	34.932	3.73	0.984		49.232	0.025	14.643	0.003		1076.02	17.9336	53.0	11.7	39.7	2.734	0.004	0.004	0.000	0.090	0.08	
185	8/25/2004	7:41:57 AM	0	23.819	22.852	25.139	24.32	22.943	#	44.633	54.223	10.495	34.948	3.73	0.978		49.462	0.025	14.643	0.003		1077.02	17.9503	53.1	11.8	39.8	2.743	0.004	0.004	0.000	0.090	0.08	
186	8/25/2004	7:42:57 AM	0	23.865	22.852	25.15	24.326	22.913	#	44.722	54.442	10.407	35.164	3.727	0.981		49.153	0.025	14.643	0.003		1078.02	17.9669	53.3	11.7	39.9	2.754	0.004	0.004	0.000	0.089	0.08	
187	8/25/2004	7:43:57 AM	0	23.916	22.868	25.191	24.372	22.929	#	44.487	54.138	10.441	34.86	3.73	0.981		49.063	0.025	14.643	0.003		1079.02	17.9836	53.0	11.7	39.7	2.735	0.004	0.004	0.000	0.090	0.08	
188	8/25/2004	7:44:57 AM	0	23.956	22.868	25.196	24.407	23.01	#	44.942	54.865	10.522	35.026	3.73	0.981		49.424	0.025	14.643	0.003		1080.02	18.0003	53.7	11.8	40.0	2.757	0.004	0.004	0.000	0.089	0.08	
189	8/25/2004	7:45:57 AM	0	23.997	22.869	25.196	24.423	22.99	#	44.612	54.289	10.472	34.965	3.727	0.975		49.522	0.025	14.643	0.003		1081.02	18.0169	53.2	11.8	39.8	2.743	0.004	0.004	0.000	0.089	0.08	
190	8/25/2004	7:46:57 AM	0	24.048	22.9	25.227	24.469	23.036	#	45.018	54.677	10.297	35.564	3.733	0.984		49.109	0.025	14.643	0.003		1082.02	18.0336	53.6	11.7	40.3	2.778	0.004	0.004	0.000	0.088	0.08	
191	8/25/2004	7:47:57 AM	0	24.078	22.9	25.238	24.499	22.976	#	44.896	54.525	10.373	35.338	3.733	0.984		49.618	0.025	14.643	0.004		1083.02	18.0503	53.4	11.8	40.1	2.766	0.004	0.004	0.000	0.089	0.08	
192	8/25/2004	7:48:57 AM	0	24.109	22.881	25.228	24.515	23.012	#	44.821	54.503	10.226	35.39	3.73	0.978		48.788	0.024	14.643	0.003		1084.02	18.0669	53.4	11.6	40.1	2.765	0.003	0.003	0.000	0.085	0.07	
193	8/25/2004	7:49:57 AM	0	24.155	22.912	25.229	24.536	23.038	#	44.479	54.134	10.353	35.006	3.733	0.978		48.903	0.024	14.643	0.003		1085.02	18.0836	53.0	11.6	39.7	2.740	0.003	0.003	0.000	0.086	0.07	
194	8/25/2004	7:50:57 AM	0	24.195	22.927	25.254	24.561	23.038	#	44.305	53.953	10.291	34.879	3.733	0.981		48.715	0.024	14.643	0.003		1086.02	18.1003	52.8	11.6	39.6	2.730	0.003	0.003	0.000	0.086	0.07	
195	8/25/2004	7:51:57 AM	0	24.205	22.907	25.22	24.546	23.104	#	44.658	54.285	10.305	35.227	3.715	0.975		49.266	0.024	14.643	0.003		1087.02	18.1169	53.2	11.7	39.9	2.754	0.003	0.003	0.000	0.085	0.07	
196	8/25/2004	7:52:57 AM	0	24.277	22.944	25.251	24.618	23.12	#	42.853	54.071	10.384	33.167	5.273	22.925		49.172	0.003	14.643	0.003		1088.02	18.1336	52.9	11.7	38.0	2.621	0.000	0.000	0.000	0.011	0.01	
197	8/25/2004	7:53:57 AM	0	24.317	22.949	25.221	24.628	23.166	#	40.582	54.764	10.408	30.807	8.038	22.778		49.368	0.003	14.643	0.003		1089.02	18.1503	53.6	11.8	35.7	2.461	0.000	0.000	0.000	0.012	0.01	
198	8/25/2004	7:54:57 AM	0	24.459	22.956	25.213	24.655	23.233	#	36.876	54.092	10.369	27.113	11.46	47.758		49.067	0.003	14.643	0.003		1090.02	18.1669	53.0	11.7	32.0	2.206	0.000	0.000	0.000	0.013	0.01	
199	8/25/2004	7:55:57 AM	0	24.822	22.978	25.225	24.752	23.335	#	37.279	54.814	10.382	27.542	12.618	0.608		48.619	1.134	14.643	0.003		1091.02	18.1836	53.7	11.6	32.4	2.235	0.162	0.161	0.005	4.978	4.24	
200	8/25/2004	7:56:57 AM	0	24.524	22.986	25.228	24.8	23.422	#	44.633	54.026	10.266	35.213	3.524	0.44		48.475	0.024	14.643	0.003		1092.02	18.2003	52.9	11.5	39.9	2.753	0.003	0.003	0.000	0.086	0.07	
201	8/25/2004	7:57:57 AM	0	24.561	23.003	25.21	24.798	23.48	#	44.637	54.101	10.195	35.262	3.527	0.452		49.328	0.023	14.643	0.003		1093.02	18.2169	53.0	11.7	39.9	2.754	0.003	0.003	0.000	0.082	0.07	
202	8/25/2004	7:58:57 AM	0	24.585	23.007	25.209	24.846	23.554	#	44.589	54.15	10.309	34.987	3.521	0.455		48.3	0.023	14.643	0.003		1094.02	18.2336	53.0	11.5	39.8	2.743	0.003	0.003	0.000	0.082	0.07	
203	8/25/2004	7:59:57 AM	0	24.617	23.024	25.241	24.948	23.501	#	44.732	54.48	10.518	34.877	3.53	0.466		50.163	0.022	14.643	0.003		1095.02	18.2503	53.4	11.9	39.8	2.744	0.003	0.003	0.000	0.079	0.07	
204	8/25/2004	8:00:57 AM	0	24.649	23.042	25.208	25.021	23.523	#	44.537	53.901	10.255	35.248	3.527	0.472		49.226	0.022	14.643	0.003		1096.02	18.2669	52.8	11.7	39.9	2.750	0.003	0.003	0.000	0.078	0.07	
205	8/25/2004	8:01:57 AM	0	24.666	23.048	25.195	25.033	23.445	#	44.458	53.893	10.273	34.975	3.524	0.472		49.487	0.022	14.643	0.003		1097.02	18.2836	52.8	11.8	39.7	2.738	0.003	0.003	0.000	0.079	0.07	
206	8/25/2004	8:02:57 AM	0	24.688	23.06	25.212	25.065	23.387	#	44.317	53.935	10.35	34.778	3.524	0.481		49.021	0.022	14.643	0.003		1098.02	18.3003	52.8	11.7	39.5	2.727	0.003	0.003	0.000	0.079	0.07	
207	8/25/2004	8:03:57 AM	0	24.71	23.082	25.224	25.082	23.383	#	45.023	54.434	10.196	35.669	3.527	0.49		49.026	0.022	14.643	0.003		1099.02	18.3169	53.3	11.7	40.3	2.782	0.003	0.003	0.000	0.078	0.07	
208	8/25/2004	8:04:57 AM	0	24.721	23.088	25.189	25.052	23.429	#	44.84	54.179	10.185	35.537	3.527	0.495		48.458	0.022	14.643	0.003		1100.02	18.3336	53.1	11.5	40.2	2.771	0.003	0.003	0.000	0.078	0.07	
209	8/25/2004	8:05:57 AM	0	24.737	23.099	25.196	25.054	23.4	#	44.769	54.3	10.164	35.504	3.521	0.498		48.949	0.022	14.643	0.003		1101.02	18.3503	53.2	11.7	40.1	2.767	0.003	0.003	0.000	0.078	0.07	
210	8/25/2004	8:06:57 AM	0	24.753	23.115	25.216	25.064	23.386	#	44.995	54.482	9.915	35.911	3.524	0.51		48.173	0.022	14.643	0.003		1102.02	18.3669	53.4	11.5	40.5	2.789	0.003	0.003	0.000	0.077	0.07	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	8/25/2004	8:07:57 AM	0	24.768	23.121	25.192	25.08	23.387	#	44.842	54.432	10.354	35.238	3.527	0.516		49.355	0.022	14.643	0.003		1103.02	18.3836	53.3	11.8	40.0	2.761	0.003	0.003	0.000	0.078	0.07	
212	8/25/2004	8:08:57 AM	0	24.785	23.127	25.163	25.076	23.403	#	45.074	54.534	10.211	35.615	3.536	0.518		48.552	0.021	14.643	0.003		1104.02	18.4003	53.4	11.6	40.3	2.782	0.003	0.003	0.000	0.074	0.06	
213	8/25/2004	8:09:57 AM	0	24.82	23.147	25.218	25.086	23.448	#	44.9	54.415	10.167	35.642	3.55	0.533		48.415	0.021	14.643	0.003		1105.02	18.4169	53.3	11.5	40.3	2.777	0.003	0.003	0.000	0.074	0.06	
214	8/25/2004	8:10:57 AM	0	24.851	23.163	25.214	25.138	23.504	#	44.74	54.297	10.154	35.373	3.547	0.533		48.542	0.021	14.643	0.003		1106.02	18.4336	53.2	11.6	40.1	2.762	0.003	0.003	0.000	0.075	0.06	
215	8/25/2004	8:11:57 AM	0	24.867	23.174	25.195	25.158	23.48	#	44.911	54.474	10.099	35.702	3.536	0.539		48.417	0.021	14.643	0.003		1107.02	18.4503	53.3	11.5	40.3	2.779	0.003	0.003	0.000	0.074	0.06	
216	8/25/2004	8:12:57 AM	0	24.882	23.175	25.196	25.194	23.465	#	44.759	54.206	10.256	35.236	3.547	0.547		48.803	0.021	14.643	0.003		1108.02	18.4669	53.1	11.6	40.0	2.758	0.003	0.003	0.000	0.075	0.06	
217	8/25/2004	8:13:57 AM	0	24.913	23.201	25.227	25.24	23.462	#	44.966	54.824	10.173	35.484	3.547	0.553		48.487	0.021	14.643	0.003		1109.02	18.4836	53.7	11.5	40.2	2.773	0.003	0.003	0.000	0.074	0.06	
218	8/25/2004	8:14:57 AM	0	24.94	23.207	25.223	25.242	23.588	#	44.879	54.449	10.236	35.505	3.55	0.562		49.762	0.021	14.643	0.003		1110.02	18.5003	53.3	11.9	40.2	2.771	0.003	0.003	0.000	0.074	0.06	
219	8/25/2004	8:15:57 AM	0	24.944	23.202	25.193	25.261	23.563	#	44.46	54.208	10.188	35.061	3.553	0.568		48.275	0.021	14.643	0.003		1111.02	18.5169	53.1	11.5	39.8	2.741	0.003	0.003	0.000	0.075	0.06	
220	8/25/2004	8:16:57 AM	0	24.981	23.234	25.239	25.293	23.529	#	44.587	54.302	10.191	35.102	3.553	0.573		48.143	0.021	14.643	0.003		1112.02	18.5336	53.2	11.5	39.8	2.747	0.003	0.003	0.000	0.075	0.06	
221	8/25/2004	8:17:57 AM	0	24.986	23.234	25.229	25.268	23.489	#	44.689	54.337	10.21	35.377	3.547	0.579		49.065	0.021	14.643	0.003		1113.02	18.5503	53.2	11.7	40.0	2.760	0.003	0.003	0.000	0.075	0.06	
222	8/25/2004	8:18:57 AM	0	25.002	23.244	25.215	25.289	23.555	#	44.734	54.416	10.15	35.371	3.55	0.582		48.788	0.021	14.643	0.003		1114.02	18.5669	53.3	11.6	40.1	2.761	0.003	0.003	0.000	0.075	0.06	
223	8/25/2004	8:19:57 AM	0	25.023	23.261	25.226	25.33	23.576	#	44.9	54.498	10.289	35.316	3.55	0.591		48.951	0.021	14.643	0.003		1115.02	18.5836	53.4	11.7	40.1	2.765	0.003	0.003	0.000	0.074	0.06	
224	8/25/2004	8:20:57 AM	0	25.039	23.261	25.197	25.31	23.522	#	44.463	53.908	10.24	35.096	3.547	0.594		49.257	0.02	14.643	0.003		1116.02	18.6003	52.8	11.7	39.8	2.743	0.003	0.003	0.000	0.072	0.06	
225	8/25/2004	8:21:57 AM	0	25.054	23.282	25.208	25.356	23.568	#	44.911	54.596	10.314	35.472	3.553	0.602		49.122	0.02	14.643	0.003		1117.02	18.6169	53.5	11.7	40.2	2.771	0.003	0.003	0.000	0.071	0.06	
226	8/25/2004	8:22:57 AM	0	25.07	23.283	25.228	25.377	23.623	#	44.701	54.239	10.383	35.11	3.55	0.611		49.334	0.02	14.643	0.003		1118.02	18.6336	53.1	11.8	39.9	2.751	0.003	0.003	0.000	0.071	0.06	
227	8/25/2004	8:23:57 AM	0	25.075	23.293	25.194	25.403	23.619	#	44.757	54.256	10.316	35.242	3.55	0.617		48.627	0.02	14.643	0.003		1119.02	18.6503	53.1	11.6	40.0	2.758	0.003	0.003	0.000	0.071	0.06	
228	8/25/2004	8:24:57 AM	0	25.097	23.31	25.205	25.419	23.57	#	44.745	54.629	10.313	35.19	3.55	0.62		48.905	0.02	14.643	0.003		1120.02	18.6669	53.5	11.6	40.0	2.756	0.003	0.003	0.000	0.071	0.06	
229	8/25/2004	8:25:57 AM	0	25.108	23.321	25.236	25.43	23.531	#	44.537	53.96	10.332	35.111	3.553	0.628		49.167	0.02	14.643	0.003		1121.02	18.6836	52.8	11.7	39.8	2.746	0.003	0.003	0.000	0.071	0.06	
230	8/25/2004	8:26:57 AM	0	25.119	23.337	25.252	25.431	23.522	#	44.535	54.1	10.258	35.09	3.562	0.634		49.118	0.02	14.643	0.003		1122.02	18.7003	53.0	11.7	39.8	2.745	0.003	0.003	0.000	0.071	0.06	
231	8/25/2004	8:27:57 AM	0	25.129	23.337	25.218	25.461	23.563	#	44.465	54.146	10.197	35.072	3.565	0.64		49.022	0.02	14.643	0.003		1123.02	18.7169	53.0	11.7	39.8	2.742	0.003	0.003	0.000	0.072	0.06	
232	8/25/2004	8:28:57 AM	0	25.156	23.359	25.249	25.513	23.634	#	44.701	54.341	10.375	35.061	3.556	0.651		48.69	0.02	14.643	0.004		1124.02	18.7336	53.2	11.6	39.9	2.750	0.003	0.003	0.000	0.071	0.06	
233	8/25/2004	8:29:57 AM	0	25.172	23.375	25.26	25.534	23.645	#	44.915	54.6	10.245	35.544	3.585	0.654		49.305	0.02	14.643	0.003		1125.02	18.7503	53.5	11.7	40.2	2.774	0.003	0.003	0.000	0.071	0.06	
234	8/25/2004	8:30:57 AM	0	25.172	23.38	25.225	25.539	23.731	#	44.883	54.619	10.392	35.25	3.628	0.75		49.145	0.02	14.643	0.003		1126.02	18.7669	53.5	11.7	40.1	2.762	0.003	0.003	0.000	0.071	0.06	
235	8/25/2004	8:31:57 AM	0	25.188	23.397	25.252	25.555	23.707	#	44.579	54.187	10.243	35.281	3.776	0.938		49.061	0.02	14.643	0.003		1127.02	18.7836	53.1	11.7	39.9	2.753	0.003	0.003	0.000	0.071	0.06	
236	8/25/2004	8:32:57 AM	0	25.193	23.397	25.272	25.565	23.717	#	45.008	54.758	10.382	35.42	3.776	0.938		48.573	0.02	14.643	0.003		1128.02	18.8003	53.6	11.6	40.2	2.773	0.003	0.003	0.000	0.071	0.06	
237	8/25/2004	8:33:57 AM	0	25.199	23.407	25.222	25.551	23.652	#	44.711	54.407	10.232	35.324	3.776	0.938		48.876	0.02	14.643	0.003		1129.02	18.8169	53.3	11.6	40.0	2.759	0.003	0.003	0.000	0.071	0.06	
238	8/25/2004	8:34:57 AM	0	25.224	23.433	25.268	25.582	23.678	#	44.404	54.281	10.239	34.92	3.776	0.935		48.786	0.02	14.643	0.003		1130.02	18.8336	53.2	11.6	39.7	2.735	0.003	0.003	0.000	0.072	0.06	
239	8/25/2004	8:35:57 AM	0	25.22	23.429	25.258	25.557	23.674	#	44.724	54.7	10.309	35.084	3.773	0.932		48.807	0.02	14.643	0.003		1131.02	18.8503	53.6	11.6	39.9	2.751	0.003	0.003	0.000	0.071	0.06	
240	8/25/2004	8:36:57 AM	0	25.224	23.437	25.232	25.556	23.687	#	44.834	54.202	10.239	35.591	3.776	0.932		48.967	0.02	14.643	0.003		1132.02	18.8669	53.1	11.7	40.2	2.773	0.003	0.003	0.000	0.071	0.06	
241	8/25/2004	8:37:57 AM	0	25.243	23.452	25.252	25.56	23.612	#	44.434	54.173	10.102	35.191	3.779	0.935		48.494	0.02	14.643	0.003		1133.02	18.8836	53.0	11.6	39.8	2.745	0.003	0.003	0.000	0.071	0.06	
242	8/25/2004	8:38:57 AM	0	25.257	23.466	25.285	25.579	23.455	#	44.556	54.21	10.164	35.367	3.776	0.938		48.784	0.02	14.643	0.003		1134.02	18.9003	53.1	11.6	40.0	2.755	0.003	0.003	0.000	0.071	0.06	
243	8/25/2004	8:39:57 AM	0	25.245	23.454	25.243	25.497	23.498	#	44.873	54.84	10.264	35.308	3.776	0.935		48.705	0.02	14.643	0.003		1135.02	18.9169	53.7	11.6	40.1	2.764	0.003	0.003	0.000	0.071	0.06	
244	8/25/2004	8:40:57 AM	0	25.268	23.472	25.271	25.51	23.411	#	44.691	54.32	10.174	35.254	3.779	0.938		48.442	0.02	14.643	0.004		1136.02	18.9336	53.2	11.5	40.0	2.756	0.003	0.003	0.000	0.071	0.06	
245	8/25/2004	8:41:57 AM	0	25.272	23.481	25.29	25.519	23.425	#	44.631	54.445	10.316	35.149	3.773	0.935		48.481	0.02	14.643	0.003		1137.02	18.9503	53.3	11.5	39.9	2.750	0.003	0.003	0.000	0.071	0.06	
246	8/25/2004	8:42:57 AM	0	25.269	23.473	25.278	25.466	23.442	#	44.867	54.635	10.215	35.461	3.765	0.932		48.631	0.02	14.643	0.003		1138.02	18.9669	53.5	11.6	40.2	2.769	0.003	0.003	0.000	0.071	0.06	
247	8/25/2004	8:43:57 AM	0	25.294	23.493	25.282	25.476	23.457	#	44.753	54.7	10.251	35.197	3.773	0.932		49.001	0.02	14.643	0.003		1139.02	18.9836	53.6	11.7	40.0	2.756	0.003	0.003	0.000	0.071	0.06	
248	8/25/2004	8:44:57 AM	0	25.283	23.482	25.271	25.475	23.456	#	44.749	54.619	10.23	35.246	3.753	0.929		48.825	0.02	14.643	0.003		1140.02	19.0003	53.5	11.6	40.0	2.758	0.003	0.003	0.000	0.071	0.06	
249	8/25/2004	8:45:57 AM	0	25.313	23.512	25.316	25.535	23.506	#	44.89	54.787	10.334	35.322	3.779	0.929		48.919	0.02	14.643	0.003		1141.02	19.0169	53.7	11.7	40.1	2.765	0.003	0.003	0.000	0.071	0.06	
250	8/25/2004	8:46:57 AM	0	25.319	23.523	25.277	25.481	23.412	#	44.95	54.824	10.304	35.531	3.744	0.932		49.005	0.019	14.643	0.004		1142.02	19.0336	53.7	11.7	40.2	2.774	0.003	0.003	0.000	0.067	0.06	
251	8/25/2004	8:47:57 AM	0	25.324	23.523	25.288	25.446	23.412	#	44.548	54.409	10.319	34.973	3.773	0.932		49.07	0.019	14.643	0.003		1143.02	19.0503	53.3	11.7	39.8	2.741	0.003	0.003	0.000	0.068	0.06	
252	8/25/2004	8:48:57 AM	0	25.319	23.513	25.293	25.436	23.482	#	44.496	54.069	10.32	35.072	3.776	0.926		48.473	0.019	14.643	0.003		1144.02	19.0669	52.9	11.5	39.8	2.743	0.003	0.003	0.000	0.068	0.06	
253	8/25/2004	8:49:57 AM	0	25.331	23.54	25.274	25.478	23.554	#	44.502	54.217	10.227	35.147	3.762	0.929		48.907	0.019	14.643	0.004		1145.02	19.0836	53.1	11.6	39.8	2.746	0.003	0.003	0.000	0.068	0.06	
254	8/25/2004	8:50:57 AM	0	25.331	23.535	25.264	25.538	23.549	#	44.774	54.413	10.283	35.275	3.773	0.929		49.069	0.019	14.643	0.003		1146.02	19.1003	53.3	11.7	40.0	2.760	0.003	0.003	0.000	0.067	0.06	
255	8/25/2004	8:51:57 AM	0	25.357	23.562	25.291	25.635	23.636	#	44.518	54.335	10.275	34.996	3.75	0.926		48.694	0.019	14.643	0.003		1147.02	19.1169	53.2	11.6	39.8	2.741	0.003	0.003	0.000	0.068	0.06	
256	8/25/2004	8:52:57 AM	0	25.357	23.562	25.271	25.68	23.596	#	44.774	54.795	10.264	35.199	3.733	0.926		48.702	0.019	14.643	0.003		1148.02	19.1336	53.7	11.6	40.0	2.757	0.003	0.003	0.000	0.068	0.06	
257	8/25/2004	8:53:57 AM	0	25.374	23.578	25.272	25.746	23.587	#	44.684	54.084	10.176	35.533	3.767	0.929		48.8	0.019	14.643	0.004		1149.02	19.1503	53.0	11.6	40.1	2.765	0.003	0.003	0.000	0.067	0.06	
258	8/25/2004	8:54:57 AM	0	25.379	23.589	25.263	25.802	23.628	#	44.67	54.403	10.38	35.182	3.75	0.926		48.054	0.019	14.643	0.004		1150.02	19.1669	53.3	11.4	39.9	2.753	0.003	0.003	0.000	0.068	0.06	
259	8/25/2004	8:55:57 AM	0	25.391	23.6	25.279	25.853	23.704	#	44.689	54.733	10.299	35.055	3.756	0.926		48.811	0.019	14.643	0.004		1151.02	19.1836	53.6	11.6	39.9	2.749	0.003	0.003	0.000	0.068	0.06	
260	8/25/2004	8:56:57 AM	0	25.391	23.606	25.29	25.869	23.72	#	44.979	54.861	10.337	35.41	3.733	0.926		48.59	0.019	14.643	0.003		1152.02	19.2003	53.7	11.6	40.2	2.771	0.003	0.003	0.000	0.067	0.06	
261	8/25/2004	8:57:57 AM	0	25.392	23.612	25.246	25.89	23.736	#	44.662	54.492	10.277	35.033	3.765	0.923		48.617	0.019	14.643	0.003		1153.02	19.2169	53.4	11.6	39.8	2.747	0.003	0.003	0.000	0.068	0.06	
262	8/25/2004	8:58:57 AM	0	25.404	23.628	25.267	25.951	23.808	#	44.539	54.366	10.239	34.975	3.738	0.92		48.784	0.019	14.643	0.003		1154.02	19.2336	53.2	11.6	39.8	2.741	0.003	0.003	0.000	0.068	0.06	
263	8/25/2004	8:59:57 AM	0	25.415	23.64	25.293	26.003	23.804	#	43.587	54.21	10.241	34.023	4.593	21.87		49.045	0.003	14.643	0.003		1155.02	19.2503	53.1	11.7	38.8	2.675	0.000	0.000	0.000	0.011	0.01	
264	8/25/2004	9:00:57 AM	0	25.411	23.656	25.25	26.034	23.735	#	41.459	53.889	10.143	32.159	6.622	20.471		48.671	0.003	14.643	0.003		1156.02	19.2669	52.8	11.6	36.8	2.538	0.000	0.000	0.000	0.012	0.01	
265	8/25/2004	9:01:57 AM	0	25.376	23.651	25.23	26.014	23.81	#	39.489	54.484	10.273	29.964	9.054	21.072		48.857	0.003	14.643	0.003		1157.02	19.2836	53.4	11.6	34.7	2.394	0.000	0.000	0.000	0.012	0.01	
266	8/25/2004	9:02:57 AM	0	24.966	23.646	25.21	25.954	23.875	#	5.477	54.299	10.142	-4.071	43.407	23.775		48.642	0.003	14.643	0.005		1158.02	19.3003	53.2	11.6	0.7	0.048	0.000	0.000	0.001	0.607	0.52	
267	8/25/2004	9:03:57 AM	0	25.321	23.675	25.214	25.968	23.769	#	44.66	54.386	10.263	34.95	3.455	0.437		48.356	0.021	14.643	0.003		1159.02	19.3169	53.3	11.5	39.8	2.744	0.003	0.003	0.000	0.075	0.06	
268	8/25/2004	9:04:57 AM	0	25.31	23.685	25.223	25.953	23.674	#	44.786	54.202	10.237	35.346	3.455	0.443		48.802	0.02	14.643	0.003		1160.02	19.3336	53.1	11.6	40.1	2.762	0.003	0.003	0.000	0.071	0.06	
269	8/25/2004	9:05:57 AM	0	25.298	23.683	25.212	25.906	23.667	#	44.614	53.949	10.117	35.433	3.461	0.446		49.416	0.019	14.643	0.003		1161.02	19.3503	52.8	11.8	40.0	2.759	0.003	0.003	0.000	0.068	0.06	
270	8/25/2004	9:06:57 AM	0	25.322	23.702	25.206	25.88	23.521	#	44.701	54.032	10.123	35.435	3.478	0.452		48.442	0.019	14.643	0.003		1162.02	19.3669	52.9	11.5	40.1	2.763	0.003	0.003	0.000	0.067	0.06	
271	8/25/2004	9:07:57 AM	0	25.326	23.711	25.24	25.884	23.54	#	45.039	54.629	10.119	35.699	3.466	0.461		48.444	0.019	14.643	0.003		1163.02	19.3836	53.5	11.5	40.4	2.783	0.003	0.003	0.000	0.067	0.06	
272	8/25/2004	9:08:57 AM	0	25.331	23.706	25.235	25.894	23.58	#	44.989	54.451	10.18	35.609	3.498	0.461		49.161	0.019	14.643	0.003		1164.02	19.4003	53.3	11.7	40.3	2.778	0.003	0.003	0.000	0.067	0.06	
273	8/25/2004	9:09:57 AM	0	25.356	23.715	25.229	25.968	23.629	#	44.952	54.791	10.318	35.279	3.518	0.469		48.754	0.019	14.643	0.003		1165.02	19.4169	53.7	11.6	40.1	2.766	0.003	0.003	0.000	0.067	0.06	
274	8/25/2004	9:10:57 AM	0	25.381	23.736	25.265	26.029	23.72	#	45.049	54.538	10.447	35.279	3.478	0.481		49.015	0.02	14.643	0.003		1166.02	19.4336	53.4	11.7	40.2	2.769	0.003	0.003	0.000	0.071	0.06	
275	8/25/2004	9:11:57 AM	0	25.382	23.747	25.28	26.045	23.751	#	44.618	54.02	10.312	35.147	3.524	0.487		48.171	0.02	14.643	0.003		1167.02	19.4503	52.9	11.5	39.9	2.750	0.003	0.003	0.000	0.071	0.06	
276	8/25/2004	9:12:57 AM	0	25.397	23.747	25.241	26.09	23.811	#	44.863	54.198	10.289	35.546	3.463	0.49		49.034	0.02	14.643	0.003		1168.02	19.4669	53.1	11.7	40.2	2.772	0.003	0.003	0.000	0.071	0.06	
277	8/25/2004	9:13:57 AM	0	25.388	23.738	25.232	26.066	23.847	#	44.346	53.846	10.289	34.842	3.475	0.495		48.972	0.018	14.643	0.003		1169.02	19.4836	52.7	11.7	39.6	2.730	0.003	0.003	0.000	0.065	0.06	
278	8/25/2004	9:14:57 AM	0	25.409	23.759	25.263	26.107	23.863	#	45.336	54.961	9.86	36.243	3.527	0.507		47.52	0.019	14.643	0.003		1170.02	19.5003	53.8	11.3	40.8	2.812	0.003	0.003	0.000	0.066	0.06	
279	8/25/2004	9:15:57 AM	0	25.431	23.771	25.214	26.159	23.87	#	45.551	55.354	9.781	36.453	3.524	0.501		47.15	0.019	14.643	0.003		1171.02	19.5169	54.2	11.2	41.0	2.827	0.003	0.003	0.000	0.066	0.06	
280	8/25/2004	9:16:57 AM	0	25.453	23.783	25.217	26.186	23.867	#	45.593	55.174	9.948	36.395	3.521	0.51		47.701	0.019	14.643	0.003		1172.02	19.5336	54.0	11.4	41.0	2.826	0.003	0.003	0.000	0.066	0.06	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	8/25/2004	9:17:57 AM	0	25.463	23.783	25.192	26.191	23.927	#	45.091	54.364	9.646	36.305	3.524	0.51		47.382	0.019	14.643	0.003		1173.02	19.5503	53.2	11.3	40.7	2.806	0.003	0.003	0.000	0.066	0.06	
282	8/25/2004	9:18:57 AM	0	25.479	23.805	25.193	26.237	23.944	#	45.448	54.799	9.74	36.615	3.527	0.524		47.192	0.02	14.643	0.003		1174.02	19.5669	53.7	11.2	41.0	2.829	0.003	0.003	0.000	0.069	0.06	
283	8/25/2004	9:19:57 AM	0	25.486	23.812	25.155	26.294	23.98	#	45.547	55.118	9.856	36.449	3.527	0.536		46.948	0.017	14.643	0.003		1175.02	19.5836	54.0	11.2	41.0	2.827	0.002	0.002	0.000	0.059	0.05	
284	8/25/2004	9:20:57 AM	0	25.504	23.824	25.157	26.302	23.953	#	45.309	54.791	9.697	36.488	3.524	0.533		47.299	0.017	14.643	0.003		1176.02	19.6003	53.7	11.3	40.9	2.820	0.002	0.002	0.000	0.059	0.05	
285	8/25/2004	9:21:57 AM	0	25.495	23.82	25.158	26.278	24.009	#	45.556	55.189	9.942	36.27	3.521	0.544		48.016	0.019	14.643	0.003		1177.02	19.6169	54.1	11.4	40.9	2.821	0.003	0.003	0.000	0.066	0.06	
286	8/25/2004	9:22:57 AM	0	25.521	23.852	25.13	26.334	23.966	#	45.56	55.323	9.939	36.305	3.524	0.55		46.859	0.02	14.643	0.003		1178.02	19.6336	54.2	11.2	40.9	2.822	0.003	0.003	0.000	0.070	0.06	
287	8/25/2004	9:23:57 AM	0	25.523	23.858	25.141	26.361	23.997	#	45.18	54.492	9.859	36.169	3.524	0.556		47.363	0.019	14.643	0.003		1179.02	19.6503	53.4	11.3	40.7	2.804	0.003	0.003	0.000	0.067	0.06	
288	8/25/2004	9:24:57 AM	0	25.523	23.853	25.141	26.331	23.907	#	45.249	54.693	9.771	36.315	3.521	0.55		47.66	0.021	14.643	0.003		1180.02	19.6669	53.6	11.4	40.8	2.812	0.003	0.003	0.000	0.073	0.06	
289	8/25/2004	9:25:57 AM	0	25.538	23.869	25.117	26.306	23.973	#	45.348	55.012	9.886	36.293	3.527	0.579		47.574	0.017	14.643	0.003		1181.02	19.6836	53.9	11.3	40.8	2.814	0.002	0.002	0.000	0.059	0.05	
290	8/25/2004	9:26:57 AM	0	25.543	23.879	25.132	26.261	23.882	#	44.799	54.339	10.301	35.297	3.524	0.576		48.642	0.019	14.643	0.003		1182.02	19.7003	53.2	11.6	40.0	2.761	0.003	0.003	0.000	0.068	0.06	
291	8/25/2004	9:27:57 AM	0	25.542	23.888	25.146	26.16	23.831	#	44.911	54.517	10.265	35.466	3.524	0.57		48.675	0.022	14.643	0.003		1183.02	19.7169	53.4	11.6	40.2	2.771	0.003	0.003	0.000	0.078	0.07	
292	8/25/2004	9:28:57 AM	0	25.546	23.891	25.139	26.109	23.78	#	44.809	54.322	10.275	35.332	3.533	0.591		48.775	0.017	14.643	0.003		1184.02	19.7336	53.2	11.6	40.1	2.763	0.002	0.002	0.000	0.061	0.05	
293	8/25/2004	9:29:57 AM	0	25.554	23.9	25.142	26.132	23.778	#	44.881	54.699	10.427	35.125	3.524	0.596		48.608	0.019	14.643	0.003		1185.02	19.7503	53.6	11.6	40.0	2.758	0.003	0.003	0.000	0.068	0.06	
294	8/25/2004	9:30:57 AM	0	25.553	23.904	25.137	26.136	23.832	#	44.828	54.308	10.194	35.455	3.524	0.591		47.991	0.018	14.643	0.003		1186.02	19.7669	53.2	11.4	40.1	2.768	0.003	0.003	0.000	0.064	0.05	
295	8/25/2004	9:31:57 AM	0	25.556	23.917	25.165	26.114	23.72	#	44.923	54.641	10.184	35.513	3.55	0.617		48.41	0.015	14.643	0.003		1187.02	19.7836	53.5	11.5	40.2	2.773	0.002	0.002	0.000	0.053	0.05	
296	8/25/2004	9:32:57 AM	0	25.57	23.926	25.178	26.123	23.639	#	44.776	54.384	10.086	35.404	3.533	0.617		48.715	0.015	14.643	0.003		1188.02	19.8003	53.3	11.6	40.1	2.764	0.002	0.002	0.000	0.053	0.05	
297	8/25/2004	9:33:57 AM	0	25.564	23.925	25.158	26.137	23.793	#	45.006	54.602	10.158	35.611	3.533	0.614		48.008	0.021	14.643	0.003		1189.02	19.8169	53.5	11.4	40.3	2.779	0.003	0.003	0.000	0.074	0.06	
298	8/25/2004	9:34:57 AM	0	25.585	23.956	25.199	26.198	23.719	#	45.041	54.532	10.219	35.669	3.553	0.617		48.198	0.018	14.643	0.003		1190.02	19.8336	53.4	11.5	40.4	2.782	0.003	0.003	0.000	0.064	0.05	
299	8/25/2004	9:35:57 AM	0	25.585	23.951	25.214	26.228	23.759	#	45.163	54.847	10.076	35.78	3.55	0.617		48.331	0.016	14.643	0.003		1191.02	19.8503	53.7	11.5	40.5	2.790	0.002	0.002	0.000	0.056	0.05	
300	8/25/2004	9:36:57 AM	0	25.581	23.952	25.159	26.259	23.694	#	45.151	54.716	10.079	35.862	3.55	0.628		48.333	0.018	14.643	0.003		1192.02	19.8669	53.6	11.5	40.5	2.793	0.003	0.003	0.000	0.063	0.05	
301	8/25/2004	9:37:57 AM	0	25.588	23.964	25.191	26.286	23.882	#	44.91	54.606	10.01	35.691	3.55	0.628		48.41	0.018	14.643	0.003		1193.02	19.8836	53.5	11.5	40.3	2.779	0.003	0.003	0.000	0.064	0.05	
302	8/25/2004	9:38:57 AM	0	25.593	23.974	25.242	26.311	23.897	#	44.214	53.742	10.416	34.569	3.55	0.637		49.837	0.018	14.643	0.003		1194.02	19.9003	52.6	11.9	39.4	2.716	0.003	0.003	0.000	0.065	0.06	
303	8/25/2004	9:39:57 AM	0	25.605	23.975	25.253	26.363	23.919	#	44.904	54.89	10.297	35.312	3.553	0.643		48.608	0.017	14.643	0.004		1195.02	19.9169	53.8	11.6	40.1	2.765	0.002	0.002	0.000	0.060	0.05	
304	8/25/2004	9:40:57 AM	0	25.601	23.987	25.219	26.364	24.01	#	45.379	54.942	10.023	36.161	3.545	0.637		48.175	0.019	14.643	0.003		1196.02	19.9336	53.8	11.5	40.8	2.811	0.003	0.003	0.000	0.066	0.06	
305	8/25/2004	9:41:57 AM	0	25.602	23.978	25.221	26.405	24.051	#	45.031	54.718	10.099	35.66	3.611	0.75		48.404	0.019	14.643	0.003		1197.02	19.9503	53.6	11.5	40.3	2.782	0.003	0.003	0.000	0.067	0.06	
306	8/25/2004	9:42:57 AM	0	25.608	23.999	25.207	26.426	24.063	#	45.081	54.801	9.915	35.839	3.741	0.935		47.703	0.017	14.643	0.003		1198.02	19.9669	53.7	11.4	40.5	2.790	0.002	0.002	0.000	0.060	0.05	
307	8/25/2004	9:43:57 AM	0	25.625	24.016	25.229	26.438	24.07	#	44.865	54.644	9.891	35.767	3.756	0.941		47.657	0.018	14.643	0.003		1199.02	19.9836	53.5	11.4	40.3	2.780	0.003	0.003	0.000	0.064	0.05	
308	8/25/2004	9:44:57 AM	0	25.632	24.028	25.185	26.475	23.991	#	44.91	54.685	9.833	35.896	3.741	0.935		47.891	0.018	14.643	0.003		1200.02	20.0003	53.6	11.4	40.4	2.786	0.003	0.003	0.000	0.063	0.05	
309	8/25/2004	9:45:57 AM	0	25.632	24.023	25.176	26.445	23.971	#	45.01	54.598	9.87	36.03	3.75	0.932		47.966	0.017	14.643	0.003		1201.02	20.0169	53.5	11.4	40.5	2.794	0.002	0.002	0.000	0.060	0.05	
310	8/25/2004	9:46:57 AM	0	25.628	24.019	25.181	26.416	23.882	#	44.937	54.648	9.893	35.786	3.75	0.932		47.468	0.017	14.643	0.003		1202.02	20.0336	53.5	11.3	40.4	2.783	0.002	0.002	0.000	0.060	0.05	
311	8/25/2004	9:47:57 AM	0	25.637	24.023	25.151	26.43	23.876	#	45.174	54.741	9.916	36.016	3.753	0.935		47.618	0.018	14.643	0.003		1203.02	20.0503	53.6	11.3	40.6	2.799	0.003	0.003	0.000	0.063	0.05	
312	8/25/2004	9:48:57 AM	0	25.637	24.038	25.16	26.42	23.991	#	45.097	54.894	9.859	35.966	3.73	0.929		47.878	0.017	14.643	0.003		1204.02	20.0669	53.8	11.4	40.5	2.795	0.002	0.002	0.000	0.060	0.05	
313	8/25/2004	9:49:57 AM	0	25.651	24.052	25.184	26.389	23.955	#	45.035	54.67	9.828	36.073	3.733	0.943		47.459	0.018	14.643	0.004		1205.02	20.0836	53.5	11.3	40.6	2.796	0.003	0.003	0.000	0.063	0.05	
314	8/25/2004	9:50:57 AM	0	25.65	24.057	25.154	26.353	23.819	#	44.946	54.612	9.762	35.976	3.756	0.935		47.384	0.017	14.643	0.003		1206.02	20.1003	53.5	11.3	40.5	2.790	0.002	0.002	0.000	0.060	0.05	
315	8/25/2004	9:51:57 AM	0	25.66	24.066	25.163	26.348	23.829	#	45.319	55.033	9.81	36.42	3.727	0.938		47.524	0.017	14.643	0.003		1207.02	20.1169	53.9	11.3	40.9	2.818	0.002	0.002	0.000	0.059	0.05	
316	8/25/2004	9:52:57 AM	0	25.659	24.065	25.152	26.357	23.868	#	45.305	55.23	9.866	36.194	3.741	0.932		47.691	0.017	14.643	0.003		1208.02	20.1336	54.1	11.4	40.7	2.810	0.002	0.002	0.000	0.059	0.05	
317	8/25/2004	9:53:57 AM	0	25.665	24.076	25.163	26.388	23.984	#	45.464	55.205	9.834	36.514	3.756	0.938		47.442	0.017	14.643	0.003		1209.02	20.1503	54.1	11.3	41.0	2.826	0.002	0.002	0.000	0.059	0.05	
318	8/25/2004	9:54:57 AM	0	25.67	24.087	25.154	26.403	24.04	#	45.004	54.724	9.826	35.999	3.759	0.932		47.76	0.018	14.643	0.003		1210.02	20.1669	53.6	11.4	40.5	2.792	0.003	0.003	0.000	0.063	0.05	
319	8/25/2004	9:55:57 AM	0	25.671	24.092	25.144	26.429	24.035	#	45.381	55.211	9.933	36.26	3.727	0.935		47.491	0.017	14.643	0.003		1211.02	20.1836	54.1	11.3	40.8	2.814	0.002	0.002	0.000	0.059	0.05	
320	8/25/2004	9:56:57 AM	0	25.677	24.103	25.165	26.47	24.121	#	44.981	54.828	9.872	35.839	3.756	0.932		47.453	0.017	14.643	0.003		1212.02	20.2003	53.7	11.3	40.4	2.786	0.002	0.002	0.000	0.060	0.05	
321	8/25/2004	9:57:57 AM	0	25.688	24.104	25.126	26.531	24.172	#	45.39	55.269	9.842	36.264	3.753	0.935		47.238	0.018	14.643	0.004		1213.02	20.2169	54.1	11.3	40.8	2.815	0.003	0.003	0.000	0.063	0.05	
322	8/25/2004	9:58:57 AM	0	25.69	24.116	25.143	26.573	24.129	#	45.296	55.071	9.733	36.366	3.767	0.935		47.382	0.017	14.643	0.003		1214.02	20.2336	53.9	11.3	40.8	2.815	0.002	0.002	0.000	0.059	0.05	
323	8/25/2004	9:59:57 AM	0	25.69	24.127	25.169	26.603	24.1	#	45.533	55.197	9.808	36.516	3.73	0.935		47.555	0.017	14.643	0.003		1215.02	20.2503	54.1	11.3	41.0	2.828	0.002	0.002	0.000	0.059	0.05	
324	8/25/2004	10:00:57 AM	0	25.697	24.128	25.13	26.65	24.186	#	45.641	55.359	9.979	36.457	3.73	0.932		47.547	0.018	14.643	0.003		1216.02	20.2669	54.2	11.3	41.0	2.830	0.003	0.003	0.000	0.063	0.05	
325	8/25/2004	10:01:57 AM	0	25.709	24.145	25.152	26.692	24.173	#	45.28	55.048	9.924	35.977	3.759	0.932		47.194	0.017	14.643	0.003		1217.02	20.2836	53.9	11.2	40.6	2.801	0.002	0.002	0.000	0.060	0.05	
326	8/25/2004	10:02:57 AM	0	25.711	24.162	25.179	26.699	24.23	#	45.188	54.977	9.758	36.147	3.738	0.932		47.515	0.017	14.643	0.003		1218.02	20.3003	53.9	11.3	40.7	2.804	0.002	0.002	0.000	0.060	0.05	
327	8/25/2004	10:03:57 AM	0	25.732	24.174	25.171	26.726	24.272	#	45.24	54.859	9.83	36.235	3.741	0.932		48.006	0.018	14.643	0.003		1219.02	20.3169	53.7	11.4	40.7	2.809	0.003	0.003	0.000	0.063	0.05	
328	8/25/2004	10:04:57 AM	0	25.704	24.165	25.127	26.712	24.283	#	45.361	55.216	9.79	36.346	3.724	0.926		47.153	0.018	14.643	0.003		1220.02	20.3336	54.1	11.2	40.9	2.817	0.003	0.003	0.000	0.063	0.05	
329	8/25/2004	10:05:57 AM	0	25.731	24.193	25.165	26.709	24.341	#	45.423	55.305	9.765	36.371	3.744	0.938		47.536	0.017	14.643	0.004		1221.02	20.3503	54.2	11.3	40.9	2.820	0.002	0.002	0.000	0.059	0.05	
330	8/25/2004	10:06:57 AM	0	25.723	24.184	25.136	26.696	24.382	#	45.099	54.755	9.73	36.266	3.727	0.929		47.699	0.017	14.643	0.003		1222.02	20.3669	53.6	11.4	40.7	2.805	0.002	0.002	0.000	0.060	0.05	
331	8/25/2004	10:07:57 AM	0	25.73	24.207	25.124	26.773	24.445	#	45.375	55.06	9.752	36.428	3.727	0.932		47.178	0.017	14.643	0.003		1223.02	20.3836	53.9	11.2	40.9	2.820	0.002	0.002	0.000	0.059	0.05	
332	8/25/2004	10:08:57 AM	0	25.722	24.208	25.12	26.815	24.386	#	45.361	55.22	9.753	36.358	3.736	0.932		47.24	0.018	14.643	0.003		1224.02	20.4003	54.1	11.3	40.9	2.817	0.003	0.003	0.000	0.063	0.05	
333	8/25/2004	10:09:57 AM	0	25.732	24.219	25.151	26.82	24.362	#	45.242	55.139	9.737	36.305	3.744	0.929		47.259	0.017	14.643	0.003		1225.02	20.4169	54.0	11.3	40.8	2.811	0.002	0.002	0.000	0.059	0.05	
334	8/25/2004	10:10:57 AM	0	25.733	24.24	25.117	26.837	24.328	#	45.236	55.041	9.785	36.313	3.744	0.929		47.814	0.017	14.643	0.003		1226.02	20.4336	53.9	11.4	40.8	2.811	0.002	0.002	0.000	0.059	0.05	
335	8/25/2004	10:11:57 AM	0	25.733	24.25	25.137	26.787	24.283	#	45.417	55.323	9.97	36.155	3.724	0.929		46.781	0.017	14.643	0.003		1227.02	20.4503	54.2	11.1	40.8	2.812	0.002	0.002	0.000	0.059	0.05	
336	8/25/2004	10:12:57 AM	0	25.748	24.255	25.147	26.762	24.318	#	45.367	55.228	9.904	36.204	3.73	0.926		46.99	0.018	14.643	0.003		1228.02	20.4669	54.1	11.2	40.8	2.812	0.003	0.003	0.000	0.063	0.05	
337	8/25/2004	10:13:57 AM	0	25.743	24.265	25.121	26.751	24.242	#	45.346	55.068	9.837	36.317	3.738	0.926		47.363	0.017	14.643	0.003		1229.02	20.4836	53.9	11.3	40.8	2.815	0.002	0.002	0.000	0.059	0.05	
338	8/25/2004	10:14:57 AM	0	25.748	24.275	25.141	26.716	24.313	#	45.363	55.174	9.819	36.412	3.727	0.926		47.455	0.017	14.643	0.003		1230.02	20.5003	54.0	11.3	40.9	2.819	0.002	0.002	0.000	0.059	0.05	
339	8/25/2004	10:15:57 AM	0	25.752	24.279	25.146	26.66	24.252	#	45.145	55.025	9.839	36.1	3.765	0.929		46.671	0.017	14.643	0.003		1231.02	20.5169	53.9	11.1	40.6	2.801	0.002	0.002	0.000	0.060	0.05	
340	8/25/2004	10:16:57 AM	0	25.751	24.283	25.119	26.649	24.2	#	45.135	54.971	9.867	36.071	3.73	0.926		47.148	0.017	14.643	0.003		1232.02	20.5336	53.8	11.2	40.6	2.799	0.002	0.002	0.000	0.060	0.05	
341	8/25/2004	10:17:57 AM	0	25.771	24.308	25.175	26.669	24.135	#	44.154	53.817	10.531	34.515	3.727	0.914		49.958	0.017	14.643	0.003		1233.02	20.5503	52.7	11.9	39.3	2.712	0.002	0.002	0.000	0.062	0.05	
342	8/25/2004	10:18:57 AM	0	25.76	24.292	25.169	26.638	24.035	#	44.097	53.638	10.642	34.312	3.724	0.912		49.533	0.016	14.643	0.003		1234.02	20.5669	52.5	11.8	39.2	2.703	0.002	0.002	0.000	0.058	0.05	
343	8/25/2004	10:19:57 AM	0	25.779	24.311	25.203	26.627	23.958	#	44.247	53.765	10.537	34.597	3.686	0.92		50.486	0.017	14.643	0.003		1235.02	20.5836	52.6	12.0	39.4	2.718	0.002	0.002	0.000	0.061	0.05	
344	8/25/2004	10:20:57 AM	0	25.769	24.316	25.218	26.617	23.933	#	44.543	54.015	10.435	35.053	3.724	0.917		49.109	0.017	14.643	0.003		1236.02	20.6003	52.9	11.7	39.8	2.744	0.002	0.002	0.000	0.061	0.05	
345	8/25/2004	10:21:57 AM	0	25.784	24.316	25.263	26.662	24.003	#	44.046	53.736	10.464	34.388	3.712	0.923		49.593	0.017	14.643	0.003		1237.02	20.6169	52.6	11.8	39.2	2.704	0.002	0.002	0.000	0.062	0.05	
346	8/25/2004	10:22:57 AM	0	25.779	24.311	25.238	26.707	24.113	#	44.458	54.239	10.408	34.907	3.727	0.923		49.337	0.017	14.643	0.003		1238.02	20.6336	53.1	11.8	39.7	2.736	0.002	0.002	0.000	0.061	0.05	
347	8/25/2004	10:23:57 AM	0	25.81	24.353	25.294	26.783	24.175	#	43.585	53.788	10.663	33.694	4.184	19.485		49.551	0.003	14.643	0.003		1239.02	20.6503	52.7	11.8	38.6	2.664	0.000	0.000	0.000	0.011	0.01	
348	8/25/2004	10:24:57 AM	0	25.811	24.344	25.285	26.795	24.156	#	41.953	53.775	10.434	32.332	5.904	21.445		49.591	0.003	14.643	0.003		1240.02	20.6669	52.6	11.8	37.1	2.561	0.000	0.000	0.000	0.011	0.01	
349	8/25/2004	10:25:57 AM	0	25.818	24.35	25.272	26.806	24.257	#	40.163	53.771	10.383	30.581	7.904	26.473		49.435	0.003	14.643	0.003		1241.02	20.6836	52.6	11.8	35.4	2.439	0.000	0.000	0.000	0.012	0.01	
350	8/25/2004	10:26:57 AM	0	25.625	24.352	25.244	26.843	24.289	#	43.206	53.555	10.478	33.524	4.65	0.426		49.503	0.353	14.643	0.004		1242.02	20.7003	52.4	11.8	38.4	2.645	0.051	0.050	0.001	1.308	1.11	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	8/25/2004	10:27:57 AM	0	25.707	24.369	25.19	26.9	24.402	#	44.674	53.986	10.372	35.209	3.446	0.417		49.489	0.018	14.643	0.003		1243.02	20.7169	52.9	11.8	39.9	2.754	0.003	0.003	0.000	0.064	0.05	
352	8/25/2004	10:28:57 AM	0	25.703	24.37	25.102	26.931	24.433	#	44.311	53.692	10.436	34.682	3.414	0.417		49.274	0.017	14.643	0.003		1244.02	20.7336	52.6	11.7	39.5	2.723	0.002	0.002	0.000	0.061	0.05	
353	8/25/2004	10:29:57 AM	0	25.731	24.388	25.039	27.004	24.445	#	44.643	54.024	10.313	35.205	3.437	0.423		49.32	0.018	14.643	0.003		1245.02	20.7503	52.9	11.7	39.9	2.753	0.003	0.003	0.000	0.064	0.05	
354	8/25/2004	10:30:57 AM	0	25.727	24.389	25.005	27.005	24.407	#	44.72	54.045	10.255	35.359	3.411	0.423		49.161	0.017	14.643	0.003		1246.02	20.7669	52.9	11.7	40.0	2.761	0.002	0.002	0.000	0.061	0.05	
355	8/25/2004	10:31:57 AM	0	25.738	24.391	24.947	27.021	24.468	#	44.892	54.314	10.334	35.387	3.435	0.429		48.148	0.018	14.643	0.003		1247.02	20.7836	53.2	11.5	40.1	2.767	0.003	0.003	0.000	0.064	0.05	
356	8/25/2004	10:32:57 AM	0	25.734	24.401	24.882	27.002	24.524	#	44.765	54.107	10.394	35.215	3.435	0.437		49.209	0.017	14.643	0.003		1248.02	20.8003	53.0	11.7	40.0	2.757	0.002	0.002	0.000	0.061	0.05	
357	8/25/2004	10:33:57 AM	0	25.755	24.417	24.863	26.998	24.379	#	44.651	54.018	10.267	35.199	3.455	0.449		48.798	0.018	14.643	0.004		1249.02	20.8169	52.9	11.6	39.9	2.753	0.003	0.003	0.000	0.065	0.06	
358	8/25/2004	10:34:57 AM	0	25.765	24.422	24.823	26.968	24.334	#	44.409	53.872	10.327	34.889	3.452	0.461		48.999	0.016	14.643	0.003		1250.02	20.8336	52.7	11.7	39.6	2.734	0.002	0.002	0.000	0.058	0.05	
359	8/25/2004	10:35:57 AM	0	25.759	24.422	24.767	26.957	24.274	#	44.753	54.281	10.426	35.11	3.455	0.455		49.553	0.017	14.643	0.003		1251.02	20.8503	53.2	11.8	39.9	2.753	0.002	0.002	0.000	0.061	0.05	
360	8/25/2004	10:36:57 AM	0	25.768	24.431	24.761	26.911	24.188	#	44.803	54.2	10.27	35.412	3.452	0.466		48.944	0.017	14.643	0.003		1252.02	20.8669	53.1	11.7	40.1	2.765	0.002	0.002	0.000	0.061	0.05	
361	8/25/2004	10:37:57 AM	0	25.773	24.43	24.716	26.881	24.112	#	44.618	53.912	10.224	35.332	3.455	0.466		48.869	0.019	14.643	0.003		1253.02	20.8836	52.8	11.6	40.0	2.756	0.003	0.003	0.000	0.069	0.06	
362	8/25/2004	10:38:57 AM	0	25.777	24.445	24.68	26.825	24.086	#	44.606	53.91	10.19	35.359	3.452	0.475		49.111	0.019	14.643	0.003		1254.02	20.9003	52.8	11.7	40.0	2.757	0.003	0.003	0.000	0.069	0.06	
363	8/25/2004	10:39:57 AM	0	25.771	24.443	24.679	26.784	24.055	#	44.848	54.366	10.265	35.459	3.452	0.472		48.884	0.019	14.643	0.003		1255.02	20.9169	53.2	11.6	40.2	2.768	0.003	0.003	0.000	0.068	0.06	
364	8/25/2004	10:40:57 AM	0	25.774	24.442	24.632	26.772	24.114	#	44.842	54.343	10.225	35.476	3.455	0.487		49.047	0.019	14.643	0.003		1256.02	20.9336	53.2	11.7	40.2	2.769	0.003	0.003	0.000	0.068	0.06	
365	8/25/2004	10:41:57 AM	0	25.773	24.436	24.616	26.751	24.088	#	44.772	54.096	10.189	35.529	3.452	0.49		48.367	0.019	14.643	0.003		1257.02	20.9503	53.0	11.5	40.2	2.768	0.003	0.003	0.000	0.068	0.06	
366	8/25/2004	10:42:57 AM	0	25.783	24.456	24.611	26.781	24.042	#	44.966	54.306	10.206	35.587	3.455	0.504		48.755	0.016	14.643	0.004		1258.02	20.9669	53.2	11.6	40.3	2.777	0.002	0.002	0.000	0.058	0.05	
367	8/25/2004	10:43:57 AM	0	25.762	24.444	24.549	26.73	24.086	#	44.767	54.227	10.205	35.427	3.452	0.507		48.2	0.014	14.643	0.003		1259.02	20.9836	53.1	11.5	40.1	2.765	0.002	0.002	0.000	0.051	0.04	
368	8/25/2004	10:44:57 AM	0	25.777	24.475	24.59	26.75	24.172	#	44.987	54.482	10.273	35.484	3.455	0.51		48.723	0.017	14.643	0.003		1260.02	21.0003	53.4	11.6	40.2	2.774	0.002	0.002	0.000	0.061	0.05	
369	8/25/2004	10:45:57 AM	0	25.768	24.466	24.521	26.751	24.223	#	44.585	54.117	10.222	35.057	3.452	0.504		48.617	0.018	14.643	0.003		1261.02	21.0169	53.0	11.6	39.8	2.746	0.003	0.003	0.000	0.066	0.06	
370	8/25/2004	10:46:57 AM	0	25.774	24.487	24.572	26.797	24.274	#	44.703	54.134	10.14	35.474	3.452	0.521		48.74	0.02	14.643	0.003		1262.02	21.0336	53.0	11.6	40.1	2.764	0.003	0.003	0.000	0.072	0.06	
371	8/25/2004	10:47:57 AM	0	25.78	24.493	24.543	26.868	24.28	#	44.931	54.664	10.073	35.71	3.455	0.524		48.467	0.021	14.643	0.003		1263.02	21.0503	53.5	11.5	40.3	2.780	0.003	0.003	0.000	0.076	0.06	
372	8/25/2004	10:48:57 AM	0	25.767	24.495	24.51	26.885	24.347	#	45.018	54.658	10.138	35.636	3.452	0.524		48.417	0.017	14.643	0.003		1264.02	21.0669	53.5	11.5	40.3	2.780	0.002	0.002	0.000	0.061	0.05	
373	8/25/2004	10:49:57 AM	0	25.758	24.506	24.516	26.936	24.398	#	45.134	54.59	10.083	35.923	3.455	0.533		48.168	0.019	14.643	0.003		1265.02	21.0836	53.5	11.5	40.5	2.794	0.003	0.003	0.000	0.068	0.06	
374	8/25/2004	10:50:57 AM	0	25.76	24.518	24.508	26.988	24.445	#	44.94	54.357	10.113	35.718	3.455	0.547		48.146	0.016	14.643	0.003		1266.02	21.1003	53.2	11.5	40.3	2.781	0.002	0.002	0.000	0.058	0.05	
375	8/25/2004	10:51:57 AM	0	25.749	24.526	24.521	27.007	24.473	#	44.848	54.486	10.158	35.492	3.461	0.562		48.108	0.013	14.643	0.004		1267.02	21.1169	53.4	11.5	40.2	2.770	0.002	0.002	0.000	0.047	0.04	
376	8/25/2004	10:52:57 AM	0	25.726	24.524	24.469	27.029	24.491	#	44.942	54.573	10.177	35.494	3.455	0.547		48.327	0.019	14.643	0.003		1268.02	21.1336	53.4	11.5	40.2	2.773	0.003	0.003	0.000	0.069	0.06	
377	8/25/2004	10:53:57 AM	0	25.738	24.55	24.485	27.12	24.467	#	45.076	54.67	10.219	35.685	3.466	0.556		48.462	0.017	14.643	0.003		1269.02	21.1503	53.5	11.5	40.4	2.784	0.002	0.002	0.000	0.061	0.05	
378	8/25/2004	10:54:57 AM	0	25.724	24.537	24.471	27.107	24.524	#	45.332	55.075	10.17	35.976	3.475	0.559		48.181	0.016	14.643	0.003		1270.02	21.1669	53.9	11.5	40.7	2.803	0.002	0.002	0.000	0.057	0.05	
379	8/25/2004	10:55:57 AM	0	25.721	24.559	24.448	27.139	24.456	#	45.039	54.625	10.051	35.788	3.458	0.565		48.139	0.017	14.643	0.003		1271.02	21.1836	53.5	11.5	40.4	2.786	0.002	0.002	0.000	0.061	0.05	
380	8/25/2004	10:56:57 AM	0	25.721	24.569	24.479	27.124	24.351	#	44.896	54.351	10.049	35.728	3.498	0.568		48.168	0.021	14.643	0.003		1272.02	21.2003	53.2	11.5	40.3	2.779	0.003	0.003	0.000	0.076	0.06	
381	8/25/2004	10:57:57 AM	0	25.696	24.549	24.413	27.059	24.24	#	45.051	54.838	10.183	35.634	3.475	0.573		48.054	0.018	14.643	0.003		1273.02	21.2169	53.7	11.4	40.3	2.781	0.003	0.003	0.000	0.065	0.06	
382	8/25/2004	10:58:57 AM	0	25.72	24.573	24.433	27.063	24.185	#	45.108	54.925	10.272	35.546	3.469	0.579		48.235	0.016	14.643	0.003		1274.02	21.2336	53.8	11.5	40.3	2.780	0.002	0.002	0.000	0.058	0.05	
383	8/25/2004	10:59:57 AM	0	25.694	24.562	24.416	27.042	24.138	#	44.91	54.442	10.079	35.632	3.472	0.585		48.125	0.017	14.643	0.003		1275.02	21.2503	53.3	11.5	40.3	2.777	0.002	0.002	0.000	0.061	0.05	
384	8/25/2004	11:00:57 AM	0	25.703	24.576	24.395	27.055	24.017	#	45.209	54.772	10.211	35.777	3.478	0.588		48.179	0.016	14.643	0.003		1276.02	21.2669	53.6	11.5	40.5	2.792	0.002	0.002	0.000	0.058	0.05	
385	8/25/2004	11:01:57 AM	0	25.706	24.574	24.424	27.024	24.076	#	44.913	54.486	10.222	35.539	3.521	0.591		48.354	0.02	14.643	0.003		1277.02	21.2836	53.4	11.5	40.2	2.773	0.003	0.003	0.000	0.072	0.06	
386	8/25/2004	11:02:57 AM	0	25.7	24.583	24.417	27.008	24.014	#	44.929	54.577	10.187	35.56	3.524	0.611		48.327	0.014	14.643	0.004		1278.02	21.3003	53.5	11.5	40.2	2.775	0.002	0.002	0.000	0.051	0.04	
387	8/25/2004	11:03:57 AM	0	25.688	24.586	24.425	26.971	24.027	#	44.813	54.362	10.176	35.484	3.487	0.608		48.588	0.017	14.643	0.004		1279.02	21.3169	53.2	11.6	40.1	2.768	0.002	0.002	0.000	0.062	0.05	
388	8/25/2004	11:04:57 AM	0	25.697	24.6	24.435	27.015	24.112	#	44.602	54.013	10.091	35.449	3.504	0.617		48.252	0.015	14.643	0.003		1280.02	21.3336	52.9	11.5	40.0	2.760	0.002	0.002	0.000	0.055	0.05	
389	8/25/2004	11:05:57 AM	0	25.697	24.61	24.425	27.025	24.162	#	44.861	54.358	10.182	35.527	3.527	0.614		48.369	0.017	14.643	0.003		1281.02	21.3503	53.2	11.5	40.2	2.771	0.002	0.002	0.000	0.062	0.05	
390	8/25/2004	11:06:57 AM	0	25.687	24.605	24.435	26.99	24.217	#	44.91	54.409	10.22	35.507	3.527	0.625		48.736	0.015	14.643	0.003		1282.02	21.3669	53.3	11.6	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
391	8/25/2004	11:07:57 AM	0	25.684	24.612	24.401	27.046	24.348	#	44.84	54.302	10.167	35.492	3.524	0.617		48.581	0.02	14.643	0.003		1283.02	21.3836	53.2	11.6	40.2	2.769	0.003	0.003	0.000	0.073	0.06	
392	8/25/2004	11:08:57 AM	0	25.695	24.618	24.457	27.113	24.375	#	44.703	54.071	10.194	35.381	3.53	0.634		48.546	0.017	14.643	0.004		1284.02	21.4003	52.9	11.6	40.0	2.761	0.002	0.002	0.000	0.062	0.05	
393	8/25/2004	11:09:57 AM	0	25.676	24.614	24.409	27.124	24.466	#	44.854	54.233	10.3	35.307	3.518	0.628		48.458	0.017	14.643	0.003		1285.02	21.4169	53.1	11.5	40.1	2.763	0.002	0.002	0.000	0.062	0.05	
394	8/25/2004	11:10:57 AM	0	25.679	24.622	24.421	27.187	24.554	#	44.939	54.36	10.271	35.562	3.524	0.643		48.506	0.017	14.643	0.004		1286.02	21.4336	53.2	11.6	40.3	2.775	0.002	0.002	0.000	0.061	0.05	
395	8/25/2004	11:11:57 AM	0	25.667	24.62	24.414	27.209	24.611	#	44.991	54.534	10.277	35.484	3.649	0.877		48.231	0.015	14.643	0.003		1287.02	21.4503	53.4	11.5	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
396	8/25/2004	11:12:57 AM	0	25.679	24.642	24.406	27.286	24.648	#	44.95	54.585	10.216	35.543	3.66	0.926		48.325	0.016	14.643	0.003		1288.02	21.4669	53.5	11.5	40.2	2.775	0.002	0.002	0.000	0.058	0.05	
397	8/25/2004	11:13:57 AM	0	25.67	24.638	24.442	27.327	24.57	#	44.998	54.629	10.191	35.546	3.663	0.938		48.49	0.017	14.643	0.004		1289.02	21.4836	53.5	11.5	40.3	2.777	0.002	0.002	0.000	0.061	0.05	
398	8/25/2004	11:14:57 AM	0	25.672	24.655	24.414	27.294	24.547	#	44.533	54.127	10.131	35.225	3.66	0.938		48.698	0.016	14.643	0.003		1290.02	21.5003	53.0	11.6	39.9	2.750	0.002	0.002	0.000	0.058	0.05	
399	8/25/2004	11:15:57 AM	0	25.658	24.646	24.411	27.236	24.538	#	44.94	54.633	10.325	35.252	3.657	0.938		48.667	0.017	14.643	0.003		1291.02	21.5169	53.5	11.6	40.1	2.764	0.002	0.002	0.000	0.062	0.05	
400	8/25/2004	11:16:57 AM	0	25.654	24.657	24.411	27.217	24.514	#	45.008	54.726	10.254	35.472	3.657	0.941		48.281	0.017	14.643	0.003		1292.02	21.5336	53.6	11.5	40.2	2.774	0.002	0.002	0.000	0.061	0.05	
401	8/25/2004	11:17:57 AM	0	25.655	24.668	24.397	27.197	24.389	#	45.116	54.822	10.118	35.884	3.663	0.943		48.214	0.017	14.643	0.004		1293.02	21.5503	53.7	11.5	40.5	2.792	0.002	0.002	0.000	0.061	0.05	
402	8/25/2004	11:18:57 AM	0	25.66	24.673	24.422	27.157	24.394	#	44.925	54.892	10.116	35.521	3.657	0.943		47.945	0.017	14.643	0.003		1294.02	21.5669	53.8	11.4	40.2	2.773	0.002	0.002	0.000	0.062	0.05	
403	8/25/2004	11:19:57 AM	0	25.649	24.682	24.396	27.157	24.334	#	44.645	54.31	10.139	35.293	3.663	0.938		48.196	0.016	14.643	0.003		1295.02	21.5836	53.2	11.5	40.0	2.756	0.002	0.002	0.000	0.058	0.05	
404	8/25/2004	11:20:57 AM	0	25.659	24.697	24.441	27.152	24.364	#	44.589	54.461	10.176	35.115	3.66	0.941		48.392	0.017	14.643	0.003		1296.02	21.6003	53.3	11.5	39.9	2.748	0.002	0.002	0.000	0.062	0.05	
405	8/25/2004	11:21:57 AM	0	25.653	24.691	24.41	27.13	24.232	#	45.027	54.693	10.079	35.757	3.663	0.941		47.918	0.016	14.643	0.003		1297.02	21.6169	53.6	11.4	40.4	2.785	0.002	0.002	0.000	0.058	0.05	
406	8/25/2004	11:22:57 AM	0	25.651	24.694	24.404	27.084	24.131	#	44.886	54.596	10.15	35.494	3.66	0.943		48.438	0.016	14.643	0.003		1298.02	21.6336	53.5	11.5	40.2	2.771	0.002	0.002	0.000	0.058	0.05	
407	8/25/2004	11:23:57 AM	0	25.635	24.683	24.382	27.043	24.064	#	45.199	54.946	10.226	35.712	3.657	0.941		47.981	0.017	14.643	0.003		1299.02	21.6503	53.8	11.4	40.5	2.789	0.002	0.002	0.000	0.061	0.05	
408	8/25/2004	11:24:57 AM	0	25.639	24.692	24.371	27.031	24.133	#	44.631	54.378	10.003	35.39	3.66	0.938		48.173	0.015	14.643	0.003		1300.02	21.6669	53.3	11.5	40.0	2.759	0.002	0.002	0.000	0.055	0.05	
409	8/25/2004	11:25:57 AM	0	25.637	24.695	24.415	26.985	24.102	#	44.701	54.639	10.108	35.232	3.663	0.946		48.024	0.017	14.643	0.004		1301.02	21.6836	53.5	11.4	40.0	2.756	0.002	0.002	0.000	0.062	0.05	
410	8/25/2004	11:26:57 AM	0	25.631	24.694	24.383	26.999	24.125	#	44.767	54.455	10.145	35.387	3.66	0.938		48.173	0.017	14.643	0.003		1302.02	21.7003	53.3	11.5	40.1	2.763	0.002	0.002	0.000	0.062	0.05	
411	8/25/2004	11:27:57 AM	0	25.63	24.703	24.412	26.967	24.024	#	44.489	54.3	10.052	35.201	3.66	0.941		48.279	0.017	14.643	0.003		1303.02	21.7169	53.2	11.5	39.8	2.747	0.002	0.002	0.000	0.062	0.05	
412	8/25/2004	11:28:57 AM	0	25.628	24.697	24.396	26.961	24.053	#	44.765	54.523	10.009	35.636	3.66	0.941		48.185	0.017	14.643	0.003		1304.02	21.7336	53.4	11.5	40.2	2.772	0.002	0.002	0.000	0.062	0.05	
413	8/25/2004	11:29:57 AM	0	25.626	24.695	24.399	26.929	24.001	#	44.726	54.782	10.189	35.11	3.663	0.941		48.204	0.016	14.643	0.003		1305.02	21.7503	53.7	11.5	39.9	2.752	0.002	0.002	0.000	0.058	0.05	
414	8/25/2004	11:30:57 AM	0	25.62	24.698	24.407	26.898	24.084	#	44.726	54.364	10.172	35.336	3.66	0.941		48.431	0.016	14.643	0.003		1306.02	21.7669	53.2	11.5	40.0	2.760	0.002	0.002	0.000	0.058	0.05	
415	8/25/2004	11:31:57 AM	0	25.62	24.708	24.397	26.913	24.024	#	44.89	54.729	10.256	35.406	3.66	0.943		48.129	0.017	14.643	0.003		1307.02	21.7836	53.6	11.5	40.1	2.768	0.002	0.002	0.000	0.062	0.05	
416	8/25/2004	11:32:57 AM	0	25.609	24.707	24.426	26.857	24.073	#	44.562	54.405	10.108	35.188	3.66	0.943		48.344	0.016	14.643	0.003		1308.02	21.8003	53.3	11.5	39.9	2.749	0.002	0.002	0.000	0.058	0.05	
417	8/25/2004	11:33:57 AM	0	25.607	24.69	24.394	26.855	24.096	#	45.022	54.782	10.207	35.603	3.663	0.941		48.095	0.016	14.643	0.003		1309.02	21.8169	53.7	11.5	40.3	2.779	0.002	0.002	0.000	0.058	0.05	
418	8/25/2004	11:34:57 AM	0	25.59	24.694	24.403	26.838	24.07	#	44.545	54.038	10.23	35.164	3.66	0.938		48.154	0.016	14.643	0.003		1310.02	21.8336	52.9	11.5	39.9	2.748	0.002	0.002	0.000	0.058	0.05	
419	8/25/2004	11:35:57 AM	0	25.606	24.709	24.408	26.874	24.05	#	44.9	54.507	10.205	35.58	3.657	0.941		48.275	0.016	14.643	0.003		1311.02	21.8503	53.4	11.5	40.2	2.774	0.002	0.002	0.000	0.058	0.05	
420	8/25/2004	11:36:57 AM	0	25.601	24.709	24.413	26.899	24.13	#	44.749	54.304	10.078	35.453	3.66	0.938		48.095	0.016	14.643	0.003		1312.02	21.8669	53.2	11.5	40.1	2.765	0.002	0.002	0.000	0.058	0.05	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	8/25/2004	11:37:57 AM	0	25.602	24.71	24.419	26.935	24.266	#	45.099	54.907	10.238	35.648	3.663	0.943		49.533	0.016	14.643	0.004		1313.02	21.8836	53.8	11.8	40.4	2.784	0.002	0.002	0.000	0.058	0.05	
422	8/25/2004	11:38:57 AM	0	25.587	24.711	24.4	26.98	24.262	#	44.666	54.219	10.128	35.457	3.66	0.938		48.427	0.016	14.643	0.003		1314.02	21.9003	53.1	11.5	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
423	8/25/2004	11:39:57 AM	0	25.589	24.712	24.421	27.007	24.313	#	44.969	54.521	10.26	35.591	3.657	0.938		48.7	0.016	14.643	0.003		1315.02	21.9169	53.4	11.6	40.3	2.777	0.002	0.002	0.000	0.058	0.05	
424	8/25/2004	11:40:57 AM	0	25.601	24.734	24.423	27.093	24.41	#	44.711	54.387	10.249	35.268	3.666	0.941		48.949	0.016	14.643	0.004		1316.02	21.9336	53.3	11.7	40.0	2.757	0.002	0.002	0.000	0.058	0.05	
425	8/25/2004	11:41:57 AM	0	25.593	24.731	24.445	27.115	24.492	#	44.554	54.266	10.19	35.182	3.663	0.941		48.404	0.016	14.643	0.003		1317.02	21.9503	53.1	11.5	39.9	2.749	0.002	0.002	0.000	0.058	0.05	
426	8/25/2004	11:42:57 AM	0	25.584	24.727	24.426	27.157	24.454	#	44.74	54.372	10.154	35.379	3.663	0.943		48.588	0.016	14.643	0.003		1318.02	21.9669	53.2	11.6	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
427	8/25/2004	11:43:57 AM	0	25.58	24.729	24.438	27.163	24.405	#	45.039	55.097	10.163	35.582	3.672	0.938		48.066	0.017	14.643	0.003		1319.02	21.9836	54.0	11.4	40.3	2.779	0.002	0.002	0.000	0.061	0.05	
428	8/25/2004	11:44:57 AM	0	25.582	24.73	24.439	27.179	24.406	#	44.713	54.467	10.119	35.328	3.66	0.938		48.095	0.016	14.643	0.003		1320.02	22.0003	53.3	11.5	40.0	2.759	0.002	0.002	0.000	0.058	0.05	
429	8/25/2004	11:45:57 AM	0	25.582	24.741	24.425	27.2	24.317	#	44.635	54.395	10.208	35.268	3.66	0.938		48.292	0.015	14.643	0.003		1321.02	22.0169	53.3	11.5	40.0	2.755	0.002	0.002	0.000	0.055	0.05	
430	8/25/2004	11:46:57 AM	0	25.582	24.746	24.46	27.175	24.207	#	44.728	54.569	10.108	35.519	3.66	0.941		48.317	0.016	14.643	0.003		1322.02	22.0336	53.4	11.5	40.1	2.766	0.002	0.002	0.000	0.058	0.05	
431	8/25/2004	11:47:57 AM	0	25.577	24.736	24.42	27.14	24.162	#	44.546	54.283	10.201	35.211	3.66	0.938		48.317	0.015	14.643	0.003		1323.02	22.0503	53.2	11.5	39.9	2.749	0.002	0.002	0.000	0.055	0.05	
432	8/25/2004	11:48:57 AM	0	25.587	24.74	24.459	27.119	24.171	#	44.535	54.09	10.206	35.16	3.66	0.938		48.759	0.016	14.643	0.003		1324.02	22.0669	53.0	11.6	39.8	2.747	0.002	0.002	0.000	0.058	0.05	
433	8/25/2004	11:49:57 AM	0	25.575	24.739	24.423	27.088	24.17	#	44.836	54.554	10.151	35.48	3.66	0.935		48.438	0.016	14.643	0.003		1325.02	22.0836	53.4	11.5	40.2	2.769	0.002	0.002	0.000	0.058	0.05	
434	8/25/2004	11:50:57 AM	0	25.585	24.744	24.448	27.088	24.275	#	44.626	54.134	10.161	35.381	3.66	0.935		48.116	0.016	14.643	0.003		1326.02	22.1003	53.0	11.5	40.0	2.758	0.002	0.002	0.000	0.058	0.05	
435	8/25/2004	11:51:57 AM	0	25.579	24.747	24.431	27.082	24.299	#	44.68	54.422	10.202	35.275	3.66	0.943		48.189	0.016	14.643	0.003		1327.02	22.1169	53.3	11.5	40.0	2.756	0.002	0.002	0.000	0.058	0.05	
436	8/25/2004	11:52:57 AM	0	25.593	24.746	24.42	27.06	24.212	#	44.689	54.358	10.072	35.439	3.66	0.943		48.412	0.016	14.643	0.003		1328.02	22.1336	53.2	11.5	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
437	8/25/2004	11:53:57 AM	0	25.587	24.745	24.434	27.005	24.171	#	45.114	54.805	10.257	35.673	3.663	0.935		48.208	0.016	14.643	0.003		1329.02	22.1503	53.7	11.5	40.4	2.785	0.002	0.002	0.000	0.058	0.05	
438	8/25/2004	11:54:57 AM	0	25.601	24.76	24.419	27.009	24.246	#	44.734	54.279	10.15	35.396	3.66	0.938		48.141	0.017	14.643	0.003		1330.02	22.1669	53.2	11.5	40.1	2.762	0.002	0.002	0.000	0.062	0.05	
439	8/25/2004	11:55:57 AM	0	25.601	24.759	24.448	27.003	24.2	#	44.846	54.544	10.125	35.449	3.66	0.938		47.985	0.017	14.643	0.003		1331.02	22.1836	53.4	11.4	40.1	2.768	0.002	0.002	0.000	0.062	0.05	
440	8/25/2004	11:56:57 AM	0	25.605	24.773	24.442	27.028	24.23	#	44.832	54.644	10.259	35.308	3.666	0.941		48.427	0.016	14.643	0.004		1332.02	22.2003	53.5	11.5	40.1	2.763	0.002	0.002	0.000	0.058	0.05	
441	8/25/2004	11:57:57 AM	0	25.594	24.768	24.442	27.007	24.209	#	44.927	54.633	10.253	35.379	3.66	0.938		48.415	0.016	14.643	0.003		1333.02	22.2169	53.5	11.5	40.2	2.768	0.002	0.002	0.000	0.058	0.05	
442	8/25/2004	11:58:57 AM	0	25.599	24.767	24.426	27.012	24.203	#	44.662	54.142	10.052	35.461	3.657	0.935		47.954	0.016	14.643	0.003		1334.02	22.2336	53.0	11.4	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
443	8/25/2004	11:59:57 AM	0	25.599	24.762	24.401	27.022	24.133	#	45.209	54.857	10.237	35.802	3.66	0.935		48.189	0.016	14.643	0.003		1335.02	22.2503	53.7	11.5	40.5	2.793	0.002	0.002	0.000	0.058	0.05	
444	8/25/2004	12:00:57 PM	0	25.603	24.766	24.435	27.066	24.007	#	44.687	54.028	10.145	35.42	3.663	0.938		48.206	0.016	14.643	0.004		1336.02	22.2669	52.9	11.5	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
445	8/25/2004	12:01:57 PM	0	25.608	24.771	24.41	27.051	24.107	#	44.778	54.358	10.167	35.447	3.657	0.929		48.2	0.016	14.643	0.003		1337.02	22.2836	53.2	11.5	40.1	2.766	0.002	0.002	0.000	0.058	0.05	
446	8/25/2004	12:02:57 PM	0	25.609	24.767	24.446	27.081	24.213	#	44.562	54.192	10.183	35.252	3.663	0.938		48.433	0.016	14.643	0.004		1338.02	22.3003	53.1	11.5	39.9	2.751	0.002	0.002	0.000	0.058	0.05	
447	8/25/2004	12:03:57 PM	0	25.614	24.773	24.417	27.127	24.214	#	44.732	54.418	10.197	35.32	3.66	0.929		47.943	0.016	14.643	0.003		1339.02	22.3169	53.3	11.4	40.0	2.760	0.002	0.002	0.000	0.058	0.05	
448	8/25/2004	12:04:57 PM	0	25.631	24.785	24.464	27.179	24.286	#	44.875	54.532	10.113	35.63	3.663	0.938		48.44	0.015	14.643	0.003		1340.02	22.3336	53.4	11.5	40.3	2.775	0.002	0.002	0.000	0.054	0.05	
449	8/25/2004	12:05:57 PM	0	25.643	24.792	24.466	27.226	24.313	#	45	54.747	10.145	35.56	3.663	0.938		47.576	0.016	14.643	0.004		1341.02	22.3503	53.6	11.3	40.3	2.777	0.002	0.002	0.000	0.058	0.05	
450	8/25/2004	12:06:57 PM	0	25.63	24.784	24.423	27.283	24.44	#	44.763	54.384	10.112	35.431	3.66	0.935		48.231	0.015	14.643	0.003		1342.02	22.3669	53.3	11.5	40.1	2.765	0.002	0.002	0.000	0.054	0.05	
451	8/25/2004	12:07:57 PM	0	25.632	24.791	24.465	27.33	24.547	#	45.047	54.907	10.169	35.685	3.663	0.935		48.39	0.016	14.643	0.003		1343.02	22.3836	53.8	11.5	40.4	2.783	0.002	0.002	0.000	0.058	0.05	
452	8/25/2004	12:08:57 PM	0	25.651	24.804	24.448	27.433	24.67	#	44.836	54.509	10.071	35.607	3.66	0.935		48.168	0.016	14.643	0.003		1344.02	22.4003	53.4	11.5	40.2	2.773	0.002	0.002	0.000	0.058	0.05	
453	8/25/2004	12:09:57 PM	0	25.643	24.807	24.471	27.446	24.633	#	44.983	54.944	10.209	35.474	3.66	0.935		48.156	0.017	14.643	0.003		1345.02	22.4169	53.8	11.5	40.2	2.774	0.002	0.002	0.000	0.061	0.05	
454	8/25/2004	12:10:57 PM	0	25.64	24.814	24.443	27.488	24.545	#	44.942	54.581	10.242	35.574	3.66	0.935		48.183	0.015	14.643	0.003		1346.02	22.4336	53.5	11.5	40.3	2.776	0.002	0.002	0.000	0.054	0.05	
455	8/25/2004	12:11:57 PM	0	25.637	24.805	24.439	27.439	24.426	#	45.085	54.673	10.311	35.566	3.66	0.932		48.241	0.015	14.643	0.003		1347.02	22.4503	53.5	11.5	40.3	2.780	0.002	0.002	0.000	0.054	0.05	
456	8/25/2004	12:12:57 PM	0	25.648	24.811	24.445	27.435	24.358	#	44.658	54.256	10.203	35.34	3.66	0.935		48.511	0.016	14.643	0.003		1348.02	22.4669	53.1	11.6	40.0	2.758	0.002	0.002	0.000	0.058	0.05	
457	8/25/2004	12:13:57 PM	0	25.648	24.816	24.41	27.42	24.338	#	44.884	54.445	10.252	35.412	3.66	0.938		48.421	0.017	14.643	0.003		1349.02	22.4836	53.3	11.5	40.1	2.768	0.002	0.002	0.000	0.062	0.05	
458	8/25/2004	12:14:57 PM	0	25.649	24.812	24.446	27.426	24.293	#	44.682	54.366	10.192	35.252	3.657	0.932		48.043	0.016	14.643	0.003		1350.02	22.5003	53.2	11.4	40.0	2.756	0.002	0.002	0.000	0.058	0.05	
459	8/25/2004	12:15:57 PM	0	25.659	24.828	24.432	27.397	24.269	#	45.114	54.898	10.304	35.496	3.66	0.932		48.54	0.016	14.643	0.003		1351.02	22.5169	53.8	11.6	40.3	2.779	0.002	0.002	0.000	0.058	0.05	
460	8/25/2004	12:16:57 PM	0	25.659	24.828	24.452	27.387	24.359	#	45.135	54.934	10.3	35.564	3.66	0.935		48.508	0.016	14.643	0.003		1352.02	22.5336	53.8	11.6	40.3	2.782	0.002	0.002	0.000	0.058	0.05	
461	8/25/2004	12:17:57 PM	0	25.659	24.838	24.442	27.382	24.309	#	44.838	54.671	10.218	35.371	3.66	0.938		48.035	0.016	14.643	0.004		1353.02	22.5503	53.5	11.4	40.1	2.765	0.002	0.002	0.000	0.058	0.05	
462	8/25/2004	12:18:57 PM	0	25.665	24.849	24.437	27.367	24.395	#	44.998	54.708	10.149	35.706	3.657	0.932		47.872	0.016	14.643	0.003		1354.02	22.5669	53.6	11.4	40.4	2.782	0.002	0.002	0.000	0.058	0.05	
463	8/25/2004	12:19:57 PM	0	25.67	24.844	24.452	27.327	24.365	#	44.687	54.496	10.068	35.507	3.657	0.935		48.348	0.016	14.643	0.003		1355.02	22.5836	53.4	11.5	40.1	2.765	0.002	0.002	0.000	0.058	0.05	
464	8/25/2004	12:20:57 PM	0	25.665	24.844	24.432	27.327	24.265	#	44.655	54.355	10.093	35.347	3.66	0.935		48.17	0.016	14.643	0.003		1356.02	22.6003	53.2	11.5	40.0	2.758	0.002	0.002	0.000	0.058	0.05	
465	8/25/2004	12:21:57 PM	0	25.669	24.852	24.466	27.281	24.203	#	44.695	54.482	10.115	35.414	3.66	0.935		48.171	0.015	14.643	0.003		1357.02	22.6169	53.4	11.5	40.1	2.762	0.002	0.002	0.000	0.054	0.05	
466	8/25/2004	12:22:57 PM	0	25.668	24.852	24.435	27.266	24.237	#	45.186	54.892	10.256	35.638	3.66	0.929		48.079	0.016	14.643	0.003		1358.02	22.6336	53.8	11.5	40.4	2.786	0.002	0.002	0.000	0.058	0.05	
467	8/25/2004	12:23:57 PM	0	25.667	24.851	24.46	27.255	24.272	#	45.079	54.923	10.143	35.753	3.66	0.929		48.006	0.016	14.643	0.003		1359.02	22.6503	53.8	11.4	40.4	2.787	0.002	0.002	0.000	0.058	0.05	
468	8/25/2004	12:24:57 PM	0	25.672	24.861	24.47	27.25	24.202	#	44.786	54.675	10.206	35.279	3.66	0.929		48.465	0.015	14.643	0.004		1360.02	22.6669	53.5	11.5	40.0	2.760	0.002	0.002	0.000	0.054	0.05	
469	8/25/2004	12:25:57 PM	0	25.666	24.855	24.438	27.219	24.21	#	44.834	54.722	10.289	35.289	3.66	0.926		48.463	0.016	14.643	0.003		1361.02	22.6836	53.6	11.5	40.1	2.762	0.002	0.002	0.000	0.058	0.05	
470	8/25/2004	12:26:57 PM	0	25.655	24.848	24.467	27.172	24.154	#	44.83	54.505	10.171	35.474	3.66	0.929		47.647	0.015	14.643	0.003		1362.02	22.7003	53.4	11.3	40.2	2.768	0.002	0.002	0.000	0.054	0.05	
471	8/25/2004	12:27:57 PM	0	25.664	24.843	24.451	27.157	24.123	#	44.686	54.291	10.217	35.357	3.66	0.929		48.17	0.016	14.643	0.003		1363.02	22.7169	53.2	11.5	40.0	2.759	0.002	0.002	0.000	0.058	0.05	
472	8/25/2004	12:28:57 PM	0	25.679	24.863	24.507	27.112	24.053	#	44.606	54.173	10.292	35.158	3.663	0.926		48.583	0.015	14.643	0.003		1364.02	22.7336	53.0	11.6	39.9	2.750	0.002	0.002	0.000	0.055	0.05	
473	8/25/2004	12:29:57 PM	0	25.663	24.847	24.466	27.091	23.972	#	44.995	54.93	10.227	35.41	3.663	0.929		48.112	0.015	14.643	0.003		1365.02	22.7503	53.8	11.5	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
474	8/25/2004	12:30:57 PM	0	25.652	24.846	24.474	27.055	23.946	#	44.809	54.596	10.152	35.461	3.663	0.929		48.302	0.015	14.643	0.003		1366.02	22.7669	53.5	11.5	40.1	2.767	0.002	0.002	0.000	0.054	0.05	
475	8/25/2004	12:31:57 PM	0	25.651	24.84	24.459	27.059	23.92	#	44.782	54.619	10.225	35.31	3.66	0.926		48.529	0.015	14.643	0.003		1367.02	22.7836	53.5	11.6	40.0	2.761	0.002	0.002	0.000	0.054	0.05	
476	8/25/2004	12:32:57 PM	0	25.655	24.844	24.462	27.073	23.824	#	44.409	54.198	10.124	35.067	3.663	0.929		49.833	0.016	14.643	0.004		1368.02	22.8003	53.1	11.9	39.7	2.740	0.002	0.002	0.000	0.059	0.05	
477	8/25/2004	12:33:57 PM	0	25.649	24.843	24.467	27.032	23.763	#	44.56	54.101	10.336	35.09	3.66	0.929		48.362	0.015	14.643	0.003		1369.02	22.8169	53.0	11.5	39.8	2.746	0.002	0.002	0.000	0.055	0.05	
478	8/25/2004	12:34:57 PM	0	25.654	24.843	24.497	27.002	23.613	#	44.687	54.132	10.168	35.437	3.663	0.929		48.583	0.015	14.643	0.003		1370.02	22.8336	53.0	11.6	40.1	2.762	0.002	0.002	0.000	0.054	0.05	
479	8/25/2004	12:35:57 PM	0	25.659	24.847	24.471	27.011	23.492	#	44.852	54.438	10.29	35.357	3.657	0.926		48.435	0.016	14.643	0.003		1371.02	22.8503	53.3	11.5	40.1	2.765	0.002	0.002	0.000	0.058	0.05	
480	8/25/2004	12:36:57 PM	0	25.654	24.843	24.487	26.982	23.422	#	44.788	54.341	10.234	35.388	3.66	0.923		48.373	0.016	14.643	0.003		1372.02	22.8669	53.2	11.5	40.1	2.764	0.002	0.002	0.000	0.058	0.05	
481	8/25/2004	12:37:57 PM	0	25.654	24.843	24.517	26.827	23.402	#	44.813	54.569	10.239	35.373	3.66	0.932		48.713	0.015	14.643	0.003		1373.02	22.8836	53.4	11.6	40.1	2.764	0.002	0.002	0.000	0.054	0.05	
482	8/25/2004	12:38:57 PM	0	25.637	24.816	24.505	26.71	23.446	#	44.355	54.26	10.072	34.959	3.663	0.929		48.4	0.016	14.643	0.004		1374.02	22.9003	53.1	11.5	39.7	2.734	0.002	0.002	0.000	0.059	0.05	
483	8/25/2004	12:39:57 PM	0	25.635	24.809	24.478	26.668	23.599	#	44.736	54.503	10.238	35.199	3.663	0.929		48.075	0.016	14.643	0.003		1375.02	22.9169	53.4	11.5	40.0	2.756	0.002	0.002	0.000	0.058	0.05	
484	8/25/2004	12:40:57 PM	0	25.633	24.822	24.506	26.681	23.692	#	44.952	54.691	10.29	35.361	3.663	0.932		49.153	0.016	14.643	0.004		1376.02	22.9336	53.6	11.7	40.2	2.769	0.002	0.002	0.000	0.058	0.05	
485	8/25/2004	12:41:57 PM	0	25.638	24.821	24.48	26.711	23.852	#	44.861	54.36	10.189	35.574	3.663	0.932		48.475	0.016	14.643	0.003		1377.02	22.9503	53.2	11.5	40.2	2.773	0.002	0.002	0.000	0.058	0.05	
486	8/25/2004	12:42:57 PM	0	25.652	24.826	24.535	26.765	23.871	#	44.757	54.165	10.22	35.435	3.663	0.938		48.223	0.016	14.643	0.003		1378.02	22.9669	53.0	11.5	40.1	2.764	0.002	0.002	0.000	0.058	0.05	
487	8/25/2004	12:43:57 PM	0	25.642	24.821	24.5	26.805	24.011	#	44.74	54.27	10.273	35.308	3.663	0.935		48.223	0.016	14.643	0.003		1379.02	22.9836	53.1	11.5	40.0	2.760	0.002	0.002	0.000	0.058	0.05	
488	8/25/2004	12:44:57 PM	0	25.648	24.821	24.52	26.901	24.097	#	44.962	54.7	10.235	35.476	3.66	0.932		48.292	0.015	14.643	0.003		1380.02	23.0003	53.6	11.5	40.2	2.773	0.002	0.002	0.000	0.054	0.05	
489	8/25/2004	12:45:57 PM	0	25.633	24.812	24.496	26.966	24.193	#	44.906	54.629	10.262	35.468	3.66	0.932		48.483	0.015	14.643	0.003		1381.02	23.0169	53.5	11.5	40.2	2.771	0.002	0.002	0.000	0.054	0.05	
490	8/25/2004	12:46:57 PM	0	25.65	24.824	24.498	27.083	24.315	#	44.954	54.685	10.323	35.431	3.657	0.935		48.383	0.016	14.643	0.003		1382.02	23.0336	53.6	11.5	40.2	2.771	0.002	0.002	0.000	0.058	0.05	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	8/25/2004	12:47:57 PM	0	25.643	24.816	24.511	27.131	24.458	#	44.855	54.718	10.249	35.349	3.66	0.932		48.465	0.015	14.643	0.003		1383.02	23.0503	53.6	11.5	40.1	2.765	0.002	0.002	0.000	0.054	0.05	
492	8/25/2004	12:48:57 PM	0	25.645	24.808	24.483	27.273	24.57	#	44.4	54.273	10.067	35.188	3.66	0.932		48.508	0.015	14.643	0.003		1384.02	23.0669	53.1	11.6	39.8	2.744	0.002	0.002	0.000	0.055	0.05	
493	8/25/2004	12:49:57 PM	0	25.657	24.83	24.535	27.324	24.557	#	44.78	54.731	10.182	35.332	3.66	0.914		48.15	0.015	14.643	0.003		1385.02	23.0836	53.6	11.5	40.1	2.762	0.002	0.002	0.000	0.054	0.05	
494	8/25/2004	12:50:57 PM	0	25.66	24.823	24.512	27.307	24.599	#	44.647	54.31	10.154	35.318	3.655	0.912		48.642	0.016	14.643	0.003		1386.02	23.1003	53.2	11.6	40.0	2.757	0.002	0.002	0.000	0.058	0.05	
495	8/25/2004	12:51:57 PM	0	25.665	24.839	24.528	27.338	24.445	#	44.539	54.252	10.17	35.121	3.66	0.917		48.298	0.015	14.643	0.003		1387.02	23.1169	53.1	11.5	39.8	2.746	0.002	0.002	0.000	0.055	0.05	
496	8/25/2004	12:52:57 PM	0	25.68	24.844	24.548	27.318	24.335	#	44.575	54.14	10.135	35.301	3.666	0.917		48.185	0.016	14.643	0.004		1388.02	23.1336	53.0	11.5	39.9	2.754	0.002	0.002	0.000	0.058	0.05	
497	8/25/2004	12:53:57 PM	0	25.681	24.85	24.514	27.249	24.155	#	45.182	54.93	10.342	35.587	3.66	0.917		48.041	0.015	14.643	0.003		1389.02	23.1503	53.8	11.4	40.4	2.784	0.002	0.002	0.000	0.054	0.05	
498	8/25/2004	12:54:57 PM	0	25.68	24.854	24.543	27.203	24.165	#	44.778	54.465	10.26	35.283	3.663	0.914		48.606	0.015	14.643	0.003		1390.02	23.1669	53.3	11.6	40.0	2.760	0.002	0.002	0.000	0.054	0.05	
499	8/25/2004	12:55:57 PM	0	25.669	24.837	24.502	27.157	24.113	#	44.805	54.691	10.119	35.449	3.66	0.912		48.523	0.015	14.643	0.003		1391.02	23.1836	53.6	11.6	40.1	2.767	0.002	0.002	0.000	0.054	0.05	
500	8/25/2004	12:56:57 PM	0	25.699	24.843	24.537	27.102	24.113	#	43.587	54.899	10.234	33.986	5.088	9.012		48.46	0.003	14.643	0.003		1392.02	23.2003	53.8	11.5	38.8	2.674	0.000	0.000	0.000	0.011	0.01	
501	8/25/2004	12:57:57 PM	0	25.723	24.847	24.516	27.061	23.993	#	41.489	54.297	10.08	32.085	6.665	8.754		48.629	0.003	14.643	0.003		1393.02	23.2169	53.2	11.6	36.8	2.536	0.000	0.000	0.000	0.012	0.01	
502	8/25/2004	12:58:57 PM	0	25.742	24.851	24.525	27.055	23.992	#	39.985	54.556	10.07	30.514	8.57	8.731		46.644	0.003	14.643	0.003		1394.02	23.2336	53.4	11.1	35.2	2.430	0.000	0.000	0.000	0.012	0.01	
503	8/25/2004	12:59:57 PM	0	25.681	24.839	24.508	27.008	24.025	#	38.156	54.729	10.253	28.404	10.724	49.672		48.233	0.003	14.643	0.003		1395.02	23.2503	53.6	11.5	33.3	2.295	0.000	0.000	0.000	0.013	0.01	
504	8/25/2004	1:00:57 PM	0	25.69	24.844	24.498	27.048	24.064	#	35.872	54.753	10.118	26.278	13.066	91.502		48.031	0.003	14.643	0.003		1396.02	23.2669	53.6	11.4	31.1	2.143	0.000	0.000	0.000	0.014	0.01	
505	8/25/2004	1:01:57 PM	0	25.504	24.847	24.521	27.041	24.048	#	-7.277	54.586	10.007	-18.557	62.08	62.062		47.926	0.003	14.643	0.413		1397.02	23.2836	53.5	11.4	-12.9	-0.891	0.000	0.000	0.000	-0.034	-0.03	
506	8/25/2004	1:02:57 PM	0	25.603	24.862	24.501	27.026	23.952	#	8.231	54.105	10.076	-1.154	40.743	64.198		48.041	0.003	14.643	0.005		1398.02	23.3003	53.0	11.4	3.5	0.244	0.000	0.000	0.000	0.123	0.10	
507	8/25/2004	1:03:57 PM	0	25.637	24.865	24.524	27.014	23.936	#	8.352	54.416	10.041	-1.027	40.665	30.098		48.081	0.003	14.643	0.006		1399.02	23.3169	53.3	11.5	3.7	0.253	0.000	0.000	0.000	0.119	0.10	
508	8/25/2004	1:04:57 PM	0	25.645	24.854	24.488	26.978	23.959	#	8.312	54.399	10.057	-1.142	40.74	0.357		48.177	0.003	14.643	0.006		1400.02	23.3336	53.3	11.5	3.6	0.247	0.000	0.000	0.000	0.122	0.10	
509	8/25/2004	1:05:57 PM	0	25.635	24.853	24.477	27.007	23.904	#	10.326	54.074	9.996	1.054	38.67	0.357		48.135	0.031	14.643	0.003		1401.02	23.3503	52.9	11.5	5.7	0.392	0.004	0.005	0.001	0.792	0.67	
510	8/25/2004	1:06:57 PM	0	25.268	24.847	24.481	27.006	24.068	#	36.072	54.498	10.064	26.725	12.823	0.377		48.11	0.083	14.643	0.003		1402.02	23.3669	53.4	11.5	31.4	2.165	0.012	0.012	0.000	0.384	0.33	
511	8/25/2004	1:07:57 PM	0	25.593	24.851	24.46	27.045	24.027	#	44.74	54.181	10.021	35.488	3.547	0.406		48.294	0.05	14.643	0.003		1403.02	23.3836	53.1	11.5	40.1	2.766	0.007	0.007	0.000	0.181	0.15	
512	8/25/2004	1:08:57 PM	0	25.647	24.861	24.515	27.045	23.981	#	45.278	54.529	10.058	36.124	3.397	0.406		48.208	0.016	14.643	0.003		1404.02	23.4003	53.4	11.5	40.7	2.806	0.002	0.002	0.000	0.057	0.05	
513	8/25/2004	1:09:57 PM	0	25.626	24.835	24.429	26.989	24.026	#	45.199	54.749	9.977	35.927	3.394	0.409		48.619	0.016	14.643	0.003		1405.02	23.4169	53.6	11.6	40.6	2.797	0.002	0.002	0.000	0.057	0.05	
514	8/25/2004	1:10:57 PM	0	25.641	24.839	24.463	26.989	23.96	#	45.049	54.355	10.025	35.792	3.391	0.409		48.098	0.017	14.643	0.003		1406.02	23.4336	53.2	11.5	40.4	2.787	0.002	0.002	0.000	0.061	0.05	
515	8/25/2004	1:11:57 PM	0	25.666	24.854	24.458	27.033	23.95	#	45.186	54.501	10.153	35.86	3.394	0.417		48.183	0.016	14.643	0.003		1407.02	23.4503	53.4	11.5	40.5	2.794	0.002	0.002	0.000	0.057	0.05	
516	8/25/2004	1:12:57 PM	0	25.664	24.843	24.457	27.017	23.959	#	45.052	54.527	10.048	35.667	3.397	0.423		47.943	0.016	14.643	0.003		1408.02	23.4669	53.4	11.4	40.4	2.783	0.002	0.002	0.000	0.058	0.05	
517	8/25/2004	1:13:57 PM	0	25.669	24.852	24.466	27.051	24.113	#	45.016	54.486	9.939	35.845	3.397	0.426		48.006	0.016	14.643	0.003		1409.02	23.4836	53.4	11.4	40.4	2.788	0.002	0.002	0.000	0.058	0.05	
518	8/25/2004	1:14:57 PM	0	25.674	24.858	24.442	27.077	24.189	#	45.269	54.795	10.092	35.919	3.394	0.429		47.511	0.015	14.643	0.003		1410.02	23.5003	53.7	11.3	40.6	2.799	0.002	0.002	0.000	0.054	0.05	
519	8/25/2004	1:15:57 PM	0	25.674	24.853	24.472	27.067	24.119	#	45.334	54.652	10.05	36.132	3.397	0.435		48.108	0.016	14.643	0.003		1411.02	23.5169	53.5	11.5	40.7	2.808	0.002	0.002	0.000	0.057	0.05	
520	8/25/2004	1:16:57 PM	0	25.674	24.852	24.456	27.106	24.178	#	45.294	54.745	10.118	36.034	3.397	0.44		48.198	0.015	14.643	0.003		1412.02	23.5336	53.6	11.5	40.7	2.804	0.002	0.002	0.000	0.054	0.05	
521	8/25/2004	1:17:57 PM	0	25.679	24.868	24.502	27.107	24.109	#	45.101	54.59	10.1	35.802	3.4	0.443		48.093	0.016	14.643	0.003		1413.02	23.5503	53.5	11.5	40.5	2.789	0.002	0.002	0.000	0.057	0.05	
522	8/25/2004	1:18:57 PM	0	25.674	24.848	24.452	27.072	24.154	#	44.956	54.592	10.019	35.706	3.397	0.446		48.342	0.016	14.643	0.003		1414.02	23.5669	53.5	11.5	40.3	2.781	0.002	0.002	0.000	0.058	0.05	
523	8/25/2004	1:19:57 PM	0	25.675	24.859	24.462	27.088	24.134	#	45.037	54.588	10.046	35.839	3.403	0.452		48.304	0.015	14.643	0.003		1415.02	23.5836	53.5	11.5	40.4	2.788	0.002	0.002	0.000	0.054	0.05	
524	8/25/2004	1:20:57 PM	0	25.68	24.854	24.473	27.063	24.004	#	45.157	54.443	10.058	36.048	3.397	0.458		48.421	0.015	14.643	0.003		1416.02	23.6003	53.3	11.5	40.6	2.799	0.002	0.002	0.000	0.054	0.05	
525	8/25/2004	1:21:57 PM	0	25.669	24.847	24.431	27.007	24.028	#	45.079	54.625	10.086	35.728	3.429	0.464		47.841	0.015	14.643	0.003		1417.02	23.6169	53.5	11.4	40.4	2.786	0.002	0.002	0.000	0.054	0.05	
526	8/25/2004	1:22:57 PM	0	25.667	24.846	24.465	26.96	23.911	#	45.23	54.527	10.032	36.118	3.397	0.466		48.189	0.015	14.643	0.003		1418.02	23.6336	53.4	11.5	40.7	2.804	0.002	0.002	0.000	0.054	0.05	
527	8/25/2004	1:23:57 PM	0	25.672	24.856	24.455	26.925	23.891	#	45.095	54.525	9.99	35.907	3.423	0.472		47.958	0.015	14.643	0.003		1419.02	23.6503	53.4	11.4	40.5	2.792	0.002	0.002	0.000	0.054	0.05	
528	8/25/2004	1:24:57 PM	0	25.675	24.844	24.473	26.883	23.92	#	45.056	54.482	10.146	35.716	3.414	0.478		48.043	0.015	14.643	0.003		1420.02	23.6669	53.4	11.4	40.4	2.784	0.002	0.002	0.000	0.054	0.05	
529	8/25/2004	1:25:57 PM	0	25.675	24.858	24.462	26.883	23.859	#	45.188	54.942	10.189	35.574	3.452	0.481		48.12	0.015	14.643	0.003		1421.02	23.6836	53.8	11.5	40.4	2.784	0.002	0.002	0.000	0.054	0.05	
530	8/25/2004	1:26:57 PM	0	25.673	24.847	24.461	26.866	23.827	#	45.081	54.592	9.945	35.974	3.426	0.487		47.901	0.015	14.643	0.003		1422.02	23.7003	53.5	11.4	40.5	2.794	0.002	0.002	0.000	0.054	0.05	
531	8/25/2004	1:27:57 PM	0	25.667	24.836	24.445	26.82	23.761	#	45.01	54.542	10.025	35.853	3.42	0.49		48.285	0.015	14.643	0.003		1423.02	23.7169	53.4	11.5	40.4	2.788	0.002	0.002	0.000	0.054	0.05	
532	8/25/2004	1:28:57 PM	0	25.677	24.846	24.46	26.895	23.956	#	44.564	53.989	10.011	35.427	3.458	0.495		47.682	0.015	14.643	0.004		1424.02	23.7336	52.9	11.4	40.0	2.758	0.002	0.002	0.000	0.055	0.05	
533	8/25/2004	1:29:57 PM	0	25.676	24.845	24.474	26.914	24.031	#	45.358	54.816	10.152	36.075	3.452	0.498		48.108	0.015	14.643	0.003		1425.02	23.7503	53.7	11.5	40.7	2.807	0.002	0.002	0.000	0.054	0.05	
534	8/25/2004	1:30:57 PM	0	25.656	24.824	24.483	26.884	23.975	#	44.989	54.119	10.019	35.894	3.452	0.498		47.845	0.015	14.643	0.003		1426.02	23.7669	53.0	11.4	40.4	2.788	0.002	0.002	0.000	0.054	0.05	
535	8/25/2004	1:31:57 PM	0	25.676	24.834	24.493	26.934	23.9	#	45.228	54.71	10.092	35.905	3.443	0.51		48.062	0.015	14.643	0.004		1427.02	23.7836	53.6	11.4	40.6	2.797	0.002	0.002	0.000	0.054	0.05	
536	8/25/2004	1:32:57 PM	0	25.664	24.818	24.482	26.892	23.924	#	45.172	54.687	10.105	35.878	3.455	0.513		48.327	0.015	14.643	0.003		1428.02	23.8003	53.6	11.5	40.5	2.794	0.002	0.002	0.000	0.054	0.05	
537	8/25/2004	1:33:57 PM	0	25.663	24.827	24.481	26.851	23.797	#	44.95	54.681	10.143	35.461	3.449	0.516		47.837	0.015	14.643	0.003		1429.02	23.8169	53.6	11.4	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
538	8/25/2004	1:34:57 PM	0	25.667	24.826	24.48	26.845	23.857	#	44.546	54.011	9.978	35.406	3.458	0.521		47.897	0.015	14.643	0.003		1430.02	23.8336	52.9	11.4	40.0	2.756	0.002	0.002	0.000	0.055	0.05	
539	8/25/2004	1:35:57 PM	0	25.661	24.82	24.494	26.834	23.775	#	44.873	54.37	10.087	35.636	3.455	0.524		48.047	0.015	14.643	0.004		1431.02	23.8503	53.2	11.4	40.3	2.775	0.002	0.002	0.000	0.054	0.05	
540	8/25/2004	1:36:57 PM	0	25.655	24.804	24.448	26.819	23.799	#	44.942	54.418	10.047	35.738	3.449	0.527		48.135	0.015	14.643	0.003		1432.02	23.8669	53.3	11.5	40.3	2.781	0.002	0.002	0.000	0.054	0.05	
541	8/25/2004	1:37:57 PM	0	25.659	24.813	24.507	26.822	23.728	#	45.052	54.571	10.124	35.687	3.455	0.533		48.077	0.015	14.643	0.003		1433.02	23.8836	53.4	11.5	40.4	2.783	0.002	0.002	0.000	0.054	0.05	
542	8/25/2004	1:38:57 PM	0	25.649	24.802	24.471	26.847	23.823	#	45.367	54.872	10.207	35.818	3.455	0.539		47.879	0.015	14.643	0.003		1434.02	23.9003	53.7	11.4	40.6	2.799	0.002	0.002	0.000	0.054	0.05	
543	8/25/2004	1:39:57 PM	0	25.644	24.797	24.496	26.822	23.953	#	45.439	55.099	10.214	35.989	3.452	0.544		48.296	0.016	14.643	0.004		1435.02	23.9169	54.0	11.5	40.7	2.807	0.002	0.002	0.000	0.057	0.05	
544	8/25/2004	1:40:57 PM	0	25.643	24.796	24.48	26.846	23.882	#	45.182	55.019	10.186	35.679	3.452	0.544		48.269	0.015	14.643	0.003		1436.02	23.9336	53.9	11.5	40.4	2.788	0.002	0.002	0.000	0.054	0.05	
545	8/25/2004	1:41:57 PM	0	25.648	24.801	24.495	26.856	24.027	#	45.128	54.764	10.133	35.767	3.455	0.547		47.997	0.015	14.643	0.003		1437.02	23.9503	53.6	11.4	40.4	2.789	0.002	0.002	0.000	0.054	0.05	
546	8/25/2004	1:42:57 PM	0	25.649	24.797	24.496	26.882	24.023	#	45.18	54.494	10.008	36.034	3.455	0.556		48.016	0.015	14.643	0.003		1438.02	23.9669	53.4	11.4	40.6	2.800	0.002	0.002	0.000	0.054	0.05	
547	8/25/2004	1:43:57 PM	0	25.649	24.807	24.491	26.941	23.878	#	45.033	54.513	10.001	35.897	3.501	0.562		48.145	0.015	14.643	0.003		1439.02	23.9836	53.4	11.5	40.5	2.790	0.002	0.002	0.000	0.054	0.05	
548	8/25/2004	1:44:57 PM	0	25.648	24.801	24.51	26.946	23.852	#	44.763	54.219	10.073	35.468	3.455	0.568		48.15	0.015	14.643	0.004		1440.02	24.0003	53.1	11.5	40.1	2.766	0.002	0.002	0.000	0.054	0.05	
549	8/25/2004	1:45:57 PM	0	25.638	24.776	24.45	26.956	23.957	#	45.087	54.671	10.164	35.728	3.449	0.565		48.146	0.015	14.643	0.003		1441.02	24.0169	53.5	11.5	40.4	2.786	0.002	0.002	0.000	0.054	0.05	
550	8/25/2004	1:46:57 PM	0	25.658	24.806	24.531	26.996	23.867	#	44.989	54.529	10.179	35.554	3.461	0.579		48.358	0.015	14.643	0.004		1442.02	24.0336	53.4	11.5	40.3	2.777	0.002	0.002	0.000	0.054	0.05	
551	8/25/2004	1:47:57 PM	0	25.647	24.78	24.479	26.965	23.856	#	45.124	54.967	10.122	35.671	3.455	0.579		48.058	0.015	14.643	0.003		1443.02	24.0503	53.8	11.4	40.4	2.785	0.002	0.002	0.000	0.054	0.05	
552	8/25/2004	1:48:57 PM	0	25.647	24.785	24.499	26.94	23.796	#	45.016	54.728	10.095	35.685	3.487	0.585		48.523	0.015	14.643	0.003		1444.02	24.0669	53.6	11.6	40.4	2.782	0.002	0.002	0.000	0.054	0.05	
553	8/25/2004	1:49:57 PM	0	25.645	24.774	24.468	26.928	23.794	#	45.39	55.042	10.231	35.872	3.472	0.588		48.137	0.015	14.643	0.003		1445.02	24.0836	53.9	11.5	40.6	2.801	0.002	0.002	0.000	0.054	0.05	
554	8/25/2004	1:50:57 PM	0	25.656	24.789	24.483	26.934	23.92	#	44.995	54.507	10.229	35.578	3.458	0.594		48.083	0.015	14.643	0.003		1446.02	24.1003	53.4	11.5	40.3	2.778	0.002	0.002	0.000	0.054	0.05	
555	8/25/2004	1:51:57 PM	0	25.656	24.784	24.488	26.969	24.015	#	45.215	54.644	10.172	35.868	3.481	0.596		48.838	0.015	14.643	0.004		1447.02	24.1169	53.5	11.6	40.5	2.795	0.002	0.002	0.000	0.054	0.05	
556	8/25/2004	1:52:57 PM	0	25.653	24.786	24.455	27.031	24.172	#	45.085	54.625	10.182	35.714	3.458	0.599		47.799	0.015	14.643	0.003		1448.02	24.1336	53.5	11.4	40.4	2.785	0.002	0.002	0.000	0.054	0.05	
557	8/25/2004	1:53:57 PM	0	25.67	24.793	24.502	27.158	24.234	#	44.939	54.357	10.153	35.601	3.501	0.602		48.024	0.015	14.643	0.004		1449.02	24.1503	53.2	11.4	40.3	2.776	0.002	0.002	0.000	0.054	0.05	
558	8/25/2004	1:54:57 PM	0	25.673	24.792	24.466	27.241	24.418	#	44.861	54.37	10.09	35.511	3.518	0.605		47.793	0.015	14.643	0.003		1450.02	24.1669	53.2	11.4	40.2	2.771	0.002	0.002	0.000	0.054	0.05	
559	8/25/2004	1:55:57 PM	0	25.706	24.82	24.549	27.409	24.511	#	44.958	54.492	10.097	35.745	3.55	0.779		47.96	0.014	14.643	0.004		1451.02	24.1836	53.4	11.4	40.4	2.782	0.002	0.002	0.000	0.050	0.04	
560	8/25/2004	1:56:57 PM	0	25.705	24.824	24.513	27.493	24.575	#	45.012	54.6	10.19	35.562	3.608	0.836		48.216	0.015	14.643	0.003		1452.02	24.2003	53.5	11.5	40.3	2.778	0.002	0.002	0.000	0.054	0.05	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	8/25/2004	1:57:57 PM	0	25.734	24.827	24.531	27.551	24.573	#	45.058	54.813	10.141	35.634	3.588	0.839		48.181	0.015	14.643	0.003		1453.02	24.2169	53.7	11.5	40.3	2.782	0.002	0.002	0.000	0.054	0.05	
562	8/25/2004	1:58:57 PM	0	25.731	24.835	24.544	27.574	24.566	#	44.979	54.637	10.098	35.74	3.608	0.842		47.924	0.015	14.643	0.004		1454.02	24.2336	53.5	11.4	40.4	2.783	0.002	0.002	0.000	0.054	0.05	
563	8/25/2004	1:59:57 PM	0	25.734	24.838	24.512	27.586	24.579	#	44.989	54.731	10.238	35.383	3.626	0.842		47.91	0.015	14.643	0.003		1455.02	24.2503	53.6	11.4	40.2	2.771	0.002	0.002	0.000	0.054	0.05	
564	8/25/2004	2:00:57 PM	0	25.742	24.835	24.539	27.579	24.621	#	45.012	54.791	10.19	35.466	3.608	0.845		48.252	0.015	14.643	0.003		1456.02	24.2669	53.7	11.5	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
565	8/25/2004	2:01:57 PM	0	25.748	24.847	24.526	27.541	24.598	#	45.13	54.55	10.128	35.94	3.608	0.842		48.133	0.015	14.643	0.003		1457.02	24.2836	53.4	11.5	40.5	2.795	0.002	0.002	0.000	0.054	0.05	
566	8/25/2004	2:02:57 PM	0	25.75	24.849	24.543	27.542	24.53	#	44.703	54.376	10.102	35.312	3.588	0.842		47.928	0.015	14.643	0.003		1458.02	24.3003	53.3	11.4	40.0	2.758	0.002	0.002	0.000	0.054	0.05	
567	8/25/2004	2:03:57 PM	0	25.745	24.854	24.518	27.518	24.61	#	44.913	54.457	10.174	35.605	3.608	0.845		48.442	0.015	14.643	0.003		1459.02	24.3169	53.3	11.5	40.3	2.776	0.002	0.002	0.000	0.054	0.05	
568	8/25/2004	2:04:57 PM	0	25.773	24.882	24.541	27.545	24.538	#	44.686	54.101	10.178	35.322	3.646	0.848		49.124	0.015	14.643	0.004		1460.02	24.3336	53.0	11.7	40.0	2.758	0.002	0.002	0.000	0.054	0.05	
569	8/25/2004	2:05:57 PM	0	25.774	24.888	24.567	27.567	24.609	#	45.168	54.878	10.191	35.741	3.594	0.845		48.11	0.015	14.643	0.003		1461.02	24.3503	53.8	11.5	40.5	2.789	0.002	0.002	0.000	0.054	0.05	
570	8/25/2004	2:06:57 PM	0	25.776	24.895	24.544	27.568	24.516	#	45.058	54.805	10.222	35.552	3.631	0.842		47.924	0.014	14.643	0.004		1462.02	24.3669	53.7	11.4	40.3	2.779	0.002	0.002	0.000	0.050	0.04	
571	8/25/2004	2:07:57 PM	0	25.781	24.89	24.569	27.514	24.556	#	44.749	54.187	10.094	35.531	3.608	0.845		48.164	0.016	14.643	0.003		1463.02	24.3836	53.1	11.5	40.1	2.768	0.002	0.002	0.000	0.058	0.05	
572	8/25/2004	2:08:57 PM	0	25.783	24.897	24.541	27.49	24.498	#	44.989	54.731	10.289	35.482	3.64	0.848		48.235	0.015	14.643	0.003		1464.02	24.4003	53.6	11.5	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
573	8/25/2004	2:09:57 PM	0	25.788	24.902	24.566	27.451	24.463	#	44.964	54.811	10.228	35.453	3.576	0.842		47.945	0.015	14.643	0.003		1465.02	24.4169	53.7	11.4	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
574	8/25/2004	2:10:57 PM	0	25.783	24.907	24.546	27.446	24.483	#	44.892	54.523	10.181	35.515	3.608	0.842		48.609	0.015	14.643	0.003		1466.02	24.4336	53.4	11.6	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
575	8/25/2004	2:11:57 PM	0	25.794	24.918	24.542	27.442	24.549	#	44.612	54.246	10.071	35.351	3.611	0.845		48.26	0.015	14.643	0.003		1467.02	24.4503	53.1	11.5	40.0	2.757	0.002	0.002	0.000	0.054	0.05	
576	8/25/2004	2:12:57 PM	0	25.79	24.914	24.568	27.437	24.445	#	44.496	54.018	10.147	35.094	3.626	0.848		48.456	0.015	14.643	0.003		1468.02	24.4669	52.9	11.5	39.8	2.744	0.002	0.002	0.000	0.055	0.05	
577	8/25/2004	2:13:57 PM	0	25.795	24.914	24.533	27.403	24.34	#	44.798	54.49	10.231	35.26	3.611	0.842		49.017	0.015	14.643	0.003		1469.02	24.4836	53.4	11.7	40.0	2.760	0.002	0.002	0.000	0.054	0.05	
578	8/25/2004	2:14:57 PM	0	25.805	24.934	24.588	27.428	24.28	#	44.641	54.436	10.262	35.127	3.597	0.848		48.659	0.015	14.643	0.003		1470.02	24.5003	53.3	11.6	39.9	2.750	0.002	0.002	0.000	0.054	0.05	
579	8/25/2004	2:15:57 PM	0	25.795	24.919	24.543	27.438	24.34	#	44.84	54.467	10.193	35.523	3.626	0.845		49.998	0.013	14.643	0.003		1471.02	24.5169	53.3	11.9	40.2	2.770	0.002	0.002	0.000	0.047	0.04	
580	8/25/2004	2:16:57 PM	0	25.821	24.94	24.584	27.454	24.296	#	44.973	54.542	10.212	35.509	3.608	0.845		48.243	0.015	14.643	0.003		1472.02	24.5336	53.4	11.5	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
581	8/25/2004	2:17:57 PM	0	25.826	24.95	24.579	27.479	24.466	#	45.066	55.039	10.25	35.353	3.608	0.845		47.737	0.015	14.643	0.004		1473.02	24.5503	53.9	11.4	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
582	8/25/2004	2:18:57 PM	0	25.832	24.951	24.56	27.464	24.482	#	44.597	54.498	10.235	35.08	3.579	0.851		48.463	0.015	14.643	0.004		1474.02	24.5669	53.4	11.5	39.8	2.747	0.002	0.002	0.000	0.055	0.05	
583	8/25/2004	2:19:57 PM	0	25.832	24.961	24.6	27.485	24.537	#	44.973	54.646	10.25	35.48	3.602	0.851		48.304	0.014	14.643	0.003		1475.02	24.5836	53.5	11.5	40.2	2.773	0.002	0.002	0.000	0.050	0.04	
584	8/25/2004	2:20:57 PM	0	25.828	24.957	24.571	27.501	24.443	#	44.612	54.067	10.181	35.314	3.626	0.848		48.001	0.015	14.643	0.003		1476.02	24.6003	52.9	11.4	40.0	2.755	0.002	0.002	0.000	0.054	0.05	
585	8/25/2004	2:21:57 PM	0	25.834	24.958	24.602	27.476	24.434	#	44.68	54.527	10.154	35.277	3.631	0.848		48.185	0.015	14.643	0.003		1477.02	24.6169	53.4	11.5	40.0	2.756	0.002	0.002	0.000	0.054	0.05	
586	8/25/2004	2:22:57 PM	0	25.839	24.968	24.582	27.476	24.329	#	44.631	54.326	10.131	35.264	3.617	0.851		48.442	0.015	14.643	0.003		1478.02	24.6336	53.2	11.5	39.9	2.754	0.002	0.002	0.000	0.054	0.05	
587	8/25/2004	2:23:57 PM	0	25.839	24.968	24.587	27.441	24.369	#	44.956	54.463	10.224	35.554	3.617	0.851		48.352	0.015	14.643	0.003		1479.02	24.6503	53.3	11.5	40.3	2.775	0.002	0.002	0.000	0.054	0.05	
588	8/25/2004	2:24:57 PM	0	25.839	24.973	24.587	27.426	24.439	#	45.296	54.917	10.35	35.699	3.611	0.848		48.679	0.015	14.643	0.003		1480.02	24.6669	53.8	11.6	40.5	2.792	0.002	0.002	0.000	0.054	0.05	
589	8/25/2004	2:25:57 PM	0	25.819	24.958	24.537	27.376	24.429	#	44.944	54.853	10.19	35.449	3.608	0.848		48.271	0.014	14.643	0.003		1481.02	24.6836	53.7	11.5	40.2	2.771	0.002	0.002	0.000	0.051	0.04	
590	8/25/2004	2:26:57 PM	0	25.844	24.979	24.602	27.407	24.414	#	44.925	54.619	10.229	35.435	3.614	0.854		48.44	0.014	14.643	0.003		1482.02	24.7003	53.5	11.5	40.2	2.770	0.002	0.002	0.000	0.050	0.04	
591	8/25/2004	2:27:57 PM	0	25.844	24.978	24.577	27.416	24.489	#	44.931	54.716	10.162	35.527	3.64	0.851		48.248	0.015	14.643	0.003		1483.02	24.7169	53.6	11.5	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
592	8/25/2004	2:28:57 PM	0	25.86	24.999	24.613	27.418	24.39	#	44.873	54.6	10.318	35.266	3.611	0.848		48.488	0.014	14.643	0.003		1484.02	24.7336	53.5	11.5	40.1	2.763	0.002	0.002	0.000	0.051	0.04	
593	8/25/2004	2:29:57 PM	0	25.845	24.984	24.583	27.398	24.34	#	44.867	54.557	10.111	35.576	3.646	0.851		47.962	0.014	14.643	0.003		1485.02	24.7503	53.4	11.4	40.2	2.773	0.002	0.002	0.000	0.050	0.04	
594	8/25/2004	2:30:57 PM	0	25.849	24.989	24.577	27.392	24.244	#	44.732	54.393	10.101	35.392	3.643	0.851		48.294	0.015	14.643	0.004		1486.02	24.7669	53.3	11.5	40.1	2.762	0.002	0.002	0.000	0.054	0.05	
595	8/25/2004	2:31:57 PM	0	25.855	24.994	24.598	27.363	24.18	#	44.896	54.627	10.164	35.58	3.643	0.851		48.17	0.014	14.643	0.003		1487.02	24.7836	53.5	11.5	40.2	2.774	0.002	0.002	0.000	0.050	0.04	
596	8/25/2004	2:32:57 PM	0	25.869	24.999	24.592	27.377	24.224	#	44.74	54.123	10.158	35.525	3.64	0.854		48.252	0.014	14.643	0.003		1488.02	24.8003	53.0	11.5	40.1	2.767	0.002	0.002	0.000	0.051	0.04	
597	8/25/2004	2:33:57 PM	0	25.875	25.004	24.618	27.398	24.325	#	44.979	54.787	10.265	35.336	3.652	0.854		48.246	0.015	14.643	0.003		1489.02	24.8169	53.7	11.5	40.2	2.769	0.002	0.002	0.000	0.054	0.05	
598	8/25/2004	2:34:57 PM	0	25.865	24.999	24.593	27.408	24.26	#	44.923	54.689	10.267	35.427	3.614	0.854		48.271	0.014	14.643	0.003		1490.02	24.8336	53.6	11.5	40.2	2.770	0.002	0.002	0.000	0.050	0.04	
599	8/25/2004	2:35:57 PM	0	25.87	25.004	24.613	27.393	24.255	#	44.952	54.67	10.241	35.422	3.655	0.854		48.321	0.014	14.643	0.003		1491.02	24.8503	53.5	11.5	40.2	2.771	0.002	0.002	0.000	0.050	0.04	
600	8/25/2004	2:36:57 PM	0	25.87	24.999	24.603	27.363	24.45	#	44.745	54.262	10.08	35.595	3.637	0.854		48.433	0.015	14.643	0.003		1492.02	24.8669	53.1	11.5	40.2	2.770	0.002	0.002	0.000	0.054	0.05	
601	8/25/2004	2:37:57 PM	0	25.859	24.989	24.567	27.317	24.384	#	44.915	54.617	10.19	35.416	3.657	0.854		48.511	0.014	14.643	0.003		1493.02	24.8836	53.5	11.6	40.2	2.769	0.002	0.002	0.000	0.051	0.04	
602	8/25/2004	2:38:57 PM	0	25.875	25.009	24.608	27.313	24.29	#	44.989	54.911	10.185	35.543	3.62	0.857		48.241	0.015	14.643	0.003		1494.02	24.9003	53.8	11.5	40.3	2.776	0.002	0.002	0.000	0.054	0.05	
603	8/25/2004	2:39:57 PM	0	25.875	25.009	24.588	27.318	24.28	#	44.799	54.554	10.313	35.328	3.649	0.854		48.146	0.015	14.643	0.003		1495.02	24.9169	53.4	11.5	40.1	2.762	0.002	0.002	0.000	0.054	0.05	
604	8/25/2004	2:40:57 PM	0	25.875	25.004	24.603	27.288	24.315	#	44.743	54.198	10.04	35.484	3.655	0.857		47.903	0.014	14.643	0.003		1496.02	24.9336	53.1	11.4	40.1	2.766	0.002	0.002	0.000	0.051	0.04	
605	8/25/2004	2:41:57 PM	0	25.869	24.999	24.582	27.307	24.294	#	44.742	54.188	10.129	35.427	3.623	0.854		48.369	0.014	14.643	0.003		1497.02	24.9503	53.1	11.5	40.1	2.764	0.002	0.002	0.000	0.051	0.04	
606	8/25/2004	2:42:57 PM	0	25.875	25.004	24.608	27.338	24.24	#	44.73	54.465	10.253	35.287	3.637	0.857		47.578	0.015	14.643	0.003		1498.02	24.9669	53.3	11.3	40.0	2.758	0.002	0.002	0.000	0.054	0.05	
607	8/25/2004	2:43:57 PM	0	25.879	25.009	24.602	27.407	24.229	#	45.02	54.842	10.245	35.527	3.631	0.857		48.146	0.015	14.643	0.003		1499.02	24.9836	53.7	11.5	40.3	2.777	0.002	0.002	0.000	0.054	0.05	
608	8/25/2004	2:44:57 PM	0	25.879	25.008	24.592	27.416	24.178	#	45.149	54.967	10.23	35.642	3.652	0.854		48.462	0.014	14.643	0.004		1500.02	25.0003	53.8	11.5	40.4	2.785	0.002	0.002	0.000	0.050	0.04	
609	8/25/2004	2:45:57 PM	0	25.884	25.004	24.608	27.402	24.344	#	44.888	54.735	10.171	35.463	3.617	0.854		48.387	0.015	14.643	0.003		1501.02	25.0169	53.6	11.5	40.2	2.770	0.002	0.002	0.000	0.054	0.05	
610	8/25/2004	2:46:57 PM	0	25.895	25.019	24.593	27.423	24.35	#	44.637	54.614	10.118	35.19	3.614	0.854		48.379	0.015	14.643	0.003		1502.02	25.0336	53.5	11.5	39.9	2.752	0.002	0.002	0.000	0.054	0.05	
611	8/25/2004	2:47:57 PM	0	25.895	25.019	24.628	27.413	24.355	#	44.78	54.588	10.201	35.297	3.62	0.857		49.117	0.014	14.643	0.004		1503.02	25.0503	53.5	11.7	40.0	2.761	0.002	0.002	0.000	0.051	0.04	
612	8/25/2004	2:48:57 PM	0	25.886	25.005	24.599	27.383	24.466	#	44.589	54.119	10.132	35.277	3.614	0.854		48.287	0.014	14.643	0.003		1504.02	25.0669	53.0	11.5	39.9	2.753	0.002	0.002	0.000	0.051	0.04	
613	8/25/2004	2:49:57 PM	0	25.891	25.005	24.599	27.403	24.316	#	44.73	54.472	10.228	35.254	3.657	0.857		48.31	0.014	14.643	0.003		1505.02	25.0836	53.3	11.5	40.0	2.757	0.002	0.002	0.000	0.051	0.04	
614	8/25/2004	2:50:57 PM	0	25.901	25.015	24.624	27.423	24.346	#	44.873	54.221	10.144	35.636	3.66	0.857		48.162	0.015	14.643	0.003		1506.02	25.1003	53.1	11.5	40.3	2.775	0.002	0.002	0.000	0.054	0.05	
615	8/25/2004	2:51:57 PM	0	25.906	25.021	24.605	27.459	24.306	#	44.678	54.471	10.24	35.191	3.631	0.86		48.538	0.015	14.643	0.004		1507.02	25.1169	53.3	11.6	39.9	2.753	0.002	0.002	0.000	0.054	0.05	
616	8/25/2004	2:52:57 PM	0	25.912	25.021	24.63	27.49	24.492	#	44.904	54.753	10.335	35.246	3.649	0.86		48.143	0.014	14.643	0.003		1508.02	25.1336	53.6	11.5	40.1	2.763	0.002	0.002	0.000	0.051	0.04	
617	8/25/2004	2:53:57 PM	0	25.918	25.032	24.621	27.54	24.403	#	44.433	54.21	10.082	35.078	3.657	0.86		48.193	0.015	14.643	0.003		1509.02	25.1503	53.1	11.5	39.8	2.741	0.002	0.002	0.000	0.055	0.05	
618	8/25/2004	2:54:57 PM	0	25.923	25.032	24.636	27.505	24.393	#	44.45	54.217	10.1	35.176	3.646	0.857		48.517	0.015	14.643	0.003		1510.02	25.1669	53.1	11.6	39.8	2.745	0.002	0.002	0.000	0.054	0.05	
619	8/25/2004	2:55:57 PM	0	25.928	25.038	24.637	27.576	24.383	#	44.809	54.596	10.187	35.279	3.628	0.86		48.183	0.014	14.643	0.003		1511.02	25.1836	53.5	11.5	40.0	2.761	0.002	0.002	0.000	0.051	0.04	
620	8/25/2004	2:56:57 PM	0	25.923	25.028	24.612	27.546	24.328	#	44.305	54.061	10.136	34.876	3.837	0.68		48.623	0.003	14.643	0.003		1512.02	25.2003	52.9	11.6	39.6	2.730	0.000	0.000	0.000	0.011	0.01	
621	8/25/2004	2:57:57 PM	0	25.953	25.028	24.652	27.521	24.328	#	43.403	54.43	10.171	33.926	5.215	6.471		48.223	0.003	14.643	0.003		1513.02	25.2169	53.3	11.5	38.7	2.666	0.000	0.000	0.000	0.011	0.01	
622	8/25/2004	2:58:57 PM	0	25.989	25.033	24.647	27.517	24.329	#	41.818	54.328	10.101	32.455	6.689	6.367		48.287	0.003	14.643	0.004		1514.02	25.2336	53.2	11.5	37.1	2.560	0.000	0.000	0.000	0.012	0.01	
623	8/25/2004	2:59:57 PM	0	25.994	25.028	24.652	27.502	24.494	#	40.097	54.511	10.105	30.513	8.385	6.323		48.104	0.003	14.643	0.003		1515.02	25.2503	53.4	11.5	35.3	2.434	0.000	0.000	0.000	0.012	0.01	
624	8/25/2004	3:00:57 PM	0	25.899	25.033	24.642	27.557	24.409	#	38.05	54.403	10.1	28.474	10.371	62.695		48.239	0.003	14.643	0.003		1516.02	25.2669	53.3	11.5	33.3	2.293	0.000	0.000	0.000	0.013	0.01	
625	8/25/2004	3:01:57 PM	0	25.969	25.038	24.662	27.631	24.524	#	36.229	54.867	10.2	26.399	12.554	93.283		48.306	0.003	14.643	0.005		1517.02	25.2836	53.7	11.5	31.3	2.159	0.000	0.000	0.000	0.014	0.01	
626	8/25/2004	3:02:57 PM	0	25.885	25.044	24.663	27.702	24.485	#	7.87	54.498	10.075	-1.587	41.038	65.291		48.377	0.003	14.643	0.005		1518.02	25.3003	53.4	11.5	3.1	0.217	0.000	0.000	0.000	0.138	0.12	
627	8/25/2004	3:03:57 PM	0	25.925	25.039	24.618	27.672	24.49	#	8.495	54.465	10.038	-0.861	40.581	57.156		48.7	0.003	14.643	0.005		1519.02	25.3169	53.3	11.6	3.8	0.263	0.000	0.000	0.000	0.114	0.10	
628	8/25/2004	3:04:57 PM	0	25.955	25.06	24.654	27.698	24.505	#	8.513	54.592	10.03	-0.834	40.572	0.383		48.621	0.003	14.643	0.006		1520.02	25.3336	53.5	11.6	3.8	0.265	0.000	0.000	0.000	0.113	0.10	
629	8/25/2004	3:05:57 PM	0	25.671	25.055	24.629	27.693	24.471	#	32.204	54.411	10.093	22.709	16.523	0.371		48.46	0.088	14.643	0.003		1521.02	25.3503	53.3	11.5	27.5	1.893	0.013	0.013	0.000	0.464	0.39	
630	8/25/2004	3:06:57 PM	0	25.912	25.066	24.655	27.674	24.422	#	44.033	54.086	10.031	34.825	4.063	0.397		48.143	0.062	14.643	0.003		1522.02	25.3669	53.0	11.5	39.4	2.718	0.009	0.009	0.000	0.227	0.19	

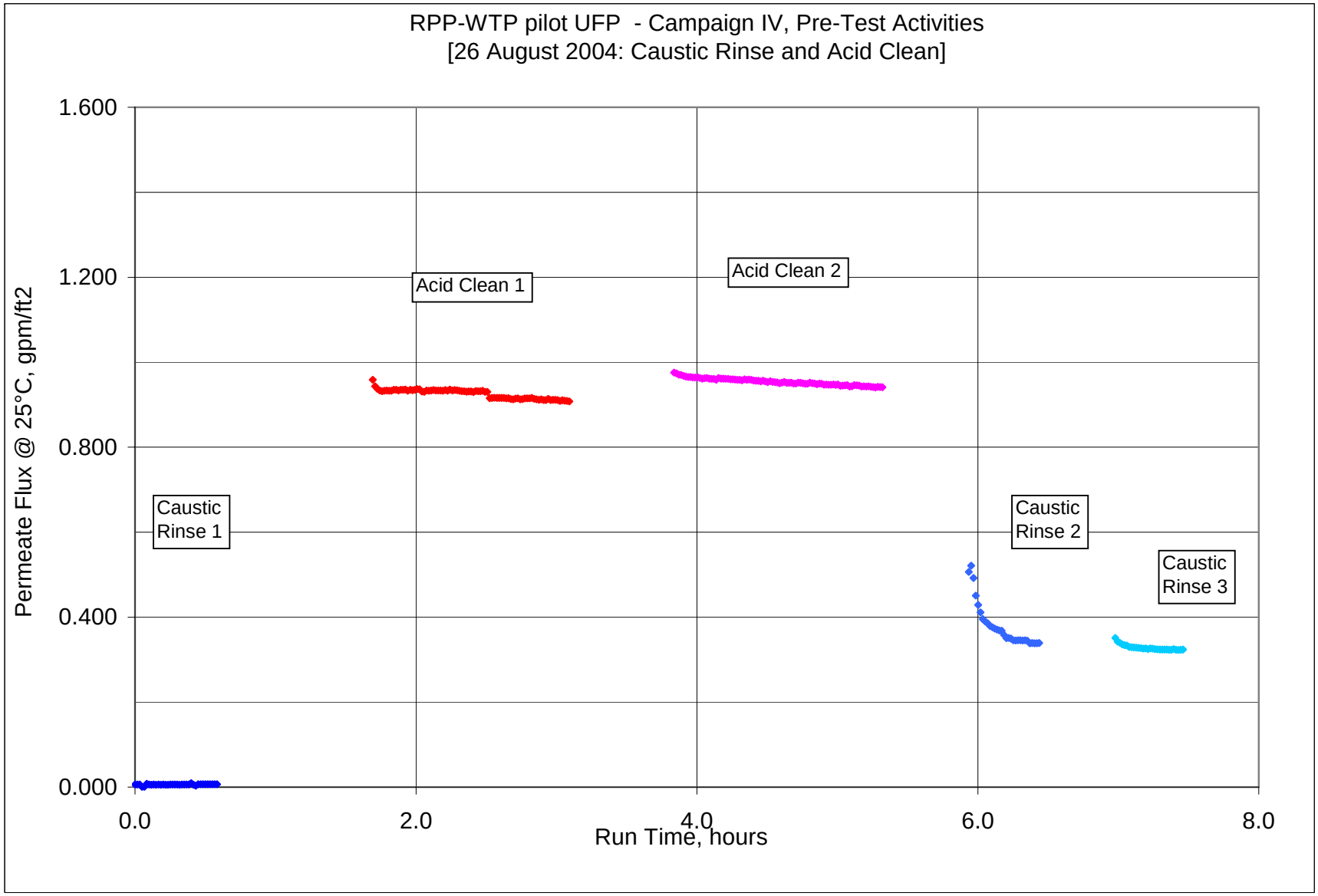
CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	8/25/2004	3:07:57 PM	0	25.957	25.066	24.62	27.704	24.392	#	44.861	54.119	10.151	35.548	3.423	0.394		48.437	0.015	14.643	0.003		1523.02	25.3836	53.0	11.5	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
632	8/25/2004	3:08:57 PM	0	25.963	25.077	24.621	27.705	24.528	#	44.859	54.192	10.165	35.488	3.397	0.406		48.552	0.015	14.643	0.004		1524.02	25.4003	53.1	11.6	40.2	2.770	0.002	0.002	0.000	0.054	0.05	
633	8/25/2004	3:09:57 PM	0	25.963	25.077	24.626	27.715	24.428	#	45.112	54.386	10.221	35.697	3.42	0.406		48.214	0.015	14.643	0.004		1525.02	25.4169	53.3	11.5	40.4	2.786	0.002	0.002	0.000	0.054	0.05	
634	8/25/2004	3:10:57 PM	0	25.984	25.089	24.603	27.687	24.454	#	44.857	54.291	10.12	35.607	3.4	0.409		48.629	0.015	14.643	0.003		1526.02	25.4336	53.2	11.6	40.2	2.774	0.002	0.002	0.000	0.054	0.05	
635	8/25/2004	3:11:57 PM	0	25.995	25.1	24.633	27.662	24.405	#	45.018	54.652	10.19	35.626	3.394	0.414		48.569	0.015	14.643	0.003		1527.02	25.4503	53.5	11.6	40.3	2.780	0.002	0.002	0.000	0.054	0.05	
636	8/25/2004	3:12:57 PM	0	25.995	25.095	24.613	27.657	24.52	#	45.06	54.863	10.174	35.599	3.417	0.417		48.289	0.015	14.643	0.003		1528.02	25.4669	53.7	11.5	40.3	2.781	0.002	0.002	0.000	0.054	0.05	
637	8/25/2004	3:13:57 PM	0	25.986	25.1	24.609	27.633	24.451	#	45.043	54.455	10.153	35.701	3.4	0.42		47.935	0.015	14.643	0.003		1529.02	25.4836	53.3	11.4	40.4	2.784	0.002	0.002	0.000	0.054	0.05	
638	8/25/2004	3:14:57 PM	0	26.001	25.095	24.604	27.623	24.331	#	44.846	54.32	10.104	35.554	3.408	0.423		48.73	0.015	14.643	0.003		1530.02	25.5003	53.2	11.6	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
639	8/25/2004	3:15:57 PM	0	26.006	25.105	24.589	27.608	24.371	#	44.983	54.511	10.051	35.701	3.449	0.429		48.148	0.015	14.643	0.003		1531.02	25.5169	53.4	11.5	40.3	2.781	0.002	0.002	0.000	0.054	0.05	
640	8/25/2004	3:16:57 PM	0	26.006	25.11	24.619	27.558	24.271	#	44.85	54.192	10.05	35.669	3.42	0.435		48.494	0.015	14.643	0.004		1532.02	25.5336	53.1	11.6	40.3	2.776	0.002	0.002	0.000	0.054	0.05	
641	8/25/2004	3:17:57 PM	0	26.006	25.11	24.594	27.528	24.306	#	44.74	54.084	10.077	35.574	3.432	0.437		48.306	0.015	14.643	0.003		1533.02	25.5503	53.0	11.5	40.2	2.769	0.002	0.002	0.000	0.054	0.05	
642	8/25/2004	3:18:57 PM	0	26.006	25.12	24.619	27.453	24.331	#	45.174	54.838	10.221	35.603	3.452	0.443		48.231	0.015	14.643	0.004		1534.02	25.5669	53.7	11.5	40.4	2.785	0.002	0.002	0.000	0.054	0.05	
643	8/25/2004	3:19:57 PM	0	25.995	25.11	24.588	27.433	24.175	#	44.917	54.492	10.149	35.459	3.452	0.443		48.414	0.014	14.643	0.003		1535.02	25.5836	53.4	11.5	40.2	2.771	0.002	0.002	0.000	0.050	0.04	
644	8/25/2004	3:20:57 PM	0	25.999	25.109	24.598	27.407	24.174	#	44.958	54.461	10.15	35.574	3.446	0.449		48.123	0.014	14.643	0.003		1536.02	25.6003	53.3	11.5	40.3	2.776	0.002	0.002	0.000	0.050	0.04	
645	8/25/2004	3:21:57 PM	0	25.978	25.093	24.566	27.401	24.208	#	44.743	53.997	10.068	35.525	3.449	0.452		48.598	0.015	14.643	0.003		1537.02	25.6169	52.9	11.6	40.1	2.767	0.002	0.002	0.000	0.054	0.05	
646	8/25/2004	3:22:57 PM	0	25.977	25.087	24.54	27.4	24.232	#	45.145	54.615	10.14	35.8	3.452	0.458		48.2	0.014	14.643	0.003		1538.02	25.6336	53.5	11.5	40.5	2.790	0.002	0.002	0.000	0.050	0.04	
647	8/25/2004	3:23:57 PM	0	25.992	25.101	24.605	27.404	24.287	#	44.977	54.434	10.137	35.648	3.452	0.464		48.314	0.015	14.643	0.003		1539.02	25.6503	53.3	11.5	40.3	2.779	0.002	0.002	0.000	0.054	0.05	
648	8/25/2004	3:24:57 PM	0	25.991	25.106	24.574	27.459	24.301	#	45.039	54.386	10.142	35.656	3.455	0.466		48.719	0.015	14.643	0.003		1540.02	25.6669	53.3	11.6	40.3	2.782	0.002	0.002	0.000	0.054	0.05	
649	8/25/2004	3:25:57 PM	0	26.001	25.116	24.614	27.509	24.311	#	44.801	54.256	10.21	35.459	3.458	0.478		48.285	0.015	14.643	0.004		1541.02	25.6836	53.1	11.5	40.1	2.767	0.002	0.002	0.000	0.054	0.05	
650	8/25/2004	3:26:57 PM	0	25.985	25.095	24.584	27.508	24.225	#	44.788	54.59	10.302	35.158	3.452	0.475		48.631	0.015	14.643	0.003		1542.02	25.7003	53.5	11.6	40.0	2.756	0.002	0.002	0.000	0.054	0.05	
651	8/25/2004	3:27:57 PM	0	25.995	25.094	24.593	27.512	24.36	#	44.834	54.254	10.096	35.673	3.455	0.481		48.613	0.015	14.643	0.003		1543.02	25.7169	53.1	11.6	40.3	2.775	0.002	0.002	0.000	0.054	0.05	
652	8/25/2004	3:28:57 PM	0	25.989	25.098	24.592	27.522	24.414	#	44.772	54.391	10.257	35.191	3.452	0.484		48.828	0.015	14.643	0.003		1544.02	25.7336	53.3	11.6	40.0	2.757	0.002	0.002	0.000	0.054	0.05	
653	8/25/2004	3:29:57 PM	0	25.999	25.109	24.582	27.532	24.254	#	44.745	54.219	10.073	35.605	3.455	0.49		48.705	0.015	14.643	0.003		1545.02	25.7503	53.1	11.6	40.2	2.770	0.002	0.002	0.000	0.054	0.05	
654	8/25/2004	3:30:57 PM	0	25.988	25.098	24.607	27.491	24.358	#	44.703	54.115	10.084	35.515	3.452	0.492		48.465	0.014	14.643	0.003		1546.02	25.7669	53.0	11.5	40.1	2.765	0.002	0.002	0.000	0.051	0.04	
655	8/25/2004	3:31:57 PM	0	25.994	25.109	24.597	27.527	24.409	#	44.892	54.513	10.188	35.426	3.452	0.495		48.663	0.014	14.643	0.003		1547.02	25.7836	53.4	11.6	40.2	2.769	0.002	0.002	0.000	0.050	0.04	
656	8/25/2004	3:32:57 PM	0	25.988	25.098	24.622	27.496	24.378	#	44.873	54.358	10.224	35.449	3.452	0.498		48.454	0.014	14.643	0.003		1548.02	25.8003	53.2	11.5	40.2	2.769	0.002	0.002	0.000	0.050	0.04	
657	8/25/2004	3:33:57 PM	0	25.988	25.103	24.607	27.566	24.328	#	44.788	54.299	10.373	35.191	3.455	0.504		48.577	0.015	14.643	0.003		1549.02	25.8169	53.2	11.6	40.0	2.757	0.002	0.002	0.000	0.054	0.05	
658	8/25/2004	3:34:57 PM	0	25.994	25.109	24.607	27.581	24.394	#	44.883	54.393	10.178	35.521	3.452	0.51		48.45	0.015	14.643	0.003		1550.02	25.8336	53.3	11.5	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
659	8/25/2004	3:35:57 PM	0	25.989	25.109	24.627	27.691	24.434	#	45.016	54.699	10.291	35.365	3.452	0.513		48.287	0.015	14.643	0.003		1551.02	25.8503	53.6	11.5	40.2	2.771	0.002	0.002	0.000	0.054	0.05	
660	8/25/2004	3:36:57 PM	0	25.99	25.109	24.598	27.657	24.41	#	44.894	54.455	10.185	35.517	3.452	0.518		48.479	0.015	14.643	0.003		1552.02	25.8669	53.3	11.5	40.2	2.772	0.002	0.002	0.000	0.054	0.05	
661	8/25/2004	3:37:57 PM	0	26	25.11	24.649	27.713	24.425	#	44.85	54.339	10.226	35.478	3.475	0.524		48.565	0.015	14.643	0.003		1553.02	25.8836	53.2	11.6	40.2	2.769	0.002	0.002	0.000	0.054	0.05	
662	8/25/2004	3:38:57 PM	0	26.011	25.116	24.619	27.798	24.341	#	44.958	54.523	10.32	35.465	3.452	0.527		48.59	0.014	14.643	0.003		1554.02	25.9003	53.4	11.6	40.2	2.772	0.002	0.002	0.000	0.050	0.04	
663	8/25/2004	3:39:57 PM	0	26.016	25.111	24.634	27.768	24.471	#	44.687	54.094	10.18	35.375	3.455	0.53		48.229	0.015	14.643	0.004		1555.02	25.9169	53.0	11.5	40.0	2.760	0.002	0.002	0.000	0.054	0.05	
664	8/25/2004	3:40:57 PM	0	26.022	25.121	24.63	27.709	24.312	#	44.958	54.695	10.396	35.151	3.495	0.533		48.444	0.014	14.643	0.003		1556.02	25.9336	53.6	11.5	40.1	2.762	0.002	0.002	0.000	0.051	0.04	
665	8/25/2004	3:41:57 PM	0	26.032	25.137	24.636	27.675	24.392	#	44.854	54.586	10.312	35.242	3.458	0.542		48.723	0.015	14.643	0.004		1557.02	25.9503	53.5	11.6	40.0	2.761	0.002	0.002	0.000	0.054	0.05	
666	8/25/2004	3:42:57 PM	0	26.017	25.121	24.645	27.574	24.417	#	44.855	54.505	10.218	35.47	3.513	0.542		49.028	0.014	14.643	0.003		1558.02	25.9669	53.4	11.7	40.2	2.769	0.002	0.002	0.000	0.050	0.04	
667	8/25/2004	3:43:57 PM	0	26.028	25.143	24.636	27.536	24.488	#	44.662	54.09	10.06	35.523	3.455	0.547		48.561	0.014	14.643	0.003		1559.02	25.9836	53.0	11.6	40.1	2.764	0.002	0.002	0.000	0.051	0.04	
668	8/25/2004	3:44:57 PM	0	26.007	25.127	24.646	27.505	24.452	#	44.825	54.268	10.216	35.426	3.481	0.547		48.258	0.014	14.643	0.003		1560.02	26.0003	53.1	11.5	40.1	2.767	0.002	0.002	0.000	0.050	0.04	
669	8/25/2004	3:45:57 PM	0	26.012	25.132	24.621	27.48	24.402	#	44.668	54.188	10.22	35.268	3.507	0.553		49.191	0.014	14.643	0.003		1561.02	26.0169	53.1	11.7	40.0	2.756	0.002	0.002	0.000	0.051	0.04	
670	8/25/2004	3:46:57 PM	0	26.017	25.132	24.651	27.47	24.282	#	45.081	54.6	10.249	35.554	3.475	0.559		48.823	0.014	14.643	0.003		1562.02	26.0336	53.5	11.6	40.3	2.780	0.002	0.002	0.000	0.050	0.04	
671	8/25/2004	3:47:57 PM	0	26.011	25.126	24.639	27.454	24.351	#	44.784	54.318	10.224	35.381	3.51	0.565		48.584	0.014	14.643	0.003		1563.02	26.0503	53.2	11.6	40.1	2.764	0.002	0.002	0.000	0.051	0.04	
672	8/25/2004	3:48:57 PM	0	26.016	25.136	24.634	27.469	24.231	#	44.873	54.561	10.246	35.424	3.521	0.568		48.652	0.015	14.643	0.003		1564.02	26.0669	53.4	11.6	40.1	2.768	0.002	0.002	0.000	0.054	0.05	
673	8/25/2004	3:49:57 PM	0	26.021	25.156	24.684	27.489	24.351	#	44.539	53.765	10.075	35.412	3.524	0.573		48.586	0.014	14.643	0.003		1565.02	26.0836	52.6	11.6	40.0	2.756	0.002	0.002	0.000	0.051	0.04	
674	8/25/2004	3:50:57 PM	0	26.016	25.141	24.644	27.529	24.471	#	44.674	54.302	10.198	35.178	3.516	0.573		48.2	0.014	14.643	0.003		1566.02	26.1003	53.2	11.5	39.9	2.753	0.002	0.002	0.000	0.051	0.04	
675	8/25/2004	3:51:57 PM	0	26.01	25.125	24.659	27.548	24.485	#	44.732	53.995	10.284	35.349	3.521	0.579		47.609	0.014	14.643	0.003		1567.02	26.1169	52.9	11.3	40.0	2.761	0.002	0.002	0.000	0.051	0.04	
676	8/25/2004	3:52:57 PM	0	26.006	25.136	24.639	27.598	24.451	#	45.118	54.604	10.338	35.502	3.521	0.585		48.802	0.014	14.643	0.003		1568.02	26.1336	53.5	11.6	40.3	2.779	0.002	0.002	0.000	0.050	0.04	
677	8/25/2004	3:53:57 PM	0	26.025	25.135	24.659	27.698	24.37	#	44.96	54.66	10.352	35.275	3.521	0.588		48.385	0.014	14.643	0.003		1569.02	26.1503	53.5	11.5	40.1	2.766	0.002	0.002	0.000	0.050	0.04	
678	8/25/2004	3:54:57 PM	0	26.032	25.141	24.655	27.724	24.407	#	44.747	54.459	10.188	35.303	3.521	0.594		48.479	0.014	14.643	0.003		1570.02	26.1669	53.3	11.5	40.0	2.760	0.002	0.002	0.000	0.051	0.04	
679	8/25/2004	3:55:57 PM	0	26.047	25.146	24.65	27.729	24.412	#	44.79	54.227	10.235	35.457	3.521	0.594		48.571	0.014	14.643	0.003		1571.02	26.1836	53.1	11.6	40.1	2.766	0.002	0.002	0.000	0.050	0.04	
680	8/25/2004	3:56:57 PM	0	26.052	25.152	24.686	27.69	24.442	#	44.583	54.212	10.124	35.342	3.547	0.715		48.659	0.01	14.643	0.003		1572.02	26.2003	53.1	11.6	40.0	2.755	0.001	0.001	0.000	0.036	0.03	
681	8/25/2004	3:57:57 PM	0	26.047	25.146	24.65	27.634	24.437	#	44.678	54.15	10.257	35.193	3.611	0.799		48.46	0.013	14.643	0.003		1573.02	26.2169	53.0	11.5	39.9	2.753	0.002	0.002	0.000	0.047	0.04	
682	8/25/2004	3:58:57 PM	0	26.053	25.153	24.681	27.685	24.448	#	44.865	54.515	10.251	35.414	3.605	0.828		48.657	0.014	14.643	0.003		1574.02	26.2336	53.4	11.6	40.1	2.767	0.002	0.002	0.000	0.050	0.04	
683	8/25/2004	3:59:57 PM	0	26.063	25.148	24.671	27.715	24.468	#	44.867	54.621	10.256	35.344	3.611	0.828		48.698	0.014	14.643	0.003		1575.02	26.2503	53.5	11.6	40.1	2.765	0.002	0.002	0.000	0.050	0.04	
684	8/25/2004	4:00:57 PM	0	26.079	25.158	24.687	27.776	24.524	#	44.888	54.77	10.33	35.098	3.626	0.831		48.803	0.014	14.643	0.003		1576.02	26.2669	53.6	11.6	40.0	2.757	0.002	0.002	0.000	0.051	0.04	
685	8/25/2004	4:01:57 PM	0	26.079	25.143	24.672	27.731	24.394	#	44.747	54.529	10.232	35.174	3.626	0.831		48.634	0.014	14.643	0.003		1577.02	26.2836	53.4	11.6	40.0	2.755	0.002	0.002	0.000	0.051	0.04	
686	8/25/2004	4:02:57 PM	0	26.084	25.164	24.663	27.712	24.339	#	44.686	54.403	10.256	35.273	3.617	0.831		48.713	0.014	14.643	0.004		1578.02	26.3003	53.3	11.6	40.0	2.756	0.002	0.002	0.000	0.051	0.04	
687	8/25/2004	4:03:57 PM	0	26.074	25.154	24.683	27.687	24.339	#	44.4	54.215	10.167	34.959	3.643	0.831		48.39	0.014	14.643	0.003		1579.02	26.3169	53.1	11.5	39.7	2.736	0.002	0.002	0.000	0.051	0.04	
688	8/25/2004	4:04:57 PM	0	26.079	25.159	24.668	27.652	24.449	#	44.384	53.781	10.145	35.049	3.623	0.828		48.611	0.014	14.643	0.003		1580.02	26.3336	52.7	11.6	39.7	2.738	0.002	0.002	0.000	0.051	0.04	
689	8/25/2004	4:05:57 PM	0	26.084	25.164	24.703	27.687	24.434	#	44.378	53.812	10.16	35.018	3.611	0.831		48.365	0.014	14.643	0.003		1581.02	26.3503	52.7	11.5	39.7	2.737	0.002	0.002	0.000	0.051	0.04	
690	8/25/2004	4:06:57 PM	0	26.085	25.16	24.678	27.637	24.395	#	44.602	54.227	10.203	35.049	3.64	0.831		48.21	0.014	14.643	0.003		1582.02	26.3669	53.1	11.5	39.8	2.746	0.002	0.002	0.000	0.051	0.04	
691	8/25/2004	4:07:57 PM	0	26.084	25.164	24.683	27.622	24.51	#	44.815	54.449	10.303	35.281	3.62	0.831		48.219	0.014	14.643	0.003		1583.02	26.3836	53.3	11.5	40.0	2.761	0.002	0.002	0.000	0.050	0.04	
692	8/25/2004	4:08:57 PM	0	26.096	25.165	24.699	27.738	24.496	#	44.813	54.598	10.301	35.229	3.646	0.834		48.365	0.014	14.643	0.004		1584.02	26.4003	53.5	11.5	40.0	2.759	0.002	0.002	0.000	0.051	0.04	
693	8/25/2004	4:09:57 PM	0	26.102	25.182	24.675	27.774	24.482	#	44.531	54.264	10.268	35.035	3.646	0.836		48.813	0.014	14.643	0.004		1585.02	26.4169	53.1	11.6	39.8	2.743	0.002	0.002	0.000	0.051	0.04	
694	8/25/2004	4:10:57 PM	0	26.103	25.177	24.716	27.835	24.598	#	44.703	54.399	10.36	35.135	3.608	0.836		48.744	0.014	14.643	0.003		1586.02	26.4336	53.3	11.6	39.9	2.752	0.002	0.002	0.000	0.051	0.04	
695	8/25/2004	4:11:57 PM	0	26.12	25.2	24.734	27.927	24.681	#	44.66	54.024	10.196	35.305	3.66	0.839		48.379	0.014	14.643	0.004		1587.02	26.4503	52.9	11.5	40.0	2.757	0.002	0.002	0.000	0.051	0.04	
696	8/25/2004	4:12:57 PM	0	26.112	25.197	24.726	27.884	24.828	#	44.788	54.293	10.358	35.246	3.66	0.836		48.335	0.014	14.643	0.003		1588.02	26.4669	53.2	11.5	40.0	2.759	0.002	0.002	0.000	0.050	0.04	
697	8/25/2004	4:13:57 PM	0	26.116	25.196	24.71	27.918	24.952	#	44.801	54.629	10.285	35.143	3.628	0.831		47.964	0.014	14.643	0.003		1589.02	26.4836	53.5	11.4	40.0	2.756	0.002	0.002	0.000	0.051	0.04	
698	8/25/2004	4:14:57 PM	0	26.124	25.209	24.708	28.016	24.955	#	44.842	54.577	10.235	35.314	3.663	0.842		48.408	0.014	14.643	0.004		1590.02	26.5003	53.5	11.5	40.1	2.763	0.002	0.002	0.000	0.050	0.04	
699	8/25/2004	4:15:57 PM	0	26.137	25.212	24.736	28.024	24.917	#	44.604	54.413	10.298	35.084	3.655	0.836		48.665	0.014	14.643	0.003		1591.02	26.5169	53.3	11.6	39.8	2.747	0.002	0.002	0.000	0.051	0.04	
700	8/25/2004	4:16:57 PM	0	26.128	25.203	24.702	28.03	24.779	#	44.639	54.364	10.219	35.219	3.623	0.836		48.727	0.014	14.643	0.003		1592.02	26.5336	53.2	11.6	39.9	2.753	0.002	0.002	0.000	0.051	0.04	

CAMPAIGN IV NEW GKN CONDITIONING WITH AN102R2 SIMULANT – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
701	8/25/2004	4:17:57 PM	0	26.13	25.21	24.714	28.017	24.776	#	44.545	54.02	10.087	35.353	3.66	0.836		48.54	0.014	14.643	0.004		1593.02	26.5503	52.9	11.6	39.9	2.754	0.002	0.002	0.000	0.051	0.04	
702	8/25/2004	4:18:57 PM	0	26.136	25.211	24.705	28.013	24.721	#	44.562	54.067	10.207	35.24	3.66	0.834		48.275	0.014	14.643	0.003		1594.02	26.5669	52.9	11.5	39.9	2.751	0.002	0.002	0.000	0.051	0.04	
703	8/25/2004	4:19:57 PM	0	26.152	25.222	24.701	28.029	24.693	#	44.535	53.98	10.221	35.172	3.66	0.836		48.052	0.014	14.643	0.003		1595.02	26.5836	52.9	11.4	39.9	2.748	0.002	0.002	0.000	0.051	0.04	
704	8/25/2004	4:20:57 PM	0	26.158	25.238	24.732	28.025	24.638	#	44.761	54.488	10.152	35.373	3.66	0.839		48.258	0.014	14.643	0.003		1596.02	26.6003	53.4	11.5	40.1	2.762	0.002	0.002	0.000	0.050	0.04	
705	8/25/2004	4:21:57 PM	0	26.169	25.239	24.722	27.956	24.714	#	44.937	54.671	10.235	35.466	3.66	0.836		48.367	0.014	14.643	0.003		1597.02	26.6169	53.5	11.5	40.2	2.772	0.002	0.002	0.000	0.050	0.04	
706	8/25/2004	4:22:57 PM	0	26.164	25.244	24.732	27.961	24.704	#	44.861	54.656	10.33	35.209	3.66	0.839		48.317	0.014	14.643	0.003		1598.02	26.6336	53.5	11.5	40.0	2.760	0.002	0.002	0.000	0.050	0.04	
707	8/25/2004	4:23:57 PM	0	26.174	25.259	24.743	27.971	24.65	#	44.705	54.557	10.199	35.213	3.663	0.842		48.148	0.014	14.643	0.004		1599.02	26.6503	53.4	11.5	40.0	2.755	0.002	0.002	0.000	0.051	0.04	
708	8/25/2004	4:24:57 PM	0	26.17	25.25	24.709	27.902	24.596	#	44.776	54.451	10.115	35.541	3.657	0.839		48.1	0.014	14.643	0.003		1600.02	26.6669	53.3	11.5	40.2	2.769	0.002	0.002	0.000	0.050	0.04	
709	8/25/2004	4:25:57 PM	0	26.169	25.249	24.723	27.882	24.585	#	44.479	53.928	10.093	35.365	3.657	0.839		48.095	0.014	14.643	0.003		1601.02	26.6836	52.8	11.5	39.9	2.752	0.002	0.002	0.000	0.051	0.04	
710	8/25/2004	4:26:57 PM	0	26.159	25.244	24.683	27.862	24.565	#	44.668	54.183	10.095	35.466	3.657	0.839		47.926	0.014	14.643	0.003		1602.02	26.7003	53.1	11.4	40.1	2.762	0.002	0.002	0.000	0.050	0.04	
711	8/25/2004	4:27:57 PM	0	26.18	25.27	24.739	27.867	24.581	#	44.923	54.451	10.157	35.582	3.66	0.839		48.233	0.014	14.643	0.003		1603.02	26.7169	53.3	11.5	40.3	2.775	0.002	0.002	0.000	0.050	0.04	
712	8/25/2004	4:28:57 PM	0	26.175	25.27	24.709	27.832	24.515	#	44.807	54.534	10.239	35.213	3.657	0.839		48.095	0.014	14.643	0.003		1604.02	26.7336	53.4	11.5	40.0	2.759	0.002	0.002	0.000	0.051	0.04	
713	8/25/2004	4:29:57 PM	0	26.175	25.27	24.699	27.822	24.525	#	44.894	54.668	10.248	35.412	3.66	0.842		48.187	0.014	14.643	0.004		1605.02	26.7503	53.5	11.5	40.2	2.768	0.002	0.002	0.000	0.050	0.04	
714	8/25/2004	4:30:57 PM	0	26.186	25.271	24.725	27.778	24.596	#	44.724	54.447	10.108	35.431	3.66	0.842		48.277	0.014	14.643	0.003		1606.02	26.7669	53.3	11.5	40.1	2.763	0.002	0.002	0.000	0.050	0.04	
715	8/25/2004	4:31:57 PM	0	26.19	25.29	24.719	27.797	24.586	#	44.657	54.436	10.1	35.361	3.663	0.845		48.202	0.014	14.643	0.004		1607.02	26.7836	53.3	11.5	40.0	2.758	0.002	0.002	0.000	0.050	0.04	
716	8/25/2004	4:32:57 PM	0	26.21	25.29	24.734	27.772	24.535	#	44.767	54.538	10.072	35.49	3.657	0.842		48.15	0.014	14.643	0.003		1608.02	26.8003	53.4	11.5	40.1	2.767	0.002	0.002	0.000	0.050	0.04	
717	8/25/2004	4:33:57 PM	0	26.209	25.274	24.707	27.761	24.424	#	44.556	54.03	10.068	35.416	3.66	0.842		48.258	0.014	14.643	0.003		1609.02	26.8169	52.9	11.5	40.0	2.757	0.002	0.002	0.000	0.051	0.04	
718	8/25/2004	4:34:57 PM	0	26.234	25.284	24.728	27.752	24.44	#	44.964	54.461	10.097	35.701	3.66	0.842		48.212	0.014	14.643	0.004		1610.02	26.8336	53.3	11.5	40.3	2.781	0.002	0.002	0.000	0.050	0.04	
719	8/25/2004	4:35:57 PM	0	26.233	25.283	24.717	27.74	24.458	#	45.101	54.845	10.117	35.72	3.657	0.845		48.093	0.014	14.643	0.003		1611.02	26.8503	53.7	11.5	40.4	2.786	0.002	0.002	0.000	0.050	0.04	
720	8/25/2004	4:36:57 PM	0	26.248	25.283	24.707	27.76	24.458	#	45.066	54.689	10.117	35.855	3.657	0.842		48.162	0.014	14.643	0.003		1612.02	26.8669	53.6	11.5	40.5	2.790	0.002	0.002	0.000	0.050	0.04	
721	8/25/2004	4:37:57 PM	0	26.257	25.302	24.761	27.79	24.493	#	44.827	54.755	10.257	35.336	3.663	0.848		48.289	0.014	14.643	0.004		1613.02	26.8836	53.6	11.5	40.1	2.763	0.002	0.002	0.000	0.050	0.04	
722	8/25/2004	4:38:57 PM	0	26.242	25.287	24.715	27.759	24.487	#	44.705	54.161	10.091	35.531	3.66	0.842		48.437	0.014	14.643	0.003		1614.02	26.9003	53.0	11.5	40.1	2.766	0.002	0.002	0.000	0.050	0.04	
723	8/25/2004	4:39:57 PM	0	26.252	25.287	24.725	27.734	24.577	#	44.825	54.606	10.166	35.507	3.657	0.845		48.154	0.014	14.643	0.003		1615.02	26.9169	53.5	11.5	40.2	2.769	0.002	0.002	0.000	0.050	0.04	
724	8/25/2004	4:40:57 PM	0	26.256	25.296	24.73	27.743	24.551	#	44.604	54.072	10.067	35.367	3.66	0.845		48.129	0.014	14.643	0.003		1616.02	26.9336	52.9	11.5	40.0	2.757	0.002	0.002	0.000	0.051	0.04	
725	8/25/2004	4:41:57 PM	0	26.236	25.286	24.69	27.703	24.481	#	44.977	54.378	10.204	35.603	3.66	0.845		48.072	0.014	14.643	0.003		1617.02	26.9503	53.3	11.4	40.3	2.778	0.002	0.002	0.000	0.050	0.04	
726	8/25/2004	4:42:57 PM	0	26.242	25.282	24.72	27.714	24.507	#	44.608	54.285	10.177	35.211	3.657	0.842		48.427	0.014	14.643	0.003		1618.02	26.9669	53.2	11.5	39.9	2.752	0.002	0.002	0.000	0.051	0.04	
727	8/25/2004	4:43:57 PM	0	26.256	25.301	24.72	27.758	24.476	#	44.693	54.581	10.306	35.049	3.657	0.842		48.604	0.014	14.643	0.003		1619.02	26.9836	53.5	11.6	39.9	2.749	0.002	0.002	0.000	0.051	0.04	
728	8/25/2004	4:44:57 PM	0	26.25	25.3	24.734	27.738	24.506	#	44.579	54.221	10.206	35.164	3.657	0.845		48.517	0.014	14.643	0.003		1620.02	27.0003	53.1	11.6	39.9	2.749	0.002	0.002	0.000	0.051	0.04	
729																																	
730																																	
731																																	
732		Averages		25.7	24.6	24.9	26.9	24.2		44.0	54.1	10.3	34.5	4.1	2.0		48.5	0.0	14.6	0.0				52.9	11.6	39.2	2.7	0.003	0.003	0.000	0.078	0.1	
733		Maximum		26.5	25.5	27.9	28.0	25.4		49.0	55.9	11.7	39.9	62.1	93.3		51.8	1.1	14.6	0.4				54.8	12.3	44.4	3.1	0.162	0.161	0.005	4.978	4.2	
734		Median		25.7	24.8	24.7	27.1	24.3		44.8	54.4	10.2	35.4	3.6	0.8		48.4	0.0	14.6	0.0				53.3	11.5	40.1	2.8	0.002	0.002	0.000	0.058	0.0	
735		Minimum		22.5	22.7	23.5	22.5	22.2		-7.3	49.3	9.6	-18.6	-0.1	-6.0		46.6	0.0	14.6	0.0				48.2	11.1	-12.9	-0.9	0.000	0.000	0.000	-0.034	0.0	
736		2 x Std Dev		1.159	1.394	0.827	1.785	1.011		9.077	2.238	0.656	9.158	9.446	17.540		1.466	0.090	0.000	0.031				2.238	0.349	9.107	0.628	0.013	0.013	0.000	0.394	0.335	
737		Number of Points Used*		705	705	705	705	705		705	705	705	705	705	705		705	705	705	705				705	705	705	705	705	705	705	705	705	
738		* Backpulse points in box are not included																															

CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE



CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	8/26/2004	9:15:47 AM		25.723	23.377	24.761	25.305	23.286		22.682	27.732	5.027	17.796	-0.095	-4.809		48.502	0.042	14.643	0.003		0	0	26.6	11.6	20.2	1.395	0.006	0.006	0.000	0.299	0.25	
18	8/26/2004	9:16:47 AM		25.648	23.371	24.64	25.265	23.306		22.761	27.879	5.09	17.755	-0.077	-4.809		48.709	0.043	14.643	0.003		1.00	0.01667	26.8	11.6	20.3	1.397	0.006	0.006	0.000	0.307	0.26	
19	8/26/2004	9:17:47 AM		25.599	23.402	24.561	25.29	23.331		22.902	27.978	5.007	18.112	-0.077	-4.807		48.454	0.042	14.643	0.003		2.00	0.03333	26.9	11.5	20.5	1.414	0.006	0.006	0.000	0.297	0.25	
20	8/26/2004	9:18:47 AM		25.593	23.406	24.455	25.265	23.376		20.274	27.947	4.976	15.347	2.415	19.682		48.511	0.003	14.643	0.003		3.00	0.05	26.8	11.6	17.8	1.228	0.000	0.000	0.000	0.024	0.02	
21	8/26/2004	9:19:47 AM		25.569	23.417	24.381	25.27	23.442		17.01	27.941	4.976	11.996	5.788	20.731		48.25	0.003	14.643	0.003		4.00	0.06667	26.8	11.5	14.5	1.000	0.000	0.000	0.000	0.030	0.03	
22	8/26/2004	9:20:47 AM		25.219	23.417	24.31	25.295	23.372		19.714	28.093	4.972	14.847	3.162	0.365		48.379	0.053	14.643	0.003		5.00	0.08333	27.0	11.5	17.3	1.191	0.008	0.008	0.000	0.448	0.38	
23	8/26/2004	9:21:47 AM		25.275	23.428	24.252	25.337	23.503		19.665	27.916	4.893	14.865	3.099	0.388		47.747	0.04	14.643	0.003		6.00	0.1	26.8	11.4	17.3	1.190	0.006	0.006	0.000	0.339	0.29	
24	8/26/2004	9:22:47 AM		25.201	23.435	24.173	25.333	23.529		19.683	27.916	4.942	14.836	3.096	0.397		48.064	0.039	14.643	0.003		7.00	0.11667	26.8	11.4	17.3	1.190	0.006	0.006	0.000	0.331	0.28	
25	8/26/2004	9:23:47 AM		25.152	23.446	24.214	25.314	23.636		19.565	27.809	4.958	14.726	3.096	0.411		47.879	0.041	14.643	0.003		8.00	0.13333	26.7	11.4	17.1	1.182	0.006	0.006	0.000	0.350	0.30	
26	8/26/2004	9:24:47 AM		25.104	23.462	24.23	25.315	23.552		19.683	27.931	4.984	14.783	3.099	0.426		48.016	0.037	14.643	0.003		9.00	0.15	26.8	11.4	17.2	1.188	0.005	0.005	0.000	0.314	0.27	
27	8/26/2004	9:25:47 AM		25.065	23.479	24.257	25.312	23.624		19.862	28.161	5.083	14.726	3.096	0.437		47.929	0.041	14.643	0.003		10.00	0.16667	27.0	11.4	17.3	1.192	0.006	0.006	0.000	0.347	0.29	
28	8/26/2004	9:26:47 AM		25.032	23.486	24.268	25.329	23.645		19.953	28.256	5.05	14.869	3.151	0.464		47.922	0.039	14.643	0.003		11.00	0.18333	27.1	11.4	17.4	1.200	0.006	0.006	0.000	0.327	0.28	
29	8/26/2004	9:27:47 AM		25.003	23.497	24.29	25.33	23.672		19.854	28.101	4.871	14.992	3.131	0.472		47.522	0.04	14.643	0.003		12.00	0.2	27.0	11.3	17.4	1.201	0.006	0.006	0.000	0.335	0.29	
30	8/26/2004	9:28:47 AM		24.969	23.508	24.296	25.356	23.683		19.723	27.92	4.98	14.806	3.159	0.469		48.179	0.038	14.643	0.003		13.00	0.21667	26.8	11.5	17.3	1.190	0.005	0.006	0.000	0.321	0.27	
31	8/26/2004	9:29:47 AM		24.945	23.51	24.307	25.393	23.629		19.876	28.082	5.015	14.82	3.162	0.487		48.139	0.038	14.643	0.003		14.00	0.23333	27.0	11.5	17.3	1.196	0.005	0.006	0.000	0.320	0.27	
32	8/26/2004	9:30:47 AM		24.915	23.515	24.312	25.388	23.529		19.688	27.854	4.919	14.849	3.162	0.495		48.116	0.04	14.643	0.003		15.00	0.25	26.7	11.5	17.3	1.191	0.006	0.006	0.000	0.338	0.29	
33	8/26/2004	9:31:47 AM		24.88	23.519	24.312	25.362	23.528		19.696	27.923	4.878	14.826	3.159	0.507		48.17	0.04	14.643	0.003		16.00	0.26667	26.8	11.5	17.3	1.190	0.006	0.006	0.000	0.338	0.29	
34	8/26/2004	9:32:47 AM		24.859	23.523	24.311	25.331	23.482		19.827	28.088	4.956	14.9	3.162	0.524		47.768	0.042	14.643	0.003		17.00	0.28333	27.0	11.4	17.4	1.197	0.006	0.006	0.000	0.353	0.30	
35	8/26/2004	9:33:47 AM		24.853	23.538	24.331	25.3	23.402		19.603	27.782	4.816	14.884	3.217	0.53		48.058	0.041	14.643	0.003		18.00	0.3	26.7	11.4	17.2	1.189	0.006	0.006	0.000	0.347	0.30	
36	8/26/2004	9:34:47 AM		24.847	23.552	24.349	25.304	23.33		19.584	27.993	4.911	14.562	3.197	0.53		47.981	0.039	14.643	0.003		19.00	0.31667	26.9	11.4	17.1	1.177	0.006	0.006	0.000	0.333	0.28	
37	8/26/2004	9:35:47 AM		24.826	23.545	24.328	25.233	23.299		19.685	28.005	4.964	14.627	3.214	0.547		48.235	0.041	14.643	0.003		20.00	0.33333	26.9	11.5	17.2	1.183	0.006	0.006	0.000	0.349	0.30	
38	8/26/2004	9:36:47 AM		24.825	23.564	24.342	25.242	23.237		19.737	28.053	4.97	14.818	3.217	0.57		48.054	0.04	14.643	0.003		21.00	0.35	26.9	11.4	17.3	1.191	0.006	0.006	0.000	0.338	0.29	
39	8/26/2004	9:37:47 AM		24.81	23.564	24.347	25.232	23.303		19.574	27.91	4.902	14.732	3.217	0.565		48.133	0.04	14.643	0.003		22.00	0.36667	26.8	11.5	17.2	1.183	0.006	0.006	0.000	0.340	0.29	
40	8/26/2004	9:38:47 AM		24.81	23.579	24.362	25.242	23.308		19.735	27.985	4.91	14.892	3.217	0.594		47.741	0.041	14.643	0.004		23.00	0.38333	26.9	11.4	17.3	1.194	0.006	0.006	0.000	0.345	0.29	
41	8/26/2004	9:39:47 AM		24.806	23.595	24.368	25.233	23.309		22.942	28.007	4.936	18.069	-0.022	-4.838		48.1	0.063	14.643	0.003		24.00	0.4	26.9	11.5	20.5	1.414	0.009	0.009	0.000	0.448	0.38	
42	8/26/2004	9:40:47 AM		24.788	23.603	24.381	25.2	23.156		23.029	27.601	5.163	17.812	-0.679	-4.564		48.807	0.037	14.643	0.003		25.00	0.41667	26.5	11.6	20.4	1.408	0.005	0.005	0.000	0.264	0.22	
43	8/26/2004	9:41:47 AM		24.777	23.601	24.384	25.103	23.3		21.714	27.636	5.141	16.69	0.814	-2.809		49.366	0.021	14.643	0.003		26.00	0.43333	26.5	11.8	19.2	1.324	0.003	0.003	0.000	0.159	0.14	
44	8/26/2004	9:42:47 AM		24.74	23.61	24.393	25.052	23.318		22.099	27.873	5.069	17.075	0.67	-3.107		48.667	0.044	14.643	0.003		27.00	0.45	26.7	11.6	19.6	1.350	0.006	0.006	0.000	0.327	0.28	
45	8/26/2004	9:43:47 AM		24.724	23.609	24.386	24.965	23.212		22.015	27.952	5.051	16.889	0.629	-3.199		48.898	0.044	14.643	0.003		28.00	0.46667	26.8	11.6	19.5	1.341	0.006	0.006	0.000	0.329	0.28	
46	8/26/2004	9:44:47 AM		24.711	23.621	24.378	24.977	23.094		21.903	27.748	4.995	16.903	0.664	-3.199		48.156	0.044	14.643	0.003		29.00	0.48333	26.6	11.5	19.4	1.338	0.006	0.006	0.000	0.330	0.28	
47	8/26/2004	9:45:47 AM		24.705	23.615	24.368	24.992	23.078		22.16	27.979	5.138	16.995	0.67	-3.196		48.55	0.045	14.643	0.004		30.00	0.5	26.9	11.6	19.6	1.350	0.006	0.007	0.000	0.335	0.29	
48	8/26/2004	9:46:47 AM		24.715	23.625	24.368	25.012	23.153		22.064	27.856	5.069	16.989	0.667	-3.191		48.934	0.045	14.643	0.003		31.00	0.51667	26.7	11.7	19.5	1.346	0.006	0.007	0.000	0.336	0.29	
49	8/26/2004	9:47:47 AM		24.718	23.633	24.376	25.07	23.171		22.071	27.972	5.062	17.03	0.67	-3.185		48.682	0.044	14.643	0.003		32.00	0.53333	26.8	11.6	19.6	1.348	0.006	0.006	0.000	0.328	0.28	
50	8/26/2004	9:48:47 AM		24.727	23.646	24.389	25.143	23.154		21.813	27.672	5.069	16.809	0.704	-3.185		48.342	0.045	14.643	0.003		33.00	0.55	26.5	11.5	19.3	1.331	0.006	0.007	0.000	0.339	0.29	
51	8/26/2004	9:49:47 AM		24.735	23.645	24.378	25.202	23.153		21.985	27.842	5.173	16.747	0.704	-3.176		48.402	0.044	14.643	0.003		34.00	0.56667	26.7	11.5	19.4	1.335	0.006	0.006	0.000	0.331	0.28	
52	8/26/2004	9:50:47 AM		24.733	23.648	24.38	25.24	23.1		22.054	27.922	5.062	17	0.728	-3.17		48.383	0.044	14.643	0.004		35.00	0.58333	26.8	11.5	19.5	1.346	0.006	0.006	0.000	0.328	0.28	
53	8/26/2004	10:50:18 AM		25.696	24.318	25.099	25.678	24.321		24.277	63.363	3.922	24.303	30.865	0.617		44.992	0.003	6.434	0.004		94.52	1.57528	62.2	10.7	24.3	1.675	0.000	0.000	0.000	0.018	0.02	
54	8/26/2004	10:51:18 AM		25.785	24.312	25.183	25.682	24.384		24.36	63.797	3.854	24.439	31.137	0.64		43.986	0.003	6.469	0.006		95.52	1.59194	62.7	10.5	24.4	1.682	0.926	0.921	0.038	37.762	32.14	
55	8/26/2004	10:52:18 AM		25.89	24.333	25.279	25.668	24.395		24.478	64.174	3.703	24.851	31.357	0.669		43.749	0.003	6.487	0.005		96.52	1.60861	63.0	10.4	24.7	1.701	0.929	0.921	0.037	37.360	31.79	
56	8/26/2004	10:53:18 AM		25.934	24.307	25.313	25.622	24.359		8.883	65.193	3.567	5.679	51.481	29.014		39.416	1.205	-0.002	0.003		97.52	1.62528	64.1	9.4	7.3	0.502	0.000	0.000	0.000	-0.039	-0.03	
57	8/26/2004	10:54:18 AM		25.959	24.331	25.388	25.631	24.339		2.26	66.134	3.526	-1.171	58.962	22.197		37.745	0.003	-0.012	0.003		98.52	1.64194	65.0	9.0	0.5	0.038	-0.002	-0.002	-0.003	-3.121	-2.66	
58	8/26/2004	10:55:18 AM		25.944	24.326	25.438	25.626	24.304		2.072	65.882	3.416	-1.222	58.985	21.74		37.539	0.003	-0.012	0.003		99.52	1.65861	64.8	8.9	0.4	0.029	-0.002	-0.002	-0.004	-3.993	-3.40	
59	8/26/2004	10:56:18 AM		26.757	24.331	25.477	25.646	24.398		2.238	65.969	3.476	-1.077	59.211	58.492		37.579	0.003	14.643	0.005		100.52	1.67528	64.8	9.0	0.6	0.040	2.096	2.068	3.563	######	######	
60	8/26/2004	10:57:18 AM		26.137	24.32	25.507	25.62	24.312		20.801	63.809	3.604	21.59	34.542	3.632		43.824	0.004	6.791	0.003		101.52	1.69194	62.7	10.4	21.2	1.461	0.972	0.958	0.045	45.221	38.48	
61	8/26/2004	10:58:18 AM		26.192	24.319	25.566	25.629	24.327		21.5	63.426	3.882	21.74	33.555	3.733		46.504	0.003	6.694	0.003		102.52	1.70861	62.3	11.1	21.6	1.491	0.958	0.943	0.044	43.628	37.13	
62	8/26/2004	10:59:18 AM		26.246	24.319	25.61	25.684	24.261		21.946	63.626	3.864	22.399	33.013	3.655		44.397	0.003	6.658	0.003		103.52	1.72528	62.5	10.6	22.2	1.529	0.953	0.937	0.042	42.259	35.96	
63	8/26/2004	11:00:18 AM		26.255	24.302	25.574	25.708	24.22		22.143	63.26	3.817	22.508	32.648	3.626		45.042	0.003	6.627	0.004		104.52	1.74194	62.1	10.7	22.3	1.539	0.949	0.934	0.042	41.817	35.59	
64	8/26/2004	11:01:18 AM		26.2	24.322	25.499	25.743	24.26		22.678	63.697	3.83	23.082	32.498	3.609		44.656	0.003	6.599	0.004		105.52	1.75861	62.6	10.6	22.9	1.577	0.945	0.932	0.041	40.716	34.65	
65	8/26/2004	11:02:18 AM		26.093	24.301	25.393	25.736	24.298		23.012	63.944	3.86	23.201	32.428	3.62		44.02	0.003	6.59	0.005		106.52	1.77528	62.8	10.5	23.1	1.593	0.943	0.933	0.040	40.382	34.37	
66	8/26/2004	11:03:18 AM		26.012	24.295	25.316	25.715	24.307		22.969	63.797	3.858	23.382	32.373	3.603		44.401	0.003	6.58	0.004		107.52	1.79194	62.7	10.6	23.2	1.598	0.942	0.934	0.040	40.288	34.29	
67	8/26/2004	11:04:18 AM		25.958	24.295	25.242	25.721	24.373		22.962	63.357	3.772	23.212	32.081	3.58		44.193	0.003	6.561	0.004		108.52	1.80861	62.2	10.5	23.1	1.592	0.939	0.933	0.040	40.410	34.39	
68	8/26/2004	11:05:18 AM		25.914	24.306	25.192	25.706	24.459		23.265	63.651	3.82	23.38	32.067	3.577		44.116	0.003	6.553	0.006		109.52	1.82528	62.5	10.5	23.3	1.608	0.938	0.933	0.040	40.009	34.05	
69	8/26/2004	11:06:18 AM		25.87	24.317	25.164	25.783	24.54		23.238	63.568	3.742	23.608	32.174	3.58		43.847	0.003	6.562	0.006		110.52	1.84194	62.4	10.4	23.4	1.615	0.939	0.935	0.040	39.923	33.98	
70	8/26/2004	11:07:18 AM		25.816	24.319	25.125	25.799	24.586		23.553	64.053	3.749	23.874	31.959	3.58		43.715	0.003	6.555	0.004		111.52	1.85861	62.9	10.4	23.7	1.635	0.938	0.935	0.039	39.435	33.56	

CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	8/26/2004	11:08:18 AM		25.783	24.341	25.097	25.836	24.633		23.259	63.548	3.718	23.716	31.957	3.565		43.938	0.003	6.539	0.005		112.52	1.87528	62.4	10.5	23.5	1.619	0.936	0.934	0.040	39.749	33.83	
72	8/26/2004	11:09:18 AM		25.735	24.347	25.058	25.887	24.669		23.616	63.805	3.794	23.86	31.855	3.56		43.984	0.003	6.543	0.006		113.52	1.89194	62.7	10.5	23.7	1.637	0.937	0.935	0.039	39.397	33.53	
73	8/26/2004	11:10:18 AM		25.682	24.349	25.005	25.904	24.706		23.524	63.626	3.715	23.911	31.757	3.542		43.832	0.003	6.533	0.005		114.52	1.90861	62.5	10.4	23.7	1.635	0.935	0.935	0.039	39.429	33.55	
74	8/26/2004	11:11:18 AM		25.649	24.367	24.973	25.992	24.689		23.825	64.136	3.84	24.014	31.722	3.548		43.997	0.003	6.532	0.005		115.52	1.92528	63.0	10.5	23.9	1.649	0.935	0.936	0.039	39.126	33.30	
75	8/26/2004	11:12:18 AM		25.636	24.394	24.944	26.024	24.696		23.73	63.579	3.773	23.994	31.519	3.496		43.909	0.003	6.505	0.006		116.52	1.94194	62.5	10.5	23.9	1.645	0.931	0.933	0.039	39.090	33.27	
76	8/26/2004	11:13:18 AM		25.617	24.409	24.935	26.03	24.642		23.908	64.248	3.809	24.16	31.583	3.522		44.093	0.003	6.519	0.005		117.52	1.95861	63.1	10.5	24.0	1.657	0.933	0.935	0.039	38.903	33.11	
77	8/26/2004	11:14:18 AM		25.582	24.41	24.886	25.97	24.577		23.912	63.931	3.775	24.281	31.667	3.51		43.602	0.003	6.504	0.004		118.52	1.97528	62.8	10.4	24.1	1.661	0.931	0.934	0.039	38.767	32.99	
78	8/26/2004	11:15:18 AM		25.559	24.416	24.867	25.907	24.579		23.893	63.786	3.764	24.139	31.739	3.519		43.717	0.003	6.507	0.004		119.52	1.99194	62.7	10.4	24.0	1.656	0.932	0.935	0.039	38.935	33.13	
79	8/26/2004	11:16:18 AM		25.539	24.432	24.863	25.922	24.549		23.972	64.128	3.726	24.346	31.505	3.531		43.511	0.003	6.516	0.004		120.52	2.00861	63.0	10.4	24.2	1.666	0.933	0.936	0.039	38.763	32.99	
80	8/26/2004	11:17:18 AM		25.52	24.438	24.843	25.928	24.51		23.906	63.794	3.734	24.297	31.569	3.516		43.73	0.003	6.512	0.006		121.52	2.02528	62.7	10.4	24.1	1.662	0.932	0.936	0.039	38.853	33.06	
81	8/26/2004	11:18:18 AM		25.485	24.443	24.828	25.888	24.475		24.007	63.741	3.805	24.211	31.392	3.482		44.599	0.003	6.474	0.006		122.52	2.04194	62.6	10.6	24.1	1.662	0.927	0.931	0.039	38.631	32.88	
82	8/26/2004	11:19:18 AM		25.471	24.443	24.809	25.878	24.476		23.858	63.384	3.777	24.088	31.094	3.458		44.251	0.003	6.463	0.005		123.52	2.05861	62.3	10.5	24.0	1.653	0.925	0.930	0.039	38.805	33.02	
83	8/26/2004	11:20:18 AM		25.461	24.448	24.779	25.903	24.445		24.296	63.91	3.871	24.488	31.236	3.484		44.222	0.003	6.481	0.005		124.52	2.07528	62.8	10.5	24.4	1.682	0.928	0.934	0.038	38.277	32.57	
84	8/26/2004	11:21:18 AM		25.446	24.448	24.754	25.903	24.385		24.258	63.921	3.901	24.293	31.184	3.482		44.391	0.003	6.472	0.006		125.52	2.09194	62.8	10.6	24.3	1.674	0.927	0.933	0.038	38.434	32.71	
85	8/26/2004	11:22:18 AM		25.434	24.442	24.732	25.952	24.394		24.119	63.49	3.831	24.248	31.224	3.467		43.734	0.003	6.471	0.004		126.52	2.10861	62.4	10.4	24.2	1.667	0.926	0.933	0.039	38.598	32.85	
86	8/26/2004	11:23:18 AM		25.414	24.436	24.707	25.957	24.318		24.084	63.51	3.803	24.199	31.308	3.476		44.095	0.003	6.473	0.005		127.52	2.12528	62.4	10.5	24.1	1.664	0.927	0.934	0.039	38.705	32.94	
87	8/26/2004	11:24:18 AM		25.413	24.43	24.72	25.98	24.337		24.163	63.654	3.812	24.287	31.311	3.49		44.009	0.003	6.468	0.005		128.52	2.14194	62.5	10.5	24.2	1.670	0.926	0.933	0.039	38.527	32.79	
88	8/26/2004	11:25:18 AM		25.397	24.429	24.71	25.905	24.351		24.122	63.654	3.753	24.351	31.195	3.461		43.817	0.003	6.468	0.006		129.52	2.15861	62.5	10.4	24.2	1.671	0.926	0.934	0.039	38.520	32.78	
89	8/26/2004	11:26:18 AM		25.392	24.434	24.72	25.93	24.321		24.296	64.076	3.729	24.595	31.137	3.476		43.632	0.003	6.469	0.005		130.52	2.17528	63.0	10.4	24.4	1.685	0.926	0.933	0.038	38.186	32.50	
90	8/26/2004	11:27:18 AM		25.371	24.424	24.709	25.919	24.286		24.078	63.421	3.733	24.353	31.056	3.47		43.847	0.003	6.463	0.006		131.52	2.19194	62.3	10.4	24.2	1.670	0.925	0.933	0.039	38.525	32.79	
91	8/26/2004	11:28:18 AM		25.351	24.408	24.668	25.908	24.315		24.371	63.983	3.765	24.554	31.215	3.473		43.717	0.003	6.467	0.004		132.52	2.20861	62.9	10.4	24.5	1.687	0.926	0.935	0.038	38.203	32.51	
92	8/26/2004	11:29:18 AM		25.36	24.422	24.688	25.888	24.314		24.315	63.757	3.808	24.488	31.01	3.458		43.579	0.003	6.459	0.006		133.52	2.22528	62.6	10.4	24.4	1.682	0.925	0.933	0.038	38.230	32.53	
93	8/26/2004	11:30:18 AM		25.349	24.402	24.657	25.887	24.384		24.445	63.981	3.769	24.673	31.221	3.476		43.59	0.003	6.472	0.004		134.52	2.24194	62.9	10.4	24.6	1.693	0.927	0.936	0.038	38.095	32.42	
94	8/26/2004	11:31:18 AM		25.349	24.402	24.642	25.962	24.449		24.285	63.531	3.751	24.556	31.076	3.453		43.665	0.003	6.455	0.005		135.52	2.25861	62.4	10.4	24.4	1.684	0.924	0.934	0.038	38.226	32.53	
95	8/26/2004	11:32:18 AM		25.341	24.403	24.638	26.028	24.54		24.449	63.817	3.677	24.786	30.88	3.453		43.805	0.003	6.46	0.006		136.52	2.27528	62.7	10.4	24.6	1.697	0.925	0.934	0.038	37.954	32.30	
96	8/26/2004	11:33:18 AM		25.353	24.436	24.666	26.081	24.663		24.4	63.803	3.752	24.611	31.273	3.473		43.713	0.003	6.461	0.005		137.52	2.29194	62.7	10.4	24.5	1.690	0.925	0.934	0.038	38.103	32.43	
97	8/26/2004	11:34:18 AM		25.334	24.437	24.657	26.147	24.754		24.393	63.678	3.682	24.695	30.995	3.45		43.924	0.003	6.452	0.005		138.52	2.30861	62.6	10.5	24.5	1.692	0.924	0.933	0.038	38.000	32.34	
98	8/26/2004	11:35:18 AM		25.342	24.45	24.68	26.21	24.802		24.447	63.813	3.803	24.431	31.053	3.453		43.577	0.003	6.451	0.004		139.52	2.32528	62.7	10.4	24.4	1.685	0.924	0.932	0.038	38.133	32.45	
99	8/26/2004	11:36:18 AM		25.33	24.463	24.673	26.253	24.88		24.47	63.492	3.793	24.665	31.198	3.458		43.321	0.003	6.449	0.006		140.52	2.34194	62.4	10.3	24.6	1.694	0.923	0.932	0.038	37.929	32.28	
100	8/26/2004	11:37:18 AM		25.334	24.486	24.672	26.347	24.914		24.702	64.014	3.766	24.86	31.068	3.444		43.607	0.003	6.442	0.006		141.52	2.35861	62.9	10.4	24.8	1.709	0.922	0.931	0.038	37.562	31.97	
101	8/26/2004	11:38:18 AM		25.316	24.504	24.674	26.374	24.936		24.57	63.707	3.724	24.911	31.062	3.456		44.086	0.003	6.447	0.006		142.52	2.37528	62.6	10.5	24.7	1.706	0.923	0.932	0.038	37.651	32.04	
102	8/26/2004	11:39:18 AM		25.323	24.531	24.676	26.406	24.953		24.485	63.577	3.713	24.975	30.784	3.441		43.473	0.003	6.444	0.006		143.52	2.39194	62.5	10.4	24.7	1.705	0.923	0.931	0.038	37.647	32.04	
103	8/26/2004	11:40:18 AM		25.311	24.544	24.654	26.409	24.961		24.512	63.513	3.773	24.747	30.874	3.424		43.256	0.003	6.429	0.005		144.52	2.40861	62.4	10.3	24.6	1.698	0.920	0.929	0.038	37.736	32.11	
104	8/26/2004	11:41:18 AM		25.312	24.56	24.62	26.32	24.857		24.623	63.745	3.751	24.8	31.056	3.447		43.602	0.003	6.442	0.004		145.52	2.42528	62.6	10.4	24.7	1.704	0.922	0.932	0.038	37.723	32.10	
105	8/26/2004	11:42:18 AM		25.299	24.557	24.597	26.312	24.844		24.904	64.331	3.803	25.016	30.969	3.43		43.482	0.003	6.435	0.005		146.52	2.44194	63.2	10.4	25.0	1.721	0.921	0.932	0.037	37.331	31.77	
106	8/26/2004	11:43:18 AM		25.305	24.583	24.623	26.303	24.805		24.623	63.774	3.776	24.741	30.917	3.438		43.607	0.003	6.438	0.005		147.52	2.45861	62.6	10.4	24.7	1.702	0.922	0.932	0.038	37.742	32.12	
107	8/26/2004	11:44:18 AM		25.316	24.604	24.628	26.199	24.775		24.848	63.987	3.782	25.104	30.877	3.45		43.678	0.003	6.448	0.006		148.52	2.47528	62.9	10.4	25.0	1.722	0.923	0.933	0.037	37.350	31.79	
108	8/26/2004	11:45:18 AM		25.307	24.605	24.63	26.145	24.707		24.644	63.61	3.753	24.833	30.657	3.421		43.584	0.003	6.43	0.005		149.52	2.49194	62.5	10.4	24.7	1.706	0.921	0.930	0.038	37.601	32.00	
109	8/26/2004	11:46:18 AM		25.308	24.621	24.645	26.185	24.692		24.777	63.697	3.703	25.116	30.72	3.441		43.655	0.003	6.431	0.005		150.52	2.50861	62.6	10.4	24.9	1.720	0.921	0.930	0.037	37.278	31.72	
110	8/26/2004	11:47:18 AM		25.293	24.631	24.666	26.176	24.698		24.933	62.864	4.206	24.7	29.913	3.325		45.968	0.003	6.335	0.004		151.52	2.52528	61.7	10.9	24.8	1.711	0.907	0.916	0.037	36.892	31.40	
111	8/26/2004	11:48:18 AM		25.298	24.626	24.671	26.086	24.678		24.659	62.681	4.092	24.349	29.782	3.314		46.018	0.003	6.338	0.006		152.52	2.54194	61.6	11.0	24.5	1.689	0.907	0.916	0.037	37.375	31.81	
112	8/26/2004	11:49:18 AM		25.298	24.626	24.666	26.07	24.662		24.883	63.077	4.049	24.597	30.011	3.334		45.72	0.003	6.343	0.006		153.52	2.55861	62.0	10.9	24.7	1.706	0.908	0.917	0.037	37.053	31.53	
113	8/26/2004	11:50:18 AM		25.313	24.631	24.676	26.105	24.612		24.988	62.965	4.11	24.831	29.846	3.317		45.657	0.003	6.339	0.004		154.52	2.57528	61.8	10.9	24.9	1.717	0.908	0.916	0.037	36.767	31.29	
114	8/26/2004	11:51:18 AM		25.333	24.631	24.676	26.12	24.592		25.233	63.496	4.136	24.901	29.939	3.317		45.88	0.003	6.341	0.005		155.52	2.59194	62.4	10.9	25.1	1.728	0.908	0.916	0.037	36.548	31.10	
115	8/26/2004	11:52:18 AM		25.321	24.624	24.649	26.079	24.596		24.945	62.992	4.053	24.56	29.768	3.314		45.726	0.003	6.336	0.004		156.52	2.60861	61.9	10.9	24.8	1.707	0.907	0.916	0.037	37.011	31.50	
116	8/26/2004	11:53:18 AM		25.346	24.634	24.674	26.143	24.57		24.93	62.816	4.098	24.663	29.814	3.325		45.444	0.003	6.341	0.005		157.52	2.62528	61.7	10.8	24.8	1.710	0.908	0.916	0.037	36.948	31.44	
117	8/26/2004	11:54:18 AM		25.339	24.622	24.662	26.142	24.624		25.208	63.274	4.093	24.96	29.751	3.311		45.547	0.003	6.331	0.004		158.52	2.64194	62.1	10.8	25.1	1.729	0.906	0.915	0.036	36.480	31.04	
118	8/26/2004	11:55:18 AM		25.354	24.632	24.687	26.182	24.644		25.067	63.139	4.082	24.858	29.968	3.317		45.524	0.003	6.339	0.005		159.52	2.65861	62.0	10.8	25.0	1.721	0.908	0.916	0.037	36.678	31.21	
119	8/26/2004	11:56:18 AM		25.364	24.642	24.727	26.187	24.634		24.904	62.741	4.016	24.706	29.71	3.308		45.701	0.003	6.33	0.005		160.52	2.67528	61.6	10.9	24.8	1.710	0.906	0.913	0.037	36.817	31.33	
120	8/26/2004	11:57:18 AM		25.359	24.642	24.722	26.182	24.594		24.852	62.746	3.989	24.743	29.832	3.305		45.553	0.003	6.325	0.005		161.52	2.69194	61.6	10.8	24.8	1.710	0.906	0.913	0.037	36.804	31.32	
121	8/26/2004	11:58:18 AM		25.359	24.632	24.732	26.156	24.593		25.107	62.988	4.036	25.073	29.643	3.311		45.446	0.003	6.34	0.006		162.52	2.70861	61.9	10.8	25.1	1.730	0.908	0.915	0.036	36.451	31.02	
122	8/26/2004	11:59:18 AM		25.353	24.631	24.721	26.251	24.553		25.1	62.928	4.05	25.014	29.837	3.32		45.774	0.003	6.341	0.005		163.52	2.72528	61.8	10.9	25.1	1.728	0.908	0.915	0.037	36.516	31.08	
123	8/26/2004	12:00:18 PM		25.349	24.632	24.717	26.307	24.608		25.293	63.175	4.113	24.979	29.736	3.311		45.183	0.003	6.325	0.006		164.52	2.74194	62.0	10.8	25.1	1.733	0.906	0.913	0.036	36.313	30.90	
124	8/26/2004	12:01:18 PM		25.354	24.627	24.697	26.327	24.613		25.304	63.255	4.052	25.122	29.672	3.305		45.232	0.003	6.325	0.006		165.52	2.75861	62.1	10.8	25.2	1.738	0.906	0.913	0.036	36.223	30.83	
125	8/26/2004	12:02:18 PM		25.359	24.617	24.672	26.322	24.604		25.123	62.955	4.046	24.915	29.759	3.305		45.505	0.003	6.333	0.005		166.52	2.77528	61.8	10.8	25.0	1.725	0.907	0.915	0.037	36.576	31.13	
126	8/26/2004	12:03:18 PM		25.374	24.642	24.712	26.312	24.579		25.333	63.123	4.077	25.133	29.739	3.308		45.411	0.003	6.338	0.005		167.52	2.79194	62.0	10.8	25.2	1.740	0.907	0.915	0.036	36.253	30.85	
127	8/26/2004	12:04:18 PM		25.359	24.627	24.692	26.267	24.524		25.152	62.887	4.01	24.907	29.794	3.314		45.413	0.003	6.333	0.005		168.52	2.80861	61.8	10.8	25.0	1.726	0.907	0.915	0.037	36.540	31.10	
128	8/26/2004	12:05:18 PM		25.364	24.622	24.692	26.272	24.494		25.351	63.282	4.043	25.153	29.704	3.305		45.238	0.003	6.341	0.004		169.52	2.82528	62.2	10.8	25.3	1.741	0.908	0.916	0.036	36.263	30.86	
129	8/26/2004	12:06:18 PM		25.354	24.612	24.702	26.247	24.513		25.418	63.171	4.079	25.102	29.829	3.317		45.188	0.003	6.328	0.005		170.52	2.84194	62.0	10.8	25.3	1.742	0.906	0.914	0.036	36.167	30.78	
130	8/26/2004	12:07:18 PM		25.354	24.612	24.712	26.302	24.528		25.086	62.826	4.013	24.917	29.626	3.288		45.423	0.003	6.322	0.006		171.52	2.85861	61.7	10.8	25.0	1.724	0.905	0.912	0.036	36.496	31.06	
131	8/26/2004	12:08:18 PM		25.369	24.627	24.727	26.242	24.568		25.086	62.945	3.88	25.094	29.614	3.288		45.382	0.003	6.319	0.005		172.52	2.87528	61.8	10.8	25.1	1.730	0.905	0.912	0.036	36.335	30.92	
132	8/26/2004	12:09:18 PM		25.359	24.617	24.722	26.192	24.573		25.275	62.837	4.065	24.944	29.655	3.302		45.202	0.003	6.325	0.006		173.52	2.89194	61.7	10.8	25.1	1.731	0.906	0.913	0.036	36.346	30.93	
133	8/26/2004	12:10:18 PM		25.349	24.612	24.697	26.177	24.559		25.422	63.185	4.005	25.311	29.614	3.282		45.217	0.003	6.311	0.005		174.52	2.90861	62.1	10.8	25.4	1.749	0.904	0.911	0.036	35.924	30.57	
134	8/26/2004	12:11:18 PM		25.349	24.612	24.697	26.212	24.614		25.376	63.061	4.1	24.966	29.603	3.282		45.183	0.003	6.308	0.005		175.52	2.92528	61.9	10.8	25.2	1.735	0.903	0.911	0.036	36.186	30.79	
135	8/26/2004	12:12:18 PM		25.355	24.618	24.703	26.238	24.625		25.604	63.537	4.049	25.235	29.504	3.314		45.309	0.003	6.331	0.004		176.52	2.94194	62.4	10.8	25.4	1.753	0.906	0.914	0.036	35.957	30.60	
136	8/26/2004	12:13:18 PM		25.36	24.608	24.693	26.253	24.62		25.598	63.589	4.071	25.529	29.557	3.297		45.165	0.003	6.31	0.005		177.52	2.95861	62.5	10.8	25.6	1.763	0.903	0.911	0.036	35.645	30.33	
137	8/26/2004	12:14:18 PM		25.355	24.608	24.693	26.218	24.645		25.397	62.884	4.023	25.219	29.597	3.291		45.288	0.003	6.314	0.006		178.52	2.97528	61.8	10.8	25.3	1.745	0.904	0.912	0.036	36.028	30.66	
138	8/26/2004	12:15:18 PM		25.361	24.609	24.694	26.254	24.635		25.42	63.04	3.98	25.371	29.507	3.288		45.206	0.003	6.314	0.006		179.52	2.99194	61.9	10.8	25.4	1.751	0.904	0.912	0.036	35.903	30.55	
139	8/26/2004	12:16:18 PM		25.366	24.614	24.709	26.239	24.63		25.633	63.287	4.037	25.44	29.658	3.285		45.401	0.003	6.312	0.004		180.52	3.00861	62.2	10.8	25.5	1.761	0.904	0.911	0.036	35.678	30.36	
140	8/26/2004	12:17:18 PM		25.361	24.609	24.719	26.279	24.631		25.461	62.891	4.053	25.092	29.476	3.279		45.24	0.003	6.298	0.005		181.52	3.02528	61.8	10.8	25.3	1.743	0.902	0.909	0.036	35.955	30.60	

CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	8/26/2004	12:18:18 PM		25.361	24.619	24.719	26.264	24.636		25.515	63.206	3.943	25.397	29.403	3.282		45.325	0.003	6.31	0.006		182.52	3.04194	62.1	10.8	25.5	1.755	0.903	0.911	0.036	35.770	30.44	
142	8/26/2004	12:19:18 PM		25.352	24.615	24.72	26.295	24.697		25.339	62.746	4.009	25.145	29.496	3.262		45.271	0.003	6.301	0.005		183.52	3.05861	61.6	10.8	25.2	1.740	0.902	0.909	0.036	36.020	30.65	
143	8/26/2004	12:20:18 PM		25.346	24.609	24.699	26.269	24.636		25.675	63.255	4.079	25.401	29.476	3.25		45.121	0.003	6.296	0.005		184.52	3.07528	62.1	10.7	25.5	1.761	0.901	0.909	0.036	35.596	30.29	
144	8/26/2004	12:21:18 PM		25.356	24.619	24.714	26.244	24.581		25.66	63.285	4.032	25.295	29.218	3.265		45.309	0.003	6.291	0.005		185.52	3.09194	62.2	10.8	25.5	1.757	0.901	0.908	0.036	35.637	30.33	
145	8/26/2004	1:00:04 PM		25.394	24.547	24.717	26.147	24.514		21.403	63.62	3.976	21.627	33.636	1.163		45.081	0.003	6.706	0.004		224.28	3.73806	62.5	10.7	21.5	1.483	0.960	0.968	0.045	44.980	38.28	
146	8/26/2004	1:01:04 PM		25.368	24.546	24.701	26.181	24.593		21.38	63.249	3.905	21.826	33.754	1.152		45.044	0.003	6.696	0.003		225.28	3.75472	62.1	10.7	21.6	1.489	0.959	0.967	0.045	44.751	38.08	
147	8/26/2004	1:02:04 PM		25.353	24.536	24.651	26.231	24.753		2.435	65.347	3.719	-1.115	58.05	19.39		39.295	0.006	-0.01	0.003		226.28	3.77139	64.2	9.4	0.7	0.046	-0.001	-0.001	-0.002	-2.191	-1.86	
148	8/26/2004	1:03:04 PM		25.353	24.536	24.626	26.276	24.763		2.231	65.469	3.74	-1.413	58.449	20.549		39.162	0.003	-0.011	0.003		227.28	3.78806	64.3	9.3	0.4	0.028	-0.002	-0.002	-0.004	-3.891	-3.31	
149	8/26/2004	1:04:04 PM		25.38	24.562	24.613	26.378	24.815		2.258	65.623	3.655	-1.187	58.438	105.615		38.874	0.003	-0.012	0.004		228.28	3.80472	64.5	9.3	0.5	0.037	-0.002	-0.002	-0.003	-3.243	-2.76	
150	8/26/2004	1:05:04 PM		25.341	24.569	24.574	26.399	24.906		7.563	64.64	3.73	4.311	52.199	30.251		40.636	1.205	-0.012	0.003		229.28	3.82139	63.5	9.7	5.9	0.409	-0.002	-0.002	0.000	-0.293	-0.25	
151	8/26/2004	1:06:04 PM		25.293	24.591	24.621	26.456	25.033		20.778	63.691	3.963	21.215	34.29	2.794		45.292	0.003	6.742	0.004		230.28	3.83806	62.6	10.8	21.0	1.448	0.965	0.976	0.046	46.464	39.54	
152	8/26/2004	1:07:04 PM		25.279	24.597	24.617	26.482	25.034		20.77	63.351	3.876	21.207	34.009	2.779		44.958	0.003	6.73	0.003		231.28	3.85472	62.2	10.7	21.0	1.447	0.964	0.974	0.046	46.404	39.49	
153	8/26/2004	1:08:04 PM		25.291	24.619	24.629	26.499	25.001		21.173	63.539	3.949	21.516	33.754	2.756		44.823	0.003	6.711	0.003		232.28	3.87139	62.4	10.7	21.3	1.472	0.961	0.971	0.045	45.486	38.71	
154	8/26/2004	1:09:04 PM		25.281	24.624	24.624	26.439	24.951		21.255	63.483	3.923	21.605	33.725	2.727		45.184	0.003	6.704	0.003		233.28	3.88806	62.4	10.8	21.4	1.478	0.960	0.970	0.045	45.264	38.52	
155	8/26/2004	1:10:04 PM		25.298	24.646	24.646	26.491	24.963		21.145	63.05	3.859	21.627	33.723	2.742		44.898	0.003	6.694	0.003		234.28	3.90472	61.9	10.7	21.4	1.474	0.958	0.968	0.045	45.261	38.52	
156	8/26/2004	1:11:04 PM		25.303	24.666	24.666	26.531	24.913		21.311	63.32	3.893	21.701	33.503	2.718		44.975	0.003	6.686	0.004		235.28	3.92139	62.2	10.7	21.5	1.483	0.957	0.966	0.045	44.930	38.24	
157	8/26/2004	1:12:04 PM		25.304	24.672	24.657	26.462	24.839		21.419	63.343	3.874	21.896	33.491	2.718		44.981	0.003	6.678	0.003		236.28	3.93806	62.2	10.7	21.7	1.493	0.956	0.965	0.045	44.573	37.93	
158	8/26/2004	1:13:04 PM		25.299	24.687	24.667	26.437	24.844		21.508	63.515	3.916	21.952	33.523	2.701		44.748	0.003	6.677	0.004		237.28	3.95472	62.4	10.7	21.7	1.498	0.956	0.965	0.044	44.405	37.79	
159	8/26/2004	1:14:04 PM		25.31	24.704	24.658	26.413	24.85		21.365	63.003	3.921	21.584	33.256	2.707		44.931	0.003	6.67	0.005		238.28	3.97139	61.9	10.7	21.5	1.481	0.955	0.964	0.045	44.898	38.21	
160	8/26/2004	1:15:04 PM		25.32	24.704	24.653	26.448	24.85		21.511	63.226	3.883	22.052	33.187	2.689		44.789	0.003	6.667	0.004		239.28	3.98806	62.1	10.7	21.8	1.502	0.954	0.964	0.044	44.251	37.66	
161	8/26/2004	1:16:04 PM		25.325	24.704	24.653	26.448	24.845		21.573	63.353	3.887	22.023	33.355	2.704		44.818	0.003	6.671	0.005		240.28	4.00472	62.2	10.7	21.8	1.503	0.955	0.964	0.044	44.244	37.65	
162	8/26/2004	1:17:04 PM		25.351	24.734	24.684	26.469	24.886		21.79	63.778	3.961	22.032	33.309	2.715		44.806	0.003	6.667	0.006		241.28	4.02139	62.7	10.7	21.9	1.511	0.954	0.963	0.044	43.951	37.40	
163	8/26/2004	1:18:04 PM		25.34	24.724	24.673	26.463	24.865		21.861	63.707	3.966	22.218	33.335	2.698		44.931	0.003	6.652	0.006		242.28	4.03806	62.6	10.7	22.0	1.520	0.952	0.961	0.044	43.610	37.11	
164	8/26/2004	1:19:04 PM		25.34	24.728	24.673	26.463	24.86		21.716	63.459	3.899	22.089	33.366	2.707		44.821	0.003	6.662	0.005		243.28	4.05472	62.3	10.7	21.9	1.510	0.954	0.963	0.044	43.949	37.40	
165	8/26/2004	1:20:04 PM		25.35	24.733	24.683	26.493	24.87		21.658	63.27	3.87	22.054	33.303	2.71		44.921	0.003	6.665	0.005		244.28	4.07139	62.1	10.7	21.9	1.507	0.954	0.963	0.044	44.050	37.49	
166	8/26/2004	1:21:04 PM		25.345	24.743	24.688	26.513	24.855		21.797	63.396	3.968	21.913	32.984	2.695		44.768	0.003	6.656	0.005		245.28	4.08806	62.3	10.7	21.9	1.507	0.953	0.961	0.044	43.986	37.43	
167	8/26/2004	1:22:04 PM		25.345	24.754	24.693	26.513	24.865		22.058	63.977	3.987	22.255	33.268	2.687		44.723	0.003	6.652	0.004		246.28	4.10472	62.9	10.7	22.2	1.528	0.952	0.961	0.043	43.356	36.90	
168	8/26/2004	1:23:04 PM		25.341	24.754	24.709	26.529	24.896		22.021	63.678	3.916	22.497	33.135	2.695		44.852	0.003	6.655	0.005		247.28	4.12139	62.6	10.7	22.3	1.535	0.953	0.961	0.043	43.156	36.73	
169	8/26/2004	1:24:04 PM		25.337	24.755	24.69	26.485	24.867		21.851	63.506	3.903	22.192	33.103	2.672		44.76	0.003	6.639	0.005		248.28	4.13806	62.4	10.7	22.0	1.518	0.950	0.959	0.044	43.540	37.05	
170	8/26/2004	1:25:04 PM		25.341	24.749	24.679	26.439	24.871		21.672	63.137	3.897	22.11	33.259	2.713		44.958	0.003	6.664	0.005		249.28	4.15472	62.0	10.7	21.9	1.509	0.954	0.963	0.044	43.978	37.43	
171	8/26/2004	1:26:04 PM		25.352	24.771	24.675	26.49	24.872		21.892	63.388	3.95	22.097	33.23	2.701		44.814	0.003	6.652	0.005		250.28	4.17139	62.3	10.7	22.0	1.516	0.952	0.961	0.044	43.697	37.19	
172	8/26/2004	1:27:04 PM		25.347	24.76	24.665	26.48	24.872		21.844	63.544	3.871	22.298	33.062	2.678		44.739	0.003	6.651	0.003		251.28	4.18806	62.4	10.7	22.1	1.522	0.952	0.961	0.044	43.551	37.06	
173	8/26/2004	1:28:04 PM		25.357	24.76	24.66	26.465	24.852		21.658	63.056	3.872	22.138	33.039	2.684		44.8	0.003	6.647	0.007		252.28	4.20472	61.9	10.7	21.9	1.510	0.952	0.961	0.044	43.875	37.34	
174	8/26/2004	1:29:04 PM		25.362	24.776	24.696	26.495	24.802		21.776	63.282	3.852	22.073	33.19	2.689		44.614	0.003	6.653	0.005		253.28	4.22139	62.2	10.6	21.9	1.512	0.952	0.961	0.044	43.817	37.29	
175	8/26/2004	1:30:04 PM		25.352	24.77	24.68	26.425	24.847		21.705	63.084	3.806	22.225	33.057	2.689		44.681	0.003	6.643	0.005		254.28	4.23806	62.0	10.6	22.0	1.514	0.951	0.960	0.044	43.691	37.18	
176	8/26/2004	1:31:04 PM		25.34	24.764	24.688	26.388	24.785		22.068	63.568	3.919	22.419	33.028	2.663		44.362	0.003	6.643	0.004		255.28	4.25472	62.4	10.6	22.2	1.534	0.951	0.959	0.043	43.134	36.71	
177	8/26/2004	1:32:04 PM		25.35	24.774	24.698	26.428	24.785		21.923	63.378	3.874	22.358	32.97	2.695		44.75	0.003	6.641	0.005		256.28	4.27139	62.3	10.7	22.1	1.527	0.951	0.959	0.043	43.309	36.86	
178	8/26/2004	1:33:04 PM		25.345	24.768	24.698	26.438	24.78		22.062	63.484	3.888	22.536	32.958	2.675		44.635	0.003	6.637	0.006		257.28	4.28806	62.4	10.6	22.3	1.537	0.950	0.958	0.043	42.975	36.57	
179	8/26/2004	1:34:04 PM		25.344	24.772	24.692	26.422	24.804		22.085	63.556	3.867	22.502	33.002	2.675		44.683	0.003	6.638	0.007		258.28	4.30472	62.4	10.6	22.3	1.537	0.950	0.959	0.043	43.000	36.59	
180	8/26/2004	1:35:04 PM		25.343	24.762	24.671	26.471	24.798		22.077	63.527	3.877	22.257	32.921	2.661		44.593	0.003	6.626	0.005		259.28	4.32139	62.4	10.6	22.2	1.528	0.949	0.957	0.043	43.193	36.76	
181	8/26/2004	1:36:04 PM		25.354	24.767	24.662	26.567	24.774		22.239	63.807	3.913	22.506	32.964	2.675		44.602	0.003	6.638	0.005		260.28	4.33806	62.7	10.6	22.4	1.543	0.950	0.959	0.043	42.884	36.50	
182	8/26/2004	1:37:04 PM		25.364	24.782	24.687	26.587	24.794		22.014	63.359	3.824	22.499	32.796	2.684		44.499	0.003	6.636	0.006		261.28	4.35472	62.2	10.6	22.3	1.535	0.950	0.958	0.043	43.064	36.65	
183	8/26/2004	1:38:04 PM		25.359	24.782	24.677	26.607	24.854		22.048	63.421	3.869	22.292	33.1	2.695		44.61	0.003	6.64	0.005		262.28	4.37139	62.3	10.6	22.2	1.529	0.951	0.959	0.043	43.271	36.82	
184	8/26/2004	1:39:04 PM		25.364	24.782	24.682	26.617	24.849		22.093	63.658	3.824	22.629	32.984	2.675		44.485	0.003	6.636	0.006		263.28	4.38806	62.5	10.6	22.4	1.542	0.950	0.959	0.043	42.869	36.48	
185	8/26/2004	1:40:04 PM		25.354	24.782	24.687	26.647	24.824		22.218	63.662	3.919	22.405	32.851	2.661		44.483	0.003	6.627	0.005		264.28	4.40472	62.5	10.6	22.3	1.538	0.949	0.957	0.043	42.900	36.51	
186	8/26/2004	1:41:04 PM		25.354	24.772	24.687	26.587	24.804		22.212	63.542	3.857	22.639	32.779	2.661		44.539	0.003	6.622	0.004		265.28	4.42139	62.4	10.6	22.4	1.546	0.948	0.956	0.043	42.650	36.30	
187	8/26/2004	1:42:04 PM		25.355	24.773	24.703	26.623	24.82		22.193	63.399	3.814	22.621	32.912	2.672		44.572	0.003	6.626	0.005		266.28	4.43806	62.3	10.6	22.4	1.545	0.949	0.957	0.043	42.691	36.33	
188	8/26/2004	1:43:04 PM		25.35	24.778	24.703	26.608	24.875		22.081	63.171	3.801	22.465	32.903	2.663		44.255	0.003	6.614	0.005		267.28	4.45472	62.0	10.5	22.3	1.536	0.947	0.955	0.043	42.870	36.48	
189	8/26/2004	1:44:04 PM		25.34	24.789	24.693	26.658	24.905		22.323	63.672	3.908	22.545	32.701	2.661		44.335	0.003	6.622	0.005		268.28	4.47139	62.5	10.6	22.4	1.547	0.948	0.956	0.043	42.626	36.28	
190	8/26/2004	1:45:04 PM		25.346	24.784	24.684	26.724	24.941		22.129	63.127	3.828	22.463	32.593	2.649		44.437	0.003	6.61	0.006		269.28	4.48806	62.0	10.6	22.3	1.537	0.946	0.955	0.043	42.823	36.44	
191	8/26/2004	1:46:04 PM		25.362	24.805	24.695	26.76	24.877		22.471	63.552	3.89	22.74	32.538	2.635		44.428	0.003	6.601	0.004		270.28	4.50472	62.4	10.6	22.6	1.559	0.945	0.953	0.042	42.166	35.88	
192	8/26/2004	1:47:04 PM		25.357	24.801	24.686	26.67	24.897		22.319	63.198	3.877	22.559	32.573	2.643		44.551	0.003	6.613	0.004		271.28	4.52139	62.1	10.6	22.4	1.547	0.947	0.955	0.043	42.567	36.23	
193	8/26/2004	1:48:04 PM		25.357	24.796	24.67	26.69	24.902		22.348	63.328	3.858	22.616	32.654	2.643		44.33	0.003	6.598	0.005		272.28	4.53806	62.2	10.6	22.5	1.550	0.945	0.953	0.042	42.409	36.09	
194	8/26/2004	1:49:04 PM		25.369	24.807	24.702	26.752	24.894		22.776	64.219	3.943	22.982	32.524	2.629		44.391	0.003	6.602	0.005		273.28	4.55472	63.1	10.6	22.9	1.577	0.945	0.953	0.042	41.660	35.45	
195	8/26/2004	1:50:04 PM		25.364	24.792	24.707	26.707	24.854		22.429	63.264	3.861	22.84	32.651	2.632		44.643	0.003	6.598	0.006		274.28	4.57139	62.1	10.6	22.6	1.561	0.945	0.952	0.042	42.079	35.81	
196	8/26/2004	1:51:04 PM		25.369	24.807	24.722	26.692	24.874		22.409	63.444	3.833	22.742	32.541	2.632		44.441	0.003	6.588	0.005		275.28	4.58806	62.3	10.6	22.6	1.557	0.943	0.951	0.042	42.107	35.83	
197	8/26/2004	1:52:04 PM		25.359	24.807	24.707	26.642	24.894		22.375	63.442	3.831	22.781	32.431	2.629		44.381	0.003	6.595	0.005		276.28	4.60472	62.3	10.6	22.6	1.557	0.944	0.952	0.042	42.165	35.88	
198	8/26/2004	1:53:04 PM		25.349	24.802	24.692	26.622	24.934		22.579	63.604	3.871	22.867	32.507	2.646		44.447	0.003	6.602	0.005		277.28	4.62139	62.5	10.6	22.7	1.567	0.945	0.953	0.042	41.958	35.71	
199	8/26/2004	1:54:04 PM		25.349	24.807	24.682	26.732	24.914		22.695	63.54	3.916	22.842	32.443	2.632		44.445	0.003	6.588	0.006		278.28	4.63806	62.4	10.6	22.8	1.570	0.943	0.952	0.042	41.797	35.57	
200	8/26/2004	1:55:04 PM		25.364	24.823	24.708	26.822	24.954		22.492	63.345	3.825	22.813	32.625	2.632		44.526	0.003	6.592	0.006		279.28	4.65472	62.2	10.6	22.7	1.562	0.944	0.952	0.042	42.006	35.75	
201	8/26/2004	1:56:04 PM		25.365	24.814	24.683	26.793	24.9		22.589	63.33	3.865	22.928	32.527	2.623		44.52	0.003	6.591	0.005		280.28	4.67139	62.2	10.6	22.8	1.569	0.944	0.952	0.042	41.834	35.60	
202	8/26/2004	1:57:04 PM		25.36	24.809	24.673	26.713	24.855		22.738	63.645	3.846	22.961	32.226	2.62		44.422	0.003	6.573	0.005		281.28	4.68806	62.5	10.6	22.8	1.575	0.941	0.950	0.042	41.565	35.37	
203	8/26/2004	1:58:04 PM		25.36	24.804	24.678	26.703	24.845		22.666	63.459	3.894	22.793	32.084	2.614		44.416	0.003	6.575	0.005		282.28	4.70472	62.3	10.6	22.7	1.567	0.941	0.950	0.042	41.791	35.56	
204	8/26/2004	1:59:04 PM		25.366	24.809	24.694	26.704	24.781		22.811	63.716	3.864	23.128	32.255	2.64		44.524	0.003	6.593	0.004		283.28	4.72139	62.6	10.6	23.0	1.584	0.944	0.952	0.041	41.449	35.27	
205	8/26/2004	2:00:04 PM		25.366	24.814	24.709	26.649	24.846		22.674	63.423	3.932	22.97	32.463	2.632		44.568	0.003	6.591	0.005		284.28	4.73806	62.3	10.6	22.8	1.573	0.944	0.951	0.042	41.687	35.48	
206	8/26/2004	2:01:04 PM		25.365	24.814	24.708	26.688	24.775		22.705	63.483	3.841	23.049	32.362	2.606		44.599	0.003	6.585	0.005		285.28	4.75472	62.4	10.6	22.9	1.577	0.943	0.951	0.042	41.550	35.36	
207	8/26/2004	2:02:04 PM		25.35	24.809	24.688	26.643	24.78		22.606	63.253	3.832	22.807	32.507	2.611		44.358	0.003	6.574	0.006		286.28	4.77139	62.1	10.6	22.7	1.566	0.941	0.949	0.042	41.815	35.59	
208	8/26/2004	2:03:04 PM		25.36	24.829	24.718	26.748	24.895		22.57	62.974	3.799	22.908	32.22	2.62		44.387	0.003	6.579	0.006		287.28	4.78806	61.8	10.6	22.7	1.568	0.942	0.949	0.042	41.752	35.53	
209	8/26/2004	2:04:04 PM		25.345	24.814	24.678	26.743	24.885		22.579	63.343	3.768	23.002	32.318	2.626		44.437	0.003	6.588	0.005		288.28	4.80472	62.2	10.6	22.8	1.571	0.943	0.952	0.042	41.762	35.54	
210	8/26/2004	2:05:04 PM		25.346	24.809	24.674	26.809	24.951		22.84	63.564	3.887	23.054	32.342	2.632		44.428	0.003	6.577	0.006		289.28	4.82139	62.4	10.6	22.9	1.582	0.942	0.950	0.041	41.412	35.24	

CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	8/26/2004	2:06:04 PM		25.356	24.82	24.675	26.809	24.926		22.817	63.421	3.884	23.068	32.182	2.606		44.358	0.003	6.573	0.005		290.28	4.83806	62.3	10.6	22.9	1.582	0.941	0.950	0.041	41.394	35.23	
212	8/26/2004	2:07:04 PM		25.372	24.831	24.69	26.775	24.922		22.66	63.189	3.821	22.97	32.13	2.597		44.105	0.003	6.565	0.005		291.28	4.85472	62.1	10.5	22.8	1.573	0.940	0.948	0.042	41.557	35.37	
213	8/26/2004	2:08:04 PM		25.347	24.811	24.655	26.77	24.942		22.776	63.299	3.796	23.255	32.188	2.611		44.624	0.003	6.57	0.005		292.28	4.87139	62.2	10.6	23.0	1.587	0.941	0.950	0.041	41.267	35.12	
214	8/26/2004	2:09:04 PM		25.363	24.826	24.686	26.761	24.908		22.788	63.444	3.884	23.043	32.255	2.614		44.556	0.003	6.572	0.005		293.28	4.88806	62.3	10.6	22.9	1.580	0.941	0.949	0.041	41.424	35.25	
215	8/26/2004	2:10:04 PM		25.358	24.831	24.696	26.766	24.923		22.946	63.581	3.874	23.238	32.249	2.597		44.497	0.003	6.559	0.005		294.28	4.90472	62.5	10.6	23.1	1.592	0.939	0.947	0.041	41.014	34.90	
216	8/26/2004	2:11:04 PM		25.363	24.836	24.711	26.681	24.928		22.761	63.092	3.839	23.166	32.258	2.614		44.454	0.003	6.566	0.005		295.28	4.92139	62.0	10.6	23.0	1.583	0.940	0.948	0.041	41.270	35.12	
217	8/26/2004	2:12:04 PM		25.358	24.836	24.706	26.676	24.918		22.871	63.367	3.844	23.148	32.232	2.6		44.337	0.003	6.559	0.006		296.28	4.93806	62.2	10.6	23.0	1.586	0.939	0.947	0.041	41.150	35.02	
218	8/26/2004	2:13:04 PM		25.353	24.831	24.706	26.721	24.888		23.02	63.641	3.882	23.285	32.072	2.611		44.478	0.003	6.562	0.005		297.28	4.95472	62.5	10.6	23.2	1.596	0.939	0.947	0.041	40.914	34.82	
219	8/26/2004	2:14:04 PM		25.354	24.842	24.697	26.731	24.853		22.919	63.413	3.846	23.244	32.11	2.606		44.308	0.003	6.563	0.005		298.28	4.97139	62.3	10.6	23.1	1.591	0.940	0.948	0.041	41.057	34.94	
220	8/26/2004	2:15:04 PM		25.353	24.841	24.681	26.691	24.903		22.846	63.355	3.796	23.125	32.122	2.594		44.397	0.003	6.553	0.005		299.28	4.98806	62.2	10.6	23.0	1.585	0.938	0.947	0.041	41.184	35.05	
221	8/26/2004	2:16:04 PM		25.363	24.836	24.671	26.751	24.918		23.045	63.44	3.876	23.257	31.988	2.6		44.435	0.003	6.557	0.005		300.28	5.00472	62.3	10.6	23.2	1.596	0.939	0.947	0.041	40.926	34.83	
222	8/26/2004	2:17:04 PM		25.369	24.842	24.677	26.741	24.973		23.165	63.467	3.937	23.286	31.705	2.556		44.355	0.003	6.535	0.006		301.28	5.02139	62.3	10.6	23.2	1.601	0.936	0.944	0.041	40.651	34.59	
223	8/26/2004	2:18:04 PM		25.364	24.842	24.682	26.746	24.993		23.207	63.84	3.82	23.515	32.043	2.577		44.38	0.003	6.543	0.006		302.28	5.03806	62.7	10.6	23.4	1.611	0.937	0.945	0.040	40.459	34.43	
224	8/26/2004	2:19:04 PM		25.369	24.853	24.712	26.792	24.959		22.991	63.486	3.879	23.212	32.029	2.588		44.518	0.003	6.549	0.005		303.28	5.05472	62.4	10.6	23.1	1.593	0.938	0.945	0.041	40.916	34.82	
225	8/26/2004	2:20:04 PM		25.375	24.863	24.708	26.728	24.905		23.253	63.753	3.819	23.52	31.977	2.591		44.533	0.003	6.552	0.005		304.28	5.07139	62.6	10.6	23.4	1.612	0.938	0.946	0.040	40.441	34.42	
226	8/26/2004	2:21:04 PM		25.375	24.868	24.723	26.743	24.955		23.334	63.709	3.894	23.415	31.968	2.562		44.399	0.003	6.534	0.005		305.28	5.08806	62.6	10.6	23.4	1.612	0.935	0.943	0.040	40.333	34.32	
227	8/26/2004	2:22:04 PM		25.361	24.859	24.714	26.759	24.891		23.078	63.405	3.88	23.218	31.841	2.574		44.278	0.003	6.535	0.004		306.28	5.10472	62.3	10.5	23.1	1.596	0.936	0.943	0.041	40.745	34.67	
228	8/26/2004	2:23:04 PM		25.356	24.86	24.699	26.774	24.891		23.319	63.749	3.872	23.589	31.974	2.6		44.32	0.003	6.552	0.005		307.28	5.12139	62.6	10.6	23.5	1.617	0.938	0.946	0.040	40.335	34.33	
229	8/26/2004	2:24:04 PM		25.356	24.865	24.694	26.739	24.871		23.445	63.836	3.932	23.575	32.122	2.583		44.745	0.003	6.546	0.005		308.28	5.13806	62.7	10.7	23.5	1.621	0.937	0.945	0.040	40.207	34.22	
230	8/26/2004	2:25:04 PM		25.351	24.86	24.669	26.719	24.891		23.311	63.562	3.839	23.558	31.679	2.574		44.579	0.003	6.537	0.005		309.28	5.15472	62.4	10.6	23.4	1.616	0.936	0.945	0.040	40.310	34.30	
231	8/26/2004	2:26:04 PM		25.361	24.875	24.679	26.769	24.986		23.263	63.386	3.859	23.567	31.794	2.568		44.524	0.003	6.525	0.004		310.28	5.17139	62.3	10.6	23.4	1.614	0.934	0.943	0.040	40.258	34.26	
232	8/26/2004	2:27:04 PM		25.356	24.869	24.669	26.774	24.931		23.377	63.542	3.872	23.624	31.621	2.562		44.543	0.003	6.528	0.005		311.28	5.18806	62.4	10.6	23.5	1.620	0.935	0.943	0.040	40.141	34.16	
233	8/26/2004	2:28:04 PM		25.356	24.865	24.669	26.819	24.986		23.286	63.403	3.894	23.478	31.615	2.551		44.543	0.003	6.524	0.005		312.28	5.20472	62.3	10.6	23.4	1.612	0.934	0.943	0.040	40.320	34.31	
234	8/26/2004	2:29:04 PM		25.367	24.891	24.705	26.89	25.042		23.371	63.421	3.89	23.624	31.78	2.574		44.466	0.003	6.534	0.005		313.28	5.22139	62.3	10.6	23.5	1.620	0.935	0.943	0.040	40.143	34.16	
235	8/26/2004	2:30:04 PM		25.368	24.891	24.701	26.91	25.023		23.292	63.349	3.872	23.53	31.722	2.568		44.566	0.003	6.526	0.005		314.28	5.23806	62.2	10.6	23.4	1.614	0.934	0.942	0.040	40.246	34.25	
236	8/26/2004	2:31:04 PM		25.368	24.897	24.721	26.961	25.043		23.24	63.214	3.841	23.425	31.777	2.554		44.42	0.003	6.524	0.004		315.28	5.25472	62.1	10.6	23.3	1.609	0.934	0.941	0.040	40.346	34.34	
237	8/26/2004	2:32:04 PM		25.359	24.908	24.712	27.027	25.084		23.375	63.39	3.87	23.706	31.444	2.559		44.516	0.003	6.518	0.005		316.28	5.27139	62.3	10.6	23.5	1.623	0.933	0.941	0.040	39.963	34.01	
238	8/26/2004	2:33:04 PM		25.349	24.903	24.692	27.002	25.029		23.292	63.237	3.849	23.622	31.612	2.571		44.506	0.003	6.524	0.006		317.28	5.28806	62.1	10.6	23.5	1.617	0.934	0.942	0.040	40.165	34.18	
239	8/26/2004	2:34:04 PM		25.365	24.918	24.698	27.042	25.005		23.576	63.593	3.872	23.737	31.76	2.556		44.624	0.003	6.522	0.004		318.28	5.30472	62.5	10.6	23.7	1.631	0.934	0.942	0.040	39.807	33.88	
240	8/26/2004	2:35:04 PM		25.375	24.919	24.688	27.073	25.04		23.564	63.674	3.866	23.79	31.6	2.554		44.349	0.003	6.515	0.004		319.28	5.32139	62.5	10.6	23.7	1.632	0.933	0.941	0.040	39.741	33.82	
241	8/26/2004	3:05:58 PM		21.882	24.92	21.511	26.624	24.701		22.143	31.713	3.81	19.288	3.649	-3.081		44.512	0.003	3.082	0.006		350.18	5.83639	30.6	10.6	20.7	1.428	0.441	0.487	0.024	23.525	20.02	
242	8/26/2004	3:06:58 PM		21.98	24.908	21.695	26.457	24.564		22.504	31.626	4.056	19.323	3.11	-3.133		45.444	0.003	2.98	0.005		351.18	5.85306	30.5	10.8	20.9	1.442	0.427	0.469	0.022	22.412	19.07	
243	8/26/2004	3:07:58 PM		22.142	24.918	21.882	26.463	24.53		22.1	29.975	4.163	18.805	2.056	-3.225		46.181	0.003	2.782	0.007		352.18	5.86972	28.8	11.0	20.5	1.410	0.398	0.435	0.021	21.280	18.11	
244	8/26/2004	3:08:58 PM		22.259	24.91	22.039	26.439	24.481		2.628	29.964	3.852	-1.241	22.458	11.616		42.655	0.007	-0.012	0.004		353.18	5.88639	28.8	10.2	0.7	0.048	-0.002	-0.002	-0.003	-2.695	-2.29	
245	8/26/2004	3:09:58 PM		22.294	24.89	22.15	26.334	24.581		2.401	29.688	3.875	-1.458	22.585	21.393		42.776	0.003	-0.012	0.003		354.18	5.90306	28.6	10.2	0.5	0.033	-0.002	-0.002	-0.004	-3.951	-3.36	
246	8/26/2004	3:10:58 PM		22.389	24.879	22.275	26.358	24.695		2.387	29.773	3.878	-1.546	22.472	71.301		42.493	0.003	-0.013	0.003		355.18	5.91972	28.6	10.1	0.4	0.029	-0.002	-0.002	-0.005	-4.782	-4.07	
247	8/26/2004	3:11:58 PM		22.585	24.884	22.37	26.408	24.665		18.449	29.303	4.133	15.3	4.769	1.417		45.254	0.003	3.282	0.003		356.18	5.93639	28.2	10.8	16.9	1.163	0.470	0.506	0.030	30.004	25.53	
248	8/26/2004	3:12:58 PM		22.715	24.869	22.451	26.468	24.695		21.376	32.8	3.79	18.705	5.337	1.432		44.128	0.003	3.385	0.003		357.18	5.95306	31.7	10.5	20.0	1.382	0.485	0.521	0.026	25.997	22.12	
249	8/26/2004	3:13:58 PM		22.851	24.854	22.577	26.433	24.705		22.243	32.644	3.921	19.195	4.248	1.4		44.892	0.003	3.21	0.003		358.18	5.96972	31.5	10.7	20.7	1.429	0.460	0.492	0.024	23.760	20.22	
250	8/26/2004	3:14:58 PM		22.976	24.864	22.702	26.458	24.705		22.073	30.849	4.048	18.947	2.911	1.36		45.136	0.003	2.95	0.003		359.18	5.98639	29.7	10.8	20.5	1.414	0.422	0.451	0.022	21.979	18.70	
251	8/26/2004	3:15:58 PM		23.121	24.853	22.917	26.393	24.78		22.042	30.238	3.931	18.933	2.256	1.342		44.95	0.003	2.821	0.003		360.18	6.00306	29.1	10.7	20.5	1.413	0.404	0.428	0.021	20.912	17.80	
252	8/26/2004	3:16:58 PM		23.316	24.858	23.133	26.337	24.689		21.938	29.595	3.977	18.705	1.747	1.337		45.019	0.003	2.724	0.004		361.18	6.01972	28.5	10.7	20.3	1.401	0.390	0.411	0.020	20.233	17.22	
253	8/26/2004	3:17:58 PM		23.471	24.833	23.273	26.287	24.659		22.07	29.189	3.872	19.085	1.286	1.319		44.727	0.003	2.629	0.003		362.18	6.03639	28.1	10.7	20.6	1.419	0.376	0.395	0.019	19.208	16.35	
254	8/26/2004	3:18:58 PM		23.636	24.842	23.458	26.391	24.713		22.046	29.073	3.962	18.781	1.179	1.322		44.673	0.003	2.605	0.006		363.18	6.05306	27.9	10.6	20.4	1.407	0.373	0.390	0.019	19.084	16.24	
255	8/26/2004	3:19:58 PM		23.771	24.827	23.589	26.391	24.668		22.255	29.168	3.928	19.081	1.029	1.319		44.733	0.003	2.586	0.005		364.18	6.06972	28.0	10.7	20.7	1.425	0.370	0.385	0.019	18.642	15.86	
256	8/26/2004	3:20:58 PM		23.957	24.827	23.84	26.371	24.763		22.172	29.031	3.897	18.939	0.945	1.322		44.791	0.003	2.56	0.004		365.18	6.08639	27.9	10.7	20.6	1.417	0.367	0.379	0.018	18.424	15.68	
257	8/26/2004	3:21:58 PM		24.174	24.813	24.107	26.363	24.805		22.377	29.046	3.868	19.247	0.942	1.319		44.518	0.003	2.563	0.004		366.18	6.10306	27.9	10.6	20.8	1.435	0.367	0.376	0.018	18.081	15.39	
258	8/26/2004	3:22:58 PM		24.43	24.82	24.339	26.339	24.841		22.456	29.332	3.939	19.198	0.942	1.325		44.796	0.003	2.556	0.005		367.18	6.11972	28.2	10.7	20.8	1.436	0.366	0.373	0.018	17.901	15.23	
259	8/26/2004	3:23:58 PM		24.646	24.815	24.53	26.275	24.827		22.747	29.637	3.925	19.483	0.945	1.331		44.385	0.003	2.557	0.006		368.18	6.13639	28.5	10.6	21.1	1.456	0.366	0.371	0.018	17.568	14.95	
260	8/26/2004	3:24:58 PM		24.843	24.797	24.726	26.216	24.778		22.454	29.346	3.742	19.433	0.93	1.325		44.385	0.003	2.553	0.005		369.18	6.15306	28.2	10.6	20.9	1.444	0.366	0.368	0.018	17.587	14.97	
261	8/26/2004	3:25:58 PM		25.002	24.781	24.891	26.15	24.767		22.751	29.508	3.829	19.589	0.936	1.328		44.295	0.003	2.563	0.004		370.18	6.16972	28.4	10.6	21.2	1.460	0.367	0.368	0.017	17.386	14.80	
262	8/26/2004	3:26:58 PM		25.172	24.785	25.051	26.13	24.757		22.357	28.926	4.013	19.072	0.699	1.325		45.772	0.003	2.505	0.004		371.18	6.18639	27.8	10.9	20.7	1.428	0.359	0.358	0.017	17.288	14.71	
263	8/26/2004	3:27:58 PM		25.327	24.785	25.181	26.16	24.727		22.174	28.555	3.905	19.042	0.484	1.316		45.096	0.003	2.46	0.005		372.18	6.20306	27.4	10.7	20.6	1.421	0.352	0.350	0.017	17.003	14.47	
264	8/26/2004	3:28:58 PM		25.471	24.779	25.31	26.194	24.781		21.859	28.072	3.885	18.769	0.464	1.316		44.969	0.003	2.472	0.004		373.18	6.21972	26.9	10.7	20.3	1.401	0.354	0.351	0.017	17.270	14.70	
265	8/26/2004	3:29:58 PM		25.591	24.759	25.4	26.129	24.776		21.963	28.312	3.899	18.785	0.484	1.319		44.804	0.003	2.47	0.004		374.18	6.23639	27.2	10.7	20.4	1.405	0.354	0.350	0.017	17.162	14.61	
266	8/26/2004	3:30:58 PM		25.706	24.759	25.52	26.204	24.796		21.979	28.165	3.885	18.832	0.395	1.319		45.102	0.003	2.448	0.006		375.18	6.25306	27.0	10.7	20.4	1.407	0.350	0.345	0.017	16.926	14.40	
267	8/26/2004	3:31:58 PM		25.774	24.742	25.523	26.297	24.769		22.097	28.316	3.929	18.914	0.427	1.322		44.996	0.003	2.444	0.006		376.18	6.26972	27.2	10.7	20.5	1.414	0.350	0.345	0.017	16.815	14.31	
268	8/26/2004	3:32:58 PM		25.783	24.736	25.477	26.431	24.693		21.929	28.144	3.921	18.699	0.406	1.319		44.965	0.003	2.448	0.004		377.18	6.28639	27.0	10.7	20.3	1.401	0.350	0.346	0.017	17.023	14.49	
269	8/26/2004	3:33:58 PM		25.772	24.75	25.456	26.475	24.807		22.27	28.706	4.026	18.789	0.369	1.319		45.304	0.003	2.444	0.006		378.18	6.30306	27.6	10.8	20.5	1.415	0.350	0.345	0.017	16.826	14.32	
270	8/26/2004	3:34:58 PM		25.741	24.75	25.415	26.449	24.866		22.212	28.492	3.973	18.886	0.369	1.322		44.702	0.003	2.439	0.005		379.18	6.31972	27.4	10.6	20.5	1.417	0.349	0.345	0.017	16.795	14.29	
271	8/26/2004	3:35:58 PM		25.705	24.743	25.369	26.328	24.81		22.28	28.648	4.001	18.844	0.366	1.319		44.672	0.003	2.441	0.006		380.18	6.33639	27.5	10.6	20.6	1.418	0.349	0.346	0.017	16.820	14.31	
272	8/26/2004	3:36:58 PM		25.69	24.758	25.364	26.343	24.8		22.33	28.492	3.959	19.035	0.363	1.325		44.685	0.003	2.432	0.006		381.18	6.35306	27.4	10.6	20.7	1.426	0.348	0.345	0.017	16.663	14.18	
273	8/26/2004	3:37:58 PM		25.649	24.748	25.323	26.337	24.824		22.102	28.211	3.985	18.785	0.163	1.316		44.952	0.003	2.385	0.004		382.18	6.36972	27.1	10.7	20.4	1.410	0.341	0.338	0.017	16.551	14.09	
274	8/26/2004	3:38:58 PM		25.613	24.747	25.277	26.286	24.779		21.944	27.877	4.033	18.639	0.14	1.313		45.134	0.003	2.385	0.006		383.18	6.38639	26.8	10.8	20.3	1.399	0.341	0.339	0.017	16.697	14.21	
275	8/26/2004	3:39:58 PM		25.578	24.741	25.257	26.311	24.783		21.973	28.053	3.994	18.576	0.143	1.316		45.065	0.003	2.381	0.004		384.18	6.40306	26.9	10.7	20.3	1.398	0.341	0.338	0.017	16.692	14.21	
276	8/26/2004	3:40:58 PM		25.558	24.741	25.242	26.436	24.758		22.189	28.221	3.944	18.966	0.154	1.319		44.937	0.003	2.38	0.005		385.18	6.41972	27.1	10.7	20.6	1.419	0.341	0.338	0.016	16.446	14.00	
277	8/26/2004	3:41:58 PM		25.537	24.755	25.221	26.505	24.767		22.149	28.064	3.994	18.808	0.146	1.319		44.958	0.003	2.381	0.005		386.18	6.43639	26.9	10.7	20.5	1.412	0.341	0.339	0.017	16.542	14.08	
278	8/26/2004	4:09:28 PM		25.662	24.715	25.296	26.315	24.767		21.623	27.147	3.97	18.514	-0.532	-3.034		45.33	0.003	2.241	0.003		413.68	6.89472	26.0	10.8	20.1	1.384	0.321	0.318	0.016	15.854	13.49	
279	8/26/2004	4:10:28 PM		25.628	24.731	25.272	26.306	24.723		21.664	27.191	3.997	18.455	-0.54	-3.017		45.225	0.003	2.243	0.003		414.68	6.91139	26.1	10.8	20.1	1.383	0.321	0.319	0.016	15.886	13.52	

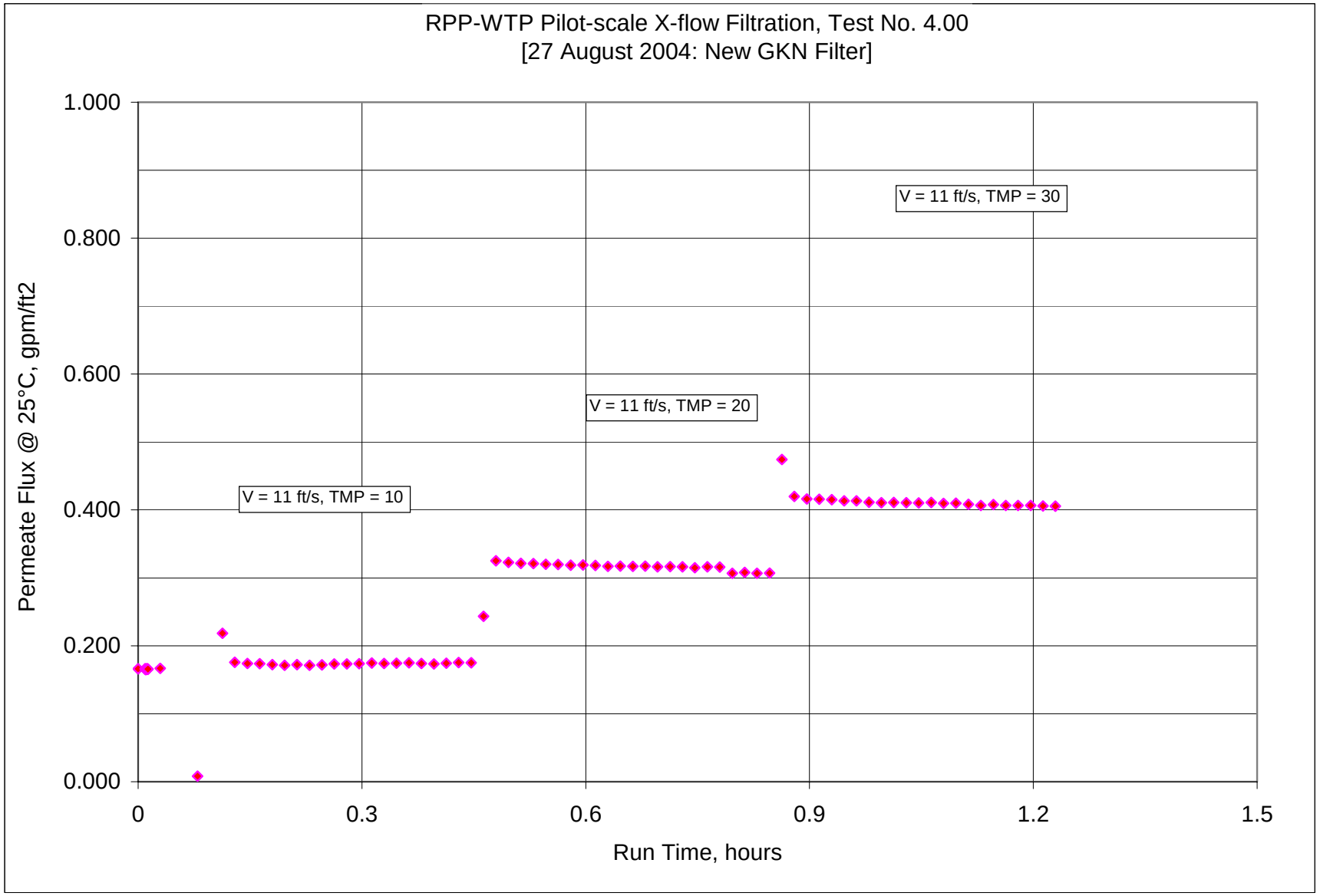
CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
280	8/26/2004	4:11:28 PM		25.617	24.73	25.246	26.38	24.677		2.47	27.711	3.957	-1.358	20.229	23.03		43.25	0.003	-0.011	0.004		415.68	6.92806	26.6	10.3	0.6	0.038	-0.002	-0.002	-0.003	-2.813	-2.39	
281	8/26/2004	4:12:28 PM		25.631	24.74	25.2	26.354	24.701		2.335	27.616	3.923	-1.509	20.24	22.703		43.388	0.003	-0.011	0.003		416.68	6.94472	26.5	10.3	0.4	0.028	-0.002	-0.002	-0.004	-3.792	-3.23	
282	8/26/2004	4:13:28 PM		25.556	24.74	25.165	26.289	24.721		11.867	27.529	4.016	8.267	10.18	0.394		44.28	1.205	13.942	0.004		417.68	6.96139	26.4	10.5	10.1	0.694	1.996	1.987	0.197	197.354	167.95	
283	8/26/2004	4:14:28 PM		25.496	24.74	25.135	26.289	24.701		20.735	27.323	4.032	17.617	0.441	0.946		45.161	0.003	2.461	0.003		418.68	6.97806	26.2	10.8	19.2	1.322	0.352	0.351	0.018	18.304	15.58	
284	8/26/2004	4:15:28 PM		25.466	24.75	25.13	26.344	24.706		20.469	26.77	4.007	17.406	0.183	0.941		45.361	0.003	2.4	0.003		419.68	6.99472	25.6	10.8	18.9	1.306	0.344	0.342	0.018	18.077	15.38	
285	8/26/2004	4:16:28 PM		25.421	24.729	25.08	26.374	24.731		20.934	27.083	4.002	17.788	0.041	0.938		45.077	0.003	2.378	0.003		420.68	7.01139	26.0	10.7	19.4	1.335	0.340	0.340	0.018	17.545	14.93	
286	8/26/2004	4:17:28 PM		25.416	24.759	25.08	26.384	24.736		21.094	27.178	3.973	18.054	-0.028	0.935		45.092	0.003	2.352	0.003		421.68	7.02806	26.1	10.7	19.6	1.350	0.337	0.336	0.017	17.164	14.61	
287	8/26/2004	4:18:28 PM		25.391	24.759	25.07	26.314	24.756		21.081	27.038	3.969	17.958	-0.083	0.935		45.048	0.003	2.337	0.004		422.68	7.04472	25.9	10.7	19.5	1.346	0.335	0.334	0.017	17.107	14.56	
288	8/26/2004	4:19:28 PM		25.364	24.753	25.038	26.352	24.779		21.397	27.402	4.013	18.27	-0.095	0.935		44.919	0.003	2.329	0.004		423.68	7.06139	26.3	10.7	19.8	1.367	0.333	0.333	0.017	16.794	14.29	
289	8/26/2004	4:20:28 PM		25.354	24.757	25.032	26.402	24.809		21.235	27.011	3.933	18.18	-0.19	0.938		45.231	0.003	2.307	0.004		424.68	7.07806	25.9	10.8	19.7	1.359	0.330	0.330	0.017	16.744	14.25	
290	8/26/2004	4:21:28 PM		25.334	24.763	25.018	26.472	24.819		21.332	27.18	4.115	18.04	-0.207	0.938		45.019	0.003	2.3	0.004		425.68	7.09472	26.1	10.7	19.7	1.357	0.329	0.329	0.017	16.718	14.23	
291	8/26/2004	4:22:28 PM		25.314	24.768	24.988	26.447	24.764		21.303	27.033	3.998	18.237	-0.274	0.932		44.867	0.003	2.294	0.004		426.68	7.11139	25.9	10.7	19.8	1.363	0.328	0.329	0.017	16.618	14.14	
292	8/26/2004	4:23:28 PM		25.293	24.756	24.972	26.391	24.723		21.37	27.212	3.909	18.229	-0.3	0.935		44.935	0.003	2.291	0.003		427.68	7.12806	26.1	10.7	19.8	1.365	0.328	0.328	0.017	16.579	14.11	
293	8/26/2004	4:24:28 PM		25.273	24.766	24.947	26.411	24.773		21.558	27.365	4.003	18.5	-0.32	0.929		44.879	0.003	2.285	0.004		428.68	7.14472	26.2	10.7	20.0	1.381	0.327	0.328	0.016	16.357	13.92	
294	8/26/2004	4:25:28 PM		25.263	24.771	24.947	26.346	24.783		21.535	27.29	3.985	18.317	-0.349	0.932		44.835	0.003	2.279	0.003		429.68	7.16139	26.2	10.7	19.9	1.374	0.326	0.327	0.016	16.399	13.96	
295	8/26/2004	4:26:28 PM		25.243	24.761	24.922	26.231	24.733		21.637	27.367	3.889	18.606	-0.355	0.929		44.866	0.003	2.273	0.003		430.68	7.17806	26.2	10.7	20.1	1.387	0.325	0.326	0.016	16.208	13.79	
296	8/26/2004	4:27:28 PM		25.237	24.766	24.921	26.27	24.797		21.411	27.118	3.929	18.286	-0.378	0.935		44.883	0.003	2.274	0.003		431.68	7.19472	26.0	10.7	19.8	1.368	0.326	0.326	0.016	16.439	13.99	
297	8/26/2004	4:28:28 PM		25.228	24.771	24.917	26.301	24.773		21.369	26.973	3.856	18.37	-0.419	0.932		44.867	0.003	2.264	0.004		432.68	7.21139	25.8	10.7	19.9	1.370	0.324	0.325	0.016	16.351	13.91	
298	8/26/2004	4:29:28 PM		25.202	24.765	24.895	26.325	24.732		21.695	27.458	3.949	18.471	-0.349	0.932		44.704	0.003	2.273	0.005		433.68	7.22806	26.3	10.6	20.1	1.385	0.325	0.326	0.016	16.251	13.83	
299	8/26/2004	4:30:28 PM		25.197	24.775	24.895	26.365	24.817		21.384	27.091	3.851	18.389	-0.355	0.935		44.614	0.003	2.269	0.005		434.68	7.24472	26.0	10.6	19.9	1.371	0.325	0.326	0.016	16.383	13.94	
300	8/26/2004	4:31:28 PM		25.197	24.775	24.89	26.4	24.762		21.714	27.411	4.002	18.553	-0.419	0.932		44.804	0.003	2.26	0.003		435.68	7.26139	26.3	10.7	20.1	1.388	0.324	0.325	0.016	16.120	13.72	
301	8/26/2004	4:32:28 PM		25.191	24.789	24.905	26.439	24.751		21.583	27.307	3.992	18.315	-0.451	0.938		44.948	0.003	2.259	0.006		436.68	7.27806	26.2	10.7	19.9	1.375	0.323	0.324	0.016	16.255	13.83	
302	8/26/2004	4:33:28 PM		25.175	24.769	24.889	26.448	24.75		21.616	27.301	3.974	18.44	-0.471	0.935		44.808	0.003	2.254	0.004		437.68	7.29472	26.2	10.7	20.0	1.381	0.323	0.324	0.016	16.163	13.75	
303	8/26/2004	4:34:28 PM		25.17	24.779	24.874	26.433	24.73		21.558	27.17	3.914	18.422	-0.448	0.935		44.944	0.003	2.254	0.003		438.68	7.31139	26.0	10.7	20.0	1.378	0.323	0.324	0.016	16.200	13.79	
304	8/26/2004	4:35:28 PM		25.166	24.789	24.874	26.414	24.706		21.45	27.069	3.831	18.489	-0.471	0.932		45.019	0.003	2.253	0.004		439.68	7.32806	25.9	10.7	20.0	1.377	0.323	0.324	0.016	16.210	13.79	
305	8/26/2004	4:36:28 PM		25.14	24.769	24.849	26.383	24.75		21.735	27.328	3.942	18.74	-0.477	0.929		44.919	0.003	2.252	0.003		440.68	7.34472	26.2	10.7	20.2	1.395	0.322	0.324	0.016	15.999	13.62	
306	8/26/2004	4:37:28 PM		25.146	24.784	24.864	26.429	24.736		21.797	27.523	3.955	18.635	-0.474	0.935		44.912	0.003	2.247	0.003		441.68	7.36139	26.4	10.7	20.2	1.394	0.322	0.323	0.016	15.974	13.59	
307	8/26/2004	4:38:28 PM		25.136	24.784	24.859	26.434	24.751		21.786	27.419	3.999	18.65	-0.471	0.938		44.733	0.003	2.248	0.005		442.68	7.37806	26.3	10.7	20.2	1.394	0.322	0.323	0.016	15.982	13.60	
308	8/26/2004	4:39:28 PM		25.137	24.78	24.865	26.51	24.742		21.652	27.216	4.016	18.465	-0.425	0.935		44.583	0.003	2.261	0.003		443.68	7.39472	26.1	10.6	20.1	1.383	0.324	0.325	0.016	16.199	13.79	
309	8/26/2004	4:40:28 PM		25.142	24.79	24.875	26.59	24.717		21.79	27.489	4.035	18.479	-0.468	0.938		44.766	0.003	2.251	0.004		444.68	7.41139	26.4	10.7	20.1	1.388	0.322	0.323	0.016	16.062	13.67	
310	8/26/2004	4:41:28 PM		25.132	24.791	24.871	26.625	24.807		21.956	27.562	3.985	18.865	-0.468	0.941		44.854	0.003	2.247	0.004		445.68	7.42806	26.4	10.7	20.4	1.407	0.322	0.323	0.016	15.818	13.46	
311	8/26/2004	4:42:28 PM		25.123	24.786	24.851	26.626	24.873		21.593	27.174	3.942	18.44	-0.474	0.935		44.796	0.003	2.247	0.004		446.68	7.44472	26.0	10.7	20.0	1.380	0.322	0.323	0.016	16.139	13.73	
312	8/26/2004	4:43:28 PM		25.118	24.786	24.841	26.641	24.728		22.012	27.686	4.148	18.676	-0.474	0.938		44.794	0.003	2.251	0.005		447.68	7.46139	26.6	10.7	20.3	1.403	0.322	0.324	0.016	15.912	13.54	
313																																	
314	Caustic Rinse 1																																
315																																	
316		Averages		25.0	23.5	24.4	25.2	23.4		20.7	27.9	5.0	15.8	2.1	-0.2		48.3	0.0	14.6	0.0				26.8	11.5	18.2	1.258	0.006	0.006	0.000	0.3	0.3	
317		Maximum		25.7	23.6	24.8	25.4	23.7		23.0	28.3	5.2	18.1	5.8	20.7		49.4	0.1	14.6	0.0				27.1	11.8	20.5	1.414	0.009	0.009	0.000	0.4	0.4	
318		Median		24.9	23.5	24.4	25.3	23.3		19.9	27.9	5.0	14.9	3.1	0.4		48.2	0.0	14.6	0.0				26.8	11.5	17.4	1.199	0.006	0.006	0.000	0.3	0.3	
319		Minimum		24.7	23.4	24.2	25.0	23.1		17.0	27.6	4.8	12.0	-0.7	-4.8		47.5	0.0	14.6	0.0				26.5	11.3	14.5	1.000	0.000	0.000	0.000	0.0	0.0	
320		2 x Std Dev		0.598	0.167	0.217	0.237	0.358		2.837	0.279	0.171	2.756	3.006	10.715		0.766	0.021	0.000	0.001				0.279	0.182	2.794	0.193	0.003	0.003	0.000	0.164	0.139	
321		Number of Points Used*		36	36	36	36	36		36	36	36	36	36	36		36	36	36	36				36	36	36	36	36	36	36	36	36	
322		* Backpulse points in box are not included																															
323																																	
324	Acid Clean 1																																
325																																	
326		Averages		25.5	24.5	24.8	26.1	24.6		24.4	63.5	3.9	24.5	30.8	3.4		44.5	0.0	6.4	0.0				62.3	10.6	24.5	1.687	0.921	0.925	0.038	37.9	32.2	
327		Maximum		26.3	24.6	25.6	26.4	25.0		25.7	64.3	4.2	25.5	34.5	3.7		46.5	0.0	6.8	0.0				63.2	11.1	25.6	1.763	0.972	0.958	0.045	45.2	38.5	
328		Median		25.4	24.5	24.7	26.1	24.6		24.6	63.5	3.8	24.7	31.0	3.4		44.3	0.0	6.4	0.0				62.4	10.5	24.7	1.702	0.923	0.932	0.038	37.7	32.1	
329		Minimum		25.3	24.3	24.6	25.6	24.2		20.8	62.7	3.6	21.6	29.2	3.3		43.3	0.0	6.3	0.0				61.6	10.3	21.2	1.461	0.901	0.908	0.036	35.6	30.3	
330		2 x Std Dev		0.503	0.238	0.493	0.410	0.339		1.917	0.819	0.293	1.538	2.167	0.231		1.698	0.000	0.210	0.002				0.819	0.405	1.717	0.118	0.030	0.022	0.004	3.568	3.036	
331		Number of Points Used*		85	85	85	85	85		85	85	85	85	85	85		85	85	85	85				85	85	85	85	85	85	85	85	85	
332		* Backpulse points in box are not included																															
333																																	
334	Acid Clean 2																																
335																																	
336		Averages		25.3	24.8	24.7	26.7	24.9		22.4	63.5	3.9	22.7	32.6	2.6		44.6	0.0	6.6	0.0				62.3	10.6	22.6	1.556	0.945	0.954	0.042	42.3	36.0	
337		Maximum		25.4	24.9	24.7	27.1	25.1		23.6	64.2	4.0	23.8	34.3	2.8		45.3	0.0	6.7	0.0				63.1	10.8	23.7	1.632	0.965	0.976	0.046	46.5	39.5	
338		Median		25.4	24.8	24.7	26.7	24.9		22.5	63.4	3.9	22.8	32.5	2.6		44.5	0.0	6.6	0.0				62.3	10.6	22.6	1.560	0.945	0.953	0.042	42.1	35.8	
339		Minimum		25.3	24.6	24.6	26.4	24.8		20.8	63.0	3.8	21.2	31.4	2.6		44.1	0.0	6.5	0.0				61.8	10.5	21.0	1.447	0.933	0.941	0.040	39.7	33.8	
340		2 x Std Dev		0.042	0.137	0.043	0.320	0.142		1.351	0.434	0.087	1.241	1.252	0.111		0.431	0.000	0.109	0.002				0.434	0.103	1.293	0.089	0.016	0.016	0.003	3.173	2.701	
341		Number of Points Used*		90	90	90	90	90		90	90	90	90	90	90		90	90	90	90				90	90	90	90	90	90	90	90	90	
342		* Backpulse points in box are not included																															

CAMPAIGN IV NEW GKN ACID CLEAN AND CAUSTIC RINSE – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
345	Acid Cleans																																
346																																	
347		Averages		25.4	24.7	24.7	26.4	24.7		23.4	63.5	3.9	23.6	31.7	3.0		44.6	0.0	6.5	0.0				62.3	10.6	23.5	1.622	0.933	0.940	0.040	40.1	34.1	
348		Maximum		26.3	24.9	25.6	27.1	25.1		25.7	64.3	4.2	25.5	34.0	3.7		46.0	0.0	6.7	0.0				63.2	11.0	25.6	1.763	0.964	0.974	0.046	46.4	39.5	
349		Median		25.4	24.6	24.7	26.4	24.8		23.3	63.5	3.9	23.5	31.9	2.7		44.5	0.0	6.5	0.0				62.3	10.6	23.4	1.614	0.936	0.942	0.040	40.3	34.3	
350		Minimum		25.3	24.3	24.6	25.7	24.2		20.8	62.7	3.7	21.2	29.2	2.6		43.3	0.0	6.3	0.0				61.6	10.3	21.0	1.447	0.901	0.908	0.036	35.6	30.3	
351		2 x Std Dev		0.341	0.342	0.328	0.669	0.404		2.553	0.652	0.211	2.206	2.471	0.793		1.188	0.000	0.235	0.002				0.652	0.283	2.374	0.164	0.034	0.034	0.005	5.446	4.635	
352	Number of Points Used*			172	172	172	172	172		172	172	172	172	172	172		172	172	172	172				172	172	172	172	172	172	172	172	172	
353		* Backpulse points in box are not included																															
354																																	
355	Caustic Rinse 2																																
356																																	
357		Averages		24.7	24.8	24.4	26.3	24.8		22.0	29.1	3.9	18.8	1.2	1.3		44.9	0.0	2.6	0.0				28.0	10.7	20.4	1.409	0.373	0.380	0.019	18.7	15.9	
358		Maximum		25.8	24.9	25.5	26.5	24.9		22.8	32.8	4.1	19.6	5.3	1.4		45.8	0.0	3.4	0.0				31.7	10.9	21.2	1.460	0.485	0.521	0.030	30.0	25.5	
359		Median		25.1	24.8	25.0	26.3	24.8		22.1	29.0	3.9	18.9	0.8	1.3		44.9	0.0	2.5	0.0				27.9	10.7	20.5	1.416	0.362	0.363	0.017	17.3	14.8	
360		Minimum		22.6	24.7	22.4	26.1	24.7		18.4	27.9	3.7	15.3	0.1	1.3		44.1	0.0	2.4	0.0				26.8	10.5	16.9	1.163	0.341	0.338	0.016	16.4	14.0	
361		2 x Std Dev		2.205	0.092	2.163	0.207	0.109		1.431	2.341	0.154	1.403	2.703	0.059		0.651	0.000	0.526	0.002				2.341	0.155	1.409	0.097	0.075	0.101	0.006	6.129	5.215	
362	Number of Points Used*			30	30	30	30	30		30	30	30	30	30	30		30	30	30	30				30	30	30	30	30	30	30	30	30	
363		* Backpulse points in box are not included																															
364																																	
365	Caustic Rinse 3																																
366																																	
367		Averages		25.2	24.8	24.9	26.4	24.8		21.5	27.2	4.0	18.3	-0.3	0.9		44.9	0.0	2.3	0.0				26.1	10.7	19.9	1.4	0.3	0.3	0.0	16.5	14.0	
368		Maximum		25.5	24.8	25.1	26.6	24.9		22.0	27.6	4.1	18.9	0.2	0.9		45.4	0.0	2.4	0.0				26.4	10.8	20.4	1.4	0.3	0.3	0.0	18.1	15.4	
369		Median		25.2	24.8	24.9	26.4	24.8		21.5	27.2	4.0	18.4	-0.4	0.9		44.9	0.0	2.3	0.0				26.1	10.7	20.0	1.4	0.3	0.3	0.0	16.3	13.9	
370		Minimum		25.1	24.7	24.8	26.2	24.7		20.5	26.8	3.8	17.4	-0.5	0.9		44.6	0.0	2.2	0.0				25.6	10.6	18.9	1.3	0.3	0.3	0.0	15.8	13.5	
371		2 x Std Dev		0.201	0.028	0.162	0.186	0.076		0.607	0.372	0.120	0.588	0.351	0.006		0.328	0.000	0.081	0.002				0.372	0.078	0.591	0.041	0.012	0.010	0.001	0.996	0.847	
372	Number of Points Used*			28	28	28	28	28		28	28	28	28	28	28		28	28	28	28				28	28	28	28	28	28	28	28	28	
373		* Backpulse points in box are not included																															
374																																	
375	Caustic Rinses 2 & 3																																
376																																	
377		Averages		24.9	24.8	24.6	26.4	24.8		21.4	28.2	3.9	18.3	0.8	2.3		44.8	0.0	2.4	0.0				27.1	10.7	19.8	1.4	0.3	0.3	0.0	17.2	14.7	
378		Maximum		25.8	24.9	25.5	26.6	24.9		22.8	32.8	4.1	19.6	22.5	71.3		45.8	0.0	3.4	0.0				31.7	10.9	21.2	1.5	0.5	0.5	0.0	30.0	25.5	
379		Median		25.2	24.8	24.9	26.4	24.8		21.8	28.1	3.9	18.7	0.2	1.3		44.9	0.0	2.4	0.0				26.9	10.7	20.2	1.4	0.3	0.3	0.0	16.8	14.3	
380		Minimum		22.4	24.7	22.3	26.1	24.7		2.4	26.8	3.7	-1.5	-0.5	0.9		42.5	0.0	0.0	0.0				25.6	10.1	0.4	0.0	0.0	0.0	0.0	-4.8	-4.1	
381		2 x Std Dev		1.808	0.077	1.740	0.212	0.095		5.153	2.560	0.141	5.335	6.190	18.117		0.805	0.000	0.805	0.002				2.559	0.192	5.242	0.361	0.115	0.128	0.008	7.596	6.464	
382	Number of Points Used*			59	59	59	59	59		59	59	59	59	59	59		59	59	59	59				59	59	59	59	59	59	59	59	59	
383																																	
384	All																																
385																																	
386		Averages		25.2	24.6	24.7	26.3	24.6		22.7	51.9	4.0	21.6	21.7	2.5		45.0	0.0	6.4	0.0				50.7	10.7	22.1	1.5	0.7	0.7	0.0	30.9	26.3	
387		Maximum		26.3	24.9	25.6	27.1	25.1		25.7	64.3	5.2	25.5	34.0	71.3		49.4	0.1	14.6	0.0				63.2	11.8	25.6	1.8	1.0	1.0	0.0	46.4	39.5	
388		Median		25.4	24.7	24.7	26.3	24.8		22.5	63.3	3.9	22.7	31.0	2.6		44.7	0.0	6.5	0.0				62.1	10.7	22.6	1.6	0.9	0.9	0.0	37.7	32.1	
389		Minimum		22.4	23.4	22.3	25.0	23.1		2.4	26.8	3.7	-1.5	-0.7	-4.8		42.5	0.0	0.0	0.0				25.6	10.1	0.4	0.0	0.0	0.0	0.0	-4.8	-4.1	
390		2 x Std Dev		1.035	0.745	0.912	0.882	0.874		3.978	33.181	0.676	6.768	28.804	9.081		2.399	0.023	6.439	0.002				33.181	0.572	5.216	0.360	0.674	0.679	0.028	28.241	24.034	
391	Number of Points Used*			256	256	256	256	256		256	256	256	256	256	256		256	256	256	256				256	256	256	256	256	256	256	256	256	

RUN # 4.00 A, B AND C; PRE-TEST BASELINE WITH 0.1 M NAOH



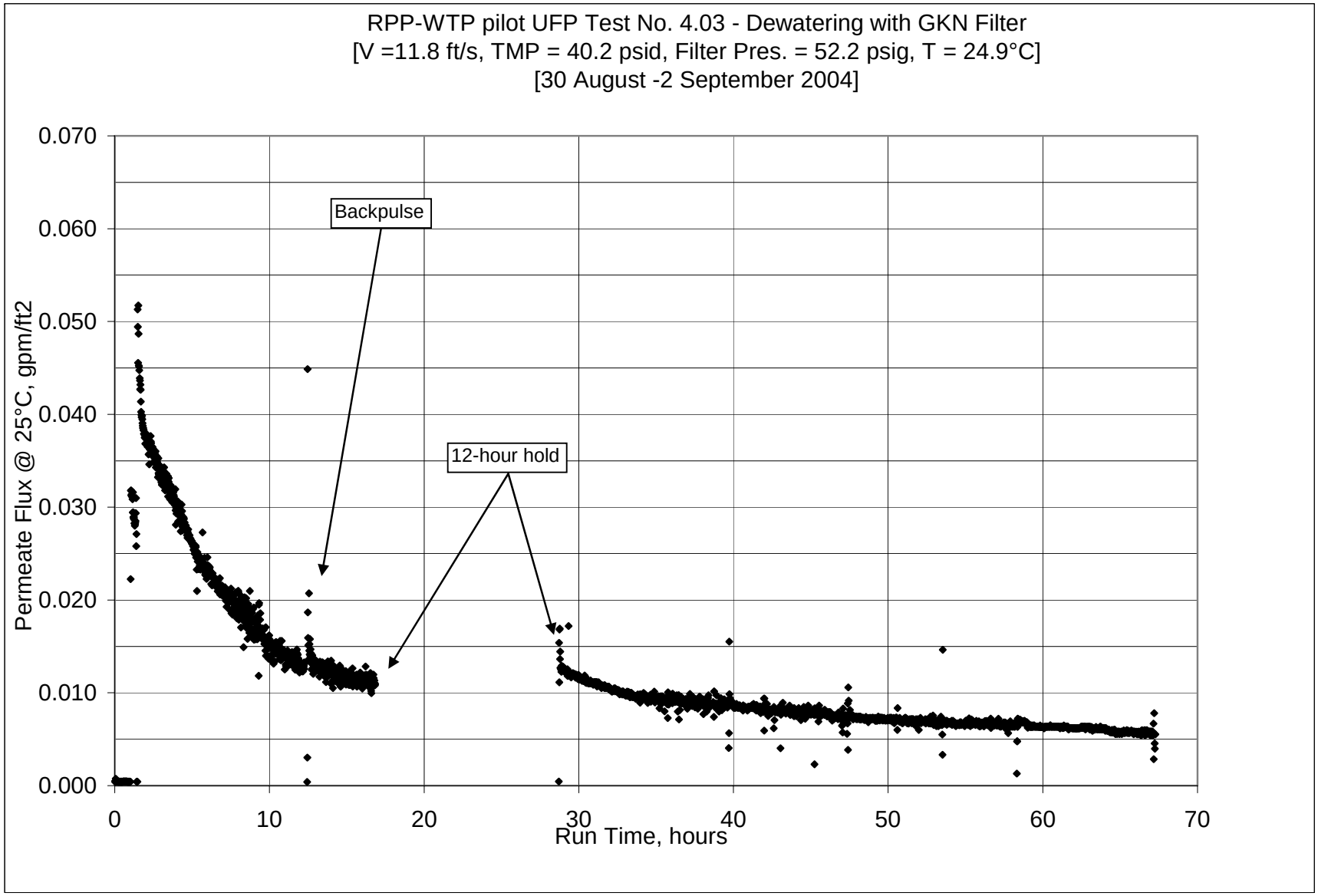
RUN # 4.00 A, B AND C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >< PERMIABILITY >>					
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
585	Friday, 8/27/04																																
586	Baseline 4.00; 0.1 M NaOH																																
587	8/27/2004	7:59:56 AM		23.879	22.902	23.736	23.321	22.592	#	11.941	13.142	4.266	7.869	-1.209	-3.711		45.037	0.003	1.119	0.003		0.00	0	12.0	10.7	9.9	0.683	0.160	0.166	0.017	16.762	14.26	
588	8/27/2004	8:00:30 AM		23.879	22.902	23.736	23.321	22.592	#	11.941	13.142	4.266	7.869	-1.209	-3.711		45.037	0.003	1.119	0.003		0.57	0.00944	12.0	10.7	9.9	0.683	0.160	0.166	0.017	16.762	14.26	
589	8/27/2004	8:00:31 AM		23.879	22.901	23.761	23.356	22.611	#	11.898	13.124	4.177	7.943	-1.209	-3.714		45.061	0.003	1.118	0.003		0.58	0.00972	12.0	10.7	9.9	0.684	0.160	0.166	0.017	16.709	14.22	
590	8/27/2004	8:00:32 AM		23.878	22.906	23.75	23.345	22.606	#	11.892	13.076	4.148	7.97	-1.209	-3.714		44.914	0.003	1.114	0.003		0.60	0.01	11.9	10.7	9.9	0.685	0.159	0.165	0.017	16.637	14.16	
591	8/27/2004	8:00:33 AM		23.878	22.901	23.755	23.35	22.611	#	11.796	12.989	4.076	7.921	-1.212	-3.714		44.985	0.003	1.113	0.003		0.62	0.01028	11.9	10.7	9.9	0.680	0.159	0.165	0.017	16.742	14.25	
592	8/27/2004	8:00:34 AM		23.878	22.906	23.755	23.355	22.611	#	11.873	13.037	4.02	8.208	-1.209	-3.714		45.088	0.003	1.115	0.003		0.63	0.01056	11.9	10.7	10.0	0.692	0.160	0.165	0.016	16.468	14.01	
593	8/27/2004	8:00:35 AM		23.878	22.906	23.75	23.355	22.616	#	11.811	13.007	4.173	7.875	-1.209	-3.717		44.944	0.003	1.115	0.003		0.65	0.01083	11.9	10.7	9.8	0.679	0.160	0.165	0.017	16.801	14.30	
594	8/27/2004	8:00:36 AM		23.873	22.906	23.755	23.35	22.616	#	11.807	12.937	4.18	7.914	-1.212	-3.717		45.004	0.003	1.115	0.003		0.67	0.01111	11.8	10.7	9.9	0.680	0.160	0.165	0.017	16.769	14.27	
595	8/27/2004	8:00:37 AM		23.878	22.901	23.75	23.35	22.621	#	11.67	12.865	4.176	7.691	-1.212	-3.714		44.992	0.003	1.119	0.003		0.68	0.01139	11.7	10.7	9.7	0.667	0.160	0.166	0.017	17.144	14.59	
596	8/27/2004	8:00:38 AM		23.883	22.906	23.755	23.35	22.621	#	11.852	12.989	4.13	8.033	-1.212	-3.717		44.931	0.003	1.119	0.003		0.70	0.01167	11.9	10.7	9.9	0.686	0.160	0.166	0.017	16.690	14.20	
597	8/27/2004	8:00:39 AM		23.878	22.916	23.76	23.355	22.621	#	11.859	13.051	4.193	7.923	-1.212	-3.717		44.879	0.003	1.118	0.003		0.72	0.01194	11.9	10.7	9.9	0.682	0.160	0.166	0.017	16.760	14.26	
598	8/27/2004	8:00:40 AM		23.883	22.916	23.77	23.365	22.621	#	11.782	12.95	4.2	7.842	-1.209	-3.714		44.946	0.003	1.119	0.003		0.73	0.01222	11.8	10.7	9.8	0.677	0.160	0.166	0.017	16.905	14.39	
599	8/27/2004	8:00:41 AM		23.883	22.906	23.765	23.355	22.621	#	11.811	13.003	4.083	8.052	-1.206	-3.711		45.012	0.003	1.119	0.003		0.75	0.0125	11.9	10.7	9.9	0.685	0.160	0.166	0.017	16.704	14.22	
600	8/27/2004	8:00:42 AM		23.873	22.91	23.76	23.355	22.615	#	11.923	13.115	4.15	7.927	-1.209	-3.714		44.973	0.003	1.117	0.003		0.77	0.01278	12.0	10.7	9.9	0.684	0.160	0.166	0.017	16.687	14.20	
601	8/27/2004	8:00:43 AM		23.878	22.911	23.765	23.355	22.621	#	11.838	13.024	4.277	7.836	-1.209	-3.714		44.954	0.003	1.118	0.003		0.78	0.01306	11.9	10.7	9.8	0.678	0.160	0.166	0.017	16.849	14.34	
602	8/27/2004	8:01:43 AM		23.901	22.914	23.783	23.268	22.624	#	11.944	13.148	4.357	7.816	-1.209	-3.714		44.998	0.003	1.126	0.003		1.78	0.02972	12.0	10.7	9.9	0.681	0.161	0.167	0.017	16.887	14.37	
603	8/27/2004	8:02:43 AM		23.91	22.928	23.827	23.327	22.658	#	2.507	13.376	4.029	-1.36	5.571	20.564		44.187	0.003	-0.012	0.004		2.78	0.04639	12.2	10.5	0.6	0.040	-0.002	-0.002	-0.003	-3.097	-2.64	
604	8/27/2004	8:03:43 AM		23.863	22.91	23.79	23.38	22.61	#	2.439	13.217	4.179	-1.471	5.528	20.517		44.289	0.003	-0.011	0.004		3.78	0.06306	12.1	10.5	0.5	0.033	-0.002	-0.002	-0.003	-3.367	-2.87	
605	8/27/2004	8:04:43 AM		23.841	22.929	23.783	23.419	22.579	#	2.663	13.548	4.21	-1.206	5.635	19.199		44.093	0.003	0.056	0.004		4.78	0.07972	12.4	10.5	0.7	0.050	0.008	0.008	0.011	11.390	9.69	
606	8/27/2004	8:05:43 AM		23.799	22.932	23.776	23.461	22.551	#	2.356	13.316	4.084	-1.491	5.632	52.866		44.122	0.003	14.643	0.004		5.78	0.09639	12.2	10.5	0.4	0.030	2.096	2.170	5.018	######	######	
607	8/27/2004	8:06:43 AM		23.842	22.93	23.8	23.49	22.585	#	11.875	13.277	4.038	8.05	-1.212	0.542		45.196	0.003	1.474	0.003		6.78	0.11306	12.2	10.8	10.0	0.687	0.211	0.218	0.022	21.913	18.65	
608	8/27/2004	8:07:43 AM		23.906	22.924	23.803	23.549	22.624	#	11.63	12.941	4.23	7.652	-1.209	0.55		44.764	0.003	1.187	0.003		7.78	0.12972	11.8	10.7	9.6	0.665	0.170	0.176	0.018	18.233	15.52	
609	8/27/2004	8:08:43 AM		23.941	22.944	23.803	23.594	22.628	#	11.813	13.051	4.07	8.101	-1.209	0.547		44.912	0.003	1.174	0.003		8.78	0.14639	11.9	10.7	10.0	0.687	0.168	0.174	0.017	17.461	14.86	
610	8/27/2004	8:09:43 AM		23.95	22.942	23.872	23.567	22.657	#	11.912	13.19	4.021	8.187	-1.209	0.547		44.866	0.003	1.174	0.003		9.78	0.16306	12.1	10.7	10.0	0.693	0.168	0.174	0.017	17.267	14.69	
611	8/27/2004	8:10:43 AM		24.003	22.94	23.975	23.485	22.67	#	11.95	13.291	4.108	8.087	-1.212	0.544		44.9	0.003	1.169	0.003		10.78	0.17972	12.2	10.7	10.0	0.691	0.167	0.172	0.017	17.196	14.63	
612	8/27/2004	8:11:43 AM		24.052	22.949	24.024	23.474	22.579	#	11.869	13.124	4.125	7.996	-1.212	0.544		45.171	0.003	1.165	0.003		11.78	0.19639	12.0	10.8	9.9	0.685	0.167	0.171	0.017	17.261	14.69	
613	8/27/2004	8:12:43 AM		24.121	22.949	24.059	23.544	22.553	#	12.027	13.225	4.191	8.202	-1.209	0.547		45.121	0.003	1.172	0.004		12.78	0.21306	12.1	10.7	10.1	0.697	0.168	0.172	0.017	17.036	14.50	
614	8/27/2004	8:13:43 AM		24.176	22.958	24.158	23.563	22.587	#	12.047	13.256	4.133	8.273	-1.209	0.542		44.952	0.003	1.169	0.004		13.78	0.22972	12.1	10.7	10.2	0.700	0.167	0.171	0.017	16.869	14.36	
615	8/27/2004	8:14:43 AM		24.235	22.952	24.192	23.562	22.566	#	11.944	13.277	4.091	7.961	-1.212	0.544		44.877	0.003	1.174	0.004		14.78	0.24639	12.2	10.7	10.0	0.686	0.168	0.172	0.017	17.277	14.70	
616	8/27/2004	8:15:43 AM		24.299	22.966	24.221	23.642	22.56	#	12.213	13.47	4.357	8.072	-1.212	0.544		45.088	0.003	1.184	0.005		15.78	0.26306	12.3	10.7	10.1	0.699	0.170	0.173	0.017	17.084	14.54	
617	8/27/2004	8:16:43 AM		24.339	22.961	24.316	23.671	22.675	#	11.84	13.163	4.194	7.871	-1.209	0.542		44.99	0.003	1.188	0.004		16.78	0.27972	12.0	10.7	9.9	0.680	0.170	0.173	0.018	17.594	14.97	
618	8/27/2004	8:17:43 AM		24.388	22.97	24.33	23.64	22.66	#	11.78	12.997	4.091	8.07	-1.212	0.544		45.146	0.003	1.19	0.004		17.78	0.29639	11.9	10.8	9.9	0.684	0.170	0.174	0.017	17.493	14.89	
619	8/27/2004	8:18:43 AM		24.427	22.974	24.345	23.675	22.644	#	11.948	13.248	4.282	7.838	-1.209	0.542		45.092	0.003	1.197	0.005		18.78	0.31306	12.1	10.7	9.9	0.682	0.171	0.175	0.018	17.645	15.02	
620	8/27/2004	8:19:43 AM		24.478	22.985	24.435	23.755	22.714	#	11.871	13.165	4.132	8.081	-1.209	0.544		44.948	0.003	1.197	0.005		19.78	0.32972	12.0	10.7	10.0	0.688	0.171	0.174	0.017	17.454	14.85	
621	8/27/2004	8:20:43 AM		24.523	22.99	24.45	23.735	22.804	#	11.807	13.053	4.253	7.793	-1.212	0.544		45.054	0.003	1.199	0.004		20.78	0.34639	11.9	10.7	9.8	0.676	0.172	0.174	0.018	17.790	15.14	
622	8/27/2004	8:21:43 AM		24.563	22.995	24.486	23.816	22.87	#	11.863	13.105	4.207	7.894	-1.206	0.55		45.119	0.003	1.205	0.004		21.78	0.36306	12.0	10.7	9.9	0.681	0.173	0.175	0.018	17.719	15.08	
623	8/27/2004	8:22:43 AM		24.595	23.007	24.543	23.828	22.997	#	11.906	13.177	4.289	7.81	-1.209	0.542		44.881	0.003	1.2	0.004		22.78	0.37972	12.1	10.7	9.9	0.680	0.172	0.174	0.018	17.653	15.02	
624	8/27/2004	8:23:43 AM		24.626	23.003	24.549	23.854	23.079	#	11.678	12.929	4.159	7.765	-1.209	0.544		44.971	0.003	1.196	0.004		23.78	0.39639	11.8	10.7	9.7	0.670	0.171	0.173	0.018	17.838	15.18	
625	8/27/2004	8:24:43 AM		24.658	23.01	24.56	23.901	23.095	#	11.759	12.972	4.051	8.083	-1.209	0.544		44.923	0.003	1.203	0.005		24.78	0.41306	11.8	10.7	9.9	0.684	0.172	0.174	0.018	17.577	14.96	
626	8/27/2004	8:25:43 AM		24.685	23.027	24.608	23.994	23.183	#	11.774	13.01	4.05	7.949	-1.212	0.544		44.844	0.003	1.211	0.005		25.78	0.42972	11.9	10.7	9.9	0.680	0.173	0.175	0.018	17.776	15.13	
627	8/27/2004	8:26:43 AM		24.701	23.033	24.634	24.065	23.234	#	11.904	13.124	4.051	8.154	-1.203	0.547		45.158	0.003	1.209	0.004		26.78	0.44639	12.0	10.8	10.0	0.691	0.173	0.175	0.017	17.438	14.84	
628	8/27/2004	8:27:43 AM		24.713	23.025	24.615	24.091	23.19	#	16.627	19.427	4.229	13.018	-1.212	0.562		47.908	0.003	1.681	0.005		27.78	0.46306	18.3	11.4	14.8	1.022	0.241	0.243	0.016	16.413	13.97	
629	8/27/2004	8:28:43 AM		24.834	23.041	24.712	24.173	23.207	#	21.66	26.921	3.965	18.319	-0.471	0.591		45.013	0.003	2.253	0.005		28.78	0.47972	25.8	10.7	20.0	1.378	0.323	0.325	0.016	16.268	13.84	
630	8/27/2004	8:29:43 AM		24.95	23.062	24.793	24.255	23.138	#	21.587	26.826	3.996	18.229	-0.5	0.591		45.054	0.003	2.241	0.004		29.78	0.49639	25.7	10.7	19.9	1.373	0.321	0.323	0.016	16.210	13.79	
631	8/27/2004	8:30:43 AM		24.996	23.068	24.809	24.366	23.143	#	22.112	27.278	4.084	18.701	-0.564	0.588		44.923	0.003	2.232	0.004		30.78	0.51306	26.2	10.7	20.4	1.407	0.320	0.321	0.016	15.743	13.40	
632	8/27/2004	8:31:43 AM		25.032	23.079	24.82	24.436	23.129	#	21.844	27.015	4.013	18.424	-0.535	0.594		44.869	0.003	2.232	0.005		31.78	0.52972	25.9	10.7	20.1	1.388	0.320	0.321	0.016	15.952	13.58	
633	8/27/2004	8:32:43 AM		25.047	23.079	24.81	24.462	23.145	#	22.012	27.195	4.046	18.598	-0.607	0.585		44.794	0.003	2.224	0.005		32.78	0.54639	26.1	10.7	20.3	1.400	0.318	0.320	0.016	15.765	13.42	
634	8/27/2004	8:33:43 AM		25.073	23.095	24.836	24.508	23.115	#	21.986	27.081	3.922	18.797	-0.569	0.594		44.842	0.003	2.223	0.004		33.78	0.56306	26.0	10.7	20.4	1.406	0.318	0.320	0.016	15.680	13.34	
635	8/27/2004	8:34:43 AM		25.084	23.106	24.841	24.513	23.141	#	21.818	26.959	3.974	18.491	-0.642	0.588		44.837	0.003	2.215	0.005		34.78	0.57972	25.8	10.7	20.2	1.390	0.317	0.319	0.016	15.805	13.45	
636	8/27/2004	8:35:43 AM		25.089	23.116	24.836	24.508	23.206	#	21.807	26.973	3.935	18.492	-0.642	0.588		44.706	0.003	2.217	0.005		35.78	0.59639	25.8	10.6	20.1	1.389	0.317	0.319	0.016	15.825	13.47	
637	8/27/2004	8:36:43 AM		25.109	23.121	24.847	24.509	23.212	#	21.847	26.785	3.892	18.727	-0.639	0.591		44.693	0.003	2.213	0.005		36.78	0.61306	25.7	10.6	20.3	1.399	0.317	0.318	0.016	15.685	13.35	

RUN # 4.00 A, B AND C; PRE-TEST BASELINE WITH 0.1 M NAOH – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
638	8/27/2004	8:37:43 AM		25.12	23.143	24.863	24.53	23.243	#	22.017	27.056	3.929	18.738	-0.659	0.591		44.562	0.003	2.206	0.005		37.78	0.62972	25.9	10.6	20.4	1.405	0.316	0.317	0.016	15.559	13.24	
639	8/27/2004	8:38:43 AM		25.12	23.143	24.868	24.53	23.238	#	22.012	27.077	3.975	18.641	-0.659	0.591		44.558	0.003	2.209	0.005		38.78	0.64639	26.0	10.6	20.3	1.401	0.316	0.317	0.016	15.617	13.29	
640	8/27/2004	8:39:43 AM		25.121	23.153	24.874	24.596	23.304	#	22.108	27.079	3.937	18.84	-0.682	0.588		44.485	0.003	2.206	0.005		39.78	0.66306	26.0	10.6	20.5	1.412	0.316	0.317	0.015	15.480	13.17	
641	8/27/2004	8:40:43 AM		25.132	23.18	24.92	24.608	23.35	#	21.959	26.986	3.964	18.584	-0.697	0.591		44.658	0.003	2.21	0.005		40.78	0.67972	25.9	10.6	20.3	1.398	0.316	0.317	0.016	15.643	13.31	
642	8/27/2004	8:41:43 AM		25.133	23.165	24.906	24.573	23.391	#	22.019	27.069	3.949	18.643	-0.674	0.591		44.639	0.003	2.204	0.005		41.78	0.69639	25.9	10.6	20.3	1.402	0.316	0.316	0.016	15.561	13.24	
643	8/27/2004	8:42:43 AM		25.133	23.17	24.901	24.633	23.361	#	21.958	26.928	3.962	18.693	-0.685	0.591		44.568	0.003	2.204	0.005		42.78	0.71306	25.8	10.6	20.3	1.401	0.316	0.316	0.016	15.567	13.25	
644	8/27/2004	8:43:43 AM		25.149	23.197	24.922	24.66	23.347	#	21.882	26.888	3.808	18.779	-0.694	0.594		44.597	0.003	2.205	0.005		43.78	0.72972	25.8	10.6	20.3	1.402	0.316	0.316	0.016	15.562	13.24	
645	8/27/2004	8:44:43 AM		25.16	23.217	24.948	24.71	23.353	#	22.052	27.027	4.02	18.557	-0.694	0.591		44.527	0.003	2.197	0.006		44.78	0.74639	25.9	10.6	20.3	1.400	0.315	0.315	0.016	15.514	13.20	
646	8/27/2004	8:45:43 AM		25.155	23.212	24.913	24.7	23.343	#	21.919	26.934	3.899	18.635	-0.671	0.591		44.589	0.003	2.203	0.007		45.78	0.76306	25.8	10.6	20.3	1.398	0.315	0.316	0.016	15.592	13.27	
647	8/27/2004	8:46:43 AM		25.161	23.219	24.914	24.722	23.354	#	21.992	27.071	3.87	18.695	-0.697	0.591		44.527	0.003	2.202	0.005		46.78	0.77972	25.9	10.6	20.3	1.403	0.315	0.316	0.016	15.534	13.22	
648	8/27/2004	8:47:43 AM		25.182	23.255	24.94	24.748	23.355	#	21.627	26.432	4.037	18.141	-0.925	0.588		45.029	0.003	2.139	0.006		47.78	0.79639	25.3	10.7	19.9	1.371	0.306	0.307	0.015	15.427	13.13	
649	8/27/2004	8:48:43 AM		25.157	23.23	24.89	24.718	23.345	#	21.533	26.341	4.004	18.058	-0.928	0.582		44.762	0.003	2.145	0.005		48.78	0.81306	25.2	10.7	19.8	1.365	0.307	0.308	0.016	15.561	13.24	
650	8/27/2004	8:49:43 AM		25.174	23.251	24.912	24.769	23.306	#	21.537	26.296	4.047	18.034	-0.928	0.588		44.823	0.003	2.136	0.005		49.78	0.82972	25.2	10.7	19.8	1.364	0.306	0.307	0.015	15.494	13.19	
651	8/27/2004	8:50:43 AM		25.17	23.273	24.908	24.775	23.408	#	21.654	26.349	4.07	18.212	-0.923	0.588		44.923	0.003	2.138	0.006		50.78	0.84639	25.2	10.7	19.9	1.374	0.306	0.307	0.015	15.396	13.10	
652	8/27/2004	8:51:43 AM		25.28	23.288	25.039	24.836	23.489	#	33.969	44.889	4.173	30.953	4.807	0.672		46.521	0.003	3.316	0.005		51.78	0.86306	43.8	11.1	32.5	2.238	0.475	0.474	0.015	14.609	12.43	
653	8/27/2004	8:52:43 AM		25.416	23.294	25.144	24.872	23.439	#	31.44	40.093	4.005	28.398	2.74	0.64		44.998	0.003	2.944	0.004		52.78	0.87972	39.0	10.7	29.9	2.063	0.421	0.420	0.014	14.030	11.94	
654	8/27/2004	8:53:43 AM		25.491	23.304	25.189	24.932	23.414	#	31.366	39.948	3.887	28.426	2.679	0.64		44.987	0.003	2.922	0.005		53.78	0.89639	38.8	10.7	29.9	2.061	0.418	0.416	0.014	13.919	11.84	
655	8/27/2004	8:54:43 AM		25.522	23.305	25.205	25.018	23.415	#	31.546	40.141	4.034	28.414	2.63	0.64		44.998	0.003	2.921	0.005		54.78	0.91306	39.0	10.7	30.0	2.067	0.418	0.416	0.014	13.869	11.80	
656	8/27/2004	8:55:43 AM		25.547	23.32	25.216	25.079	23.425	#	31.588	40.145	3.84	28.736	2.638	0.64		44.593	0.003	2.917	0.004		55.78	0.92972	39.0	10.6	30.2	2.080	0.418	0.415	0.014	13.762	11.71	
657	8/27/2004	8:56:43 AM		25.569	23.327	25.222	25.105	23.492	#	31.59	39.961	3.815	28.771	2.552	0.637		44.533	0.003	2.905	0.004		56.78	0.94639	38.8	10.6	30.2	2.081	0.416	0.413	0.014	13.694	11.65	
658	8/27/2004	8:57:43 AM		25.589	23.342	25.243	25.156	23.508	#	31.525	39.888	3.84	28.712	2.552	0.643		44.562	0.003	2.906	0.005		57.78	0.96306	38.8	10.6	30.1	2.077	0.416	0.413	0.014	13.719	11.68	
659	8/27/2004	8:58:43 AM		25.595	23.348	25.238	25.171	23.593	#	31.627	39.998	3.846	28.802	2.543	0.643		44.506	0.003	2.893	0.005		58.78	0.97972	38.9	10.6	30.2	2.083	0.414	0.411	0.014	13.616	11.59	
660	8/27/2004	8:59:43 AM		25.621	23.375	25.275	25.233	23.565	#	31.637	40.151	3.759	28.816	2.531	0.643		44.47	0.003	2.891	0.007		59.78	0.99639	39.0	10.6	30.2	2.084	0.414	0.411	0.014	13.587	11.56	
661	8/27/2004	9:00:43 AM		25.622	23.375	25.26	25.203	23.51	#	32.087	40.614	3.856	29.122	2.482	0.64		44.453	0.003	2.891	0.006		60.78	1.01306	39.5	10.6	30.6	2.110	0.414	0.411	0.013	13.425	11.43	
662	8/27/2004	9:01:43 AM		25.638	23.391	25.296	25.26	23.591	#	31.919	40.423	3.818	29.028	2.485	0.64		44.416	0.003	2.893	0.004		61.78	1.02972	39.3	10.6	30.5	2.101	0.414	0.411	0.013	13.479	11.47	
663	8/27/2004	9:02:43 AM		25.644	23.397	25.302	25.245	23.647	#	31.924	40.508	3.884	28.781	2.433	0.64		44.36	0.003	2.89	0.006		62.78	1.04639	39.4	10.6	30.4	2.093	0.414	0.410	0.014	13.516	11.50	
664	8/27/2004	9:03:43 AM		25.655	23.408	25.318	25.267	23.598	#	31.61	40.077	3.809	28.722	2.439	0.643		44.322	0.003	2.897	0.004		63.78	1.06306	39.0	10.6	30.2	2.080	0.415	0.411	0.014	13.627	11.60	
665	8/27/2004	9:04:43 AM		25.666	23.425	25.325	25.263	23.55	#	31.733	40.162	3.715	28.89	2.47	0.64		44.355	0.003	2.886	0.005		64.78	1.07972	39.0	10.6	30.3	2.090	0.413	0.409	0.014	13.507	11.49	
666	8/27/2004	9:05:43 AM		25.656	23.43	25.315	25.268	23.63	#	31.81	40.253	3.842	28.913	2.462	0.643		44.257	0.003	2.889	0.006		65.78	1.09639	39.1	10.5	30.4	2.093	0.414	0.410	0.014	13.503	11.49	
667	8/27/2004	9:06:43 AM		25.683	23.442	25.322	25.3	23.697	#	31.696	39.946	3.819	28.798	2.384	0.64		44.892	0.003	2.877	0.005		66.78	1.11306	38.8	10.7	30.2	2.085	0.412	0.408	0.013	13.495	11.48	
668	8/27/2004	9:07:43 AM		25.689	23.463	25.323	25.306	23.698	#	31.7	39.859	3.876	28.786	2.375	0.643		44.808	0.003	2.865	0.006		67.78	1.12972	38.7	10.7	30.2	2.085	0.410	0.406	0.013	13.440	11.44	
669	8/27/2004	9:08:43 AM		25.695	23.469	25.319	25.322	23.694	#	31.845	40.394	3.926	28.679	2.369	0.637		44.867	0.003	2.874	0.005		68.78	1.14639	39.3	10.7	30.3	2.086	0.411	0.408	0.013	13.475	11.47	
670	8/27/2004	9:09:43 AM		25.696	23.469	25.329	25.328	23.769	#	31.735	40.104	3.93	28.747	2.366	0.64		44.892	0.003	2.866	0.004		69.78	1.16306	39.0	10.7	30.2	2.085	0.410	0.407	0.013	13.443	11.44	
671	8/27/2004	9:10:43 AM		25.717	23.491	25.356	25.359	23.776	#	31.98	40.502	3.908	28.882	2.36	0.643		44.693	0.003	2.868	0.006		70.78	1.17972	39.4	10.6	30.4	2.098	0.411	0.407	0.013	13.358	11.37	
672	8/27/2004	9:11:43 AM		25.723	23.507	25.372	25.425	23.792	#	31.652	39.921	3.928	28.576	2.369	0.643		44.793	0.003	2.868	0.005		71.78	1.19639	38.8	10.7	30.1	2.076	0.411	0.406	0.013	13.493	11.48	
673	8/27/2004	9:12:43 AM		25.734	23.529	25.403	25.447	23.783	#	31.554	39.809	3.812	28.662	2.372	0.646		44.731	0.003	2.866	0.005		72.78	1.21306	38.7	10.7	30.1	2.076	0.410	0.406	0.013	13.474	11.47	
674	8/27/2004	9:13:43 AM		25.746	23.53	25.409	25.448	23.77	#	31.714	40.095	3.884	28.634	2.369	0.64		44.816	0.003	2.865	0.005		73.78	1.22972	39.0	10.7	30.2	2.080	0.410	0.405	0.013	13.438	11.44	
675																																	
676																																	
677	A	Averages		24.3	23.0	24.3	23.7	22.8		11.9	13.1	4.2	8.0	-1.2	0.5		45.0	0.0	1.2	0.0				12.0	10.7	9.9	0.7	0.2	0.2	0.0	17.5	14.9	
678		Maximum		24.7	23.0	24.6	24.1	23.2		12.2	13.5	4.4	8.3	-1.2	0.6		45.2	0.0	1.2	0.0				12.3	10.8	10.2	0.7	0.2	0.2	0.0	18.2	15.5	
679		Median		24.4	23.0	24.3	23.7	22.7		11.9	13.1	4.1	8.0	-1.2	0.5		45.0	0.0	1.2	0.0				12.0	10.7	9.9	0.7	0.2	0.2	0.0	17.5	14.9	
680		Minimum		23.9	22.9	23.8	23.5	22.6		11.6	12.9	4.0	7.7	-1.2	0.5		44.8	0.0	1.2	0.0				11.8	10.7	9.6	0.7	0.2	0.2	0.0	16.9	14.4	
681		2 x Std Dev		0.528	0.060	0.531	0.328	0.437		0.256	0.266	0.182	0.325	0.004	0.005		0.236	0.000	0.029	0.001				0.266	0.056	0.257	0.018	0.004	0.002	0.001	0.626	0.533	
682		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
683		* Backpulse points in box are not included																															
684																																	
685																																	
686	B	Averages		25.1	23.2	24.9	24.6	23.3		21.9	26.9	4.0	18.5	-0.7	0.6		44.7	0.0	2.2	0.0				25.8	10.7	20.2	1.4	0.3	0.3	0.0	15.7	13.3	
687		Maximum		25.2	23.3	24.9	24.8	23.4		22.1	27.3	4.1	18.8	-0.5	0.6		45.1	0.0	2.3	0.0				26.2	10.7	20.5	1.4	0.3	0.3	0.0	16.3	13.8	
688		Median		25.1	23.2	24.9	24.6	23.3		21.9	27.0	4.0	18.6	-0.7	0.6		44.7	0.0	2.2	0.0				25.8	10.6	20.3	1.4	0.3	0.3	0.0	15.6	13.3	
689		Minimum		24.8	23.0	24.7	24.2	23.1		21.5	26.3	3.8	18.0	-0.9	0.6		44.5	0.0	2.1	0.0				25.2	10.6	19.8	1.4	0.3	0.3	0.0	15.4	13.1	
690		2 x Std Dev		0.162	0.133	0.111	0.311	0.192		0.359	0.540	0.132	0.477	0.256	0.006		0.345	0.000	0.064	0.001				0.540	0.082	0.408	0.028	0.009	0.010	0.000	0.437	0.372	
691		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
692		* Backpulse points in box are not included																															
693																																	
694																																	
695	C	Averages		25.6	23.4	25.3	25.2	23.6		31.8	40.3	3.9	28.8	2.6	0.6		44.7	0.0	2.9	0.0				39.2	10.7	30.3	2.1	0.4	0.4	0.0	13.6	11.6	
696		Maximum		25.7	23.5	25.4	25.4	23.8		34.0	44.9	4.2	31.0	4.8	0.7		46.5	0.0	3.3	0.0				43.8	11.1	32.5	2.2	0.5	0.5	0.0	14.6	12.4	
697		Median		25.6	23.4	25.3	25.3	23.6		31.7	40.1	3.9	28.8	2.5	0.6		44.7	0.0	2.9	0.0				39.0	10.6	30.2	2.1	0.4	0.4	0.0	13.5	11.5	
698		Minimum		25.3	23.3	25.0	24.8	23.4		31.4	39.8	3.7	28.4	2.4	0.6		44.3	0.0	2.9	0.0				38.7	10.5	29.9	2.1	0.4	0.4	0.0	13.4	11.4	
699		2 x Std Dev		0.216	0.151	0.167	0.334	0.250		0.988	1.987	0.188	0.967	0.973	0.013		0.890	0.000	0.178	0.002				1.987	0.212	0.971	0.067	0.026	0.027	0.001	0.538	0.458	
700		Number of Points Used*		23	23	23	23	23		23	23	23	23	23	23		23	23	23	23				23	23	23	23	23	23	23	23	23	
701		* Backpulse points in box are not included																										Calc	0.0172				
702																										Avg St Dv (all pts)			0.013				
703																										Max St Dv (all pts)			0.027				
704																										Min St Dv (all pts)			0.002				

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING



RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	8/30/2004	7:53:22 AM		23.1	23.025	24.506	23.324	22.77		35.192	34.464	4.366	27.478	-1.209	0.241		26.459	0.003	14.643	0.006		0	0	33.3	6.3	31.3	2.160	0.000	0.000	0.000	0.014	0.01	
18	8/30/2004	7:54:37 AM		23.1	23.025	24.506	23.324	22.77		35.192	34.464	4.366	27.478	-1.209	0.241		26.459	0.003	14.643	0.006		1.25	0.02083	33.3	6.3	31.3	2.160	0.000	0.000	0.000	0.014	0.01	
19	8/30/2004	7:55:37 AM		23.13	23.036	24.306	23.691	22.791		33.458	34.642	4.363	25.779	-0.309	0.195		25.967	0.003	14.643	0.005		2.25	0.0375	33.5	6.2	29.6	2.042	0.000	0.000	0.000	0.015	0.01	
20	8/30/2004	7:56:37 AM		23.099	23.035	24.44	23.74	22.88		47.613	49.027	9.602	34.669	-0.17	0.192		45.474	0.005	14.643	0.003		3.25	0.05417	47.9	10.8	41.1	2.837	0.001	0.001	0.000	0.018	0.02	
21	8/30/2004	7:57:37 AM		23.108	23.033	24.669	23.829	22.938		47.032	48.637	10.206	33.372	-0.173	0.183		47.246	0.003	14.643	0.005		4.25	0.07083	47.5	11.3	40.2	2.772	0.000	0.000	0.000	0.011	0.01	
22	8/30/2004	7:58:37 AM		23.103	23.034	24.87	23.885	22.999		47.733	49.232	9.604	34.616	-0.173	0.186		45.982	0.003	14.643	0.005		5.25	0.0875	48.1	11.0	41.2	2.839	0.000	0.000	0.000	0.011	0.01	
23	8/30/2004	7:59:37 AM		23.126	23.047	25.068	23.953	23.092		48.038	49.632	9.492	35.074	-0.173	0.195		48.458	0.003	14.643	0.005		6.25	0.10417	48.5	11.5	41.6	2.865	0.000	0.000	0.000	0.011	0.01	
24	8/30/2004	8:00:37 AM		23.13	23.045	25.262	24.012	23.171		46.634	48.079	10.372	32.917	-0.17	0.195		48.746	0.003	14.643	0.006		7.25	0.12083	47.0	11.6	39.8	2.742	0.000	0.000	0.000	0.011	0.01	
25	8/30/2004	8:01:37 AM		23.173	23.069	25.43	24.141	23.229		47.327	48.763	10.369	33.376	-0.173	0.183		46.744	0.003	14.643	0.005		8.25	0.1375	47.6	11.1	40.4	2.782	0.000	0.000	0.000	0.011	0.01	
26	8/30/2004	8:02:37 AM		23.216	23.101	25.533	24.304	23.387		46.723	48.33	10.597	32.824	-0.173	0.198		45.878	0.003	14.643	0.003		9.25	0.15417	47.2	10.9	39.8	2.742	0.000	0.000	0.000	0.011	0.01	
27	8/30/2004	8:03:37 AM		23.249	23.124	25.605	24.376	23.52		46.947	48.604	10.719	32.748	-0.176	0.183		48.477	0.003	14.643	0.004		10.25	0.17083	47.5	11.5	39.8	2.747	0.000	0.000	0.000	0.011	0.01	
28	8/30/2004	8:04:37 AM		23.287	23.147	25.709	24.475	23.578		46.283	47.795	11.086	31.798	-0.167	0.2		46.448	0.003	14.643	0.005		11.25	0.1875	46.7	11.1	39.0	2.692	0.000	0.000	0.000	0.011	0.01	
29	8/30/2004	8:05:37 AM		23.324	23.159	25.755	24.487	23.57		46.607	48.096	11.005	32.289	-0.17	0.186		49.507	0.003	14.643	0.007		12.25	0.20417	47.0	11.8	39.4	2.720	0.000	0.000	0.000	0.011	0.01	
30	8/30/2004	8:06:37 AM		23.353	23.173	25.774	24.616	23.549		46.706	48.438	10.748	32.389	-0.173	0.183		45.636	0.003	14.643	0.005		13.25	0.22083	47.3	10.9	39.5	2.727	0.000	0.000	0.000	0.011	0.01	
31	8/30/2004	8:07:37 AM		23.392	23.198	25.759	24.701	23.613		45.168	46.78	11.818	29.844	-0.19	0.183		48.636	0.003	14.643	0.006		14.25	0.2375	45.7	11.6	37.5	2.586	0.000	0.000	0.000	0.011	0.01	
32	8/30/2004	8:08:37 AM		23.421	23.212	25.687	24.729	23.632		45.52	47.157	11.504	30.581	-0.207	0.183		51.205	0.003	14.643	0.005		15.25	0.25417	46.0	12.2	38.1	2.623	0.000	0.000	0.000	0.011	0.01	
33	8/30/2004	8:09:37 AM		23.462	23.223	25.564	24.741	23.634		45.893	47.348	11.094	31.507	-0.173	0.195		53.112	0.003	14.643	0.005		16.25	0.27083	46.2	12.7	38.7	2.668	0.000	0.000	0.000	0.011	0.01	
34	8/30/2004	8:10:37 AM		23.497	23.247	25.443	24.765	23.638		46.207	48.055	11.201	31.49	-0.17	0.183		51.376	0.003	14.643	0.007		17.25	0.2875	46.9	12.2	38.8	2.678	0.000	0.000	0.000	0.011	0.01	
35	8/30/2004	8:11:37 AM		23.536	23.261	25.302	24.794	23.587		46.47	48.017	11.275	31.62	-0.173	0.186		51.936	0.003	14.643	0.007		18.25	0.30417	46.9	12.4	39.0	2.692	0.000	0.000	0.000	0.011	0.01	
36	8/30/2004	8:12:37 AM		23.582	23.293	25.218	24.815	23.588		46.57	48.229	11.475	31.657	-0.179	0.189		53.464	0.003	14.643	0.006		19.25	0.32083	47.1	12.7	39.1	2.697	0.000	0.000	0.000	0.011	0.01	
37	8/30/2004	8:13:37 AM		23.605	23.3	25.12	24.863	23.56		46.57	48.123	11.233	32.008	-0.173	0.183		48.825	0.003	14.643	0.003		20.25	0.3375	47.0	11.6	39.3	2.709	0.000	0.000	0.000	0.011	0.01	
38	8/30/2004	8:14:37 AM		23.632	23.312	25.037	24.82	23.507		46.648	48.293	11.331	31.732	-0.173	0.189		50.273	0.003	14.643	0.005		21.25	0.35417	47.2	12.0	39.2	2.702	0.000	0.000	0.000	0.011	0.01	
39	8/30/2004	8:15:37 AM		23.662	23.317	24.942	24.784	23.507		46.918	48.529	11.183	32.172	-0.207	0.192		51.264	0.003	14.643	0.006		22.25	0.37083	47.4	12.2	39.5	2.726	0.000	0.000	0.000	0.011	0.01	
40	8/30/2004	8:16:37 AM		23.709	23.349	24.858	24.776	23.524		46.536	47.918	11.262	31.964	-0.181	0.18		50.822	0.003	14.643	0.006		23.25	0.3875	46.8	12.1	39.3	2.706	0.000	0.000	0.000	0.011	0.01	
41	8/30/2004	8:17:37 AM		23.754	23.37	24.794	24.812	23.524		46.825	48.488	11.256	32.125	-0.173	0.186		51.182	0.003	14.643	0.005		24.25	0.40417	47.4	12.2	39.5	2.722	0.000	0.000	0.000	0.011	0.01	
42	8/30/2004	8:18:37 AM		23.786	23.386	24.715	24.823	23.536		46.777	48.291	11.079	32.289	-0.176	0.18		50.048	0.003	14.643	0.004		25.25	0.42083	47.2	11.9	39.5	2.726	0.000	0.000	0.000	0.011	0.01	
43	8/30/2004	8:19:37 AM		23.816	23.402	24.651	24.784	23.546		46.868	48.425	11.108	32.266	-0.184	0.18		52.021	0.003	14.643	0.005		26.25	0.4375	47.3	12.4	39.6	2.728	0.000	0.000	0.000	0.011	0.01	
44	8/30/2004	8:20:37 AM		23.845	23.42	24.584	24.848	23.55		46.841	48.442	11.033	32.406	-0.213	0.186		48.16	0.003	14.643	0.006		27.25	0.45417	47.3	11.5	39.6	2.732	0.000	0.000	0.000	0.011	0.01	
45	8/30/2004	8:21:37 AM		23.866	23.432	24.52	24.839	23.551		47.099	48.763	10.973	32.74	-0.179	0.186		54.113	0.003	14.643	0.006		28.25	0.47083	47.6	12.9	39.9	2.752	0.000	0.000	0.000	0.011	0.01	
46	8/30/2004	8:22:37 AM		23.899	23.454	24.458	24.881	23.574		46.642	48.359	10.819	32.303	-0.179	0.18		51.539	0.003	14.643	0.004		29.25	0.4875	47.2	12.3	39.5	2.721	0.000	0.000	0.000	0.011	0.01	
47	8/30/2004	8:23:37 AM		23.931	23.477	24.405	24.899	23.576		46.854	48.44	10.778	32.64	-0.173	0.186		48.913	0.003	14.643	0.007		30.25	0.50417	47.3	11.7	39.7	2.740	0.000	0.000	0.000	0.011	0.01	
48	8/30/2004	8:24:37 AM		23.946	23.476	24.344	24.833	23.576		46.723	48.326	10.863	32.379	-0.173	0.174		51.241	0.003	14.643	0.004		31.25	0.52083	47.2	12.2	39.6	2.727	0.000	0.000	0.000	0.011	0.01	
49	8/30/2004	8:25:37 AM		23.978	23.489	24.282	24.836	23.563		46.918	48.38	10.872	32.791	-0.176	0.186		52.58	0.003	14.643	0.008		32.25	0.5375	47.3	12.5	39.9	2.748	0.000	0.000	0.000	0.011	0.01	
50	8/30/2004	8:26:37 AM		24.01	23.51	24.243	24.857	23.594		46.754	48.206	10.811	32.648	-0.176	0.177		53.813	0.003	14.643	0.005		33.25	0.55417	47.1	12.8	39.7	2.737	0.000	0.000	0.000	0.011	0.01	
51	8/30/2004	8:27:37 AM		24.042	23.523	24.2	24.925	23.617		46.843	48.566	10.9	32.379	-0.173	0.186		50.82	0.003	14.643	0.007		34.25	0.57083	47.4	12.1	39.6	2.731	0.000	0.000	0.000	0.011	0.01	
52	8/30/2004	8:28:37 AM		24.069	23.539	24.141	24.931	23.633		46.964	48.66	10.911	32.56	-0.196	0.174		52.634	0.003	14.643	0.004		35.25	0.5875	47.5	12.5	39.8	2.741	0.000	0.000	0.000	0.011	0.01	
53	8/30/2004	8:29:37 AM		24.101	23.567	24.109	24.963	23.681		46.802	48.37	10.925	32.512	-0.17	0.183		51.205	0.003	14.643	0.007		36.25	0.60417	47.2	12.2	39.7	2.734	0.000	0.000	0.000	0.011	0.01	
54	8/30/2004	8:30:37 AM		24.107	23.568	24.045	24.93	23.682		46.912	48.743	10.913	32.358	-0.176	0.186		47.165	0.003	14.643	0.005		37.25	0.62083	47.6	11.2	39.6	2.733	0.000	0.000	0.000	0.011	0.01	
55	8/30/2004	8:31:37 AM		24.154	23.599	24.041	24.981	23.713		46.748	48.212	10.917	32.457	-0.176	0.177		50.225	0.003	14.643	0.008		38.25	0.6375	47.1	12.0	39.6	2.730	0.000	0.000	0.000	0.011	0.01	
56	8/30/2004	8:32:37 AM		24.176	23.611	23.993	24.958	23.67		46.931	48.718	10.911	32.525	-0.179	0.189		51.426	0.003	14.643	0.004		39.25	0.65417	47.6	12.2	39.7	2.739	0.000	0.000	0.000	0.011	0.01	
57	8/30/2004	8:33:37 AM		24.197	23.622	23.964	24.989	23.712		46.947	48.585	10.91	32.631	-0.176	0.174		49.85	0.003	14.643	0.006		40.25	0.67083	47.5	11.9	39.8	2.743	0.000	0.000	0.000	0.011	0.01	
58	8/30/2004	8:34:37 AM		24.207	23.633	23.919	24.969	23.722		46.916	48.473	10.923	32.679	-0.176	0.186		49.873	0.003	14.643	0.005		41.25	0.6875	47.3	11.9	39.8	2.744	0.000	0.000	0.000	0.011	0.01	
59	8/30/2004	8:35:37 AM		24.221	23.632	23.868	25.004	23.741		46.922	48.477	10.972	32.568	-0.179	0.174		52.228	0.003	14.643	0.005		42.25	0.70417	47.4	12.4	39.7	2.740	0.000	0.000	0.000	0.011	0.01	
60	8/30/2004	8:36:37 AM		24.251	23.656	23.912	24.953	23.745		45.043	46.544	10.697	30.99	-0.187	0.183		51.324	0.003	14.643	0.007		43.25	0.72083	45.4	12.2	38.0	2.621	0.000	0.000	0.000	0.012	0.01	
61	8/30/2004	8:37:37 AM		24.271	23.676	23.958	24.988	23.745		46.7	48.289	10.885	32.461	-0.173	0.18		49.37	0.003	14.643	0.004		44.25	0.7375	47.2	11.8	39.6	2.729	0.000	0.000	0.000	0.011	0.01	
62	8/30/2004	8:38:37 AM		24.295	23.685	24.027	25.012	23.799		44.734	46.154	10.47	31.088	-0.17	0.18		52.088	0.003	14.643	0.004		45.25	0.75417	45.0	12.4	37.9	2.614	0.000	0.000	0.000	0.012	0.01	
63	8/30/2004	8:39:37 AM		24.319	23.7	24.161	25.066	23.784		47.814	49.373	11.147	33.284	-0.173	0.183		48.934	0.003	14.643	0.006		46.25	0.77083	48.2	11.7	40.5	2.796	0.000	0.000	0.000	0.011	0.01	
64	8/30/2004	8:40:37 AM		24.329	23.715	24.307	25.071	23.769		47.752	49.427	11.069	33.19	-0.167	0.195		48.563	0.003	14.643	0.008		47.25	0.7875	48.3	11.6	40.5	2.790	0.000	0.000	0.000	0.011	0.01	
65	8/30/2004	8:41:37 AM		24.345	23.726	24.418	25.047	23.795		47.94	49.51	11.052	33.528	-0.176	0.18		52.465	0.003	14.643	0.006		48.25	0.80417	48.4	12.5	40.7	2.808	0.000	0.000	0.000	0.011	0.01	
66	8/30/2004	8:42:37 AM		24.373	23.749	24.561	25.07	23.817		47.754	49.393	11.025	33.356	-0.17	0.183		51.197	0.003	14.643	0.006		49.25	0.82083	48.3	12.2	40.6	2.796	0.000	0.000	0.000	0.011	0.01	
67	8/30/2004	8:43:37 AM		24.385	23.756	24.658	25.082	23.809		47.982	49.586	10.991	33.608	-0.176	0.186		50.663	0.003	14.643	0.005		50.25	0.8375	48.5	12.1	40.8	2.813	0.000	0.000	0.000	0.011	0.01	
68	8/30/2004	8:44:37 AM		24.352	23.763	24.756	25.099	23.897		47.063	48.962	10.801	33.023	-0.173	0.192		49.871	0.003	14.643	0.005		51.25	0.85417	47.8	11.9	40.0	2.761	0.000	0.000	0.000	0.011	0.01	
69	8/30/2004	8:45:37 AM		24.32	23.781	24.828	25.162	23.839		47.049	49.36	10.901	33.352	-0.176	0.192		51.869	0.003	14.643	0.006		52.25	0.87083	48.2	12.4	40.2	2.772	0.000	0.000	0.000	0.011	0.01	
70	8/30/2004	8:46:37 AM		24.323	23.794	24.907	25.145	23.893		46.147	48.83	10.804	32.867	-0.173	0.192		50.375	0.003	14.643	0.006		53.25	0.8875	47.7	12.0	39.5	2.724	0.000	0.000	0.000	0.011	0.01	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	8/30/2004	8:47:37 AM		24.324	23.805	24.983	25.167	23.889		45.908	48.977	10.786	33.161	-0.173	0.195		50.761	0.003	14.643	0.006		54.25	0.90417	47.9	12.1	39.5	2.726	0.000	0.000	0.000	0.011	0.01	
72	8/30/2004	8:48:37 AM		24.326	23.812	25.045	25.163	23.931		45.423	49.012	10.847	32.99	-0.173	0.192		50.976	0.003	14.643	0.006		55.25	0.92083	47.9	12.1	39.2	2.703	0.000	0.000	0.000	0.011	0.01	
73	8/30/2004	8:49:37 AM		24.355	23.841	25.144	25.222	23.92		44.757	48.745	10.938	32.73	-0.173	0.195		50.067	0.003	14.643	0.005		56.25	0.9375	47.6	11.9	38.7	2.671	0.000	0.000	0.000	0.011	0.01	
74	8/30/2004	8:50:37 AM		24.357	23.853	25.201	25.234	23.917		44.344	48.84	10.797	32.943	-0.173	0.189		50.747	0.003	14.643	0.006		57.25	0.95417	47.7	12.1	38.6	2.664	0.000	0.000	0.000	0.011	0.01	
75	8/30/2004	8:51:37 AM		24.369	23.86	25.233	25.286	23.908		43.637	48.624	10.818	32.672	-0.173	0.192		48.004	0.003	14.643	0.005		58.25	0.97083	47.5	11.4	38.2	2.631	0.000	0.000	0.000	0.011	0.01	
76	8/30/2004	8:52:37 AM		24.375	23.871	25.199	25.403	23.96		43.461	48.72	10.847	32.964	-0.173	0.192		50.803	0.003	14.643	0.006		59.25	0.9875	47.6	12.1	38.2	2.635	0.000	0.000	0.000	0.011	0.01	
77	8/30/2004	8:53:37 AM		24.382	23.883	25.151	25.415	24.012		45.078	50.819	10.806	34.946	-0.176	0.189		52.649	0.003	14.643	0.004		60.25	1.00417	49.7	12.5	40.0	2.759	0.000	0.000	0.000	0.011	0.01	
78	8/30/2004	8:54:37 AM		24.81	23.896	25.149	25.417	24.014		45.116	51.352	10.674	35.203	0.073	0.186		49.606	0.156	14.643	0.003		61.25	1.02083	50.2	11.8	40.2	2.769	0.022	0.022	0.001	0.554	0.47	
79	8/30/2004	8:55:37 AM		25.096	23.902	25.145	25.378	24.026		43.386	51.249	10.605	33.536	1.718	0.319		47.96	0.223	14.643	0.003		62.25	1.0375	50.1	11.4	38.5	2.652	0.032	0.032	0.001	0.827	0.70	
80	8/30/2004	8:56:37 AM		25.22	23.935	25.138	25.427	24.039		43.278	51.166	10.631	33.444	1.718	0.394		53.208	0.223	14.643	0.004		63.25	1.05417	50.0	12.7	38.4	2.645	0.032	0.032	0.001	0.829	0.71	
81	8/30/2004	8:57:37 AM		25.263	23.944	25.111	25.475	24.092		43.32	51.178	10.643	33.436	1.741	0.472		49.099	0.219	14.643	0.003		64.25	1.07083	50.1	11.7	38.4	2.646	0.031	0.031	0.001	0.814	0.69	
82	8/30/2004	8:58:37 AM		25.311	23.952	25.12	25.523	24.085		43.506	51.431	10.49	33.721	1.799	0.55		47.526	0.22	14.643	0.004		65.25	1.0875	50.3	11.3	38.6	2.662	0.031	0.031	0.001	0.813	0.69	
83	8/30/2004	8:59:37 AM		25.36	23.966	25.118	25.537	24.124		43.141	51.18	10.452	33.458	1.912	0.625		51.216	0.219	14.643	0.003		66.25	1.10417	50.1	12.2	38.3	2.641	0.031	0.031	0.001	0.816	0.69	
84	8/30/2004	9:00:37 AM		25.395	23.99	25.098	25.522	24.104		43.353	51.41	10.427	33.838	1.961	0.706		48.229	0.218	14.643	0.003		67.25	1.12083	50.3	11.5	38.6	2.661	0.031	0.031	0.001	0.806	0.69	
85	8/30/2004	9:01:37 AM		25.39	23.986	25.064	25.552	24.17		43.479	51.375	10.399	33.937	2.022	0.773		50.913	0.216	14.643	0.003		68.25	1.1375	50.2	12.1	38.7	2.669	0.031	0.031	0.001	0.797	0.68	
86	8/30/2004	9:02:37 AM		24.852	24.003	25.06	25.574	24.126		48.507	51.785	10.273	39.151	-1.212	-4.922		48.533	0.206	14.643	0.003		69.25	1.15417	50.7	11.6	43.8	3.022	0.029	0.029	0.001	0.672	0.57	
87	8/30/2004	9:03:37 AM		25.014	24.02	25.032	25.561	24.183		45.222	48.108	11.585	34.515	-1.209	-5.223		55.454	0.221	14.643	0.003		70.25	1.17083	47.0	13.2	39.9	2.749	0.032	0.032	0.001	0.793	0.67	
88	8/30/2004	9:04:37 AM		25.125	24.052	25.029	25.603	24.19		45.112	47.862	11.29	34.688	-1.206	-5.578		51.693	0.206	14.643	0.004		71.25	1.1875	46.7	12.3	39.9	2.751	0.029	0.029	0.001	0.739	0.63	
89	8/30/2004	9:05:37 AM		25.146	24.057	24.984	25.643	24.18		45.392	48.127	10.941	35.367	-1.209	-5.656		52.23	0.202	14.643	0.003		72.25	1.20417	47.0	12.4	40.4	2.784	0.029	0.029	0.001	0.717	0.61	
90	8/30/2004	9:06:37 AM		25.177	24.068	24.955	25.659	24.206		44.966	47.644	10.863	34.885	-1.212	-5.625		49.912	0.201	14.643	0.003		73.25	1.22083	46.5	11.9	39.9	2.753	0.029	0.029	0.001	0.722	0.61	
91	8/30/2004	9:07:37 AM		25.198	24.094	24.971	25.69	24.217		45.462	48.148	10.761	35.472	-1.209	-5.613		52.555	0.202	14.643	0.004		74.25	1.2375	47.0	12.5	40.5	2.790	0.029	0.029	0.001	0.715	0.61	
92	8/30/2004	9:08:37 AM		25.199	24.11	24.937	25.701	24.243		45.51	48.224	10.655	35.749	-1.212	-5.616		50.638	0.2	14.643	0.003		75.25	1.25417	47.1	12.1	40.6	2.801	0.029	0.029	0.001	0.706	0.60	
93	8/30/2004	9:09:37 AM		25.139	24.136	24.928	25.752	24.304		45.116	47.744	10.986	35.055	-1.209	-5.61		51.894	0.197	14.643	0.003		76.25	1.27083	46.6	12.4	40.1	2.764	0.028	0.028	0.001	0.705	0.60	
94	8/30/2004	9:10:37 AM		25.07	24.146	24.888	25.787	24.254		45.058	47.555	11.001	34.924	-1.209	-5.625		52.862	0.195	14.643	0.003		77.25	1.2875	46.4	12.6	40.0	2.757	0.028	0.028	0.001	0.700	0.60	
95	8/30/2004	9:11:37 AM		25.086	24.172	24.874	25.818	24.32		45.074	47.744	10.903	35.08	-1.209	-5.628		51.157	0.196	14.643	0.003		78.25	1.30417	46.6	12.2	40.1	2.763	0.028	0.028	0.001	0.703	0.60	
96	8/30/2004	9:12:37 AM		25.075	24.166	24.828	25.762	24.335		45.371	47.988	10.652	35.527	-1.215	-5.622		52.042	0.197	14.643	0.003		79.25	1.32083	46.9	12.4	40.4	2.789	0.028	0.028	0.001	0.701	0.60	
97	8/30/2004	9:13:37 AM		25.085	24.182	24.803	25.727	24.355		45.591	47.982	10.321	36.34	-1.215	-5.622		49.345	0.198	14.643	0.003		80.25	1.3375	46.9	11.8	41.0	2.824	0.028	0.029	0.001	0.696	0.59	
98	8/30/2004	9:14:37 AM		25.111	24.218	24.809	25.769	24.361		45.636	48.208	10.46	36.13	-1.212	-5.451		50.415	0.204	14.643	0.003		81.25	1.35417	47.1	12.0	40.9	2.819	0.029	0.029	0.001	0.718	0.61	
99	8/30/2004	9:15:37 AM		25.137	24.229	24.771	25.795	24.357		46.217	48.633	10.514	36.422	-1.212	-6.654		49.051	0.215	14.643	0.003		82.25	1.37083	47.5	11.7	41.3	2.849	0.031	0.031	0.001	0.750	0.64	
100	8/30/2004	9:16:37 AM		25.147	24.239	24.751	25.815	24.352		45.108	47.14	11.289	34.626	-1.212	-6.911		53.264	0.179	14.643	0.003		83.25	1.3875	46.0	12.7	39.9	2.749	0.026	0.026	0.001	0.647	0.55	
101	8/30/2004	9:17:37 AM		25.169	24.256	24.747	25.831	24.358		44.828	46.941	10.987	34.63	-1.212	-6.923		52.334	0.188	14.643	0.003		84.25	1.40417	45.8	12.5	39.7	2.739	0.027	0.027	0.001	0.682	0.58	
102	8/30/2004	9:18:37 AM		25.201	24.273	24.734	25.853	24.476		9.635	47.232	11.019	-0.666	31.841	22		50.997	0.003	14.643	0.003		85.25	1.42083	46.1	12.1	4.5	0.309	0.000	0.000	0.000	0.096	0.08	
103	8/30/2004	9:19:37 AM		25.212	24.294	24.725	25.925	24.452		7.035	46.873	10.997	-3.145	34.299	21.94		52.467	0.003	14.643	0.003		86.25	1.4375	45.7	12.5	1.9	0.134	0.000	0.000	0.000	0.223	0.19	
104	8/30/2004	9:20:37 AM		25.219	24.311	24.697	25.937	24.574		6.247	47.337	9.787	-2.889	35.182	41.681		50.705	0.003	14.643	0.004		87.25	1.45417	46.2	12.1	1.7	0.116	0.000	0.000	0.000	0.258	0.22	
105	8/30/2004	9:21:37 AM		25.177	24.324	24.66	25.939	24.536		38.846	46.666	9.935	29.812	1.718	0.706		48.187	0.355	14.643	0.003		88.25	1.47083	45.5	11.5	34.3	2.367	0.051	0.051	0.001	1.495	1.27	
106	8/30/2004	9:22:37 AM		25.189	24.331	24.657	25.931	24.493		38.709	46.558	9.9	29.709	1.741	0.79		50.851	0.342	14.643	0.003		89.25	1.4875	45.4	12.1	34.2	2.359	0.049	0.049	0.001	1.445	1.23	
107	8/30/2004	9:23:37 AM		25.175	24.347	24.653	25.948	24.455		44.604	47.65	10	35.529	-1.212	-4.029		50.054	0.315	14.643	0.004		90.25	1.50417	46.5	11.9	40.1	2.762	0.045	0.046	0.001	1.137	0.97	
108	8/30/2004	9:24:37 AM		25.183	24.37	24.666	25.955	24.467		45.58	47.988	9.975	36.545	-1.212	-4.824		50.644	0.358	14.643	0.003		91.25	1.52083	46.9	12.1	41.1	2.831	0.051	0.052	0.001	1.260	1.07	
109	8/30/2004	9:25:37 AM		25.18	24.387	24.688	25.952	24.494		46.016	47.941	9.969	36.758	-1.212	-5.11		49.024	0.337	14.643	0.003		92.25	1.5375	46.8	11.7	41.4	2.853	0.048	0.049	0.001	1.176	1.00	
110	8/30/2004	9:26:37 AM		25.162	24.404	24.66	25.984	24.486		44.425	45.967	9.645	35.55	-1.209	-5.376		49.726	0.313	14.643	0.004		93.25	1.55417	44.8	11.8	40.0	2.757	0.045	0.045	0.001	1.131	0.96	
111	8/30/2004	9:27:37 AM		25.119	24.417	24.607	25.942	24.504		44.467	45.493	9.669	35.726	-1.215	-5.529		53.016	0.312	14.643	0.003		94.25	1.57083	44.4	12.6	40.1	2.765	0.045	0.045	0.001	1.126	0.96	
112	8/30/2004	9:28:37 AM		25.096	24.439	24.599	25.954	24.501		44.879	46.071	9.553	36.171	-1.212	-5.581		51.024	0.309	14.643	0.003		95.25	1.5875	44.9	12.2	40.5	2.794	0.044	0.045	0.001	1.104	0.94	
113	8/30/2004	9:29:37 AM		25.093	24.445	24.58	25.965	24.467		44.817	45.746	9.485	36.163	-1.212	-5.691		49.41	0.303	14.643	0.003		96.25	1.60417	44.6	11.8	40.5	2.792	0.043	0.044	0.001	1.084	0.92	
114	8/30/2004	9:30:37 AM		25.082	24.454	24.55	25.945	24.422		44.863	45.642	9.458	36.342	-1.212	-5.755		49.731	0.301	14.643	0.003		97.25	1.62083	44.5	11.8	40.6	2.799	0.043	0.044	0.001	1.075	0.91	
115	8/30/2004	9:31:37 AM		25.056	24.448	24.503	25.918	24.29		44.769	45.733	9.62	35.985	-1.209	-5.821		52.131	0.294	14.643	0.003		98.25	1.6375	44.6	12.4	40.4	2.784	0.042	0.043	0.001	1.057	0.90	
116	8/30/2004	9:32:37 AM		25.019	24.437	24.442	25.782	24.239		45.29	46.052	9.537	36.537	-1.215	-5.801		49.507	0.297	14.643	0.003		99.25	1.65417	44.9	11.8	40.9	2.821	0.043	0.043	0.001	1.056	0.90	
117	8/30/2004	9:33:37 AM		25.007	24.44	24.42	25.83	24.227		44.838	45.648	9.461	36.237	-1.215	-5.862		48.458	0.293	14.643	0.003		100.25	1.67083	44.5	11.5	40.5	2.795	0.042	0.043	0.001	1.052	0.90	
118	8/30/2004	9:34:37 AM		25.006	24.433	24.378	25.743	24.175		44.317	44.852	9.629	35.695	-1.215	-5.919		51.554	0.284	14.643	0.003		101.25	1.6875	43.7	12.3	40.0	2.758	0.041	0.041	0.001	1.034	0.88	
119	8/30/2004	9:35:37 AM		25.135	24.433	24.338	25.708	24.125		44.589	45.281	9.869	35.609	-1.212	-6.021		50.73	0.276	14.643	0.004		102.25	1.70417	44.2	12.1	40.1	2.765	0.040	0.040	0.001	1.004	0.85	
120	8/30/2004	9:36:37 AM		25.135	24.427	24.352	25.692	24.164		44.299	44.804	9.898	35.349	-1.212	-6.024		52.198	0.274	14.643	0.004		103.25	1.72083	43.7	12.4	39.8	2.746	0.039	0.040	0.001	1.003	0.85	
121	8/30/2004	9:37:37 AM		25.096	24.433	24.313	25.779	24.311		44.581	45.103	9.772	35.663	-1.212	-6.139		54.9	0.272	14.643	0.003		104.25	1.7375	44.0	13.1	40.1	2.766	0.039	0.040	0.001	0.990	0.84	
122	8/30/2004	9:38:37 AM		25.064	24.446	24.306	25.896	24.353		44.251	45.086	9.728	35.31	-1.209	-6.116		51.804	0.273	14.643	0.004		105.25	1.75417	44.0	12.3	39.8	2.743	0.039	0.040	0.001	1.002	0.85	
123	8/30/2004	9:39:37 AM		25.002	24.439	24.264	25.88	24.412		44.604	45.302	9.62	35.913	-1.215	-6.154		50.953	0.27	14.643	0.003		106.25	1.77083	44.2	12.1	40.3	2.776	0.039	0.039	0.001	0.980	0.83	
124	8/30/2004	9:40:37 AM		24.964	24.442	24.242	25.892	24.449		44.272	45.047	9.655	35.507	-1.212	-6.185		51.823	0.267	14.643	0.003		107.25	1.7875	43.9	12.3	39.9	2.750	0.038	0.039	0.001	0.979	0.83	
125	8/30/2004	9:41:37 AM		24.884	24.447	24.226	25.907	24.444		44.626	45.41	9.768	35.738	-1.209	-6.209		50.792	0.265	14.643	0.003		108.25	1.80417	44.3	12.1	40.2	2.770	0.038	0.039	0.001	0.965	0.82	
126	8/30/2004	9:42:37 AM		24.855	24.448	24.177	25.928	24.46		44.388	45.238	9.646	35.65	-1.212	-6.226		47.879	0.263	14.643	0.003		109.25	1.82083	44.1	11.4	40.0	2.759	0.038	0.039	0.001	0.963	0.82	
127	8/30/2004	9:43:37 AM		24.84	24.452	24.187	25.953	24.415		44.626	45.694	9.838	35.414	-1.215	-6.24		50.989	0.263	14.643	0.003		110.25	1.8375	44.6	12.1	40.0	2.759	0.038	0.039	0.001	0.963	0.82	
128	8/30/2004	9:44:37 AM		24.791	24.439	24.138	26.029	24.461		44.556	45.503	9.702	35.784	-1.212	-6.258		50.442	0.261	14.643	0.003		111.25	1.85417	44.4	12.0	40.2	2.770	0.037	0.038	0.001	0.953	0.81	
129	8/30/2004	9:45:37 AM		24.782	24.445	24.12	26.041	24.422		44.487	45.517	9.787	35.593	-1.212	-6.269		51.963	0.261	14.643	0.003		112.25	1.87083	44.4	12.4	40.0	2.761	0.037	0.038	0.001	0.957	0.81	
130	8/30/2004	9:46:37 AM		24.773	24.456	24.09	26.051	24.458		44.541	45.918	9.773	35.429	-1.209	-6.278		51.564	0.258	14.643	0.003		113.25	1.8875	44.8	12.3	40.0	2.757	0.037	0.038	0.001	0.948	0.81	
131	8/30/2004	9:47:37 AM		24.764	24.467	24.081	26.167	24.534		44.243	45.335	9.736	35.394	-1.212	-6.272		52.488	0.258	14.643	0.003		114.25	1.90417	44.2	12.5	39.8	2.745	0.037	0.038	0.001	0.952	0.81	
132	8/30/2004	9:48:37 AM		24.764	24.482	24.051	26.183	24.58		44.572	45.687	9.644	35.814	-1.212	-6.237		49.737	0.255	14.643	0.003		115.25	1.92083	44.6	11.8	40.2	2.771	0.037	0.037	0.001	0.933	0.79	
133	8/30/2004	9:49:37 AM		24.757	24.51	24.099	26.245	24.642		44.377	45.77	9.705	35.437	-1.212	-6.301		50.44	0.257	14.643	0.003		116.25	1.9375	44.6	12.0	39.9	2.751	0.037	0.038	0.001	0.946	0.80	
134	8/30/2004	9:50:37 AM		24.771	24.544	24.113	26.314	24.736		44.543	45.847	9.665	35.658	-1.212	-6.269		52.703	0.259	14.643	0.003		117.25	1.95417	44.7	12.6	40.1	2.765	0.037	0.038	0.001	0.948	0.81	
135	8/30/2004	9:51:37 AM		24.77	24.573	24.112	26.323	24.745		44.502	45.729	9.634	35.675	-1.212	-6.246		49.017	0.251	14.643	0.003		118.25	1.97083	44.6	11.7	40.1	2.764	0.036	0.037	0.001	0.919	0.78	
136	8/30/2004	9:52:37 AM		24.774	24.598	24.167	26.303	24.78		44.825	46.131	9.623	36.12	-1.206	-6.272		51.533	0.258	14.643	0.004		119.25	1.9875	45.0	12.3	40.5	2.790	0.037	0.038	0.001	0.934	0.80	
137	8/30/2004	9:53:37 AM		24.778	24.612	24.201	26.302	24.789		44.218	45.58	9.743	35.24	-1.209	-6.255		48.767	0.257	14.643	0.003		120.25	2.00417	44.5	11.6	39.7	2.739	0.037	0.038	0.001	0.947	0.81	
138	8/30/2004	9:54:37 AM		24.767	24.62	24.3	26.325	24.822		44.321	45.752	9.766	35.357	-1.212	-6.258		53.427	0.252	14.643	0.003		121.25	2.02083	44.6	12.7	39.8	2.747	0.036	0.037	0.001	0.924	0.79	
139	8/30/2004	9:55:37 AM		24.812	24.65	24.37	26.36	24.857		44.743	46.015	9.681	35.94	-1.209	-6.246		51.96	0.256	14.643	0.003		122.25	2.0375	44.9	12.4	40.3	2.781	0.037	0.037	0.001	0.925	0.79	
140	8/30/2004	9:56:37 AM		24.82	24.653	24.388	26.348	24.865		44.614	45.998	9.488	35.874	-1.212	-6.237		47.486	0.26	14.643	0.003		123.25	2.05417	44.9	11.3	40.2	2.775	0.037	0.038	0.001	0.941	0.80	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	8/30/2004	9:57:37 AM		24.859	24.663	24.437	26.388	24.9		44.575	45.984	9.435	35.989	-1.212	-6.168		49.407	0.259	14.643	0.003		124.25	2.07083	44.9	11.8	40.3	2.777	0.037	0.038	0.001	0.935	0.80	
142	8/30/2004	9:58:37 AM		24.888	24.686	24.486	26.476	24.928		44.886	46.344	9.483	36.132	-1.209	-6.168		50.82	0.258	14.643	0.004		125.25	2.0875	45.2	12.1	40.5	2.793	0.037	0.037	0.001	0.925	0.79	
143	8/30/2004	9:59:37 AM		24.922	24.7	24.515	26.455	24.907		45.139	46.55	9.585	36.403	-1.212	-6.183		48.869	0.259	14.643	0.003		126.25	2.10417	45.4	11.6	40.8	2.811	0.037	0.038	0.001	0.922	0.78	
144	8/30/2004	10:00:08 AM		24.948	24.707	24.542	26.472	24.929		44.51	45.524	9.312	36.274	-1.212	-6.165		49.752	0.259	14.643	0.003		126.77	2.11278	44.4	11.9	40.4	2.785	0.037	0.038	0.001	0.930	0.79	
145	8/30/2004	10:01:08 AM		24.972	24.725	24.585	26.47	24.947		44.736	46.4	9.809	35.572	-1.212	-6.223		50.033	0.252	14.643	0.003		127.77	2.12944	45.3	11.9	40.2	2.768	0.036	0.037	0.001	0.909	0.77	
146	8/30/2004	10:02:08 AM		24.997	24.73	24.645	26.44	24.942		44.487	45.897	9.529	35.798	-1.212	-6.183		49.699	0.255	14.643	0.003		128.77	2.14611	44.8	11.8	40.1	2.768	0.037	0.037	0.001	0.919	0.78	
147	8/30/2004	10:03:08 AM		25.019	24.728	24.657	26.372	24.869		44.614	46.003	9.495	35.896	-1.212	-6.174		49.806	0.254	14.643	0.003		129.77	2.16278	44.9	11.9	40.3	2.775	0.036	0.037	0.001	0.912	0.78	
148	8/30/2004	10:04:08 AM		25.06	24.733	24.673	26.278	24.795		44.574	46.117	9.556	35.892	-1.218	-6.133		48.077	0.247	14.643	0.003		130.77	2.17944	45.0	11.5	40.2	2.774	0.035	0.036	0.001	0.887	0.75	
149	8/30/2004	10:05:08 AM		25.09	24.748	24.693	26.273	24.75		44.454	45.617	9.423	36.054	-1.212	-6.214		49.695	0.256	14.643	0.003		131.77	2.19611	44.5	11.8	40.3	2.775	0.037	0.037	0.001	0.918	0.78	
150	8/30/2004	10:06:08 AM		25.132	24.775	24.745	26.24	24.697		44.861	46.253	9.522	36.252	-1.212	-6.151		48.942	0.254	14.643	0.004		132.77	2.21278	45.1	11.7	40.6	2.796	0.036	0.037	0.001	0.903	0.77	
151	8/30/2004	10:07:08 AM		25.158	24.766	24.751	26.171	24.678		44.701	46.259	9.539	35.929	-1.212	-6.09		48.892	0.24	14.643	0.003		133.77	2.22944	45.1	11.6	40.3	2.780	0.034	0.035	0.001	0.858	0.73	
152	8/30/2004	10:08:08 AM		25.19	24.778	24.793	26.138	24.59		44.676	46.191	9.552	35.87	-1.212	-6.154		48.504	0.253	14.643	0.003		134.77	2.24611	45.1	11.6	40.3	2.777	0.036	0.036	0.001	0.905	0.77	
153	8/30/2004	10:09:08 AM		25.217	24.786	24.846	26.065	24.562		44.546	45.882	9.534	35.919	-1.212	-6.148		50.119	0.252	14.643	0.003		135.77	2.26278	44.8	11.9	40.2	2.774	0.036	0.036	0.001	0.901	0.77	
154	8/30/2004	10:10:08 AM		25.226	24.765	24.845	26.039	24.481		44.784	45.895	9.566	36.264	-1.212	-6.145		48.734	0.253	14.643	0.003		136.77	2.27944	44.8	11.6	40.5	2.794	0.036	0.036	0.001	0.898	0.76	
155	8/30/2004	10:11:08 AM		25.24	24.753	24.859	26.068	24.425		45.018	46.591	9.589	36.169	-1.209	-6.177		49.487	0.255	14.643	0.003		137.77	2.29611	45.5	11.8	40.6	2.799	0.037	0.037	0.001	0.903	0.77	
156	8/30/2004	10:12:08 AM		25.266	24.74	24.86	26.074	24.501		44.371	45.93	9.553	35.632	-1.212	-6.058		50.749	0.262	14.643	0.003		138.77	2.31278	44.8	12.1	40.0	2.758	0.038	0.038	0.001	0.941	0.80	
157	8/30/2004	10:13:08 AM		25.293	24.741	24.876	26.131	24.563		44.29	45.731	9.428	35.761	-1.212	-6.081		49.799	0.258	14.643	0.004		139.77	2.32944	44.6	11.9	40.0	2.760	0.037	0.037	0.001	0.926	0.79	
158	8/30/2004	10:14:08 AM		25.3	24.748	24.898	26.233	24.605		44.761	46.411	9.497	36.13	-1.212	-6.145		49.115	0.257	14.643	0.003		140.77	2.34611	45.3	11.7	40.4	2.789	0.037	0.037	0.001	0.912	0.78	
159	8/30/2004	10:15:08 AM		25.311	24.745	24.935	26.259	24.621		44.724	46.141	9.48	36.143	-1.212	-6.116		50.657	0.253	14.643	0.003		141.77	2.36278	45.0	12.1	40.4	2.788	0.036	0.036	0.001	0.897	0.76	
160	8/30/2004	10:16:08 AM		25.338	24.747	24.962	26.311	24.648		44.815	46.394	9.539	36.102	-1.212	-6.052		49.295	0.253	14.643	0.003		142.77	2.37944	45.3	11.7	40.5	2.789	0.036	0.036	0.001	0.896	0.76	
161	8/30/2004	10:17:08 AM		25.366	24.759	24.975	26.359	24.716		44.78	45.93	9.453	36.301	-1.212	-6.148		47.945	0.252	14.643	0.003		143.77	2.39611	44.8	11.4	40.5	2.795	0.036	0.036	0.001	0.891	0.76	
162	8/30/2004	10:18:08 AM		25.383	24.767	24.972	26.376	24.788		44.85	46.396	9.434	36.198	-1.215	-6.107		50.425	0.249	14.643	0.003		144.77	2.41278	45.3	12.0	40.5	2.794	0.036	0.036	0.001	0.880	0.75	
163	8/30/2004	10:19:08 AM		25.4	24.779	24.999	26.358	24.835		44.726	46.313	9.591	35.917	-1.212	-6.11		48.909	0.255	14.643	0.003		145.77	2.42944	45.2	11.6	40.3	2.780	0.037	0.037	0.001	0.905	0.77	
164	8/30/2004	10:20:08 AM		25.428	24.801	25.037	26.381	24.858		44.479	46.023	9.462	35.81	-1.206	-6.11		48.815	0.255	14.643	0.003		146.77	2.44611	44.9	11.6	40.1	2.768	0.037	0.036	0.001	0.908	0.77	
165	8/30/2004	10:21:08 AM		25.452	24.816	25.041	26.39	24.872		44.883	46.425	9.546	36.256	-1.212	-6.145		49.303	0.254	14.643	0.003		147.77	2.46278	45.3	11.7	40.6	2.797	0.036	0.036	0.001	0.895	0.76	
166	8/30/2004	10:22:08 AM		25.465	24.818	25.069	26.393	24.87		44.857	46.432	9.686	35.845	-1.212	-6.076		50.119	0.248	14.643	0.003		148.77	2.47944	45.3	11.9	40.4	2.782	0.036	0.035	0.001	0.878	0.75	
167	8/30/2004	10:23:08 AM		25.483	24.826	25.097	26.406	24.898		44.442	45.841	9.669	35.685	-1.212	-6.154		50.363	0.249	14.643	0.003		149.77	2.49611	44.7	12.0	40.1	2.762	0.036	0.036	0.001	0.887	0.76	
168	8/30/2004	10:24:08 AM		25.51	24.843	25.094	26.453	24.94		44.85	46.318	9.822	35.784	-1.212	-6.133		50.847	0.25	14.643	0.003		150.77	2.51278	45.2	12.1	40.3	2.780	0.036	0.036	0.001	0.885	0.75	
169	8/30/2004	10:25:08 AM		25.538	24.866	25.067	26.551	24.938		44.745	46.332	9.709	35.78	-1.212	-6.102		47.192	0.244	14.643	0.003		151.77	2.52944	45.2	11.2	40.3	2.776	0.035	0.035	0.001	0.866	0.74	
170	8/30/2004	10:26:08 AM		25.535	24.873	25.029	26.533	24.915		44.664	46.044	9.603	36.015	-1.215	-6.168		49.441	0.25	14.643	0.003		152.77	2.54611	44.9	11.8	40.3	2.781	0.036	0.036	0.001	0.887	0.75	
171	8/30/2004	10:27:08 AM		25.533	24.881	25.016	26.591	24.868		44.869	46.353	9.785	35.821	-1.212	-6.188		49.253	0.244	14.643	0.003		153.77	2.56278	45.2	11.7	40.3	2.782	0.035	0.035	0.001	0.865	0.74	
172	8/30/2004	10:28:08 AM		25.508	24.882	25.002	26.576	24.803		44.56	45.843	9.447	36.159	-1.212	-6.064		48.027	0.252	14.643	0.003		154.77	2.57944	44.7	11.4	40.4	2.783	0.036	0.036	0.001	0.894	0.76	
173	8/30/2004	10:29:08 AM		25.513	24.887	24.992	26.551	24.758		44.94	46.517	9.62	36.132	-1.209	-6.087		50.263	0.25	14.643	0.003		155.77	2.59611	45.4	12.0	40.5	2.795	0.036	0.036	0.001	0.883	0.75	
174	8/30/2004	10:30:08 AM		25.518	24.897	24.962	26.501	24.693		44.701	46.237	9.583	36.022	-1.209	-6.087		49.376	0.245	14.643	0.003		156.77	2.61278	45.1	11.8	40.4	2.783	0.035	0.035	0.001	0.870	0.74	
175	8/30/2004	10:31:08 AM		25.486	24.875	24.92	26.399	24.581		45.023	46.4	9.737	36.091	-1.212	-6.174		50.884	0.251	14.643	0.003		157.77	2.62944	45.3	12.1	40.6	2.796	0.036	0.036	0.001	0.888	0.76	
176	8/30/2004	10:32:08 AM		25.495	24.878	24.923	26.388	24.535		44.444	46.036	9.681	35.507	-1.212	-6.154		49.847	0.239	14.643	0.003		158.77	2.64611	44.9	11.9	40.0	2.756	0.034	0.034	0.001	0.858	0.73	
177	8/30/2004	10:33:08 AM		25.49	24.883	24.948	26.348	24.455		44.772	46.011	9.778	35.796	-1.212	-6.168		52.711	0.247	14.643	0.003		159.77	2.66278	44.9	12.6	40.3	2.777	0.035	0.035	0.001	0.879	0.75	
178	8/30/2004	10:34:08 AM		25.483	24.872	24.927	26.301	24.443		44.546	45.988	9.661	35.792	-1.212	-6.119		50.997	0.246	14.643	0.003		160.77	2.67944	44.9	12.1	40.2	2.770	0.035	0.035	0.001	0.879	0.75	
179	8/30/2004	10:35:08 AM		25.481	24.86	24.92	26.334	24.446		44.577	45.88	9.677	35.839	-1.215	-6.139		48.108	0.239	14.643	0.003		161.77	2.69611	44.8	11.5	40.2	2.772	0.034	0.034	0.001	0.853	0.73	
180	8/30/2004	10:36:08 AM		25.49	24.873	24.924	26.318	24.47		44.722	46.512	9.753	35.671	-1.209	-6.136		48.465	0.241	14.643	0.004		162.77	2.71278	45.4	11.5	40.2	2.771	0.035	0.035	0.001	0.860	0.73	
181	8/30/2004	10:37:08 AM		25.493	24.872	24.907	26.276	24.423		44.633	46.071	9.684	35.866	-1.212	-6.084		51.149	0.247	14.643	0.003		163.77	2.72944	44.9	12.2	40.2	2.775	0.035	0.035	0.001	0.881	0.75	
182	8/30/2004	10:38:08 AM		25.482	24.871	24.896	26.25	24.512		44.815	46.417	9.827	35.712	-1.215	-6.093		50.584	0.243	14.643	0.003		164.77	2.74611	45.3	12.0	40.3	2.776	0.035	0.035	0.001	0.867	0.74	
183	8/30/2004	10:39:08 AM		25.481	24.885	24.945	26.269	24.576		44.778	46.17	9.733	35.907	-1.212	-6.081		51.251	0.246	14.643	0.003		165.77	2.76278	45.0	12.2	40.3	2.781	0.035	0.035	0.001	0.874	0.74	
184	8/30/2004	10:40:08 AM		25.5	24.899	24.979	26.313	24.655		44.448	46.034	9.74	35.515	-1.209	-6.102		50.715	0.232	14.643	0.003		166.77	2.77944	44.9	12.1	40.0	2.757	0.033	0.033	0.001	0.831	0.71	
185	8/30/2004	10:41:08 AM		25.494	24.898	24.938	26.342	24.689		45.217	46.595	9.683	36.403	-1.215	-6.052		53.331	0.241	14.643	0.003		167.77	2.79611	45.5	12.7	40.8	2.814	0.035	0.035	0.001	0.847	0.72	
186	8/30/2004	10:42:08 AM		25.496	24.924	24.944	26.389	24.721		45.081	47.008	9.805	35.894	-1.215	-6.142		49.274	0.246	14.643	0.003		168.77	2.81278	45.9	11.7	40.5	2.791	0.035	0.035	0.001	0.871	0.74	
187	8/30/2004	10:43:08 AM		25.517	24.941	24.976	26.5	24.837		44.738	46.123	9.786	35.857	-1.206	-6.18		53.222	0.235	14.643	0.003		169.77	2.82944	45.0	12.7	40.3	2.778	0.034	0.034	0.001	0.835	0.71	
188	8/30/2004	10:44:08 AM		25.508	24.942	24.952	26.536	24.898		44.686	45.992	9.823	35.78	-1.215	-6.064		52.615	0.234	14.643	0.003		170.77	2.84611	44.9	12.5	40.2	2.774	0.034	0.034	0.001	0.834	0.71	
189	8/30/2004	10:45:08 AM		25.506	24.964	24.959	26.599	24.941		44.651	46.038	9.816	35.714	-1.215	-6.105		47.102	0.241	14.643	0.003		171.77	2.86278	44.9	11.2	40.2	2.770	0.035	0.035	0.001	0.860	0.73	
190	8/30/2004	10:46:08 AM		25.507	24.981	25.001	26.67	24.952		44.498	46.042	9.896	35.443	-1.209	-6.145		51.383	0.24	14.643	0.004		172.77	2.87944	44.9	12.2	40.0	2.756	0.034	0.034	0.001	0.860	0.73	
191	8/30/2004	10:47:08 AM		25.519	24.998	24.993	26.692	24.989		45.058	46.492	9.887	36.087	-1.212	-6.041		48.098	0.241	14.643	0.003		173.77	2.89611	45.4	11.5	40.6	2.797	0.035	0.035	0.001	0.851	0.72	
192	8/30/2004	10:48:08 AM		25.515	25.004	24.969	26.713	24.995		45.093	46.419	9.731	36.33	-1.215	-6.055		45.534	0.24	14.643	0.003		174.77	2.91278	45.3	10.8	40.7	2.807	0.034	0.034	0.001	0.845	0.72	
193	8/30/2004	10:49:08 AM		25.541	25.025	24.995	26.749	25.106		44.108	45.58	10.21	34.714	-1.212	-6.174		53.162	0.231	14.643	0.003		175.77	2.92944	44.5	12.7	39.4	2.717	0.033	0.033	0.001	0.839	0.71	
194	8/30/2004	10:50:08 AM		25.539	25.043	24.993	26.747	25.129		44.106	45.285	10.229	34.876	-1.215	-6.162		53.998	0.237	14.643	0.003		176.77	2.94611	44.2	12.9	39.5	2.723	0.034	0.034	0.001	0.859	0.73	
195	8/30/2004	10:51:08 AM		25.552	25.056	25.011	26.805	25.122		44.122	45.408	10.115	34.993	-1.212	-6.073		49.045	0.233	14.643	0.003		177.77	2.96278	44.3	11.7	39.6	2.727	0.033	0.033	0.001	0.843	0.72	
196	8/30/2004	10:52:08 AM		25.554	25.083	25.018	26.812	25.044		44.278	45.677	10.22	34.901	-1.215	-6.168		53.832	0.233	14.643	0.003		178.77	2.97944	44.6	12.8	39.6	2.730	0.033	0.033	0.001	0.842	0.72	
197	8/30/2004	10:53:08 AM		25.546	25.095	25.07	26.789	25.001		44.259	45.596	10.097	35.002	-1.209	-6.105		52.547	0.238	14.643	0.003		179.77	2.99611	44.5	12.5	39.6	2.732	0.034	0.034	0.001	0.858	0.73	
198	8/30/2004	10:54:08 AM		25.557	25.107	25.061	26.71	24.977		44.477	46.063	10.169	35.172	-1.212	-6.148		48.212	0.229	14.643	0.003		180.77	3.01278	44.9	11.5	39.8	2.746	0.033	0.033	0.001	0.822	0.70	
199	8/30/2004	10:55:08 AM		25.567	25.112	25.016	26.705	24.887		44.315	45.762	10.186	34.897	-1.209	-6.096		53.366	0.228	14.643	0.004		181.77	3.02944	44.6	12.7	39.6	2.731	0.033	0.033	0.001	0.824	0.70	
200	8/30/2004	10:56:08 AM		25.557	25.127	24.951	26.68	24.887		44.239	45.712	10.119	35.026	-1.212	-6.133		50.615	0.226	14.643	0.003		182.77	3.04611	44.6	12.1	39.6	2.733	0.032	0.032	0.001	0.818	0.70	
201	8/30/2004	10:57:08 AM		25.562	25.132	24.931	26.65	24.898		44.131	45.656	10.176	34.928	-1.212	-6.05		51.013	0.233	14.643	0.004		183.77	3.06278	44.5	12.2	39.5	2.725	0.033	0.033	0.001	0.846	0.72	
202	8/30/2004	10:58:08 AM		25.53	25.134	24.864	26.603	24.895		44.581	45.891	10.006	35.543	-1.215	-6.099		48.584	0.232	14.643	0.003		184.77	3.07944	44.8	11.6	40.1	2.762	0.033	0.033	0.001	0.832	0.71	
203	8/30/2004	10:59:08 AM		25.525	25.15	24.914	26.608	24.83		44.873	46.307	10.086	35.663	-1.215	-6.157		47.369	0.23	14.643	0.003		185.77	3.09611	45.2	11.3	40.3	2.776	0.033	0.033	0.001	0.820	0.70	
204	8/30/2004	11:00:08 AM		25.525	25.165	24.884	26.588	24.8		44.786	46.172	10.042	35.605	-1.212	-6.139		47.036	0.233	14.643	0.003		186.77	3.11278	45.0	11.2	40.2	2.771	0.033	0.033	0.001	0.833	0.71	
205	8/30/2004	11:01:08 AM		25.521	25.171	24.85	26.559	24.766		44.726	46.336	10.012	35.515	-1.212	-6.084		50.236	0.236	14.643	0.003		187.77	3.12944	45.2	12.0	40.1	2.766	0.034	0.034	0.001	0.846	0.72	
206	8/30/2004	11:02:08 AM		25.516	25.186	24.83	26.579	24.751		44.693	46.204	10.034	35.539	-1.215	-6.122		51.041	0.228	14.643	0.003		188.77	3.14611	45.1	12.2	40.1	2.766	0.033	0.033	0.001	0.818	0.70	
207	8/30/2004	11:03:08 AM		25.502	25.186	24.806	26.52	24.707		44.894	46.255	9.985	35.894	-1.212	-6.07		51.739	0.235	14.643	0.003		189.77	3.16278	45.1	12.3	40.4	2.785	0.034	0.034	0.001	0.837	0.71	
208	8/30/2004	11:04:08 AM		25.472	25.186	24.775	26.465	24.757		44.875	46.344	10.004	35.755	-1.212	-6.058		49.047	0.234	14.643	0.004		190.77	3.17944	45.2	11.7	40.3	2.780	0.034	0.034	0.001	0.836	0.71	
209	8/30/2004	11:05:08 AM		25.462	25.207	24.776	26.46	24.832		45.025	46.759	9.945	35.833	-1.212	-6.029		49.191	0.238	14.643	0.004		191.77	3.19611	45.6	11.7	40.4	2.787	0.034	0.034	0.001	0.848	0.72	
210	8/30/2004	11:06:08 AM		25.448	25.203	24.827	26.501	24.898		44.881	46.429	9.889	35.767	-1.215	-6.136		49.295	0.227	14.643	0.003		192.77	3.21278	45.3	11.7	40.3	2.780	0.032	0.033	0.001	0.810	0.69	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	8/30/2004	11:07:08 AM		25.455	25.219	24.828	26.573	24.96		44.807	46.587	9.823	35.773	-1.212	-6.012		47.828	0.224	14.643	0.003		193.77	3.22944	45.5	11.4	40.3	2.778	0.032	0.032	0.001	0.800	0.68	
212	8/30/2004	11:08:08 AM		25.451	25.211	24.82	26.659	24.981		45.222	46.819	9.997	36.061	-1.212	-5.969		46.566	0.221	14.643	0.003		194.77	3.24611	45.7	11.1	40.6	2.802	0.032	0.032	0.001	0.782	0.67	
213	8/30/2004	11:09:08 AM		25.464	25.234	24.833	26.682	25.024		45.022	46.429	9.867	36.145	-1.212	-6.012		50.692	0.223	14.643	0.003		195.77	3.26278	45.3	12.1	40.6	2.798	0.032	0.032	0.001	0.790	0.67	
214	8/30/2004	11:10:08 AM		25.452	25.242	24.841	26.755	25.072		44.463	46.038	9.761	35.5	-1.212	-6.029		49.199	0.233	14.643	0.003		196.77	3.27944	44.9	11.7	40.0	2.757	0.033	0.034	0.001	0.838	0.71	
215	8/30/2004	11:11:08 AM		25.457	25.252	24.831	26.79	25.152		44.859	46.214	9.86	35.925	-1.215	-5.983		47.255	0.232	14.643	0.003		197.77	3.29611	45.1	11.3	40.4	2.785	0.033	0.033	0.001	0.826	0.70	
216	8/30/2004	11:12:08 AM		25.462	25.262	24.846	26.815	25.167		45.11	46.473	9.936	36.137	-1.212	-6.125		52.878	0.231	14.643	0.003		198.77	3.31278	45.3	12.6	40.6	2.801	0.033	0.033	0.001	0.818	0.70	
217	8/30/2004	11:13:08 AM		25.467	25.272	24.911	26.83	25.182		44.915	46.577	9.844	35.929	-1.212	-5.96		49.998	0.231	14.643	0.003		199.77	3.32944	45.5	11.9	40.4	2.787	0.033	0.033	0.001	0.820	0.70	
218	8/30/2004	11:14:08 AM		25.464	25.283	24.902	26.877	25.259		45.213	46.861	10.003	35.886	-1.215	-6.087		50.3	0.234	14.643	0.003		200.77	3.34611	45.7	12.0	40.5	2.796	0.034	0.034	0.001	0.828	0.71	
219	8/30/2004	11:15:08 AM		25.474	25.288	24.892	26.917	25.239		45.184	46.384	9.843	36.387	-1.212	-6.021		50.021	0.225	14.643	0.004		201.77	3.36278	45.3	11.9	40.8	2.812	0.032	0.032	0.001	0.792	0.67	
220	8/30/2004	11:16:08 AM		25.489	25.298	24.887	26.927	25.199		45.195	46.912	9.875	36.21	-1.212	-5.972		48.702	0.228	14.643	0.003		202.77	3.37944	45.8	11.6	40.7	2.806	0.033	0.033	0.001	0.805	0.68	
221	8/30/2004	11:17:08 AM		25.49	25.31	24.889	26.948	25.19		45.143	46.734	9.952	36.003	-1.212	-5.948		49.545	0.227	14.643	0.003		203.77	3.39611	45.6	11.8	40.6	2.797	0.032	0.033	0.001	0.803	0.68	
222	8/30/2004	11:18:08 AM		25.481	25.315	24.874	26.889	25.136		45.193	46.628	9.934	36.104	-1.212	-5.986		45.709	0.229	14.643	0.003		204.77	3.41278	45.5	10.9	40.6	2.803	0.033	0.033	0.001	0.809	0.69	
223	8/30/2004	11:19:08 AM		25.476	25.321	24.87	26.849	25.081		45.344	46.885	9.981	36.128	-1.209	-6.076		48.385	0.232	14.643	0.004		205.77	3.42944	45.8	11.5	40.7	2.809	0.033	0.033	0.001	0.818	0.70	
224	8/30/2004	11:20:08 AM		25.478	25.332	24.906	26.826	25.073		45.261	46.817	9.859	36.204	-1.215	-5.948		49.072	0.217	14.643	0.003		206.77	3.44611	45.7	11.7	40.7	2.808	0.031	0.031	0.001	0.765	0.65	
225	8/30/2004	11:21:08 AM		25.474	25.339	24.918	26.802	25.024		45.263	46.631	9.811	36.332	-1.218	-6.076		50.63	0.228	14.643	0.003		207.77	3.46278	45.5	12.1	40.8	2.813	0.033	0.033	0.001	0.802	0.68	
226	8/30/2004	11:22:08 AM		25.495	25.34	24.898	26.778	24.98		45.103	46.78	9.772	36.223	-1.218	-6.003		47.211	0.228	14.643	0.003		208.77	3.47944	45.7	11.2	40.7	2.804	0.033	0.033	0.001	0.805	0.69	
227	8/30/2004	11:23:08 AM		25.504	25.354	24.923	26.747	24.934		45.302	46.782	9.892	36.202	-1.212	-6.026		49.808	0.231	14.643	0.003		209.77	3.49611	45.7	11.9	40.8	2.810	0.033	0.033	0.001	0.813	0.69	
228	8/30/2004	11:24:08 AM		25.499	25.353	24.917	26.712	24.939		44.543	45.926	10.327	35.076	-1.212	-6.107		45.718	0.222	14.643	0.003		210.77	3.51278	44.8	10.9	39.8	2.745	0.032	0.032	0.001	0.800	0.68	
229	8/30/2004	11:25:08 AM		25.488	25.332	24.896	26.656	24.928		44.348	45.835	10.184	35.067	-1.218	-6.168		50.419	0.22	14.643	0.003		211.77	3.52944	44.7	12.0	39.7	2.738	0.031	0.032	0.001	0.796	0.68	
230	8/30/2004	11:26:08 AM		25.507	25.352	24.916	26.72	24.937		44.713	46.378	10.336	35.141	-1.212	-5.998		48.569	0.223	14.643	0.003		212.77	3.54611	45.3	11.6	39.9	2.753	0.032	0.032	0.001	0.801	0.68	
231	8/30/2004	11:27:08 AM		25.511	25.351	24.905	26.694	24.901		45.012	46.315	10.334	35.626	-1.215	-6.113		47.678	0.215	14.643	0.003		213.77	3.56278	45.2	11.4	40.3	2.780	0.031	0.031	0.001	0.765	0.65	
232	8/30/2004	11:28:08 AM		25.511	25.36	24.999	26.689	24.871		44.709	46.187	10.152	35.42	-1.206	-6.084		48.953	0.224	14.643	0.004		214.77	3.57944	45.1	11.7	40.1	2.762	0.032	0.032	0.001	0.800	0.68	
233	8/30/2004	11:29:08 AM		25.52	25.35	24.979	26.678	24.845		44.977	46.473	10.16	35.663	-1.215	-6.047		51.068	0.219	14.643	0.003		215.77	3.59611	45.3	12.2	40.3	2.780	0.031	0.031	0.001	0.778	0.66	
234	8/30/2004	11:30:08 AM		25.535	25.36	24.984	26.623	24.81		45.045	46.531	10.18	35.683	-1.212	-6.047		51.262	0.226	14.643	0.003		216.77	3.61278	45.4	12.2	40.4	2.783	0.032	0.032	0.001	0.802	0.68	
235	8/30/2004	11:31:08 AM		25.539	25.354	24.973	26.547	24.834		45.105	46.543	10.165	35.786	-1.215	-6.064		48.867	0.225	14.643	0.003		217.77	3.62944	45.4	11.6	40.4	2.789	0.032	0.032	0.001	0.797	0.68	
236	8/30/2004	11:32:08 AM		25.55	25.355	24.969	26.573	24.91		44.854	46.51	10.017	35.78	-1.212	-6.128		49.495	0.216	14.643	0.003		218.77	3.64611	45.4	11.8	40.3	2.780	0.031	0.031	0.001	0.768	0.65	
237	8/30/2004	11:33:08 AM		25.565	25.36	24.979	26.643	24.99		45.054	46.344	10.078	35.897	-1.215	-6.107		50.313	0.222	14.643	0.003		219.77	3.66278	45.2	12.0	40.5	2.791	0.032	0.032	0.001	0.786	0.67	
238	8/30/2004	11:34:08 AM		25.57	25.355	24.979	26.683	25.03		44.475	45.994	10.292	35.014	-1.215	-6.058		50.724	0.215	14.643	0.003		220.77	3.67944	44.9	12.1	39.7	2.740	0.031	0.031	0.001	0.775	0.66	
239	8/30/2004	11:35:08 AM		25.554	25.349	24.973	26.717	25.064		44.371	45.916	10.339	34.957	-1.215	-6.047		49.977	0.224	14.643	0.003		221.77	3.69611	44.8	11.9	39.7	2.735	0.032	0.032	0.001	0.809	0.69	
240	8/30/2004	11:36:08 AM		25.574	25.354	24.953	26.772	25.129		44.755	46.369	10.406	35.164	-1.218	-6.052		50.417	0.213	14.643	0.003		222.77	3.71278	45.2	12.0	40.0	2.755	0.030	0.031	0.001	0.764	0.65	
241	8/30/2004	11:37:08 AM		25.564	25.354	25.073	26.847	25.179		45.066	46.517	10.26	35.724	-1.218	-6.119		51.164	0.223	14.643	0.003		223.77	3.72944	45.4	12.2	40.4	2.785	0.032	0.032	0.001	0.789	0.67	
242	8/30/2004	11:38:08 AM		25.61	25.38	25.109	26.918	25.28		45.008	46.525	10.354	35.568	-1.215	-6.006		52.365	0.216	14.643	0.003		224.77	3.74611	45.4	12.5	40.3	2.778	0.031	0.031	0.001	0.765	0.65	
243	8/30/2004	11:39:08 AM		25.622	25.387	25.096	26.935	25.317		44.763	46.216	10.125	35.663	-1.212	-5.998		47.747	0.216	14.643	0.003		225.77	3.76278	45.1	11.4	40.2	2.773	0.031	0.031	0.001	0.767	0.65	
244	8/30/2004	11:40:08 AM		25.633	25.393	25.082	26.956	25.298		45.027	46.446	10.122	35.734	-1.215	-6.041		48.314	0.221	14.643	0.003		226.77	3.77944	45.3	11.5	40.4	2.784	0.032	0.032	0.001	0.782	0.67	
245	8/30/2004	11:41:08 AM		25.651	25.405	25.084	27.023	25.305		44.84	46.291	9.99	35.722	-1.212	-6.035		49.802	0.218	14.643	0.003		227.77	3.79611	45.2	11.9	40.3	2.777	0.031	0.031	0.001	0.773	0.66	
246	8/30/2004	11:42:08 AM		25.64	25.41	25.074	27.043	25.31		44.782	46.376	10.606	35.055	-1.215	-6.119		49.749	0.219	14.643	0.003		228.77	3.81278	45.3	11.8	39.9	2.752	0.031	0.031	0.001	0.784	0.67	
247	8/30/2004	11:43:08 AM		25.648	25.418	25.087	27.041	25.233		44.995	46.57	10.561	35.205	-1.212	-6.145		50.961	0.218	14.643	0.003		229.77	3.82944	45.4	12.1	40.1	2.765	0.031	0.031	0.001	0.776	0.66	
248	8/30/2004	11:44:08 AM		25.665	25.435	25.094	26.988	25.19		44.676	45.845	10.364	35.344	-1.215	-6.084		46.385	0.214	14.643	0.003		230.77	3.84611	44.7	11.0	40.0	2.759	0.031	0.031	0.001	0.764	0.65	
249	8/30/2004	11:45:08 AM		25.643	25.428	25.082	26.886	25.178		44.815	46.459	10.39	35.236	-1.215	-6.035		51.844	0.213	14.643	0.003		231.77	3.86278	45.3	12.3	40.0	2.760	0.030	0.030	0.001	0.760	0.65	
250	8/30/2004	11:46:08 AM		25.655	25.44	25.164	26.833	25.135		44.815	46.316	10.333	35.191	-1.215	-6.076		47.678	0.216	14.643	0.003		232.77	3.87944	45.2	11.4	40.0	2.758	0.031	0.031	0.001	0.769	0.65	
251	8/30/2004	11:47:08 AM		25.67	25.435	25.159	26.803	25.115		44.676	46.129	10.358	35.147	-1.212	-6.125		48.079	0.212	14.643	0.003		233.77	3.89611	45.0	11.5	39.9	2.752	0.030	0.030	0.001	0.757	0.64	
252	8/30/2004	11:48:08 AM		25.679	25.434	25.153	26.852	25.094		44.684	46.185	10.215	35.385	-1.212	-6.035		51.247	0.224	14.643	0.003		234.77	3.91278	45.1	12.2	40.0	2.760	0.032	0.032	0.001	0.798	0.68	
253	8/30/2004	11:49:08 AM		25.698	25.447	25.157	26.811	25.068		45	46.324	10.371	35.55	-1.212	-6.093		49.288	0.208	14.643	0.003		235.77	3.92944	45.2	11.7	40.3	2.777	0.030	0.030	0.001	0.736	0.63	
254	8/30/2004	11:50:08 AM		25.707	25.442	25.136	26.785	24.992		44.593	46.168	10.227	35.23	-1.212	-5.974		49.101	0.197	14.643	0.003		236.77	3.94611	45.0	11.7	39.9	2.752	0.028	0.028	0.001	0.704	0.60	
255	8/30/2004	11:51:08 AM		25.713	25.452	25.142	26.766	24.958		45.07	46.566	10.376	35.638	-1.218	-6.067		51.072	0.21	14.643	0.003		237.77	3.96278	45.4	12.2	40.4	2.782	0.030	0.030	0.001	0.742	0.63	
256	8/30/2004	11:52:08 AM		25.737	25.467	25.246	26.77	24.957		44.921	46.32	10.425	35.285	-1.209	-6.024		53.277	0.211	14.643	0.003		238.77	3.97944	45.2	12.7	40.1	2.765	0.030	0.030	0.001	0.748	0.64	
257	8/30/2004	11:53:08 AM		25.711	25.45	25.21	26.734	24.936		45	46.483	10.34	35.455	-1.215	-6.11		53.216	0.206	14.643	0.003		239.77	3.99611	45.4	12.7	40.2	2.774	0.029	0.029	0.001	0.729	0.62	
258	8/30/2004	11:54:08 AM		25.735	25.455	25.204	26.688	24.925		44.844	46.255	10.225	35.492	-1.215	-6.05		47.37	0.215	14.643	0.003		240.77	4.01278	45.1	11.3	40.2	2.769	0.031	0.031	0.001	0.762	0.65	
259	8/30/2004	11:55:08 AM		25.749	25.464	25.208	26.682	24.959		44.794	46.287	10.274	35.437	-1.212	-6.07		51.773	0.213	14.643	0.003		241.77	4.02944	45.2	12.3	40.1	2.766	0.030	0.030	0.001	0.756	0.64	
260	8/30/2004	11:56:08 AM		25.753	25.458	25.187	26.742	24.954		45.068	46.786	10.278	35.523	-1.212	-6.09		48.732	0.215	14.643	0.003		242.77	4.04611	45.7	11.6	40.3	2.778	0.031	0.031	0.001	0.760	0.65	
261	8/30/2004	11:57:08 AM		25.753	25.453	25.177	26.751	24.933		44.981	46.452	10.226	35.626	-1.212	-6.012		48.3	0.215	14.643	0.003		243.77	4.06278	45.3	11.5	40.3	2.779	0.031	0.031	0.001	0.760	0.65	
262	8/30/2004	11:58:08 AM		25.757	25.452	25.181	26.81	24.967		44.983	46.645	10.26	35.646	-1.215	-5.957		49.378	0.214	14.643	0.003		244.77	4.07944	45.5	11.8	40.3	2.780	0.031	0.030	0.001	0.756	0.64	
263	8/30/2004	11:58:58 AM		25.776	25.461	25.22	26.814	24.971		45.105	46.589	10.242	35.683	-1.212	-5.986		49.455	0.2	14.643	0.003		245.60	4.09333	45.5	11.8	40.4	2.785	0.029	0.028	0.001	0.704	0.60	
264	8/30/2004	11:59:58 AM		25.764	25.444	25.258	26.772	24.994		44.792	46.398	10.069	35.504	-1.215	-6.012		48.193	0.211	14.643	0.003		246.60	4.11	45.3	11.5	40.1	2.768	0.030	0.030	0.001	0.747	0.64	
265	8/30/2004	12:00:58 PM		25.772	25.437	25.236	26.75	24.962		44.942	46.51	10.132	35.679	-1.212	-6.021		51.066	0.21	14.643	0.003		247.60	4.12667	45.4	12.2	40.3	2.779	0.030	0.030	0.001	0.741	0.63	
266	8/30/2004	12:01:58 PM		25.796	25.456	25.255	26.744	24.936		45.522	47.101	10.21	36.1	-1.209	-5.983		49.887	0.213	14.643	0.004		248.60	4.14333	46.0	11.9	40.8	2.814	0.030	0.030	0.001	0.742	0.63	
267	8/30/2004	12:02:58 PM		25.795	25.454	25.219	26.763	25.02		45.056	46.635	10.206	35.607	-1.212	-6.006		52.651	0.21	14.643	0.003		249.60	4.16	45.5	12.5	40.3	2.781	0.030	0.030	0.001	0.741	0.63	
268	8/30/2004	12:03:58 PM		25.793	25.448	25.217	26.811	25.073		45.338	46.914	10.246	35.956	-1.212	-6.026		51.37	0.213	14.643	0.003		250.60	4.17667	45.8	12.2	40.6	2.802	0.030	0.030	0.001	0.746	0.63	
269	8/30/2004	12:04:58 PM		25.804	25.469	25.239	26.868	25.165		45.344	47.055	10.222	35.956	-1.212	-6.009		46.258	0.209	14.643	0.004		251.60	4.19333	45.9	11.0	40.7	2.803	0.030	0.030	0.001	0.731	0.62	
270	8/30/2004	12:05:58 PM		25.815	25.47	25.244	26.863	25.21		45.356	46.923	10.232	35.944	-1.212	-6.018		47.684	0.204	14.643	0.003		252.60	4.21	45.8	11.4	40.7	2.803	0.029	0.029	0.001	0.714	0.61	
271	8/30/2004	12:06:58 PM		25.802	25.472	25.206	26.98	25.262		45.076	46.829	10.261	35.662	-1.215	-6.035		48.692	0.2	14.643	0.003		253.60	4.22667	45.7	11.6	40.4	2.783	0.029	0.028	0.001	0.705	0.60	
272	8/30/2004	12:07:58 PM		25.804	25.479	25.153	27.111	25.379		45.062	46.461	10.353	35.73	-1.212	-6.026		48.813	0.208	14.643	0.003		254.60	4.24333	45.3	11.6	40.4	2.785	0.030	0.030	0.001	0.734	0.62	
273	8/30/2004	12:08:58 PM		25.801	25.486	25.115	27.129	25.396		45.259	46.989	10.413	35.601	-1.212	-6.012		51.333	0.192	14.643	0.003		255.60	4.26	45.9	12.2	40.4	2.788	0.027	0.027	0.001	0.678	0.58	
274	8/30/2004	12:09:58 PM		25.802	25.502	25.211	27.17	25.467		44.863	46.121	10.342	35.445	-1.212	-5.969		49.768	0.208	14.643	0.003		256.60	4.27667	45.0	11.9	40.2	2.768	0.030	0.030	0.001	0.737	0.63	
275	8/30/2004	12:10:58 PM		25.805	25.515	25.174	27.258	25.45		44.915	46.514	10.511	35.201	-1.212	-6.047		51.331	0.205	14.643	0.003		257.60	4.29333	45.4	12.2	40.1	2.762	0.029	0.029	0.001	0.729	0.62	
276	8/30/2004	12:11:58 PM		25.802	25.532	25.141	27.215	25.362		44.861	46.228	10.483	35.285	-1.209	-6.05		52.223	0.204	14.643	0.003		258.60	4.31	45.1	12.4	40.1	2.763	0.029	0.029	0.001	0.726	0.62	
277	8/30/2004	12:12:58 PM		25.77	25.525	25.074	27.143	25.395		44.929	46.382	10.475	35.174	-1.215	-6.012		46.7	0.212	14.643	0.003		259.60	4.32667	45.3	11.1	40.1	2.761	0.030	0.030	0.001	0.756	0.64	
278	8/30/2004	12:13:58 PM		25.747	25.542	25.056	27.145	25.312		45.087	46.647	10.357	35.605	-1.212	-6.05		53.047	0.207	14.643	0.003		260.60	4.34333	45.5	12.6	40.3	2.782	0.030	0.030	0.001	0.733	0.62	
279	8/30/2004	12:14:58 PM		25.729	25.549	25.008	27.117	25.264		45.412	47.045	10.477	35.73	-1.212	-6.024		50.488	0.195	14.643	0.004		261.60	4.36	45.9	12.0	40.6	2.797	0.028	0.028	0.001	0.688	0.59	
280	8/30/2004	12:15:58 PM		25.704	25.549	24.968	27.102	25.264		45.139	46.958	10.347	35.591	-1.215	-5.645		52.511	0.192	14.643	0.003		262.60	4.37667	45.8	12.5	40.4	2.783	0.027	0.028	0.001	0.682	0.58	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	8/30/2004	12:16:58 PM		25.678	25.548	24.957	27.081	25.248		45.622	47.377	10.562	35.782	-1.215	-5.575		50.571	0.196	14.643	0.003		263.60	4.39333	46.3	12.0	40.7	2.806	0.028	0.028	0.001	0.690	0.59	
282	8/30/2004	12:17:58 PM		25.684	25.559	24.963	27.057	25.264		44.929	46.374	10.292	35.603	-1.209	-5.833		48.333	0.202	14.643	0.004		264.60	4.41	45.2	11.5	40.3	2.776	0.029	0.029	0.001	0.719	0.61	
283	8/30/2004	12:18:58 PM		25.663	25.558	24.937	27.026	25.208		45.522	47.424	10.429	35.882	-1.212	-5.645		47.186	0.197	14.643	0.004		265.60	4.42667	46.3	11.2	40.7	2.806	0.028	0.028	0.001	0.694	0.59	
284	8/30/2004	12:19:58 PM		25.642	25.562	24.876	26.955	25.242		44.995	46.919	10.29	35.585	-1.215	-5.639		47.866	0.197	14.643	0.003		266.60	4.44333	45.8	11.4	40.3	2.778	0.028	0.028	0.001	0.702	0.60	
285	8/30/2004	12:20:58 PM		25.667	25.577	24.906	27.025	25.197		45.027	46.506	10.293	35.64	-1.212	-6.183		49.568	0.201	14.643	0.003		267.60	4.46	45.4	11.8	40.3	2.781	0.029	0.029	0.001	0.715	0.61	
286	8/30/2004	12:21:58 PM		25.642	25.582	24.891	26.99	25.132		45.025	46.398	10.234	35.927	-1.215	-6.159		50.296	0.2	14.643	0.003		268.60	4.47667	45.3	12.0	40.5	2.791	0.029	0.029	0.001	0.710	0.60	
287	8/30/2004	12:22:58 PM		25.637	25.582	24.901	26.98	25.062		44.879	46.51	10.242	35.642	-1.212	-6.214		48.761	0.197	14.643	0.004		269.60	4.49333	45.4	11.6	40.3	2.776	0.028	0.028	0.001	0.702	0.60	
288	8/30/2004	12:23:58 PM		25.622	25.582	24.981	26.92	25.082		45.132	46.817	10.201	35.845	-1.212	-6.22		49.339	0.198	14.643	0.003		270.60	4.51	45.7	11.8	40.5	2.792	0.028	0.028	0.001	0.700	0.60	
289	8/30/2004	12:24:58 PM		25.627	25.577	24.95	26.91	25.087		45.159	46.948	10.321	35.673	-1.212	-6.194		50.868	0.194	14.643	0.003		271.60	4.52667	45.8	12.1	40.4	2.787	0.028	0.028	0.001	0.688	0.59	
290	8/30/2004	12:25:58 PM		25.632	25.582	24.945	26.885	25.047		45.363	47.24	10.3	35.917	-1.212	-6.185		49.115	0.195	14.643	0.003		272.60	4.54333	46.1	11.7	40.6	2.802	0.028	0.028	0.001	0.688	0.59	
291	8/30/2004	12:26:58 PM		25.621	25.576	24.92	26.909	25.101		45.043	46.915	10.28	35.636	-1.212	-6.113		47.213	0.194	14.643	0.004		273.60	4.56	45.8	11.2	40.3	2.781	0.028	0.028	0.001	0.690	0.59	
292	8/30/2004	12:27:58 PM		25.607	25.577	24.881	26.9	25.047		44.786	46.595	10.219	35.517	-1.215	-6.223		45.634	0.194	14.643	0.003		274.60	4.57667	45.5	10.9	40.2	2.768	0.028	0.028	0.001	0.694	0.59	
293	8/30/2004	12:28:58 PM		25.592	25.582	24.861	26.89	25.047		44.821	46.784	10.236	35.449	-1.212	-6.177		49.72	0.195	14.643	0.003		275.60	4.59333	45.7	11.8	40.1	2.767	0.028	0.028	0.001	0.698	0.59	
294	8/30/2004	12:29:58 PM		25.577	25.572	24.85	26.89	25.042		44.855	46.964	10.357	35.275	-1.212	-6.157		46.581	0.193	14.643	0.003		276.60	4.61	45.8	11.1	40.1	2.762	0.028	0.028	0.001	0.693	0.59	
295	8/30/2004	12:30:58 PM		25.577	25.577	24.855	26.865	25.077		44.825	46.881	10.264	35.404	-1.212	-6.151		50.84	0.193	14.643	0.003		277.60	4.62667	45.8	12.1	40.1	2.766	0.028	0.028	0.001	0.692	0.59	
296	8/30/2004	12:31:58 PM		25.555	25.57	24.949	26.878	25.035		45.217	47.431	10.275	35.816	-1.212	-6.194		48.792	0.192	14.643	0.003		278.60	4.64333	46.3	11.6	40.5	2.793	0.027	0.028	0.001	0.679	0.58	
297	8/30/2004	12:32:58 PM		25.56	25.565	24.909	26.898	24.985		44.935	47.086	10.29	35.513	-1.212	-6.148		50.87	0.188	14.643	0.003		279.60	4.66	46.0	12.1	40.2	2.773	0.027	0.027	0.001	0.671	0.57	
298	8/30/2004	12:33:58 PM		25.57	25.57	24.903	26.898	24.98		44.371	46.417	10.153	35.182	-1.212	-6.174		49.157	0.191	14.643	0.003		280.60	4.67667	45.3	11.7	39.8	2.742	0.027	0.027	0.001	0.689	0.59	
299	8/30/2004	12:34:58 PM		25.569	25.564	24.893	26.872	24.974		44.68	46.763	10.241	35.308	-1.215	-6.171		47.97	0.186	14.643	0.003		281.60	4.69333	45.6	11.4	40.0	2.757	0.027	0.027	0.001	0.668	0.57	
300	8/30/2004	12:35:58 PM		25.564	25.564	24.858	26.812	25.019		44.512	46.326	10.062	35.562	-1.215	-6.139		50.421	0.19	14.643	0.003		282.60	4.71	45.2	12.0	40.0	2.760	0.027	0.027	0.001	0.682	0.58	
301	8/30/2004	12:36:58 PM		25.562	25.572	24.855	26.895	25.032		45.006	46.979	10.306	35.656	-1.212	-6.142		46.42	0.189	14.643	0.003		283.60	4.72667	45.9	11.1	40.3	2.781	0.027	0.027	0.001	0.674	0.57	
302	8/30/2004	12:37:58 PM		25.546	25.561	24.834	26.889	25.006		44.728	47.057	10.2	35.418	-1.212	-6.139		48.317	0.192	14.643	0.003		284.60	4.74333	45.9	11.5	40.1	2.763	0.027	0.028	0.001	0.689	0.59	
303	8/30/2004	12:38:58 PM		25.551	25.566	24.82	26.919	24.961		44.877	47.348	10.319	35.369	-1.215	-6.148		52.86	0.188	14.643	0.003		285.60	4.76	46.2	12.6	40.1	2.766	0.027	0.027	0.001	0.674	0.57	
304	8/30/2004	12:39:58 PM		25.557	25.587	24.855	26.935	24.982		44.799	47.296	10.305	35.373	-1.212	-6.099		50.233	0.187	14.643	0.004		286.60	4.77667	46.2	12.0	40.1	2.764	0.027	0.027	0.001	0.671	0.57	
305	8/30/2004	12:40:58 PM		25.542	25.572	24.946	26.905	24.997		44.78	46.999	10.271	35.474	-1.206	-6.122		51.185	0.186	14.643	0.004		287.60	4.79333	45.9	12.2	40.1	2.767	0.027	0.027	0.001	0.665	0.57	
306	8/30/2004	12:41:58 PM		25.536	25.561	24.93	26.884	24.981		44.4	46.645	10.145	35.211	-1.209	-6.125		49.143	0.185	14.643	0.004		288.60	4.81	45.5	11.7	39.8	2.744	0.026	0.027	0.001	0.667	0.57	
307	8/30/2004	12:42:58 PM		25.556	25.556	24.915	26.929	25.001		44.156	46.564	10.223	34.835	-1.212	-6.131		49.101	0.188	14.643	0.004		289.60	4.82667	45.4	11.7	39.5	2.723	0.027	0.027	0.001	0.683	0.58	
308	8/30/2004	12:43:58 PM		25.566	25.561	24.904	26.899	25.011		44.456	46.906	10.259	35.051	-1.212	-6.116		49.232	0.186	14.643	0.004		290.60	4.84333	45.8	11.7	39.8	2.741	0.027	0.027	0.001	0.672	0.57	
309	8/30/2004	12:44:58 PM		25.554	25.549	24.873	26.892	24.994		44.263	46.635	10.235	35.059	-1.215	-6.11		47.724	0.185	14.643	0.003		291.60	4.86	45.5	11.4	39.7	2.734	0.026	0.027	0.001	0.670	0.57	
310	8/30/2004	12:45:58 PM		25.552	25.547	24.846	26.925	24.982		44.512	46.997	10.285	35.143	-1.212	-6.067		48.433	0.184	14.643	0.003		292.60	4.87667	45.9	11.5	39.8	2.746	0.026	0.026	0.001	0.664	0.57	
311	8/30/2004	12:46:58 PM		25.55	25.545	24.834	26.993	25.015		44.626	47.07	10.447	35.069	-1.215	-6.128		51.207	0.185	14.643	0.003		293.60	4.89333	45.9	12.2	39.8	2.747	0.026	0.027	0.001	0.668	0.57	
312	8/30/2004	12:47:58 PM		25.544	25.539	24.833	26.912	25.024		44.508	46.834	10.403	35.152	-1.212	-6.119		51.283	0.183	14.643	0.003		294.60	4.91	45.7	12.2	39.8	2.746	0.026	0.026	0.001	0.661	0.56	
313	8/30/2004	12:48:58 PM		25.549	25.564	24.837	26.927	25.059		44.577	47.093	10.495	35.061	-1.215	-6.11		51.103	0.184	14.643	0.003		295.60	4.92667	46.0	12.2	39.8	2.745	0.026	0.026	0.001	0.665	0.57	
314	8/30/2004	12:49:58 PM		25.554	25.574	24.848	26.912	24.984		44.11	46.67	10.308	34.84	-1.212	-6.133		49.562	0.183	14.643	0.003		296.60	4.94333	45.5	11.8	39.5	2.722	0.026	0.026	0.001	0.667	0.57	
315	8/30/2004	12:50:58 PM		25.539	25.559	24.812	26.937	24.999		44.68	47.379	10.393	35.279	-1.212	-6.107		51.451	0.182	14.643	0.003		297.60	4.96	46.3	12.3	40.0	2.756	0.026	0.026	0.001	0.655	0.56	
316	8/30/2004	12:51:58 PM		25.529	25.554	24.802	26.872	25.034		44.369	47.014	10.429	34.95	-1.218	-6.113		48.066	0.183	14.643	0.003		298.60	4.97667	45.9	11.4	39.7	2.734	0.026	0.026	0.001	0.664	0.57	
317	8/30/2004	12:52:58 PM		25.524	25.549	24.807	26.867	25.099		44.402	47.227	10.44	34.907	-1.218	-6.125		49.925	0.181	14.643	0.003		299.60	4.99333	46.1	11.9	39.7	2.734	0.026	0.026	0.001	0.657	0.56	
318	8/30/2004	12:53:58 PM		25.524	25.554	24.962	26.907	25.179		44.427	46.995	10.438	35.012	-1.212	-6.128		52.202	0.182	14.643	0.003		300.60	5.01	45.9	12.4	39.7	2.739	0.026	0.026	0.001	0.657	0.56	
319	8/30/2004	12:54:58 PM		25.534	25.554	24.942	26.997	25.279		44.243	46.935	10.284	35.022	-1.212	-6.125		49.635	0.182	14.643	0.003		301.60	5.02667	45.8	11.8	39.6	2.733	0.026	0.026	0.001	0.659	0.56	
320	8/30/2004	12:55:58 PM		25.56	25.565	24.939	27.103	25.34		44.195	47.097	10.442	34.671	-1.212	-5.94		49.409	0.182	14.643	0.003		302.60	5.04333	46.0	11.8	39.4	2.719	0.026	0.026	0.001	0.662	0.56	
321	8/30/2004	12:56:58 PM		25.582	25.582	24.941	27.23	25.427		44.18	47.08	10.29	34.854	-1.212	-6.122		49.328	0.18	14.643	0.003		303.60	5.06	46.0	11.7	39.5	2.725	0.026	0.026	0.001	0.653	0.56	
322	8/30/2004	12:57:58 PM		25.596	25.601	24.935	27.289	25.521		44.33	47.232	10.418	34.86	-1.215	-6.081		50.959	0.18	14.643	0.003		304.60	5.07667	46.1	12.1	39.6	2.730	0.026	0.026	0.001	0.652	0.55	
323	8/30/2004	12:58:58 PM		25.615	25.61	24.923	27.412	25.559		44.044	46.962	10.322	34.679	-1.215	-5.902		48.492	0.177	14.643	0.003		305.60	5.09333	45.8	11.5	39.4	2.714	0.025	0.025	0.001	0.645	0.55	
324	8/30/2004	12:59:58 PM		25.658	25.623	24.917	27.585	25.538		44.406	47.254	10.305	35.074	-1.212	-6.064		46.277	0.18	14.643	0.003		306.60	5.11	46.1	11.0	39.7	2.740	0.026	0.026	0.001	0.650	0.55	
325	8/30/2004	1:00:58 PM		25.657	25.637	24.92	27.509	25.446		44.133	46.881	10.504	34.575	-1.212	-6.081		49.253	0.179	14.643	0.004		307.60	5.12667	45.8	11.7	39.4	2.713	0.026	0.026	0.001	0.653	0.56	
326	8/30/2004	1:01:58 PM		25.645	25.65	24.909	27.413	25.345		43.903	46.844	10.377	34.538	-1.212	-5.769		47.949	0.178	14.643	0.004		308.60	5.14333	45.7	11.4	39.2	2.704	0.025	0.026	0.001	0.651	0.55	
327	8/30/2004	1:02:58 PM		25.647	25.647	24.891	27.37	25.242		44.05	47.232	10.464	34.513	-1.212	-5.671		49.426	0.174	14.643	0.004		309.60	5.16	46.1	11.8	39.3	2.708	0.025	0.025	0.001	0.636	0.54	
328	8/30/2004	1:03:58 PM		25.632	25.652	24.876	27.33	25.172		44.083	47.395	10.474	34.575	-1.212	-5.723		46.85	0.176	14.643	0.003		310.60	5.17667	46.3	11.2	39.3	2.712	0.025	0.025	0.001	0.643	0.55	
329	8/30/2004	1:04:58 PM		25.624	25.664	24.867	27.341	25.104		43.921	47.145	10.374	34.61	-1.212	-5.787		50.215	0.175	14.643	0.003		311.60	5.19333	46.0	12.0	39.3	2.707	0.025	0.025	0.001	0.640	0.55	
330	8/30/2004	1:05:58 PM		25.64	25.67	24.884	27.243	25.135		44.324	46.925	10.342	35.012	-1.212	-6.879		49.941	0.179	14.643	0.003		312.60	5.21	45.8	11.9	39.7	2.735	0.026	0.026	0.001	0.648	0.55	
331	8/30/2004	1:06:58 PM		25.621	25.681	24.879	27.168	25.191		44.467	47.3	10.446	34.836	-1.212	-6.986		50.503	0.18	14.643	0.003		313.60	5.22667	46.2	12.0	39.7	2.734	0.026	0.026	0.001	0.652	0.55	
332	8/30/2004	1:07:58 PM		25.61	25.685	24.879	27.143	25.255		44.465	46.987	10.387	35.059	-1.212	-6.934		50.517	0.179	14.643	0.004		314.60	5.24333	45.9	12.0	39.8	2.741	0.026	0.026	0.001	0.647	0.55	
333	8/30/2004	1:08:58 PM		25.605	25.68	24.854	27.133	25.31		44.1	47.045	10.484	34.735	-1.212	-6.2		50.494	0.171	14.643	0.003		315.60	5.26	45.9	12.0	39.4	2.718	0.024	0.025	0.001	0.624	0.53	
334	8/30/2004	1:09:58 PM		25.609	25.689	24.853	27.197	25.404		43.99	47.172	10.424	34.433	-1.215	-6.174		50.582	0.175	14.643	0.003		316.60	5.27667	46.0	12.0	39.2	2.703	0.025	0.025	0.001	0.642	0.55	
335	8/30/2004	1:10:58 PM		25.734	25.694	24.863	27.172	25.449		43.894	46.805	10.406	34.624	-1.212	-6.139		50.87	0.162	14.643	0.003		317.60	5.29333	45.7	12.1	39.3	2.707	0.023	0.023	0.001	0.593	0.50	
336	8/30/2004	1:11:58 PM		25.659	25.709	24.878	27.232	25.459		43.66	46.983	10.348	34.242	-1.212	-5.85		45.747	0.146	14.643	0.003		318.60	5.31	45.9	10.9	39.0	2.686	0.021	0.021	0.001	0.538	0.46	
337	8/30/2004	1:12:58 PM		25.655	25.715	24.869	27.178	25.485		43.77	46.977	10.479	34.247	-1.212	-6.197		43.427	0.172	14.643	0.003		319.60	5.32667	45.9	10.3	39.0	2.689	0.025	0.025	0.001	0.634	0.54	
338	8/30/2004	1:13:58 PM		25.66	25.725	24.854	27.168	25.5		44.012	47.395	10.454	34.372	-1.212	-6.217		47.86	0.175	14.643	0.003		320.60	5.34333	46.3	11.4	39.2	2.702	0.025	0.025	0.001	0.642	0.55	
339	8/30/2004	1:14:58 PM		25.65	25.725	24.864	27.188	25.355		44.336	47.203	10.482	34.745	-1.212	-6.995		45.161	0.168	14.643	0.003		321.60	5.36	46.1	10.8	39.5	2.726	0.024	0.024	0.001	0.611	0.52	
340	8/30/2004	1:15:58 PM		25.64	25.72	24.859	27.108	25.325		44.423	47.25	10.472	34.883	-1.215	-7.085		47.451	0.172	14.643	0.003		322.60	5.37667	46.1	11.3	39.7	2.734	0.025	0.025	0.001	0.623	0.53	
341	8/30/2004	1:16:58 PM		25.641	25.741	24.874	27.103	25.296		44.361	47.029	10.468	34.872	-1.218	-7.113		48.669	0.171	14.643	0.003		323.60	5.39333	45.9	11.6	39.6	2.731	0.024	0.025	0.001	0.620	0.53	
342	8/30/2004	1:17:58 PM		25.617	25.732	24.841	27.105	25.342		44.027	46.745	10.439	34.636	-1.215	-7.093		46.954	0.17	14.643	0.003		324.60	5.41	45.6	11.2	39.3	2.712	0.024	0.024	0.001	0.622	0.53	
343	8/30/2004	1:18:58 PM		25.638	25.744	25.007	27.176	25.363		44.205	47.149	10.449	34.675	-1.212	-7.079		49.403	0.163	14.643	0.003		325.60	5.42667	46.0	11.8	39.4	2.719	0.023	0.023	0.001	0.592	0.50	
344	8/30/2004	1:19:58 PM		25.648	25.738	25.197	27.18	25.338		44.232	47.269	10.44	34.833	-1.215	-6.96		48.667	0.174	14.643	0.003		326.60	5.44333	46.1	11.6	39.5	2.726	0.025	0.025	0.001	0.627	0.53	
345	8/30/2004	1:20:58 PM		25.698	25.749	25.182	27.201	25.343		44.699	47.812	10.434	35.16	-1.212	-7.053		46.368	0.171	14.643	0.003		327.60	5.46	46.7	11.0	39.9	2.753	0.024	0.024	0.001	0.610	0.52	
346	8/30/2004	1:21:58 PM		25.729	25.759	25.123	27.292	25.349		44.465	47.574	10.527	34.737	-1.215	-7.119		46.982	0.169	14.643	0.003		328.60	5.47667	46.4	11.2	39.6	2.730	0.024	0.024	0.001	0.609	0.52	
347	8/30/2004	1:22:58 PM		25.75	25.766	25.059	27.283	25.36		44.608	47.244	10.457	35.152	-1.212	-7.168		52.453	0.166	14.643	0.003		329.60	5.49333	46.1	12.5	39.9	2.750	0.024	0.024	0.001	0.595	0.51	
348	8/30/2004	1:23:58 PM		25.753	25.768	24.996	27.285	25.368		44.585	47.534	10.479	35.006	-1.215	-7.085		49.887	0.167	14.643	0.003		330.60	5.51	46.4	11.9	39.8	2.744	0.024	0.024	0.001	0.601	0.51	
349	8/30/2004	1:24:58 PM		25.731	25.766	24.92	27.274	25.356		44.508	47.269	10.528	35.024	-1.215	-7.032		50.019	0.168	14.643	0.003		331.60	5.52667	46.1	11.9	39.8	2.742	0.024	0.024	0.001	0.606	0.52	
350	8/30/2004	1:25:58 PM		25.71	25.76	24.873	27.232	25.35		44.151	47.099	10.335	34.764	-1.212	-7.001		47.246	0.162	14.643	0.003		332.60	5.54333	46.0	11.3	39.5	2.720	0.023	0.023	0.001	0.590	0.50	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	8/30/2004	1:26:58 PM		25.705	25.776	24.819	27.313	25.375		44.042	46.9	10.41	34.573	-1.212	-7.105		48.905	0.168	14.643	0.003		333.60	5.56	45.8	11.6	39.3	2.710	0.024	0.024	0.001	0.615	0.52	
352	8/30/2004	1:27:58 PM		25.696	25.786	24.785	27.314	25.431		44.187	46.765	10.45	34.766	-1.212	-7.157		48.88	0.169	14.643	0.003		334.60	5.57667	45.6	11.6	39.5	2.722	0.024	0.024	0.001	0.617	0.52	
353	8/30/2004	1:28:58 PM		25.665	25.791	24.739	27.268	25.38		44.33	47.116	10.511	34.647	-1.215	-7.157		44.773	0.169	14.643	0.003		335.60	5.59333	46.0	10.7	39.5	2.723	0.024	0.024	0.001	0.617	0.53	
354	8/30/2004	1:29:58 PM		25.652	25.812	24.871	27.24	25.352		44.394	47.381	10.395	34.95	-1.209	-7.171		49.003	0.164	14.643	0.003		336.60	5.61	46.3	11.7	39.7	2.735	0.023	0.024	0.001	0.594	0.51	
355	8/30/2004	1:30:58 PM		25.631	25.806	24.82	27.214	25.376		44.643	47.574	10.568	34.993	-1.212	-7.122		50.617	0.168	14.643	0.003		337.60	5.62667	46.4	12.1	39.8	2.745	0.024	0.024	0.001	0.607	0.52	
356	8/30/2004	1:31:58 PM		25.626	25.806	24.755	27.279	25.406		44.931	48.027	10.616	35.26	-1.212	-7.064		47.084	0.165	14.643	0.004		338.60	5.64333	46.9	11.2	40.1	2.764	0.024	0.024	0.001	0.593	0.50	
357	8/30/2004	1:32:58 PM		25.632	25.823	24.746	27.335	25.452		44.599	47.549	10.45	35.151	-1.209	-7.134		49.726	0.167	14.643	0.004		339.60	5.66	46.4	11.8	39.9	2.749	0.024	0.024	0.001	0.604	0.51	
358	8/30/2004	1:33:58 PM		25.607	25.818	24.701	27.33	25.372		44.782	47.789	10.61	35.131	-1.212	-7.082		50.763	0.189	14.643	0.003		340.60	5.67667	46.7	12.1	40.0	2.755	0.027	0.027	0.001	0.683	0.58	
359	8/30/2004	1:34:58 PM		25.594	25.814	24.657	27.321	25.349		44.883	47.882	10.537	35.367	-1.212	-7.027		58.712	0.165	14.643	0.003		341.60	5.69333	46.8	14.0	40.1	2.766	0.024	0.024	0.001	0.594	0.51	
360	8/30/2004	1:35:58 PM		25.574	25.82	24.653	27.277	25.349		44.641	47.702	10.559	34.938	-1.212	-7.096		50.434	0.166	14.643	0.004		342.60	5.71	46.6	12.0	39.8	2.743	0.024	0.024	0.001	0.603	0.51	
361	8/30/2004	1:36:58 PM		25.565	25.825	24.623	27.248	25.335		44.66	47.648	10.558	35.121	-1.212	-7.096		49.587	0.163	14.643	0.004		343.60	5.72667	46.5	11.8	39.9	2.750	0.023	0.024	0.001	0.591	0.50	
362	8/30/2004	1:37:58 PM		25.534	25.82	24.583	27.202	25.294		44.993	47.845	10.679	35.468	-1.215	-7.111		51.331	0.162	14.643	0.003		344.60	5.74333	46.7	12.2	40.2	2.774	0.023	0.023	0.001	0.583	0.50	
363	8/30/2004	1:38:58 PM		25.529	25.834	24.582	27.251	25.309		44.904	47.926	10.692	35.262	-1.206	-7.038		48.946	0.163	14.643	0.004		345.60	5.76	46.8	11.7	40.1	2.764	0.023	0.024	0.001	0.589	0.50	
364	8/30/2004	1:39:58 PM		25.508	25.833	24.701	27.301	25.343		44.95	47.862	10.691	35.31	-1.212	-7.087		47.374	0.166	14.643	0.004		346.60	5.77667	46.7	11.3	40.1	2.767	0.024	0.024	0.001	0.597	0.51	
365	8/30/2004	1:40:58 PM		25.507	25.827	24.685	27.234	25.322		44.722	47.81	10.433	35.349	-1.215	-7.064		47.799	0.17	14.643	0.003		347.60	5.79333	46.7	11.4	40.0	2.760	0.024	0.025	0.001	0.613	0.52	
366	8/30/2004	1:41:58 PM		25.529	25.839	24.657	27.256	25.339		44.612	47.692	10.351	35.236	-1.212	-7.157		47.958	0.165	14.643	0.003		348.60	5.81	46.6	11.4	39.9	2.753	0.024	0.024	0.001	0.597	0.51	
367	8/30/2004	1:42:58 PM		25.516	25.836	24.634	27.204	25.326		45.025	48.309	10.455	35.543	-1.212	-7.134		50.826	0.163	14.643	0.003		349.60	5.82667	47.2	12.1	40.3	2.777	0.023	0.024	0.001	0.585	0.50	
368	8/30/2004	1:43:58 PM		25.504	25.844	24.607	27.201	25.259		44.185	47.261	10.913	34.242	-1.212	-7.177		49.303	0.157	14.643	0.003		350.60	5.84333	46.1	11.7	39.2	2.704	0.022	0.023	0.001	0.580	0.49	
369	8/30/2004	1:44:58 PM		25.482	25.838	24.571	27.155	25.227		44.095	47.232	10.757	34.331	-1.212	-7.186		49.743	0.158	14.643	0.003		351.60	5.86	46.1	11.8	39.2	2.704	0.023	0.023	0.001	0.584	0.50	
370	8/30/2004	1:45:58 PM		25.466	25.831	24.569	27.129	25.196		44.533	47.965	10.888	34.55	-1.215	-7.165		48.627	0.159	14.643	0.003		352.60	5.87667	46.8	11.6	39.5	2.726	0.023	0.023	0.001	0.583	0.50	
371	8/30/2004	1:46:58 PM		25.45	25.82	24.518	27.093	25.21		44.44	47.671	10.77	34.618	-1.218	-7.18		48.262	0.156	14.643	0.003		353.60	5.89333	46.5	11.5	39.5	2.725	0.022	0.023	0.001	0.573	0.49	
372	8/30/2004	1:47:58 PM		25.443	25.833	24.536	27.056	25.223		44.929	48.005	11.01	34.926	-1.212	-7.163		46.266	0.16	14.643	0.004		354.60	5.91	46.9	11.0	39.9	2.753	0.023	0.023	0.001	0.581	0.49	
373	8/30/2004	1:48:58 PM		25.449	25.839	24.627	27.117	25.329		44.921	47.945	10.879	35.041	-1.215	-7.105		50.317	0.154	14.643	0.003		355.60	5.92667	46.8	12.0	40.0	2.757	0.022	0.022	0.001	0.557	0.47	
374	8/30/2004	1:49:58 PM		25.427	25.827	24.61	27.079	25.267		44.962	48.139	10.899	34.913	-1.218	-7.119		49.47	0.158	14.643	0.003		356.60	5.94333	47.0	11.8	39.9	2.754	0.023	0.023	0.001	0.573	0.49	
375	8/30/2004	1:50:58 PM		25.445	25.83	24.608	27.123	25.26		45.012	48.374	10.644	35.295	-1.212	-7.128		50.477	0.164	14.643	0.004		357.60	5.96	47.2	12.0	40.2	2.768	0.023	0.024	0.001	0.591	0.50	
376	8/30/2004	1:51:58 PM		25.444	25.829	24.577	27.221	25.294		44.975	48.112	10.698	35.156	-1.215	-7.177		50.421	0.163	14.643	0.003		358.60	5.97667	47.0	12.0	40.1	2.762	0.023	0.024	0.001	0.589	0.50	
377	8/30/2004	1:52:58 PM		25.459	25.834	24.607	27.251	25.334		45.566	49.014	10.834	35.583	-1.215	-7.142		52.125	0.17	14.643	0.003		359.60	5.99333	47.9	12.4	40.6	2.797	0.024	0.025	0.001	0.607	0.52	
378	8/30/2004	1:53:58 PM		25.459	25.834	24.577	27.316	25.339		45.205	48.156	10.999	35.307	-1.218	-7.16		50.125	0.164	14.643	0.003		360.60	6.01	47.0	11.9	40.3	2.776	0.023	0.024	0.001	0.590	0.50	
379	8/30/2004	1:54:58 PM		25.463	25.833	24.581	27.331	25.313		45.464	48.898	11.069	35.266	-1.215	-7.139		52.93	0.159	14.643	0.003		361.60	6.02667	47.8	12.6	40.4	2.783	0.023	0.023	0.001	0.571	0.49	
380	8/30/2004	1:55:58 PM		25.457	25.832	24.575	27.369	25.292		45.278	48.66	10.951	35.207	-1.215	-7.151		49.893	0.159	14.643	0.003		362.60	6.04333	47.5	11.9	40.2	2.775	0.023	0.023	0.001	0.572	0.49	
381	8/30/2004	1:56:58 PM		25.471	25.836	24.714	27.378	25.466		45.529	48.962	10.933	35.589	-1.215	-7.087		52.106	0.16	14.643	0.003		363.60	6.06	47.8	12.4	40.6	2.796	0.023	0.023	0.001	0.569	0.48	
382	8/30/2004	1:57:58 PM		25.495	25.846	24.744	27.363	25.44		45.518	48.817	10.984	35.504	-1.212	-7.163		52.067	0.164	14.643	0.003		364.60	6.07667	47.7	12.4	40.5	2.793	0.023	0.024	0.001	0.584	0.50	
383	8/30/2004	1:58:58 PM		25.547	25.872	24.75	27.469	25.422		45.454	48.575	10.978	35.541	-1.209	-7.165		50.934	0.161	14.643	0.003		365.60	6.09333	47.4	12.1	40.5	2.792	0.023	0.023	0.001	0.573	0.49	
384	8/30/2004	1:59:58 PM		25.547	25.868	24.721	27.46	25.497		45.738	49.099	11.011	35.609	-1.215	-7.171		52.484	0.162	14.643	0.003		366.60	6.11	48.0	12.5	40.7	2.804	0.023	0.023	0.001	0.575	0.49	
385	8/30/2004	2:00:58 PM		25.569	25.874	24.722	27.511	25.519		45.69	49.112	10.994	35.621	-1.215	-7.09		50.87	0.161	14.643	0.003		367.60	6.12667	48.0	12.1	40.7	2.803	0.023	0.023	0.001	0.571	0.49	
386	8/30/2004	2:01:58 PM		25.565	25.881	24.709	27.503	25.515		45.352	48.877	11.068	35.211	-1.215	-7.128		46.446	0.163	14.643	0.003		368.60	6.14333	47.8	11.1	40.3	2.777	0.023	0.024	0.001	0.584	0.50	
387	8/30/2004	2:02:58 PM		25.577	25.882	24.73	27.474	25.516		45.711	49.354	11.139	35.367	-1.215	-7.128		49.407	0.16	14.643	0.003		369.60	6.16	48.2	11.8	40.5	2.795	0.023	0.023	0.001	0.569	0.48	
388	8/30/2004	2:03:58 PM		25.593	25.893	24.727	27.54	25.528		45.377	48.826	11.086	35.172	-1.212	-7.18		51.399	0.16	14.643	0.003		370.60	6.17667	47.7	12.2	40.3	2.777	0.023	0.023	0.001	0.573	0.49	
389	8/30/2004	2:04:58 PM		25.579	25.89	24.873	27.462	25.564		45.587	48.985	11.15	35.351	-1.218	-7.131		49.42	0.158	14.643	0.003		371.60	6.19333	47.9	11.8	40.5	2.790	0.023	0.023	0.001	0.561	0.48	
390	8/30/2004	2:05:58 PM		25.617	25.902	24.875	27.484	25.486		45.388	48.604	11.033	35.394	-1.215	-7.105		44.754	0.16	14.643	0.003		372.60	6.21	47.5	10.7	40.4	2.785	0.023	0.023	0.001	0.569	0.48	
391	8/30/2004	2:06:58 PM		25.621	25.901	24.835	27.383	25.436		45.522	48.66	11.119	35.351	-1.212	-7.079		53.047	0.151	14.643	0.003		373.60	6.22667	47.5	12.6	40.4	2.788	0.022	0.022	0.001	0.537	0.46	
392	8/30/2004	2:07:58 PM		25.631	25.906	24.85	27.388	25.366		45.315	48.629	11.014	35.33	-1.212	-7.096		49.197	0.158	14.643	0.003		374.60	6.24333	47.5	11.7	40.3	2.780	0.023	0.023	0.001	0.563	0.48	
393	8/30/2004	2:08:58 PM		25.647	25.918	24.831	27.46	25.417		45.037	48.274	10.99	35.168	-1.212	-7.18		46.037	0.158	14.643	0.003		375.60	6.26	47.1	11.0	40.1	2.765	0.023	0.023	0.001	0.567	0.48	
394	8/30/2004	2:09:58 PM		25.646	25.911	24.835	27.403	25.466		45.105	48.378	10.984	35.156	-1.212	-7.18		54.192	0.159	14.643	0.003		376.60	6.27667	47.3	12.9	40.1	2.767	0.023	0.023	0.001	0.570	0.48	
395	8/30/2004	2:10:58 PM		25.651	25.911	24.82	27.443	25.461		45.28	48.587	11.031	35.375	-1.212	-7.073		53.694	0.15	14.643	0.003		377.60	6.29333	47.5	12.8	40.3	2.780	0.021	0.022	0.001	0.535	0.46	
396	8/30/2004	2:11:28 PM		25.667	25.927	24.82	27.494	25.471		45.3	48.722	11.161	35.133	-1.212	-7.171		49.209	0.157	14.643	0.004		378.10	6.30167	47.6	11.7	40.2	2.773	0.022	0.023	0.001	0.562	0.48	
397	8/30/2004	2:12:28 PM		25.666	25.926	24.83	27.478	25.516		45.556	49.224	11.234	35.074	-1.212	-7.151		51.166	0.159	14.643	0.003		379.10	6.31833	48.1	12.2	40.3	2.780	0.023	0.023	0.001	0.567	0.48	
398	8/30/2004	2:13:28 PM		25.675	25.931	24.819	27.488	25.54		45.336	48.527	11.176	35.211	-1.215	-7.197		48.704	0.157	14.643	0.003		380.10	6.335	47.4	11.6	40.3	2.777	0.022	0.023	0.001	0.561	0.48	
399	8/30/2004	2:14:28 PM		25.694	25.939	24.958	27.566	25.549		45.541	48.877	11.127	35.383	-1.212	-7.177		50.017	0.156	14.643	0.004		381.10	6.35167	47.8	11.9	40.5	2.790	0.022	0.022	0.001	0.553	0.47	
400	8/30/2004	2:15:28 PM		25.692	25.943	24.961	27.55	25.492		45.302	48.782	11.066	35.125	-1.212	-7.191		51.871	0.157	14.643	0.003		382.10	6.36833	47.7	12.4	40.2	2.773	0.022	0.023	0.001	0.560	0.48	
401	8/30/2004	2:16:28 PM		25.712	25.932	24.93	27.524	25.402		44.964	48.295	10.941	35.121	-1.212	-7.125		48.961	0.156	14.643	0.004		383.10	6.385	47.2	11.7	40.0	2.761	0.022	0.022	0.001	0.559	0.48	
402	8/30/2004	2:17:28 PM		25.712	25.923	24.916	27.375	25.312		45.344	49.054	10.996	35.199	-1.215	-7.174		49.775	0.156	14.643	0.003		384.10	6.40167	47.9	11.9	40.3	2.777	0.022	0.022	0.001	0.556	0.47	
403	8/30/2004	2:18:28 PM		25.717	25.918	24.906	27.315	25.272		45.089	48.595	10.98	35.139	-1.212	-7.099		49.445	0.151	14.643	0.003		385.10	6.41833	47.5	11.8	40.1	2.766	0.022	0.022	0.001	0.540	0.46	
404	8/30/2004	2:19:28 PM		25.705	25.896	24.869	27.228	25.28		45.174	48.666	11.087	35.106	-1.212	-7.212		49.858	0.152	14.643	0.003		386.10	6.435	47.5	11.9	40.1	2.768	0.022	0.022	0.001	0.544	0.46	
405	8/30/2004	2:20:28 PM		25.703	25.893	24.882	27.301	25.408		45.412	48.747	11.044	35.572	-1.215	-7.137		52.605	0.156	14.643	0.004		387.10	6.45167	47.6	12.5	40.5	2.792	0.022	0.022	0.001	0.553	0.47	
406	8/30/2004	2:21:28 PM		25.702	25.877	24.861	27.369	25.372		44.655	48.27	11.372	34.304	-1.218	-7.186		53.091	0.151	14.643	0.003		388.10	6.46833	47.1	12.6	39.5	2.722	0.022	0.022	0.001	0.550	0.47	
407	8/30/2004	2:22:28 PM		25.689	25.864	24.868	27.322	25.289		44.95	48.765	11.378	34.366	-1.212	-7.194		46.698	0.15	14.643	0.003		389.10	6.485	47.6	11.1	39.7	2.734	0.021	0.022	0.001	0.544	0.46	
408	8/30/2004	2:23:28 PM		25.696	25.861	24.87	27.299	25.301		44.888	48.423	11.498	34.292	-1.212	-7.223		49.272	0.154	14.643	0.003		390.10	6.50167	47.3	11.7	39.6	2.730	0.022	0.022	0.001	0.559	0.48	
409	8/30/2004	2:24:28 PM		25.703	25.859	24.952	27.291	25.293		44.55	48.146	11.36	34.093	-1.215	-7.139		47.77	0.151	14.643	0.003		391.10	6.51833	47.0	11.4	39.3	2.711	0.022	0.022	0.001	0.551	0.47	
410	8/30/2004	2:25:28 PM		25.705	25.84	25.039	27.277	25.265		44.863	48.349	11.387	34.404	-1.212	-7.183		49.399	0.15	14.643	0.004		392.10	6.535	47.2	11.8	39.6	2.733	0.021	0.021	0.001	0.541	0.46	
411	8/30/2004	2:26:28 PM		25.721	25.821	25	27.289	25.261		44.935	48.415	11.405	34.448	-1.215	-7.18		48.673	0.151	14.643	0.004		393.10	6.55167	47.3	11.6	39.7	2.737	0.022	0.022	0.001	0.545	0.46	
412	8/30/2004	2:27:28 PM		25.732	25.812	25.006	27.24	25.227		44.728	48.264	11.322	34.341	-1.218	-7.076		47.814	0.152	14.643	0.003		394.10	6.56833	47.1	11.4	39.5	2.726	0.022	0.022	0.001	0.550	0.47	
413	8/30/2004	2:28:28 PM		25.753	25.808	24.992	27.255	25.158		44.699	48.042	11.229	34.589	-1.212	-7.163		52.107	0.152	14.643	0.003		395.10	6.585	46.9	12.4	39.6	2.733	0.022	0.022	0.001	0.549	0.47	
414	8/30/2004	2:29:28 PM		25.748	25.783	24.962	27.155	25.098		44.807	48.224	11.092	34.829	-1.212	-7.125		51.512	0.15	14.643	0.004		396.10	6.60167	47.1	12.3	39.8	2.745	0.021	0.021	0.001	0.540	0.46	
415	8/30/2004	2:30:28 PM		25.758	25.779	24.977	27.091	25.049		45.551	49.238	11.1	35.32	-1.212	-7.209		49.858	0.155	14.643	0.003		397.10	6.61833	48.1	11.9	40.4	2.788	0.022	0.022	0.001	0.549	0.47	
416	8/30/2004	2:31:28 PM		25.753	25.759	24.942	27.016	25.074		45.097	48.682	11.072	34.934	-1.215	-7.186		47.903	0.152	14.643	0.003		398.10	6.635	47.6	11.4	40.0	2.759	0.022	0.022	0.001	0.545	0.46	
417	8/30/2004	2:32:28 PM		25.742	25.727	24.941	26.94	25.052		44.89	48.722	10.986	34.856	-1.215	-7.027		48.606	0.146	14.643	0.003		399.10	6.65167	47.6	11.6	39.9	2.749	0.021	0.021	0.001	0.525	0.45	
418	8/30/2004	2:33:28 PM		25.747	25.727	24.941	26.96	25.022		45.429	49.06	10.887	35.525	-1.215	-7.137		50.154	0.154	14.643	0.003		400.10	6.66833	47.9	11.9	40.5	2.791	0.022	0.022	0.001	0.546	0.46	
419	8/30/2004	2:34:28 PM		25.735	25.706	24.924	26.893	25.011		45.358	48.915	10.848	35.453	-1.212	-7.157		46.815	0.154	14.643	0.003		401.10	6.685	47.8	11.2	40.4	2.786	0.022	0.022	0.001	0.547	0.47	
420	8/30/2004	2:35:28 PM		25.728	25.683	25.067	26.901	24.959		45.387	49.153	10.854	35.468	-1.212	-7.142		50.106	0.15	14.643	0.003		402.10	6.70167	48.0	11.9	40.4	2.787	0.021	0.021	0.001	0.530	0.45	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	8/30/2004	2:36:28 PM		25.747	25.672	25.201	26.9	24.967		45.321	48.886	10.82	35.541	-1.212	-7.096		48.533	0.153	14.643	0.003		403.10	6.71833	47.8	11.6	40.4	2.788	0.022	0.022	0.001	0.539	0.46	
422	8/30/2004	2:37:28 PM		25.765	25.645	25.294	26.933	25.045		44.95	48.728	11.29	34.563	-1.212	-7.09		50.333	0.149	14.643	0.003		404.10	6.735	47.6	12.0	39.8	2.741	0.021	0.021	0.001	0.532	0.45	
423	8/30/2004	2:38:28 PM		25.815	25.645	25.409	26.968	25.055		44.827	48.662	11.273	34.443	-1.209	-7.09		48.775	0.151	14.643	0.004		405.10	6.75167	47.5	11.6	39.6	2.733	0.022	0.021	0.001	0.539	0.46	
424	8/30/2004	2:39:28 PM		25.862	25.637	25.516	27	24.947		44.535	48.048	11.258	34.318	-1.215	-7.053		51.235	0.151	14.643	0.003		406.10	6.76833	46.9	12.2	39.4	2.718	0.022	0.021	0.001	0.540	0.46	
425	8/30/2004	2:40:28 PM		25.927	25.642	25.637	26.995	24.973		44.813	48.394	11.171	34.682	-1.215	-7.116		52.186	0.159	14.643	0.003		407.10	6.785	47.3	12.4	39.7	2.740	0.023	0.022	0.001	0.563	0.48	
426	8/30/2004	2:41:28 PM		26.002	25.657	25.787	27.02	24.973		44.535	48.287	11.167	34.392	-1.212	-7.116		50.031	0.147	14.643	0.003		408.10	6.80167	47.2	11.9	39.5	2.721	0.021	0.021	0.001	0.522	0.44	
427	8/30/2004	2:42:28 PM		26.058	25.643	25.883	27.016	24.968		44.827	48.262	11.298	34.725	-1.212	-7.07		50.006	0.15	14.643	0.003		409.10	6.81833	47.1	11.9	39.8	2.742	0.021	0.021	0.001	0.527	0.45	
428	8/30/2004	2:43:28 PM		26.13	25.655	25.99	27.048	25.02		45.219	49.196	11.315	34.778	-1.212	-7.174		51.387	0.152	14.643	0.003		410.10	6.835	48.1	12.2	40.0	2.758	0.022	0.021	0.001	0.529	0.45	
429	8/30/2004	2:44:28 PM		26.178	25.634	26.063	27.027	24.984		45.01	48.753	11.117	34.731	-1.218	-7.131		48.068	0.152	14.643	0.003		411.10	6.85167	47.6	11.4	39.9	2.749	0.022	0.021	0.001	0.530	0.45	
430	8/30/2004	2:45:28 PM		26.25	25.645	26.18	27.038	24.94		44.745	48.62	11.199	34.511	-1.215	-7.015		50.188	0.151	14.643	0.003		412.10	6.86833	47.5	12.0	39.6	2.732	0.022	0.021	0.001	0.528	0.45	
431	8/30/2004	2:46:28 PM		26.331	25.652	26.311	26.989	24.932		44.989	48.73	10.921	35.166	-1.212	-6.995		50.39	0.153	14.643	0.003		413.10	6.885	47.6	12.0	40.1	2.763	0.022	0.021	0.001	0.527	0.45	
432	8/30/2004	2:47:28 PM		26.388	25.654	26.408	27.002	24.924		44.898	48.394	10.97	35.008	-1.209	-6.94		48.364	0.154	14.643	0.003		414.10	6.90167	47.3	11.5	40.0	2.755	0.022	0.021	0.001	0.530	0.45	
433	8/30/2004	2:48:28 PM		26.451	25.652	26.492	27.005	24.908		45.02	48.902	10.977	34.932	-1.212	-6.983		50.402	0.154	14.643	0.003		415.10	6.91833	47.8	12.0	40.0	2.756	0.022	0.021	0.001	0.529	0.45	
434	8/30/2004	2:49:28 PM		26.501	25.632	26.521	27	24.892		45.093	49.083	10.921	35.176	-1.212	-7.021		51.474	0.157	14.643	0.003		416.10	6.935	48.0	12.3	40.1	2.767	0.022	0.022	0.001	0.537	0.46	
435	8/30/2004	2:50:28 PM		26.556	25.637	26.537	27.03	24.858		44.846	48.631	10.903	35.059	-1.215	-7.102		53.898	0.151	14.643	0.004		417.10	6.95167	47.5	12.8	40.0	2.755	0.022	0.021	0.001	0.518	0.44	
436	8/30/2004	2:51:28 PM		26.598	25.639	26.503	26.972	24.829		44.753	48.709	10.974	34.655	-1.218	-7.082		46.479	0.149	14.643	0.003		418.10	6.96833	47.6	11.1	39.7	2.737	0.021	0.020	0.001	0.515	0.44	
437	8/30/2004	2:52:28 PM		26.663	25.64	26.489	27.002	24.85		44.939	48.933	11.103	34.696	-1.215	-7.018		45.985	0.153	14.643	0.003		419.10	6.985	47.8	11.0	39.8	2.745	0.022	0.021	0.001	0.528	0.45	
438	8/30/2004	2:53:28 PM		26.674	25.625	26.429	26.943	24.835		44.863	48.446	11.005	34.932	-1.215	-7.061		50.801	0.15	14.643	0.003		420.10	7.00167	47.3	12.1	39.9	2.751	0.021	0.021	0.001	0.517	0.44	
439	8/30/2004	2:54:28 PM		26.705	25.632	26.376	26.92	24.847		44.649	48.231	10.918	34.844	-1.215	-7.096		50.067	0.149	14.643	0.003		421.10	7.01833	47.1	11.9	39.7	2.740	0.021	0.021	0.001	0.516	0.44	
440	8/30/2004	2:55:28 PM		26.71	25.627	26.311	26.915	24.872		45.19	49.34	11.107	34.87	-1.212	-7.024		49.964	0.154	14.643	0.003		422.10	7.035	48.2	11.9	40.0	2.760	0.022	0.021	0.001	0.531	0.45	
441	8/30/2004	2:56:28 PM		26.73	25.637	26.266	26.87	24.902		45.253	49.06	11.009	35.273	-1.212	-7.018		50.938	0.152	14.643	0.003		423.10	7.05167	47.9	12.1	40.3	2.776	0.022	0.021	0.001	0.522	0.44	
442	8/30/2004	2:57:28 PM		26.732	25.643	26.267	26.881	24.873		45.259	49.136	11.077	35.373	-1.209	-6.98		50.868	0.15	14.643	0.003		424.10	7.06833	48.0	12.1	40.3	2.780	0.021	0.021	0.001	0.514	0.44	
443	8/30/2004	2:58:28 PM		26.733	25.64	26.204	26.887	24.875		45.085	49.033	11.04	35.123	-1.215	-6.992		47.092	0.152	14.643	0.003		425.10	7.085	47.9	11.2	40.1	2.765	0.022	0.021	0.001	0.525	0.45	
444	8/30/2004	2:59:28 PM		26.725	25.641	26.17	26.899	24.856		45.193	49.078	11.12	35.172	-1.212	-6.969		53.206	0.152	14.643	0.003		426.10	7.10167	48.0	12.7	40.2	2.770	0.022	0.021	0.001	0.524	0.45	
445	8/30/2004	3:00:28 PM		26.706	25.632	26.102	26.93	24.857		45.417	49.358	11.333	35	-1.218	-7.018		47.253	0.154	14.643	0.003		427.10	7.11833	48.2	11.3	40.2	2.772	0.022	0.021	0.001	0.532	0.45	
446	8/30/2004	3:01:28 PM		26.688	25.634	26.058	26.932	24.949		45.313	49.145	11.064	35.223	-1.215	-7.073		51.059	0.148	14.643	0.003		428.10	7.135	48.0	12.2	40.3	2.776	0.021	0.021	0.001	0.511	0.43	
447	8/30/2004	3:02:28 PM		26.675	25.636	26.01	26.949	25.036		45.244	48.975	10.971	35.451	-1.212	-7.015		46.383	0.146	14.643	0.004		429.10	7.15167	47.8	11.0	40.3	2.782	0.021	0.020	0.001	0.504	0.43	
448	8/30/2004	3:03:28 PM		26.653	25.634	25.993	27.012	25.089		45.188	49.132	10.968	35.371	-1.215	-6.986		43.185	0.152	14.643	0.003		430.10	7.16833	48.0	10.3	40.3	2.777	0.022	0.021	0.001	0.525	0.45	
449	8/30/2004	3:04:28 PM		26.643	25.649	25.953	27.097	25.179		45.487	49.53	11.185	35.215	-1.212	-6.966		48.652	0.143	14.643	0.003		431.10	7.185	48.4	11.6	40.4	2.782	0.020	0.020	0.000	0.494	0.42	
450	8/30/2004	3:05:28 PM		26.621	25.653	25.917	27.22	25.238		45.292	49.298	11.06	35.232	-1.212	-7.015		50.246	0.15	14.643	0.003		432.10	7.20167	48.2	12.0	40.3	2.776	0.021	0.021	0.001	0.520	0.44	
451	8/30/2004	3:06:28 PM		26.6	25.651	25.9	27.214	25.276		45.3	49.327	11.067	35.117	-1.212	-6.978		51.896	0.138	14.643	0.004		433.10	7.21833	48.2	12.4	40.2	2.772	0.020	0.019	0.000	0.479	0.41	
452	8/30/2004	3:07:28 PM		26.58	25.661	25.945	27.294	25.351		45.207	49.045	11.11	35.217	-1.212	-6.952		50.183	0.144	14.643	0.003		434.10	7.235	47.9	12.0	40.2	2.772	0.021	0.020	0.000	0.499	0.42	
453	8/30/2004	3:08:28 PM		26.564	25.666	25.895	27.343	25.37		45.257	49.199	11.125	35.135	-1.212	-7.134		50.052	0.15	14.643	0.003		435.10	7.25167	48.1	11.9	40.2	2.771	0.021	0.021	0.001	0.521	0.44	
454	8/30/2004	3:09:28 PM		26.549	25.676	25.86	27.318	25.38		45.186	48.792	11.028	35.334	-1.212	-7.076		50.721	0.147	14.643	0.003		436.10	7.26833	47.7	12.1	40.3	2.776	0.021	0.021	0.001	0.510	0.43	
455	8/30/2004	3:10:28 PM		26.54	25.676	25.825	27.344	25.351		45.373	49.462	11.105	35.191	-1.215	-6.995		48.85	0.147	14.643	0.003		437.10	7.285	48.3	11.6	40.3	2.777	0.021	0.021	0.001	0.510	0.43	
456	8/30/2004	3:11:28 PM		26.53	25.696	25.815	27.389	25.321		45.093	49.362	11.081	34.971	-1.215	-7.027		49.726	0.148	14.643	0.003		438.10	7.30167	48.2	11.8	40.0	2.760	0.021	0.021	0.001	0.517	0.44	
457	8/30/2004	3:12:12 PM		26.511	25.687	25.781	27.364	25.452		45.161	49.3	11.164	34.983	-1.212	-6.92		47.664	0.145	14.643	0.003		438.83	7.31389	48.2	11.4	40.1	2.763	0.021	0.020	0.001	0.507	0.43	
458	8/30/2004	3:13:12 PM		26.473	25.684	25.753	27.286	25.583		44.989	49.076	10.988	34.971	-1.215	-7.021		51.293	0.144	14.643	0.003		439.83	7.33056	48.0	12.2	40.0	2.756	0.021	0.020	0.001	0.505	0.43	
459	8/30/2004	3:14:12 PM		26.464	25.695	25.724	27.253	25.635		45.502	49.323	11.142	35.572	-1.215	-6.969		51.714	0.145	14.643	0.003		440.83	7.34722	48.2	12.3	40.5	2.795	0.021	0.020	0.001	0.502	0.43	
460	8/30/2004	3:15:12 PM		26.465	25.721	25.725	27.199	25.521		44.906	48.695	11.002	35.098	-1.215	-7.021		48.077	0.144	14.643	0.003		441.83	7.36389	47.6	11.5	40.0	2.758	0.021	0.020	0.001	0.505	0.43	
461	8/30/2004	3:16:12 PM		26.468	25.744	25.728	27.232	25.419		44.836	48.877	11.134	34.708	-1.209	-7.004		49.14	0.145	14.643	0.003		442.83	7.38056	47.8	11.7	39.8	2.742	0.021	0.020	0.001	0.511	0.44	
462	8/30/2004	3:17:12 PM		26.443	25.744	25.683	27.202	25.424		45.002	49.153	11.202	34.768	-1.215	-6.946		51.71	0.143	14.643	0.003		443.83	7.39722	48.0	12.3	39.9	2.750	0.020	0.020	0.001	0.504	0.43	
463	8/30/2004	3:18:12 PM		26.436	25.757	25.771	27.185	25.407		45.305	49.47	11.221	34.987	-1.212	-6.94		50.819	0.141	14.643	0.004		444.83	7.41389	48.3	12.1	40.1	2.768	0.020	0.020	0.000	0.492	0.42	
464	8/30/2004	3:19:12 PM		26.42	25.751	25.735	27.188	25.375		45.004	49.097	10.989	35.065	-1.212	-6.888		49.929	0.135	14.643	0.003		445.83	7.43056	48.0	11.9	40.0	2.760	0.019	0.019	0.000	0.473	0.40	
465	8/30/2004	3:20:12 PM		26.415	25.756	25.71	27.154	25.356		45.161	49.139	11.074	35.17	-1.212	-6.983		47.564	0.145	14.643	0.003		446.83	7.44722	48.0	11.3	40.2	2.769	0.021	0.020	0.001	0.507	0.43	
466	8/30/2004	3:21:12 PM		26.41	25.761	25.7	27.199	25.346		45.377	49.443	11.114	35.262	-1.215	-7.03		49.03	0.144	14.643	0.003		447.83	7.46389	48.3	11.7	40.3	2.780	0.021	0.020	0.001	0.501	0.43	
467	8/30/2004	3:22:12 PM		26.39	25.756	25.66	27.219	25.221		45.217	49.19	11.159	35.242	-1.212	-7.001		48.9	0.143	14.643	0.003		448.83	7.48056	48.1	11.6	40.2	2.774	0.020	0.020	0.000	0.500	0.43	
468	8/30/2004	3:23:12 PM		26.397	25.773	25.677	27.25	25.223		45.097	49.346	11.109	35.02	-1.209	-7.03		49.795	0.148	14.643	0.004		449.83	7.49722	48.2	11.9	40.1	2.762	0.021	0.021	0.001	0.519	0.44	
469	8/30/2004	3:24:12 PM		26.398	25.779	25.668	27.312	25.254		44.691	48.656	11.09	34.727	-1.206	-6.949		50.187	0.151	14.643	0.004		450.83	7.51389	47.5	12.0	39.7	2.738	0.022	0.021	0.001	0.534	0.45	
470	8/30/2004	3:25:12 PM		26.373	25.759	25.633	27.251	25.328		44.937	49.194	11	34.965	-1.212	-7.087		48.778	0.142	14.643	0.003		451.83	7.53056	48.1	11.6	40.0	2.754	0.020	0.020	0.000	0.500	0.43	
471	8/30/2004	3:26:12 PM		26.358	25.759	25.618	27.242	25.334		45.361	49.495	11.256	34.969	-1.212	-7.004		50.317	0.132	14.643	0.003		452.83	7.54722	48.4	12.0	40.2	2.769	0.019	0.019	0.000	0.462	0.39	
472	8/30/2004	3:27:12 PM		26.363	25.764	25.613	27.217	25.339		45.081	49.24	11.257	34.606	-1.212	-7.006		52.517	0.143	14.643	0.004		453.83	7.56389	48.1	12.5	39.8	2.747	0.020	0.020	0.001	0.505	0.43	
473	8/30/2004	3:28:12 PM		26.344	25.76	25.604	27.142	25.329		44.888	49.221	11.093	34.721	-1.212	-6.96		50.121	0.135	14.643	0.003		454.83	7.58056	48.1	11.9	39.8	2.744	0.019	0.019	0.000	0.477	0.41	
474	8/30/2004	3:29:12 PM		26.316	25.727	25.621	27.129	25.276		45.135	49.288	11.095	35.113	-1.215	-7.015		51.032	0.141	14.643	0.003		455.83	7.59722	48.2	12.2	40.1	2.766	0.020	0.020	0.000	0.494	0.42	
475	8/30/2004	3:30:12 PM		26.321	25.742	25.636	27.174	25.186		45.033	49.36	11.057	35.03	-1.209	-6.934		51.758	0.131	14.643	0.004		456.83	7.61389	48.2	12.3	40.0	2.760	0.019	0.018	0.000	0.460	0.39	
476	8/30/2004	3:31:12 PM		26.325	25.746	25.62	27.233	25.211		45.247	49.246	11.199	35.074	-1.212	-7.004		50.822	0.14	14.643	0.004		457.83	7.63056	48.1	12.1	40.2	2.769	0.020	0.020	0.000	0.490	0.42	
477	8/30/2004	3:32:12 PM		26.329	25.75	25.599	27.303	25.165		45.159	49.269	11.08	35.164	-1.212	-7.038		50.882	0.132	14.643	0.004		458.83	7.64722	48.1	12.1	40.2	2.769	0.019	0.019	0.000	0.463	0.39	
478	8/30/2004	3:33:12 PM		26.335	25.756	25.605	27.253	25.181		44.95	49.279	11.171	34.708	-1.212	-6.755		51.203	0.135	14.643	0.003		459.83	7.66389	48.2	12.2	39.8	2.746	0.019	0.019	0.000	0.477	0.41	
479	8/30/2004	3:34:12 PM		26.329	25.755	25.589	27.202	25.174		44.832	48.77	11.109	34.858	-1.209	-7.009		49.789	0.142	14.643	0.004		460.83	7.68056	47.6	11.9	39.8	2.747	0.020	0.020	0.001	0.502	0.43	
480	8/30/2004	3:35:12 PM		26.329	25.76	25.574	27.167	25.189		45.079	49.203	11.14	35.051	-1.215	-7.012		49.188	0.134	14.643	0.003		461.83	7.69722	48.1	11.7	40.1	2.762	0.019	0.019	0.000	0.471	0.40	
481	8/30/2004	3:36:12 PM		26.322	25.748	25.557	27.231	25.153		44.751	48.898	11.061	34.836	-1.215	-7.004		48.696	0.143	14.643	0.003		462.83	7.71389	47.8	11.6	39.8	2.744	0.020	0.020	0.001	0.506	0.43	
482	8/30/2004	3:37:12 PM		26.337	25.763	25.562	27.225	25.132		44.693	49.008	11.009	34.797	-1.212	-7.024		51.827	0.137	14.643	0.003		463.83	7.73056	47.9	12.3	39.7	2.740	0.020	0.019	0.000	0.486	0.41	
483	8/30/2004	3:38:12 PM		26.332	25.773	25.577	27.2	25.172		44.9	49.157	11.083	34.833	-1.212	-7.024		48.473	0.146	14.643	0.003		464.83	7.74722	48.0	11.5	39.9	2.749	0.021	0.021	0.001	0.516	0.44	
484	8/30/2004	3:39:12 PM		26.331	25.767	25.546	27.269	25.187		44.548	48.778	11.024	34.583	-1.212	-7.012		52.538	0.138	14.643	0.003		465.83	7.76389	47.7	12.5	39.6	2.728	0.020	0.019	0.000	0.492	0.42	
485	8/30/2004	3:40:12 PM		26.336	25.777	25.661	27.269	25.222		45.124	49.433	11.251	34.723	-1.212	-6.885		50.263	0.141	14.643	0.003		466.83	7.78056	48.3	12.0	39.9	2.753	0.020	0.020	0.000	0.496	0.42	
486	8/30/2004	3:41:12 PM		26.321	25.767	25.626	27.234	25.406		44.871	49.033	11.14	34.801	-1.215	-6.975		50.267	0.137	14.643	0.003		467.83	7.79722	47.9	12.0	39.8	2.747	0.020	0.019	0.000	0.484	0.41	
487	8/30/2004	3:42:12 PM		26.322	25.753	25.597	27.155	25.487		44.635	48.968	11.006	34.764	-1.212	-6.868		52.538	0.139	14.643	0.003		468.83	7.81389	47.8	12.5	39.7	2.737	0.020	0.020	0.000	0.493	0.42	
488	8/30/2004	3:43:12 PM		26.315	25.751	25.595	27.119	25.281		45.043	49.018	11.219	34.916	-1.212	-7.004		47.86	0.141	14.643	0.003		469.83	7.83056	47.9	11.4	40.0	2.756	0.020	0.020	0.000	0.497	0.42	
489	8/30/2004	3:44:12 PM		26.322	25.763	25.577	27.2	25.192		44.886	49.375	11.248	34.64	-1.212	-6.859		48.659	0.148	14.643	0.003		470.83	7.84722	48.2	11.6	39.8	2.742	0.021	0.021	0.001	0.524	0.45	
490	8/30/2004	3:45:12 PM		26.322	25.773	25.597	27.166	25.178		44.811	49.141	11.023	34.905	-1.212	-6.856		48.682	0.141	14.643	0.003		471.83	7.86389	48.0	11.6	39.9	2.748	0.020	0.020	0.000	0.498	0.42	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	8/30/2004	3:46:12 PM		26.322	25.768	25.562	27.276	25.173		44.911	49.398	11.171	34.626	-1.212	-6.908		49.549	0.135	14.643	0.003		472.83	7.88056	48.3	11.8	39.8	2.742	0.019	0.019	0.000	0.478	0.41	
492	8/30/2004	3:47:12 PM		26.322	25.768	25.577	27.251	25.188		44.815	49.217	11.149	34.657	-1.215	-7.018		52.213	0.128	14.643	0.003		473.83	7.89722	48.1	12.4	39.7	2.740	0.018	0.018	0.000	0.454	0.39	
493	8/30/2004	3:48:12 PM		26.306	25.757	25.556	27.189	25.147		44.726	49.091	11.282	34.443	-1.215	-7.024		52.374	0.131	14.643	0.003		474.83	7.91389	48.0	12.5	39.6	2.729	0.019	0.018	0.000	0.466	0.40	
494	8/30/2004	3:49:12 PM		26.325	25.77	25.554	27.163	25.115		44.618	48.948	11.028	34.618	-1.209	-6.989		50.379	0.139	14.643	0.003		475.83	7.93056	47.8	12.0	39.6	2.732	0.020	0.020	0.000	0.495	0.42	
495	8/30/2004	3:50:12 PM		26.31	25.766	25.545	27.184	25.106		44.508	48.952	11.144	34.347	-1.212	-6.983		48.404	0.137	14.643	0.003		476.83	7.94722	47.8	11.5	39.4	2.718	0.020	0.019	0.000	0.490	0.42	
496	8/30/2004	3:51:12 PM		26.295	25.755	25.524	27.188	25.105		44.386	48.589	11.124	34.411	-1.215	-6.868		50.511	0.133	14.643	0.003		477.83	7.96389	47.5	12.0	39.4	2.716	0.019	0.019	0.000	0.476	0.41	
497	8/30/2004	3:52:12 PM		26.31	25.766	25.555	27.204	25.391		44.417	48.691	11.11	34.427	-1.212	-6.928		51.725	0.149	14.643	0.003		478.83	7.98056	47.6	12.3	39.4	2.718	0.021	0.021	0.001	0.533	0.45	
498	8/30/2004	3:53:12 PM		26.309	25.76	25.599	27.237	25.509		44.846	49.416	11.172	34.558	-1.212	-7.024		50.82	0.148	14.643	0.003		479.83	7.99722	48.3	12.1	39.7	2.737	0.021	0.021	0.001	0.525	0.45	
499	8/30/2004	3:54:12 PM		26.329	25.775	25.634	27.227	25.709		45.051	49.752	11.212	34.731	-1.212	-6.995		49.614	0.142	14.643	0.003		480.83	8.01389	48.6	11.8	39.9	2.750	0.020	0.020	0.001	0.501	0.43	
500	8/30/2004	3:55:12 PM		26.34	25.791	25.64	27.204	25.72		45.118	49.549	11.284	34.821	-1.212	-6.966		49.679	0.127	14.643	0.004		481.83	8.03056	48.4	11.8	40.0	2.756	0.018	0.018	0.000	0.447	0.38	
501	8/30/2004	3:56:12 PM		26.352	25.798	25.617	27.27	25.842		45.045	49.424	11.32	34.7	-1.212	-6.983		45.703	0.134	14.643	0.003		482.83	8.04722	48.3	10.9	39.9	2.749	0.019	0.019	0.000	0.473	0.40	
502	8/30/2004	3:57:12 PM		26.369	25.815	25.619	27.288	25.819		44.902	49.271	11.283	34.575	-1.212	-7.061		48.371	0.136	14.643	0.003		483.83	8.06389	48.1	11.5	39.7	2.740	0.019	0.019	0.000	0.482	0.41	
503	8/30/2004	3:58:12 PM		26.372	25.828	25.602	27.265	25.872		44.577	48.973	11.094	34.536	-1.212	-7.015		49.485	0.132	14.643	0.003		484.83	8.08056	47.8	11.8	39.6	2.727	0.019	0.019	0.000	0.470	0.40	
504	8/30/2004	3:59:12 PM		26.391	25.852	25.616	27.354	25.881		44.728	49.205	11.169	34.56	-1.212	-7.056		50.78	0.146	14.643	0.004		485.83	8.09722	48.1	12.1	39.6	2.733	0.021	0.021	0.001	0.518	0.44	
505	8/30/2004	4:00:12 PM		26.404	25.865	25.614	27.402	25.874		44.433	49.058	11.158	34.322	-1.212	-7.05		49.113	0.141	14.643	0.003		486.83	8.11389	47.9	11.7	39.4	2.715	0.020	0.020	0.001	0.504	0.43	
506	8/30/2004	4:01:12 PM		26.402	25.878	25.582	27.435	25.937		44.548	49.066	11.162	34.431	-1.212	-6.989		49.629	0.136	14.643	0.003		487.83	8.13056	47.9	11.8	39.5	2.723	0.019	0.019	0.000	0.485	0.41	
507	8/30/2004	4:02:12 PM		26.414	25.895	25.614	27.402	25.884		44.321	48.84	11.163	34.22	-1.212	-6.952		48.661	0.135	14.643	0.003		488.83	8.14722	47.7	11.6	39.3	2.708	0.019	0.019	0.000	0.484	0.41	
508	8/30/2004	4:03:12 PM		26.41	25.896	25.58	27.398	25.85		44.255	48.774	11.145	34.119	-1.212	-6.908		48.613	0.121	14.643	0.003		489.83	8.16389	47.6	11.6	39.2	2.702	0.017	0.017	0.000	0.435	0.37	
509	8/30/2004	4:04:12 PM		26.427	25.924	25.593	27.366	25.803		44.35	48.687	11.148	34.308	-1.212	-6.926		48.782	0.132	14.643	0.003		490.83	8.18056	47.6	11.6	39.3	2.712	0.019	0.019	0.000	0.473	0.40	
510	8/30/2004	4:05:12 PM		26.429	25.935	25.594	27.257	25.794		43.894	48.204	11.067	33.908	-1.212	-6.966		48.738	0.132	14.643	0.003		491.83	8.19722	47.1	11.6	38.9	2.682	0.019	0.019	0.000	0.478	0.41	
511	8/30/2004	4:06:12 PM		26.419	25.935	25.639	27.222	25.809		44.081	48.626	11.033	34.101	-1.221	-6.992		49.434	0.128	14.643	0.003		492.83	8.21389	47.5	11.8	39.1	2.695	0.018	0.018	0.000	0.460	0.39	
512	8/30/2004	4:07:12 PM		26.434	25.961	25.695	27.263	25.775		44.78	49.36	11.136	34.661	-1.215	-6.957		48.17	0.13	14.643	0.004		493.83	8.23056	48.2	11.5	39.7	2.739	0.019	0.018	0.000	0.460	0.39	
513	8/30/2004	4:08:12 PM		26.434	25.966	25.665	27.278	25.64		44.649	49.172	11.096	34.718	-1.212	-6.833		48.488	0.13	14.643	0.004		494.83	8.24722	48.0	11.5	39.7	2.736	0.019	0.018	0.000	0.460	0.39	
514	8/30/2004	4:09:12 PM		26.445	25.976	25.655	27.269	25.646		44.747	49.412	11.223	34.45	-1.215	-6.879		55.023	0.142	14.643	0.003		495.83	8.26389	48.3	13.1	39.6	2.730	0.020	0.020	0.001	0.504	0.43	
515	8/30/2004	4:10:12 PM		26.436	25.967	25.631	27.329	25.811		45.056	49.505	11.317	34.934	-1.212	-7.006		50.976	0.128	14.643	0.003		496.83	8.28056	48.4	12.1	40.0	2.758	0.018	0.018	0.000	0.450	0.38	
516	8/30/2004	4:11:12 PM		26.457	25.999	25.628	27.291	25.683		44.512	49	11.19	34.468	-1.212	-6.986		48.433	0.14	14.643	0.003		497.83	8.29722	47.9	11.5	39.5	2.723	0.020	0.020	0.000	0.499	0.42	
517	8/30/2004	4:12:12 PM		26.437	25.999	25.623	27.216	25.623		44.411	48.927	11.113	34.271	-1.215	-6.989		52.534	0.133	14.643	0.003		498.83	8.31389	47.8	12.5	39.3	2.712	0.019	0.019	0.000	0.476	0.40	
518	8/30/2004	4:13:12 PM		26.438	25.999	25.598	27.192	25.519		44.713	49.41	11.207	34.565	-1.212	-6.949		48.25	0.106	14.643	0.004		499.83	8.33056	48.3	11.5	39.6	2.733	0.015	0.015	0.000	0.376	0.32	
519	8/30/2004	4:14:12 PM		26.433	26.009	25.613	27.197	25.669		44.263	48.809	11.274	34.062	-1.212	-6.853		50.77	0.126	14.643	0.003		500.83	8.34722	47.7	12.1	39.2	2.700	0.018	0.018	0.000	0.453	0.39	
520	8/30/2004	4:15:12 PM		26.417	26.004	25.593	27.206	25.673		44.429	49.253	11.138	34.265	-1.212	-6.902		50.734	0.135	14.643	0.004		501.83	8.36389	48.1	12.1	39.3	2.713	0.019	0.019	0.000	0.483	0.41	
521	8/30/2004	4:16:12 PM		26.417	26.004	25.567	27.166	25.608		43.973	48.345	11.151	33.939	-1.215	-6.989		49.143	0.144	14.643	0.003		502.83	8.38056	47.2	11.7	39.0	2.686	0.021	0.020	0.001	0.521	0.44	
522	8/30/2004	4:17:12 PM		26.427	26.028	25.602	27.225	25.612		44.222	48.624	11.286	34.056	-1.212	-6.92		49.86	0.122	14.643	0.003		503.83	8.39722	47.5	11.9	39.1	2.698	0.017	0.017	0.000	0.439	0.37	
523	8/30/2004	4:18:12 PM		26.421	26.032	25.606	27.289	25.731		45.051	49.646	11.379	34.757	-1.212	-6.972		50.277	0.13	14.643	0.003		504.83	8.41389	48.5	12.0	39.9	2.751	0.019	0.018	0.000	0.459	0.39	
524	8/30/2004	4:19:12 PM		26.427	26.039	25.618	27.326	25.843		44.647	49.385	11.261	34.376	-1.212	-6.963		49.422	0.136	14.643	0.003		505.83	8.43056	48.3	11.8	39.5	2.724	0.019	0.019	0.000	0.484	0.41	
525	8/30/2004	4:20:12 PM		26.437	26.048	25.617	27.4	25.827		44.877	49.514	11.385	34.536	-1.215	-6.98		49.752	0.122	14.643	0.003		506.83	8.44722	48.4	11.9	39.7	2.738	0.017	0.017	0.000	0.432	0.37	
526	8/30/2004	4:21:12 PM		26.436	26.048	25.647	27.405	25.952		44.788	49.52	11.364	34.396	-1.215	-6.96		51.232	0.138	14.643	0.003		507.83	8.46389	48.4	12.2	39.6	2.730	0.020	0.019	0.000	0.490	0.42	
527	8/30/2004	4:22:12 PM		26.467	26.073	25.777	27.44	26.017		45.304	50.034	11.306	35.076	-1.212	-6.914		49.535	0.127	14.643	0.004		508.83	8.48056	48.9	11.8	40.2	2.771	0.018	0.018	0.000	0.443	0.38	
528	8/30/2004	4:23:12 PM		26.462	26.063	25.742	27.49	26.062		45.41	50.562	11.444	34.833	-1.215	-6.781		48.863	0.144	14.643	0.003		509.83	8.49722	49.4	11.6	40.1	2.766	0.021	0.020	0.001	0.503	0.43	
529	8/30/2004	4:24:12 PM		26.479	26.075	25.774	27.362	25.949		45.692	50.508	11.478	35.137	-1.212	-6.943		49.199	0.13	14.643	0.003		510.83	8.51389	49.4	11.7	40.4	2.786	0.019	0.018	0.000	0.451	0.38	
530	8/30/2004	4:25:12 PM		26.494	26.081	25.765	27.438	25.944		45.744	50.498	11.474	35.387	-1.215	-6.899		48.483	0.131	14.643	0.003		511.83	8.53056	49.4	11.5	40.6	2.797	0.019	0.018	0.000	0.453	0.39	
531	8/30/2004	4:26:12 PM		26.513	26.095	25.779	27.462	25.994		45.51	50.274	11.461	35.022	-1.215	-6.952		51.089	0.132	14.643	0.003		512.83	8.54722	49.1	12.2	40.3	2.776	0.019	0.018	0.000	0.459	0.39	
532	8/30/2004	4:27:12 PM		26.529	26.111	25.79	27.502	26.039		45.143	49.895	11.352	34.864	-1.218	-6.952		51.681	0.138	14.643	0.003		513.83	8.56389	48.8	12.3	40.0	2.758	0.020	0.019	0.000	0.483	0.41	
533	8/30/2004	4:28:12 PM		26.549	26.131	25.8	27.517	25.929		44.888	49.634	11.276	34.784	-1.218	-6.839		51.176	0.113	14.643	0.003		514.83	8.58056	48.5	12.2	39.8	2.747	0.016	0.016	0.000	0.397	0.34	
534	8/30/2004	4:29:12 PM		26.575	26.156	25.845	27.463	25.94		45.105	49.891	11.424	34.768	-1.215	-6.928		48.851	0.137	14.643	0.003		515.83	8.59722	48.8	11.6	39.9	2.753	0.020	0.019	0.000	0.480	0.41	
535	8/30/2004	4:30:12 PM		26.595	26.171	25.845	27.503	26.065		44.745	49.228	11.276	34.645	-1.212	-6.946		47.507	0.131	14.643	0.003		516.83	8.61389	48.1	11.3	39.7	2.737	0.019	0.018	0.000	0.461	0.39	
536	8/30/2004	4:31:12 PM		26.609	26.181	25.86	27.448	26.159		45.006	49.872	11.356	34.657	-1.218	-6.949		49.704	0.14	14.643	0.003		517.83	8.63056	48.7	11.8	39.8	2.746	0.020	0.020	0.000	0.491	0.42	
537	8/30/2004	4:32:12 PM		26.613	26.18	25.884	27.387	25.954		44.747	49.681	11.445	34.23	-1.215	-6.905		48.982	0.12	14.643	0.003		518.83	8.64722	48.6	11.7	39.5	2.723	0.017	0.017	0.000	0.424	0.36	
538	8/30/2004	4:33:12 PM		26.605	26.176	25.88	27.373	25.875		44.606	49.586	11.359	34.207	-1.212	-6.96		48.836	0.138	14.643	0.003		519.83	8.66389	48.5	11.6	39.4	2.717	0.020	0.019	0.000	0.489	0.42	
539	8/30/2004	4:34:12 PM		26.611	26.178	25.922	27.35	25.947		43.824	48.56	11.04	33.932	-1.212	-6.963		49.495	0.135	14.643	0.003		520.83	8.68056	47.4	11.8	38.9	2.681	0.019	0.019	0.000	0.484	0.41	
540	8/30/2004	4:35:12 PM		26.603	26.159	25.923	27.296	25.958		44.657	49.364	11.377	34.318	-1.215	-6.908		49.714	0.118	14.643	0.003		521.83	8.69722	48.2	11.8	39.5	2.723	0.017	0.016	0.000	0.417	0.35	
541	8/30/2004	4:36:12 PM		26.61	26.156	25.966	27.309	25.965		44.189	48.933	11.183	34.13	-1.218	-6.954		47.171	0.125	14.643	0.003		522.83	8.71389	47.8	11.2	39.2	2.700	0.018	0.017	0.000	0.445	0.38	
542	8/30/2004	4:37:12 PM		26.633	26.17	26.099	27.382	25.829		46.406	51.626	11.631	35.761	-1.212	-6.891		51.735	0.151	14.643	0.003		523.83	8.73056	50.5	12.3	41.1	2.833	0.022	0.021	0.001	0.510	0.43	
543	8/30/2004	4:38:12 PM		26.651	26.168	26.112	27.415	25.917		45.709	50.983	11.508	35.098	-1.212	-6.417		50.413	0.121	14.643	0.003		524.83	8.74722	49.9	12.0	40.4	2.786	0.017	0.017	0.000	0.416	0.35	
544	8/30/2004	4:39:12 PM		26.658	26.169	26.128	27.381	25.808		45.444	50.115	11.456	35.09	-1.212	-6.816		49.581	0.133	14.643	0.003		525.83	8.76389	49.0	11.8	40.3	2.776	0.019	0.018	0.000	0.458	0.39	
545	8/30/2004	4:40:12 PM		26.69	26.172	26.146	27.339	25.94		45.732	50.635	11.576	35.121	-1.212	-6.954		49.249	0.134	14.643	0.003		526.83	8.78056	49.5	11.7	40.4	2.787	0.019	0.019	0.000	0.460	0.39	
546	8/30/2004	4:41:12 PM		26.698	26.164	26.103	27.297	25.858		45.448	50.324	11.389	35.059	-1.215	-6.931		50.546	0.121	14.643	0.003		527.83	8.79722	49.2	12.0	40.3	2.775	0.017	0.017	0.000	0.417	0.36	
547	8/30/2004	4:42:12 PM		26.732	26.179	26.108	27.406	25.863		45.327	50.214	11.364	35.01	-1.215	-6.949		47.616	0.129	14.643	0.003		528.83	8.81389	49.1	11.3	40.2	2.769	0.018	0.018	0.000	0.446	0.38	
548	8/30/2004	4:43:12 PM		26.745	26.187	26.091	27.399	25.791		45.219	50.104	11.482	34.731	-1.215	-6.897		48.876	0.122	14.643	0.003		529.83	8.83056	49.0	11.6	40.0	2.756	0.017	0.017	0.000	0.424	0.36	
549	8/30/2004	4:44:12 PM		26.739	26.186	26.055	27.313	25.74		44.587	49.532	11.34	34.314	-1.212	-6.954		49.207	0.129	14.643	0.003		530.83	8.84722	48.4	11.7	39.5	2.720	0.018	0.018	0.000	0.454	0.39	
550	8/30/2004	4:45:12 PM		26.764	26.196	26.055	27.328	25.87		44.892	49.825	11.321	34.587	-1.215	-6.934		48.692	0.129	14.643	0.003		531.83	8.86389	48.7	11.6	39.7	2.740	0.018	0.018	0.000	0.451	0.38	
551	8/30/2004	4:46:12 PM		26.774	26.201	26.05	27.348	25.84		44.373	49.524	11.337	33.971	-1.209	-6.934		51.385	0.134	14.643	0.003		532.83	8.88056	48.4	12.2	39.2	2.701	0.019	0.019	0.000	0.476	0.40	
552	8/30/2004	4:47:12 PM		26.781	26.198	26.032	27.34	25.832		43.706	48.568	11.119	33.793	-1.212	-6.937		50.066	0.129	14.643	0.003		533.83	8.89722	47.4	11.9	38.7	2.672	0.018	0.018	0.000	0.463	0.39	
553	8/30/2004	4:48:12 PM		26.777	26.204	26.029	27.411	25.998		44.187	49.275	11.211	33.928	-1.212	-6.946		46.942	0.115	14.643	0.003		534.83	8.91389	48.1	11.2	39.1	2.693	0.016	0.016	0.000	0.410	0.35	
554	8/30/2004	4:49:12 PM		26.78	26.222	26.081	27.434	26.136		46.269	51.518	11.571	35.583	-1.212	-6.894		49.439	0.137	14.643	0.003		535.83	8.93056	50.4	11.8	40.9	2.822	0.020	0.019	0.000	0.465	0.40	
555	8/30/2004	4:50:12 PM		26.784	26.226	26.065	27.498	26.12		45.96	51.141	11.506	35.431	-1.212	-6.729		49.512	0.121	14.643	0.003		536.83	8.94722	50.0	11.8	40.7	2.806	0.017	0.017	0.000	0.413	0.35	
556	8/30/2004	4:51:12 PM		26.793	26.24	26.059	27.536	26.098		46.227	51.365	11.577	35.603	-1.209	-6.772		53.197	0.127	14.643	0.004		537.83	8.96389	50.2	12.7	40.9	2.821	0.018	0.018	0.000	0.431	0.37	
557	8/30/2004	4:52:12 PM		26.791	26.233	26.032	27.445	25.972		45.593	50.819	11.509	35.018	-1.157	-6.512		47.092	0.138	14.643	0.003		538.83	8.98056	49.7	11.2	40.3	2.779	0.020	0.019	0.000	0.476	0.41	
558	8/30/2004	4:53:12 PM		26.774	26.231	26.005	27.333	25.955		45.107	50.351	11.373	34.606	-1.212	-6.862		47.649	0.113	14.643	0.003		539.83	8.99722	49.2	11.3	39.9	2.748	0.016	0.016	0.000	0.395	0.34	
559	8/30/2004	4:54:12 PM		26.773	26.245	25.994	27.292	25.949		44.948	49.992	11.472	34.345	-1.215	-6.98		48.342	0.129	14.643	0.003		540.83	9.01389	48.9	11.5	39.6	2.733	0.018	0.018	0.000	0.453	0.39	
560	8/30/2004	4:55:12 PM		26.759	26.236	25.966	27.368	25.92		44.228	49.178	11.19	34.091	-1.215	-6.975		49.364	0.12	14.643	0.003		541.83	9.03056	48.1	11.8	39.2	2.700	0.017	0.017	0.000	0.427	0.36	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	8/30/2004	4:56:12 PM		26.762	26.244	25.964	27.441	26.033		44.247	49.391	11.17	34.125	-1.215	-6.928		46.76	0.116	14.643	0.003		542.83	9.04722	48.3	11.1	39.2	2.702	0.017	0.016	0.000	0.412	0.35	
562	8/30/2004	4:57:12 PM		26.775	26.267	25.976	27.458	26.06		43.581	48.542	11.062	33.577	-1.212	-6.972		48.095	0.128	14.643	0.003		543.83	9.06389	47.4	11.5	38.6	2.660	0.018	0.018	0.000	0.462	0.39	
563	8/30/2004	4:58:12 PM		26.757	26.249	25.938	27.466	26.127		44.436	49.445	11.273	34.191	-1.215	-6.975		48.882	0.121	14.643	0.003		544.83	9.08056	48.3	11.6	39.3	2.711	0.017	0.017	0.000	0.429	0.37	
564	8/30/2004	4:59:12 PM		26.771	26.263	25.957	27.455	26.087		43.867	48.995	11.147	33.678	-1.212	-6.986		48.419	0.122	14.643	0.003		545.83	9.09722	47.9	11.5	38.8	2.673	0.017	0.017	0.000	0.439	0.37	
565	8/30/2004	5:00:12 PM		26.769	26.266	25.94	27.458	26.05		43.685	48.832	11.286	33.366	-1.215	-6.978		48.926	0.113	14.643	0.003		546.83	9.11389	47.7	11.7	38.5	2.656	0.016	0.016	0.000	0.409	0.35	
566	8/30/2004	5:01:12 PM		26.751	26.253	25.922	27.44	26.046		43.444	48.484	11.104	33.354	-1.215	-6.963		50.442	0.118	14.643	0.003		547.83	9.13056	47.4	12.0	38.4	2.647	0.017	0.016	0.000	0.429	0.36	
567	8/30/2004	5:02:12 PM		26.752	26.254	25.913	27.581	26.058		42.795	48.235	11.153	32.681	-0.813	-6.142		49.37	0.114	14.643	0.003		548.83	9.14722	47.1	11.8	37.7	2.602	0.016	0.016	0.000	0.422	0.36	
568	8/30/2004	5:03:12 PM		26.769	26.266	25.915	27.742	26.264		43.187	48.768	11.227	32.902	-0.798	-6.131		49.768	0.117	14.643	0.003		549.83	9.16389	47.6	11.9	38.0	2.623	0.017	0.016	0.000	0.429	0.37	
569	8/30/2004	5:04:12 PM		26.796	26.273	25.917	27.694	26.356		42.878	48.37	11.174	32.668	-0.766	-6.116		48.584	0.116	14.643	0.003		550.83	9.18056	47.2	11.6	37.8	2.604	0.017	0.016	0.000	0.428	0.36	
570	8/30/2004	5:05:12 PM		26.818	26.28	25.919	27.682	26.303		42.832	48.363	11.114	32.754	-0.76	-6.128		46.815	0.114	14.643	0.004		551.83	9.19722	47.2	11.2	37.8	2.606	0.016	0.016	0.000	0.421	0.36	
571	8/30/2004	5:06:12 PM		26.842	26.3	25.924	27.686	26.368		42.648	47.914	11.083	32.878	-0.763	-6.128		51.274	0.113	14.643	0.003		552.83	9.21389	46.8	12.2	37.8	2.604	0.016	0.016	0.000	0.417	0.36	
572	8/30/2004	5:07:12 PM		26.816	26.288	25.877	27.619	26.311		43.592	49.008	11.183	33.296	-1.143	-6.975		48.325	0.124	14.643	0.003		553.83	9.23056	47.9	11.5	38.4	2.651	0.018	0.017	0.000	0.451	0.38	
573	8/30/2004	5:08:12 PM		27.019	26.306	25.966	27.468	26.22		44.05	48.954	11.261	33.789	-1.215	-7.313		48.173	0.117	14.643	0.003		554.83	9.24722	47.8	11.5	38.9	2.683	0.017	0.016	0.000	0.419	0.36	
574	8/30/2004	5:09:12 PM		26.842	26.304	26.039	27.391	26.203		47.02	51.988	11.634	36.274	-1.215	-7.296		52.211	0.124	14.643	0.003		555.83	9.26389	50.9	12.4	41.6	2.871	0.018	0.017	0.000	0.414	0.35	
575	8/30/2004	5:10:12 PM		26.865	26.307	26.012	27.384	26.306		46.984	52.121	11.784	36.219	-1.148	-6.712		50.087	0.132	14.643	0.003		556.83	9.28056	51.0	11.9	41.6	2.868	0.019	0.018	0.000	0.442	0.38	
576	8/30/2004	5:11:12 PM		26.823	26.32	26	27.367	26.339		46.491	51.677	11.549	35.94	-1.212	-6.061		51.963	0.085	14.643	0.003		557.83	9.29722	50.6	12.4	41.2	2.842	0.012	0.012	0.000	0.287	0.24	
577	8/30/2004	5:12:12 PM		26.771	26.323	25.967	27.37	26.326		47.167	51.443	11.59	36.722	-1.215	-6.911		49.441	0.14	14.643	0.003		558.83	9.31389	50.3	11.8	41.9	2.892	0.020	0.020	0.000	0.465	0.40	
578	8/30/2004	5:13:12 PM		26.739	26.321	25.935	27.508	26.324		47.376	52.09	11.833	36.422	-1.212	-7.038		47.801	0.141	14.643	0.003		559.83	9.33056	51.0	11.4	41.9	2.889	0.020	0.020	0.000	0.469	0.40	
579	8/30/2004	5:14:12 PM		26.716	26.328	25.927	27.5	26.276		46.933	51.261	11.704	36.327	-1.212	-7.316		50.436	0.128	14.643	0.003		560.83	9.34722	50.1	12.0	41.6	2.870	0.018	0.018	0.000	0.429	0.36	
580	8/30/2004	5:15:12 PM		26.688	26.33	25.889	27.322	26.288		46.539	51.257	11.508	36.009	-1.215	-7.296		50.171	0.121	14.643	0.003		561.83	9.36389	50.1	11.9	41.3	2.846	0.017	0.017	0.000	0.409	0.35	
581	8/30/2004	5:16:12 PM		26.705	26.347	25.901	27.349	26.26		46.543	51.197	11.634	35.821	-1.215	-7.29		51.378	0.119	14.643	0.003		562.83	9.38056	50.1	12.2	41.2	2.839	0.017	0.017	0.000	0.403	0.34	
582	8/30/2004	5:17:12 PM		26.697	26.353	25.893	27.37	26.167		46.642	51.315	11.589	36.032	-1.212	-7.35		49.514	0.128	14.643	0.003		563.83	9.39722	50.2	11.8	41.3	2.850	0.018	0.018	0.000	0.432	0.37	
583	8/30/2004	5:18:12 PM		26.683	26.35	25.874	27.192	26.198		46.001	50.65	11.367	35.599	-1.218	-7.348		50.59	0.133	14.643	0.003		564.83	9.41389	49.5	12.0	40.8	2.813	0.019	0.019	0.000	0.455	0.39	
584	8/30/2004	5:19:12 PM		26.68	26.352	25.862	27.174	26.186		46.186	50.85	11.528	35.621	-1.218	-7.374		45.012	0.119	14.643	0.003		565.83	9.43056	49.7	10.7	40.9	2.820	0.017	0.017	0.000	0.407	0.35	
585	8/30/2004	5:20:12 PM		26.677	26.369	25.863	27.251	26.237		45.437	50.023	11.43	35.049	-1.212	-7.307		48.951	0.117	14.643	0.003		566.83	9.44722	48.9	11.7	40.2	2.775	0.017	0.016	0.000	0.406	0.35	
586	8/30/2004	5:21:12 PM		26.664	26.366	25.85	27.273	26.304		44.865	49.31	11.168	34.823	-1.215	-7.403		49.781	0.114	14.643	0.003		567.83	9.46389	48.2	11.9	39.8	2.747	0.016	0.016	0.000	0.400	0.34	
587	8/30/2004	5:22:12 PM		26.667	26.379	25.854	27.266	26.342		44.301	48.995	11.159	33.988	-1.215	-7.411		49.007	0.12	14.643	0.004		568.83	9.48056	47.9	11.7	39.1	2.699	0.017	0.017	0.000	0.428	0.36	
588	8/30/2004	5:23:12 PM		26.644	26.376	25.815	27.233	26.289		44.139	48.701	11.166	34.049	-1.212	-7.411		49.883	0.119	14.643	0.003		569.83	9.49722	47.6	11.9	39.1	2.695	0.017	0.017	0.000	0.426	0.36	
589	8/30/2004	5:24:12 PM		26.645	26.382	25.817	27.334	26.251		44.12	48.968	11.188	33.844	-1.215	-7.417		49.18	0.114	14.643	0.003		570.83	9.51389	47.8	11.7	39.0	2.688	0.016	0.016	0.000	0.409	0.35	
590	8/30/2004	5:24:35 PM		26.645	26.392	25.817	27.309	26.261		44.201	48.888	11.174	33.971	-1.212	-7.431		47.655	0.115	14.643	0.003		571.22	9.52028	47.8	11.4	39.1	2.695	0.016	0.016	0.000	0.412	0.35	
591	8/30/2004	5:25:35 PM		26.633	26.394	25.799	27.302	26.238		43.869	48.5	11.063	33.869	-1.215	-7.423		47.576	0.113	14.643	0.003		572.22	9.53694	47.4	11.3	38.9	2.680	0.016	0.016	0.000	0.407	0.35	
592	8/30/2004	5:26:35 PM		26.629	26.4	25.8	27.247	26.264		44.774	49.509	11.26	34.54	-1.212	-7.408		50.212	0.121	14.643	0.003		573.22	9.55361	48.4	12.0	39.7	2.734	0.017	0.017	0.000	0.427	0.36	
593	8/30/2004	5:27:35 PM		26.619	26.401	25.791	27.208	26.24		43.757	48.508	10.925	33.924	-1.212	-7.423		47.929	0.116	14.643	0.003		574.22	9.57028	47.4	11.4	38.8	2.678	0.017	0.016	0.000	0.418	0.36	
594	8/30/2004	5:28:35 PM		26.631	26.403	25.792	27.2	26.221		44.29	48.964	11.172	34.025	-1.215	-7.426		48.75	0.112	14.643	0.003		575.22	9.58694	47.8	11.6	39.2	2.700	0.016	0.016	0.000	0.400	0.34	
595	8/30/2004	5:29:35 PM		26.624	26.406	25.786	27.233	26.11		44.355	49.126	11.213	34.185	-1.218	-7.437		48.052	0.115	14.643	0.003		576.22	9.60361	48.0	11.4	39.3	2.708	0.016	0.016	0.000	0.410	0.35	
596	8/30/2004	5:30:35 PM		26.645	26.427	25.797	27.429	26.131		44.114	48.796	11.154	33.982	-1.212	-7.423		49.14	0.115	14.643	0.003		577.22	9.62028	47.7	11.7	39.0	2.692	0.016	0.016	0.000	0.412	0.35	
597	8/30/2004	5:31:35 PM		26.66	26.437	25.796	27.479	26.101		44.098	48.869	10.982	34.113	-1.212	-7.437		47.812	0.12	14.643	0.003		578.22	9.63694	47.7	11.4	39.1	2.696	0.017	0.017	0.000	0.430	0.37	
598	8/30/2004	5:32:35 PM		26.676	26.453	25.802	27.545	26.152		44.181	49.029	11.136	34.062	-1.212	-7.431		48.865	0.113	14.643	0.003		579.22	9.65361	47.9	11.6	39.1	2.697	0.016	0.016	0.000	0.404	0.34	
599	8/30/2004	5:33:35 PM		26.688	26.46	25.809	27.547	26.129		44.46	49.344	11.296	34.121	-1.215	-7.437		47.347	0.109	14.643	0.003		580.22	9.67028	48.2	11.3	39.3	2.709	0.016	0.015	0.000	0.388	0.33	
600	8/30/2004	5:34:35 PM		26.705	26.477	25.821	27.544	26.185		44.029	48.964	11.181	33.676	-1.215	-7.44		49.007	0.114	14.643	0.003		581.22	9.68694	47.8	11.7	38.9	2.679	0.016	0.016	0.000	0.410	0.35	
601	8/30/2004	5:35:35 PM		26.717	26.499	25.833	27.571	26.152		44.384	49.275	11.185	34.193	-1.212	-7.365		48.903	0.112	14.643	0.003		582.22	9.70361	48.1	11.6	39.3	2.709	0.016	0.016	0.000	0.399	0.34	
602	8/30/2004	5:36:35 PM		26.725	26.502	25.831	27.578	26.17		44.075	48.964	11.147	33.865	-1.215	-7.443		49.86	0.11	14.643	0.003		583.22	9.72028	47.8	11.9	39.0	2.687	0.016	0.015	0.000	0.395	0.34	
603	8/30/2004	5:37:35 PM		26.721	26.498	25.822	27.545	26.126		44.216	49.064	11.142	34.156	-1.215	-7.46		46.519	0.104	14.643	0.003		584.22	9.73694	47.9	11.1	39.2	2.702	0.015	0.015	0.000	0.371	0.32	
604	8/30/2004	5:38:35 PM		26.729	26.51	25.835	27.607	26.139		44.112	49.07	11.175	33.834	-1.215	-7.452		46.252	0.122	14.643	0.003		585.22	9.75361	47.9	11.0	39.0	2.687	0.017	0.017	0.000	0.438	0.37	
605	8/30/2004	5:39:35 PM		26.731	26.512	25.832	27.549	26.176		43.853	48.836	11.202	33.645	-1.215	-7.31		47.997	0.1	14.643	0.003		586.22	9.77028	47.7	11.4	38.7	2.672	0.014	0.014	0.000	0.361	0.31	
606	8/30/2004	5:40:35 PM		26.728	26.515	25.934	27.482	26.149		44.728	49.424	11.3	34.575	-1.215	-7.33		48.846	0.109	14.643	0.003		587.22	9.78694	48.3	11.6	39.7	2.734	0.016	0.015	0.000	0.383	0.33	
607	8/30/2004	5:41:35 PM		26.735	26.522	25.931	27.509	26.136		44.218	49.292	11.258	33.896	-1.215	-7.324		49.543	0.11	14.643	0.003		588.22	9.80361	48.2	11.8	39.1	2.693	0.016	0.015	0.000	0.393	0.33	
608	8/30/2004	5:42:35 PM		26.747	26.524	25.923	27.526	26.093		44.411	49.565	11.239	34.058	-1.215	-7.405		47.897	0.113	14.643	0.003		589.22	9.82028	48.4	11.4	39.2	2.705	0.016	0.016	0.000	0.402	0.34	
609	8/30/2004	5:43:35 PM		26.755	26.537	25.926	27.504	26.051		44.216	49.139	11.325	33.894	-1.212	-7.414		48.79	0.105	14.643	0.004		590.22	9.83694	48.0	11.6	39.1	2.693	0.015	0.015	0.000	0.375	0.32	
610	8/30/2004	5:44:35 PM		26.758	26.54	25.909	27.486	26.053		44.172	49.369	11.128	33.971	-1.212	-7.313		49.556	0.114	14.643	0.003		591.22	9.85361	48.2	11.8	39.1	2.694	0.016	0.016	0.000	0.407	0.35	
611	8/30/2004	5:45:35 PM		26.755	26.532	25.892	27.449	26.111		43.95	48.807	11.042	34.033	-1.218	-7.27		47.395	0.112	14.643	0.003		592.22	9.87028	47.7	11.3	39.0	2.688	0.016	0.016	0.000	0.401	0.34	
612	8/30/2004	5:46:35 PM		26.767	26.539	25.894	27.496	26.128		44.27	49.25	11.196	34.037	-1.215	-7.33		49.241	0.114	14.643	0.003		593.22	9.88694	48.1	11.7	39.2	2.699	0.016	0.016	0.000	0.407	0.35	
613	8/30/2004	5:47:35 PM		26.77	26.542	25.896	27.529	26.151		44.348	49.344	11.186	34.091	-1.215	-7.397		48.94	0.115	14.643	0.004		594.22	9.90361	48.2	11.7	39.2	2.704	0.016	0.016	0.000	0.409	0.35	
614	8/30/2004	5:48:35 PM		26.789	26.561	25.926	27.573	26.27		43.374	48.452	12.09	32.159	-1.209	-7.362		48.919	0.099	14.643	0.004		595.22	9.92028	47.3	11.7	37.8	2.604	0.014	0.014	0.000	0.366	0.31	
615	8/30/2004	5:49:35 PM		26.772	26.539	25.938	27.541	26.287		42.442	47.252	12.69	30.702	-1.215	-7.495		50.279	0.1	14.643	0.003		596.22	9.93694	46.1	12.0	36.6	2.522	0.014	0.014	0.000	0.381	0.32	
616	8/30/2004	5:50:35 PM		26.781	26.543	25.958	27.545	26.232		43.662	48.606	11.496	33.196	-1.212	-7.371		50.008	0.098	14.643	0.003		597.22	9.95361	47.5	11.9	38.4	2.650	0.014	0.014	0.000	0.355	0.30	
617	8/30/2004	5:51:35 PM		26.758	26.525	25.925	27.537	26.184		43.54	48.282	11.385	33.188	-1.212	-7.217		46.577	0.111	14.643	0.003		598.22	9.97028	47.2	11.1	38.4	2.645	0.016	0.015	0.000	0.404	0.34	
618	8/30/2004	5:52:35 PM		26.772	26.534	25.908	27.501	26.138		44.535	49.607	10.687	34.831	-1.218	-7.345		44.967	0.116	14.643	0.003		599.22	9.98694	48.5	10.7	39.7	2.736	0.017	0.016	0.000	0.408	0.35	
619	8/30/2004	5:53:35 PM		26.786	26.533	25.912	27.49	26.102		45.047	50.015	10.73	35.264	-1.215	-7.414		47.096	0.113	14.643	0.003		600.22	10.0036	48.9	11.2	40.2	2.769	0.016	0.016	0.000	0.393	0.33	
620	8/30/2004	5:54:35 PM		26.785	26.538	25.887	27.459	26.076		44.612	49.582	10.737	34.858	-1.212	-7.391		47.787	0.107	14.643	0.003		601.22	10.0203	48.5	11.4	39.7	2.740	0.015	0.015	0.000	0.376	0.32	
621	8/30/2004	5:55:35 PM		26.795	26.543	25.872	27.464	26.046		45.124	50.023	10.623	35.574	-1.215	-7.304		43.728	0.111	14.643	0.003		602.22	10.0369	48.9	10.4	40.3	2.782	0.016	0.016	0.000	0.384	0.33	
622	8/30/2004	5:56:35 PM		26.795	26.552	25.956	27.499	26.105		45.848	50.606	10.642	36.403	-1.215	-7.397		46.896	0.109	14.643	0.003		603.22	10.0536	49.5	11.2	41.1	2.835	0.016	0.015	0.000	0.369	0.31	
623	8/30/2004	5:57:35 PM		26.8	26.547	25.926	27.524	26.16		45.433	50.332	10.794	35.654	-1.215	-7.403		45.257	0.11	14.643	0.003		604.22	10.0703	49.2	10.8	40.5	2.795	0.016	0.015	0.000	0.378	0.32	
624	8/30/2004	5:58:35 PM		26.805	26.552	25.946	27.529	26.175		44.898	49.76	11.73	34.119	-1.212	-7.319		48.269	0.11	14.643	0.003		605.22	10.0869	48.6	11.5	39.5	2.724	0.016	0.015	0.000	0.388	0.33	
625	8/30/2004	5:59:35 PM		26.809	26.551	25.95	27.463	26.155		44.666	49.862	11.617	33.963	-1.212	-7.197		50.565	0.097	14.643	0.003		606.22	10.1036	48.7	12.0	39.3	2.711	0.014	0.014	0.000	0.344	0.29	
626	8/30/2004	6:00:35 PM		26.819	26.566	25.985	27.568	26.214		45.186	49.982	11.453	34.819	-1.212	-7.423		49.13	0.1	14.643	0.004		607.22	10.1203	48.9	11.7	40.0	2.758	0.014	0.014	0.000	0.348	0.30	
627	8/30/2004	6:01:35 PM		26.809	26.561	25.96	27.623	26.284		45.035	49.891	11.223	34.864	-1.215	-7.452		46.387	0.111	14.643	0.003		608.22	10.1369	48.8	11.0	39.9	2.754	0.016	0.015	0.000	0.387	0.33	
628	8/30/2004	6:02:35 PM		26.82	26.567	25.976	27.743	26.355		44.877	49.75	11.426	34.448	-1.215	-7.333		48.873	0.097	14.643	0.003		609.22	10.1536	48.6	11.6	39.7	2.735	0.014	0.014	0.000	0.341	0.29	
629	8/30/2004	6:03:35 PM		26.837	26.584	25.993	27.79	26.477		44.77	49.752	12.325	33.452	-1.215	-7.486		48.8	0.101	14.643	0.003		610.22	10.1703	48.6	11.6	39.1	2.697	0.014	0.014	0.000	0.360	0.31	
630	8/30/2004	6:04:35 PM		26.849	26.591	26.04	27.837	26.524		44.745	49.76	11.937	33.682	-1.215	-7.411		51.541	0.106	14.643	0.003		611.22	10.1869	48.6	12.3	39.2	2.704	0.015	0.015	0.000	0.376	0.32	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
631	8/30/2004	6:05:35 PM		26.861	26.603	26.072	27.914	26.525		44.801	49.526	12.162	33.789	-1.218	-7.348		50.406	0.102	14.643	0.003		612.22	10.2036	48.4	12.0	39.3	2.709	0.015	0.014	0.000	0.361	0.31	
632	8/30/2004	6:06:35 PM		26.882	26.609	26.113	27.93	26.557		44.873	49.905	12.079	33.873	-1.215	-7.368		48.074	0.107	14.643	0.003		613.22	10.2203	48.8	11.5	39.4	2.715	0.015	0.015	0.000	0.377	0.32	
633	8/30/2004	6:07:35 PM		26.893	26.616	26.13	27.862	26.498		44.411	49.252	12.177	33.153	-1.218	-7.446		47.716	0.105	14.643	0.003		614.22	10.2369	48.1	11.4	38.8	2.674	0.015	0.015	0.000	0.376	0.32	
634	8/30/2004	6:08:35 PM		26.911	26.628	26.142	27.799	26.246		44.817	49.601	11.845	34.121	-1.212	-7.466		49.451	0.106	14.643	0.003		615.22	10.2536	48.5	11.8	39.5	2.721	0.015	0.015	0.000	0.372	0.32	
635	8/30/2004	6:09:35 PM		26.906	26.618	26.217	27.684	26.266		44.985	49.851	11.828	34.14	-1.215	-7.275		50.215	0.095	14.643	0.003		616.22	10.2703	48.7	12.0	39.6	2.728	0.014	0.013	0.000	0.332	0.28	
636	8/30/2004	6:10:35 PM		26.936	26.643	26.297	27.684	26.351		45.3	50.148	11.524	34.784	-1.209	-7.255		47.63	0.106	14.643	0.004		617.22	10.2869	49.0	11.3	40.0	2.761	0.015	0.015	0.000	0.365	0.31	
637	8/30/2004	6:11:35 PM		26.946	26.638	26.262	27.649	26.356		45.728	50.724	11.424	35.193	-1.215	-7.446		48.463	0.111	14.643	0.003		618.22	10.3036	49.6	11.5	40.5	2.790	0.016	0.015	0.000	0.379	0.32	
638	8/30/2004	6:12:35 PM		26.956	26.634	26.253	27.665	26.332		45.278	50.158	11.587	34.634	-1.218	-7.298		50.01	0.103	14.643	0.003		619.22	10.3203	49.0	11.9	40.0	2.755	0.015	0.014	0.000	0.356	0.30	
639	8/30/2004	6:13:35 PM		26.986	26.659	26.278	27.72	26.357		45.379	50.137	11.554	34.924	-1.212	-7.376		47.803	0.097	14.643	0.003		620.22	10.3369	49.0	11.4	40.2	2.768	0.014	0.013	0.000	0.334	0.28	
640	8/30/2004	6:14:35 PM		27.001	26.674	26.303	27.74	26.342		45.769	50.778	11.663	35.063	-1.209	-7.423		50.058	0.111	14.643	0.004		621.22	10.3536	49.7	11.9	40.4	2.787	0.016	0.015	0.000	0.379	0.32	
641	8/30/2004	6:15:35 PM		27.011	26.674	26.283	27.73	26.352		45.276	50.198	11.649	34.659	-1.215	-7.394		46.279	0.109	14.643	0.003		622.22	10.3703	49.1	11.0	40.0	2.756	0.016	0.015	0.000	0.377	0.32	
642	8/30/2004	6:16:35 PM		27	26.657	26.261	27.674	26.38		45.732	50.786	11.547	35.067	-1.218	-7.385		46.258	0.105	14.643	0.003		623.22	10.3869	49.7	11.0	40.4	2.785	0.015	0.015	0.000	0.359	0.31	
643	8/30/2004	6:17:35 PM		27.025	26.677	26.291	27.689	26.35		45.537	50.297	11.554	35.09	-1.215	-7.414		48.946	0.105	14.643	0.003		624.22	10.4036	49.2	11.7	40.3	2.779	0.015	0.014	0.000	0.360	0.31	
644	8/30/2004	6:18:35 PM		27.04	26.692	26.286	27.649	26.35		45.622	50.436	11.384	35.24	-1.212	-7.374		49.424	0.112	14.643	0.004		625.22	10.4203	49.3	11.8	40.4	2.788	0.016	0.015	0.000	0.383	0.33	
645	8/30/2004	6:19:35 PM		27.05	26.697	26.296	27.684	26.335		45.508	50.347	11.292	35.201	-1.215	-7.463		48.444	0.112	14.643	0.003		626.22	10.4369	49.2	11.5	40.4	2.782	0.016	0.015	0.000	0.383	0.33	
646	8/30/2004	6:20:35 PM		27.05	26.697	26.281	27.649	26.32		45.622	50.365	11.424	35.197	-1.218	-7.4		48.544	0.103	14.643	0.003		627.22	10.4536	49.2	11.6	40.4	2.786	0.015	0.014	0.000	0.352	0.30	
647	8/30/2004	6:21:35 PM		27.053	26.701	26.285	27.592	26.279		45.914	50.821	11.226	35.64	-1.218	-7.411		46.475	0.109	14.643	0.003		628.22	10.4703	49.7	11.1	40.8	2.811	0.016	0.015	0.000	0.369	0.31	
648	8/30/2004	6:22:35 PM		27.058	26.706	26.295	27.597	26.269		45.234	49.837	11.186	35.271	-1.215	-7.504		46.925	0.109	14.643	0.004		629.22	10.4869	48.7	11.2	40.3	2.775	0.016	0.015	0.000	0.374	0.32	
649	8/30/2004	6:23:35 PM		27.066	26.719	26.313	27.606	26.248		45.784	50.666	11.242	35.587	-1.212	-7.446		46.6	0.109	14.643	0.003		630.22	10.5036	49.5	11.1	40.7	2.805	0.016	0.015	0.000	0.370	0.31	
650	8/30/2004	6:24:35 PM		27.061	26.708	26.283	27.56	26.262		45.321	49.936	11.214	35.312	-1.218	-7.507		47.205	0.105	14.643	0.003		631.22	10.5203	48.8	11.2	40.3	2.780	0.015	0.015	0.000	0.360	0.31	
651	8/30/2004	6:25:35 PM		27.059	26.712	26.296	27.554	26.24		45.657	50.679	11.308	35.301	-1.212	-7.379		47.532	0.108	14.643	0.003		632.22	10.5369	49.6	11.3	40.5	2.791	0.015	0.015	0.000	0.368	0.31	
652	8/30/2004	6:26:35 PM		27.067	26.71	26.294	27.556	26.233		44.971	50.071	11.083	34.862	-1.212	-7.301		46.99	0.103	14.643	0.004		633.22	10.5536	48.9	11.2	39.9	2.752	0.015	0.014	0.000	0.356	0.30	
653	8/30/2004	6:27:35 PM		27.066	26.719	26.373	27.536	26.247		45.759	50.826	11.203	35.371	-1.215	-7.486		44.704	0.107	14.643	0.003		634.22	10.5703	49.7	10.6	40.6	2.797	0.015	0.015	0.000	0.363	0.31	
654	8/30/2004	6:28:35 PM		27.065	26.707	26.381	27.519	26.196		45.572	50.513	11.08	35.443	-1.212	-7.466		48.041	0.108	14.643	0.003		635.22	10.5869	49.4	11.4	40.5	2.793	0.015	0.015	0.000	0.367	0.31	
655	8/30/2004	6:29:35 PM		27.08	26.727	26.386	27.509	26.176		45.763	50.608	11.334	35.426	-1.215	-7.293		46.748	0.104	14.643	0.003		636.22	10.6036	49.5	11.1	40.6	2.799	0.015	0.014	0.000	0.353	0.30	
656	8/30/2004	6:30:35 PM		27.073	26.716	26.35	27.478	26.13		45.46	50.494	10.999	35.511	-1.215	-7.22		46.946	0.11	14.643	0.003		637.22	10.6203	49.4	11.2	40.5	2.791	0.016	0.015	0.000	0.375	0.32	
657	8/30/2004	6:31:35 PM		27.071	26.714	26.353	27.456	26.122		45.885	50.656	11.156	35.78	-1.212	-7.226		45.701	0.099	14.643	0.004		638.22	10.6369	49.5	10.9	40.8	2.815	0.014	0.014	0.000	0.334	0.28	
658	8/30/2004	6:32:35 PM		27.09	26.728	26.372	27.46	26.127		46.005	50.668	11.083	36.038	-1.209	-7.463		46.975	0.107	14.643	0.004		639.22	10.6536	49.5	11.2	41.0	2.828	0.015	0.015	0.000	0.359	0.31	
659	8/30/2004	6:33:35 PM		27.073	26.706	26.34	27.418	26.149		45.572	50.602	11.096	35.344	-1.215	-7.405		46.669	0.105	14.643	0.003		640.22	10.6703	49.5	11.1	40.5	2.789	0.015	0.014	0.000	0.358	0.30	
660	8/30/2004	6:34:35 PM		27.066	26.704	26.338	27.381	26.112		45.848	50.792	11.141	35.621	-1.212	-7.411		48.608	0.113	14.643	0.003		641.22	10.6869	49.7	11.6	40.7	2.809	0.016	0.016	0.000	0.383	0.33	
661	8/30/2004	6:35:35 PM		27.059	26.697	26.321	27.379	26.096		45.429	50.386	11.037	35.26	-1.218	-7.29		46.514	0.105	14.643	0.003		642.22	10.7036	49.3	11.1	40.3	2.782	0.015	0.014	0.000	0.359	0.31	
662	8/30/2004	6:36:35 PM		27.067	26.705	26.334	27.377	26.099		45.663	50.266	11.066	35.654	-1.215	-7.403		47.497	0.106	14.643	0.003		643.22	10.7203	49.1	11.3	40.7	2.803	0.015	0.015	0.000	0.360	0.31	
663	8/30/2004	6:37:35 PM		27.065	26.703	26.327	27.4	26.051		45.487	50.307	10.967	35.515	-1.212	-7.426		49.572	0.098	14.643	0.004		644.22	10.7369	49.2	11.8	40.5	2.792	0.014	0.014	0.000	0.334	0.28	
664	8/30/2004	6:38:35 PM		27.048	26.681	26.309	27.308	26.024		45.518	50.33	10.945	35.767	-1.215	-7.431		46.95	0.107	14.643	0.003		645.22	10.7536	49.2	11.2	40.6	2.802	0.015	0.015	0.000	0.363	0.31	
665	8/30/2004	6:39:35 PM		27.052	26.685	26.314	27.362	25.989		45.634	50.548	11.171	35.307	-1.215	-7.44		45.371	0.099	14.643	0.003		646.22	10.7703	49.4	10.8	40.5	2.790	0.014	0.014	0.000	0.338	0.29	
666	8/30/2004	6:40:35 PM		27.036	26.668	26.317	27.31	25.967		44.745	49.464	11.549	34.129	-1.218	-7.498		48.969	0.113	14.643	0.003		647.22	10.7869	48.3	11.7	39.4	2.719	0.016	0.016	0.000	0.395	0.34	
667	8/30/2004	6:41:35 PM		27.034	26.676	26.36	27.298	25.955		45.325	50.231	11.547	34.788	-1.212	-7.481		48.256	0.099	14.643	0.003		648.22	10.8036	49.1	11.5	40.1	2.762	0.014	0.014	0.000	0.341	0.29	
668	8/30/2004	6:42:35 PM		27.016	26.654	26.413	27.246	25.913		45.611	50.372	11.642	35.002	-1.215	-7.391		50.09	0.107	14.643	0.003		649.22	10.8203	49.2	11.9	40.3	2.779	0.015	0.015	0.000	0.365	0.31	
669	8/30/2004	6:43:35 PM		27.029	26.662	26.436	27.254	25.976		45.531	50.384	11.664	34.858	-1.212	-7.174		47.042	0.103	14.643	0.003		650.22	10.8369	49.3	11.2	40.2	2.771	0.015	0.014	0.000	0.352	0.30	
670	8/30/2004	6:44:35 PM		27.026	26.649	26.413	27.271	26.033		44.956	49.934	11.516	34.429	-1.215	-7.362		47.009	0.102	14.643	0.003		651.22	10.8536	48.8	11.2	39.7	2.737	0.015	0.014	0.000	0.354	0.30	
671	8/30/2004	6:45:35 PM		27.037	26.655	26.443	27.347	26.068		45.068	49.872	11.517	34.587	-1.212	-7.498		50.367	0.102	14.643	0.003		652.22	10.8703	48.7	12.0	39.8	2.746	0.015	0.014	0.000	0.352	0.30	
672	8/30/2004	6:46:35 PM		27.04	26.648	26.432	27.355	26.097		45.719	50.834	11.408	35.032	-1.215	-7.483		45.962	0.105	14.643	0.003		653.22	10.8869	49.7	10.9	40.4	2.784	0.015	0.014	0.000	0.358	0.30	
673	8/30/2004	6:47:35 PM		27.055	26.652	26.441	27.414	26.161		45.815	50.915	11.509	35.131	-1.212	-7.35		47.422	0.103	14.643	0.003		654.22	10.9036	49.8	11.3	40.5	2.790	0.015	0.014	0.000	0.350	0.30	
674	8/30/2004	6:48:35 PM		27.065	26.652	26.441	27.434	26.211		45.79	50.678	11.46	35.349	-1.215	-7.376		47.83	0.102	14.643	0.003		655.22	10.9203	49.6	11.4	40.6	2.797	0.015	0.014	0.000	0.346	0.29	
675	8/30/2004	6:49:35 PM		27.081	26.659	26.453	27.476	26.292		45.823	50.65	11.478	35.398	-1.215	-7.495		46.738	0.106	14.643	0.003		656.22	10.9369	49.5	11.1	40.6	2.800	0.015	0.015	0.000	0.359	0.31	
676	8/30/2004	6:50:35 PM		27.077	26.66	26.448	27.481	26.298		45.4	50.241	11.499	34.772	-1.218	-7.518		47.516	0.106	14.643	0.003		657.22	10.9536	49.1	11.3	40.1	2.764	0.015	0.015	0.000	0.364	0.31	
677	8/30/2004	6:51:35 PM		27.093	26.666	26.455	27.558	26.269		45.528	50.39	11.541	34.87	-1.215	-7.388		49.428	0.101	14.643	0.003		658.22	10.9703	49.3	11.8	40.2	2.772	0.014	0.014	0.000	0.345	0.29	
678	8/30/2004	6:52:35 PM		27.09	26.663	26.462	27.6	26.331		45.599	50.43	11.444	35.071	-1.215	-7.382		45.903	0.091	14.643	0.003		659.22	10.9869	49.3	10.9	40.3	2.781	0.013	0.013	0.000	0.310	0.26	
679	8/30/2004	6:53:35 PM		27.088	26.655	26.449	27.577	26.294		45.446	50.165	11.405	35.24	-1.215	-7.411		49.057	0.102	14.643	0.003		660.22	11.0036	49.0	11.7	40.3	2.782	0.015	0.014	0.000	0.348	0.30	
680	8/30/2004	6:54:35 PM		27.093	26.646	26.455	27.563	26.274		45.047	50.019	11.32	34.638	-1.215	-7.333		47.757	0.102	14.643	0.003		661.22	11.0203	48.9	11.4	39.8	2.747	0.015	0.014	0.000	0.352	0.30	
681	8/30/2004	6:55:35 PM		27.093	26.651	26.465	27.513	26.219		45.427	50.575	11.452	34.87	-1.212	-7.489		48.072	0.103	14.643	0.003		662.22	11.0369	49.4	11.4	40.1	2.768	0.015	0.014	0.000	0.353	0.30	
682	8/30/2004	6:56:35 PM		27.093	26.646	26.45	27.448	26.19		45.485	50.113	11.468	35.188	-1.215	-7.489		49.839	0.095	14.643	0.003		663.22	11.0536	49.0	11.9	40.3	2.781	0.014	0.013	0.000	0.324	0.28	
683	8/30/2004	6:57:35 PM		27.088	26.645	26.529	27.442	26.174		45.446	50.394	11.183	35.39	-1.215	-7.327		48.244	0.094	14.643	0.003		664.22	11.0703	49.3	11.5	40.4	2.787	0.013	0.013	0.000	0.319	0.27	
684	8/30/2004	6:58:35 PM		27.098	26.65	26.534	27.432	26.109		45.726	50.759	11.306	35.466	-1.215	-7.394		50.911	0.103	14.643	0.003		665.22	11.0869	49.6	12.1	40.6	2.799	0.015	0.014	0.000	0.348	0.30	
685	8/30/2004	6:59:35 PM		27.107	26.65	26.528	27.407	26.023		45.703	50.579	11.328	35.347	-1.212	-7.446		48.827	0.101	14.643	0.003		666.22	11.1036	49.5	11.6	40.5	2.794	0.014	0.014	0.000	0.342	0.29	
686	8/30/2004	7:00:35 PM		27.106	26.654	26.513	27.326	25.998		45.286	50.125	11.316	34.981	-1.215	-7.379		47.086	0.101	14.643	0.003		667.22	11.1203	49.0	11.2	40.1	2.767	0.014	0.014	0.000	0.345	0.29	
687	8/30/2004	7:01:35 PM		27.098	26.636	26.49	27.288	25.98		46.203	51.315	11.522	35.603	-1.212	-7.449		47.603	0.105	14.643	0.003		668.22	11.1369	50.2	11.3	40.9	2.820	0.015	0.014	0.000	0.352	0.30	
688	8/30/2004	7:02:35 PM		27.102	26.64	26.489	27.222	25.914		45.721	50.676	11.438	35.273	-1.212	-7.492		46.785	0.099	14.643	0.003		669.22	11.1536	49.6	11.1	40.5	2.792	0.014	0.014	0.000	0.336	0.29	
689	8/30/2004	7:03:35 PM		27.096	26.624	26.488	27.146	25.903		45.305	50.094	11.271	35.084	-1.212	-7.327		47.457	0.106	14.643	0.003		670.22	11.1703	49.0	11.3	40.2	2.771	0.015	0.015	0.000	0.362	0.31	
690	8/30/2004	7:04:23 PM		27.09	26.628	26.492	27.125	25.917		45.601	50.426	11.278	35.285	-1.215	-7.319		49.33	0.095	14.643	0.003		671.02	11.1836	49.3	11.7	40.4	2.788	0.014	0.013	0.000	0.323	0.27	
691	8/30/2004	7:05:23 PM		27.083	26.621	26.485	27.068	25.84		45.657	50.55	11.317	35.291	-1.212	-7.437		48.757	0.094	14.643	0.003		672.02	11.2003	49.4	11.6	40.5	2.791	0.013	0.013	0.000	0.319	0.27	
692	8/30/2004	7:06:23 PM		27.087	26.609	26.483	27.127	25.848		45.34	50.194	11.402	34.866	-1.218	-7.249		46.55	0.103	14.643	0.003		673.02	11.2169	49.1	11.1	40.1	2.765	0.015	0.014	0.000	0.353	0.30	
693	8/30/2004	7:07:23 PM		27.084	26.612	26.485	27.134	25.856		45.058	50.123	11.307	34.673	-1.212	-7.535		47.251	0.097	14.643	0.003		674.02	11.2336	49.0	11.3	39.9	2.749	0.014	0.013	0.000	0.334	0.28	
694	8/30/2004	7:08:23 PM		27.067	26.594	26.478	27.062	25.803		45.145	49.893	11.309	34.899	-1.215	-7.457		47.209	0.1	14.643	0.003		675.02	11.2503	48.8	11.2	40.0	2.759	0.014	0.014	0.000	0.343	0.29	
695	8/30/2004	7:09:23 PM		27.063	26.576	26.47	27.068	25.74		45.155	49.955	11.325	34.881	-1.212	-7.379		47.096	0.097	14.643	0.004		676.02	11.2669	48.8	11.2	40.0	2.759	0.014	0.013	0.000	0.333	0.28	
696	8/30/2004	7:10:23 PM		27.051	26.574	26.467	27.091	25.718		45.379	50.39	11.429	34.799	-1.215	-7.481		47.945	0.1	14.643	0.004		677.02	11.2836	49.3	11.4	40.1	2.764	0.014	0.014	0.000	0.343	0.29	
697	8/30/2004	7:11:23 PM		27.054	26.577	26.476	27.059	25.731		45.002	49.874	11.293	34.747	-1.212	-7.472		46.01	0.099	14.643	0.004		678.02	11.3003	48.7	11.0	39.9	2.749	0.014	0.014	0.000	0.341	0.29	
698	8/30/2004	7:12:23 PM		27.052	26.564	26.468	27.007	25.748		45.095	50.115	11.455	34.376	-1.215	-7.509		48.73	0.095	14.643	0.003		679.02	11.3169	49.0	11.6	39.7	2.740	0.014	0.013	0.000	0.328	0.28	
699	8/30/2004	7:13:23 PM		27.045	26.563	26.482	26.985	25.797		44.506	49.188	11.115	34.536	-1.212	-7.434		47.482	0.099	14.643	0.003		680.02	11.3336	48.1	11.3	39.5	2.725	0.014	0.014	0.000	0.344	0.29	
700	8/30/2004	7:14:23 PM		27.033	26.551	26.474	27.043	25.86		45.022	49.75	11.326	34.864	-1.215	-7.483		46.087	0.097	14.643	0.003		681.02	11.3503	48.6	11.0	39.9	2.754	0.014	0.013	0.000	0.334	0.28	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
701	8/30/2004	7:15:23 PM		27.037	26.539	26.468	27.122	25.923		45.066	50.003	11.361	34.667	-1.215	-7.394		47.632	0.098	14.643	0.003		682.02	11.3669	48.9	11.3	39.9	2.749	0.014	0.013	0.000	0.338	0.29	
702	8/30/2004	7:16:23 PM		27.032	26.534	26.528	27.147	25.928		45.601	50.525	11.374	35.258	-1.215	-7.408		47.726	0.096	14.643	0.003		683.02	11.3836	49.4	11.4	40.4	2.787	0.014	0.013	0.000	0.326	0.28	
703	8/30/2004	7:17:23 PM		27.036	26.529	26.562	27.216	25.967		45.526	50.272	11.322	35.289	-1.215	-7.379		48.216	0.104	14.643	0.003		684.02	11.4003	49.1	11.5	40.4	2.786	0.015	0.014	0.000	0.353	0.30	
704	8/30/2004	7:18:23 PM		27.057	26.539	26.573	27.236	26.023		45.717	50.471	11.406	35.463	-1.215	-7.504		45.668	0.101	14.643	0.003		685.02	11.4169	49.3	10.9	40.6	2.799	0.014	0.014	0.000	0.341	0.29	
705	8/30/2004	7:19:23 PM		27.068	26.541	26.569	27.273	26.069		45.473	50.243	11.286	35.283	-1.215	-7.455		46.594	0.101	14.643	0.003		686.02	11.4336	49.1	11.1	40.4	2.784	0.014	0.014	0.000	0.343	0.29	
706	8/30/2004	7:20:23 PM		27.084	26.546	26.565	27.293	26.14		45.568	50.361	11.355	35.34	-1.215	-7.186		46.535	0.105	14.643	0.004		687.02	11.4503	49.2	11.1	40.5	2.789	0.015	0.014	0.000	0.356	0.30	
707	8/30/2004	7:21:23 PM		27.074	26.531	26.55	27.358	26.12		45.628	50.39	11.384	35.307	-1.215	-7.521		48.079	0.102	14.643	0.003		688.02	11.4669	49.3	11.5	40.5	2.790	0.015	0.014	0.000	0.346	0.29	
708	8/30/2004	7:22:23 PM		27.089	26.537	26.561	27.424	26.161		46.026	50.792	11.536	35.576	-1.212	-7.394		48.358	0.096	14.643	0.004		689.02	11.4836	49.7	11.5	40.8	2.813	0.014	0.013	0.000	0.322	0.27	
709	8/30/2004	7:23:23 PM		27.096	26.534	26.552	27.43	26.192		45.39	50.252	11.24	35.201	-1.215	-7.246		46.779	0.1	14.643	0.003		690.02	11.5003	49.1	11.1	40.3	2.778	0.014	0.014	0.000	0.340	0.29	
710	8/30/2004	7:24:23 PM		27.097	26.54	26.549	27.442	26.223		45.246	50.125	11.408	34.766	-1.215	-7.368		46.986	0.094	14.643	0.003		691.02	11.5169	49.0	11.2	40.0	2.758	0.013	0.013	0.000	0.322	0.27	
711	8/30/2004	7:25:23 PM		27.093	26.536	26.544	27.433	26.159		45.566	50.363	11.363	35.303	-1.215	-7.437		47.013	0.098	14.643	0.003		692.02	11.5336	49.2	11.2	40.4	2.788	0.014	0.013	0.000	0.332	0.28	
712	8/30/2004	7:26:23 PM		27.103	26.536	26.554	27.408	26.079		44.817	49.781	11.233	34.478	-1.212	-7.469		45.546	0.098	14.643	0.004		693.02	11.5503	48.7	10.8	39.6	2.734	0.014	0.013	0.000	0.339	0.29	
713	8/30/2004	7:27:23 PM		27.092	26.52	26.534	27.342	26.024		44.844	49.69	11.306	34.517	-1.218	-7.535		46.637	0.099	14.643	0.003		694.02	11.5669	48.6	11.1	39.7	2.736	0.014	0.014	0.000	0.342	0.29	
714	8/30/2004	7:28:23 PM		27.102	26.53	26.539	27.277	26.009		45.634	50.409	11.132	35.687	-1.215	-7.533		47.924	0.102	14.643	0.004		695.02	11.5836	49.3	11.4	40.7	2.803	0.015	0.014	0.000	0.344	0.29	
715	8/30/2004	7:29:23 PM		27.096	26.539	26.527	27.196	25.937		45.614	50.511	11.24	35.361	-1.212	-7.455		47.908	0.097	14.643	0.003		696.02	11.6003	49.4	11.4	40.5	2.791	0.014	0.013	0.000	0.329	0.28	
716	8/30/2004	7:30:23 PM		27.104	26.532	26.546	27.194	25.886		44.877	49.686	10.993	34.95	-1.212	-7.414		47.299	0.097	14.643	0.004		697.02	11.6169	48.6	11.3	39.9	2.752	0.014	0.013	0.000	0.333	0.28	
717	8/30/2004	7:31:23 PM		27.078	26.516	26.509	27.143	25.88		45.502	50.376	11.147	35.373	-1.212	-7.46		45.866	0.099	14.643	0.003		698.02	11.6336	49.3	10.9	40.4	2.788	0.014	0.014	0.000	0.336	0.29	
718	8/30/2004	7:32:23 PM		27.083	26.521	26.519	27.133	25.83		45.808	50.712	11.146	35.597	-1.212	-7.382		46.339	0.096	14.643	0.004		699.02	11.6503	49.6	11.0	40.7	2.806	0.014	0.013	0.000	0.324	0.28	
719	8/30/2004	7:33:23 PM		27.082	26.524	26.518	27.072	25.778		46.259	51.226	11.35	35.829	-1.212	-7.145		45.069	0.091	14.643	0.004		700.02	11.6669	50.1	10.7	41.0	2.830	0.013	0.012	0.000	0.304	0.26	
720	8/30/2004	7:34:23 PM		27.054	26.492	26.486	26.964	25.726		45.566	50.183	11.139	35.675	-1.218	-7.388		47.357	0.098	14.643	0.003		701.02	11.6836	49.1	11.3	40.6	2.801	0.014	0.013	0.000	0.331	0.28	
721	8/30/2004	7:35:23 PM		27.057	26.489	26.503	27.002	25.688		44.848	49.679	11.08	34.821	-1.212	-7.408		45.64	0.095	14.643	0.004		702.02	11.7003	48.6	10.9	39.8	2.746	0.014	0.013	0.000	0.327	0.28	
722	8/30/2004	7:36:23 PM		27.044	26.482	26.501	26.95	25.686		45.051	50.231	11.193	34.677	-1.212	-7.518		46.354	0.1	14.643	0.003		703.02	11.7169	49.1	11.0	39.9	2.748	0.014	0.014	0.000	0.344	0.29	
723	8/30/2004	7:37:23 PM		27.047	26.48	26.559	26.927	25.669		46.619	51.524	11.446	36.116	-1.215	-7.463		46.239	0.106	14.643	0.003		704.02	11.7336	50.4	11.0	41.4	2.852	0.015	0.015	0.000	0.351	0.30	
724	8/30/2004	7:38:23 PM		27.05	26.473	26.581	26.965	25.682		46.209	51.043	11.316	35.88	-1.209	-7.492		49.161	0.096	14.643	0.004		705.02	11.7503	49.9	11.7	41.0	2.830	0.014	0.013	0.000	0.320	0.27	
725	8/30/2004	7:39:23 PM		27.039	26.467	26.561	27.019	25.686		45.738	50.564	11.219	35.519	-1.212	-7.446		48.085	0.107	14.643	0.003		706.02	11.7669	49.4	11.5	40.6	2.801	0.015	0.015	0.000	0.361	0.31	
726	8/30/2004	7:40:23 PM		27.039	26.456	26.555	26.984	25.626		45.972	50.826	11.28	35.753	-1.212	-7.371		44.405	0.104	14.643	0.004		707.02	11.7836	49.7	10.6	40.9	2.817	0.015	0.014	0.000	0.349	0.30	
727	8/30/2004	7:41:23 PM		27.033	26.446	26.549	26.983	25.64		46.559	51.331	11.369	36.184	-1.212	-7.324		46.817	0.1	14.643	0.004		708.02	11.8003	50.2	11.2	41.4	2.852	0.014	0.014	0.000	0.331	0.28	
728	8/30/2004	7:42:23 PM		27.044	26.452	26.546	26.984	25.761		46.331	51.155	11.357	35.964	-1.215	-7.489		45.378	0.099	14.643	0.003		709.02	11.8169	50.0	10.8	41.1	2.837	0.014	0.014	0.000	0.330	0.28	
729	8/30/2004	7:43:23 PM		27.028	26.421	26.534	27.008	25.85		46.171	50.942	11.298	35.882	-1.218	-7.426		47.067	0.103	14.643	0.003		710.02	11.8336	49.8	11.2	41.0	2.829	0.015	0.014	0.000	0.344	0.29	
730	8/30/2004	7:44:23 PM		27.034	26.421	26.55	27.094	25.895		46.08	51.232	11.254	35.652	-1.215	-7.31		49.163	0.096	14.643	0.003		711.02	11.8503	50.1	11.7	40.9	2.818	0.014	0.013	0.000	0.322	0.27	
731	8/30/2004	7:45:23 PM		27.039	26.427	26.556	27.124	25.951		46.281	51.249	11.293	35.929	-1.218	-7.466		46.888	0.1	14.643	0.003		712.02	11.8669	50.1	11.2	41.1	2.834	0.014	0.014	0.000	0.333	0.28	
732	8/30/2004	7:46:23 PM		27.054	26.437	26.576	27.174	26.001		46.095	51.049	11.388	35.615	-1.215	-7.324		46.391	0.099	14.643	0.003		713.02	11.8836	49.9	11.0	40.9	2.817	0.014	0.014	0.000	0.332	0.28	
733	8/30/2004	7:47:23 PM		27.065	26.438	26.581	27.22	25.992		45.663	50.598	11.155	35.39	-1.212	-7.489		46.681	0.098	14.643	0.003		714.02	11.9003	49.5	11.1	40.5	2.794	0.014	0.013	0.000	0.331	0.28	
734	8/30/2004	7:48:23 PM		27.061	26.429	26.587	27.226	26.022		45.854	50.606	11.277	35.665	-1.212	-7.457		43.21	0.098	14.643	0.004		715.02	11.9169	49.5	10.3	40.8	2.810	0.014	0.013	0.000	0.329	0.28	
735	8/30/2004	7:49:23 PM		27.072	26.425	26.589	27.297	26.054		45.595	50.426	11.198	35.468	-1.215	-7.44		47.28	0.089	14.643	0.003		716.02	11.9336	49.3	11.3	40.5	2.795	0.013	0.012	0.000	0.301	0.26	
736	8/30/2004	7:50:23 PM		27.083	26.431	26.584	27.303	26.054		45.286	50.276	11.199	34.967	-1.215	-7.379		45.023	0.098	14.643	0.003		717.02	11.9503	49.2	10.7	40.1	2.767	0.014	0.013	0.000	0.334	0.28	
737	8/30/2004	7:51:23 PM		27.079	26.437	26.606	27.294	26.081		45.607	50.388	11.169	35.523	-1.209	-7.324		46.646	0.093	14.643	0.004		718.02	11.9669	49.3	11.1	40.6	2.797	0.013	0.013	0.000	0.314	0.27	
738	8/30/2004	7:52:23 PM		27.08	26.428	26.581	27.25	25.987		44.691	49.822	11.118	34.398	-1.212	-7.434		46.825	0.097	14.643	0.003		719.02	11.9836	48.7	11.2	39.5	2.726	0.014	0.013	0.000	0.336	0.29	
739	8/30/2004	7:53:23 PM		27.074	26.422	26.586	27.209	25.946		44.792	49.516	11.11	34.84	-1.212	-7.333		45.465	0.094	14.643	0.003		720.02	12.0003	48.4	10.8	39.8	2.745	0.013	0.013	0.000	0.323	0.28	
740	8/30/2004	7:54:23 PM		27.068	26.411	26.624	27.118	25.82		46.603	51.416	11.445	36.223	-1.215	-7.319		46.5	0.097	14.643	0.003		721.02	12.0169	50.3	11.1	41.4	2.855	0.014	0.013	0.000	0.320	0.27	
741	8/30/2004	7:55:23 PM		27.073	26.411	26.614	27.098	25.79		45.943	50.734	11.285	35.763	-1.218	-7.394		46.272	0.097	14.643	0.003		722.02	12.0336	49.6	11.0	40.9	2.817	0.014	0.013	0.000	0.325	0.28	
742	8/30/2004	7:56:23 PM		27.072	26.414	26.613	27.042	25.748		45.929	51.027	11.316	35.416	-1.215	-7.33		49.629	0.092	14.643	0.003		723.02	12.0503	49.9	11.8	40.7	2.804	0.013	0.013	0.000	0.310	0.26	
743	8/30/2004	7:57:23 PM		27.06	26.403	26.596	27.025	25.732		46.211	51.043	11.379	35.86	-1.215	-7.431		46.986	0.094	14.643	0.004		724.02	12.0669	49.9	11.2	41.0	2.829	0.013	0.013	0.000	0.314	0.27	
744	8/30/2004	7:58:23 PM		27.068	26.401	26.604	26.933	25.68		46.437	51.742	11.904	35.281	-1.212	-7.29		49.645	0.093	14.643	0.003		725.02	12.0836	50.6	11.8	40.9	2.817	0.013	0.013	0.000	0.312	0.27	
745	8/30/2004	7:59:23 PM		27.071	26.409	26.637	26.941	25.663		45.149	49.97	11.499	34.813	-1.212	-7.33		44.892	0.093	14.643	0.003		726.02	12.1003	48.8	10.7	40.0	2.757	0.013	0.013	0.000	0.318	0.27	
746	8/30/2004	8:00:23 PM		27.054	26.387	26.616	26.97	25.651		45.273	49.851	11.546	34.848	-1.215	-7.457		47.62	0.09	14.643	0.003		727.02	12.1169	48.7	11.3	40.1	2.762	0.013	0.012	0.000	0.307	0.26	
747	8/30/2004	8:01:23 PM		27.059	26.387	26.625	26.904	25.656		45.006	49.872	11.483	34.606	-1.218	-7.388		47.474	0.091	14.643	0.003		728.02	12.1336	48.7	11.3	39.8	2.744	0.013	0.012	0.000	0.313	0.27	
748	8/30/2004	8:02:23 PM		27.064	26.387	26.625	26.839	25.586		45.031	50.04	11.508	34.4	-1.212	-7.35		48.542	0.094	14.643	0.003		729.02	12.1503	48.9	11.6	39.7	2.738	0.013	0.013	0.000	0.324	0.28	
749	8/30/2004	8:03:23 PM		27.064	26.372	26.62	26.789	25.526		45.665	50.793	11.596	34.926	-1.212	-7.353		48.208	0.09	14.643	0.003		730.02	12.1669	49.7	11.5	40.3	2.778	0.013	0.012	0.000	0.306	0.26	
750	8/30/2004	8:04:23 PM		27.053	26.366	26.614	26.783	25.4		44.747	49.514	11.333	34.515	-1.215	-7.371		45.697	0.095	14.643	0.003		731.02	12.1836	48.4	10.9	39.6	2.732	0.014	0.013	0.000	0.328	0.28	
751	8/30/2004	8:05:23 PM		27.036	26.334	26.592	26.726	25.403		45.902	50.921	11.659	35.088	-1.215	-7.449		46.387	0.094	14.643	0.003		732.02	12.2003	49.8	11.0	40.5	2.792	0.013	0.013	0.000	0.318	0.27	
752	8/30/2004	8:06:23 PM		27.034	26.322	26.575	26.734	25.416		45.033	50.024	11.275	34.69	-1.215	-7.437		46.45	0.094	14.643	0.003		733.02	12.2169	48.9	11.1	39.9	2.748	0.013	0.013	0.000	0.323	0.27	
753	8/30/2004	8:07:23 PM		27.041	26.314	26.587	26.721	25.458		44.388	49.228	11.162	34.294	-1.215	-7.376		45.962	0.097	14.643	0.004		734.02	12.2336	48.1	10.9	39.3	2.712	0.014	0.013	0.000	0.338	0.29	
754	8/30/2004	8:08:23 PM		27.043	26.311	26.584	26.763	25.455		45.425	50.316	11.346	35.102	-1.212	-7.403		47.132	0.092	14.643	0.003		735.02	12.2503	49.2	11.2	40.3	2.776	0.013	0.013	0.000	0.313	0.27	
755	8/30/2004	8:09:23 PM		27.043	26.3	26.574	26.758	25.385		45.416	50.451	11.177	35.096	-1.212	-7.426		46.8	0.096	14.643	0.004		736.02	12.2669	49.3	11.1	40.3	2.776	0.014	0.013	0.000	0.327	0.28	
756	8/30/2004	8:19:13 PM		26.854	26.181	26.519	26.763	25.68		6.427	50.332	9.804	-2.733	38.465	0.504		47.806	0.003	14.643	0.004		745.85	12.4308	49.2	11.4	1.8	0.127	0.000	0.000	0.000	0.223	0.19	
757	8/30/2004	8:20:13 PM		26.884	26.186	26.539	26.848	25.635		7.14	49.134	9.586	-1.622	36.707	0.521		47.766	0.022	14.643	0.003		746.85	12.4475	48.0	11.4	2.8	0.190	0.003	0.003	0.001	1.093	0.93	
758	8/30/2004	8:21:13 PM		26.978	26.171	26.514	26.798	25.59		36.457	49.87	10.829	26.45	7.572	0.582		46.944	0.327	14.643	0.003		747.85	12.4642	48.7	11.2	31.5	2.169	0.047	0.045	0.001	1.427	1.21	
759	8/30/2004	8:22:13 PM		26.968	26.166	26.509	26.778	25.48		40.317	49.429	11.702	29.483	3.157	0.637		45.895	0.136	14.643	0.003		748.85	12.4808	48.3	10.9	34.9	2.406	0.019	0.019	0.001	0.535	0.46	
760	8/30/2004	8:23:13 PM		26.947	26.144	26.493	26.677	25.319		40.814	49.899	12.125	29.639	3.093	0.718		46.368	0.116	14.643	0.003		749.85	12.4975	48.8	11.0	35.2	2.429	0.017	0.016	0.000	0.452	0.38	
761	8/30/2004	8:24:13 PM		26.95	26.142	26.486	26.63	25.312		39.902	48.937	12.012	28.73	3.055	0.77		44.743	0.11	14.643	0.004		750.85	12.5142	47.8	10.7	34.3	2.366	0.016	0.015	0.000	0.440	0.37	
762	8/30/2004	8:25:13 PM		26.936	26.129	26.482	26.581	25.263		39.52	48.676	12.035	28.418	3.044	0.805		45.784	0.099	14.643	0.003		751.85	12.5308	47.6	10.9	34.0	2.342	0.014	0.014	0.000	0.400	0.34	
763	8/30/2004	8:26:13 PM		26.914	26.126	26.53	26.534	25.121		45.435	51.381	12.69	33.684	-0.286	-5.587		47.438	0.151	14.643	0.003		752.85	12.5475	50.3	11.3	39.6	2.727	0.022	0.021	0.001	0.524	0.45	
764	8/30/2004	8:27:13 PM		26.94	26.123	26.531	26.495	25.132		45.949	50.919	12.495	34.54	-1.09	-7.073		45.634	0.106	14.643	0.004		753.85	12.5642	49.8	10.9	40.2	2.775	0.015	0.015	0.000	0.361	0.31	
765	8/30/2004	8:28:13 PM		26.95	26.103	26.516	26.47	25.182		46.163	51.13	12.733	34.357	-1.212	-7.206		46.252	0.111	14.643	0.003		754.85	12.5808	50.0	11.0	40.3	2.776	0.016	0.015	0.000	0.378	0.32	
766	8/30/2004	8:29:13 PM		26.957	26.099	26.513	26.487	25.144		46.298	51.391	12.941	34.253	-1.212	-7.004		46.481	0.103	14.643	0.003		755.85	12.5975	50.3	11.1	40.3	2.777	0.015	0.014	0.000	0.351	0.30	
767	8/30/2004	8:30:13 PM		26.968	26.091	26.509	26.478	25.195		46.082	50.952	12.903	34.234	-1.212	-7.281		50.002	0.115	14.643	0.004		756.85	12.6142	49.8	11.9	40.2	2.769	0.016	0.016	0.000	0.393	0.33	
768	8/30/2004	8:31:13 PM		26.961	26.073	26.506	26.415	25.162		46.045	51.023	12.812	34.125	-1.215	-7.336		47.904	0.1	14.643	0.003		757.85	12.6308	49.9	11.4	40.1	2.764	0.014	0.014	0.000	0.342	0.29	
769	8/30/2004	8:32:13 PM		26.968	26.066	26.524	26.448	25.235		45.983	50.73	12.757	34.296	-1.215	-7.186		44.81	0.102	14.643	0.003		758.85	12.6475	49.6	10.7	40.1	2.767	0.015	0.014	0.000	0.349	0.30	
770	8/30/2004	8:33:13 PM		26.972	26.065	26.473	26.517	25.254		43.11	47.733	14.042	30.208	-1.212	-7.423		49.608	0.107	14.643	0.004		759.85	12.6642	46.6	11.8	36.7	2.528	0.015	0.015	0.000	0.401	0.34	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
771	8/30/2004	8:34:13 PM		26.946	26.058	26.352	26.471	25.352		43.013	47.885	13.22	30.795	-1.215	-7.348		48.281	0.096	14.643	0.003		760.85	12.6808	46.8	11.5	36.9	2.544	0.014	0.013	0.000	0.359	0.31	
772	8/30/2004	8:35:13 PM		26.929	26.042	26.225	26.409	25.321		45.468	50.527	12.232	34.14	-1.212	-7.365		45.186	0.103	14.643	0.003		761.85	12.6975	49.4	10.8	39.8	2.744	0.015	0.014	0.000	0.358	0.30	
773	8/30/2004	8:36:13 PM		26.885	26.022	26.145	26.474	25.336		44.877	49.76	12.022	33.826	-1.215	-7.267		44.77	0.1	14.643	0.003		762.85	12.7142	48.6	10.7	39.4	2.713	0.014	0.014	0.000	0.352	0.30	
774	8/30/2004	8:37:13 PM		26.874	26.021	26.125	26.524	25.315		45.083	50.334	12.821	33.122	-1.215	-7.035		48.039	0.09	14.643	0.003		763.85	12.7308	49.2	11.4	39.1	2.696	0.013	0.012	0.000	0.319	0.27	
775	8/30/2004	8:38:13 PM		26.855	26.017	26.101	26.625	25.367		45.908	51.066	12.284	34.31	-1.212	-7.391		46.143	0.095	14.643	0.003		764.85	12.7475	49.9	11.0	40.1	2.765	0.014	0.013	0.000	0.329	0.28	
776	8/30/2004	8:39:13 PM		26.815	26.002	26.066	26.61	25.327		47.128	52.046	11.56	36.582	-1.215	-7.437		43.874	0.101	14.643	0.003		765.85	12.7642	50.9	10.5	41.9	2.886	0.014	0.014	0.000	0.335	0.29	
777	8/30/2004	8:40:13 PM		26.801	25.998	26.117	26.596	25.412		44.796	49.512	12.709	33.257	-1.209	-7.414		45.899	0.091	14.643	0.003		766.85	12.7808	48.4	10.9	39.0	2.691	0.013	0.013	0.000	0.324	0.28	
778	8/30/2004	8:41:13 PM		26.791	26.003	26.132	26.661	25.432		45.672	50.465	12.829	33.834	-1.212	-7.455		47.002	0.094	14.643	0.003		767.85	12.7975	49.3	11.2	39.8	2.741	0.013	0.013	0.000	0.328	0.28	
779	8/30/2004	8:42:13 PM		26.751	25.992	26.206	26.675	25.487		46.252	51.224	13.48	33.612	-1.218	-7.463		48.644	0.098	14.643	0.003		768.85	12.8142	50.1	11.6	39.9	2.753	0.014	0.014	0.000	0.340	0.29	
780	8/30/2004	8:43:13 PM		26.751	25.992	26.241	26.75	25.477		46.169	51.126	13.266	34.013	-1.212	-7.287		49.082	0.087	14.643	0.003		769.85	12.8308	50.0	11.7	40.1	2.764	0.012	0.012	0.000	0.300	0.26	
781	8/30/2004	8:44:13 PM		26.736	25.988	26.247	26.751	25.467		46.814	51.694	12.473	35.324	-1.212	-7.33		47.728	0.099	14.643	0.003		770.85	12.8475	50.6	11.4	41.1	2.832	0.014	0.014	0.000	0.333	0.28	
782	8/30/2004	8:45:13 PM		26.752	25.994	26.307	26.731	25.488		46.171	51.027	13.312	33.779	-1.209	-7.27		46.375	0.095	14.643	0.003		771.85	12.8642	49.9	11.0	40.0	2.756	0.014	0.013	0.000	0.328	0.28	
783	8/30/2004	8:46:13 PM		26.747	25.979	26.352	26.706	25.458		46.717	51.624	13.157	34.675	-1.212	-7.356		47.847	0.094	14.643	0.003		772.85	12.8808	50.5	11.4	40.7	2.806	0.013	0.013	0.000	0.318	0.27	
784	8/30/2004	8:47:13 PM		26.768	25.994	26.388	26.767	25.369		45.999	51.037	13.078	33.818	-1.212	-7.359		47.171	0.095	14.643	0.004		773.85	12.8975	49.9	11.2	39.9	2.752	0.014	0.013	0.000	0.328	0.28	
785	8/30/2004	8:48:13 PM		26.759	26.001	26.439	26.673	25.225		46.565	51.644	12.916	34.591	-1.212	-7.356		46.579	0.099	14.643	0.003		774.85	12.9142	50.5	11.1	40.6	2.798	0.014	0.014	0.000	0.335	0.29	
786	8/30/2004	8:49:13 PM		26.71	25.987	26.461	26.57	25.187		45.197	50.303	12.963	33.118	-1.212	-7.382		45.555	0.094	14.643	0.004		775.85	12.9308	49.2	10.9	39.2	2.700	0.013	0.013	0.000	0.330	0.28	
787	8/30/2004	8:50:13 PM		26.661	25.962	26.461	26.485	25.117		46.391	51.28	13.171	34.234	-1.215	-7.27		48.181	0.093	14.643	0.003		776.85	12.9475	50.2	11.5	40.3	2.779	0.013	0.013	0.000	0.317	0.27	
788	8/30/2004	8:51:13 PM		26.621	25.947	26.481	26.44	25.022		45.723	50.834	12.937	33.709	-1.215	-7.342		47.165	0.097	14.643	0.003		777.85	12.9642	49.7	11.2	39.7	2.738	0.014	0.013	0.000	0.335	0.29	
789	8/30/2004	8:52:13 PM		26.601	25.932	26.496	26.395	24.907		45.97	50.944	12.998	34.015	-1.212	-7.235		46.091	0.091	14.643	0.003		778.85	12.9808	49.8	11.0	40.0	2.757	0.013	0.012	0.000	0.312	0.27	
790	8/30/2004	8:53:13 PM		26.564	25.911	26.489	26.268	24.77		45.416	50.484	12.918	33.43	-1.218	-7.353		46.057	0.09	14.643	0.003		779.85	12.9975	49.4	11.0	39.4	2.718	0.013	0.012	0.000	0.313	0.27	
791	8/30/2004	8:54:13 PM		26.542	25.899	26.522	26.246	24.698		45.668	50.875	12.936	33.604	-1.212	-7.29		47.025	0.091	14.643	0.003		780.85	13.0142	49.7	11.2	39.6	2.733	0.013	0.012	0.000	0.315	0.27	
792	8/30/2004	8:55:13 PM		26.536	25.882	26.601	26.2	24.642		47.258	52.075	13.253	35.016	-1.212	-7.296		47.255	0.098	14.643	0.003		781.85	13.0308	50.9	11.3	41.1	2.836	0.014	0.013	0.000	0.326	0.28	
793	8/30/2004	8:56:13 PM		26.519	25.86	26.619	26.183	24.585		46.794	52.125	13.155	34.351	-1.151	-7.056		47.029	0.091	14.643	0.003		782.85	13.0475	51.0	11.2	40.6	2.797	0.013	0.012	0.000	0.307	0.26	
794	8/30/2004	8:57:13 PM		26.512	25.838	26.627	26.156	24.573		46.632	51.694	13.09	34.466	-1.209	-7.316		46.22	0.096	14.643	0.004		783.85	13.0642	50.6	11.0	40.5	2.796	0.014	0.013	0.000	0.324	0.28	
795	8/30/2004	8:58:13 PM		26.493	25.81	26.603	26.112	24.494		46.621	51.518	12.968	34.712	-1.212	-7.298		47.42	0.097	14.643	0.003		784.85	13.0808	50.4	11.3	40.7	2.804	0.014	0.013	0.000	0.326	0.28	
796	8/30/2004	8:59:13 PM		26.491	25.787	26.63	26.09	24.472		46.541	51.64	13.115	34.314	-1.212	-7.27		48.125	0.095	14.643	0.003		785.85	13.0975	50.5	11.5	40.4	2.787	0.014	0.013	0.000	0.321	0.27	
797	8/30/2004	9:00:13 PM		26.488	25.754	26.638	26.082	24.539		46.781	51.889	13.166	34.522	-1.212	-7.232		47.211	0.091	14.643	0.003		786.85	13.1142	50.8	11.2	40.7	2.803	0.013	0.012	0.000	0.306	0.26	
798	8/30/2004	9:01:13 PM		26.482	25.738	26.641	26.09	24.567		46.574	51.665	13.101	34.357	-1.212	-7.284		45.319	0.094	14.643	0.003		787.85	13.1308	50.5	10.8	40.5	2.790	0.013	0.013	0.000	0.318	0.27	
799	8/30/2004	9:02:13 PM		26.484	25.715	26.644	26.118	24.61		46.028	51.174	13.059	33.838	-1.212	-7.304		46.168	0.095	14.643	0.003		788.85	13.1475	50.0	11.0	39.9	2.753	0.014	0.013	0.000	0.325	0.28	
800	8/30/2004	9:03:13 PM		26.488	25.694	26.653	26.147	24.619		45.974	50.915	13.046	33.959	-1.212	-7.125		47.68	0.096	14.643	0.004		789.85	13.1642	49.8	11.4	40.0	2.756	0.014	0.013	0.000	0.328	0.28	
801	8/30/2004	9:04:13 PM		26.482	25.668	26.646	26.141	24.643		46.371	51.503	13.091	34.22	-1.212	-7.267		47.843	0.093	14.643	0.003		790.85	13.1808	50.4	11.4	40.3	2.778	0.013	0.013	0.000	0.316	0.27	
802	8/30/2004	9:05:13 PM		26.495	25.657	26.67	26.169	24.656		45.385	50.49	12.95	33.284	-1.212	-7.165		47.144	0.095	14.643	0.003		791.85	13.1975	49.4	11.2	39.3	2.712	0.014	0.013	0.000	0.330	0.28	
803	8/30/2004	9:06:13 PM		26.516	25.647	26.691	26.175	24.677		44.977	49.907	12.635	33.315	-1.215	-7.342		48.047	0.091	14.643	0.003		792.85	13.2142	48.8	11.4	39.1	2.699	0.013	0.012	0.000	0.317	0.27	
804	8/30/2004	9:07:13 PM		26.499	25.625	26.679	26.173	24.645		45.468	50.434	12.786	33.694	-1.212	-7.171		45.807	0.086	14.643	0.003		793.85	13.2308	49.3	10.9	39.6	2.729	0.012	0.012	0.000	0.297	0.25	
805	8/30/2004	9:08:13 PM		26.513	25.614	26.698	26.197	24.654		45.717	50.593	12.735	34.093	-1.212	-7.275		48.185	0.09	14.643	0.004		794.85	13.2475	49.5	11.5	39.9	2.751	0.013	0.012	0.000	0.308	0.26	
806	8/30/2004	9:09:13 PM		26.533	25.614	26.713	26.222	24.724		46.238	51.288	12.846	34.318	-1.206	-7.287		48.481	0.098	14.643	0.004		795.85	13.2642	50.2	11.5	40.3	2.777	0.014	0.013	0.000	0.332	0.28	
807	8/30/2004	9:10:13 PM		26.522	25.588	26.687	26.216	24.713		45.854	50.935	12.808	34.049	-1.154	-7.116		45.761	0.093	14.643	0.003		796.85	13.2808	49.8	10.9	40.0	2.755	0.013	0.013	0.000	0.318	0.27	
808	8/30/2004	9:11:13 PM		26.521	25.572	26.696	26.2	24.712		45.4	50.347	12.616	33.641	-1.215	-7.304		45.167	0.089	14.643	0.003		797.85	13.2975	49.2	10.8	39.5	2.725	0.013	0.012	0.000	0.307	0.26	
809	8/30/2004	9:12:13 PM		26.524	25.555	26.709	26.208	24.765		45.249	50.15	13.077	33.245	-1.212	-7.087		48.271	0.09	14.643	0.003		798.85	13.3142	49.0	11.5	39.2	2.706	0.013	0.012	0.000	0.313	0.27	
810	8/30/2004	9:13:13 PM		26.534	25.56	26.739	26.238	24.765		45.885	50.917	12.974	33.894	-1.212	-7.226		45.912	0.092	14.643	0.003		799.85	13.3308	49.8	10.9	39.9	2.750	0.013	0.013	0.000	0.315	0.27	
811	8/30/2004	9:14:13 PM		26.549	25.55	26.749	26.248	24.805		44.774	49.901	12.686	33.058	-1.209	-7.307		45.353	0.093	14.643	0.004		800.85	13.3475	48.8	10.8	38.9	2.683	0.013	0.013	0.000	0.326	0.28	
812	8/30/2004	9:15:13 PM		26.574	25.555	26.794	26.273	24.895		45.176	50.162	13.32	32.744	-1.209	-7.33		47.87	0.093	14.643	0.003		801.85	13.3642	49.0	11.4	39.0	2.686	0.013	0.013	0.000	0.325	0.28	
813	8/30/2004	9:16:13 PM		26.584	25.535	26.824	26.243	24.88		45.767	50.683	13.403	33.405	-1.215	-7.304		49.013	0.09	14.643	0.003		802.85	13.3808	49.6	11.7	39.6	2.729	0.013	0.012	0.000	0.309	0.26	
814	8/30/2004	9:17:13 PM		26.594	25.535	26.879	26.273	24.885		45.688	50.633	13.406	33.356	-1.209	-7.287		48.608	0.092	14.643	0.003		803.85	13.3975	49.5	11.6	39.5	2.725	0.013	0.012	0.000	0.316	0.27	
815	8/30/2004	9:18:13 PM		26.609	25.525	26.929	26.303	24.885		47.368	52.376	13.598	34.766	-1.212	-7.217		49.58	0.098	14.643	0.003		804.85	13.4142	51.3	11.8	41.1	2.831	0.014	0.013	0.000	0.324	0.28	
816	8/30/2004	9:19:13 PM		26.62	25.526	26.949	26.279	24.856		46.532	51.727	13.35	34.076	-1.2	-7.2		48.552	0.09	14.643	0.003		805.85	13.4308	50.6	11.6	40.3	2.779	0.013	0.012	0.000	0.303	0.26	
817	8/30/2004	9:20:13 PM		26.656	25.542	27.02	26.31	24.897		46.789	51.976	13.686	33.811	-1.177	-7.186		47.153	0.098	14.643	0.003		806.85	13.4475	50.9	11.2	40.3	2.779	0.014	0.013	0.000	0.329	0.28	
818	8/30/2004	9:21:13 PM		26.652	25.518	27.026	26.276	24.908		47.053	52.163	13.727	34.168	-1.212	-7.232		46.762	0.089	14.643	0.003		807.85	13.4642	51.0	11.1	40.6	2.800	0.013	0.012	0.000	0.296	0.25	
819	8/30/2004	9:22:13 PM		26.677	25.514	27.062	26.292	24.914		45.51	50.515	13.333	33.147	-1.195	-7.209		48.5	0.094	14.643	0.003		808.85	13.4808	49.4	11.6	39.3	2.712	0.013	0.013	0.000	0.323	0.27	
820	8/30/2004	9:23:13 PM		26.687	25.514	27.087	26.297	24.889		45.711	50.836	13.247	33.401	-1.212	-7.261		47.741	0.089	14.643	0.003		809.85	13.4975	49.7	11.4	39.6	2.727	0.013	0.012	0.000	0.304	0.26	
821	8/30/2004	9:24:13 PM		26.719	25.515	27.128	26.308	24.905		45.676	51.008	13.239	33.266	-1.145	-7.113		47.263	0.094	14.643	0.003		810.85	13.5142	49.9	11.3	39.5	2.721	0.013	0.013	0.000	0.321	0.27	
822	8/30/2004	9:25:13 PM		26.729	25.505	27.138	26.308	24.925		45.247	50.343	13.147	32.935	-1.212	-7.27		46.172	0.097	14.643	0.003		811.85	13.5308	49.2	11.0	39.1	2.695	0.014	0.013	0.000	0.335	0.28	
823	8/30/2004	9:26:13 PM		26.744	25.501	27.159	26.304	24.946		46.173	51.157	13.354	33.859	-1.093	-7.027		46.347	0.088	14.643	0.003		812.85	13.5475	50.0	11.0	40.0	2.759	0.013	0.012	0.000	0.296	0.25	
824	8/30/2004	9:27:13 PM		26.769	25.515	27.208	26.313	24.885		46.138	51.284	13.39	33.662	-1.145	-7.22		47.518	0.093	14.643	0.003		813.85	13.5642	50.2	11.3	39.9	2.751	0.013	0.013	0.000	0.314	0.27	
825	8/30/2004	9:28:13 PM		26.784	25.505	27.228	26.308	24.905		46.159	51.079	13.362	33.785	-1.212	-7.18		46.863	0.088	14.643	0.003		814.85	13.5808	50.0	11.2	40.0	2.756	0.013	0.012	0.000	0.296	0.25	
826	8/30/2004	9:29:13 PM		26.777	25.479	27.226	26.277	24.814		46.358	51.648	13.243	33.873	-1.108	-7.05		47.904	0.093	14.643	0.003		815.85	13.5975	50.5	11.4	40.1	2.766	0.013	0.013	0.000	0.312	0.27	
827	8/30/2004	9:30:13 PM		26.787	25.484	27.246	26.237	24.714		45.858	50.855	13.184	33.666	-1.215	-7.217		46.562	0.087	14.643	0.003		816.85	13.6142	49.7	11.1	39.8	2.741	0.012	0.012	0.000	0.294	0.25	
828	8/30/2004	9:31:13 PM		26.802	25.478	27.276	26.201	24.648		46.456	51.508	13.432	33.859	-1.212	-7.27		46.41	0.098	14.643	0.003		817.85	13.6308	50.4	11.1	40.2	2.769	0.014	0.013	0.000	0.328	0.28	
829	8/30/2004	9:32:13 PM		26.779	25.45	27.273	26.113	24.595		45.977	51.093	13.34	33.532	-1.09	-6.882		48.479	0.083	14.643	0.003		818.85	13.6475	50.0	11.5	39.8	2.741	0.012	0.011	0.000	0.281	0.24	
830	8/30/2004	9:33:13 PM		26.787	25.459	27.312	26.092	24.514		46.19	51.002	13.186	34.224	-1.209	-7.238		48.663	0.097	14.643	0.004		819.85	13.6642	49.9	11.6	40.2	2.772	0.014	0.013	0.000	0.324	0.28	
831	8/30/2004	9:34:13 PM		26.771	25.432	27.31	26.02	24.533		46.186	51.331	13.392	33.736	-1.183	-7.232		49.572	0.091	14.643	0.003		820.85	13.6808	50.2	11.8	40.0	2.755	0.013	0.012	0.000	0.306	0.26	
832	8/30/2004	9:35:13 PM		26.769	25.42	27.323	26.028	24.576		46.483	51.696	13.294	34.068	-1.148	-7.215		47.48	0.094	14.643	0.003		821.85	13.6975	50.6	11.3	40.3	2.777	0.013	0.013	0.000	0.313	0.27	
833	8/30/2004	9:36:13 PM		26.752	25.388	27.321	25.986	24.604		45.752	50.66	13.201	33.573	-1.192	-7.261		48.848	0.092	14.643	0.003		822.85	13.7142	49.5	11.6	39.7	2.735	0.013	0.012	0.000	0.311	0.26	
834	8/30/2004	9:37:13 PM		26.786	25.408	27.365	26.046	24.628		46.354	51.769	13.308	33.758	-1.09	-7.015		47.505	0.089	14.643	0.003		823.85	13.7308	50.6	11.3	40.1	2.762	0.013	0.012	0.000	0.298	0.25	
835	8/30/2004	9:38:13 PM		26.796	25.402	27.38	26.085	24.612		46.203	51.277	13.23	33.869	-1.209	-7.258		46.833	0.091	14.643	0.004		824.85	13.7475	50.2	11.2	40.0	2.760	0.013	0.012	0.000	0.304	0.26	
836	8/30/2004	9:39:13 PM		26.79	25.386	27.379	26.054	24.621		46.773	51.883	13.245	34.665	-1.215	-7.064		48.511	0.095	14.643	0.003		825.85	13.7642	50.8	11.6	40.7	2.807	0.014	0.013	0.000	0.313	0.27	
837	8/30/2004	9:40:13 PM		26.81	25.391	27.424	26.089	24.672		46.406	51.476	13.209	34.181	-1.143	-7.186		47.338	0.1	14.643	0.004		826.85	13.7808	50.4	11.3	40.3	2.778	0.014	0.013	0.000	0.332	0.28	
838	8/30/2004	9:41:13 PM		26.805	25.376	27.409	26.064	24.682		44.939	49.974	12.825	33.062	-1.174	-7.246		47.292	0.088	14.643	0.003		827.85	13.7975	48.8	11.3	39.0	2.689	0.013	0.012	0.000	0.302	0.26	
839	8/30/2004	9:42:13 PM		26.814	25.366	27.433	26.079	24.686		46.314	51.298	13.158	34.119	-1.212	-7.275		47.009	0.089	14.643	0.003		828.85	13.8142	50.2	11.2	40.2	2.773	0.013	0.012	0.000	0.296	0.25	
840	8/30/2004	9:43:13 PM		26.824	25.356	27.428	26.079	24.736		46.076	51.265	13.141	33.791	-1.151	-7.163		47.954	0.092	14.643	0.003		829.85	13.8308	50.1	11.4	39.9	2.753	0.013	0.012	0.000	0.308	0.26	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
841	8/30/2004	9:44:13 PM		26.839	25.356	27.463	26.109	24.736		46.043	51.277	13.041	33.863	-1.209	-7.223		47.443	0.095	14.643	0.003		830.85	13.8475	50.2	11.3	40.0	2.755	0.014	0.013	0.000	0.318	0.27	
842	8/30/2004	9:45:13 PM		26.844	25.355	27.477	26.138	24.73		47.086	52.223	13.306	34.708	-1.015	-6.94		49.143	0.094	14.643	0.004		831.85	13.8642	51.1	11.7	40.9	2.820	0.013	0.013	0.000	0.307	0.26	
843	8/30/2004	9:46:13 PM		26.854	25.35	27.492	26.133	24.73		46.082	51.145	13.17	33.774	-1.145	-7.139		49.387	0.095	14.643	0.003		832.85	13.8808	50.0	11.8	39.9	2.753	0.014	0.013	0.000	0.318	0.27	
844	8/30/2004	9:47:13 PM		26.849	25.336	27.478	26.114	24.766		47.074	52.407	13.289	34.602	-1.154	-7.174		47.484	0.095	14.643	0.003		833.85	13.8975	51.3	11.3	40.8	2.816	0.014	0.013	0.000	0.311	0.26	
845	8/30/2004	9:48:13 PM		26.864	25.335	27.497	26.138	24.8		46.435	51.423	13.369	33.974	-1.148	-7.203		47.741	0.095	14.643	0.003		834.85	13.9142	50.3	11.4	40.2	2.772	0.014	0.013	0.000	0.316	0.27	
846	8/30/2004	9:49:13 PM		26.888	25.34	27.527	26.178	24.775		46.787	52.015	13.261	34.417	-1.088	-7.053		48.838	0.1	14.643	0.003		835.85	13.9308	50.9	11.6	40.6	2.799	0.014	0.013	0.000	0.329	0.28	
847	8/30/2004	9:50:13 PM		26.888	25.33	27.517	26.158	24.8		45.305	50.465	12.917	33.282	-1.148	-7.217		48.415	0.09	14.643	0.003		836.85	13.9475	49.3	11.5	39.3	2.709	0.013	0.012	0.000	0.306	0.26	
848	8/30/2004	9:51:13 PM		26.925	25.351	27.568	26.225	24.812		45.035	50.057	12.831	33.231	-1.143	-6.998		48.437	0.09	14.643	0.003		837.85	13.9642	48.9	11.5	39.1	2.698	0.013	0.012	0.000	0.306	0.26	
849	8/30/2004	9:52:13 PM		26.92	25.336	27.544	26.21	24.812		46.68	52.076	13.237	34.22	-1.09	-7.085		48.986	0.101	14.643	0.003		838.85	13.9808	51.0	11.7	40.5	2.789	0.014	0.013	0.000	0.333	0.28	
850	8/30/2004	9:53:13 PM		26.94	25.331	27.563	26.22	24.852		45.815	51.02	13.047	33.719	-1.148	-7.053		49.512	0.082	14.643	0.004		839.85	13.9975	49.9	11.8	39.8	2.742	0.012	0.011	0.000	0.275	0.23	
851	8/30/2004	9:54:13 PM		26.949	25.336	27.578	26.229	24.866		45.087	49.937	12.743	33.549	-1.143	-7.2		45.968	0.091	14.643	0.003		840.85	14.0142	48.8	10.9	39.3	2.711	0.013	0.012	0.000	0.308	0.26	
852	8/30/2004	9:55:13 PM		26.953	25.33	27.572	26.223	24.84		45.977	51.186	13.035	33.887	-1.148	-7.215		46.713	0.09	14.643	0.003		841.85	14.0308	50.1	11.1	39.9	2.753	0.013	0.012	0.000	0.300	0.26	
853	8/30/2004	9:56:13 PM		26.958	25.324	27.586	26.218	24.835		46.541	51.613	13.122	34.333	-1.145	-7.2		47.336	0.092	14.643	0.003		842.85	14.0475	50.5	11.3	40.4	2.788	0.013	0.012	0.000	0.303	0.26	
854	8/30/2004	9:57:13 PM		26.968	25.33	27.602	26.223	24.9		45.273	50.183	12.842	33.454	-1.148	-7.076		46.786	0.093	14.643	0.003		843.85	14.0642	49.1	11.1	39.4	2.714	0.013	0.012	0.000	0.315	0.27	
855	8/30/2004	9:58:13 PM		26.98	25.346	27.643	26.27	24.922		46.296	51.309	13.021	34.339	-1.145	-7.203		48.36	0.092	14.643	0.003		844.85	14.0808	50.2	11.5	40.3	2.780	0.013	0.012	0.000	0.303	0.26	
856	8/30/2004	9:59:13 PM		27.109	25.326	27.623	26.225	24.887		45.713	50.948	12.93	33.696	-1.145	-6.905		46.324	0.085	14.643	0.003		845.85	14.0975	49.8	11.0	39.7	2.737	0.012	0.011	0.000	0.285	0.24	
857	8/30/2004	9:59:20 PM		27.129	25.341	27.628	26.23	24.882		45.195	50.285	12.771	33.469	-1.009	-6.752		46.99	0.079	14.643	0.003		845.97	14.0994	49.2	11.2	39.3	2.712	0.011	0.011	0.000	0.267	0.23	
858	8/30/2004	10:00:20 PM		27.035	25.317	27.619	26.21	24.862		45.553	50.504	12.844	33.75	-1.212	-7.249		45.878	0.094	14.643	0.003		846.97	14.1161	49.4	10.9	39.7	2.734	0.013	0.013	0.000	0.315	0.27	
859	8/30/2004	10:01:20 PM		27.041	25.318	27.61	26.216	24.843		46.85	51.794	13.121	34.638	-1.198	-7.267		44.368	0.088	14.643	0.003		847.97	14.1328	50.7	10.6	40.7	2.809	0.013	0.012	0.000	0.287	0.24	
860	8/30/2004	10:02:20 PM		27.071	25.328	27.645	26.246	24.873		46.285	51.315	13.038	34.181	-1.145	-7.082		47.87	0.094	14.643	0.003		848.97	14.1494	50.2	11.4	40.2	2.774	0.013	0.013	0.000	0.311	0.26	
861	8/30/2004	10:03:20 PM		27.065	25.317	27.639	26.23	24.847		46.742	51.982	13.139	34.425	-1.148	-7.116		47.428	0.097	14.643	0.003		849.97	14.1661	50.9	11.3	40.6	2.798	0.014	0.013	0.000	0.318	0.27	
862	8/30/2004	10:04:20 PM		27.066	25.328	27.65	26.236	24.863		46.348	51.418	12.974	34.296	-1.145	-7.22		48.12	0.09	14.643	0.003		850.97	14.1828	50.3	11.5	40.3	2.780	0.013	0.012	0.000	0.297	0.25	
863	8/30/2004	10:05:20 PM		27.062	25.324	27.666	26.242	24.864		46.777	51.792	13.168	34.597	-1.148	-7.209		48.25	0.093	14.643	0.003		851.97	14.1994	50.7	11.5	40.7	2.805	0.013	0.012	0.000	0.304	0.26	
864	8/30/2004	10:06:20 PM		27.062	25.314	27.676	26.252	24.894		47.306	52.569	13.29	34.952	-1.099	-7.122		47.39	0.092	14.643	0.003		852.97	14.2161	51.4	11.3	41.1	2.836	0.013	0.012	0.000	0.297	0.25	
865	8/30/2004	10:07:20 PM		27.053	25.32	27.682	26.248	24.89		46.387	51.537	13.086	34.222	-1.143	-7.134		47.219	0.087	14.643	0.003		853.97	14.2328	50.4	11.2	40.3	2.779	0.012	0.012	0.000	0.287	0.24	
866	8/30/2004	10:08:20 PM		27.059	25.321	27.698	26.249	24.886		45.636	50.817	12.993	33.612	-1.09	-7.105		45.947	0.095	14.643	0.004		854.97	14.2494	49.7	10.9	39.6	2.732	0.014	0.013	0.000	0.318	0.27	
867	8/30/2004	10:09:20 PM		27.065	25.317	27.708	26.24	24.907		46.215	51.454	13.088	34.123	-1.09	-7.113		45.734	0.089	14.643	0.003		855.97	14.2661	50.3	10.9	40.2	2.770	0.013	0.012	0.000	0.294	0.25	
868	8/30/2004	10:10:20 PM		27.05	25.312	27.714	26.251	24.893		45.267	50.394	12.798	33.356	-1.148	-7.177		46.128	0.092	14.643	0.003		856.97	14.2828	49.3	11.0	39.3	2.710	0.013	0.012	0.000	0.311	0.26	
869	8/30/2004	10:11:20 PM		27.046	25.302	27.699	26.236	24.883		46.089	51.34	13.093	33.898	-0.937	-6.865		46.71	0.094	14.643	0.003		857.97	14.2994	50.2	11.1	40.0	2.757	0.013	0.012	0.000	0.312	0.27	
870	8/30/2004	10:12:20 PM		27.06	25.317	27.724	26.276	24.898		45.45	50.508	12.794	33.606	-1.09	-7.163		44.57	0.092	14.643	0.003		858.97	14.3161	49.4	10.6	39.5	2.725	0.013	0.012	0.000	0.309	0.26	
871	8/30/2004	10:13:20 PM		27.05	25.307	27.718	26.28	24.917		46.294	51.278	12.999	34.207	-1.212	-7.154		47.77	0.087	14.643	0.003		859.97	14.3328	50.2	11.4	40.3	2.775	0.012	0.012	0.000	0.287	0.24	
872	8/30/2004	10:14:20 PM		27.05	25.312	27.733	26.27	24.957		45.414	50.486	13.637	32.775	-1.09	-6.885		48.78	0.091	14.643	0.003		860.97	14.3494	49.4	11.6	39.1	2.695	0.013	0.012	0.000	0.309	0.26	
873	8/30/2004	10:15:20 PM		27.119	25.316	27.753	26.439	24.891		43.817	49.182	13.063	31.544	-1.148	-7.142		48.511	0.088	14.643	0.003		861.97	14.3661	48.1	11.6	37.7	2.598	0.013	0.012	0.000	0.310	0.26	
874	8/30/2004	10:16:20 PM		27.212	25.31	27.746	26.508	24.755		44.925	50.009	13.233	32.677	-1.157	-7.235		47.566	0.084	14.643	0.003		862.97	14.3828	48.9	11.3	38.8	2.675	0.012	0.011	0.000	0.287	0.24	
875	8/30/2004	10:17:20 PM		27.311	25.328	27.79	26.442	24.889		45.161	50.368	13.337	32.66	-1.148	-7.165		47.897	0.09	14.643	0.003		863.97	14.3994	49.2	11.4	38.9	2.683	0.013	0.012	0.000	0.306	0.26	
876	8/30/2004	10:18:20 PM		27.373	25.331	27.807	26.204	24.996		44.332	49.505	13.118	32.061	-1.16	-7.2		45.726	0.088	14.643	0.003		864.97	14.4161	48.4	10.9	38.2	2.634	0.013	0.012	0.000	0.305	0.26	
877	8/30/2004	10:19:20 PM		27.417	25.345	27.806	26.078	25.01		45.504	50.508	13.252	33.265	-1.105	-7.18		47.007	0.086	14.643	0.003		865.97	14.4328	49.4	11.2	39.4	2.715	0.012	0.011	0.000	0.289	0.25	
878	8/30/2004	10:20:20 PM		27.434	25.337	27.798	25.995	24.952		44.944	50.254	13.113	32.635	-1.093	-7.07		47.557	0.087	14.643	0.003		866.97	14.4494	49.1	11.3	38.8	2.674	0.012	0.012	0.000	0.297	0.25	
879	8/30/2004	10:21:20 PM		27.462	25.345	27.812	25.928	24.97		45.371	50.384	13.186	33.243	-1.093	-7.151		46.852	0.086	14.643	0.003		867.97	14.4661	49.3	11.2	39.3	2.710	0.012	0.011	0.000	0.290	0.25	
880	8/30/2004	10:22:20 PM		27.491	25.354	27.83	25.932	25.009		45.421	50.525	13.221	33.144	-1.09	-7.035		46.103	0.088	14.643	0.003		868.97	14.4828	49.4	11.0	39.3	2.708	0.013	0.012	0.000	0.296	0.25	
881	8/30/2004	10:23:20 PM		27.501	25.354	27.836	25.947	25.039		45.514	50.764	13.06	33.325	-1.09	-7.151		48.166	0.086	14.643	0.003		869.97	14.4994	49.6	11.5	39.4	2.718	0.012	0.011	0.000	0.289	0.25	
882	8/30/2004	10:24:20 PM		27.528	25.367	27.858	25.975	25.102		45.429	50.608	13.047	33.372	-1.03	-6.983		50.119	0.083	14.643	0.003		870.97	14.5161	49.5	11.9	39.4	2.717	0.012	0.011	0.000	0.278	0.24	
883	8/30/2004	10:25:20 PM		27.549	25.373	27.899	26.001	25.093		46.236	51.503	13.377	33.674	-1.033	-7.073		48.012	0.089	14.643	0.003		871.97	14.5328	50.4	11.4	40.0	2.755	0.013	0.012	0.000	0.294	0.25	
884	8/30/2004	10:26:20 PM		27.575	25.383	27.909	25.996	25.098		45.819	50.892	13.233	33.584	-1.105	-7.099		45.659	0.098	14.643	0.003		872.97	14.5494	49.8	10.9	39.7	2.737	0.014	0.013	0.000	0.326	0.28	
885	8/30/2004	10:27:20 PM		27.59	25.378	27.919	25.916	25.123		45.412	50.567	13.128	33.147	-1.021	-6.989		45.653	0.097	14.643	0.003		873.97	14.5661	49.4	10.9	39.3	2.708	0.014	0.013	0.000	0.326	0.28	
886	8/30/2004	10:28:20 PM		27.621	25.4	27.95	26.043	25.14		45.402	50.479	13.191	33.149	-1.09	-7.137		47.747	0.088	14.643	0.003		874.97	14.5828	49.4	11.4	39.3	2.708	0.013	0.012	0.000	0.295	0.25	
887	8/30/2004	10:29:20 PM		27.654	25.418	27.978	26.091	25.138		45.226	50.326	13.029	33.192	-1.148	-7.09		48.435	0.081	14.643	0.004		875.97	14.5994	49.2	11.5	39.2	2.703	0.012	0.011	0.000	0.272	0.23	
888	8/30/2004	10:30:20 PM		27.691	25.435	27.991	26.143	25.135		46.752	51.821	13.441	34.376	-0.923	-6.931		49.136	0.095	14.643	0.004		876.97	14.6161	50.7	11.7	40.6	2.797	0.014	0.013	0.000	0.308	0.26	
889	8/30/2004	10:31:20 PM		27.703	25.432	27.983	26.165	25.117		46.259	51.532	13.287	33.777	-1.09	-7.128		45.897	0.091	14.643	0.003		877.97	14.6328	50.4	10.9	40.0	2.759	0.013	0.012	0.000	0.300	0.25	
890	8/30/2004	10:32:20 PM		27.723	25.427	27.977	26.16	25.157		45.715	50.821	13.113	33.633	-1.021	-7.03		48.367	0.092	14.643	0.003		878.97	14.6494	49.7	11.5	39.7	2.735	0.013	0.012	0.000	0.306	0.26	
891	8/30/2004	10:33:20 PM		27.751	25.455	28.006	26.163	25.16		46.08	51.114	13.28	33.842	-1.09	-7.079		48.06	0.088	14.643	0.003		879.97	14.6661	50.0	11.4	40.0	2.755	0.013	0.012	0.000	0.290	0.25	
892	8/30/2004	10:34:20 PM		27.785	25.469	28.044	26.187	25.124		45.304	50.322	13.088	33.265	-1.145	-7.128		44.32	0.094	14.643	0.003		880.97	14.6828	49.2	10.6	39.3	2.709	0.013	0.012	0.000	0.315	0.27	
893	8/30/2004	10:35:20 PM		27.788	25.458	28.023	26.151	25.138		45.875	51.363	13.376	33.346	-0.879	-6.625		49.925	0.086	14.643	0.003		881.97	14.6994	50.2	11.9	39.6	2.731	0.012	0.011	0.000	0.286	0.24	
894	8/30/2004	10:36:20 PM		27.803	25.467	28.038	26.135	25.127		45.108	50.16	13.094	33.013	-1.044	-7.07		47.664	0.093	14.643	0.003		882.97	14.7161	49.0	11.4	39.1	2.693	0.013	0.012	0.000	0.313	0.27	
895	8/30/2004	10:37:20 PM		27.831	25.491	28.071	26.164	25.216		45.626	50.803	13.19	33.263	-1.145	-7.168		47.589	0.091	14.643	0.003		883.97	14.7328	49.7	11.3	39.4	2.720	0.013	0.012	0.000	0.303	0.26	
896	8/30/2004	10:38:20 PM		27.836	25.485	28.07	26.158	25.275		45.444	50.508	13.022	33.53	-0.989	-6.992		49.689	0.089	14.643	0.004		884.97	14.7494	49.4	11.8	39.5	2.722	0.013	0.012	0.000	0.296	0.25	
897	8/30/2004	10:39:20 PM		27.845	25.495	28.07	26.163	25.219		45.462	50.77	13.095	33.157	-1.021	-7.061		48.823	0.088	14.643	0.003		885.97	14.7661	49.6	11.6	39.3	2.710	0.013	0.012	0.000	0.294	0.25	
898	8/30/2004	10:40:20 PM		27.865	25.505	28.1	26.168	25.244		46.192	51.495	13.306	33.818	-1.09	-7.134		48.004	0.086	14.643	0.003		886.97	14.7828	50.4	11.4	40.0	2.758	0.012	0.011	0.000	0.282	0.24	
899	8/30/2004	10:41:20 PM		27.874	25.519	28.094	26.207	25.264		45.896	51.008	13.182	33.832	-1.015	-7.009		47.705	0.09	14.643	0.003		887.97	14.7994	49.9	11.4	39.9	2.748	0.013	0.012	0.000	0.297	0.25	
900	8/30/2004	10:42:20 PM		27.872	25.512	28.097	26.185	25.257		45.659	50.826	13.287	33.214	-1.004	-7.076		47.999	0.094	14.643	0.003		888.97	14.8161	49.7	11.4	39.4	2.719	0.013	0.012	0.000	0.313	0.27	
901	8/30/2004	10:43:20 PM		27.887	25.522	28.112	26.195	25.247		45.541	50.623	13.07	33.561	-1.09	-6.978		47.714	0.089	14.643	0.003		889.97	14.8328	49.5	11.4	39.6	2.727	0.013	0.012	0.000	0.295	0.25	
902	8/30/2004	10:44:20 PM		27.897	25.541	28.116	26.224	25.296		45.759	51.12	13.181	33.415	-0.949	-6.894		47.376	0.086	14.643	0.004		890.97	14.8494	50.0	11.3	39.6	2.729	0.012	0.011	0.000	0.285	0.24	
903	8/30/2004	10:45:20 PM		27.906	25.541	28.091	26.194	25.266		46.385	51.555	13.328	33.953	-1.096	-7.142		48.258	0.092	14.643	0.003		891.97	14.8661	50.4	11.5	40.2	2.770	0.013	0.012	0.000	0.301	0.26	
904	8/30/2004	10:46:20 PM		27.926	25.551	28.101	26.204	25.296		45.089	50.376	12.929	33.11	-0.986	-6.905		46.523	0.086	14.643	0.004		892.97	14.8828	49.3	11.1	39.1	2.696	0.012	0.011	0.000	0.289	0.25	
905	8/30/2004	10:47:20 PM		27.926	25.551	28.111	26.199	25.29		45.86	51.035	13.3	33.481	-1.093	-7.113		47.059	0.09	14.643	0.003		893.97	14.8994	49.9	11.2	39.7	2.735	0.013	0.012	0.000	0.298	0.25	
906	8/30/2004	10:48:20 PM		27.931	25.572	28.121	26.219	25.281		45.684	50.942	13.141	33.348	-1.009	-7.047		47.355	0.092	14.643	0.003		894.97	14.9161	49.8	11.3	39.5	2.724	0.013	0.012	0.000	0.306	0.26	
907	8/30/2004	10:49:20 PM		27.937	25.577	28.127	26.185	25.302		46.138	51.163	13.341	33.805	-1.09	-7.087		47.97	0.094	14.643	0.003		895.97	14.9328	50.0	11.4	40.0	2.756	0.013	0.012	0.000	0.309	0.26	
908	8/30/2004	10:50:20 PM		27.952	25.587	28.147	26.175	25.287		45.752	51.209	13.221	33.417	-0.928	-6.778		47.924	0.083	14.643	0.004		896.97	14.9494	50.1	11.4	39.6	2.729	0.012	0.011	0.000	0.275	0.23	
909	8/30/2004	10:51:20 PM		27.952	25.592	28.147	26.2	25.287		45.495	50.556	13.172	33.319	-1.009	-7.032		46.362	0.085	14.643	0.003		897.97	14.9661	49.4	11.0	39.4	2.717	0.012	0.011	0.000	0.283	0.24	
910	8/30/2004	10:52:20 PM		27.962	25.597	28.147	26.22	25.307		46.433	51.731	13.33	33.943	-1.114	-7.113		45.131	0.086	14.643	0.003		898.97	14.9828	50.6	10.7	40.2	2.771	0.012	0.011	0.000	0.281	0.24	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
911	8/30/2004	10:53:20 PM		27.978	25.613	28.172	26.231	25.282		45.632	51.049	13.264	33.239	-0.963	-6.931		46.122	0.091	14.643	0.004		899.97	14.9994	49.9	11.0	39.4	2.719	0.013	0.012	0.000	0.302	0.26	
912	8/30/2004	10:54:20 PM		27.973	25.609	28.173	26.231	25.318		46.379	51.476	13.271	34.3	-1.027	-7.105		46.446	0.09	14.643	0.003		900.97	15.0161	50.4	11.1	40.3	2.781	0.013	0.012	0.000	0.292	0.25	
913	8/30/2004	10:55:20 PM		27.978	25.608	28.163	26.211	25.352		46.086	51.267	13.29	33.799	-1.004	-6.992		46.788	0.089	14.643	0.003		901.97	15.0328	50.1	11.1	39.9	2.754	0.013	0.012	0.000	0.292	0.25	
914	8/30/2004	10:56:20 PM		27.982	25.608	28.192	26.216	25.322		45.873	50.942	13.057	33.902	-1.062	-7.102		49.487	0.092	14.643	0.003		902.97	15.0494	49.8	11.8	39.9	2.750	0.013	0.012	0.000	0.302	0.26	
915	8/30/2004	10:57:20 PM		27.998	25.629	28.218	26.236	25.318		45.553	50.9	13.156	33.307	-0.925	-6.845		47.674	0.087	14.643	0.003		903.97	15.0661	49.8	11.4	39.4	2.719	0.012	0.011	0.000	0.289	0.25	
916	8/30/2004	10:58:20 PM		27.992	25.633	28.232	26.226	25.387		45.526	50.817	13.034	33.522	-0.989	-7.027		47.564	0.09	14.643	0.003		904.97	15.0828	49.7	11.3	39.5	2.725	0.013	0.012	0.000	0.298	0.25	
917	8/30/2004	10:59:20 PM		27.992	25.643	28.252	26.196	25.362		45.956	51.147	13.15	33.783	-1.07	-7.087		47.226	0.089	14.643	0.004		905.97	15.0994	50.0	11.2	39.9	2.749	0.013	0.012	0.000	0.292	0.25	
918	8/30/2004	11:00:20 PM		27.997	25.643	28.247	26.216	25.292		46.377	51.597	13.369	33.873	-0.928	-6.853		47.251	0.083	14.643	0.004		906.97	15.1161	50.5	11.3	40.1	2.766	0.012	0.011	0.000	0.271	0.23	
919	8/30/2004	11:01:20 PM		27.998	25.649	28.263	26.216	25.303		45.587	50.759	13.087	33.504	-1.009	-7.064		47	0.089	14.643	0.003		907.97	15.1328	49.6	11.2	39.5	2.727	0.013	0.012	0.000	0.294	0.25	
920	8/30/2004	11:02:20 PM		28.014	25.654	28.268	26.212	25.304		46.171	51.545	13.434	33.421	-1.128	-7.093		49.993	0.093	14.643	0.003		908.97	15.1494	50.4	11.9	39.8	2.744	0.013	0.012	0.000	0.305	0.26	
921	8/30/2004	11:03:20 PM		28.019	25.664	28.268	26.202	25.324		45.906	51.203	13.239	33.631	-0.96	-6.914		48.004	0.094	14.643	0.003		909.97	15.1661	50.1	11.4	39.8	2.742	0.013	0.012	0.000	0.309	0.26	
922	8/30/2004	11:04:20 PM		28.019	25.659	28.288	26.182	25.314		45.271	50.527	13.108	33.159	-0.986	-6.926		48.853	0.083	14.643	0.003		910.97	15.1828	49.4	11.6	39.2	2.704	0.012	0.011	0.000	0.277	0.24	
923	8/30/2004	11:05:20 PM		28.031	25.666	28.26	26.164	25.351		46.211	51.443	13.26	33.943	-1.053	-7.082		47.109	0.089	14.643	0.003		911.97	15.1994	50.3	11.2	40.1	2.763	0.013	0.012	0.000	0.290	0.25	
924	8/30/2004	11:06:20 PM		28.036	25.671	28.285	26.209	25.321		46.686	51.972	13.489	34.084	-1.021	-7.038		48.458	0.087	14.643	0.004		912.97	15.2161	50.8	11.5	40.4	2.784	0.012	0.011	0.000	0.281	0.24	
925	8/30/2004	11:07:20 PM		28.04	25.666	28.27	26.173	25.34		46.001	51.336	13.233	33.74	-0.931	-6.969		48.181	0.091	14.643	0.003		913.97	15.2328	50.2	11.5	39.9	2.749	0.013	0.012	0.000	0.298	0.25	
926	8/30/2004	11:08:20 PM		28.08	25.701	28.325	26.243	25.325		46.518	51.733	13.338	34.16	-1.015	-7.076		50.659	0.088	14.643	0.004		914.97	15.2494	50.6	12.1	40.3	2.781	0.013	0.011	0.000	0.285	0.24	
927	8/30/2004	11:09:20 PM		28.094	25.7	28.344	26.243	25.304		46.068	51.508	13.25	33.688	-0.923	-6.842		50.094	0.089	14.643	0.003		915.97	15.2661	50.4	11.9	39.9	2.749	0.013	0.012	0.000	0.291	0.25	
928	8/30/2004	11:10:20 PM		28.103	25.709	28.358	26.262	25.314		45.609	50.768	13.142	33.385	-0.986	-7.061		45.244	0.087	14.643	0.003		916.97	15.2828	49.6	10.8	39.5	2.723	0.012	0.011	0.000	0.287	0.24	
929	8/30/2004	11:11:20 PM		28.115	25.716	28.354	26.258	25.335		46.393	51.675	13.375	33.85	-1.021	-7.032		48.429	0.091	14.643	0.003		917.97	15.2994	50.6	11.5	40.1	2.766	0.013	0.012	0.000	0.296	0.25	
930	8/30/2004	11:12:20 PM		28.109	25.705	28.344	26.233	25.329		46.051	51.246	13.444	33.635	-0.873	-6.712		47.442	0.087	14.643	0.003		918.97	15.3161	50.1	11.3	39.8	2.747	0.012	0.011	0.000	0.285	0.24	
931	8/30/2004	11:13:20 PM		28.109	25.71	28.364	26.233	25.304		46.281	51.574	13.152	34.107	-0.925	-7.012		44.176	0.088	14.643	0.003		919.97	15.3328	50.4	10.5	40.2	2.771	0.013	0.011	0.000	0.285	0.24	
932	8/30/2004	11:14:20 PM		28.129	25.715	28.359	26.278	25.304		46.258	51.336	13.081	34.228	-0.928	-7.041		46.204	0.091	14.643	0.003		920.97	15.3494	50.2	11.0	40.2	2.775	0.013	0.012	0.000	0.295	0.25	
933	8/30/2004	11:15:20 PM		28.129	25.731	28.369	26.288	25.34		46.076	51.487	13.068	33.842	-0.952	-7.035		47.261	0.097	14.643	0.003		921.97	15.3661	50.4	11.3	40.0	2.755	0.014	0.013	0.000	0.316	0.27	
934	8/30/2004	11:16:20 PM		28.139	25.731	28.379	26.288	25.305		46.466	51.943	13.379	33.9	-0.876	-6.613		47.263	0.082	14.643	0.003		922.97	15.3828	50.8	11.3	40.2	2.770	0.012	0.011	0.000	0.266	0.23	
935	8/30/2004	11:17:20 PM		28.134	25.726	28.389	26.278	25.335		46.312	51.526	13.211	34.006	-1.021	-7.03		47.401	0.092	14.643	0.003		923.97	15.3994	50.4	11.3	40.2	2.769	0.013	0.012	0.000	0.298	0.25	
936	8/30/2004	11:18:20 PM		28.145	25.741	28.405	26.259	25.381		46.103	51.344	13.152	33.834	-1.021	-7.079		46.836	0.088	14.643	0.004		924.97	15.4161	50.2	11.2	40.0	2.756	0.013	0.011	0.000	0.287	0.24	
937	8/30/2004	11:19:20 PM		28.149	25.741	28.409	26.258	25.315		45.705	50.834	13.112	33.508	-1.09	-7.009		46.798	0.085	14.643	0.003		925.97	15.4328	49.7	11.1	39.6	2.731	0.012	0.011	0.000	0.279	0.24	
938	8/30/2004	11:20:20 PM		28.159	25.745	28.389	26.243	25.359		46.03	51.058	13.089	34.142	-0.928	-6.847		45.682	0.091	14.643	0.004		926.97	15.4494	49.9	10.9	40.1	2.764	0.013	0.012	0.000	0.296	0.25	
939	8/30/2004	11:21:20 PM		28.154	25.756	28.394	26.268	25.38		46.198	51.58	13.129	34.006	-1.004	-7.044		47.019	0.089	14.643	0.003		927.97	15.4661	50.5	11.2	40.1	2.765	0.013	0.012	0.000	0.289	0.25	
940	8/30/2004	11:22:20 PM		28.164	25.76	28.414	26.263	25.324		47.155	52.332	13.449	34.614	-1.009	-7.047		47.1	0.089	14.643	0.003		928.97	15.4828	51.2	11.2	40.9	2.819	0.013	0.012	0.000	0.283	0.24	
941	8/30/2004	11:23:20 PM		28.178	25.774	28.438	26.312	25.344		45.806	51.106	13.219	33.43	-0.966	-7.044		47.438	0.088	14.643	0.004		929.97	15.4994	50.0	11.3	39.6	2.732	0.013	0.011	0.000	0.289	0.25	
942	8/30/2004	11:24:20 PM		28.174	25.765	28.414	26.278	25.329		46.619	51.733	13.283	34.433	-1.021	-7.032		46.494	0.089	14.643	0.003		930.97	15.5161	50.6	11.1	40.5	2.794	0.013	0.012	0.000	0.286	0.24	
943	8/30/2004	11:25:20 PM		28.169	25.781	28.444	26.298	25.395		46.008	51.454	13.241	33.623	-0.876	-6.821		46.27	0.091	14.643	0.003		931.97	15.5328	50.3	11.0	39.8	2.745	0.013	0.012	0.000	0.297	0.25	
944	8/30/2004	11:26:20 PM		28.18	25.791	28.465	26.289	25.431		45.273	50.633	13.401	32.736	-0.888	-6.917		46.573	0.088	14.643	0.003		932.97	15.5494	49.5	11.1	39.0	2.689	0.013	0.011	0.000	0.293	0.25	
945	8/30/2004	11:27:20 PM		28.171	25.782	28.455	26.295	25.381		46.169	51.352	13.265	33.83	-0.98	-7.03		47.309	0.091	14.643	0.003		933.97	15.5661	50.2	11.3	40.0	2.758	0.013	0.012	0.000	0.296	0.25	
946	8/30/2004	11:28:20 PM		28.161	25.783	28.436	26.245	25.402		45.85	51.197	13.312	33.356	-0.879	-6.894		49.117	0.084	14.643	0.003		934.97	15.5828	50.1	11.7	39.6	2.730	0.012	0.011	0.000	0.276	0.23	
947	8/30/2004	11:29:20 PM		28.168	25.79	28.453	26.262	25.409		45.437	50.851	13.367	32.826	-0.928	-7.012		48.452	0.09	14.643	0.003		935.97	15.5994	49.7	11.5	39.1	2.698	0.013	0.012	0.000	0.299	0.25	
948	8/30/2004	11:30:20 PM		28.168	25.785	28.458	26.257	25.389		45.612	50.923	13.267	33.245	-0.905	-6.868		45.292	0.087	14.643	0.004		936.97	15.6161	49.8	10.8	39.4	2.718	0.012	0.011	0.000	0.287	0.24	
949	8/30/2004	11:31:20 PM		28.179	25.8	28.488	26.313	25.35		45.253	50.479	13.202	32.88	-0.925	-6.972		46.921	0.092	14.643	0.004		937.97	15.6328	49.4	11.2	39.1	2.693	0.013	0.012	0.000	0.306	0.26	
950	8/30/2004	11:32:20 PM		28.175	25.796	28.484	26.228	25.49		45.668	50.79	13.236	33.493	-0.986	-6.917		49.783	0.082	14.643	0.003		938.97	15.6494	49.7	11.9	39.6	2.729	0.012	0.011	0.000	0.269	0.23	
951	8/30/2004	11:33:20 PM		28.175	25.792	28.465	26.234	25.461		45.651	50.946	13.267	33.364	-0.931	-6.954		47.217	0.086	14.643	0.003		939.97	15.6661	49.8	11.2	39.5	2.724	0.012	0.011	0.000	0.283	0.24	
952	8/30/2004	11:34:20 PM		28.206	25.822	28.515	26.3	25.362		45.993	51.329	13.426	33.424	-0.983	-7.061		47.461	0.092	14.643	0.003		940.97	15.6828	50.2	11.3	39.7	2.738	0.013	0.012	0.000	0.301	0.26	
953	8/30/2004	11:35:20 PM		28.195	25.817	28.505	26.294	25.406		45.502	50.643	13.126	33.374	-0.923	-6.949		46.84	0.088	14.643	0.004		941.97	15.6994	49.5	11.2	39.4	2.719	0.013	0.011	0.000	0.290	0.25	
954	8/30/2004	11:36:20 PM		28.194	25.816	28.479	26.289	25.46		46.617	52.133	13.452	33.904	-0.928	-7.021		48.07	0.084	14.643	0.003		942.97	15.7161	51.0	11.4	40.3	2.776	0.012	0.011	0.000	0.271	0.23	
955	8/30/2004	11:37:20 PM		28.194	25.816	28.479	26.269	25.46		46.356	51.717	13.448	33.735	-0.923	-6.836		46.602	0.086	14.643	0.003		943.97	15.7328	50.6	11.1	40.0	2.761	0.012	0.011	0.000	0.279	0.24	
956	8/30/2004	11:38:20 PM		28.199	25.821	28.479	26.264	25.43		46.02	51.352	13.422	33.518	-0.928	-6.983		48.577	0.088	14.643	0.003		944.97	15.7494	50.2	11.6	39.8	2.742	0.013	0.011	0.000	0.288	0.24	
957	8/30/2004	11:39:20 PM		28.219	25.831	28.499	26.304	25.465		46.072	51.265	13.322	33.758	-0.925	-7.015		49.407	0.084	14.643	0.004		945.97	15.7661	50.1	11.8	39.9	2.752	0.012	0.011	0.000	0.273	0.23	
958	8/30/2004	11:40:20 PM		28.229	25.831	28.499	26.329	25.455		46.059	51.273	13.487	33.551	-0.928	-6.827		47.709	0.088	14.643	0.004		946.97	15.7828	50.1	11.4	39.8	2.744	0.013	0.011	0.000	0.287	0.24	
959	8/30/2004	11:41:20 PM		28.229	25.836	28.499	26.299	25.41		44.919	50.094	13.09	32.921	-0.876	-6.85		48.21	0.085	14.643	0.003		947.97	15.7994	49.0	11.5	38.9	2.683	0.012	0.011	0.000	0.284	0.24	
960	8/30/2004	11:42:20 PM		28.25	25.842	28.505	26.319	25.436		45.724	51.114	13.362	33.259	-0.914	-6.931		47.411	0.088	14.643	0.003		948.97	15.8161	50.0	11.3	39.5	2.723	0.013	0.011	0.000	0.289	0.25	
961	8/30/2004	11:43:20 PM		28.249	25.841	28.519	26.284	25.465		45.533	50.838	13.21	33.212	-0.925	-6.992		45.974	0.087	14.643	0.003		949.97	15.8328	49.7	11.0	39.4	2.715	0.012	0.011	0.000	0.287	0.24	
962	8/30/2004	11:44:20 PM		28.264	25.846	28.509	26.314	25.4		45.885	51.213	13.424	33.327	-0.931	-6.995		48.588	0.088	14.643	0.003		950.97	15.8494	50.1	11.6	39.6	2.731	0.013	0.011	0.000	0.289	0.25	
963	8/30/2004	11:45:20 PM		28.27	25.862	28.525	26.304	25.441		46.061	51.302	13.377	33.713	-0.81	-6.821		48.602	0.094	14.643	0.003		951.97	15.8661	50.2	11.6	39.9	2.750	0.013	0.012	0.000	0.306	0.26	
964	8/30/2004	11:46:20 PM		28.28	25.862	28.54	26.31	25.372		46.248	51.634	13.431	33.838	-0.839	-6.879		47.951	0.091	14.643	0.003		952.97	15.8828	50.5	11.4	40.0	2.761	0.013	0.012	0.000	0.295	0.25	
965	8/30/2004	11:47:20 PM		28.281	25.863	28.546	26.275	25.377		46.323	51.532	13.366	33.92	-0.931	-6.957		45.603	0.093	14.643	0.003		953.97	15.8994	50.4	10.9	40.1	2.766	0.013	0.012	0.000	0.301	0.26	
966	8/30/2004	11:48:20 PM		28.293	25.87	28.578	26.282	25.424		46.412	51.866	13.652	33.664	-0.81	-6.726		48.114	0.087	14.643	0.004		954.97	15.9161	50.7	11.5	40.0	2.760	0.012	0.011	0.000	0.282	0.24	
967	8/30/2004	11:49:20 PM		28.283	25.86	28.588	26.282	25.434		45.547	50.958	13.81	32.596	-0.928	-6.986		48.01	0.088	14.643	0.003		955.97	15.9328	49.8	11.4	39.1	2.694	0.013	0.011	0.000	0.292	0.25	
968	8/30/2004	11:50:20 PM		28.319	25.876	28.634	26.294	25.465		46.167	51.532	13.896	33.235	-0.928	-6.998		52.28	0.089	14.643	0.003		956.97	15.9494	50.4	12.5	39.7	2.737	0.013	0.012	0.000	0.290	0.25	
969	8/30/2004	11:51:20 PM		28.34	25.888	28.68	26.3	25.497		45.902	51.255	13.81	32.931	-0.847	-6.845		48.129	0.082	14.643	0.003		957.97	15.9661	50.1	11.5	39.4	2.718	0.012	0.011	0.000	0.269	0.23	
970	8/30/2004	11:52:20 PM		28.325	25.872	28.674	26.274	25.441		46.061	51.306	13.668	33.237	-0.928	-6.975		50.697	0.087	14.643	0.003		958.97	15.9828	50.2	12.1	39.6	2.734	0.012	0.011	0.000	0.284	0.24	
971	8/30/2004	11:53:20 PM		28.339	25.871	28.694	26.284	25.44		45.939	51.23	13.692	33.251	-0.775	-6.616		49.61	0.081	14.643	0.003		959.97	15.9994	50.1	11.8	39.6	2.730	0.012	0.010	0.000	0.264	0.22	
972	8/30/2004	11:54:20 PM		28.299	25.876	28.688	26.283	25.44		46.509	51.858	13.827	33.541	-0.81	-6.833		48.715	0.092	14.643	0.003		960.97	16.0161	50.7	11.6	40.0	2.760	0.013	0.012	0.000	0.297	0.25	
973	8/30/2004	11:55:20 PM		28.279	25.886	28.713	26.303	25.415		46.431	51.677	13.698	33.567	-1.021	-6.989		50.849	0.088	14.643	0.003		961.97	16.0328	50.6	12.1	40.0	2.758	0.013	0.011	0.000	0.284	0.24	
974	8/30/2004	11:56:20 PM		28.279	25.886	28.738	26.293	25.43		46.342	51.723	13.711	33.541	-0.763	-6.579		50.179	0.091	14.643	0.003		962.97	16.0494	50.6	12.0	39.9	2.754	0.013	0.012	0.000	0.294	0.25	
975	8/30/2004	11:57:20 PM		28.284	25.896	28.768	26.268	25.39		46.75	52.063	13.689	33.873	-0.928	-6.989		46.961	0.092	14.643	0.003		963.97	16.0661	50.9	11.2	40.3	2.779	0.013	0.012	0.000	0.294	0.25	
976	8/30/2004	11:58:20 PM		28.273	25.885	28.762	26.272	25.369		46.53	51.704	13.721	33.736	-0.931	-7.021		48.354	0.091	14.643	0.003		964.97	16.0828	50.6	11.5	40.1	2.767	0.013	0.012	0.000	0.292	0.25	
977	8/30/2004	11:59:20 PM		28.293	25.895	28.812	26.272	25.324		46.715	51.903	13.794	33.852	-0.905	-6.954		50.177	0.092	14.643	0.003		965.97	16.0994	50.8	12.0	40.3	2.777	0.013	0.012	0.000	0.294	0.25	
978	8/31/2004	12:00:10 AM		28.303	25.9	28.817	26.267	25.394		46.555	51.885	13.721	33.736	-0.928	-6.873		48.243	0.09	14.643	0.004		966.80	16.1133	50.8	11.5	40.1	2.768	0.013	0.012	0.000	0.289	0.25	
979	8/31/2004	12:01:10 AM		28.318	25.905	28.842	26.267	25.424		46.221	51.522	13.457	33.74	-0.879	-6.891		48.511	0.089	14.643	0.003		967.80	16.13	50.4	11.6	40.0	2.757	0.013	0.011	0.000	0.286	0.24	
980	8/31/2004	12:02:10 AM		28.328	25.911	28.862	26.263	25.38		46.269	51.578	13.655	33.645	-0.908	-6.96		48.905	0.085	14.643	0.004		968.80	16.1467	50.5	11.6	40.0	2.755	0.012	0.011	0.000	0.274	0.23	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
981	8/31/2004	12:03:10 AM		28.343	25.911	28.872	26.278	25.33		45.692	51.244	13.464	32.993	-0.859	-6.885		47.403	0.09	14.643	0.003		969.80	16.1633	50.1	11.3	39.3	2.713	0.013	0.012	0.000	0.294	0.25	
982	8/31/2004	12:04:10 AM		28.353	25.91	28.896	26.267	25.309		46.655	51.686	13.707	34.07	-0.989	-6.897		45.982	0.092	14.643	0.003		970.80	16.18	50.6	11.0	40.4	2.783	0.013	0.012	0.000	0.293	0.25	
983	8/31/2004	12:05:10 AM		28.358	25.91	28.896	26.242	25.364		45.815	51.306	13.606	33.263	-0.723	-6.509		50.058	0.093	14.643	0.003		971.80	16.1967	50.2	11.9	39.5	2.726	0.013	0.012	0.000	0.302	0.26	
984	8/31/2004	12:06:10 AM		28.378	25.915	28.916	26.297	25.389		46.752	52.134	13.636	34.015	-0.876	-6.923		47.991	0.1	14.643	0.003		972.80	16.2133	51.0	11.4	40.4	2.784	0.014	0.013	0.000	0.318	0.27	
985	8/31/2004	12:07:10 AM		28.387	25.915	28.941	26.317	25.364		46.095	51.19	13.398	33.711	-0.957	-6.986		46.763	0.092	14.643	0.003		973.80	16.23	50.1	11.1	39.9	2.751	0.013	0.012	0.000	0.296	0.25	
986	8/31/2004	12:08:10 AM		28.413	25.921	28.947	26.333	25.425		46.698	51.995	13.694	33.912	-0.839	-6.775		49.14	0.089	14.643	0.004		974.80	16.2467	50.9	11.7	40.3	2.779	0.013	0.011	0.000	0.283	0.24	
987	8/31/2004	12:09:10 AM		28.428	25.931	28.937	26.348	25.39		46.903	52.185	13.584	34.253	-0.873	-6.937		47.926	0.093	14.643	0.004		975.80	16.2633	51.1	11.4	40.6	2.798	0.013	0.012	0.000	0.294	0.25	
988	8/31/2004	12:10:10 AM		28.423	25.921	28.932	26.308	25.375		46.661	52.071	13.594	33.861	-0.856	-6.885		48.2	0.093	14.643	0.004		976.80	16.28	50.9	11.5	40.3	2.776	0.013	0.012	0.000	0.296	0.25	
989	8/31/2004	12:11:10 AM		28.449	25.936	28.977	26.339	25.4		46.146	51.464	13.938	33.14	-0.873	-6.937		49.482	0.085	14.643	0.003		977.80	16.2967	50.3	11.8	39.6	2.733	0.012	0.011	0.000	0.275	0.23	
990	8/31/2004	12:12:10 AM		28.45	25.933	28.979	26.306	25.382		46.088	51.483	13.877	33.079	-0.807	-6.888		49.101	0.089	14.643	0.003		978.80	16.3133	50.4	11.7	39.6	2.729	0.013	0.011	0.000	0.288	0.25	
991	8/31/2004	12:13:10 AM		28.445	25.928	28.999	26.301	25.382		45.968	51.24	13.739	33.147	-0.923	-6.795		48.154	0.089	14.643	0.004		979.80	16.33	50.1	11.5	39.6	2.727	0.013	0.011	0.000	0.288	0.25	
992	8/31/2004	12:14:10 AM		28.471	25.939	29.035	26.321	25.363		45.58	51.016	13.71	32.761	-0.804	-6.706		50.083	0.09	14.643	0.004		980.80	16.3467	49.9	11.9	39.2	2.701	0.013	0.012	0.000	0.294	0.25	
993	8/31/2004	12:15:10 AM		28.472	25.94	29.03	26.317	25.364		45.869	51.34	13.624	33.2	-0.876	-6.882		49.656	0.084	14.643	0.003		981.80	16.3633	50.2	11.8	39.5	2.726	0.012	0.011	0.000	0.272	0.23	
994	8/31/2004	12:16:10 AM		28.47	25.923	29.049	26.291	25.442		45.732	51.132	13.712	32.976	-0.81	-6.885		52.463	0.084	14.643	0.003		982.80	16.38	50.0	12.5	39.4	2.713	0.012	0.011	0.000	0.273	0.23	
995	8/31/2004	12:17:10 AM		28.479	25.932	29.053	26.269	25.411		45.85	51.257	13.683	33.085	-0.827	-6.882		46.921	0.088	14.643	0.003		983.80	16.3967	50.1	11.2	39.5	2.721	0.013	0.011	0.000	0.285	0.24	
996	8/31/2004	12:18:10 AM		28.495	25.938	29.069	26.306	25.372		46.064	51.445	13.756	33.142	-0.902	-6.931		50.34	0.087	14.643	0.003		984.80	16.4133	50.3	12.0	39.6	2.730	0.012	0.011	0.000	0.281	0.24	
997	8/31/2004	12:19:10 AM		28.51	25.943	29.094	26.271	25.422		45.993	51.396	13.741	33.11	-0.795	-6.755		48.986	0.093	14.643	0.003		985.80	16.43	50.3	11.7	39.6	2.727	0.013	0.012	0.000	0.300	0.26	
998	8/31/2004	12:20:10 AM		28.515	25.943	29.099	26.261	25.412		45.852	51.445	13.741	32.964	-0.81	-6.842		50.694	0.088	14.643	0.003		986.80	16.4467	50.3	12.1	39.4	2.717	0.013	0.011	0.000	0.285	0.24	
999	8/31/2004	12:21:10 AM		28.53	25.943	29.114	26.266	25.367		46.599	51.968	13.904	33.616	-0.876	-6.923		49.685	0.091	14.643	0.003		987.80	16.4633	50.8	11.8	40.1	2.765	0.013	0.012	0.000	0.290	0.25	
1000	8/31/2004	12:22:10 AM		28.535	25.938	29.119	26.241	25.357		45.75	51.234	13.714	33.011	-0.749	-6.599		48.423	0.087	14.643	0.003		988.80	16.48	50.1	11.5	39.4	2.715	0.012	0.011	0.000	0.282	0.24	
1001	8/31/2004	12:23:10 AM		28.555	25.953	29.148	26.291	25.402		45.844	51.213	13.783	32.898	-0.876	-6.934		46.948	0.089	14.643	0.003		989.80	16.4967	50.1	11.2	39.4	2.714	0.013	0.011	0.000	0.288	0.25	
1002	8/31/2004	12:24:10 AM		28.57	25.948	29.143	26.286	25.397		46.418	51.611	13.762	33.567	-0.81	-6.703		48.621	0.084	14.643	0.003		990.80	16.5133	50.5	11.6	40.0	2.757	0.012	0.011	0.000	0.268	0.23	
1003	8/31/2004	12:25:10 AM		28.575	25.953	29.099	26.251	25.432		46.539	52.032	13.822	33.547	-0.807	-6.891		49.115	0.095	14.643	0.004		991.80	16.53	50.9	11.7	40.0	2.761	0.014	0.012	0.000	0.303	0.26	
1004	8/31/2004	12:26:10 AM		28.908	25.953	29.104	26.281	25.382		46.254	51.858	13.73	33.272	-0.879	-6.917		48.018	0.087	14.643	0.003		992.80	16.5467	50.7	11.4	39.8	2.742	0.012	0.011	0.000	0.280	0.24	
1005	8/31/2004	12:27:10 AM		28.768	25.952	29.112	26.289	25.371		46.13	51.638	13.747	33.354	-0.81	-6.85		50.868	0.087	14.643	0.004		993.80	16.5633	50.5	12.1	39.7	2.740	0.012	0.011	0.000	0.280	0.24	
1006	8/31/2004	12:28:10 AM		28.733	25.972	29.147	26.324	25.431		46.329	52.001	13.692	33.343	-0.873	-6.908		46.452	0.08	14.643	0.003		994.80	16.58	50.9	11.1	39.8	2.747	0.011	0.010	0.000	0.256	0.22	
1007	8/31/2004	12:29:10 AM		28.698	25.967	29.142	26.324	25.421		46.082	51.765	13.701	33.186	-0.708	-6.532		48.563	0.078	14.643	0.004		995.80	16.5967	50.6	11.6	39.6	2.733	0.011	0.010	0.000	0.251	0.21	
1008	8/31/2004	12:30:10 AM		28.672	25.951	29.132	26.269	25.435		46.076	51.394	13.594	33.415	-0.853	-6.931		47.205	0.09	14.643	0.003		996.80	16.6133	50.3	11.2	39.7	2.740	0.013	0.011	0.000	0.289	0.25	
1009	8/31/2004	12:31:10 AM		28.658	25.967	29.152	26.279	25.426		46.339	51.64	13.694	33.557	-0.876	-6.926		48.285	0.085	14.643	0.004		997.80	16.63	50.5	11.5	39.9	2.754	0.012	0.011	0.000	0.271	0.23	
1010	8/31/2004	12:32:10 AM		28.643	25.971	29.166	26.334	25.405		46.028	51.42	13.622	33.37	-0.821	-6.804		48.6	0.089	14.643	0.003		998.80	16.6467	50.3	11.6	39.7	2.737	0.013	0.011	0.000	0.286	0.24	
1011	8/31/2004	12:33:10 AM		28.638	25.967	29.172	26.329	25.411		45.686	50.987	13.539	33.163	-0.859	-6.908		48.442	0.086	14.643	0.003		999.80	16.6633	49.9	11.5	39.4	2.718	0.012	0.011	0.000	0.278	0.24	
1012	8/31/2004	12:34:10 AM		28.633	25.972	29.202	26.374	25.426		45.821	51.192	13.646	33.04	-0.807	-6.749		47.507	0.085	14.643	0.004		1000.80	16.68	50.1	11.3	39.4	2.719	0.012	0.011	0.000	0.275	0.23	
1013	8/31/2004	12:35:10 AM		28.628	25.972	29.212	26.344	25.351		46.182	51.524	13.659	33.397	-0.813	-6.885		48.024	0.084	14.643	0.003		1001.80	16.6967	50.4	11.4	39.8	2.743	0.012	0.011	0.000	0.269	0.23	
1014	8/31/2004	12:36:10 AM		28.623	25.977	29.217	26.339	25.391		46.171	51.819	13.77	33.173	-0.813	-6.882		49.372	0.087	14.643	0.003		1002.80	16.7133	50.7	11.8	39.7	2.735	0.012	0.011	0.000	0.279	0.24	
1015	8/31/2004	12:37:10 AM		28.617	25.976	29.225	26.358	25.4		46.482	51.762	13.683	33.764	-0.891	-6.894		47.451	0.094	14.643	0.003		1003.80	16.73	50.6	11.3	40.1	2.766	0.013	0.012	0.000	0.298	0.25	
1016	8/31/2004	12:38:10 AM		28.613	25.992	29.257	26.339	25.411		45.728	51.271	13.465	33.167	-0.694	-6.541		51.22	0.091	14.643	0.004		1004.80	16.7467	50.1	12.2	39.4	2.720	0.013	0.012	0.000	0.293	0.25	
1017	8/31/2004	12:39:10 AM		28.619	25.983	29.232	26.38	25.457		45.95	51.605	13.769	33.095	-0.538	-6.191		47.887	0.086	14.643	0.003		1005.80	16.7633	50.5	11.4	39.5	2.725	0.012	0.011	0.000	0.277	0.24	
1018	8/31/2004	12:40:10 AM		28.613	25.977	29.247	26.359	25.451		45.516	51.105	13.616	32.798	-0.645	-6.437		45.92	0.089	14.643	0.003		1006.80	16.78	50.0	10.9	39.2	2.700	0.013	0.011	0.000	0.289	0.25	
1019	8/31/2004	12:41:10 AM		28.619	25.988	29.267	26.36	25.472		45.831	51.483	13.726	33.073	-0.535	-6.197		48.325	0.087	14.643	0.003		1007.80	16.7967	50.4	11.5	39.5	2.720	0.012	0.011	0.000	0.280	0.24	
1020	8/31/2004	12:42:10 AM		28.61	25.988	29.268	26.376	25.512		46.315	52.127	13.838	33.288	-0.477	-6.211		47.055	0.085	14.643	0.003		1008.80	16.8133	51.0	11.2	39.8	2.744	0.012	0.011	0.000	0.272	0.23	
1021	8/31/2004	12:43:10 AM		28.61	25.983	29.273	26.396	25.512		45.715	51.414	13.677	32.993	-0.471	-6.2		48.556	0.086	14.643	0.003		1009.80	16.83	50.3	11.6	39.4	2.713	0.012	0.011	0.000	0.278	0.24	
1022	8/31/2004	12:35:24 PM		23.992	23.689	23.066	24.649	23.852		-0.129	2.051	0.641	0.019	-1.209	-6.047		-0.08	0.003	14.643	0.006		1722.03	28.7006	0.9	0.0	-0.1	-0.004	0.000	0.000	-0.008	-8.249	-7.02	
1023	8/31/2004	12:36:24 PM		24.007	23.673	25.821	24.598	23.917		60.664	65.289	17.712	43.853	-1.212	-5.072		50.183	0.11	14.643	0.003		1723.03	28.7172	64.2	12.0	52.3	3.603	0.016	0.015	0.000	0.294	0.25	
1024	8/31/2004	12:37:24 PM		23.967	23.694	26.462	24.82	23.893		60.363	66.17	18.083	43.153	-0.532	-4.396		54.864	0.081	14.643	0.003		1724.03	28.7339	65.0	13.1	51.8	3.569	0.012	0.011	0.000	0.215	0.18	
1025	8/31/2004	12:38:24 PM		24.389	23.705	26.957	25.067	23.954		61.431	67.198	18.249	43.882	-0.902	-5.451		55.183	0.124	14.643	0.003		1725.03	28.7506	66.1	13.1	52.7	3.630	0.018	0.017	0.000	0.319	0.27	
1026	8/31/2004	12:39:24 PM		24.696	23.707	27.308	25.233	24.055		60.535	65.933	17.929	43.681	-0.76	-5.804		52.797	0.126	14.643	0.004		1726.03	28.7672	64.8	12.6	52.1	3.593	0.018	0.017	0.000	0.325	0.28	
1027	8/31/2004	12:40:24 PM		24.943	23.724	27.445	25.365	24.153		50.73	56.036	15.615	36.083	-1.088	-6.145		52.182	0.102	14.643	0.004		1727.03	28.7839	54.9	12.4	43.4	2.993	0.015	0.014	0.000	0.314	0.27	
1028	8/31/2004	12:41:24 PM		25.095	23.73	27.421	25.372	24.184		48.167	52.714	15.696	33.409	-1.212	-7.261		52.805	0.108	14.643	0.003		1728.03	28.8006	51.6	12.6	40.8	2.812	0.015	0.014	0.000	0.354	0.30	
1029	8/31/2004	12:42:24 PM		25.286	23.762	27.393	25.408	24.215		47.731	52.009	15.517	33.175	-1.212	-7.547		49.883	0.095	14.643	0.003		1729.03	28.8172	50.9	11.9	40.5	2.789	0.014	0.013	0.000	0.314	0.27	
1030	8/31/2004	12:43:24 PM		25.447	23.772	27.323	25.424	24.186		47.559	52.082	15.443	33.052	-1.215	-7.541		53.99	0.094	14.643	0.003		1730.03	28.8339	51.0	12.9	40.3	2.779	0.013	0.013	0.000	0.313	0.27	
1031	8/31/2004	12:44:24 PM		25.607	23.802	27.259	25.434	24.201		47.997	52.502	15.528	33.247	-1.212	-7.602		50.49	0.093	14.643	0.003		1731.03	28.8506	51.4	12.0	40.6	2.801	0.013	0.012	0.000	0.308	0.26	
1032	8/31/2004	12:45:24 PM		25.737	23.828	27.194	25.444	24.216		47.275	51.508	15.732	32.547	-1.212	-7.616		53.037	0.091	14.643	0.003		1732.03	28.8672	50.4	12.6	39.9	2.752	0.013	0.012	0.000	0.307	0.26	
1033	8/31/2004	12:46:24 PM		25.822	23.833	26.86	25.439	24.241		48.237	52.405	14.708	34.493	-1.209	-7.596		48.419	0.095	14.643	0.004		1733.03	28.8839	51.3	11.5	41.4	2.852	0.014	0.013	0.000	0.312	0.27	
1034	8/31/2004	12:47:24 PM		25.904	23.86	26.502	25.441	24.268		48.069	52.38	15.085	33.99	-1.212	-7.611		48.319	0.092	14.643	0.004		1734.03	28.9006	51.3	11.5	41.0	2.829	0.013	0.013	0.000	0.308	0.26	
1035	8/31/2004	12:48:24 PM		25.939	23.88	26.208	25.522	24.359		47.24	51.688	15.803	32.387	-1.209	-7.625		50.012	0.09	14.643	0.003		1735.03	28.9172	50.6	11.9	39.8	2.745	0.013	0.012	0.000	0.313	0.27	
1036	8/31/2004	12:49:24 PM		25.955	23.906	25.944	25.583	24.43		47.381	51.694	15.362	32.995	-1.212	-7.634		49.264	0.089	14.643	0.003		1736.03	28.9339	50.6	11.7	40.2	2.771	0.013	0.012	0.000	0.309	0.26	
1037	8/31/2004	12:50:24 PM		25.981	23.933	25.72	25.659	24.451		47.53	51.791	15.467	33.029	-1.212	-7.637		49.812	0.089	14.643	0.003		1737.03	28.9506	50.7	11.9	40.3	2.777	0.013	0.012	0.000	0.310	0.26	
1038	8/31/2004	12:51:24 PM		25.986	23.973	25.54	25.764	24.531		47.899	52.229	15.211	33.662	-1.212	-7.619		49.353	0.091	14.643	0.004		1738.03	28.9672	51.1	11.8	40.8	2.812	0.013	0.013	0.000	0.315	0.27	
1039	8/31/2004	12:52:24 PM		25.979	23.991	25.343	25.797	24.629		47.092	51.217	15.778	32.266	-1.212	-7.648		52.459	0.088	14.643	0.003		1739.03	28.9839	50.1	12.5	39.7	2.736	0.013	0.012	0.000	0.314	0.27	
1040	8/31/2004	12:53:24 PM		25.968	24.024	25.151	25.841	24.723		47.252	51.462	15.426	32.835	-1.212	-7.642		50.459	0.087	14.643	0.003		1740.03	29.0006	50.3	12.0	40.0	2.761	0.012	0.012	0.000	0.310	0.26	
1041	8/31/2004	12:54:24 PM		25.955	24.046	24.978	25.898	24.75		47.887	52.115	15.476	33.512	-1.215	-7.645		47.591	0.089	14.643	0.003		1741.03	29.0172	51.0	11.3	40.7	2.806	0.013	0.013	0.000	0.313	0.27	
1042	8/31/2004	12:55:24 PM		25.927	24.074	24.81	25.99	24.787		47.729	52.148	15.327	33.395	-1.212	-7.645		49.62	0.087	14.643	0.003		1742.03	29.0339	51.0	11.8	40.6	2.797	0.012	0.013	0.000	0.309	0.26	
1043	8/31/2004	12:56:24 PM		25.905	24.112	24.718	26.048	24.82		47.605	51.825	15.585	33.027	-1.212	-7.645		51.633	0.087	14.643	0.003		1743.03	29.0506	50.7	12.3	40.3	2.780	0.012	0.013	0.000	0.311	0.27	
1044	8/31/2004	12:57:24 PM		25.872	24.124	24.555	26.05	24.692		47.594	51.905	15.525	33.027	-1.212	-7.645		50.188	0.086	14.643	0.003		1744.03	29.0672	50.8	12.0	40.3	2.779	0.012	0.012	0.000	0.309	0.26	
1045	8/31/2004	12:58:24 PM		25.83	24.131	24.402	26.078	24.67		47.665	52.08	15.493	33.089	-1.212	-7.66		52.228	0.085	14.643	0.003		1745.03	29.0839	51.0	12.4	40.4	2.784	0.012	0.012	0.000	0.307	0.26	
1046	8/31/2004	12:59:24 PM		25.797	24.148	24.264	26.13	24.642		47.775	52.001	15.288	33.405	-1.212	-7.654		50.44	0.084	14.643	0.003		1746.03	29.1006	50.9	12.0	40.6	2.799	0.012	0.012	0.000	0.302	0.26	
1047	8/31/2004	1:00:24 PM		25.754	24.171	24.13	26.142	24.624		47.54	51.7	15.724	32.806	-1.212	-7.666		50.386	0.083	14.643	0.004		1747.03	29.1172	50.6	12.0	40.2	2.770	0.012	0.012	0.000	0.303	0.26	
1048	8/31/2004	1:01:24 PM		25.71	24.176	24.001	26.118	24.614		47.468	51.719	15.675	32.734	-1.209	-7.663		50.88	0.084	14.643	0.004		1748.03	29.1339	50.6	12.1	40.1	2.765	0.012	0.012	0.000	0.308	0.26	
1049	8/31/2004	1:02:24 PM		25.655	24.176	23.856	26.058	24.55		47.418	51.646	15.614	32.732	-1.212	-7.674		50.486	0.083	14.643	0.003		1749.03	29.1506	50.5	12.0	40.1	2.763	0.012	0.012	0.000	0.306	0.26	
1050	8/31/2004	1:03:24 PM		25.611	24.182	23.731	25.993	24.46		47.745	51.665	15.662	33.134	-1.212	-7.671		51.18	0.083	14.643	0.003		1750.03	29.1672	50.5	12.2	40.4	2.788	0.012	0.012	0.000	0.305	0.26	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1051	8/31/2004	1:04:24 PM		25.561	24.198	23.606	25.949	24.445		47.857	52.173	15.451	33.393	-1.218	-7.692		50.473	0.082	14.643	0.003		1751.03	29.1839	51.0	12.0	40.6	2.801	0.012	0.012	0.000	0.301	0.26	
1052	8/31/2004	1:05:24 PM		25.51	24.201	23.494	25.932	24.389		47.994	52.243	15.352	33.612	-1.215	-7.692		50.254	0.082	14.643	0.003		1752.03	29.2006	51.1	12.0	40.8	2.813	0.012	0.012	0.000	0.300	0.26	
1053	8/31/2004	1:06:24 PM		25.459	24.21	23.393	25.911	24.493		47.42	51.387	15.626	32.826	-1.212	-7.694		49.643	0.082	14.643	0.003		1753.03	29.2172	50.3	11.8	40.1	2.766	0.012	0.012	0.000	0.306	0.26	
1054	8/31/2004	1:07:24 PM		25.403	24.219	23.281	25.915	24.447		47.264	51.313	15.482	32.793	-1.212	-7.706		49.324	0.082	14.643	0.003		1754.03	29.2339	50.2	11.7	40.0	2.760	0.012	0.012	0.000	0.308	0.26	
1055	8/31/2004	1:08:24 PM		25.351	24.228	23.175	25.914	24.446		47.492	51.574	15.502	33.003	-1.209	-7.718		53.429	0.081	14.643	0.003		1755.03	29.2506	50.4	12.7	40.2	2.775	0.012	0.012	0.000	0.303	0.26	
1056	8/31/2004	1:09:24 PM		25.31	24.247	23.089	25.928	24.43		47.663	51.785	15.535	33.091	-1.212	-7.72		49.528	0.083	14.643	0.003		1756.03	29.2672	50.7	11.8	40.4	2.784	0.012	0.013	0.000	0.311	0.26	
1057	8/31/2004	1:10:24 PM		25.253	24.245	22.996	25.906	24.453		47.206	51.294	16.111	32.026	-1.212	-7.741		51.598	0.078	14.643	0.003		1757.03	29.2839	50.2	12.3	39.6	2.731	0.011	0.012	0.000	0.298	0.25	
1058	8/31/2004	1:11:24 PM		25.201	24.258	22.909	25.904	24.516		47.045	51.105	16.011	32.055	-1.209	-7.697		51.009	0.079	14.643	0.003		1758.03	29.3006	50.0	12.1	39.6	2.727	0.011	0.012	0.000	0.303	0.26	
1059	8/31/2004	1:12:24 PM		25.155	24.256	22.817	25.947	24.544		47.289	51.512	16.053	32.182	-1.212	-7.715		51.134	0.079	14.643	0.003		1759.03	29.3172	50.4	12.2	39.7	2.740	0.011	0.012	0.000	0.303	0.26	
1060	8/31/2004	1:13:24 PM		25.109	24.266	22.846	25.936	24.598		47.03	51.323	15.96	32.085	-1.212	-7.478		50.012	0.113	14.643	0.003		1760.03	29.3339	50.2	11.9	39.6	2.727	0.016	0.017	0.000	0.435	0.37	
1061	8/31/2004	1:14:24 PM		25.057	24.284	22.774	26.04	24.687		46.823	50.929	15.829	32.01	-1.212	-7.692		51.253	0.078	14.643	0.003		1761.03	29.3506	49.8	12.2	39.4	2.718	0.011	0.012	0.000	0.302	0.26	
1062	8/31/2004	1:15:24 PM		25.001	24.293	22.682	26.049	24.741		47.02	51.296	15.808	32.147	-1.215	-7.697		50.98	0.078	14.643	0.003		1762.03	29.3672	50.2	12.1	39.6	2.729	0.011	0.012	0.000	0.301	0.26	
1063	8/31/2004	1:16:24 PM		24.964	24.306	22.59	26.102	24.769		47.285	51.435	15.86	32.367	-1.212	-7.689		50.826	0.079	14.643	0.003		1763.03	29.3839	50.3	12.1	39.8	2.746	0.011	0.012	0.000	0.304	0.26	
1064	8/31/2004	1:17:24 PM		24.918	24.32	22.504	26.171	24.833		47.515	51.746	15.788	32.752	-1.212	-7.694		49.418	0.078	14.643	0.003		1764.03	29.4006	50.6	11.8	40.1	2.767	0.011	0.012	0.000	0.299	0.25	
1065	8/31/2004	1:18:24 PM		24.883	24.345	22.428	26.216	24.923		47.275	51.416	15.823	32.379	-1.212	-7.694		51.86	0.077	14.643	0.003		1765.03	29.4172	50.3	12.4	39.8	2.746	0.011	0.012	0.000	0.298	0.25	
1066	8/31/2004	1:19:24 PM		24.858	24.361	22.358	26.256	24.928		47.573	51.619	15.712	32.894	-1.212	-7.703		49.017	0.079	14.643	0.003		1766.03	29.4339	50.5	11.7	40.2	2.774	0.011	0.012	0.000	0.303	0.26	
1067	8/31/2004	1:20:24 PM		24.797	24.354	22.251	26.22	24.957		47.463	51.696	15.81	32.66	-1.215	-7.712		49.67	0.078	14.643	0.003		1767.03	29.4506	50.6	11.8	40.1	2.762	0.011	0.012	0.000	0.301	0.26	
1068	8/31/2004	1:21:24 PM		24.786	24.394	22.221	26.269	24.851		47.526	51.576	15.819	32.654	-1.206	-7.709		49.9	0.077	14.643	0.004		1768.03	29.4672	50.4	11.9	40.1	2.764	0.011	0.012	0.000	0.298	0.25	
1069	8/31/2004	1:22:24 PM		24.735	24.388	22.124	26.223	24.841		47.534	51.7	15.86	32.633	-1.212	-7.712		49.48	0.077	14.643	0.003		1769.03	29.4839	50.6	11.8	40.1	2.764	0.011	0.012	0.000	0.298	0.25	
1070	8/31/2004	1:23:24 PM		24.704	24.401	22.062	26.217	24.839		47.638	51.901	15.791	32.835	-1.215	-7.712		50.315	0.075	14.643	0.003		1770.03	29.5006	50.8	12.0	40.2	2.774	0.011	0.012	0.000	0.290	0.25	
1071	8/31/2004	1:24:24 PM		24.662	24.415	22	26.2	24.837		47.575	51.75	15.831	32.718	-1.209	-7.715		50.16	0.077	14.643	0.003		1771.03	29.5172	50.6	11.9	40.1	2.768	0.011	0.012	0.000	0.299	0.25	
1072	8/31/2004	1:25:24 PM		24.605	24.418	21.908	26.139	24.896		47.206	51.441	15.608	32.566	-1.215	-7.718		51.447	0.076	14.643	0.003		1772.03	29.5339	50.3	12.3	39.9	2.750	0.011	0.012	0.000	0.298	0.25	
1073	8/31/2004	1:26:24 PM		24.584	24.442	21.861	26.152	24.904		47.716	51.733	15.761	32.978	-1.212	-7.715		51.064	0.077	14.643	0.003		1773.03	29.5506	50.6	12.2	40.3	2.782	0.011	0.012	0.000	0.299	0.25	
1074	8/31/2004	1:27:24 PM		24.535	24.453	21.792	26.143	24.816		47.389	51.653	15.714	32.613	-1.212	-7.715		49.184	0.076	14.643	0.003		1774.03	29.5672	50.5	11.7	40.0	2.758	0.011	0.012	0.000	0.298	0.25	
1075	8/31/2004	1:28:24 PM		24.507	24.47	21.749	26.161	24.798		47.472	51.649	15.676	32.734	-1.209	-7.694		48.888	0.076	14.643	0.003		1775.03	29.5839	50.5	11.6	40.1	2.765	0.011	0.012	0.000	0.298	0.25	
1076	8/31/2004	1:29:24 PM		24.459	24.462	21.676	26.138	24.845		47.775	51.955	15.778	32.978	-1.212	-7.709		50.43	0.076	14.643	0.003		1776.03	29.6006	50.8	12.0	40.4	2.784	0.011	0.012	0.000	0.296	0.25	
1077	8/31/2004	1:30:24 PM		24.421	24.479	21.617	26.07	24.822		47.569	51.763	15.711	32.789	-1.215	-7.7		49.604	0.077	14.643	0.003		1777.03	29.6172	50.6	11.8	40.2	2.770	0.011	0.012	0.000	0.302	0.26	
1078	8/31/2004	1:31:24 PM		24.382	24.486	21.574	26.046	24.853		47.648	51.877	15.751	32.806	-1.212	-7.703		48.805	0.076	14.643	0.003		1778.03	29.6339	50.8	11.6	40.2	2.774	0.011	0.012	0.000	0.298	0.25	
1079	8/31/2004	1:32:24 PM		24.334	24.487	21.504	26.042	24.79		47.634	51.85	15.688	32.892	-1.212	-7.709		48.408	0.075	14.643	0.003		1779.03	29.6506	50.7	11.5	40.3	2.776	0.011	0.012	0.000	0.295	0.25	
1080	8/31/2004	1:33:24 PM		24.295	24.504	21.526	26.069	24.761		47.511	51.595	15.765	32.613	-1.209	-7.703		48.173	0.076	14.643	0.004		1780.03	29.6672	50.5	11.5	40.1	2.762	0.011	0.012	0.000	0.300	0.26	
1081	8/31/2004	1:34:24 PM		24.251	24.505	21.598	26.055	24.752		47.412	51.713	15.699	32.679	-1.209	-7.706		48.406	0.075	14.643	0.003		1781.03	29.6839	50.6	11.5	40.0	2.761	0.011	0.012	0.000	0.295	0.25	
1082	8/31/2004	1:35:24 PM		24.213	24.516	21.534	26.057	24.774		47.632	51.829	15.745	32.876	-1.212	-7.703		48.542	0.076	14.643	0.003		1782.03	29.7006	50.7	11.6	40.3	2.775	0.011	0.012	0.000	0.298	0.25	
1083	8/31/2004	1:36:24 PM		24.169	24.508	21.455	26.018	24.82		47.586	51.939	15.696	32.8	-1.212	-7.706		52.386	0.076	14.643	0.003		1783.03	29.7172	50.8	12.5	40.2	2.771	0.011	0.012	0.000	0.299	0.25	
1084	8/31/2004	1:37:24 PM		24.125	24.523	21.395	25.994	24.866		47.694	51.945	15.804	32.802	-1.215	-7.712		48.219	0.075	14.643	0.003		1784.03	29.7339	50.8	11.5	40.2	2.775	0.011	0.012	0.000	0.296	0.25	
1085	8/31/2004	1:38:24 PM		24.091	24.52	21.336	25.98	24.802		47.634	51.698	15.71	32.859	-1.212	-7.712		50.502	0.075	14.643	0.003		1785.03	29.7506	50.6	12.0	40.2	2.775	0.011	0.012	0.000	0.296	0.25	
1086	8/31/2004	1:39:24 PM		24.066	24.535	21.281	25.965	24.852		47.383	51.53	15.643	32.674	-1.212	-7.671		52.223	0.074	14.643	0.003		1786.03	29.7672	50.4	12.4	40.0	2.760	0.011	0.012	0.000	0.294	0.25	
1087	8/31/2004	1:40:24 PM		24.032	24.536	21.236	25.991	24.873		47.756	51.949	15.705	33.013	-1.212	-7.709		51.61	0.073	14.643	0.003		1787.03	29.7839	50.8	12.3	40.4	2.784	0.010	0.012	0.000	0.288	0.25	
1088	8/31/2004	1:41:24 PM		24.004	24.558	21.188	26.008	24.865		47.739	52.001	15.605	33.005	-1.212	-7.697		50.92	0.075	14.643	0.004		1788.03	29.8006	50.9	12.1	40.4	2.784	0.011	0.012	0.000	0.297	0.25	
1089	8/31/2004	1:42:24 PM		23.975	24.564	21.199	26.019	24.836		47.916	52.146	15.635	33.245	-1.212	-7.712		50.84	0.075	14.643	0.003		1789.03	29.8172	51.0	12.1	40.6	2.798	0.011	0.012	0.000	0.295	0.25	
1090	8/31/2004	1:43:24 PM		23.961	24.581	21.276	26.026	24.938		47.708	51.8	15.61	33.159	-1.215	-7.718		50.071	0.074	14.643	0.003		1790.03	29.8339	50.7	11.9	40.4	2.788	0.011	0.012	0.000	0.291	0.25	
1091	8/31/2004	1:44:24 PM		23.93	24.599	21.35	26.089	25.086		47.99	52.262	15.651	33.282	-1.212	-7.715		52.615	0.074	14.643	0.003		1791.03	29.8506	51.1	12.5	40.6	2.802	0.011	0.012	0.000	0.289	0.25	
1092	8/31/2004	1:45:24 PM		23.902	24.602	21.408	26.167	25.119		47.41	51.588	15.988	32.414	-1.212	-7.715		51.197	0.075	14.643	0.003		1792.03	29.8672	50.5	12.2	39.9	2.752	0.011	0.012	0.000	0.298	0.25	
1093	8/31/2004	1:46:24 PM		23.886	24.625	21.487	26.256	25.198		47.333	51.491	15.827	32.557	-1.212	-7.715		52.069	0.075	14.643	0.003		1793.03	29.8839	50.4	12.4	39.9	2.754	0.011	0.012	0.000	0.297	0.25	
1094	8/31/2004	1:47:24 PM		23.864	24.644	21.566	26.314	25.116		47.578	51.742	15.586	32.968	-1.209	-7.712		49.095	0.074	14.643	0.003		1794.03	29.9006	50.6	11.7	40.3	2.777	0.011	0.012	0.000	0.290	0.25	
1095	8/31/2004	1:48:24 PM		23.836	24.641	21.619	26.326	25.078		47.65	51.794	15.702	32.976	-1.212	-7.709		49.77	0.075	14.643	0.004		1795.03	29.9172	50.7	11.9	40.3	2.779	0.011	0.012	0.000	0.293	0.25	
1096	8/31/2004	1:49:24 PM		23.819	24.648	21.676	26.303	24.99		47.468	51.669	15.793	32.677	-1.215	-7.715		53.321	0.075	14.643	0.003		1796.03	29.9339	50.5	12.7	40.1	2.763	0.011	0.012	0.000	0.295	0.25	
1097	8/31/2004	1:50:24 PM		23.8	24.655	21.718	26.28	25.012		47.484	51.537	15.894	32.533	-1.209	-7.72		51.775	0.073	14.643	0.004		1797.03	29.9506	50.4	12.3	40.0	2.758	0.010	0.011	0.000	0.287	0.24	
1098	8/31/2004	1:51:24 PM		23.786	24.666	21.755	26.241	24.983		47.235	51.474	15.917	32.336	-1.212	-7.709		51.764	0.076	14.643	0.003		1798.03	29.9672	50.3	12.3	39.8	2.743	0.011	0.012	0.000	0.300	0.26	
1099	8/31/2004	1:52:24 PM		23.773	24.673	21.812	26.248	24.98		47.405	51.617	15.97	32.436	-1.212	-7.712		52.411	0.076	14.643	0.003		1799.03	29.9839	50.5	12.5	39.9	2.752	0.011	0.012	0.000	0.298	0.25	
1100	8/31/2004	1:53:24 PM		23.78	24.695	21.884	26.29	24.972		47.555	51.845	15.881	32.574	-1.212	-7.715		49.852	0.074	14.643	0.003		1800.03	30.0006	50.7	11.9	40.1	2.762	0.011	0.012	0.000	0.289	0.25	
1101	8/31/2004	1:54:24 PM		23.765	24.69	21.914	26.265	25.012		47.453	51.678	15.736	32.707	-1.212	-7.72		51.164	0.074	14.643	0.003		1801.03	30.0172	50.6	12.2	40.1	2.763	0.011	0.012	0.000	0.289	0.25	
1102	8/31/2004	1:55:24 PM		23.765	24.695	21.945	26.27	24.967		47.667	51.829	15.8	32.806	-1.212	-7.718		45.995	0.074	14.643	0.003		1802.03	30.0339	50.7	11.0	40.2	2.774	0.011	0.012	0.000	0.287	0.24	
1103	8/31/2004	1:56:24 PM		23.778	24.718	21.993	26.262	24.965		47.466	51.634	15.74	32.736	-1.212	-7.718		49.793	0.074	14.643	0.003		1803.03	30.0506	50.5	11.9	40.1	2.765	0.011	0.012	0.000	0.288	0.24	
1104	8/31/2004	1:57:24 PM		23.778	24.733	22.275	26.263	24.99		47.256	51.593	15.631	32.486	-1.212	-7.715		52.104	0.074	14.643	0.003		1804.03	30.0672	50.5	12.4	39.9	2.749	0.011	0.011	0.000	0.287	0.24	
1105	8/31/2004	1:58:24 PM		23.775	24.726	22.272	26.195	25.077		47.331	51.412	15.632	32.689	-1.212	-7.718		51.472	0.074	14.643	0.003		1805.03	30.0839	50.3	12.3	40.0	2.759	0.011	0.011	0.000	0.286	0.24	
1106	8/31/2004	1:59:24 PM		23.776	24.731	22.268	26.206	25.123		47.011	50.983	15.556	32.625	-1.212	-7.715		49.387	0.074	14.643	0.004		1806.03	30.1006	49.9	11.8	39.8	2.745	0.011	0.011	0.000	0.288	0.24	
1107	8/31/2004	2:00:24 PM		23.782	24.727	22.248	26.167	25.149		47.173	51.466	15.561	32.605	-1.212	-7.718		50.315	0.075	14.643	0.003		1807.03	30.1172	50.3	12.0	39.9	2.750	0.011	0.012	0.000	0.291	0.25	
1108	8/31/2004	2:01:24 PM		23.808	24.758	22.294	26.202	25.065		47.598	51.802	15.755	32.802	-1.209	-7.712		49.597	0.075	14.643	0.004		1808.03	30.1339	50.7	11.8	40.2	2.772	0.011	0.012	0.000	0.288	0.25	
1109	8/31/2004	2:02:24 PM		23.808	24.758	22.289	26.112	25.01		47.316	51.508	15.653	32.711	-1.212	-7.715		51.141	0.074	14.643	0.003		1809.03	30.1506	50.4	12.2	40.0	2.759	0.011	0.011	0.000	0.286	0.24	
1110	8/31/2004	2:03:24 PM		23.823	24.763	22.274	26.172	24.975		47.169	51.263	15.51	32.8	-1.218	-7.718		48.517	0.075	14.643	0.003		1810.03	30.1672	50.1	11.6	40.0	2.757	0.011	0.012	0.000	0.290	0.25	
1111	8/31/2004	2:04:24 PM		23.828	24.768	22.304	26.222	24.965		47.399	51.619	15.623	32.765	-1.215	-7.709		51.623	0.075	14.643	0.003		1811.03	30.1839	50.5	12.3	40.1	2.764	0.011	0.012	0.000	0.289	0.25	
1112	8/31/2004	2:05:24 PM		23.853	24.789	22.31	26.258	24.96		47.493	51.879	15.721	32.754	-1.209	-7.712		50.64	0.074	14.643	0.003		1812.03	30.2006	50.8	12.1	40.1	2.766	0.011	0.011	0.000	0.285	0.24	
1113	8/31/2004	2:06:24 PM		23.848	24.794	22.31	26.273	24.975		47.125	51.307	15.738	32.348	-1.209	-7.718		51.508	0.073	14.643	0.004		1813.03	30.2172	50.2	12.3	39.7	2.740	0.010	0.011	0.000	0.284	0.24	
1114	8/31/2004	2:07:24 PM		23.859	24.794	22.331	26.199	24.981		47.121	51.244	15.695	32.516	-1.212	-7.718		50.15	0.074	14.643	0.003		1814.03	30.2339	50.1	11.9	39.8	2.745	0.011	0.011	0.000	0.287	0.24	
1115	8/31/2004	2:08:24 PM		23.875	24.805	22.317	26.28	24.942		47.325	51.578	15.757	32.471	-1.212	-7.715		50.041	0.075	14.643	0.003		1815.03	30.2506	50.5	11.9	39.9	2.751	0.011	0.012	0.000	0.290	0.25	
1116	8/31/2004	2:09:24 PM		23.886	24.806	22.327	26.24	25.017		47.457	51.696	15.493	33.009	-1.212	-7.715		51.153	0.075	14.643	0.003		1816.03	30.2672	50.6	12.2	40.2	2.774	0.011	0.012	0.000	0.288	0.25	
1117	8/31/2004	2:10:24 PM		23.903	24.828	22.355	26.272	25.055		47.646	51.957	15.7	32.75	-1.215	-7.718		49.891	0.074	14.643	0.003		1817.03	30.2839	50.8	11.9	40.2	2.772	0.011	0.011	0.000	0.284	0.24	
1118	8/31/2004	2:11:24 PM		23.93	24.835	22.357	26.33	25.027		47.459	51.696	15.77	32.599	-1.218	-7.72		50.999	0.073	14.643	0.003		1818.03	30.3006	50.6	12.1	40.0	2.760	0.010	0.011	0.000	0.281	0.24	
1119	8/31/2004	2:12:24 PM		23.946	24.836	22.363	26.29	25.057		47.271	51.474	15.579	32.736	-1.215	-7.718		49.186	0.074	14.643	0.003		1819.03	30.3172	50.3	11.7	40.0	2.758	0.011	0.011	0.000	0.285	0.24	
1120	8/31/2004	2:13:24 PM		23.972	24.847	22.353	26.356	25.033		47.391	51.561	15.509	32.878	-1.215	-7.718		53.934	0.074	14.643	0.003		1820.03	30.3339	50.4	12.8	40.1	2.767	0.011	0.011	0.000	0.285	0.24	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1121	8/31/2004	2:14:24 PM		23.977	24.852	22.374	26.322	25.029		47.424	51.667	15.586	32.835	-1.212	-7.715		50.648	0.074	14.643	0.003		1821.03	30.3506	50.5	12.1	40.1	2.767	0.011	0.011	0.000	0.284	0.24	
1122	8/31/2004	2:15:24 PM		24.009	24.874	22.416	26.308	25.06		47.605	51.895	15.595	32.888	-1.215	-7.715		51.009	0.074	14.643	0.003		1822.03	30.3672	50.8	12.1	40.2	2.775	0.011	0.011	0.000	0.283	0.24	
1123	8/31/2004	2:16:24 PM		24.004	24.874	22.391	26.293	24.99		47.418	51.597	15.653	32.767	-1.212	-7.706		49.916	0.077	14.643	0.003		1823.03	30.3839	50.5	11.9	40.1	2.764	0.011	0.012	0.000	0.296	0.25	
1124	8/31/2004	2:17:24 PM		24.014	24.874	22.406	26.238	24.95		47.631	51.731	15.466	33.227	-1.212	-7.72		51.885	0.074	14.643	0.003		1824.03	30.4006	50.6	12.4	40.4	2.787	0.011	0.011	0.000	0.282	0.24	
1125	8/31/2004	2:18:24 PM		24.02	24.89	22.427	26.239	25.046		47.679	51.924	15.614	33.011	-1.209	-7.706		56.251	0.076	14.643	0.003		1825.03	30.4172	50.8	13.4	40.3	2.782	0.011	0.012	0.000	0.290	0.25	
1126	8/31/2004	2:19:24 PM		24.026	24.901	22.423	26.255	25.147		47.725	51.914	15.572	33.307	-1.212	-7.715		49.407	0.074	14.643	0.003		1826.03	30.4339	50.8	11.8	40.5	2.793	0.011	0.011	0.000	0.281	0.24	
1127	8/31/2004	2:20:24 PM		24.042	24.912	22.45	26.282	25.224		46.98	51.34	16.195	31.712	-1.212	-7.726		50.578	0.072	14.643	0.003		1827.03	30.4506	50.2	12.0	39.3	2.713	0.010	0.011	0.000	0.282	0.24	
1128	8/31/2004	2:21:24 PM		24.037	24.912	22.45	26.262	25.189		46.733	50.958	16.113	31.583	-1.215	-7.729		51.625	0.072	14.643	0.003		1828.03	30.4672	49.8	12.3	39.2	2.700	0.010	0.011	0.000	0.283	0.24	
1129	8/31/2004	2:22:24 PM		24.032	24.912	22.459	26.201	25.143		47.437	51.76	16.221	32.143	-1.215	-7.723		52.394	0.073	14.643	0.003		1829.03	30.4839	50.6	12.5	39.8	2.743	0.010	0.011	0.000	0.282	0.24	
1130	8/31/2004	2:23:24 PM		24.037	24.922	22.45	26.192	25.079		46.92	51.06	16.072	31.825	-1.212	-7.726		50.1	0.072	14.643	0.003		1830.03	30.5006	49.9	11.9	39.4	2.715	0.010	0.011	0.000	0.281	0.24	
1131	8/31/2004	2:24:24 PM		24.053	24.933	22.485	26.237	25.055		47.405	51.812	15.911	32.383	-1.212	-7.723		48.189	0.072	14.643	0.003		1831.03	30.5172	50.7	11.5	39.9	2.751	0.010	0.011	0.000	0.278	0.24	
1132	8/31/2004	2:25:24 PM		24.044	24.939	22.511	26.228	25.08		47.569	51.818	16.006	32.51	-1.212	-7.72		53.279	0.073	14.643	0.003		1832.03	30.5339	50.7	12.7	40.0	2.761	0.010	0.011	0.000	0.280	0.24	
1133	8/31/2004	2:26:24 PM		24.065	24.95	22.613	26.22	25.162		47.179	51.429	15.893	32.186	-1.209	-7.718		52.916	0.074	14.643	0.003		1833.03	30.5506	50.3	12.6	39.7	2.736	0.011	0.011	0.000	0.286	0.24	
1134	8/31/2004	2:27:24 PM		24.061	24.946	22.609	26.225	25.098		47.308	51.597	15.969	32.26	-1.218	-7.726		51.178	0.073	14.643	0.003		1834.03	30.5672	50.5	12.2	39.8	2.743	0.010	0.011	0.000	0.281	0.24	
1135	8/31/2004	2:28:24 PM		24.073	24.968	22.636	26.262	25.089		47.132	51.367	15.831	32.311	-1.215	-7.718		51.151	0.074	14.643	0.003		1835.03	30.5839	50.2	12.2	39.7	2.739	0.011	0.011	0.000	0.285	0.24	
1136	8/31/2004	2:29:24 PM		24.08	24.98	22.613	26.354	25.256		47.202	51.24	15.818	32.399	-1.212	-7.723		50.148	0.072	14.643	0.003		1836.03	30.6006	50.1	11.9	39.8	2.744	0.010	0.011	0.000	0.277	0.24	
1137	8/31/2004	2:30:24 PM		24.083	24.983	22.601	26.393	25.39		47.331	51.464	16.029	32.276	-1.212	-7.723		50.686	0.072	14.643	0.003		1837.03	30.6172	50.3	12.1	39.8	2.744	0.010	0.011	0.000	0.277	0.24	
1138	8/31/2004	2:31:24 PM		24.111	25.006	22.619	26.501	25.447		47.223	51.369	15.857	32.43	-1.212	-7.715		49.261	0.073	14.643	0.003		1838.03	30.6339	50.2	11.7	39.8	2.746	0.010	0.011	0.000	0.281	0.24	
1139	8/31/2004	2:32:24 PM		24.13	25.02	22.638	26.549	25.456		47.295	51.503	15.871	32.383	-1.215	-7.715		52.092	0.072	14.643	0.003		1839.03	30.6506	50.4	12.4	39.8	2.747	0.010	0.011	0.000	0.277	0.24	
1140	8/31/2004	2:33:24 PM		24.144	25.039	22.616	26.653	25.61		47.528	51.825	15.896	32.73	-1.212	-7.72		51.725	0.072	14.643	0.003		1840.03	30.6672	50.7	12.3	40.1	2.767	0.010	0.011	0.000	0.275	0.23	
1141	8/31/2004	2:34:24 PM		24.157	25.047	22.629	26.736	25.657		47.181	51.634	16.009	31.995	-1.215	-7.712		52.033	0.073	14.643	0.003		1841.03	30.6839	50.5	12.4	39.6	2.729	0.010	0.011	0.000	0.282	0.24	
1142	8/31/2004	2:35:24 PM		24.159	25.054	22.627	26.693	25.645		47.225	51.593	15.91	32.254	-1.218	-7.723		50.765	0.072	14.643	0.003		1842.03	30.7006	50.5	12.1	39.7	2.740	0.010	0.011	0.000	0.277	0.24	
1143	8/31/2004	2:36:24 PM		24.176	25.066	22.629	26.75	25.552		47.509	51.819	16.037	32.516	-1.212	-7.718		50.277	0.072	14.643	0.003		1843.03	30.7172	50.7	12.0	40.0	2.759	0.010	0.011	0.000	0.276	0.23	
1144	8/31/2004	2:37:24 PM		24.178	25.068	22.6	26.747	25.493		47.7	52.053	15.967	32.664	-1.212	-7.712		50.204	0.073	14.643	0.003		1844.03	30.7339	50.9	12.0	40.2	2.770	0.010	0.011	0.000	0.278	0.24	
1145	8/31/2004	2:38:24 PM		24.189	25.089	22.617	26.718	25.395		47.179	51.541	15.854	32.297	-1.212	-7.712		50.876	0.074	14.643	0.003		1845.03	30.7506	50.4	12.1	39.7	2.740	0.011	0.011	0.000	0.285	0.24	
1146	8/31/2004	2:39:24 PM		24.189	25.094	22.637	26.638	25.325		47.043	51.601	16.032	31.808	-1.215	-7.718		50.121	0.073	14.643	0.003		1846.03	30.7672	50.5	11.9	39.4	2.718	0.010	0.011	0.000	0.283	0.24	
1147	8/31/2004	2:40:24 PM		24.21	25.12	22.643	26.679	25.401		47.196	51.688	15.871	32.083	-1.209	-7.712		46.79	0.073	14.643	0.004		1847.03	30.7839	50.6	11.1	39.6	2.733	0.010	0.011	0.000	0.282	0.24	
1148	8/31/2004	2:41:24 PM		24.211	25.116	22.643	26.61	25.357		47.268	51.553	15.835	32.432	-1.212	-7.718		53.031	0.072	14.643	0.003		1848.03	30.8006	50.4	12.6	39.9	2.748	0.010	0.011	0.000	0.277	0.24	
1149	8/31/2004	2:42:24 PM		24.221	25.116	22.639	26.63	25.402		47.192	51.42	15.972	32.204	-1.215	-7.726		50.97	0.072	14.643	0.003		1849.03	30.8172	50.3	12.1	39.7	2.737	0.010	0.011	0.000	0.278	0.24	
1150	8/31/2004	2:43:24 PM		24.238	25.133	22.646	26.662	25.364		47.186	51.28	15.86	32.358	-1.215	-7.72		52.497	0.072	14.643	0.003		1850.03	30.8339	50.2	12.5	39.8	2.742	0.010	0.011	0.000	0.277	0.24	
1151	8/31/2004	2:44:24 PM		24.244	25.139	22.753	26.638	25.415		47.213	51.512	15.847	32.282	-1.212	-7.718		48.358	0.073	14.643	0.003		1851.03	30.8506	50.4	11.5	39.7	2.740	0.010	0.011	0.000	0.280	0.24	
1152	8/31/2004	2:44:41 PM		24.249	25.144	22.763	26.648	25.415		47.493	51.7	15.844	32.625	-1.215	-7.718		52.042	0.073	14.643	0.003		1851.32	30.8553	50.6	12.4	40.1	2.762	0.010	0.011	0.000	0.278	0.24	
1153	8/31/2004	2:45:41 PM		24.277	25.167	22.766	26.651	25.438		47.221	51.497	15.831	32.338	-1.212	-7.718		49.063	0.073	14.643	0.003		1852.32	30.8719	50.4	11.7	39.8	2.743	0.010	0.011	0.000	0.280	0.24	
1154	8/31/2004	2:46:41 PM		24.294	25.169	22.757	26.593	25.42		46.999	51.354	15.771	32.221	-1.215	-7.72		50.004	0.073	14.643	0.003		1853.32	30.8886	50.2	11.9	39.6	2.731	0.010	0.011	0.000	0.281	0.24	
1155	8/31/2004	2:47:41 PM		24.305	25.17	22.728	26.623	25.38		47.385	51.704	15.766	32.584	-1.212	-7.718		52.021	0.073	14.643	0.003		1854.32	30.9053	50.6	12.4	40.0	2.757	0.010	0.011	0.000	0.279	0.24	
1156	8/31/2004	2:48:41 PM		24.315	25.185	22.728	26.634	25.381		47.246	51.466	15.679	32.594	-1.215	-7.72		50.747	0.072	14.643	0.003		1855.32	30.9219	50.3	12.1	39.9	2.752	0.010	0.011	0.000	0.275	0.23	
1157	8/31/2004	2:49:41 PM		24.326	25.191	22.699	26.69	25.422		47.262	51.663	15.803	32.43	-1.215	-7.726		52.125	0.071	14.643	0.003		1856.32	30.9386	50.5	12.4	39.8	2.747	0.010	0.011	0.000	0.272	0.23	
1158	8/31/2004	2:50:41 PM		24.348	25.213	22.731	26.652	25.424		47.615	52.109	15.795	32.687	-1.209	-7.715		51.397	0.072	14.643	0.004		1857.32	30.9553	51.0	12.2	40.2	2.768	0.010	0.011	0.000	0.274	0.23	
1159	8/31/2004	2:51:41 PM		24.351	25.221	22.713	26.629	25.391		47.235	51.59	15.606	32.646	-1.212	-7.718		48.9	0.072	14.643	0.003		1858.32	30.9719	50.5	11.6	39.9	2.754	0.010	0.011	0.000	0.275	0.23	
1160	8/31/2004	2:52:41 PM		24.358	25.228	22.706	26.597	25.399		47.254	51.628	15.647	32.496	-1.212	-7.718		50.686	0.073	14.643	0.003		1859.32	30.9886	50.5	12.1	39.9	2.749	0.010	0.011	0.000	0.280	0.24	
1161	8/31/2004	2:53:41 PM		24.348	25.213	22.655	26.572	25.369		47.258	51.586	15.584	32.672	-1.212	-7.718		50.183	0.072	14.643	0.003		1860.32	31.0053	50.5	12.0	40.0	2.755	0.010	0.011	0.000	0.276	0.23	
1162	8/31/2004	2:54:41 PM		24.353	25.239	22.686	26.497	25.384		47.468	51.893	15.632	32.755	-1.215	-7.715		49.076	0.073	14.643	0.003		1861.32	31.0219	50.8	11.7	40.1	2.766	0.010	0.011	0.000	0.278	0.24	
1163	8/31/2004	2:55:41 PM		24.363	25.239	22.691	26.477	25.344		47.864	52.366	15.641	33.11	-1.212	-7.72		50.354	0.072	14.643	0.003		1862.32	31.0386	51.2	12.0	40.5	2.791	0.010	0.011	0.000	0.272	0.23	
1164	8/31/2004	2:56:41 PM		24.37	25.245	22.673	26.504	25.296		47.605	51.962	15.549	33.068	-1.215	-7.72		50.502	0.072	14.643	0.003		1863.32	31.0553	50.8	12.0	40.3	2.781	0.010	0.011	0.000	0.273	0.23	
1165	8/31/2004	2:57:41 PM		24.359	25.244	22.672	26.493	25.345		47.38	51.713	15.594	32.709	-1.212	-7.712		49.948	0.073	14.643	0.003		1864.32	31.0719	50.6	11.9	40.0	2.761	0.010	0.011	0.000	0.279	0.24	
1166	8/31/2004	2:58:41 PM		24.365	25.265	22.668	26.494	25.336		47.609	51.926	15.587	32.99	-1.212	-7.718		49.62	0.072	14.643	0.003		1865.32	31.0886	50.8	11.8	40.3	2.779	0.010	0.011	0.000	0.273	0.23	
1167	8/31/2004	2:59:41 PM		24.364	25.259	22.677	26.518	25.33		47.714	51.843	15.606	33.171	-1.212	-7.712		49.875	0.073	14.643	0.003		1866.32	31.1053	50.7	11.9	40.4	2.788	0.010	0.011	0.000	0.276	0.23	
1168	8/31/2004	3:00:41 PM		24.364	25.249	22.622	26.573	25.415		47.609	51.968	15.579	32.929	-1.218	-7.72		50.423	0.072	14.643	0.003		1867.32	31.1219	50.8	12.0	40.3	2.776	0.010	0.011	0.000	0.274	0.23	
1169	8/31/2004	3:01:41 PM		24.38	25.275	22.663	26.539	25.396		47.974	52.484	15.545	33.296	-1.215	-7.718		54.486	0.073	14.643	0.003		1868.32	31.1386	51.4	13.0	40.6	2.802	0.010	0.011	0.000	0.275	0.23	
1170	8/31/2004	3:02:41 PM		24.389	25.279	22.682	26.568	25.39		47.536	51.765	15.528	33.126	-1.212	-7.723		47.757	0.071	14.643	0.003		1869.32	31.1553	50.6	11.4	40.3	2.781	0.010	0.011	0.000	0.269	0.23	
1171	8/31/2004	3:03:41 PM		24.369	25.269	22.697	26.568	25.38		47.692	52.086	15.441	33.337	-1.215	-7.723		48.367	0.07	14.643	0.003		1870.32	31.1719	51.0	11.5	40.5	2.793	0.010	0.011	0.000	0.264	0.22	
1172	8/31/2004	3:04:41 PM		24.39	25.285	22.763	26.659	25.456		47.623	51.957	15.442	33.083	-1.215	-7.715		51.208	0.073	14.643	0.003		1871.32	31.1886	50.8	12.2	40.4	2.782	0.010	0.011	0.000	0.276	0.23	
1173	8/31/2004	3:05:41 PM		24.407	25.302	22.76	26.755	25.537		47.725	52.152	15.424	33.159	-1.215	-7.723		50.755	0.071	14.643	0.003		1872.32	31.2053	51.0	12.1	40.4	2.788	0.010	0.011	0.000	0.268	0.23	
1174	8/31/2004	3:06:41 PM		24.408	25.303	22.746	26.707	25.559		47.592	52.14	15.542	32.791	-1.218	-7.723		50.734	0.072	14.643	0.003		1873.32	31.2219	51.0	12.1	40.2	2.771	0.010	0.011	0.000	0.273	0.23	
1175	8/31/2004	3:07:41 PM		24.425	25.315	22.733	26.723	25.525		47.764	52.293	15.432	33.216	-1.215	-7.72		51.742	0.071	14.643	0.003		1874.32	31.2386	51.2	12.3	40.5	2.792	0.010	0.011	0.000	0.268	0.23	
1176	8/31/2004	3:08:41 PM		24.424	25.319	22.722	26.657	25.385		47.636	51.825	15.377	33.362	-1.212	-7.712		49.87	0.072	14.643	0.003		1875.32	31.2553	50.7	11.9	40.5	2.792	0.010	0.011	0.000	0.272	0.23	
1177	8/31/2004	3:09:41 PM		24.424	25.319	22.706	26.492	25.339		47.719	52.21	15.465	33.149	-1.215	-7.718		49.276	0.072	14.643	0.003		1876.32	31.2719	51.1	11.7	40.4	2.788	0.010	0.011	0.000	0.272	0.23	
1178	8/31/2004	3:10:41 PM		24.442	25.342	22.725	26.426	25.248		47.795	52.053	15.476	33.356	-1.212	-7.712		49.749	0.073	14.643	0.003		1877.32	31.2886	50.9	11.8	40.6	2.798	0.010	0.011	0.000	0.275	0.23	
1179	8/31/2004	3:11:41 PM		24.432	25.337	22.705	26.411	25.168		47.198	51.603	15.895	32.207	-1.215	-7.723		50.284	0.071	14.643	0.003		1878.32	31.3053	50.5	12.0	39.7	2.737	0.010	0.011	0.000	0.273	0.23	
1180	8/31/2004	3:12:41 PM		24.431	25.347	22.749	26.335	25.152		47.277	51.669	15.874	32.358	-1.215	-7.723		51.274	0.071	14.643	0.003		1879.32	31.3219	50.5	12.2	39.8	2.745	0.010	0.011	0.000	0.272	0.23	
1181	8/31/2004	3:13:41 PM		24.431	25.357	22.744	26.36	25.142		47.262	51.503	15.849	32.555	-1.212	-7.718		50.571	0.071	14.643	0.003		1880.32	31.3386	50.4	12.0	39.9	2.752	0.010	0.011	0.000	0.272	0.23	
1182	8/31/2004	3:14:41 PM		24.431	25.362	22.775	26.3	25.102		47.468	51.847	15.771	32.689	-1.212	-7.72		51.189	0.071	14.643	0.003		1881.32	31.3553	50.7	12.2	40.1	2.763	0.010	0.011	0.000	0.270	0.23	
1183	8/31/2004	3:15:41 PM		24.413	25.348	22.781	26.256	25.004		47.31	51.663	15.724	32.535	-1.209	-7.712		50.575	0.071	14.643	0.004		1882.32	31.3719	50.5	12.0	39.9	2.753	0.010	0.011	0.000	0.271	0.23	
1184	8/31/2004	3:16:41 PM		24.408	25.353	22.781	26.337	24.974		47.235	51.485	15.617	32.767	-1.209	-7.72		51.451	0.07	14.643	0.004		1883.32	31.3886	50.4	12.3	40.0	2.758	0.010	0.011	0.000	0.267	0.23	
1185	8/31/2004	3:17:41 PM		24.399	25.34	22.752	26.318	24.895		47.351	51.682	15.827	32.638	-1.212	-7.718		50.965	0.071	14.643	0.003		1884.32	31.4053	50.6	12.1	40.0	2.757	0.010	0.011	0.000	0.271	0.23	
1186	8/31/2004	3:18:41 PM		24.395	25.345	22.758	26.349	24.956		47.913	52.26	15.898	33.054	-1.212	-7.718		50.776	0.07	14.643	0.003		1885.32	31.4219	51.1	12.1	40.5	2.791	0.010	0.011	0.000	0.264	0.22	
1187	8/31/2004	3:19:41 PM		24.396	25.351	22.789	26.285	24.922		47.503	51.775	15.812	32.767	-1.215	-7.72		51.21	0.07	14.643	0.003		1886.32	31.4386	50.6	12.2	40.1	2.767	0.010	0.011	0.000	0.266	0.23	
1188	8/31/2004	3:20:41 PM		24.415	25.37	22.793	26.358	24.86		47.604	52.111	15.859	32.681	-1.215	-7.723		50.188	0.069	14.643	0.003		1887.32	31.4553	51.0	12.0	40.1	2.768	0.010	0.011	0.000	0.262	0.22	
1189	8/31/2004	3:21:41 PM		24.41	25.37	22.793	26.278	24.875		47.416	51.831	15.724	32.789	-1.215	-7.72		51.205	0.071	14.643	0.003		1888.32	31.4719	50.7	12.2	40.1	2.765	0.010	0.011	0.000	0.270	0.23	
1190	8/31/2004	3:22:41 PM		24.408	25.363	22.821	26.237	24.809		47.441	51.74	15.753	32.793	-1.212	-7.715		51.347	0.071	14.643	0.004		1889.32	31.4886	50.6	12.2	40.1	2.766	0.010	0.011	0.000	0.270	0.23	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1191	8/31/2004	3:23:41 PM		24.423	25.373	22.836	26.302	24.929		47.474	51.686	15.745	32.754	-1.212	-7.72		49.729	0.07	14.643	0.004		1890.32	31.5053	50.6	11.8	40.1	2.766	0.010	0.011	0.000	0.266	0.23	
1192	8/31/2004	3:24:41 PM		24.413	25.363	22.821	26.222	24.969		47.474	51.682	15.703	32.904	-1.212	-7.72		51.489	0.07	14.643	0.003		1891.32	31.5219	50.6	12.3	40.2	2.771	0.010	0.011	0.000	0.265	0.23	
1193	8/31/2004	3:25:41 PM		24.41	25.35	22.973	26.208	24.96		47.096	51.603	15.793	32.26	-1.218	-7.718		50	0.07	14.643	0.003		1892.32	31.5386	50.5	11.9	39.7	2.736	0.010	0.011	0.000	0.268	0.23	
1194	8/31/2004	3:26:41 PM		24.393	25.323	22.982	26.162	24.939		47.291	51.661	15.714	32.597	-1.212	-7.715		51.003	0.07	14.643	0.004		1893.32	31.5553	50.5	12.1	39.9	2.754	0.010	0.011	0.000	0.266	0.23	
1195	8/31/2004	3:27:41 PM		24.387	25.313	22.936	26.156	24.988		47.235	51.495	15.588	32.638	-1.215	-7.712		48.73	0.071	14.643	0.003		1894.32	31.5719	50.4	11.6	39.9	2.753	0.010	0.011	0.000	0.270	0.23	
1196	8/31/2004	3:28:41 PM		24.387	25.308	22.926	26.161	25.083		47.387	51.775	15.651	32.732	-1.215	-7.712		51.351	0.07	14.643	0.003		1895.32	31.5886	50.6	12.2	40.1	2.762	0.010	0.011	0.000	0.265	0.23	
1197	8/31/2004	3:29:41 PM		24.382	25.298	22.896	26.271	25.118		47.563	51.976	15.614	33.023	-1.212	-7.712		50.484	0.07	14.643	0.003		1896.32	31.6053	50.8	12.0	40.3	2.778	0.010	0.011	0.000	0.264	0.22	
1198	8/31/2004	3:30:41 PM		24.388	25.308	22.892	26.272	25.209		47.536	51.69	15.753	32.828	-1.215	-7.706		50.244	0.071	14.643	0.003		1897.32	31.6219	50.6	12.0	40.2	2.770	0.010	0.011	0.000	0.269	0.23	
1199	8/31/2004	3:31:41 PM		24.383	25.293	22.866	26.362	25.269		47.445	51.707	15.802	32.613	-1.212	-7.706		50.607	0.071	14.643	0.003		1898.32	31.6386	50.6	12.1	40.0	2.760	0.010	0.011	0.000	0.270	0.23	
1200	8/31/2004	3:32:41 PM		24.393	25.308	22.846	26.412	25.339		47.354	51.806	15.571	32.816	-1.212	-7.709		51.47	0.069	14.643	0.003		1899.32	31.6553	50.7	12.3	40.1	2.764	0.010	0.011	0.000	0.262	0.22	
1201	8/31/2004	3:33:41 PM		24.4	25.315	22.848	26.498	25.38		47.434	51.91	15.62	32.793	-1.212	-7.7		50.279	0.071	14.643	0.003		1900.32	31.6719	50.8	12.0	40.1	2.766	0.010	0.011	0.000	0.269	0.23	
1202	8/31/2004	3:34:41 PM		24.397	25.318	22.801	26.581	25.418		47.756	52.067	15.567	33.235	-1.218	-7.7		50.738	0.071	14.643	0.003		1901.32	31.6886	50.9	12.1	40.5	2.792	0.010	0.011	0.000	0.267	0.23	
1203	8/31/2004	3:35:41 PM		24.408	25.348	22.851	26.642	25.409		47.445	51.731	15.67	32.876	-1.212	-7.703		49.856	0.07	14.643	0.003		1902.32	31.7053	50.6	11.9	40.2	2.769	0.010	0.011	0.000	0.265	0.23	
1204	8/31/2004	3:36:41 PM		24.408	25.343	22.806	26.667	25.284		47.625	52.125	15.638	33.085	-1.215	-7.703		51.028	0.069	14.643	0.003		1903.32	31.7219	51.0	12.2	40.4	2.782	0.010	0.011	0.000	0.261	0.22	
1205	8/31/2004	3:37:41 PM		24.427	25.378	22.846	26.661	25.243		47.339	51.901	15.661	32.664	-1.212	-7.7		50.511	0.07	14.643	0.003		1904.32	31.7386	50.8	12.0	40.0	2.758	0.010	0.011	0.000	0.266	0.23	
1206	8/31/2004	3:38:41 PM		24.449	25.394	22.862	26.647	25.195		47.428	51.847	15.557	32.951	-1.212	-7.694		47.566	0.07	14.643	0.003		1905.32	31.7553	50.7	11.3	40.2	2.771	0.010	0.011	0.000	0.265	0.23	
1207	8/31/2004	3:39:41 PM		24.441	25.401	22.854	26.605	25.092		47.569	51.798	15.7	32.949	-1.215	-7.7		51.176	0.07	14.643	0.003		1906.32	31.7719	50.7	12.2	40.3	2.776	0.010	0.011	0.000	0.265	0.23	
1208	8/31/2004	3:40:41 PM		24.442	25.403	22.841	26.576	25.083		47.555	51.682	15.651	32.956	-1.212	-7.703		50.991	0.069	14.643	0.003		1907.32	31.7886	50.6	12.1	40.3	2.775	0.010	0.011	0.000	0.261	0.22	
1209	8/31/2004	3:41:41 PM		24.432	25.407	22.845	26.515	25.017		47.295	51.684	15.619	32.796	-1.209	-7.697		51.339	0.07	14.643	0.003		1908.32	31.8053	50.6	12.2	40.0	2.761	0.010	0.011	0.000	0.266	0.23	
1210	8/31/2004	3:42:41 PM		24.407	25.383	22.836	26.431	24.893		47.652	52.094	15.637	33.085	-1.212	-7.7		50.763	0.07	14.643	0.003		1909.32	31.8219	51.0	12.1	40.4	2.783	0.010	0.011	0.000	0.264	0.22	
1211	8/31/2004	3:43:41 PM		24.403	25.383	22.811	26.377	24.869		47.316	51.899	15.702	32.603	-1.215	-7.703		49.512	0.069	14.643	0.003		1910.32	31.8386	50.8	11.8	40.0	2.755	0.010	0.011	0.000	0.263	0.22	
1212	8/31/2004	3:44:41 PM		24.407	25.388	22.831	26.286	24.768		47.505	51.887	15.667	32.869	-1.212	-7.7		51.76	0.07	14.643	0.003		1911.32	31.8553	50.8	12.3	40.2	2.771	0.010	0.011	0.000	0.265	0.23	
1213	8/31/2004	3:45:41 PM		24.397	25.382	22.82	26.23	24.717		47.831	52.067	15.783	33.11	-1.212	-7.703		50.075	0.07	14.643	0.003		1912.32	31.8719	50.9	11.9	40.5	2.790	0.010	0.011	0.000	0.263	0.22	
1214	8/31/2004	3:46:41 PM		24.401	25.386	22.849	26.185	24.832		47.436	51.885	15.761	32.599	-1.212	-7.706		49.877	0.069	14.643	0.003		1913.32	31.8886	50.8	11.9	40.0	2.759	0.010	0.010	0.000	0.262	0.22	
1215	8/31/2004	3:47:41 PM		24.363	25.353	22.781	26.142	24.809		47.364	51.785	15.544	32.923	-1.218	-7.715		49.898	0.069	14.643	0.003		1914.32	31.9053	50.7	11.9	40.1	2.768	0.010	0.011	0.000	0.262	0.22	
1216	8/31/2004	3:48:41 PM		24.366	25.356	22.804	26.145	24.802		47.605	51.997	15.691	32.997	-1.218	-7.715		50.509	0.07	14.643	0.003		1915.32	31.9219	50.9	12.0	40.3	2.779	0.010	0.011	0.000	0.265	0.23	
1217	8/31/2004	3:49:41 PM		24.382	25.373	22.851	26.131	24.818		47.341	51.669	15.595	32.822	-1.209	-7.715		49.109	0.07	14.643	0.003		1916.32	31.9386	50.5	11.7	40.1	2.763	0.010	0.011	0.000	0.266	0.23	
1218	8/31/2004	3:50:41 PM		24.382	25.367	22.83	26.135	24.777		47.673	52.02	15.767	32.954	-1.212	-7.72		50.344	0.068	14.643	0.003		1917.32	31.9553	50.9	12.0	40.3	2.779	0.010	0.010	0.000	0.257	0.22	
1219	8/31/2004	3:51:41 PM		24.366	25.351	22.829	26.089	24.872		47.484	51.804	15.661	32.904	-1.215	-7.723		52.075	0.069	14.643	0.003		1918.32	31.9719	50.7	12.4	40.2	2.771	0.010	0.011	0.000	0.261	0.22	
1220	8/31/2004	3:52:41 PM		24.377	25.352	22.905	26.12	24.892		47.911	52.326	15.75	33.235	-1.212	-7.72		49.551	0.068	14.643	0.003		1919.32	31.9886	51.2	11.8	40.6	2.797	0.010	0.010	0.000	0.255	0.22	
1221	8/31/2004	3:53:41 PM		24.362	25.348	22.966	26.206	24.888		47.551	51.939	15.706	32.83	-1.212	-7.715		51.187	0.069	14.643	0.004		1920.32	32.0053	50.8	12.2	40.2	2.771	0.010	0.010	0.000	0.260	0.22	
1222	8/31/2004	3:54:41 PM		24.36	25.341	22.949	26.289	24.916		47.802	52.333	15.56	33.282	-1.212	-7.72		49.941	0.068	14.643	0.003		1921.32	32.0219	51.2	11.9	40.5	2.795	0.010	0.010	0.000	0.255	0.22	
1223	8/31/2004	3:55:41 PM		24.385	25.355	22.979	26.344	24.986		47.25	51.908	15.583	32.703	-1.212	-7.712		52.088	0.068	14.643	0.003		1922.32	32.0386	50.8	12.4	40.0	2.756	0.010	0.010	0.000	0.258	0.22	
1224	8/31/2004	3:56:41 PM		24.4	25.371	22.994	26.414	25.031		47.38	51.847	15.688	32.787	-1.212	-7.712		50.361	0.069	14.643	0.003		1923.32	32.0553	50.7	12.0	40.1	2.764	0.010	0.010	0.000	0.261	0.22	
1225	8/31/2004	3:57:41 PM		24.412	25.383	22.986	26.486	25.093		47.165	51.582	15.547	32.713	-1.212	-7.718		48.679	0.069	14.643	0.004		1924.32	32.0719	50.5	11.6	39.9	2.754	0.010	0.010	0.000	0.262	0.22	
1226	8/31/2004	3:58:41 PM		24.448	25.428	23.001	26.521	25.213		47.32	51.632	15.521	32.906	-1.212	-7.718		47.668	0.068	14.643	0.004		1925.32	32.0886	50.5	11.4	40.1	2.766	0.010	0.010	0.000	0.257	0.22	
1227	8/31/2004	3:59:41 PM		24.468	25.449	23.002	26.572	25.249		47.801	52.304	15.864	33.003	-1.212	-7.712		50.797	0.068	14.643	0.003		1926.32	32.1053	51.2	12.1	40.4	2.786	0.010	0.010	0.000	0.255	0.22	
1228	8/31/2004	4:00:41 PM		24.475	25.461	23.029	26.574	25.296		47.534	51.97	15.658	32.857	-1.212	-7.715		51.043	0.067	14.643	0.003		1927.32	32.1219	50.8	12.2	40.2	2.771	0.010	0.010	0.000	0.252	0.21	
1229	8/31/2004	4:01:41 PM		24.458	25.459	22.992	26.637	25.374		47.573	51.951	15.581	33.017	-1.215	-7.715		50.492	0.068	14.643	0.003		1928.32	32.1386	50.8	12.0	40.3	2.778	0.010	0.010	0.000	0.256	0.22	
1230	8/31/2004	4:02:41 PM		24.467	25.468	23.011	26.626	25.388		47.217	51.762	15.557	32.757	-1.209	-7.712		50.039	0.067	14.643	0.004		1929.32	32.1553	50.6	11.9	40.0	2.757	0.010	0.010	0.000	0.254	0.22	
1231	8/31/2004	4:03:41 PM		24.456	25.461	22.979	26.679	25.411		47.598	52.086	15.667	32.882	-1.212	-7.715		49.797	0.068	14.643	0.004		1930.32	32.1719	51.0	11.9	40.2	2.774	0.010	0.010	0.000	0.256	0.22	
1232	8/31/2004	4:04:41 PM		24.433	25.448	22.941	26.591	25.258		47.702	52.16	15.642	33.144	-1.218	-7.72		50.26	0.068	14.643	0.003		1931.32	32.1886	51.0	12.0	40.4	2.787	0.010	0.010	0.000	0.255	0.22	
1233	8/31/2004	4:05:41 PM		24.434	25.45	22.948	26.563	25.15		47.472	51.941	15.617	32.9	-1.212	-7.712		52.461	0.067	14.643	0.003		1932.32	32.2053	50.8	12.5	40.2	2.771	0.010	0.010	0.000	0.253	0.22	
1234	8/31/2004	4:06:41 PM		24.431	25.452	22.97	26.5	25.072		47.339	51.76	15.624	32.674	-1.209	-7.712		50.34	0.068	14.643	0.004		1933.32	32.2219	50.6	12.0	40.0	2.758	0.010	0.010	0.000	0.258	0.22	
1235	8/31/2004	4:07:41 PM		24.417	25.437	22.92	26.44	24.992		47.447	52.235	15.734	32.607	-1.212	-7.718		48.025	0.068	14.643	0.003		1934.32	32.2386	51.1	11.4	40.0	2.760	0.010	0.010	0.000	0.258	0.22	
1236	8/31/2004	4:08:41 PM		24.407	25.428	22.936	26.306	24.973		47.221	51.694	15.509	32.763	-1.212	-7.718		51.116	0.068	14.643	0.003		1935.32	32.2553	50.6	12.2	40.0	2.757	0.010	0.010	0.000	0.258	0.22	
1237	8/31/2004	4:09:41 PM		24.387	25.417	22.92	26.255	24.932		47.578	51.843	15.641	33.027	-1.212	-7.718		49.991	0.069	14.643	0.003		1936.32	32.2719	50.7	11.9	40.3	2.779	0.010	0.010	0.000	0.260	0.22	
1238	8/31/2004	4:10:41 PM		24.392	25.417	22.925	26.255	24.932		47.482	52.09	15.686	32.66	-1.212	-7.715		53.564	0.068	14.643	0.003		1937.32	32.2886	51.0	12.8	40.1	2.763	0.010	0.010	0.000	0.258	0.22	
1239	8/31/2004	4:11:41 PM		24.386	25.422	22.894	26.225	24.867		47.567	52.117	15.66	32.939	-1.212	-7.666		50.674	0.068	14.643	0.003		1938.32	32.3053	51.0	12.1	40.3	2.775	0.010	0.010	0.000	0.257	0.22	
1240	8/31/2004	4:12:41 PM		24.374	25.409	22.902	26.143	24.78		47.638	52.069	15.625	33.198	-1.215	-7.692		51.81	0.069	14.643	0.003		1939.32	32.3219	50.9	12.3	40.4	2.787	0.010	0.010	0.000	0.259	0.22	
1241	8/31/2004	4:13:41 PM		24.381	25.412	22.95	26.145	24.757		47.621	52.218	15.71	32.984	-1.209	-7.7		51.381	0.067	14.643	0.003		1940.32	32.3386	51.1	12.2	40.3	2.779	0.010	0.010	0.000	0.252	0.21	
1242	8/31/2004	4:14:41 PM		24.363	25.398	22.911	26.121	24.729		47.461	51.688	15.677	32.886	-1.212	-7.703		50.899	0.069	14.643	0.003		1941.32	32.3553	50.6	12.1	40.2	2.770	0.010	0.010	0.000	0.261	0.22	
1243	8/31/2004	4:15:41 PM		24.355	25.39	22.923	26.059	24.726		47.652	52.059	15.744	33.013	-1.212	-7.7		50.918	0.067	14.643	0.003		1942.32	32.3719	50.9	12.1	40.3	2.781	0.010	0.010	0.000	0.252	0.21	
1244	8/31/2004	4:16:41 PM		24.378	25.403	22.947	26.062	24.619		47.779	52.279	15.668	33.243	-1.212	-7.7		50.413	0.068	14.643	0.003		1943.32	32.3886	51.2	12.0	40.5	2.793	0.010	0.010	0.000	0.255	0.22	
1245	8/31/2004	4:17:41 PM		24.384	25.415	22.953	26.053	24.62		47.453	51.707	15.649	32.941	-1.212	-7.706		54.222	0.067	14.643	0.003		1944.32	32.4053	50.6	12.9	40.2	2.771	0.010	0.010	0.000	0.253	0.22	
1246	8/31/2004	4:18:41 PM		24.371	25.396	22.929	26.009	24.656		47.432	52.051	15.719	32.627	-1.215	-7.706		48.089	0.068	14.643	0.003		1945.32	32.4219	50.9	11.5	40.0	2.760	0.010	0.010	0.000	0.258	0.22	
1247	8/31/2004	4:19:41 PM		24.371	25.397	22.955	26.045	24.707		47.41	51.993	15.716	32.683	-1.212	-7.706		49.316	0.067	14.643	0.003		1946.32	32.4386	50.9	11.7	40.0	2.761	0.010	0.010	0.000	0.254	0.22	
1248	8/31/2004	4:20:41 PM		24.36	25.385	22.963	26.023	24.836		47.455	51.818	15.565	33.151	-1.212	-7.703		49.896	0.067	14.643	0.003		1947.32	32.4553	50.7	11.9	40.3	2.779	0.010	0.010	0.000	0.252	0.21	
1249	8/31/2004	4:21:41 PM		24.363	25.383	22.941	26.111	24.868		47.876	52.326	15.692	33.309	-1.215	-7.706		50.392	0.067	14.643	0.003		1948.32	32.4719	51.2	12.0	40.6	2.799	0.010	0.010	0.000	0.251	0.21	
1250	8/31/2004	4:22:41 PM		24.36	25.375	22.953	26.138	24.905		47.625	52.15	15.728	32.843	-1.215	-7.7		51.51	0.067	14.643	0.003		1949.32	32.4886	51.0	12.3	40.2	2.774	0.010	0.010	0.000	0.253	0.22	
1251	8/31/2004	4:23:41 PM		24.367	25.378	22.966	26.206	24.963		47.762	52.306	15.697	32.984	-1.215	-7.7		48.375	0.068	14.643	0.003		1950.32	32.5053	51.2	11.5	40.4	2.784	0.010	0.010	0.000	0.255	0.22	
1252	8/31/2004	4:24:41 PM		24.36	25.36	22.958	26.238	25.015		47.858	52.544	15.821	32.91	-1.215	-7.7		48.268	0.067	14.643	0.003		1951.32	32.5219	51.4	11.5	40.4	2.784	0.010	0.010	0.000	0.252	0.21	
1253	8/31/2004	4:25:41 PM		24.366	25.376	22.955	26.28	25.087		47.493	52.017	15.627	32.861	-1.212	-7.697		49.624	0.068	14.643	0.003		1952.32	32.5386	50.9	11.8	40.2	2.770	0.010	0.010	0.000	0.257	0.22	
1254	8/31/2004	4:26:41 PM		24.384	25.389	22.987	26.292	25.174		47.706	52.107	15.7	33.132	-1.212	-7.7		50.304	0.066	14.643	0.003		1953.32	32.5553	51.0	12.0	40.4	2.787	0.009	0.010	0.000	0.247	0.21	
1255	8/31/2004	4:27:41 PM		24.398	25.398	23.007	26.347	25.224		47.269	51.738	15.637	32.832	-1.212	-7.697		49.384	0.066	14.643	0.003		1954.32	32.5719	50.6	11.8	40.1	2.761	0.009	0.010	0.000	0.250	0.21	
1256	8/31/2004	4:28:41 PM		24.403	25.409	23.017	26.412	25.264		47.445	52.119	15.815	32.611	-1.212	-7.683		49.814	0.068	14.643	0.003		1955.32	32.5886	51.0	11.9	40.0	2.760	0.010	0.010	0.000	0.257	0.22	
1257	8/31/2004	4:29:41 PM		24.401	25.397	22.99	26.39	25.322		47.49	51.864	15.742	33.062	-1.215	-7.694		50.444	0.066	14.643	0.003		1956.32	32.6053	50.7	12.0	40.3	2.777	0.009	0.010	0.000	0.248	0.21	
1258	8/31/2004	4:30:41 PM		24.426	25.417	23.02	26.44	25.312		47.602	52.256	15.739	32.857	-1.209	-7.692		51.312	0.067	14.643	0.003		1957.32	32.6219	51.1	12.2	40.2	2.774	0.010	0.010	0.000	0.252	0.21	
1259	8/31/2004	4:31:41 PM		24.423	25.423	23.037	26.471	25.263		47.656	52.252	15.868	32.793	-1.215	-7.7		50.619	0.065	14.643	0.003		1958.32	32.6386	51.1	12.1	40.2	2.773	0.009	0.010	0.000	0.245	0.21	
1260	8/31/2004	4:32:41 PM		24.417	25.418	23.011	26.526	25.283		47.565	52.223	15.741	32.871	-1.212	-7.689		50.709	0.066	14.643	0.003		1959.32	32.6553	51.1	12.1	40.2	2.773	0.009	0.010	0.000	0.249	0.21	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1261	8/31/2004	4:33:41 PM		24.418	25.423	23.097	26.472	25.229		47.291	51.858	15.68	32.629	-1.215	-7.689		48.732	0.066	14.643	0.003		1960.32	32.6719	50.7	11.6	40.0	2.755	0.009	0.010	0.000	0.250	0.21	
1262	8/31/2004	4:34:41 PM		24.417	25.417	23.206	26.4	25.137		47.322	51.756	15.653	32.679	-1.212	-7.692		50.738	0.066	14.643	0.003		1961.32	32.6886	50.6	12.1	40.0	2.758	0.009	0.010	0.000	0.249	0.21	
1263	8/31/2004	4:35:02 PM		24.397	25.398	23.202	26.361	25.133		47.528	52.015	15.698	32.913	-1.215	-7.692		48.296	0.067	14.643	0.003		1961.67	32.6944	50.9	11.5	40.2	2.773	0.010	0.010	0.000	0.251	0.21	
1264	8/31/2004	4:36:02 PM		24.41	25.4	23.169	26.338	25.07		47.262	51.889	15.713	32.518	-1.215	-7.689		51.37	0.066	14.643	0.003		1962.67	32.7111	50.8	12.2	39.9	2.750	0.009	0.010	0.000	0.249	0.21	
1265	8/31/2004	4:37:02 PM		24.406	25.386	23.125	26.205	25.012		47.81	52.571	15.742	33.007	-1.212	-7.689		53.033	0.066	14.643	0.003		1963.67	32.7278	51.4	12.6	40.4	2.786	0.009	0.010	0.000	0.247	0.21	
1266	8/31/2004	4:38:02 PM		24.407	25.377	23.101	26.205	24.957		47.254	51.941	15.716	32.568	-1.212	-7.694		51.207	0.066	14.643	0.003		1964.67	32.7444	50.8	12.2	39.9	2.752	0.009	0.010	0.000	0.250	0.21	
1267	8/31/2004	4:39:02 PM		24.407	25.373	23.062	26.191	24.903		47.242	51.837	15.651	32.716	-1.212	-7.689		51.698	0.066	14.643	0.003		1965.67	32.7611	50.7	12.3	40.0	2.756	0.009	0.010	0.000	0.250	0.21	
1268	8/31/2004	4:40:02 PM		24.413	25.373	23.052	26.142	24.819		47.439	52.044	15.55	32.97	-1.212	-7.689		52.855	0.067	14.643	0.003		1966.67	32.7778	50.9	12.6	40.2	2.772	0.010	0.010	0.000	0.252	0.21	
1269	8/31/2004	4:41:02 PM		24.443	25.388	23.072	26.182	24.729		47.453	52.015	15.655	32.908	-1.212	-7.694		49.679	0.065	14.643	0.003		1967.67	32.7944	50.9	11.8	40.2	2.770	0.009	0.010	0.000	0.245	0.21	
1270	8/31/2004	4:42:02 PM		24.437	25.388	23.047	26.216	24.723		47.225	51.713	15.65	32.646	-1.212	-7.694		49.735	0.066	14.643	0.003		1968.67	32.8111	50.6	11.8	39.9	2.753	0.009	0.010	0.000	0.250	0.21	
1271	8/31/2004	4:43:02 PM		24.447	25.387	23.036	26.25	24.797		47.281	51.951	15.712	32.646	-1.212	-7.694		51.053	0.065	14.643	0.003		1969.67	32.8278	50.8	12.2	40.0	2.755	0.009	0.010	0.000	0.246	0.21	
1272	8/31/2004	4:44:02 PM		24.456	25.391	23.02	26.275	24.842		47.447	52.08	15.722	32.685	-1.212	-7.689		52.732	0.067	14.643	0.003		1970.67	32.8444	51.0	12.6	40.1	2.762	0.010	0.010	0.000	0.253	0.22	
1273	8/31/2004	4:45:02 PM		24.461	25.401	23.01	26.37	24.932		47.405	52.144	15.756	32.623	-1.212	-7.677		48.586	0.067	14.643	0.004		1971.67	32.8611	51.0	11.6	40.0	2.759	0.010	0.010	0.000	0.254	0.22	
1274	8/31/2004	4:46:02 PM		24.471	25.421	23.015	26.41	25.067		47.611	52.303	15.816	32.75	-1.215	-7.689		49.883	0.066	14.643	0.003		1972.67	32.8778	51.2	11.9	40.2	2.770	0.009	0.010	0.000	0.249	0.21	
1275	8/31/2004	4:47:02 PM		24.482	25.428	23.036	26.481	25.113		47.745	52.589	15.805	32.855	-1.215	-7.683		50.653	0.065	14.643	0.003		1973.67	32.8944	51.5	12.1	40.3	2.779	0.009	0.010	0.000	0.244	0.21	
1276	8/31/2004	4:48:02 PM		24.489	25.434	23.023	26.577	25.17		47.464	52.076	15.749	32.845	-1.215	-7.683		52.044	0.066	14.643	0.003		1974.67	32.9111	50.9	12.4	40.2	2.769	0.009	0.010	0.000	0.249	0.21	
1277	8/31/2004	4:49:02 PM		24.501	25.446	23.03	26.615	25.252		47.082	51.677	15.511	32.738	-1.212	-7.683		52.048	0.065	14.643	0.003		1975.67	32.9278	50.6	12.4	39.9	2.752	0.009	0.010	0.000	0.247	0.21	
1278	8/31/2004	4:50:02 PM		24.501	25.451	23.015	26.635	25.227		47.7	52.239	15.749	33.099	-1.215	-7.68		50.367	0.066	14.643	0.003		1976.67	32.9444	51.1	12.0	40.4	2.785	0.009	0.010	0.000	0.247	0.21	
1279	8/31/2004	4:51:02 PM		24.503	25.448	23.002	26.612	25.204		47.565	52.374	15.769	32.773	-1.212	-7.677		50.569	0.066	14.643	0.004		1977.67	32.9611	51.2	12.0	40.2	2.770	0.009	0.010	0.000	0.249	0.21	
1280	8/31/2004	4:52:02 PM		24.5	25.44	22.988	26.553	25.19		47.387	52.09	15.923	32.486	-1.212	-7.674		49.848	0.065	14.643	0.003		1978.67	32.9778	51.0	11.9	39.9	2.753	0.009	0.010	0.000	0.247	0.21	
1281	8/31/2004	4:53:02 PM		24.506	25.456	23.015	26.535	25.152		47.171	51.653	15.63	32.57	-1.212	-7.68		48.78	0.066	14.643	0.003		1979.67	32.9944	50.5	11.6	39.9	2.749	0.009	0.010	0.000	0.251	0.21	
1282	8/31/2004	4:54:02 PM		24.52	25.47	23.014	26.568	25.14		47.424	51.833	15.616	33.095	-1.209	-7.674		50.16	0.065	14.643	0.004		1980.67	33.0111	50.7	11.9	40.3	2.776	0.009	0.010	0.000	0.245	0.21	
1283	8/31/2004	4:55:02 PM		24.511	25.466	23.005	26.485	25.092		47.37	52.036	15.73	32.613	-1.212	-7.677		50.306	0.064	14.643	0.003		1981.67	33.0278	50.9	12.0	40.0	2.757	0.009	0.010	0.000	0.242	0.21	
1284	8/31/2004	4:56:02 PM		24.508	25.474	23.007	26.447	25.029		47.273	51.879	15.549	32.707	-1.212	-7.674		48.631	0.065	14.643	0.003		1982.67	33.0444	50.8	11.6	40.0	2.757	0.009	0.010	0.000	0.246	0.21	
1285	8/31/2004	4:57:02 PM		24.51	25.476	23.014	26.469	25.006		47.563	52.393	15.819	32.681	-1.212	-7.671		45.09	0.065	14.643	0.003		1983.67	33.0611	51.3	10.7	40.1	2.766	0.009	0.010	0.000	0.245	0.21	
1286	8/31/2004	4:58:02 PM		24.508	25.479	22.992	26.482	25.009		47.474	52.173	15.763	32.734	-1.215	-7.68		51.931	0.065	14.643	0.003		1984.67	33.0778	51.0	12.4	40.1	2.765	0.009	0.010	0.000	0.246	0.21	
1287	8/31/2004	4:59:02 PM		24.521	25.482	23.02	26.435	24.982		47.2	51.843	15.626	32.656	-1.212	-7.677		51.351	0.065	14.643	0.003		1985.67	33.0944	50.7	12.2	39.9	2.753	0.009	0.010	0.000	0.247	0.21	
1288	8/31/2004	5:00:02 PM		24.513	25.479	23.027	26.422	24.959		47.47	52.165	15.736	32.874	-1.212	-7.668		49.011	0.067	14.643	0.004		1986.67	33.1111	51.0	11.7	40.2	2.770	0.010	0.010	0.000	0.253	0.21	
1289	8/31/2004	5:01:02 PM		24.512	25.487	23.006	26.436	24.978		47.349	52.181	15.67	32.623	-1.212	-7.683		49.708	0.064	14.643	0.003		1987.67	33.1278	51.1	11.8	40.0	2.757	0.009	0.010	0.000	0.242	0.21	
1290	8/31/2004	5:02:02 PM		24.521	25.491	23.024	26.389	25.026		47.385	51.988	15.678	32.83	-1.212	-7.668		51.013	0.066	14.643	0.003		1988.67	33.1444	50.9	12.2	40.1	2.765	0.009	0.010	0.000	0.249	0.21	
1291	8/31/2004	5:03:02 PM		24.509	25.484	23.002	26.392	25.029		47.466	52.084	15.742	32.83	-1.215	-7.677		50.4	0.065	14.643	0.003		1989.67	33.1611	51.0	12.0	40.1	2.768	0.009	0.010	0.000	0.245	0.21	
1292	8/31/2004	5:04:02 PM		24.514	25.495	23.073	26.403	25.065		47.472	52.078	15.835	32.726	-1.209	-7.671		49.09	0.066	14.643	0.003		1990.67	33.1778	51.0	11.7	40.1	2.765	0.009	0.010	0.000	0.249	0.21	
1293	8/31/2004	5:05:02 PM		24.512	25.492	23.161	26.461	25.118		47.186	52.022	15.765	32.375	-1.212	-7.677		48.175	0.065	14.643	0.003		1991.67	33.1944	50.9	11.5	39.8	2.743	0.009	0.010	0.000	0.246	0.21	
1294	8/31/2004	5:06:02 PM		24.502	25.482	23.151	26.406	25.048		47.509	51.993	15.717	32.822	-1.212	-7.671		49.595	0.067	14.643	0.003		1992.67	33.2111	50.9	11.8	40.2	2.769	0.010	0.010	0.000	0.252	0.21	
1295	8/31/2004	5:07:02 PM		24.521	25.496	23.13	26.479	24.956		46.989	51.702	15.779	32.258	-1.215	-7.668		51.577	0.065	14.643	0.003		1993.67	33.2278	50.6	12.3	39.6	2.732	0.009	0.010	0.000	0.248	0.21	
1296	8/31/2004	5:08:02 PM		24.538	25.504	23.148	26.482	24.929		47.314	51.854	15.725	32.736	-1.209	-7.671		50.044	0.065	14.643	0.004		1994.67	33.2444	50.7	11.9	40.0	2.760	0.009	0.010	0.000	0.245	0.21	
1297	8/31/2004	5:09:02 PM		24.527	25.492	23.096	26.475	24.898		47.615	52.169	15.873	32.75	-1.215	-7.674		50.163	0.064	14.643	0.003		1995.67	33.2611	51.0	11.9	40.2	2.770	0.009	0.010	0.000	0.241	0.20	
1298	8/31/2004	5:10:02 PM		24.524	25.484	23.083	26.423	24.91		47.215	52.158	15.687	32.49	-1.215	-7.668		49.414	0.065	14.643	0.003		1996.67	33.2778	51.0	11.8	39.9	2.748	0.009	0.010	0.000	0.247	0.21	
1299	8/31/2004	5:11:02 PM		24.533	25.493	23.077	26.426	24.913		47.183	51.893	15.628	32.611	-1.209	-7.671		48.996	0.063	14.643	0.003		1997.67	33.2944	50.8	11.7	39.9	2.751	0.009	0.010	0.000	0.239	0.20	
1300	8/31/2004	5:12:02 PM		24.523	25.474	23.067	26.422	24.944		47.163	51.843	15.721	32.477	-1.215	-7.671		52.186	0.065	14.643	0.003		1998.67	33.3111	50.7	12.4	39.8	2.745	0.009	0.010	0.000	0.247	0.21	
1301	8/31/2004	5:13:02 PM		24.518	25.468	23.036	26.466	24.973		47.509	52.071	15.715	32.898	-1.215	-7.674		51.308	0.063	14.643	0.003		1999.67	33.3278	50.9	12.2	40.2	2.772	0.009	0.010	0.000	0.237	0.20	
1302	8/31/2004	5:14:02 PM		24.526	25.471	23.055	26.485	24.942		47.551	52.322	15.714	32.793	-1.212	-7.666		50.452	0.066	14.643	0.003		2000.67	33.3444	51.2	12.0	40.2	2.770	0.009	0.010	0.000	0.249	0.21	
1303	8/31/2004	5:15:02 PM		24.53	25.475	23.054	26.468	24.92		47.354	52.044	15.73	32.724	-1.212	-7.666		51.451	0.064	14.643	0.003		2001.67	33.3611	50.9	12.3	40.0	2.761	0.009	0.010	0.000	0.242	0.21	
1304	8/31/2004	5:16:02 PM		24.54	25.481	23.049	26.479	24.926		47.414	51.899	15.652	32.886	-1.212	-7.663		50.824	0.066	14.643	0.003		2002.67	33.3778	50.8	12.1	40.2	2.768	0.009	0.010	0.000	0.249	0.21	
1305	8/31/2004	5:17:02 PM		24.554	25.494	23.058	26.493	24.975		47.235	51.845	15.715	32.711	-1.209	-7.666		50.384	0.064	14.643	0.003		2003.67	33.3944	50.7	12.0	40.0	2.756	0.009	0.010	0.000	0.242	0.21	
1306	8/31/2004	5:18:02 PM		24.546	25.481	23.039	26.464	24.951		47.457	52.297	15.752	32.611	-1.212	-7.66		53.141	0.066	14.643	0.003		2004.67	33.4111	51.2	12.7	40.0	2.760	0.009	0.010	0.000	0.250	0.21	
1307	8/31/2004	5:19:02 PM		24.541	25.486	23.055	26.409	24.926		47.069	51.881	15.593	32.482	-1.212	-7.663		49.81	0.065	14.643	0.003		2005.67	33.4278	50.8	11.9	39.8	2.742	0.009	0.010	0.000	0.247	0.21	
1308	8/31/2004	5:20:02 PM		24.543	25.489	23.037	26.457	24.979		47.443	52.227	15.693	32.8	-1.215	-7.634		47.883	0.065	14.643	0.003		2006.67	33.4444	51.1	11.4	40.1	2.766	0.009	0.010	0.000	0.245	0.21	
1309	8/31/2004	5:21:02 PM		24.551	25.507	23.06	26.485	24.962		47.704	52.54	15.756	32.898	-1.212	-7.64		50.213	0.063	14.643	0.003		2007.67	33.4611	51.4	12.0	40.3	2.779	0.009	0.010	0.000	0.236	0.20	
1310	8/31/2004	5:22:02 PM		24.55	25.515	23.044	26.538	25.01		47.532	52.388	15.785	32.691	-1.212	-7.628		49.04	0.065	14.643	0.003		2008.67	33.4778	51.3	11.7	40.1	2.766	0.009	0.010	0.000	0.245	0.21	
1311	8/31/2004	5:23:02 PM		24.567	25.532	23.076	26.596	25.073		47.381	52.111	15.687	32.767	-1.212	-7.57		49.954	0.063	14.643	0.003		2009.67	33.4944	51.0	11.9	40.1	2.763	0.009	0.010	0.000	0.238	0.20	
1312	8/31/2004	5:24:02 PM		24.574	25.535	23.053	26.683	25.185		47.414	51.986	15.813	32.8	-1.212	-7.495		51.65	0.065	14.643	0.003		2010.67	33.5111	50.9	12.3	40.1	2.765	0.009	0.010	0.000	0.245	0.21	
1313	8/31/2004	5:25:02 PM		24.566	25.542	23.075	26.695	25.292		47.41	51.982	15.755	32.785	-1.212	-7.57		47.094	0.064	14.643	0.003		2011.67	33.5278	50.9	11.2	40.1	2.765	0.009	0.010	0.000	0.241	0.21	
1314	8/31/2004	5:26:02 PM		24.568	25.534	23.032	26.747	25.429		47.461	52.21	15.788	32.72	-1.218	-7.573		51.502	0.064	14.643	0.003		2012.67	33.5444	51.1	12.3	40.1	2.764	0.009	0.010	0.000	0.242	0.21	
1315	8/31/2004	5:27:02 PM		24.593	25.568	23.062	26.786	25.503		47.605	52.471	15.798	32.882	-1.212	-7.579		49.556	0.064	14.643	0.003		2013.67	33.5611	51.3	11.8	40.2	2.775	0.009	0.010	0.000	0.241	0.20	
1316	8/31/2004	5:28:02 PM		24.59	25.565	23.074	26.888	25.585		47.426	52.26	15.587	32.954	-1.209	-7.573		50.39	0.064	14.643	0.004		2014.67	33.5778	51.1	12.0	40.2	2.771	0.009	0.010	0.000	0.241	0.20	
1317	8/31/2004	5:29:02 PM		24.579	25.564	23.073	26.837	25.634		47.428	52.104	15.717	32.849	-1.212	-7.579		50.628	0.063	14.643	0.003		2015.67	33.5944	51.0	12.1	40.1	2.767	0.009	0.010	0.000	0.237	0.20	
1318	8/31/2004	5:30:02 PM		24.587	25.567	23.151	26.805	25.687		47.256	51.877	15.685	32.662	-1.212	-7.579		51.347	0.064	14.643	0.003		2016.67	33.6111	50.8	12.2	40.0	2.755	0.009	0.010	0.000	0.242	0.21	
1319	8/31/2004	5:31:02 PM		24.585	25.585	23.169	26.753	25.515		47.441	52.086	15.645	32.935	-1.215	-7.579		50.188	0.063	14.643	0.003		2017.67	33.6278	51.0	12.0	40.2	2.771	0.009	0.009	0.000	0.236	0.20	
1320	8/31/2004	5:32:02 PM		24.588	25.584	23.123	26.732	25.339		47.181	52.026	15.66	32.438	-1.218	-7.579		50.406	0.064	14.643	0.003		2018.67	33.6444	50.9	12.0	39.8	2.745	0.009	0.010	0.000	0.243	0.21	
1321	8/31/2004	5:33:02 PM		24.606	25.612	23.146	26.68	25.292		47.474	52.498	15.625	32.826	-1.212	-7.579		50.087	0.063	14.643	0.003		2019.67	33.6611	51.4	11.9	40.2	2.768	0.009	0.010	0.000	0.237	0.20	
1322	8/31/2004	5:34:02 PM		24.584	25.595	23.108	26.613	25.355		47.221	51.91	15.66	32.685	-1.215	-7.579		51.195	0.062	14.643	0.003		2020.67	33.6778	50.8	12.2	40.0	2.755	0.009	0.009	0.000	0.234	0.20	
1323	8/31/2004	5:35:02 PM		24.589	25.6	23.088	26.563	25.355		47.304	52.051	15.734	32.633	-1.212	-7.576		49.896	0.064	14.643	0.003		2021.67	33.6944	50.9	11.9	40.0	2.756	0.009	0.010	0.000	0.242	0.21	
1324	8/31/2004	5:36:02 PM		24.589	25.61	23.078	26.573	25.255		47.374	52.214	15.679	32.742	-1.212	-7.579		49.009	0.064	14.643	0.003		2022.67	33.7111	51.1	11.7	40.1	2.762	0.009	0.010	0.000	0.242	0.21	
1325	8/31/2004	5:37:02 PM		24.584	25.61	23.078	26.513	25.255		47.107	51.787	15.7	32.594	-1.215	-7.582		49.799	0.063	14.643	0.003		2023.67	33.7278	50.7	11.9	39.9	2.748	0.009	0.010	0.000	0.239	0.20	
1326	8/31/2004	5:38:02 PM		24.563	25.593	23.021	26.496	25.213		47.221	52.125	15.511	32.748	-1.218	-7.585		49.174	0.064	14.643	0.003		2024.67	33.7444	51.0	11.7	40.0	2.757	0.009	0.010	0.000	0.242	0.21	
1327	8/31/2004	5:39:02 PM		24.571	25.607	23.055	26.435	25.127		47.202	51.947	15.622	32.752	-1.212	-7.576		50.152	0.064	14.643	0.004		2025.67	33.7611	50.8	11.9	40.0	2.756	0.009	0.010	0.000	0.242	0.21	
1328	8/31/2004	5:40:02 PM		24.58	25.625	23.064	26.418	25.055		47.356	52.214	15.84	32.397	-1.209	-7.579		50.509	0.063	14.643	0.004		2026.67	33.7778	51.1	12.0	39.9	2.749	0.009	0.010	0.000	0.239	0.20	
1329	8/31/2004	5:41:02 PM		24.579	25.624	23.052	26.377	24.969		47.403	52.237	15.753	32.617	-1.212	-7.576		49.247	0.064	14.643	0.003		2027.67	33.7944	51.1	11.7	40.0	2.759	0.009	0.010	0.000	0.242	0.21	
1330	8/31/2004	5:42:02 PM		24.577	25.638	23.041	26.391	24.978		47.453	52.461	15.676	32.726	-1.212	-7.417		50.444	0.065	14.643	0.003		2028.67	33.8111	51.3	12.0	40.1	2.764	0.009	0.010	0.000	0.245	0.21	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1331	8/31/2004	5:43:02 PM		24.575	25.64	23.054	26.333	24.931		47.468	52.403	15.662	32.923	-1.212	-7.533		50.78	0.064	14.643	0.003		2029.67	33.8278	51.3	12.1	40.2	2.771	0.009	0.010	0.000	0.241	0.20	
1332	8/31/2004	5:44:02 PM		24.575	25.645	23.064	26.358	24.911		47.09	52.076	15.612	32.48	-1.212	-7.527		51.798	0.063	14.643	0.003		2030.67	33.8444	50.9	12.3	39.8	2.743	0.009	0.010	0.000	0.239	0.20	
1333	8/31/2004	5:45:02 PM		24.568	25.644	23.047	26.327	24.909		47.497	52.247	15.738	32.787	-1.212	-7.527		49.145	0.064	14.643	0.003		2031.67	33.8611	51.1	11.7	40.1	2.768	0.009	0.010	0.000	0.241	0.21	
1334	8/31/2004	5:46:02 PM		24.551	25.617	23.03	26.23	24.952		47.074	51.765	15.642	32.459	-1.218	-7.533		51.925	0.063	14.643	0.003		2032.67	33.8778	50.6	12.4	39.8	2.742	0.009	0.010	0.000	0.240	0.20	
1335	8/31/2004	5:47:02 PM		24.534	25.605	23.018	26.208	25.025		47.279	52.16	15.592	32.769	-1.212	-7.533		44.422	0.064	14.643	0.003		2033.67	33.8944	51.0	10.6	40.0	2.760	0.009	0.010	0.000	0.242	0.21	
1336	8/31/2004	5:48:02 PM		24.529	25.605	23.033	26.197	25.14		47.727	52.683	15.673	33.032	-1.218	-7.535		51.122	0.064	14.643	0.003		2034.67	33.9111	51.6	12.2	40.4	2.784	0.009	0.010	0.000	0.240	0.20	
1337	8/31/2004	5:49:02 PM		24.512	25.597	23.011	26.27	25.122		47.192	52.075	15.748	32.469	-1.212	-7.53		50.861	0.063	14.643	0.003		2035.67	33.9278	50.9	12.1	39.8	2.746	0.009	0.010	0.000	0.240	0.20	
1338	8/31/2004	5:50:02 PM		24.503	25.588	23.016	26.291	25.143		47.198	52.026	15.479	32.732	-1.212	-7.518		50.066	0.065	14.643	0.003		2036.67	33.9444	50.9	11.9	40.0	2.755	0.009	0.010	0.000	0.246	0.21	
1339	8/31/2004	5:51:02 PM		24.513	25.594	23.007	26.417	25.119		47.244	52.094	15.531	32.8	-1.212	-7.431		50.843	0.059	14.643	0.003		2037.67	33.9611	51.0	12.1	40.0	2.759	0.008	0.009	0.000	0.223	0.19	
1340	8/31/2004	5:52:02 PM		24.523	25.603	23.042	26.426	25.143		47.169	51.908	15.611	32.636	-1.212	-7.507		49.697	0.063	14.643	0.003		2038.67	33.9778	50.8	11.8	39.9	2.751	0.009	0.010	0.000	0.239	0.20	
1341	8/31/2004	5:53:02 PM		24.505	25.585	23.019	26.423	25.24		47.422	52.131	15.617	33.009	-1.215	-7.501		50.747	0.062	14.643	0.003		2039.67	33.9944	51.0	12.1	40.2	2.773	0.009	0.009	0.000	0.233	0.20	
1342	8/31/2004	5:54:02 PM		24.503	25.589	23.032	26.422	25.179		47.546	52.691	15.819	32.722	-1.215	-7.498		50.027	0.065	14.643	0.003		2040.67	34.0111	51.6	11.9	40.1	2.767	0.009	0.010	0.000	0.245	0.21	
1343	8/31/2004	5:55:02 PM		24.507	25.592	23.096	26.42	25.117		47.428	52.332	15.693	32.685	-1.215	-7.501		50.632	0.063	14.643	0.003		2041.67	34.0278	51.2	12.1	40.1	2.762	0.009	0.010	0.000	0.238	0.20	
1344	8/31/2004	5:56:02 PM		24.503	25.589	23.173	26.332	25.029		47.457	52.202	15.658	32.832	-1.212	-7.501		49.639	0.064	14.643	0.003		2042.67	34.0444	51.1	11.8	40.1	2.768	0.009	0.010	0.000	0.240	0.20	
1345	8/31/2004	5:57:02 PM		24.517	25.597	23.146	26.34	24.952		47.105	51.827	15.645	32.518	-1.212	-7.504		49.66	0.062	14.643	0.003		2043.67	34.0611	50.7	11.8	39.8	2.745	0.009	0.009	0.000	0.235	0.20	
1346	8/31/2004	5:58:02 PM		24.516	25.587	23.12	26.265	24.902		47.242	52.024	15.64	32.642	-1.215	-7.507		50.434	0.062	14.643	0.004		2044.67	34.0778	50.9	12.0	39.9	2.754	0.009	0.009	0.000	0.234	0.20	
1347	8/31/2004	5:59:02 PM		24.504	25.57	23.088	26.283	24.83		47.335	52.428	15.718	32.5	-1.212	-7.408		51.552	0.064	14.643	0.003		2045.67	34.0944	51.3	12.3	39.9	2.752	0.009	0.010	0.000	0.242	0.21	
1348	8/31/2004	6:00:02 PM		24.526	25.581	23.095	26.219	24.836		47.175	52.167	15.688	32.553	-1.215	-7.434		49.629	0.063	14.643	0.003		2046.67	34.1111	51.0	11.8	39.9	2.748	0.009	0.010	0.000	0.239	0.20	
1349	8/31/2004	6:01:02 PM		24.53	25.601	23.079	26.194	24.921		46.893	51.939	15.506	32.473	-1.215	-7.481		49.599	0.064	14.643	0.003		2047.67	34.1278	50.8	11.8	39.7	2.736	0.009	0.010	0.000	0.244	0.21	
1350	8/31/2004	6:02:02 PM		24.526	25.591	23.065	26.139	24.996		47.314	52.046	15.62	32.863	-1.215	-7.495		48.012	0.063	14.643	0.003		2048.67	34.1444	50.9	11.4	40.1	2.764	0.009	0.010	0.000	0.238	0.20	
1351	8/31/2004	6:03:02 PM		24.527	25.593	23.076	26.136	24.988		47.186	52.212	15.583	32.582	-1.212	-7.489		50.605	0.062	14.643	0.003		2049.67	34.1611	51.1	12.1	39.9	2.750	0.009	0.009	0.000	0.235	0.20	
1352	8/31/2004	6:04:02 PM		24.496	25.571	23.045	26.084	25.026		47.264	52.301	15.799	32.404	-1.212	-7.498		50.676	0.064	14.643	0.003		2050.67	34.1778	51.2	12.1	39.8	2.746	0.009	0.010	0.000	0.243	0.21	
1353	8/31/2004	6:05:02 PM		24.484	25.57	23.013	26.088	24.995		47.183	52.218	15.593	32.623	-1.212	-7.483		52.104	0.066	14.643	0.003		2051.67	34.1944	51.1	12.4	39.9	2.751	0.009	0.010	0.000	0.251	0.21	
1354	8/31/2004	6:06:02 PM		24.484	25.57	23.023	26.053	24.93		47.285	52.252	15.63	32.701	-1.215	-7.426		49.474	0.063	14.643	0.003		2052.67	34.2111	51.1	11.8	40.0	2.757	0.009	0.010	0.000	0.239	0.20	
1355	8/31/2004	6:07:02 PM		24.469	25.564	23.017	26.002	24.909		47.347	52.044	15.644	32.82	-1.215	-7.455		49.053	0.062	14.643	0.003		2053.67	34.2278	50.9	11.7	40.1	2.764	0.009	0.009	0.000	0.234	0.20	
1356	8/31/2004	6:08:02 PM		24.475	25.576	23.009	26.028	24.881		47.252	52.333	15.743	32.467	-1.212	-7.472		50.044	0.063	14.643	0.003		2054.67	34.2444	51.2	11.9	39.9	2.748	0.009	0.010	0.000	0.239	0.20	
1357	8/31/2004	6:09:02 PM		24.464	25.564	23.002	26.007	24.819		47.26	52.326	15.73	32.5	-1.212	-7.469		50.905	0.064	14.643	0.003		2055.67	34.2611	51.2	12.1	39.9	2.750	0.009	0.010	0.000	0.243	0.21	
1358	8/31/2004	6:10:02 PM		24.453	25.559	22.982	25.916	24.784		47.094	52.111	15.596	32.609	-1.215	-7.431		50.394	0.065	14.643	0.003		2056.67	34.2778	51.0	12.0	39.9	2.748	0.009	0.010	0.000	0.247	0.21	
1359	8/31/2004	6:11:02 PM		24.452	25.562	23	25.875	24.772		47.314	52.088	15.608	32.833	-1.212	-7.443		51.047	0.063	14.643	0.003		2057.67	34.2944	51.0	12.2	40.1	2.763	0.009	0.010	0.000	0.238	0.20	
1360	8/31/2004	6:12:02 PM		24.44	25.556	22.979	25.888	24.751		47.02	51.839	15.531	32.592	-1.212	-7.446		49.774	0.063	14.643	0.003		2058.67	34.3111	50.7	11.9	39.8	2.744	0.009	0.010	0.000	0.240	0.20	
1361	8/31/2004	6:13:02 PM		24.434	25.564	22.987	25.902	24.809		47.271	52.26	15.655	32.543	-1.212	-7.449		51.022	0.061	14.643	0.003		2059.67	34.3278	51.1	12.2	39.9	2.751	0.009	0.009	0.000	0.232	0.20	
1362	8/31/2004	6:14:02 PM		24.437	25.563	22.991	25.941	24.888		47.198	52.185	15.533	32.64	-1.215	-7.44		49.672	0.063	14.643	0.003		2060.67	34.3444	51.1	11.8	39.9	2.752	0.009	0.010	0.000	0.239	0.20	
1363	8/31/2004	6:15:02 PM		24.427	25.562	23.015	25.98	24.932		47.103	51.711	15.395	33.062	-1.215	-7.405		51.187	0.061	14.643	0.003		2061.67	34.3611	50.6	12.2	40.1	2.764	0.009	0.009	0.000	0.230	0.20	
1364	8/31/2004	6:16:02 PM		24.425	25.555	23.044	26.038	24.975		47.32	52.225	15.613	32.828	-1.212	-7.42		50.94	0.063	14.643	0.004		2062.67	34.3778	51.1	12.1	40.1	2.763	0.009	0.010	0.000	0.238	0.20	
1365	8/31/2004	6:17:02 PM		24.428	25.568	23.036	26.051	25.018		47.194	51.941	15.466	32.884	-1.215	-7.417		47.793	0.063	14.643	0.003		2063.67	34.3944	50.8	11.4	40.0	2.761	0.009	0.010	0.000	0.238	0.20	
1366	8/31/2004	6:18:02 PM		24.441	25.582	23.025	26.145	25.087		47.217	52.04	15.549	32.835	-1.215	-7.42		49.558	0.063	14.643	0.003		2064.67	34.4111	50.9	11.8	40.0	2.760	0.009	0.010	0.000	0.238	0.20	
1367	8/31/2004	6:19:02 PM		24.445	25.591	23.029	26.164	25.121		47.32	52.121	15.622	32.775	-1.215	-7.423		50.552	0.062	14.643	0.003		2065.67	34.4278	51.0	12.0	40.0	2.761	0.009	0.009	0.000	0.234	0.20	
1368	8/31/2004	6:20:02 PM		24.449	25.605	23.078	26.188	25.15		47.271	52.208	15.654	32.629	-1.215	-7.423		49.633	0.061	14.643	0.003		2066.67	34.4444	51.1	11.8	40.0	2.754	0.009	0.009	0.000	0.231	0.20	
1369	8/31/2004	6:21:02 PM		24.458	25.609	23.153	26.192	25.164		47.546	52.453	15.619	32.935	-1.215	-7.388		50.707	0.059	14.643	0.003		2067.67	34.4611	51.3	12.1	40.2	2.774	0.008	0.009	0.000	0.221	0.19	
1370	8/31/2004	6:22:02 PM		24.484	25.64	23.264	26.268	25.27		47.352	52.268	15.435	33.013	-1.209	-7.371		51.364	0.064	14.643	0.003		2068.67	34.4778	51.1	12.2	40.2	2.770	0.009	0.010	0.000	0.240	0.20	
1371	8/31/2004	6:23:02 PM		24.47	25.625	23.285	26.273	25.22		47.644	52.735	15.528	33.167	-1.218	-7.391		50.525	0.062	14.643	0.003		2069.67	34.4944	51.6	12.0	40.4	2.786	0.009	0.009	0.000	0.231	0.20	
1372	8/31/2004	6:24:02 PM		24.489	25.64	23.374	26.323	25.25		47.578	52.776	15.544	33.029	-1.206	-7.379		50.267	0.063	14.643	0.004		2070.67	34.5111	51.6	12.0	40.3	2.779	0.009	0.009	0.000	0.234	0.20	
1373	8/31/2004	6:25:02 PM		24.498	25.649	23.419	26.362	25.299		47.762	52.911	15.461	33.28	-1.212	-7.301		48.684	0.061	14.643	0.003		2071.67	34.5278	51.8	11.6	40.5	2.794	0.009	0.009	0.000	0.225	0.19	
1374	8/31/2004	6:26:02 PM		24.518	25.643	23.448	26.406	25.178		47.474	52.42	15.479	33.081	-1.215	-7.31		50.087	0.063	14.643	0.003		2072.67	34.5444	51.3	11.9	40.3	2.777	0.009	0.009	0.000	0.234	0.20	
1375	8/31/2004	6:27:02 PM		24.512	25.628	23.478	26.316	25.103		47.142	52.001	15.39	32.947	-1.215	-7.322		49.032	0.061	14.643	0.003		2073.67	34.5611	50.9	11.7	40.0	2.761	0.009	0.009	0.000	0.228	0.19	
1376	8/31/2004	6:28:02 PM		24.551	25.657	23.557	26.33	25.032		47.654	52.685	15.645	33.054	-1.209	-7.353		50.033	0.064	14.643	0.004		2074.67	34.5778	51.6	11.9	40.4	2.782	0.009	0.010	0.000	0.237	0.20	
1377	8/31/2004	6:29:02 PM		24.549	25.63	23.575	26.218	24.95		47.631	52.407	15.537	33.167	-1.215	-7.368		50.321	0.063	14.643	0.003		2075.67	34.5944	51.3	12.0	40.4	2.785	0.009	0.009	0.000	0.232	0.20	
1378	8/31/2004	6:30:02 PM		24.582	25.643	23.638	26.156	24.913		47.602	52.89	15.535	32.988	-1.215	-7.368		50.315	0.063	14.643	0.003		2076.67	34.6111	51.8	12.0	40.3	2.778	0.009	0.009	0.000	0.233	0.20	
1379	8/31/2004	6:31:02 PM		24.588	25.634	23.669	26.132	24.839		47.665	52.558	15.448	33.333	-1.212	-7.353		50.682	0.065	14.643	0.003		2077.67	34.6278	51.4	12.1	40.5	2.792	0.009	0.010	0.000	0.239	0.20	
1380	8/31/2004	6:32:02 PM		24.611	25.637	23.697	26.14	24.762		47.548	52.693	15.399	33.235	-1.209	-7.255		50.459	0.066	14.643	0.004		2078.67	34.6444	51.6	12.0	40.4	2.785	0.009	0.010	0.000	0.243	0.21	
1381	8/31/2004	6:33:02 PM		24.64	25.645	23.756	26.143	24.77		47.339	52.119	15.33	33.151	-1.206	-7.379		47.259	0.061	14.643	0.003		2079.67	34.6611	51.0	11.3	40.2	2.775	0.009	0.009	0.000	0.225	0.19	
1382	8/31/2004	6:34:02 PM		24.642	25.628	23.758	26.075	24.768		47.426	52.484	15.42	33.011	-1.215	-7.371		48.586	0.063	14.643	0.003		2080.67	34.6778	51.4	11.6	40.2	2.773	0.009	0.009	0.000	0.232	0.20	
1383	8/31/2004	6:35:02 PM		24.671	25.636	23.817	26.089	24.806		47.333	52.498	15.499	32.833	-1.212	-7.272		50.064	0.065	14.643	0.003		2081.67	34.6944	51.4	11.9	40.1	2.764	0.009	0.010	0.000	0.240	0.20	
1384	8/31/2004	6:36:02 PM		24.685	25.635	23.851	26.068	24.845		47.611	52.701	15.383	33.29	-1.212	-7.304		49.193	0.065	14.643	0.003		2082.67	34.7111	51.6	11.7	40.5	2.789	0.009	0.010	0.000	0.238	0.20	
1385	8/31/2004	6:37:02 PM		24.709	25.639	23.951	26.127	24.929		47.364	52.084	15.152	33.477	-1.212	-7.333		51.497	0.064	14.643	0.003		2083.67	34.7278	51.0	12.3	40.4	2.787	0.009	0.009	0.000	0.233	0.20	
1386	8/31/2004	6:38:02 PM		24.729	25.629	23.966	26.127	24.959		47.24	52.21	15.27	33.034	-1.215	-7.333		49.09	0.064	14.643	0.003		2084.67	34.7444	51.1	11.7	40.1	2.767	0.009	0.009	0.000	0.235	0.20	
1387	8/31/2004	6:39:02 PM		24.747	25.632	23.969	26.145	25.027		47.418	52.417	15.359	33.052	-1.215	-7.333		50.916	0.064	14.643	0.003		2085.67	34.7611	51.3	12.1	40.2	2.774	0.009	0.009	0.000	0.234	0.20	
1388	8/31/2004	6:40:02 PM		24.796	25.647	24.018	26.199	25.061		47.364	52.417	15.297	33.071	-1.212	-7.284		50.271	0.065	14.643	0.003		2086.67	34.7778	51.3	12.0	40.2	2.773	0.009	0.010	0.000	0.238	0.20	
1389	8/31/2004	6:41:02 PM		24.821	25.647	24.033	26.249	25.071		47.451	52.395	15.341	33.093	-1.215	-7.232		49.766	0.064	14.643	0.003		2087.67	34.7944	51.3	11.9	40.3	2.777	0.009	0.009	0.000	0.234	0.20	
1390	8/31/2004	6:42:02 PM		24.82	25.635	24.042	26.258	25.16		47.607	52.602	15.542	33.163	-1.212	-7.324		51.114	0.063	14.643	0.003		2088.67	34.8111	51.5	12.2	40.4	2.784	0.009	0.009	0.000	0.229	0.20	
1391	8/31/2004	6:43:02 PM		24.851	25.642	24.053	26.249	25.216		47.426	52.633	15.297	33.149	-1.212	-7.319		51.372	0.065	14.643	0.003		2089.67	34.8278	51.5	12.2	40.3	2.778	0.009	0.010	0.000	0.237	0.20	
1392	8/31/2004	6:44:02 PM		24.858	25.648	24.055	26.296	25.248		47.157	52.233	15.313	32.865	-1.212	-7.319		50.296	0.064	14.643	0.003		2090.67	34.8444	51.1	12.0	40.0	2.759	0.009	0.009	0.000	0.235	0.20	
1393	8/31/2004	6:45:02 PM		24.883	25.649	24.08	26.346	25.253		47.424	52.476	15.351	33.099	-1.212	-7.316		48.704	0.063	14.643	0.003		2091.67	34.8611	51.4	11.6	40.3	2.776	0.009	0.009	0.000	0.230	0.20	
1394	8/31/2004	6:46:02 PM		24.9	25.655	24.102	26.333	25.125		47.681	52.693	15.412	33.354	-1.215	-7.22		49.107	0.069	14.643	0.003		2092.67	34.8778	51.6	11.7	40.5	2.794	0.010	0.010	0.000	0.250	0.21	
1395	8/31/2004	6:47:02 PM		24.904	25.644	24.101	26.277	25.139		47.565	52.789	15.396	33.179	-1.215	-7.272		48.033	0.063	14.643	0.003		2093.67	34.8944	51.7	11.4	40.4	2.784	0.009	0.009	0.000	0.229	0.20	
1396	8/31/2004	6:48:02 PM		24.917	25.632	24.114	26.245	25.032		47.615	52.492	15.42	33.329	-1.215	-7.27		46.145	0.066	14.643	0.003		2094.67	34.9111	51.4	11.0	40.5	2.790	0.009	0.010	0.000	0.239	0.20	
1397	8/31/2004	6:49:02 PM		24.921	25.636	24.103	26.259	24.931		47.296	52.312	15.283	33.038	-1.212	-7.119		50.538	0.061	14.643	0.003		2095.67	34.9278	51.2	12.0	40.2	2.769	0.009	0.009	0.000	0.223	0.19	
1398	8/31/2004	6:50:02 PM		24.944	25.635	24.111	26.212	24.899		47.248	52.308	15.281	32.991	-1.212	-7.22		50.419	0.065	14.643	0.003		2096.67	34.9444	51.2	12.0	40.1	2.766	0.009	0.010	0.000	0.238	0.20	
1399	8/31/2004	6:51:02 PM		24.944	25.634	24.121	26.167	24.904		47.567	52.697	15.441	33.081	-1.212	-7.232		49.132	0.065	14.643	0.003		2097.67	34.9611	51.6	11.7	40.3	2.780	0.009	0.010	0.000	0.237	0.20	
1400	8/31/2004	6:52:02 PM		24.97	25.64	24.147	26.163	24.865		47.609	52.652	15.488	33.253	-1.215	-7.307		49.434	0.065	14.643	0.003		2098.67	34.9778	51.5	11.8	40.4	2.788	0.009	0.010	0.000	0.236	0.20	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1401	8/31/2004	6:53:02 PM		24.963	25.628	24.155	26.086	24.823		47.399	52.643	15.357	33.036	-1.212	-7.215		47.32	0.064	14.643	0.003		2099.67	34.9944	51.5	11.3	40.2	2.773	0.009	0.009	0.000	0.233	0.20	
1402	8/31/2004	6:54:02 PM		24.982	25.632	24.164	26.1	24.837		47.772	52.716	15.355	33.516	-1.215	-7.229		46.733	0.064	14.643	0.003		2100.67	35.0111	51.6	11.1	40.6	2.802	0.009	0.009	0.000	0.231	0.20	
1403	8/31/2004	6:55:02 PM		24.99	25.63	24.162	26.068	24.84		47.729	52.851	15.444	33.229	-1.215	-7.238		48.235	0.065	14.643	0.003		2101.67	35.0278	51.7	11.5	40.5	2.791	0.009	0.010	0.000	0.235	0.20	
1404	8/31/2004	6:56:02 PM		24.995	25.63	24.172	26.078	24.97		47.555	52.648	15.306	33.263	-1.212	-7.203		49.08	0.065	14.643	0.004		2102.67	35.0444	51.5	11.7	40.4	2.786	0.009	0.010	0.000	0.236	0.20	
1405	8/31/2004	6:57:02 PM		24.994	25.614	24.176	26.057	25.014		47.642	52.786	15.422	33.233	-1.212	-7.278		49.437	0.064	14.643	0.003		2103.67	35.0611	51.7	11.8	40.4	2.788	0.009	0.009	0.000	0.232	0.20	
1406	8/31/2004	6:58:02 PM		25.024	25.639	24.266	26.087	25.089		47.408	52.223	15.363	33.062	-1.215	-7.281		47.908	0.064	14.643	0.003		2104.67	35.0778	51.1	11.4	40.2	2.774	0.009	0.009	0.000	0.232	0.20	
1407	8/31/2004	6:59:02 PM		25.034	25.639	24.276	26.142	25.074		47.54	52.461	15.376	33.382	-1.215	-7.272		49.366	0.064	14.643	0.003		2105.67	35.0944	51.3	11.8	40.5	2.790	0.009	0.009	0.000	0.231	0.20	
1408	8/31/2004	7:00:02 PM		25.031	25.636	24.263	26.184	25.171		47.687	52.583	15.453	33.272	-1.212	-7.272		49.841	0.064	14.643	0.003		2106.67	35.1111	51.5	11.9	40.5	2.791	0.009	0.009	0.000	0.231	0.20	
1409	8/31/2004	7:01:02 PM		25.044	25.639	24.261	26.217	25.214		47.652	52.768	15.392	33.272	-1.215	-7.275		50.008	0.063	14.643	0.003		2107.67	35.1278	51.6	11.9	40.5	2.790	0.009	0.009	0.000	0.228	0.19	
1410	8/31/2004	7:02:02 PM		25.055	25.63	24.262	26.253	25.25		47.561	52.691	15.378	33.105	-1.212	-7.264		49.167	0.066	14.643	0.003		2108.67	35.1444	51.6	11.7	40.3	2.781	0.009	0.010	0.000	0.239	0.20	
1411	8/31/2004	7:03:02 PM		25.061	25.636	24.273	26.289	25.201		47.656	52.936	15.392	33.114	-1.212	-7.275		49.243	0.064	14.643	0.003		2109.67	35.1611	51.8	11.7	40.4	2.784	0.009	0.009	0.000	0.232	0.20	
1412	8/31/2004	7:03:18 PM		25.071	25.647	24.284	26.309	25.186		47.022	52.059	15.254	32.857	-1.192	-7.163		49.662	0.063	14.643	0.003		2109.93	35.1656	50.9	11.8	39.9	2.754	0.009	0.009	0.000	0.230	0.20	
1413	8/31/2004	7:04:18 PM		25.098	25.663	24.32	26.326	25.308		47.316	52.594	15.378	32.872	-1.172	-7.177		50.423	0.064	14.643	0.003		2110.93	35.1822	51.5	12.0	40.1	2.764	0.009	0.009	0.000	0.233	0.20	
1414	8/31/2004	7:05:18 PM		25.093	25.648	24.295	26.356	25.278		47.486	52.645	15.334	33.136	-1.212	-7.258		51.794	0.064	14.643	0.004		2111.93	35.1989	51.5	12.3	40.3	2.779	0.009	0.009	0.000	0.232	0.20	
1415	8/31/2004	7:06:18 PM		25.103	25.659	24.291	26.382	25.333		47.505	52.467	15.456	33.171	-1.212	-7.128		49.489	0.057	14.643	0.003		2112.93	35.2156	51.3	11.8	40.3	2.781	0.008	0.008	0.000	0.206	0.18	
1416	8/31/2004	7:07:18 PM		25.119	25.669	24.302	26.397	25.409		47.445	52.583	15.345	33.12	-1.212	-7.215		49.092	0.064	14.643	0.003		2113.93	35.2322	51.5	11.7	40.3	2.777	0.009	0.009	0.000	0.232	0.20	
1417	8/31/2004	7:08:18 PM		25.13	25.67	24.312	26.433	25.305		47.636	52.67	15.47	33.202	-1.212	-7.203		50.054	0.064	14.643	0.003		2114.93	35.2489	51.5	11.9	40.4	2.787	0.009	0.009	0.000	0.231	0.20	
1418	8/31/2004	7:09:18 PM		25.125	25.66	24.302	26.393	25.195		47.576	52.72	15.341	33.288	-1.212	-7.232		47.611	0.065	14.643	0.003		2115.93	35.2656	51.6	11.3	40.4	2.788	0.009	0.009	0.000	0.235	0.20	
1419	8/31/2004	7:10:18 PM		25.136	25.661	24.298	26.389	25.185		47.617	52.921	15.453	33.161	-1.212	-7.252		49.626	0.063	14.643	0.003		2116.93	35.2822	51.8	11.8	40.4	2.785	0.009	0.009	0.000	0.228	0.19	
1420	8/31/2004	7:11:18 PM		25.141	25.661	24.293	26.334	25.03		47.408	52.38	15.374	33.091	-1.212	-7.18		49.929	0.066	14.643	0.003		2117.93	35.2989	51.3	11.9	40.2	2.775	0.009	0.010	0.000	0.239	0.20	
1421	8/31/2004	7:12:18 PM		25.14	25.665	24.302	26.283	24.98		47.011	52.038	15.195	32.972	-1.148	-6.952		49.606	0.06	14.643	0.003		2118.93	35.3156	50.9	11.8	40.0	2.757	0.009	0.009	0.000	0.219	0.19	
1422	8/31/2004	7:13:18 PM		25.124	25.634	24.286	26.202	24.909		47.217	52.368	15.266	32.962	-1.215	-7.157		49.414	0.064	14.643	0.003		2119.93	35.3322	51.2	11.8	40.1	2.764	0.009	0.009	0.000	0.233	0.20	
1423	8/31/2004	7:14:18 PM		25.143	25.639	24.301	26.146	24.863		47.358	52.189	15.386	33.091	-1.215	-7.252		49.733	0.064	14.643	0.003		2120.93	35.3489	51.1	11.8	40.2	2.773	0.009	0.009	0.000	0.232	0.20	
1424	8/31/2004	7:15:18 PM		25.142	25.637	24.279	26.13	24.802		47.169	52.105	15.216	33.087	-1.215	-7.27		50.017	0.064	14.643	0.003		2121.93	35.3656	51.0	11.9	40.1	2.767	0.009	0.009	0.000	0.233	0.20	
1425	8/31/2004	7:16:18 PM		25.146	25.641	24.293	26.129	24.771		47.401	52.509	15.286	33.186	-1.209	-7.264		47.221	0.064	14.643	0.004		2122.93	35.3822	51.4	11.2	40.3	2.778	0.009	0.009	0.000	0.232	0.20	
1426	8/31/2004	7:17:18 PM		25.143	25.638	24.335	26.071	24.848		47.47	52.413	15.266	33.321	-1.212	-7.255		48.575	0.066	14.643	0.003		2123.93	35.3989	51.3	11.6	40.4	2.785	0.009	0.010	0.000	0.238	0.20	
1427	8/31/2004	7:18:18 PM		25.15	25.635	24.373	26.038	24.975		47.553	52.695	15.395	33.259	-1.212	-7.261		48.631	0.064	14.643	0.003		2124.93	35.4156	51.6	11.6	40.4	2.786	0.009	0.009	0.000	0.231	0.20	
1428	8/31/2004	7:19:18 PM		25.154	25.634	24.356	26.102	24.974		46.868	51.816	15.204	32.775	-1.212	-7.261		48.404	0.064	14.643	0.003		2125.93	35.4322	50.7	11.5	39.8	2.746	0.009	0.009	0.000	0.234	0.20	
1429	8/31/2004	7:20:18 PM		25.168	25.643	24.345	26.136	25.063		47.464	52.505	15.296	33.366	-1.212	-7.264		50.972	0.063	14.643	0.003		2126.93	35.4489	51.4	12.1	40.4	2.786	0.009	0.009	0.000	0.227	0.19	
1430	8/31/2004	7:21:18 PM		25.187	25.657	24.369	26.185	25.047		47.358	52.32	15.376	33.245	-1.212	-7.261		48.656	0.063	14.643	0.003		2127.93	35.4656	51.2	11.6	40.3	2.779	0.009	0.009	0.000	0.228	0.19	
1431	8/31/2004	7:22:18 PM		25.186	25.641	24.359	26.164	25.161		47.524	52.475	15.327	33.274	-1.212	-7.249		52.106	0.065	14.643	0.003		2128.93	35.4822	51.3	12.4	40.4	2.785	0.009	0.009	0.000	0.235	0.20	
1432	8/31/2004	7:23:18 PM		25.196	25.661	24.378	26.214	25.161		47.407	52.523	15.335	33.122	-1.212	-7.261		48.523	0.063	14.643	0.003		2129.93	35.4989	51.4	11.6	40.3	2.776	0.009	0.009	0.000	0.228	0.19	
1433	8/31/2004	7:24:18 PM		25.192	25.652	24.354	26.245	25.192		47.202	52.227	15.38	32.89	-1.212	-7.258		51.668	0.063	14.643	0.003		2130.93	35.5156	51.1	12.3	40.0	2.761	0.009	0.009	0.000	0.229	0.20	
1434	8/31/2004	7:25:18 PM		25.198	25.653	24.36	26.331	25.277		47.712	52.633	15.448	33.411	-1.209	-7.235		50.809	0.065	14.643	0.004		2131.93	35.5322	51.5	12.1	40.6	2.797	0.009	0.009	0.000	0.234	0.20	
1435	8/31/2004	7:26:18 PM		25.203	25.658	24.356	26.331	25.293		47.381	52.668	15.334	32.978	-1.148	-7.082		49.654	0.055	14.643	0.003		2132.93	35.5489	51.5	11.8	40.2	2.770	0.008	0.008	0.000	0.200	0.17	
1436	8/31/2004	7:27:18 PM		25.205	25.655	24.367	26.318	25.27		47.113	52.25	15.316	32.966	-1.212	-7.264		49.094	0.064	14.643	0.004		2133.93	35.5656	51.1	11.7	40.0	2.761	0.009	0.009	0.000	0.233	0.20	
1437	8/31/2004	7:28:18 PM		25.21	25.66	24.363	26.338	25.375		47.654	52.965	15.385	33.251	-1.218	-7.272		49.968	0.063	14.643	0.003		2134.93	35.5822	51.8	11.9	40.5	2.789	0.009	0.009	0.000	0.227	0.19	
1438	8/31/2004	7:29:18 PM		25.221	25.666	24.358	26.369	25.401		47.445	52.654	15.304	33.216	-1.195	-7.105		47.23	0.064	14.643	0.003		2135.93	35.5989	51.5	11.2	40.3	2.781	0.009	0.009	0.000	0.231	0.20	
1439	8/31/2004	7:30:18 PM		25.212	25.667	24.349	26.385	25.466		47.629	52.898	15.515	33.103	-1.212	-7.197		49.604	0.065	14.643	0.003		2136.93	35.6156	51.8	11.8	40.4	2.783	0.009	0.009	0.000	0.235	0.20	
1440	8/31/2004	7:31:18 PM		25.229	25.68	24.372	26.442	25.469		46.989	51.912	15.332	32.793	-1.212	-7.212		49.132	0.064	14.643	0.003		2137.93	35.6322	50.8	11.7	39.9	2.750	0.009	0.009	0.000	0.234	0.20	
1441	8/31/2004	7:32:18 PM		25.214	25.665	24.352	26.402	25.394		47.741	52.855	15.521	33.278	-1.212	-7.229		48.88	0.064	14.643	0.003		2138.93	35.6489	51.7	11.6	40.5	2.793	0.009	0.009	0.000	0.230	0.20	
1442	8/31/2004	7:33:18 PM		25.229	25.68	24.382	26.382	25.239		47.658	52.768	15.461	33.278	-1.206	-7.093		48.976	0.065	14.643	0.003		2139.93	35.6656	51.6	11.7	40.5	2.790	0.009	0.009	0.000	0.234	0.20	
1443	8/31/2004	7:34:18 PM		25.209	25.665	24.327	26.282	25.209		47.515	52.658	15.426	33.06	-1.186	-7.154		49.887	0.061	14.643	0.003		2140.93	35.6822	51.5	11.9	40.3	2.778	0.009	0.009	0.000	0.221	0.19	
1444	8/31/2004	7:35:18 PM		25.223	25.668	24.361	26.261	25.088		47.484	52.762	15.492	32.949	-1.145	-7.113		49.322	0.064	14.643	0.004		2141.93	35.6989	51.6	11.7	40.2	2.773	0.009	0.009	0.000	0.232	0.20	
1445	8/31/2004	7:36:18 PM		25.212	25.657	24.349	26.145	24.957		47.559	52.606	15.304	33.37	-1.172	-7.18		49.07	0.06	14.643	0.003		2142.93	35.7156	51.5	11.7	40.5	2.790	0.009	0.009	0.000	0.216	0.18	
1446	8/31/2004	7:37:18 PM		25.211	25.656	24.353	26.084	24.901		47.592	52.884	15.421	33.14	-1.215	-7.223		48.316	0.064	14.643	0.003		2143.93	35.7322	51.8	11.5	40.4	2.783	0.009	0.009	0.000	0.231	0.20	
1447	8/31/2004	7:38:18 PM		25.209	25.654	24.346	26.067	24.804		47.194	51.961	15.248	33.235	-1.215	-7.145		48.921	0.05	14.643	0.003		2144.93	35.7489	50.8	11.7	40.2	2.773	0.007	0.007	0.000	0.181	0.15	
1448	8/31/2004	7:39:18 PM		25.213	25.658	24.356	26.076	24.848		47.53	52.687	15.355	33.325	-1.148	-6.995		49.397	0.069	14.643	0.003		2145.93	35.7656	51.6	11.8	40.4	2.787	0.010	0.010	0.000	0.249	0.21	
1449	8/31/2004	7:40:18 PM		25.222	25.662	24.369	26.095	24.942		47.675	53.021	15.312	33.391	-1.215	-7.099		51.606	0.064	14.643	0.003		2146.93	35.7822	51.9	12.3	40.5	2.795	0.009	0.009	0.000	0.230	0.20	
1450	8/31/2004	7:41:18 PM		25.221	25.661	24.419	26.069	25.106		47.808	53.07	15.386	33.411	-1.215	-7.087		48.068	0.063	14.643	0.003		2147.93	35.7989	51.9	11.4	40.6	2.800	0.009	0.009	0.000	0.226	0.19	
1451	8/31/2004	7:42:18 PM		25.231	25.666	24.453	26.099	25.171		47.304	52.534	15.263	33.124	-1.212	-7.148		50.457	0.06	14.643	0.003		2148.93	35.8156	51.4	12.0	40.2	2.773	0.009	0.009	0.000	0.217	0.18	
1452	8/31/2004	7:43:18 PM		25.23	25.665	24.428	26.158	25.18		47.474	52.596	15.319	33.202	-1.212	-7.197		49.038	0.064	14.643	0.003		2149.93	35.8322	51.5	11.7	40.3	2.781	0.009	0.009	0.000	0.231	0.20	
1453	8/31/2004	7:44:18 PM		25.234	25.674	24.436	26.207	25.169		47.358	52.585	15.292	33.151	-1.206	-7.215		48.383	0.064	14.643	0.004		2150.93	35.8489	51.5	11.5	40.3	2.775	0.009	0.009	0.000	0.231	0.20	
1454	8/31/2004	7:45:18 PM		25.244	25.674	24.422	26.202	25.169		47.505	52.581	15.326	33.294	-1.212	-7.284		49.921	0.064	14.643	0.003		2151.93	35.8656	51.5	11.9	40.4	2.785	0.009	0.009	0.000	0.231	0.20	
1455	8/31/2004	7:46:18 PM		25.239	25.669	24.422	26.227	25.174		47.408	52.473	15.471	33.001	-1.212	-7.284		50.836	0.065	14.643	0.003		2152.93	35.8822	51.3	12.1	40.2	2.772	0.009	0.009	0.000	0.235	0.20	
1456	8/31/2004	7:47:18 PM		25.229	25.664	24.382	26.242	25.199		47.492	52.467	15.316	33.292	-1.215	-7.287		50.55	0.065	14.643	0.003		2153.93	35.8989	51.3	12.0	40.4	2.785	0.009	0.009	0.000	0.234	0.20	
1457	8/31/2004	7:48:18 PM		25.255	25.68	24.407	26.288	25.315		47.505	52.287	15.199	33.483	-1.209	-7.287		48.754	0.063	14.643	0.003		2154.93	35.9156	51.2	11.6	40.5	2.792	0.009	0.009	0.000	0.226	0.19	
1458	8/31/2004	7:49:18 PM		25.251	25.676	24.408	26.259	25.295		47.503	52.596	15.53	32.995	-1.212	-7.281		45.87	0.064	14.643	0.003		2155.93	35.9322	51.5	10.9	40.2	2.775	0.009	0.009	0.000	0.231	0.20	
1459	8/31/2004	7:50:18 PM		25.252	25.682	24.41	26.27	25.352		47.551	52.942	15.493	32.835	-1.212	-7.281		48.596	0.064	14.643	0.003		2156.93	35.9489	51.8	11.6	40.2	2.771	0.009	0.009	0.000	0.232	0.20	
1460	8/31/2004	7:51:18 PM		25.258	25.683	24.405	26.296	25.317		47.642	52.878	15.415	33.288	-1.209	-7.125		53.003	0.062	14.643	0.003		2157.93	35.9656	51.8	12.6	40.5	2.790	0.009	0.009	0.000	0.223	0.19	
1461	8/31/2004	7:52:18 PM		25.249	25.674	24.376	26.312	25.314		47.717	53.016	15.405	33.341	-1.218	-7.261		50.112	0.065	14.643	0.003		2158.93	35.9822	51.9	11.9	40.5	2.794	0.009	0.009	0.000	0.234	0.20	
1462	8/31/2004	7:53:18 PM		25.27	25.696	24.418	26.368	25.345		47.391	52.471	15.365	33.233	-1.209	-7.252		48.748	0.064	14.643	0.004		2159.93	35.9989	51.3	11.6	40.3	2.779	0.009	0.009	0.000	0.231	0.20	
1463	8/31/2004	7:54:18 PM		25.262	25.697	24.404	26.35	25.391		47.737	52.938	15.453	33.36	-1.212	-7.261		49.301	0.064	14.643	0.003		2160.93	36.0156	51.8	11.7	40.5	2.796	0.009	0.009	0.000	0.230	0.20	
1464	8/31/2004	7:55:18 PM		25.257	25.693	24.41	26.36	25.332		47.387	52.247	15.397	33.085	-1.212	-7.255		48.563	0.066	14.643	0.003		2161.93	36.0322	51.1	11.6	40.2	2.774	0.009	0.010	0.000	0.239	0.20	
1465	8/31/2004	7:56:18 PM		25.272	25.703	24.43	26.375	25.232		47.642	52.681	15.506	33.134	-1.148	-7.076		51.481	0.061	14.643	0.003		2162.93	36.0489	51.6	12.3	40.4	2.785	0.009	0.009	0.000	0.220	0.19	
1466	8/31/2004	7:57:18 PM		25.262	25.688	24.395	26.31	25.112		47.387	52.697	15.218	33.214	-1.145	-7.116		49.213	0.068	14.643	0.003		2163.93	36.0656	51.6	11.7	40.3	2.779	0.010	0.010	0.000	0.246	0.21	
1467	8/31/2004	7:58:18 PM		25.257	25.692	24.404	26.24	25.047		47.376	52.461	15.353	33.108	-1.206	-7.235		48.396	0.063	14.643	0.004		2164.93	36.0822	51.3	11.5	40.2	2.775	0.009	0.009	0.000	0.228	0.19	
1468	8/31/2004	7:59:18 PM		25.25	25.686	24.388	26.128	24.945		47.356	52.386	15.227	33.229	-1.215	-7.235		51.623	0.064	14.643	0.003		2165.93	36.0989	51.3	12.3	40.3	2.778	0.009	0.009	0.000	0.231	0.20	
1469	8/31/2004	8:00:18 PM		25.255	25.686	24.393	26.103	24.885		47.571	52.521	15.366	33.233	-1.212	-7.235		47.618	0.063	14.643	0.003		2166.93	36.1156	51.4	11.3	40.4	2.786	0.009	0.009	0.000	0.227	0.19	
1470	8/31/2004	8:01:18 PM		25.244	25.669	24.382	26.022	24.894		48.065	53.508	15.544	33.397	-1.215	-7.226		50.905	0.064	14.643	0.003		2167.93	36.1322	52.4	12.1	40.7	2.808	0.009	0.009	0.000	0.229	0.19	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1471	8/31/2004	8:02:18 PM		25.237	25.662	24.374	26.03	24.927		47.403	52.471	15.308	33.268	-1.198	-7.232		48.337	0.063	14.643	0.003		2168.93	36.1489	51.3	11.5	40.3	2.781	0.009	0.009	0.000	0.228	0.19	
1472	8/31/2004	8:03:18 PM		25.23	25.665	24.392	26.028	24.925		47.582	52.625	15.449	33.311	-1.212	-7.22		48.754	0.064	14.643	0.003		2169.93	36.1656	51.5	11.6	40.4	2.789	0.009	0.009	0.000	0.230	0.20	
1473	8/31/2004	8:04:18 PM		25.244	25.669	24.417	26.042	25.029		47.596	52.652	15.364	33.284	-1.143	-7.073		51.942	0.062	14.643	0.004		2170.93	36.1822	51.5	12.4	40.4	2.788	0.009	0.009	0.000	0.223	0.19	
1474	8/31/2004	8:05:18 PM		25.249	25.674	24.422	26.062	25.054		47.561	52.82	15.444	33.058	-1.206	-7.223		50.74	0.062	14.643	0.003		2171.93	36.1989	51.7	12.1	40.3	2.779	0.009	0.009	0.000	0.224	0.19	
1475	8/31/2004	8:06:18 PM		25.237	25.662	24.425	26.07	25.117		47.455	52.627	15.382	33.149	-1.195	-7.223		50.336	0.064	14.643	0.003		2172.93	36.2156	51.5	12.0	40.3	2.779	0.009	0.009	0.000	0.231	0.20	
1476	8/31/2004	8:07:18 PM		25.241	25.671	24.489	26.139	25.106		47.223	52.355	15.217	33.181	-1.209	-7.226		49.614	0.062	14.643	0.003		2173.93	36.2322	51.2	11.8	40.2	2.772	0.009	0.009	0.000	0.224	0.19	
1477	8/31/2004	8:08:18 PM		25.25	25.665	24.482	26.117	25.154		47.632	52.645	15.475	33.284	-1.183	-7.217		50.409	0.063	14.643	0.003		2174.93	36.2489	51.5	12.0	40.5	2.789	0.009	0.009	0.000	0.226	0.19	
1478	8/31/2004	8:09:18 PM		25.259	25.679	24.482	26.152	25.139		47.414	52.691	15.378	33.116	-1.145	-7.082		50.044	0.064	14.643	0.004		2175.93	36.2656	51.6	11.9	40.3	2.776	0.009	0.009	0.000	0.231	0.20	
1479	8/31/2004	8:10:18 PM		25.254	25.674	24.457	26.172	25.164		47.159	52.502	15.386	32.718	-1.189	-7.2		49.143	0.064	14.643	0.003		2176.93	36.2822	51.4	11.7	39.9	2.754	0.009	0.009	0.000	0.233	0.20	
1480	8/31/2004	8:11:18 PM		25.265	25.68	24.453	26.218	25.14		47.534	52.805	15.41	33.118	-1.148	-7.203		48.01	0.063	14.643	0.003		2177.93	36.2989	51.7	11.4	40.3	2.780	0.009	0.009	0.000	0.227	0.19	
1481	8/31/2004	8:12:18 PM		25.265	25.68	24.448	26.208	25.16		47.451	52.722	15.304	33.222	-1.148	-7.047		49.51	0.063	14.643	0.003		2178.93	36.3156	51.6	11.8	40.3	2.781	0.009	0.009	0.000	0.227	0.19	
1482	8/31/2004	8:13:18 PM		25.275	25.685	24.473	26.263	25.18		47.656	52.871	15.36	33.378	-1.143	-7.183		49.028	0.067	14.643	0.003		2179.93	36.3322	51.7	11.7	40.5	2.794	0.010	0.010	0.000	0.240	0.20	
1483	8/31/2004	8:14:18 PM		25.272	25.682	24.439	26.235	25.226		47.619	52.536	15.559	33.185	-1.151	-7.108		52.077	0.064	14.643	0.003		2180.93	36.3489	51.4	12.4	40.4	2.786	0.009	0.009	0.000	0.230	0.20	
1484	8/31/2004	8:15:18 PM		25.265	25.675	24.433	26.278	25.275		47.509	52.511	15.329	33.28	-1.093	-7.128		48.777	0.062	14.643	0.003		2181.93	36.3656	51.4	11.6	40.4	2.785	0.009	0.009	0.000	0.223	0.19	
1485	8/31/2004	8:16:18 PM		25.27	25.685	24.453	26.298	25.26		47.569	52.907	15.467	33.118	-1.088	-7.119		49.847	0.064	14.643	0.003		2182.93	36.3822	51.8	11.9	40.3	2.782	0.009	0.009	0.000	0.231	0.20	
1486	8/31/2004	8:17:18 PM		25.277	25.692	24.464	26.32	25.291		47.924	53.356	15.442	33.458	-1.143	-7.044		49.468	0.055	14.643	0.004		2183.93	36.3989	52.2	11.8	40.7	2.806	0.008	0.008	0.000	0.196	0.17	
1487	8/31/2004	8:18:18 PM		25.267	25.687	24.434	26.265	25.361		47.472	52.813	15.537	33.05	-1.09	-7.056		49.677	0.066	14.643	0.003		2184.93	36.4156	51.7	11.8	40.3	2.776	0.009	0.010	0.000	0.238	0.20	
1488	8/31/2004	8:19:18 PM		25.278	25.693	24.436	26.271	25.363		47.634	52.666	15.444	33.241	-1.09	-7.027		51.37	0.065	14.643	0.003		2185.93	36.4322	51.5	12.2	40.4	2.788	0.009	0.009	0.000	0.234	0.20	
1489	8/31/2004	8:20:18 PM		25.274	25.699	24.437	26.312	25.349		47.613	52.836	15.426	33.282	-1.145	-7.151		51.093	0.067	14.643	0.003		2186.93	36.4489	51.7	12.2	40.4	2.789	0.010	0.010	0.000	0.241	0.21	
1490	8/31/2004	8:21:18 PM		25.264	25.694	24.432	26.297	25.239		47.426	52.567	15.382	33.087	-1.215	-7.217		48.352	0.067	14.643	0.003		2187.93	36.4656	51.4	11.5	40.3	2.776	0.010	0.010	0.000	0.242	0.21	
1491	8/31/2004	8:22:18 PM		25.265	25.69	24.438	26.243	25.155		47.268	52.44	15.291	33.155	-0.87	-6.428		48.798	0.049	14.643	0.003		2188.93	36.4822	51.3	11.6	40.2	2.772	0.007	0.007	0.000	0.177	0.15	
1492	8/31/2004	8:23:18 PM		25.251	25.681	24.423	26.164	25.046		47.588	52.867	15.484	33.128	-1.212	-7.125		49.535	0.061	14.643	0.003		2189.93	36.4989	51.7	11.8	40.4	2.783	0.009	0.009	0.000	0.220	0.19	
1493	8/31/2004	8:24:18 PM		25.251	25.676	24.403	26.104	24.901		47.385	52.722	15.38	32.96	-1.195	-7.111		48.181	0.063	14.643	0.003		2190.93	36.5156	51.6	11.5	40.2	2.770	0.009	0.009	0.000	0.228	0.19	
1494	8/31/2004	8:25:18 PM		25.231	25.666	24.388	26.018	24.906		47.648	52.892	15.452	33.151	-1.215	-7.186		49.021	0.056	14.643	0.003		2191.93	36.5322	51.8	11.7	40.4	2.785	0.008	0.008	0.000	0.202	0.17	
1495	8/31/2004	8:26:18 PM		25.24	25.67	24.407	25.968	24.84		47.351	52.339	15.47	32.982	-1.154	-7.145		50.442	0.063	14.643	0.003		2192.93	36.5489	51.2	12.0	40.2	2.769	0.009	0.009	0.000	0.228	0.19	
1496	8/31/2004	8:27:18 PM		25.239	25.664	24.412	25.942	24.839		47.764	52.948	15.558	33.198	-1.148	-7.154		49.799	0.063	14.643	0.003		2193.93	36.5656	51.8	11.9	40.5	2.791	0.009	0.009	0.000	0.227	0.19	
1497	8/31/2004	8:28:18 PM		25.238	25.663	24.426	25.921	24.823		47.773	53.058	15.481	33.337	-1.206	-7.194		49.833	0.064	14.643	0.004		2194.93	36.5822	51.9	11.9	40.6	2.796	0.009	0.009	0.000	0.230	0.20	
1498	8/31/2004	8:29:18 PM		25.223	25.653	24.395	25.931	24.843		47.835	52.691	15.501	33.499	-1.209	-7.238		52.572	0.066	14.643	0.003		2195.93	36.5989	51.6	12.5	40.7	2.804	0.009	0.010	0.000	0.236	0.20	
1499	8/31/2004	8:30:18 PM		25.233	25.658	24.415	25.956	24.893		47.202	52.19	15.336	32.988	-1.145	-6.96		48.848	0.065	14.643	0.004		2196.93	36.6156	51.1	11.6	40.1	2.764	0.009	0.009	0.000	0.236	0.20	
1500	8/31/2004	8:31:18 PM		25.243	25.668	24.486	25.981	24.983		47.459	52.552	15.346	33.227	-1.183	-7.125		50.117	0.065	14.643	0.004		2197.93	36.6322	51.4	11.9	40.3	2.782	0.009	0.009	0.000	0.234	0.20	
1501	8/31/2004	8:32:18 PM		25.237	25.657	24.474	25.994	24.992		47.354	52.575	15.519	32.82	-1.212	-7.171		50.34	0.061	14.643	0.003		2198.93	36.6489	51.4	12.0	40.1	2.764	0.009	0.009	0.000	0.221	0.19	
1502	8/31/2004	8:33:18 PM		25.236	25.661	24.454	26.019	25.006		47.492	52.776	15.409	33.056	-1.166	-7.168		48.748	0.062	14.643	0.003		2199.93	36.6656	51.7	11.6	40.3	2.777	0.009	0.009	0.000	0.224	0.19	
1503	8/31/2004	8:34:18 PM		25.25	25.67	24.468	26.063	25		47.383	52.714	15.354	33.056	-1.148	-7.171		50.477	0.064	14.643	0.004		2200.93	36.6822	51.6	12.0	40.2	2.773	0.009	0.009	0.000	0.231	0.20	
1504	8/31/2004	8:35:18 PM		25.245	25.65	24.447	26.062	25.055		47.378	52.397	15.23	33.337	-1.169	-7.186		49.435	0.064	14.643	0.003		2201.93	36.6989	51.3	11.8	40.4	2.783	0.009	0.009	0.000	0.231	0.20	
1505	8/31/2004	8:36:18 PM		25.25	25.655	24.457	26.082	25.074		47.32	52.48	15.397	32.974	-1.16	-7.186		50.302	0.063	14.643	0.003		2202.93	36.7156	51.4	12.0	40.1	2.768	0.009	0.009	0.000	0.228	0.19	
1506	8/31/2004	8:37:18 PM		25.25	25.65	24.443	26.098	25.125		47.395	52.614	15.339	33.105	-1.148	-7.183		51.155	0.063	14.643	0.003		2203.93	36.7322	51.5	12.2	40.3	2.775	0.009	0.009	0.000	0.228	0.19	
1507	8/31/2004	8:38:18 PM		25.245	25.65	24.433	26.123	25.12		47.632	53.048	15.412	33.202	-1.143	-7.18		49.637	0.064	14.643	0.004		2204.93	36.7489	51.9	11.8	40.4	2.787	0.009	0.009	0.000	0.230	0.20	
1508	8/31/2004	8:39:18 PM		25.257	25.662	24.444	26.13	25.112		47.304	52.527	15.41	32.839	-1.148	-7.183		49.958	0.064	14.643	0.003		2205.93	36.7656	51.4	11.9	40.1	2.763	0.009	0.009	0.000	0.232	0.20	
1509	8/31/2004	8:40:18 PM		25.257	25.657	24.449	26.16	25.151		47.733	52.832	15.518	33.27	-1.145	-7.186		49.384	0.062	14.643	0.003		2206.93	36.7822	51.7	11.8	40.5	2.792	0.009	0.009	0.000	0.223	0.19	
1510	8/31/2004	8:41:18 PM		25.241	25.646	24.449	26.189	25.186		47.629	53.016	15.19	33.352	-1.18	-7.171		48.212	0.063	14.643	0.003		2207.93	36.7989	51.9	11.5	40.5	2.792	0.009	0.009	0.000	0.226	0.19	
1511	8/31/2004	8:42:18 PM		25.248	25.648	24.435	26.201	25.217		47.391	52.56	15.175	33.415	-1.09	-6.978		48.594	0.06	14.643	0.004		2208.93	36.8156	51.4	11.6	40.4	2.786	0.009	0.009	0.000	0.216	0.18	
1512	8/31/2004	8:43:18 PM		25.272	25.672	24.46	26.235	25.257		47.636	52.39	15.187	33.627	-1.145	-7.163		49.516	0.063	14.643	0.004		2209.93	36.8322	51.3	11.8	40.6	2.801	0.009	0.009	0.000	0.225	0.19	
1513	8/31/2004	8:44:18 PM		25.262	25.662	24.434	26.18	25.292		47.808	52.799	15.14	33.701	-1.151	-7.168		49.95	0.063	14.643	0.003		2210.93	36.8489	51.7	11.9	40.8	2.810	0.009	0.009	0.000	0.225	0.19	
1514	8/31/2004	8:45:18 PM		25.268	25.668	24.445	26.226	25.277		47.779	53.039	15.312	33.504	-1.148	-7.171		48.377	0.063	14.643	0.003		2211.93	36.8656	51.9	11.5	40.6	2.802	0.009	0.009	0.000	0.225	0.19	
1515	8/31/2004	8:46:18 PM		25.268	25.668	24.45	26.236	25.257		48.14	53.39	15.304	33.828	-1.148	-7.142		50.402	0.062	14.643	0.003		2212.93	36.8822	52.3	12.0	41.0	2.826	0.009	0.009	0.000	0.220	0.19	
1516	8/31/2004	8:47:18 PM		25.268	25.668	24.441	26.256	25.263		47.602	52.759	15.165	33.456	-1.145	-7.163		49.868	0.064	14.643	0.003		2213.93	36.8989	51.6	11.9	40.5	2.794	0.009	0.009	0.000	0.230	0.20	
1517	8/31/2004	8:48:18 PM		25.27	25.675	24.442	26.253	25.269		47.656	52.703	15.181	33.627	-1.148	-7.157		49.472	0.064	14.643	0.003		2214.93	36.9156	51.6	11.8	40.6	2.802	0.009	0.009	0.000	0.229	0.19	
1518	8/31/2004	8:49:18 PM		25.27	25.67	24.482	26.278	25.354		47.758	53.103	15.204	33.53	-1.09	-7.079		49.875	0.062	14.643	0.003		2215.93	36.9322	52.0	11.9	40.6	2.802	0.009	0.009	0.000	0.222	0.19	
1519	8/31/2004	8:50:18 PM		25.271	25.676	24.504	26.274	25.361		47.661	52.963	15.198	33.44	-1.108	-7.099		49.399	0.063	14.643	0.003		2216.93	36.9489	51.8	11.8	40.6	2.796	0.009	0.009	0.000	0.226	0.19	
1520	8/31/2004	8:51:18 PM		25.277	25.682	24.489	26.315	25.441		47.53	52.627	15.178	33.43	-1.09	-7.119		50.248	0.064	14.643	0.003		2217.93	36.9656	51.5	12.0	40.5	2.791	0.009	0.009	0.000	0.230	0.20	
1521	8/31/2004	8:52:18 PM		25.262	25.662	24.439	26.27	25.391		47.617	52.627	15.304	33.397	-1.093	-7.119		49.309	0.063	14.643	0.003		2218.93	36.9822	51.5	11.7	40.5	2.793	0.009	0.009	0.000	0.226	0.19	
1522	8/31/2004	8:53:18 PM		25.283	25.683	24.471	26.271	25.283		47.497	52.878	15.18	33.208	-1.088	-7.116		48.986	0.062	14.643	0.003		2219.93	36.9989	51.8	11.7	40.4	2.782	0.009	0.009	0.000	0.223	0.19	
1523	8/31/2004	8:54:18 PM		25.278	25.678	24.456	26.181	25.148		47.511	52.803	15.268	33.259	-1.038	-7.021		47.455	0.057	14.643	0.004		2220.93	37.0156	51.7	11.3	40.4	2.784	0.008	0.008	0.000	0.205	0.17	
1524	8/31/2004	8:55:18 PM		25.259	25.664	24.416	26.056	25.049		47.648	53.103	15.21	33.506	-1.096	-7.122		48.642	0.063	14.643	0.003		2221.93	37.0322	52.0	11.6	40.6	2.798	0.009	0.009	0.000	0.226	0.19	
1525	8/31/2004	8:56:18 PM		25.283	25.678	24.446	26.091	24.943		47.75	53.12	15.24	33.51	-1.09	-7.119		48.181	0.064	14.643	0.004		2222.93	37.0489	52.0	11.5	40.6	2.801	0.009	0.009	0.000	0.229	0.19	
1526	8/31/2004	8:57:18 PM		25.267	25.662	24.425	26.04	24.862		47.534	52.732	15.203	33.465	-1.125	-7.099		48.871	0.065	14.643	0.003		2223.93	37.0656	51.6	11.6	40.5	2.792	0.009	0.009	0.000	0.234	0.20	
1527	8/31/2004	8:58:18 PM		25.267	25.667	24.43	25.98	24.917		47.853	52.913	15.252	33.705	-1.09	-7.041		49.706	0.064	14.643	0.003		2224.93	37.0822	51.8	11.8	40.8	2.812	0.009	0.009	0.000	0.228	0.19	
1528	8/31/2004	8:59:18 PM		25.257	25.662	24.424	25.914	24.882		47.826	52.894	15.245	33.635	-1.09	-7.119		50.893	0.063	14.643	0.003		2225.93	37.0989	51.8	12.1	40.7	2.808	0.009	0.009	0.000	0.225	0.19	
1529	8/31/2004	9:00:18 PM		25.25	25.645	24.412	25.912	24.95		47.801	53.197	15.108	33.692	-1.027	-7.044		48.214	0.06	14.643	0.004		2226.93	37.1156	52.1	11.5	40.7	2.809	0.009	0.009	0.000	0.214	0.18	
1530	8/31/2004	9:01:18 PM		25.254	25.659	24.406	25.927	24.944		47.777	53.159	15.344	33.573	-1.088	-7.102		49.051	0.059	14.643	0.003		2227.93	37.1322	52.0	11.7	40.7	2.804	0.008	0.009	0.000	0.211	0.18	
1531	8/31/2004	9:02:18 PM		25.247	25.652	24.419	25.945	24.947		48.003	53.093	15.276	33.785	-1.035	-7.056		48.859	0.063	14.643	0.003		2228.93	37.1489	52.0	11.6	40.9	2.819	0.009	0.009	0.000	0.224	0.19	
1532	8/31/2004	9:03:18 PM		25.241	25.651	24.453	25.963	24.975		47.381	52.675	15.177	33.245	-1.079	-7.076		48.661	0.061	14.643	0.003		2229.93	37.1656	51.5	11.6	40.3	2.779	0.009	0.009	0.000	0.220	0.19	
1533	8/31/2004	9:04:18 PM		25.235	25.64	24.442	25.968	24.945		47.6	52.65	15.318	33.3	-1.148	-7.085		49.651	0.068	14.643	0.003		2230.93	37.1822	51.5	11.8	40.5	2.789	0.010	0.010	0.000	0.244	0.21	
1534	8/31/2004	9:05:18 PM		25.246	25.651	24.428	25.993	25		47.347	52.903	15.216	33.05	-0.925	-6.712		49.95	0.066	14.643	0.003		2231.93	37.1989	51.8	11.9	40.2	2.772	0.009	0.010	0.000	0.239	0.20	
1535	8/31/2004	9:06:18 PM		25.231	25.646	24.414	26.009	24.981		47.829	53.058	15.176	33.768	-1.09	-7.03		49.482	0.063	14.643	0.003		2232.93	37.2156	51.9	11.8	40.8	2.813	0.009	0.009	0.000	0.225	0.19	
1536	8/31/2004	9:07:18 PM		25.227	25.632	24.414	26.015	24.962		47.891	53.141	15.335	33.559	-1.09	-7.006		49.768	0.063	14.643	0.003		2233.93	37.2322	52.0	11.9	40.7	2.808	0.009	0.009	0.000	0.225	0.19	
1537	8/31/2004	9:08:18 PM		25.226	25.626	24.419	26.044	25.021		47.393	52.581	15.247	33.323	-1.09	-7.012		50.075	0.062	14.643	0.003		2234.93	37.2489	51.5	11.9	40.4	2.783	0.009	0.009	0.000	0.224	0.19	
1538	8/31/2004	9:09:18 PM		25.232	25.637	24.424	26.065	25.002		47.536	52.923	15.164	33.401	-1.021	-7.006		48.529	0.062	14.643	0.003		2235.93	37.2656	51.8	11.6	40.5	2.790	0.009	0.009	0.000	0.223	0.19	
1539	8/31/2004	9:10:18 PM		25.231	25.636	24.404	26.069	25.041		47.673	52.633	15.199	33.694	-1.064	-7.07		48.095	0.06	14.643	0.003		2236.93	37.2822	51.5	11.5	40.7	2.805	0.009	0.009	0.000	0.215	0.18	
1540	8/31/2004	9:11:18 PM		25.236	25.636	24.413	26.088	25.12		47.642	52.865	15.199	33.452	-1.082	-7.064		49.595	0.061	14.643	0.003		2237.93	37.2989	51.7	11.8	40.5	2.796	0.009	0.009	0.000	0.219	0.19	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1541	8/31/2004	9:11:26 PM		25.246	25.641	24.433	26.118	25.13		47.439	52.726	15.187	33.278	-1.067	-7.056		46.116	0.062	14.643	0.003		2238.07	37.3011	51.6	11.0	40.4	2.783	0.009	0.009	0.000	0.223	0.19	
1542	8/31/2004	9:12:26 PM		25.224	25.629	24.407	26.082	25.119		47.824	52.888	15.264	33.809	-1.093	-7.087		49.518	0.065	14.643	0.003		2239.07	37.3178	51.8	11.8	40.8	2.814	0.009	0.009	0.000	0.232	0.20	
1543	8/31/2004	9:13:27 PM		25.229	25.634	24.426	26.106	25.133		47.884	52.994	15.343	33.639	-1.09	-7.07		47.876	0.059	14.643	0.003		2240.08	37.3347	51.9	11.4	40.8	2.810	0.008	0.009	0.000	0.211	0.18	
1544	8/31/2004	9:14:27 PM		25.23	25.635	24.427	26.123	25.115		47.685	52.942	15.249	33.483	-1.09	-7.061		48.435	0.066	14.643	0.003		2241.08	37.3514	51.8	11.5	40.6	2.798	0.009	0.010	0.000	0.237	0.20	
1545	8/31/2004	9:15:27 PM		25.239	25.649	24.432	26.142	25.119		47.569	52.645	15.205	33.495	-1.07	-7.058		50.098	0.063	14.643	0.003		2242.08	37.3681	51.5	11.9	40.5	2.795	0.009	0.009	0.000	0.226	0.19	
1546	8/31/2004	9:16:27 PM		25.241	25.641	24.423	26.138	25.115		47.764	52.662	15.281	33.696	-1.021	-7.061		48.323	0.062	14.643	0.003		2243.08	37.3847	51.5	11.5	40.7	2.808	0.009	0.009	0.000	0.222	0.19	
1547	8/31/2004	9:17:27 PM		25.23	25.63	24.422	26.123	25.195		47.617	52.911	15.186	33.436	-1.09	-7.053		49.987	0.063	14.643	0.003		2244.08	37.4014	51.8	11.9	40.5	2.794	0.009	0.009	0.000	0.226	0.19	
1548	8/31/2004	9:18:27 PM		25.24	25.635	24.442	26.138	25.215		47.638	52.832	15.243	33.627	-0.983	-6.905		49.184	0.065	14.643	0.004		2245.08	37.4181	51.7	11.7	40.6	2.801	0.009	0.009	0.000	0.233	0.20	
1549	8/31/2004	9:19:27 PM		25.236	25.636	24.428	26.128	25.26		47.673	52.915	15.4	33.309	-1.009	-7.032		48.212	0.06	14.643	0.003		2246.08	37.4347	51.8	11.5	40.5	2.792	0.009	0.009	0.000	0.216	0.18	
1550	8/31/2004	9:20:27 PM		25.236	25.636	24.408	26.148	25.24		47.343	52.5	15.157	33.35	-1.038	-7.061		49.307	0.061	14.643	0.003		2247.08	37.4514	51.4	11.7	40.3	2.782	0.009	0.009	0.000	0.220	0.19	
1551	8/31/2004	9:21:27 PM		25.231	25.631	24.433	26.153	25.24		47.739	53.058	15.364	33.335	-1.085	-7.058		48.125	0.062	14.643	0.003		2248.08	37.4681	51.9	11.5	40.5	2.795	0.009	0.009	0.000	0.222	0.19	
1552	8/31/2004	9:22:27 PM		25.24	25.645	24.452	26.168	25.245		47.814	53.139	15.352	33.452	-1.015	-7.064		50.69	0.062	14.643	0.004		2249.08	37.4847	52.0	12.1	40.6	2.802	0.009	0.009	0.000	0.222	0.19	
1553	8/31/2004	9:23:27 PM		25.245	25.64	24.457	26.203	25.295		47.66	52.623	15.182	33.625	-1.079	-7.038		48.421	0.063	14.643	0.004		2250.08	37.5014	51.5	11.5	40.6	2.802	0.009	0.009	0.000	0.225	0.19	
1554	8/31/2004	9:24:27 PM		25.241	25.646	24.438	26.204	25.3		47.781	53.267	15.318	33.514	-0.989	-6.94		49.666	0.058	14.643	0.003		2251.08	37.5181	52.1	11.8	40.6	2.803	0.008	0.008	0.000	0.208	0.18	
1555	8/31/2004	9:25:27 PM		25.241	25.646	24.433	26.189	25.335		47.731	52.82	15.278	33.497	-1.044	-7.056		49.507	0.062	14.643	0.003		2252.08	37.5347	51.7	11.8	40.6	2.800	0.009	0.009	0.000	0.222	0.19	
1556	8/31/2004	9:26:27 PM		25.253	25.653	24.46	26.191	25.307		47.484	52.944	15.349	33.204	-1.064	-7.073		49.41	0.064	14.643	0.004		2253.08	37.5514	51.8	11.8	40.3	2.782	0.009	0.009	0.000	0.231	0.20	
1557	8/31/2004	9:27:27 PM		25.248	25.648	24.51	26.176	25.357		47.851	53.157	15.395	33.534	-1.027	-6.983		49.353	0.062	14.643	0.003		2254.08	37.5681	52.0	11.8	40.7	2.806	0.009	0.009	0.000	0.221	0.19	
1558	8/31/2004	9:28:27 PM		25.258	25.658	24.515	26.196	25.357		47.965	53.232	15.324	33.612	-1.03	-7.035		48.819	0.063	14.643	0.003		2255.08	37.5847	52.1	11.6	40.8	2.812	0.009	0.009	0.000	0.224	0.19	
1559	8/31/2004	9:29:27 PM		25.248	25.638	24.48	26.181	25.327		47.557	53.035	15.264	33.288	-1.093	-7.09		49.005	0.062	14.643	0.003		2256.08	37.6014	51.9	11.7	40.4	2.787	0.009	0.009	0.000	0.223	0.19	
1560	8/31/2004	9:30:27 PM		25.268	25.668	24.515	26.211	25.357		47.955	53.24	15.409	33.579	-1.09	-7.082		47.393	0.063	14.643	0.003		2257.08	37.6181	52.1	11.3	40.8	2.811	0.009	0.009	0.000	0.224	0.19	
1561	8/31/2004	9:31:27 PM		25.263	25.653	24.49	26.176	25.337		48.169	53.446	15.407	33.746	-1.09	-7.085		49.163	0.062	14.643	0.003		2258.08	37.6347	52.3	11.7	41.0	2.824	0.009	0.009	0.000	0.220	0.19	
1562	8/31/2004	9:32:27 PM		25.263	25.663	24.501	26.176	25.293		48.138	53.547	15.535	33.397	-1.085	-7.079		50.302	0.063	14.643	0.004		2259.08	37.6514	52.4	12.0	40.8	2.811	0.009	0.009	0.000	0.224	0.19	
1563	8/31/2004	9:33:27 PM		25.249	25.644	24.441	26.167	25.289		47.513	52.569	15.245	33.403	-1.056	-7.079		49.789	0.063	14.643	0.003		2260.08	37.6681	51.4	11.9	40.5	2.789	0.009	0.009	0.000	0.226	0.19	
1564	8/31/2004	9:34:27 PM		25.248	25.643	24.436	26.151	25.323		47.797	53.24	15.371	33.335	-1.093	-7.058		49.647	0.064	14.643	0.003		2261.08	37.6847	52.1	11.8	40.6	2.797	0.009	0.009	0.000	0.229	0.20	
1565	8/31/2004	9:35:27 PM		25.264	25.654	24.467	26.167	25.324		47.302	52.59	15.049	33.358	-0.928	-6.712		50.44	0.057	14.643	0.003		2262.08	37.7014	51.5	12.0	40.3	2.781	0.008	0.008	0.000	0.205	0.17	
1566	8/31/2004	9:36:27 PM		25.275	25.67	24.483	26.173	25.17		47.93	53.091	15.237	33.674	-1.004	-6.949		48.859	0.062	14.643	0.003		2263.08	37.7181	52.0	11.6	40.8	2.813	0.009	0.009	0.000	0.221	0.19	
1567	8/31/2004	9:37:27 PM		25.244	25.644	24.436	26.092	25.159		47.831	53.311	15.196	33.588	-0.992	-6.899		49.147	0.062	14.643	0.003		2264.08	37.7347	52.2	11.7	40.7	2.807	0.009	0.009	0.000	0.222	0.19	
1568	8/31/2004	9:38:27 PM		25.254	25.649	24.431	26.022	24.999		47.801	52.795	15.465	33.44	-0.969	-6.926		48.905	0.061	14.643	0.003		2265.08	37.7514	51.7	11.6	40.6	2.801	0.009	0.009	0.000	0.218	0.19	
1569	8/31/2004	9:39:27 PM		25.253	25.648	24.451	25.981	24.953		47.787	53.13	15.324	33.491	-1.018	-6.989		47.831	0.06	14.643	0.003		2266.08	37.7681	52.0	11.4	40.6	2.802	0.009	0.009	0.000	0.215	0.18	
1570	8/31/2004	9:40:27 PM		25.242	25.632	24.439	25.92	24.847		47.808	53.122	15.339	33.473	-1.009	-7.038		49.261	0.062	14.643	0.003		2267.08	37.7847	52.0	11.7	40.6	2.802	0.009	0.009	0.000	0.222	0.19	
1571	8/31/2004	9:41:27 PM		25.251	25.641	24.463	25.898	24.81		47.951	53.329	15.354	33.674	-1.018	-7.044		50.254	0.063	14.643	0.003		2268.08	37.8014	52.2	12.0	40.8	2.814	0.009	0.009	0.000	0.224	0.19	
1572	8/31/2004	9:42:27 PM		25.241	25.631	24.433	25.863	24.87		47.885	52.929	15.359	33.699	-1.093	-6.983		48.634	0.066	14.643	0.003		2269.08	37.8181	51.8	11.6	40.8	2.812	0.009	0.010	0.000	0.235	0.20	
1573	8/31/2004	9:43:27 PM		25.243	25.628	24.486	25.891	24.998		47.768	53.242	15.293	33.432	-0.925	-6.781		48.583	0.064	14.643	0.003		2270.08	37.8347	52.1	11.6	40.6	2.799	0.009	0.009	0.000	0.229	0.19	
1574	8/31/2004	9:44:27 PM		25.237	25.617	24.499	25.889	24.981		47.65	52.975	15.278	33.421	-1.085	-7.027		49.708	0.062	14.643	0.003		2271.08	37.8514	51.8	11.8	40.5	2.795	0.009	0.009	0.000	0.222	0.19	
1575	8/31/2004	9:45:27 PM		25.241	25.626	24.519	25.934	24.991		47.551	52.693	15.177	33.53	-1.067	-7.027		49.366	0.062	14.643	0.003		2272.08	37.8681	51.6	11.8	40.5	2.795	0.009	0.009	0.000	0.222	0.19	
1576	8/31/2004	9:46:27 PM		25.26	25.63	24.513	25.953	25.03		48.067	53.354	15.325	33.777	-1.088	-7.038		50.738	0.062	14.643	0.003		2273.08	37.8847	52.2	12.1	40.9	2.821	0.009	0.009	0.000	0.220	0.19	
1577	8/31/2004	9:47:27 PM		25.255	25.63	24.487	25.977	25.029		47.553	52.973	15.273	33.307	-1.07	-7.093		49.088	0.062	14.643	0.003		2274.08	37.9014	51.8	11.7	40.4	2.788	0.009	0.009	0.000	0.223	0.19	
1578	8/31/2004	9:48:27 PM		25.259	25.629	24.492	25.992	25.019		47.349	52.449	15.195	33.186	-1.05	-7.085		48.448	0.063	14.643	0.003		2275.08	37.9181	51.3	11.5	40.3	2.776	0.009	0.009	0.000	0.227	0.19	
1579	8/31/2004	9:49:27 PM		25.254	25.624	24.497	26.022	25.054		47.779	53.288	15.374	33.362	-1.088	-7.087		48.421	0.063	14.643	0.003		2276.08	37.9347	52.2	11.5	40.6	2.797	0.009	0.009	0.000	0.225	0.19	
1580	8/31/2004	9:50:27 PM		25.254	25.619	24.492	26.017	25.044		47.302	52.66	15.154	33.274	-0.992	-6.972		50.694	0.06	14.643	0.003		2277.08	37.9514	51.5	12.1	40.3	2.778	0.009	0.009	0.000	0.216	0.18	
1581	8/31/2004	9:51:27 PM		25.239	25.604	24.461	26.007	25.054		47.383	52.558	15.3	33.276	-1.021	-7.064		49.806	0.061	14.643	0.003		2278.08	37.9681	51.4	11.9	40.3	2.781	0.009	0.009	0.000	0.220	0.19	
1582	8/31/2004	9:52:27 PM		25.249	25.614	24.471	26.022	25.119		48.005	53.045	15.369	33.758	-1.082	-7.076		48.077	0.061	14.643	0.003		2279.08	37.9847	51.9	11.5	40.9	2.819	0.009	0.009	0.000	0.217	0.18	
1583	8/31/2004	9:53:27 PM		25.243	25.608	24.465	26.01	25.232		48.052	53.477	15.456	33.512	-1.062	-7.07		48.976	0.063	14.643	0.003		2280.08	38.0014	52.4	11.7	40.8	2.812	0.009	0.009	0.000	0.225	0.19	
1584	8/31/2004	9:54:27 PM		25.243	25.603	24.46	26.01	25.222		47.569	53.157	15.218	33.294	-1.001	-7.006		51.224	0.06	14.643	0.003		2281.08	38.0181	52.0	12.2	40.4	2.788	0.009	0.009	0.000	0.216	0.18	
1585	8/31/2004	9:55:27 PM		25.268	25.628	24.511	26.076	25.178		47.596	52.809	15.219	33.477	-1.044	-7.067		49.806	0.061	14.643	0.004		2282.08	38.0347	51.7	11.9	40.5	2.795	0.009	0.009	0.000	0.218	0.19	
1586	8/31/2004	9:56:27 PM		25.253	25.623	24.485	26.075	25.172		47.885	53.421	15.316	33.561	-1.056	-6.96		49.645	0.053	14.643	0.003		2283.08	38.0514	52.3	11.8	40.7	2.808	0.008	0.008	0.000	0.189	0.16	
1587	8/31/2004	9:57:27 PM		25.261	25.626	24.493	26.113	25.165		47.862	53.178	15.269	33.653	-0.923	-6.845		48.969	0.064	14.643	0.004		2284.08	38.0681	52.1	11.7	40.8	2.810	0.009	0.009	0.000	0.228	0.19	
1588	8/31/2004	9:58:27 PM		25.255	25.625	24.488	26.093	25.21		48.053	53.557	15.497	33.477	-0.986	-6.957		50.382	0.06	14.643	0.004		2285.08	38.0847	52.4	12.0	40.8	2.811	0.009	0.009	0.000	0.214	0.18	
1589	8/31/2004	9:59:27 PM		25.255	25.615	24.488	26.078	25.2		47.675	52.96	15.329	33.362	-0.934	-6.946		49.739	0.061	14.643	0.003		2286.08	38.1014	51.8	11.8	40.5	2.794	0.009	0.009	0.000	0.219	0.19	
1590	8/31/2004	10:00:27 PM		25.256	25.621	24.483	26.088	25.185		47.69	52.722	15.304	33.58	-0.931	-6.937		49.497	0.063	14.643	0.003		2287.08	38.1181	51.6	11.8	40.6	2.802	0.009	0.009	0.000	0.225	0.19	
1591	8/31/2004	10:01:27 PM		25.261	25.631	24.513	26.083	25.255		47.472	52.813	15.279	33.19	-0.923	-6.949		48.308	0.061	14.643	0.004		2288.08	38.1347	51.7	11.5	40.3	2.781	0.009	0.009	0.000	0.220	0.19	
1592	8/31/2004	10:02:27 PM		25.251	25.616	24.534	26.049	25.236		47.768	52.9	15.315	33.502	-0.928	-6.952		49.702	0.062	14.643	0.004		2289.08	38.1514	51.8	11.8	40.6	2.802	0.009	0.009	0.000	0.221	0.19	
1593	8/31/2004	10:03:27 PM		25.258	25.628	24.551	26.061	25.198		47.903	53.445	15.438	33.358	-0.978	-6.975		49.211	0.058	14.643	0.003		2290.08	38.1681	52.3	11.7	40.6	2.801	0.008	0.008	0.000	0.207	0.18	
1594	8/31/2004	10:04:27 PM		25.245	25.63	24.532	26.047	25.239		47.511	52.805	15.223	33.362	-0.966	-6.957		47.607	0.061	14.643	0.003		2291.08	38.1847	51.7	11.3	40.4	2.788	0.009	0.009	0.000	0.219	0.19	
1595	8/31/2004	10:05:27 PM		25.245	25.62	24.508	26.058	25.175		47.75	52.975	15.425	33.358	-0.928	-6.96		46.226	0.06	14.643	0.003		2292.08	38.2014	51.8	11.0	40.6	2.796	0.009	0.009	0.000	0.215	0.18	
1596	8/31/2004	10:06:27 PM		25.262	25.627	24.51	26.08	25.192		47.862	53.336	15.387	33.415	-0.928	-6.949		49.422	0.062	14.643	0.003		2293.08	38.2181	52.2	11.8	40.6	2.802	0.009	0.009	0.000	0.221	0.19	
1597	8/31/2004	10:07:27 PM		25.252	25.617	24.495	26.075	25.232		47.648	53.068	15.46	33.202	-0.928	-6.952		48.888	0.061	14.643	0.003		2294.08	38.2347	51.9	11.6	40.4	2.787	0.009	0.009	0.000	0.219	0.19	
1598	8/31/2004	10:08:27 PM		25.252	25.622	24.504	26.084	25.226		47.858	53.135	15.474	33.452	-0.92	-6.949		48.146	0.061	14.643	0.003		2295.08	38.2514	52.0	11.5	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1599	8/31/2004	10:09:27 PM		25.258	25.628	24.511	26.086	25.238		47.631	53.012	15.38	33.335	-0.888	-6.888		47.244	0.055	14.643	0.003		2296.08	38.2681	51.9	11.3	40.5	2.791	0.008	0.008	0.000	0.197	0.17	
1600	8/31/2004	10:10:27 PM		25.259	25.629	24.482	26.097	25.194		47.327	52.718	15.203	33.089	-0.96	-7.015		48.861	0.065	14.643	0.003		2297.08	38.2847	51.6	11.6	40.2	2.772	0.009	0.009	0.000	0.235	0.20	
1601	8/31/2004	10:11:27 PM		25.259	25.624	24.487	26.117	25.259		47.486	52.894	15.281	33.153	-0.876	-6.816		47.935	0.061	14.643	0.003		2298.08	38.3014	51.8	11.4	40.3	2.780	0.009	0.009	0.000	0.220	0.19	
1602	8/31/2004	10:12:27 PM		25.261	25.636	24.493	26.113	25.24		47.646	52.857	15.257	33.528	-0.876	-6.879		48.757	0.061	14.643	0.003		2299.08	38.3181	51.7	11.6	40.6	2.798	0.009	0.009	0.000	0.218	0.19	
1603	8/31/2004	10:13:27 PM		25.258	25.623	24.475	26.1	25.257		47.839	53.193	15.428	33.43	-0.931	-6.92		49.923	0.062	14.643	0.003		2300.08	38.3347	52.1	11.9	40.6	2.802	0.009	0.009	0.000	0.222	0.19	
1604	8/31/2004	10:14:27 PM		25.248	25.613	24.456	26.066	25.243		47.866	53.035	15.3	33.694	-0.931	-7.015		49.726	0.065	14.643	0.003		2301.08	38.3514	51.9	11.8	40.8	2.812	0.009	0.009	0.000	0.232	0.20	
1605	8/31/2004	10:15:27 PM		25.243	25.618	24.466	26.081	25.203		47.501	52.675	15.397	33.163	-0.928	-6.712		48.834	0.057	14.643	0.003		2302.08	38.3681	51.5	11.6	40.3	2.781	0.008	0.008	0.000	0.205	0.17	
1606	8/31/2004	10:16:27 PM		25.253	25.633	24.476	26.091	25.218		47.661	53.209	15.443	33.181	-0.818	-6.619		49.366	0.067	14.643	0.003		2303.08	38.3847	52.1	11.8	40.4	2.787	0.010	0.010	0.000	0.241	0.20	
1607	8/31/2004	10:17:27 PM		25.253	25.633	24.481	26.101	25.118		47.437	52.755	15.395	33.224	-0.882	-6.752		48.677	0.061	14.643	0.003		2304.08	38.4014	51.6	11.6	40.3	2.781	0.009	0.009	0.000	0.220	0.19	
1608	8/31/2004	10:18:27 PM		25.251	25.621	24.474	26.034	25.066		47.364	52.712	15.299	33.13	-0.876	-6.749		50.413	0.06	14.643	0.003		2305.08	38.4181	51.6	12.0	40.2	2.775	0.009	0.009	0.000	0.217	0.18	
1609	8/31/2004	10:19:27 PM		25.239	25.614	24.457	25.987	24.969		47.773	53.215	15.396	33.362	-0.928	-6.83		50.667	0.062	14.643	0.003		2306.08	38.4347	52.1	12.1	40.6	2.797	0.009	0.009	0.000	0.222	0.19	
1610	8/31/2004	10:20:27 PM		25.233	25.608	24.45	25.906	24.858		47.849	53.203	15.34	33.586	-0.928	-6.899		48.869	0.061	14.643	0.003		2307.08	38.4514	52.1	11.6	40.7	2.807	0.009	0.009	0.000	0.218	0.19	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1611	8/31/2004	10:21:27 PM		25.247	25.617	24.474	25.869	24.901		47.857	53.197	15.436	33.454	-0.928	-6.905		47.63	0.061	14.643	0.004		2308.08	38.4681	52.1	11.3	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1612	8/31/2004	10:22:27 PM		25.24	25.615	24.478	25.883	24.895		47.719	53.066	15.415	33.309	-0.894	-6.859		49.437	0.061	14.643	0.003		2309.08	38.4847	51.9	11.8	40.5	2.793	0.009	0.009	0.000	0.219	0.19	
1613	8/31/2004	10:23:27 PM		25.238	25.603	24.466	25.896	24.958		47.441	52.681	15.461	33.144	-0.911	-6.871		47.311	0.06	14.643	0.004		2310.08	38.5014	51.6	11.3	40.3	2.778	0.009	0.009	0.000	0.216	0.18	
1614	8/31/2004	10:24:27 PM		25.243	25.608	24.46	25.905	24.992		47.571	52.94	15.391	33.157	-0.876	-6.81		49.699	0.061	14.643	0.003		2311.08	38.5181	51.8	11.8	40.4	2.783	0.009	0.009	0.000	0.220	0.19	
1615	8/31/2004	10:25:27 PM		25.237	25.607	24.515	25.895	25.002		47.511	52.907	15.291	33.309	-0.876	-6.845		50.486	0.061	14.643	0.004		2312.08	38.5347	51.8	12.0	40.4	2.786	0.009	0.009	0.000	0.219	0.19	
1616	8/31/2004	10:26:27 PM		25.232	25.602	24.53	25.875	25.017		47.746	52.989	15.258	33.565	-0.876	-6.85		47.72	0.061	14.643	0.003		2313.08	38.5514	51.9	11.4	40.7	2.803	0.009	0.009	0.000	0.218	0.19	
1617	8/31/2004	10:27:27 PM		25.243	25.608	24.525	25.885	24.992		47.889	53.557	15.451	33.292	-0.876	-6.856		51.193	0.06	14.643	0.003		2314.08	38.5681	52.4	12.2	40.6	2.799	0.009	0.009	0.000	0.214	0.18	
1618	8/31/2004	10:28:27 PM		25.238	25.603	24.511	25.931	25.018		47.445	52.413	15.457	33.313	-0.876	-6.859		49.968	0.06	14.643	0.003		2315.08	38.5847	51.3	11.9	40.4	2.784	0.009	0.009	0.000	0.216	0.18	
1619	8/31/2004	10:29:27 PM		25.239	25.604	24.507	25.957	25.044		48.023	53.514	15.52	33.399	-0.876	-6.856		49.82	0.061	14.643	0.003		2316.08	38.6014	52.4	11.9	40.7	2.807	0.009	0.009	0.000	0.218	0.19	
1620	8/31/2004	10:30:27 PM		25.233	25.593	24.505	25.965	25.082		47.795	53.584	15.343	33.331	-0.876	-6.862		48.371	0.06	14.643	0.003		2317.08	38.6181	52.5	11.5	40.6	2.797	0.009	0.009	0.000	0.215	0.18	
1621	8/31/2004	10:31:27 PM		25.223	25.583	24.485	25.935	25.092		47.592	52.927	15.373	33.276	-0.876	-6.856		47.128	0.06	14.643	0.003		2318.08	38.6347	51.8	11.2	40.4	2.788	0.009	0.009	0.000	0.216	0.18	
1622	8/31/2004	10:32:27 PM		25.228	25.593	24.495	25.96	25.087		47.7	53.031	15.427	33.266	-0.876	-6.856		49.276	0.06	14.643	0.003		2319.08	38.6514	51.9	11.7	40.5	2.791	0.009	0.009	0.000	0.215	0.18	
1623	8/31/2004	10:33:27 PM		25.239	25.604	24.492	26.032	25.104		47.364	52.71	15.267	33.171	-0.876	-6.859		47.639	0.06	14.643	0.003		2320.08	38.6681	51.6	11.3	40.3	2.776	0.009	0.009	0.000	0.216	0.18	
1624	8/31/2004	10:34:27 PM		25.224	25.579	24.466	25.987	25.124		47.719	53.093	15.353	33.229	-0.879	-6.853		49.871	0.062	14.643	0.003		2321.08	38.6847	52.0	11.9	40.5	2.791	0.009	0.009	0.000	0.223	0.19	
1625	8/31/2004	10:35:27 PM		25.229	25.594	24.507	25.992	25.144		47.65	53.193	15.309	33.372	-0.876	-6.862		50.223	0.06	14.643	0.004		2322.08	38.7014	52.1	12.0	40.5	2.793	0.009	0.009	0.000	0.215	0.18	
1626	8/31/2004	10:36:27 PM		25.235	25.6	24.503	25.978	25.09		47.509	52.675	15.391	33.202	-0.815	-6.871		50.075	0.061	14.643	0.004		2323.08	38.7181	51.5	11.9	40.4	2.782	0.009	0.009	0.000	0.219	0.19	
1627	8/31/2004	10:37:27 PM		25.226	25.596	24.474	25.979	25.136		47.748	52.977	15.313	33.45	-1.128	-6.92		48.848	0.051	14.643	0.003		2324.08	38.7347	51.9	11.6	40.6	2.799	0.007	0.007	0.000	0.183	0.16	
1628	8/31/2004	10:38:27 PM		25.227	25.582	24.479	26.009	25.146		47.256	53.135	15.26	33.032	-0.474	-5.963		47.303	0.07	14.643	0.003		2325.08	38.7514	52.0	11.3	40.1	2.768	0.010	0.010	0.000	0.253	0.22	
1629	8/31/2004	10:39:27 PM		25.223	25.593	24.491	26.016	25.118		47.905	53.238	15.425	33.491	-0.844	-6.515		49.649	0.061	14.643	0.003		2326.08	38.7681	52.1	11.8	40.7	2.806	0.009	0.009	0.000	0.218	0.19	
1630	8/31/2004	10:40:27 PM		25.224	25.594	24.526	26.026	25.178		47.559	53.122	15.228	33.461	-0.81	-6.564		50.872	0.06	14.643	0.003		2327.08	38.7847	52.0	12.1	40.5	2.793	0.009	0.009	0.000	0.215	0.18	
1631	8/31/2004	10:41:27 PM		25.224	25.599	24.536	26.056	25.218		47.588	53.008	15.28	33.473	-0.873	-6.735		47.588	0.061	14.643	0.003		2328.08	38.8014	51.9	11.3	40.5	2.794	0.009	0.009	0.000	0.218	0.19	
1632	8/31/2004	10:42:27 PM		25.219	25.594	24.506	26.056	25.203		47.646	52.84	15.375	33.319	-0.879	-6.764		46.416	0.058	14.643	0.003		2329.08	38.8181	51.7	11.1	40.5	2.791	0.008	0.008	0.000	0.208	0.18	
1633	8/31/2004	10:43:27 PM		25.239	25.604	24.536	26.056	25.243		47.594	53.274	15.431	33.03	-0.873	-6.732		49.701	0.061	14.643	0.003		2330.08	38.8347	52.1	11.8	40.3	2.779	0.009	0.009	0.000	0.219	0.19	
1634	8/31/2004	10:44:27 PM		25.232	25.597	24.515	26.045	25.232		47.378	52.857	15.308	33.206	-0.879	-6.735		47.997	0.061	14.643	0.003		2331.08	38.8514	51.7	11.4	40.3	2.778	0.009	0.009	0.000	0.220	0.19	
1635	8/31/2004	10:45:27 PM		25.232	25.602	24.51	26.055	25.192		47.575	52.708	15.416	33.196	-0.876	-6.714		48.456	0.061	14.643	0.003		2332.08	38.8681	51.6	11.5	40.4	2.784	0.009	0.009	0.000	0.219	0.19	
1636	8/31/2004	10:46:27 PM		25.253	25.608	24.516	26.081	25.208		47.437	52.896	15.365	33.069	-0.876	-6.703		48.362	0.06	14.643	0.003		2333.08	38.8847	51.8	11.5	40.3	2.775	0.009	0.009	0.000	0.216	0.18	
1637	8/31/2004	10:47:27 PM		25.232	25.602	24.504	26.069	25.216		47.229	52.515	15.158	33.153	-0.911	-6.816		50.357	0.067	14.643	0.004		2334.08	38.9014	51.4	12.0	40.2	2.771	0.010	0.010	0.000	0.242	0.21	
1638	8/31/2004	10:48:27 PM		25.251	25.616	24.534	26.074	25.256		47.619	53.077	15.461	33.165	-0.894	-6.83		49.27	0.06	14.643	0.003		2335.08	38.9181	52.0	11.7	40.4	2.785	0.009	0.009	0.000	0.215	0.18	
1639	8/31/2004	10:49:27 PM		25.241	25.611	24.514	26.064	25.256		47.638	53.074	15.409	33.208	-0.928	-6.873		48.654	0.06	14.643	0.004		2336.08	38.9347	51.9	11.6	40.4	2.787	0.009	0.009	0.000	0.215	0.18	
1640	8/31/2004	10:50:27 PM		25.247	25.612	24.505	26.05	25.302		47.76	53.002	15.42	33.405	-0.928	-6.882		49.795	0.06	14.643	0.003		2337.08	38.9514	51.9	11.9	40.6	2.798	0.009	0.009	0.000	0.215	0.18	
1641	8/31/2004	10:51:27 PM		25.243	25.608	24.496	26.046	25.253		47.681	53.157	15.44	33.181	-0.891	-6.876		46.758	0.06	14.643	0.003		2338.08	38.9681	52.0	11.1	40.4	2.788	0.009	0.009	0.000	0.215	0.18	
1642	8/31/2004	10:52:27 PM		25.249	25.609	24.501	26.046	25.293		47.551	53.139	15.367	33.202	-0.925	-6.885		49.034	0.06	14.643	0.003		2339.08	38.9847	52.0	11.7	40.4	2.784	0.009	0.009	0.000	0.216	0.18	
1643	8/31/2004	10:53:27 PM		25.244	25.604	24.502	26.037	25.289		47.47	52.704	15.374	33.222	-0.894	-6.876		48.317	0.061	14.643	0.003		2340.08	39.0014	51.6	11.5	40.3	2.782	0.009	0.009	0.000	0.220	0.19	
1644	8/31/2004	10:54:27 PM		25.244	25.614	24.521	26.071	25.243		48.1	53.456	15.575	33.465	-0.905	-6.885		48.379	0.06	14.643	0.003		2341.08	39.0181	52.3	11.5	40.8	2.812	0.009	0.009	0.000	0.213	0.18	
1645	8/31/2004	10:55:27 PM		25.234	25.599	24.481	26.061	25.178		47.681	53.039	15.257	33.382	-0.876	-6.891		48.702	0.061	14.643	0.003		2342.08	39.0347	51.9	11.6	40.5	2.795	0.009	0.009	0.000	0.219	0.19	
1646	8/31/2004	10:56:27 PM		25.244	25.619	24.492	26.082	25.224		47.704	52.973	15.426	33.325	-0.925	-6.923		49.685	0.061	14.643	0.003		2343.08	39.0514	51.8	11.8	40.5	2.793	0.009	0.009	0.000	0.219	0.19	
1647	8/31/2004	10:57:27 PM		25.244	25.609	24.512	26.087	25.239		47.843	53.39	15.408	33.424	-0.876	-6.781		50.465	0.055	14.643	0.003		2344.08	39.0681	52.3	12.0	40.6	2.802	0.008	0.008	0.000	0.196	0.17	
1648	8/31/2004	10:58:27 PM		25.256	25.621	24.523	26.088	25.255		47.611	52.886	15.455	33.224	-0.876	-6.85		48.141	0.062	14.643	0.003		2345.08	39.0847	51.8	11.5	40.4	2.787	0.009	0.009	0.000	0.223	0.19	
1649	8/31/2004	10:59:27 PM		25.245	25.605	24.548	26.088	25.295		48.063	53.477	15.474	33.547	-0.882	-6.879		48.145	0.058	14.643	0.004		2346.08	39.1014	52.4	11.5	40.8	2.813	0.008	0.008	0.000	0.206	0.18	
1650	8/31/2004	11:00:04 PM		25.245	25.61	24.563	26.098	25.31		47.648	53.068	15.4	33.202	-0.882	-6.871		48.917	0.061	14.643	0.003		2346.70	39.1117	51.9	11.7	40.4	2.787	0.009	0.009	0.000	0.219	0.19	
1651	8/31/2004	11:01:04 PM		25.25	25.615	24.558	26.108	25.235		47.814	53.05	15.368	33.557	-0.928	-6.931		49.08	0.059	14.643	0.003		2347.70	39.1283	51.9	11.7	40.7	2.805	0.008	0.009	0.000	0.210	0.18	
1652	8/31/2004	11:02:04 PM		25.255	25.625	24.568	26.108	25.225		47.532	52.973	15.319	33.231	-0.925	-6.949		49.576	0.059	14.643	0.003		2348.70	39.145	51.8	11.8	40.4	2.784	0.008	0.009	0.000	0.212	0.18	
1653	8/31/2004	11:03:04 PM		25.26	25.62	24.543	26.093	25.255		47.843	53.066	15.522	33.383	-1.018	-6.963		48.9	0.061	14.643	0.003		2349.70	39.1617	51.9	11.6	40.6	2.800	0.009	0.009	0.000	0.218	0.19	
1654	8/31/2004	11:04:04 PM		25.266	25.621	24.533	26.098	25.24		47.76	53.203	15.47	33.265	-0.763	-6.527		48.485	0.065	14.643	0.003		2350.70	39.1783	52.1	11.5	40.5	2.793	0.009	0.009	0.000	0.233	0.20	
1655	8/31/2004	11:05:04 PM		25.271	25.621	24.548	26.103	25.26		47.82	53.427	15.402	33.442	-0.928	-6.876		49.658	0.061	14.643	0.003		2351.70	39.195	52.3	11.8	40.6	2.801	0.009	0.009	0.000	0.218	0.19	
1656	8/31/2004	11:06:04 PM		25.271	25.621	24.553	26.108	25.26		47.727	53.271	15.415	33.309	-0.876	-6.833		50.258	0.06	14.643	0.003		2352.70	39.2117	52.1	12.0	40.5	2.794	0.009	0.009	0.000	0.215	0.18	
1657	8/31/2004	11:07:04 PM		25.266	25.616	24.524	26.104	25.246		48.053	53.698	15.382	33.621	-0.899	-6.847		49.22	0.06	14.643	0.003		2353.70	39.2283	52.6	11.7	40.8	2.816	0.009	0.009	0.000	0.213	0.18	
1658	8/31/2004	11:08:04 PM		25.256	25.616	24.504	26.139	25.176		47.594	52.989	15.295	33.346	-0.911	-6.882		48.613	0.056	14.643	0.003		2354.70	39.245	51.9	11.6	40.5	2.790	0.008	0.008	0.000	0.201	0.17	
1659	8/31/2004	11:09:04 PM		25.267	25.617	24.535	26.13	25.227		47.716	53.045	15.444	33.255	-0.914	-6.853		48.617	0.06	14.643	0.003		2355.70	39.2617	51.9	11.6	40.5	2.791	0.009	0.009	0.000	0.215	0.18	
1660	8/31/2004	11:10:04 PM		25.263	25.613	24.54	26.135	25.227		47.484	52.859	15.414	33.118	-0.928	-6.902		51.314	0.058	14.643	0.003		2356.70	39.2783	51.7	12.2	40.3	2.779	0.008	0.008	0.000	0.209	0.18	
1661	8/31/2004	11:11:04 PM		25.269	25.619	24.532	26.137	25.239		47.534	52.913	15.383	33.354	-0.928	-6.92		49.933	0.061	14.643	0.003		2357.70	39.295	51.8	11.9	40.4	2.788	0.009	0.009	0.000	0.219	0.19	
1662	8/31/2004	11:12:04 PM		25.265	25.61	24.493	26.108	25.215		47.604	53.203	15.451	33.073	-0.879	-6.813		49.082	0.061	14.643	0.003		2358.70	39.3117	52.1	11.7	40.3	2.781	0.009	0.009	0.000	0.220	0.19	
1663	8/31/2004	11:13:04 PM		25.277	25.622	24.514	26.125	25.291		48.059	53.607	15.404	33.633	-0.923	-6.917		46.422	0.058	14.643	0.003		2359.70	39.3283	52.5	11.1	40.8	2.816	0.008	0.008	0.000	0.206	0.18	
1664	8/31/2004	11:14:04 PM		25.271	25.616	24.534	26.129	25.326		47.619	53.019	15.387	33.249	-0.908	-6.911		49.637	0.06	14.643	0.003		2360.70	39.345	51.9	11.8	40.4	2.788	0.009	0.009	0.000	0.215	0.18	
1665	8/31/2004	11:15:04 PM		25.286	25.636	24.609	26.124	25.346		47.716	53.137	15.437	33.216	-0.888	-6.931		49.487	0.058	14.643	0.003		2361.70	39.3617	52.0	11.8	40.5	2.790	0.008	0.008	0.000	0.207	0.18	
1666	8/31/2004	11:16:04 PM		25.27	25.615	24.558	26.088	25.2		47.522	52.961	15.39	33.233	-0.928	-6.899		49.117	0.064	14.643	0.003		2362.70	39.3783	51.8	11.7	40.4	2.784	0.009	0.009	0.000	0.230	0.20	
1667	8/31/2004	11:17:04 PM		25.268	25.613	24.556	26.066	25.083		47.814	52.96	15.398	33.557	-0.925	-6.816		50.177	0.058	14.643	0.003		2363.70	39.395	51.8	12.0	40.7	2.805	0.008	0.008	0.000	0.207	0.18	
1668	8/31/2004	11:18:04 PM		25.256	25.606	24.538	25.993	24.99		47.623	52.797	15.339	33.261	-0.879	-6.801		50.281	0.064	14.643	0.003		2364.70	39.4117	51.7	12.0	40.4	2.788	0.009	0.009	0.000	0.230	0.20	
1669	8/31/2004	11:19:04 PM		25.262	25.602	24.539	25.934	24.956		48.115	53.783	15.479	33.514	-0.896	-6.85		51.502	0.06	14.643	0.003		2365.70	39.4283	52.7	12.3	40.8	2.814	0.009	0.009	0.000	0.213	0.18	
1670	8/31/2004	11:20:04 PM		25.274	25.614	24.542	25.922	25.044		47.495	52.668	15.388	33.319	-0.899	-6.868		47.733	0.06	14.643	0.003		2366.70	39.445	51.5	11.4	40.4	2.786	0.009	0.009	0.000	0.215	0.18	
1671	8/31/2004	11:21:04 PM		25.278	25.628	24.545	25.92	24.952		47.783	53.091	15.345	33.512	-0.923	-6.873		49.724	0.06	14.643	0.003		2367.70	39.4617	52.0	11.8	40.6	2.803	0.009	0.009	0.000	0.214	0.18	
1672	8/31/2004	11:22:04 PM		25.262	25.607	24.52	25.895	25.002		47.831	53.294	15.442	33.374	-0.911	-6.885		49.587	0.061	14.643	0.003		2368.70	39.4783	52.2	11.8	40.6	2.799	0.009	0.009	0.000	0.218	0.19	
1673	8/31/2004	11:23:04 PM		25.276	25.611	24.543	25.918	25.005		47.266	52.602	15.335	33.14	-0.639	-6.295		49.334	0.059	14.643	0.004		2369.70	39.495	51.5	11.8	40.2	2.772	0.008	0.009	0.000	0.213	0.18	
1674	8/31/2004	11:24:04 PM		25.27	25.61	24.543	25.918	25.045		47.814	53.504	15.537	33.329	-0.737	-6.529		48.354	0.061	14.643	0.003		2370.70	39.5117	52.4	11.5	40.6	2.797	0.009	0.009	0.000	0.218	0.19	
1675	8/31/2004	11:25:04 PM		25.264	25.609	24.521	25.931	25.113		46.966	52.585	15.342	32.658	-0.636	-6.295		48.116	0.059	14.643	0.003		2371.70	39.5283	51.5	11.5	39.8	2.745	0.008	0.009	0.000	0.215	0.18	
1676	8/31/2004	11:26:04 PM		25.269	25.609	24.517	25.942	25.199		47.538	53.118	15.495	33.073	-0.645	-6.313		49.704	0.059	14.643	0.004		2372.70	39.545	52.0	11.8	40.3	2.779	0.008	0.009	0.000	0.212	0.18	
1677	8/31/2004	11:27:04 PM		25.265	25.605	24.538	25.923	25.29		47.582	53.213	15.406	33.268	-0.639	-6.301		50.01	0.06	14.643	0.003		2373.70	39.5617	52.1	11.9	40.4	2.787	0.009	0.009	0.000	0.215	0.18	
1678	8/31/2004	11:28:04 PM		25.256	25.596	24.534	25.914	25.191		47.407	52.925	15.432	33.04	-0.598	-6.31		48.062	0.059	14.643	0.003		2374.70	39.5783	51.8	11.4	40.2	2.773	0.008	0.009	0.000	0.213	0.18	
1679	8/31/2004	11:29:04 PM		25.251	25.586	24.534	25.934	25.166		47.405	53.133	15.494	32.949	-0.598	-6.307		48.921	0.059	14.643	0.003		2375.70	39.595	52.0	11.7	40.2	2.770	0.008	0.009	0.000	0.213	0.18	
1680	8/31/2004	11:30:04 PM		25.252	25.587	24.515	25.905	25.187		46.81	52.357	15.151	32.785	-0.575	-6.313		47.007	0.058	14.643	0.003		2376.70	39.6117	51.2	11.2	39.8	2.744	0.008	0.008	0.000	0.212	0.18	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1681	8/31/2004	11:31:04 PM		25.253	25.593	24.521	25.891	25.178		47.464	52.894	15.529	32.853	-0.584	-6.295		47.862	0.06	14.643	0.003		2377.70	39.6283	51.8	11.4	40.2	2.769	0.009	0.009	0.000	0.217	0.18	
1682	8/31/2004	11:32:04 PM		25.248	25.593	24.536	25.881	25.198		47.725	53.458	15.447	33.325	-0.642	-6.313		48.045	0.059	14.643	0.003		2378.70	39.645	52.3	11.4	40.5	2.794	0.008	0.009	0.000	0.211	0.18	
1683	8/31/2004	11:33:17 PM		25.243	25.588	24.536	25.841	25.158		47.787	53.332	15.377	33.549	-0.566	-6.307		48.05	0.059	14.643	0.003		2379.92	39.6653	52.2	11.4	40.7	2.804	0.008	0.009	0.000	0.210	0.18	
1684	8/31/2004	11:34:17 PM		25.24	25.6	24.533	25.828	25.15		47.493	53.392	15.537	32.902	-0.564	-6.327		48.692	0.062	14.643	0.003		2380.92	39.6819	52.3	11.6	40.2	2.771	0.009	0.009	0.000	0.224	0.19	
1685	8/31/2004	11:35:17 PM		25.571	25.601	24.524	25.869	25.151		48.397	52.905	15.391	34.062	-1.212	-5.139		51.502	0.028	14.643	0.003		2381.92	39.6986	51.8	12.3	41.2	2.843	0.004	0.004	0.000	0.099	0.08	
1686	8/31/2004	11:36:17 PM		25.336	25.596	24.529	25.854	25.136		46.437	53.137	15.6	31.944	0.589	-1.913		49.993	0.039	14.643	0.004		2382.92	39.7153	52.0	11.9	39.2	2.702	0.006	0.006	0.000	0.144	0.12	
1687	8/31/2004	11:37:17 PM		25.395	25.59	24.533	25.893	25.135		48.007	52.965	15.512	33.428	-1.212	-6.139		49.603	0.107	14.643	0.004		2383.92	39.7319	51.8	11.8	40.7	2.807	0.015	0.016	0.000	0.381	0.32	
1688	8/31/2004	11:38:17 PM		25.355	25.6	24.553	25.938	25.145		48.89	53.265	15.472	34.482	-1.209	-7.533		49.451	0.068	14.643	0.004		2384.92	39.7486	52.1	11.8	41.7	2.874	0.010	0.010	0.000	0.236	0.20	
1689	8/31/2004	11:39:17 PM		25.26	25.595	24.523	25.948	25.175		48.88	53.062	15.624	34.302	-1.212	-7.602		50.505	0.065	14.643	0.003		2385.92	39.7653	51.9	12.0	41.6	2.868	0.009	0.009	0.000	0.227	0.19	
1690	8/31/2004	11:40:17 PM		25.205	25.59	24.518	25.973	25.215		49.04	52.892	15.569	34.708	-1.212	-7.677		47.753	0.063	14.643	0.003		2386.92	39.7819	51.8	11.4	41.9	2.887	0.009	0.009	0.000	0.218	0.19	
1691	8/31/2004	11:41:17 PM		25.176	25.591	24.519	25.969	25.156		49.193	53.688	15.562	34.532	-1.212	-7.608		49.253	0.063	14.643	0.003		2387.92	39.7986	52.6	11.7	41.9	2.886	0.009	0.009	0.000	0.218	0.19	
1692	8/31/2004	11:42:17 PM		25.165	25.585	24.528	25.978	25.195		48.996	52.929	15.628	34.454	-1.212	-7.666		48.888	0.063	14.643	0.003		2388.92	39.8153	51.8	11.6	41.7	2.877	0.009	0.009	0.000	0.219	0.19	
1693	8/31/2004	11:43:17 PM		25.187	25.602	24.539	25.994	25.196		49.12	53.072	15.556	34.716	-1.209	-7.668		49.676	0.063	14.643	0.004		2389.92	39.8319	51.9	11.8	41.9	2.890	0.009	0.009	0.000	0.218	0.19	
1694	8/31/2004	11:44:17 PM		25.16	25.57	24.498	25.968	25.245		49.454	53.477	15.565	34.971	-1.212	-7.668		48.84	0.063	14.643	0.003		2390.92	39.8486	52.4	11.6	42.2	2.910	0.009	0.009	0.000	0.217	0.18	
1695	8/31/2004	11:45:17 PM		25.165	25.58	24.512	26.007	25.209		49.685	53.75	15.66	35.016	-1.212	-7.671		49.391	0.063	14.643	0.003		2391.92	39.8653	52.6	11.8	42.4	2.920	0.009	0.009	0.000	0.216	0.18	
1696	8/31/2004	11:46:17 PM		25.178	25.583	24.541	25.991	25.198		48.998	53.259	15.547	34.552	-1.209	-7.671		51.03	0.062	14.643	0.004		2392.92	39.8819	52.1	12.2	41.8	2.880	0.009	0.009	0.000	0.215	0.18	
1697	8/31/2004	11:47:17 PM		25.185	25.59	24.532	25.987	25.199		49.121	53.023	15.939	34.238	-1.212	-7.683		48.181	0.061	14.643	0.004		2393.92	39.8986	51.9	11.5	41.7	2.874	0.009	0.009	0.000	0.212	0.18	
1698	8/31/2004	11:48:17 PM		25.183	25.578	24.541	26.006	25.183		48.801	53.06	16.148	33.688	-1.212	-7.677		47.795	0.062	14.643	0.004		2394.92	39.9153	51.9	11.4	41.2	2.844	0.009	0.009	0.000	0.218	0.19	
1699	8/31/2004	11:49:17 PM		25.178	25.578	24.531	26.021	25.158		48.461	52.299	16.128	33.522	-1.212	-7.718		49.019	0.061	14.643	0.003		2395.92	39.9319	51.2	11.7	41.0	2.826	0.009	0.009	0.000	0.216	0.18	
1700	8/31/2004	11:50:17 PM		25.199	25.589	24.567	25.997	25.204		48.214	52.366	16.434	32.886	-1.215	-7.666		49.364	0.059	14.643	0.003		2396.92	39.9486	51.2	11.8	40.6	2.796	0.008	0.009	0.000	0.211	0.18	
1701	8/31/2004	11:51:17 PM		25.2	25.59	24.592	25.997	25.164		48.457	52.706	16.544	32.882	-1.212	-7.66		49.977	0.059	14.643	0.003		2397.92	39.9653	51.6	11.9	40.7	2.804	0.008	0.009	0.000	0.210	0.18	
1702	8/31/2004	11:52:17 PM		25.2	25.585	24.663	26.002	25.184		48.442	52.902	16.504	32.917	-1.209	-7.66		50.227	0.059	14.643	0.003		2398.92	39.9819	51.8	12.0	40.7	2.805	0.008	0.009	0.000	0.210	0.18	
1703	8/31/2004	11:53:17 PM		25.2	25.58	24.642	26.012	25.199		48.44	52.426	16.401	33.11	-1.212	-7.671		50.163	0.059	14.643	0.003		2399.92	39.9986	51.3	11.9	40.8	2.811	0.008	0.009	0.000	0.209	0.18	
1704	8/31/2004	11:54:17 PM		25.205	25.58	24.637	26.032	25.129		48.328	52.484	16.335	33.052	-1.215	-7.668		50.803	0.058	14.643	0.003		2400.92	40.0153	51.4	12.1	40.7	2.805	0.008	0.008	0.000	0.206	0.18	
1705	8/31/2004	11:55:17 PM		25.219	25.589	24.652	26.037	25.124		48.42	52.786	16.356	33.079	-1.212	-7.668		47.947	0.059	14.643	0.004		2401.92	40.0319	51.7	11.4	40.7	2.810	0.008	0.009	0.000	0.209	0.18	
1706	8/31/2004	11:56:17 PM		25.235	25.585	24.663	26.032	25.129		48.235	52.324	16.264	33.068	-1.209	-7.668		51.627	0.059	14.643	0.003		2402.92	40.0486	51.2	12.3	40.7	2.803	0.008	0.009	0.000	0.210	0.18	
1707	8/31/2004	11:57:17 PM		25.245	25.595	24.653	26.033	25.155		48.175	52.403	16.378	32.853	-1.212	-7.674		47.33	0.058	14.643	0.003		2403.92	40.0653	51.3	11.3	40.5	2.793	0.008	0.008	0.000	0.207	0.18	
1708	8/31/2004	11:58:17 PM		25.255	25.59	24.658	26.082	25.109		48.424	52.567	16.43	33.077	-1.209	-7.666		49.568	0.059	14.643	0.004		2404.92	40.0819	51.4	11.8	40.8	2.810	0.008	0.009	0.000	0.209	0.18	
1709	8/31/2004	11:59:17 PM		25.26	25.585	24.648	26.062	25.109		48.523	52.905	16.393	33.138	-1.212	-7.677		49.551	0.059	14.643	0.003		2405.92	40.0986	51.8	11.8	40.8	2.815	0.008	0.009	0.000	0.209	0.18	
1710	9/1/2004	12:00:17 AM		25.27	25.585	24.663	26.033	25.135		48.142	52.31	16.272	33.062	-1.215	-7.674		52.82	0.06	14.643	0.003		2406.92	40.1153	51.2	12.6	40.6	2.799	0.009	0.009	0.000	0.214	0.18	
1711	9/1/2004	12:01:17 AM		25.27	25.59	24.668	26.042	25.149		48.548	52.706	16.296	33.257	-1.209	-7.677		49.572	0.058	14.643	0.004		2407.92	40.1319	51.6	11.8	40.9	2.820	0.008	0.008	0.000	0.205	0.17	
1712	9/1/2004	12:02:17 AM		25.276	25.591	24.659	26.049	25.171		48.357	52.619	16.214	33.225	-1.212	-7.674		50.436	0.06	14.643	0.003		2408.92	40.1486	51.5	12.0	40.8	2.812	0.009	0.009	0.000	0.213	0.18	
1713	9/1/2004	12:03:17 AM		25.261	25.571	24.624	26.029	25.136		48.339	52.457	16.298	33.03	-1.215	-7.677		50.659	0.06	14.643	0.003		2409.92	40.1653	51.3	12.1	40.7	2.805	0.009	0.009	0.000	0.213	0.18	
1714	9/1/2004	12:04:17 AM		25.277	25.582	24.67	26.08	25.172		48.774	52.981	16.293	33.637	-1.212	-7.68		51.343	0.059	14.643	0.003		2410.92	40.1819	51.9	12.2	41.2	2.841	0.008	0.009	0.000	0.207	0.18	
1715	9/1/2004	12:05:17 AM		25.279	25.579	24.667	26.051	25.148		48.27	52.277	16.114	33.304	-1.212	-7.671		50.611	0.061	14.643	0.003		2411.92	40.1986	51.2	12.1	40.8	2.812	0.009	0.009	0.000	0.216	0.18	
1716	9/1/2004	12:06:17 AM		25.294	25.594	24.682	26.071	25.123		47.903	52.098	16.025	33.056	-1.209	-7.68		50.552	0.059	14.643	0.003		2412.92	40.2153	51.0	12.0	40.5	2.791	0.008	0.009	0.000	0.211	0.18	
1717	9/1/2004	12:07:17 AM		25.289	25.584	24.667	26.077	25.154		48.237	52.328	16.291	32.984	-1.206	-7.706		49.889	0.059	14.643	0.003		2413.92	40.2319	51.2	11.9	40.6	2.800	0.008	0.009	0.000	0.210	0.18	
1718	9/1/2004	12:08:17 AM		25.306	25.591	24.689	26.083	25.18		48.521	52.996	16.257	33.216	-1.209	-7.758		50.342	0.059	14.643	0.003		2414.92	40.2486	51.9	12.0	40.9	2.818	0.008	0.009	0.000	0.209	0.18	
1719	9/1/2004	12:09:17 AM		25.291	25.586	24.674	26.043	25.18		48.38	52.399	16.228	33.204	-1.212	-7.761		49.781	0.058	14.643	0.003		2415.92	40.2653	51.3	11.9	40.8	2.812	0.008	0.008	0.000	0.205	0.17	
1720	9/1/2004	12:10:17 AM		25.294	25.579	24.687	26.072	25.189		48.424	52.815	16.287	33.149	-1.212	-7.755		49.537	0.059	14.643	0.004		2416.92	40.2819	51.7	11.8	40.8	2.812	0.008	0.009	0.000	0.209	0.18	
1721	9/1/2004	12:11:17 AM		25.299	25.594	24.697	26.081	25.223		48.324	52.486	16.12	33.284	-1.209	-7.758		48.437	0.059	14.643	0.004		2417.92	40.2986	51.4	11.5	40.8	2.813	0.008	0.009	0.000	0.209	0.18	
1722	9/1/2004	12:12:17 AM		25.309	25.589	24.682	26.086	25.253		48.422	52.815	16.018	33.304	-1.212	-7.761		48.888	0.058	14.643	0.004		2418.92	40.3153	51.7	11.6	40.9	2.817	0.008	0.008	0.000	0.205	0.17	
1723	9/1/2004	12:13:17 AM		25.324	25.604	24.717	26.076	25.238		48.303	52.596	15.872	33.499	-1.209	-7.755		48.471	0.059	14.643	0.003		2419.92	40.3319	51.5	11.5	40.9	2.820	0.008	0.009	0.000	0.208	0.18	
1724	9/1/2004	12:14:17 AM		25.309	25.584	24.687	26.052	25.229		48.474	52.708	16.151	33.368	-1.212	-7.758		49.727	0.059	14.643	0.003		2420.92	40.3486	51.6	11.8	40.9	2.821	0.008	0.009	0.000	0.208	0.18	
1725	9/1/2004	12:15:17 AM		25.33	25.6	24.708	26.038	25.245		48.447	52.73	16.125	33.473	-1.212	-7.68		52.409	0.06	14.643	0.003		2421.92	40.3653	51.6	12.5	41.0	2.824	0.009	0.009	0.000	0.211	0.18	
1726	9/1/2004	12:16:17 AM		25.315	25.585	24.683	26.023	25.245		48.604	52.757	16.167	33.426	-1.212	-7.747		49.076	0.059	14.643	0.003		2422.92	40.3819	51.6	11.7	41.0	2.828	0.008	0.009	0.000	0.208	0.18	
1727	9/1/2004	12:17:17 AM		25.32	25.585	24.753	26.043	25.23		48.471	52.822	15.997	33.563	-1.209	-7.749		49.374	0.06	14.643	0.004		2423.92	40.3986	51.7	11.8	41.0	2.828	0.009	0.009	0.000	0.211	0.18	
1728	9/1/2004	12:18:17 AM		25.324	25.584	24.797	26.037	25.244		48.332	52.455	16.059	33.331	-1.212	-7.758		51.005	0.058	14.643	0.003		2424.92	40.4153	51.3	12.1	40.8	2.815	0.008	0.008	0.000	0.205	0.17	
1729	9/1/2004	12:19:17 AM		25.324	25.584	24.782	26.037	25.239		48.507	52.985	16.201	33.261	-1.212	-7.752		52.301	0.059	14.643	0.003		2425.92	40.4319	51.9	12.5	40.9	2.819	0.008	0.008	0.000	0.208	0.18	
1730	9/1/2004	12:20:17 AM		25.325	25.59	24.753	26.053	25.215		48.171	52.297	16.187	33.167	-1.212	-7.755		48.045	0.058	14.643	0.003		2426.92	40.4486	51.2	11.4	40.7	2.804	0.008	0.008	0.000	0.206	0.17	
1731	9/1/2004	12:21:17 AM		25.346	25.601	24.749	26.059	25.266		48.519	52.788	16.138	33.465	-1.209	-7.758		50.73	0.058	14.643	0.003		2427.92	40.4653	51.7	12.1	41.0	2.826	0.008	0.008	0.000	0.204	0.17	
1732	9/1/2004	12:22:17 AM		25.346	25.601	24.739	26.044	25.206		48.127	52.681	15.987	33.112	-1.212	-7.761		48.821	0.058	14.643	0.003		2428.92	40.4819	51.6	11.6	40.6	2.801	0.008	0.008	0.000	0.206	0.18	
1733	9/1/2004	12:23:17 AM		25.341	25.591	24.729	26.038	25.27		48.013	52.044	16.105	33.107	-1.215	-7.758		50.2	0.058	14.643	0.003		2429.92	40.4986	50.9	12.0	40.6	2.796	0.008	0.008	0.000	0.206	0.18	
1734	9/1/2004	12:24:17 AM		25.341	25.591	24.709	26.058	25.165		48.366	52.565	16.162	33.241	-1.212	-7.767		50.077	0.058	14.643	0.003		2430.92	40.5153	51.4	11.9	40.8	2.813	0.008	0.008	0.000	0.205	0.17	
1735	9/1/2004	12:25:17 AM		25.356	25.596	24.694	26.054	25.196		48.287	52.735	16.02	33.331	-1.215	-7.775		48.062	0.059	14.643	0.003		2431.92	40.5319	51.6	11.4	40.8	2.814	0.008	0.009	0.000	0.209	0.18	
1736	9/1/2004	12:26:17 AM		25.346	25.596	24.684	26.043	25.195		48.449	52.61	16.173	33.356	-1.212	-7.833		50.528	0.059	14.643	0.003		2432.92	40.5486	51.5	12.0	40.9	2.820	0.008	0.009	0.000	0.208	0.18	
1737	9/1/2004	12:27:17 AM		25.346	25.601	24.689	26.034	25.186		48.162	52.511	16.175	32.982	-1.212	-7.833		49.583	0.058	14.643	0.003		2433.92	40.5653	51.4	11.8	40.6	2.797	0.008	0.008	0.000	0.206	0.18	
1738	9/1/2004	12:28:17 AM		25.352	25.602	24.685	26.05	25.152		48.334	52.304	16.008	33.569	-1.212	-7.845		49.944	0.058	14.643	0.003		2434.92	40.5819	51.2	11.9	41.0	2.823	0.008	0.008	0.000	0.205	0.17	
1739	9/1/2004	12:29:17 AM		25.363	25.618	24.686	26.065	25.182		48.567	52.973	16.103	33.446	-1.209	-7.842		48.775	0.058	14.643	0.004		2435.92	40.5986	51.8	11.6	41.0	2.827	0.008	0.008	0.000	0.204	0.17	
1740	9/1/2004	12:30:17 AM		25.348	25.598	24.666	26.04	25.217		48.455	52.732	16.054	33.524	-1.212	-7.718		50.757	0.056	14.643	0.003		2436.92	40.6153	51.6	12.1	41.0	2.826	0.008	0.008	0.000	0.197	0.17	
1741	9/1/2004	12:31:17 AM		25.348	25.603	24.666	26.056	25.183		48.38	52.619	15.998	33.372	-1.209	-7.81		51.814	0.06	14.643	0.004		2437.92	40.6319	51.5	12.3	40.9	2.818	0.009	0.009	0.000	0.212	0.18	
1742	9/1/2004	12:32:17 AM		25.343	25.603	24.666	26.041	25.153		48.162	52.476	16.059	33.107	-1.212	-7.807		50.544	0.058	14.643	0.003		2438.92	40.6486	51.4	12.0	40.6	2.802	0.008	0.008	0.000	0.206	0.18	
1743	9/1/2004	12:33:17 AM		25.333	25.583	24.626	26.005	25.187		48.704	53.008	16.109	33.711	-1.215	-7.822		47.964	0.059	14.643	0.003		2439.92	40.6653	51.9	11.4	41.2	2.841	0.008	0.009	0.000	0.207	0.18	
1744	9/1/2004	12:34:17 AM		25.343	25.598	24.641	26.035	25.192		48.523	52.631	15.972	33.703	-1.212	-7.822		49.691	0.059	14.643	0.003		2440.92	40.6819	51.5	11.8	41.1	2.835	0.008	0.009	0.000	0.208	0.18	
1745	9/1/2004	12:35:17 AM		25.333	25.593	24.621	26.025	25.177		48.308	52.563	15.959	33.577	-1.215	-7.839		50.429	0.058	14.643	0.003		2441.92	40.6986	51.4	12.0	40.9	2.823	0.008	0.008	0.000	0.205	0.17	
1746	9/1/2004	12:36:17 AM		25.343	25.598	24.656	26.055	25.157		48.691	52.971	16.037	33.791	-1.209	-7.836		49.109	0.058	14.643	0.003		2442.92	40.7153	51.8	11.7	41.2	2.843	0.008	0.008	0.000	0.203	0.17	
1747	9/1/2004	12:37:17 AM		25.333	25.598	24.641	26.06	25.137		48.036	52.299	15.974	33.224	-1.215	-7.827		50.039	0.059	14.643	0.003		2443.92	40.7319	51.2	11.9	40.6	2.801	0.008	0.009	0.000	0.210	0.18	
1748	9/1/2004	12:38:17 AM		25.333	25.588	24.621	26.065	25.217		48.341	52.531	16.016	33.434	-1.218	-7.848		49.553	0.058	14.643	0.003		2444.92	40.7486	51.4	11.8	40.9	2.819	0.008	0.008	0.000	0.205	0.17	
1749	9/1/2004	12:39:17 AM		25.321	25.591	24.629	26.059	25.261		48.519	53.077	16.002	33.514	-1.212	-7.842		48.713	0.058	14.643	0.003		2445.92	40.7653	52.0	11.6	41.0	2.828	0.008	0.008	0.000	0.205	0.17	
1750	9/1/2004	12:40:17 AM		25.342	25.617	24.66	26.06	25.162		48.426	52.561	15.89	33.655	-1.212	-7.842		49.791	0.058	14.643	0.003		2446.92	40.7819	51.4	11.9	41.0	2.830	0.008	0.008	0.000	0.204	0.17	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1751	9/1/2004	12:41:17 AM		25.337	25.607	24.66	26.015	25.232		48.488	52.832	15.876	33.733	-1.212	-7.842		48.423	0.058	14.643	0.003		2447.92	40.7986	51.7	11.5	41.1	2.834	0.008	0.008	0.000	0.204	0.17	
1752	9/1/2004	12:42:17 AM		25.327	25.597	24.64	26.015	25.222		48.519	52.892	16.092	33.46	-1.209	-7.856		51.139	0.058	14.643	0.003		2448.92	40.8153	51.8	12.2	41.0	2.826	0.008	0.008	0.000	0.205	0.17	
1753	9/1/2004	12:43:17 AM		25.328	25.608	24.641	26.025	25.247		48.322	52.646	15.898	33.518	-1.215	-7.856		53.03	0.058	14.643	0.003		2449.92	40.8319	51.5	12.6	40.9	2.821	0.008	0.008	0.000	0.205	0.17	
1754	9/1/2004	12:44:17 AM		25.322	25.597	24.645	26.035	25.282		48.409	52.453	16.003	33.524	-1.212	-7.851		49.449	0.058	14.643	0.003		2450.92	40.8486	51.3	11.8	41.0	2.824	0.008	0.008	0.000	0.205	0.17	
1755	9/1/2004	12:45:17 AM		25.337	25.612	24.67	26.05	25.212		48.364	52.573	15.995	33.606	-1.209	-7.853		50.916	0.058	14.643	0.003		2451.92	40.8653	51.4	12.1	41.0	2.826	0.008	0.008	0.000	0.204	0.17	
1756	9/1/2004	12:46:17 AM		25.333	25.613	24.661	26.055	25.227		48.579	53.081	16	33.592	-1.215	-7.859		48.996	0.058	14.643	0.003		2452.92	40.8819	52.0	11.7	41.1	2.833	0.008	0.008	0.000	0.204	0.17	
1757	9/1/2004	12:47:17 AM		25.332	25.607	24.67	26.055	25.192		48.7	52.824	16.035	33.879	-1.212	-7.871		48.608	0.056	14.643	0.003		2453.92	40.8986	51.7	11.6	41.3	2.847	0.008	0.008	0.000	0.196	0.17	
1758	9/1/2004	12:48:17 AM		25.332	25.612	24.715	26.04	25.172		48.785	53.137	16.071	33.836	-1.215	-7.862		51.201	0.058	14.643	0.003		2454.92	40.9153	52.0	12.2	41.3	2.848	0.008	0.008	0.000	0.203	0.17	
1759	9/1/2004	12:49:17 AM		25.337	25.612	24.71	26.075	25.192		48.364	52.836	16.021	33.407	-1.212	-7.862		48.757	0.058	14.643	0.004		2455.92	40.9319	51.7	11.6	40.9	2.819	0.008	0.008	0.000	0.205	0.17	
1760	9/1/2004	12:50:17 AM		25.342	25.617	24.72	26.08	25.192		48.249	52.455	16.06	33.343	-1.212	-7.859		48.485	0.059	14.643	0.003		2456.92	40.9486	51.3	11.5	40.8	2.813	0.008	0.009	0.000	0.209	0.18	
1761	9/1/2004	12:51:17 AM		25.326	25.601	24.669	26.048	25.155		48.824	53.298	16.117	33.688	-1.218	-7.868		48.681	0.058	14.643	0.003		2457.92	40.9653	52.2	11.6	41.3	2.844	0.008	0.008	0.000	0.203	0.17	
1762	9/1/2004	12:52:17 AM		25.345	25.605	24.683	26.063	25.145		48.084	52.436	15.939	33.294	-1.212	-7.862		50.331	0.058	14.643	0.003		2458.92	40.9819	51.3	12.0	40.7	2.805	0.008	0.008	0.000	0.206	0.18	
1763	9/1/2004	12:53:17 AM		25.344	25.609	24.687	26.072	25.169		48.488	52.811	16.14	33.401	-1.212	-7.868		49.207	0.057	14.643	0.003		2459.92	40.9986	51.7	11.7	40.9	2.823	0.008	0.008	0.000	0.201	0.17	
1764	9/1/2004	12:54:17 AM		25.344	25.609	24.687	26.052	25.169		47.864	52.25	15.8	33.13	-1.212	-7.853		48.471	0.059	14.643	0.004		2460.92	41.0153	51.1	11.5	40.5	2.792	0.008	0.009	0.000	0.210	0.18	
1765	9/1/2004	12:55:17 AM		25.349	25.604	24.667	26.047	25.149		48.59	52.89	16.072	33.709	-1.212	-7.865		48.988	0.058	14.643	0.003		2461.92	41.0319	51.8	11.7	41.1	2.837	0.008	0.008	0.000	0.204	0.17	
1766	9/1/2004	12:56:17 AM		25.349	25.614	24.672	26.076	25.183		48.5	52.961	15.94	33.643	-1.212	-7.865		49.215	0.058	14.643	0.003		2462.92	41.0486	51.8	11.7	41.1	2.832	0.008	0.008	0.000	0.204	0.17	
1767	9/1/2004	12:57:17 AM		25.353	25.618	24.681	26.076	25.118		48.314	52.691	16.08	33.307	-1.212	-7.865		50.083	0.058	14.643	0.003		2463.92	41.0653	51.6	11.9	40.8	2.814	0.008	0.008	0.000	0.205	0.17	
1768	9/1/2004	12:58:17 AM		25.363	25.628	24.696	26.076	25.158		48.235	52.538	15.92	33.442	-1.212	-7.856		48.807	0.059	14.643	0.003		2464.92	41.0819	51.4	11.6	40.8	2.816	0.008	0.009	0.000	0.209	0.18	
1769	9/1/2004	12:59:17 AM		25.362	25.627	24.705	26.06	25.172		48.548	53.056	16.112	33.321	-1.209	-7.859		49.117	0.059	14.643	0.003		2465.92	41.0986	51.9	11.7	40.9	2.822	0.008	0.009	0.000	0.208	0.18	
1770	9/1/2004	1:00:17 AM		25.353	25.618	24.671	26.056	25.098		48.142	52.411	15.962	33.374	-1.212	-7.862		48.8	0.059	14.643	0.004		2466.92	41.1153	51.3	11.6	40.8	2.810	0.008	0.009	0.000	0.209	0.18	
1771	9/1/2004	1:01:17 AM		25.339	25.609	24.672	26.026	25.123		48.202	52.635	15.954	33.302	-1.212	-7.862		51.817	0.058	14.643	0.003		2467.92	41.1319	51.5	12.3	40.8	2.810	0.008	0.008	0.000	0.206	0.18	
1772	9/1/2004	1:02:17 AM		25.349	25.614	24.692	26.041	25.113		48.223	52.677	16.086	33.212	-1.212	-7.868		49.334	0.058	14.643	0.003		2468.92	41.1486	51.6	11.8	40.7	2.807	0.008	0.008	0.000	0.206	0.18	
1773	9/1/2004	1:03:17 AM		25.344	25.599	24.682	26.051	25.108		48.388	53.045	15.873	33.534	-1.215	-7.868		48.836	0.058	14.643	0.003		2469.92	41.1653	51.9	11.6	41.0	2.824	0.008	0.008	0.000	0.205	0.17	
1774	9/1/2004	1:04:17 AM		25.359	25.614	24.687	26.092	25.129		48.164	52.517	15.99	33.233	-1.212	-7.856		49.979	0.06	14.643	0.004		2470.92	41.1819	51.4	11.9	40.7	2.806	0.009	0.009	0.000	0.213	0.18	
1775	9/1/2004	1:05:17 AM		25.344	25.599	24.667	26.052	25.154		48.517	53.253	15.846	33.727	-1.215	-7.871		49.241	0.06	14.643	0.003		2471.92	41.1986	52.1	11.7	41.1	2.835	0.009	0.009	0.000	0.211	0.18	
1776	9/1/2004	1:06:17 AM		25.349	25.599	24.722	26.042	25.184		48.376	52.579	15.952	33.493	-1.215	-7.871		50.079	0.058	14.643	0.003		2472.92	41.2153	51.5	11.9	40.9	2.822	0.008	0.008	0.000	0.204	0.17	
1777	9/1/2004	1:07:17 AM		25.35	25.6	24.723	26.038	25.145		48.42	53.228	16.118	33.159	-1.212	-7.865		49.631	0.06	14.643	0.003		2473.92	41.2319	52.1	11.8	40.8	2.812	0.009	0.009	0.000	0.212	0.18	
1778	9/1/2004	1:08:17 AM		25.349	25.594	24.712	26.012	25.119		48.465	52.733	15.929	33.74	-1.212	-7.865		49.222	0.058	14.643	0.003		2474.92	41.2486	51.6	11.7	41.1	2.834	0.008	0.008	0.000	0.204	0.17	
1779	9/1/2004	1:09:17 AM		25.365	25.615	24.713	26.058	25.19		48.455	52.998	15.933	33.522	-1.212	-7.865		48.12	0.058	14.643	0.003		2475.92	41.2653	51.9	11.5	41.0	2.826	0.008	0.008	0.000	0.204	0.17	
1780	9/1/2004	1:10:17 AM		25.366	25.616	24.729	26.058	25.155		48.455	52.927	15.934	33.592	-1.209	-7.853		49.441	0.059	14.643	0.004		2476.92	41.2819	51.8	11.8	41.0	2.828	0.008	0.009	0.000	0.207	0.18	
1781	9/1/2004	1:11:17 AM		25.371	25.621	24.734	26.063	25.18		48.021	52.38	15.876	33.327	-1.209	-7.851		49.351	0.061	14.643	0.003		2477.92	41.2986	51.3	11.8	40.7	2.804	0.009	0.009	0.000	0.216	0.18	
1782	9/1/2004	1:11:39 AM		25.361	25.611	24.709	26.048	25.175		48.39	52.72	16.076	33.422	-1.212	-7.853		51.097	0.06	14.643	0.003		2478.28	41.3047	51.6	12.2	40.9	2.820	0.009	0.009	0.000	0.212	0.18	
1783	9/1/2004	1:12:39 AM		25.361	25.611	24.709	26.053	25.18		48.461	53.093	16.057	33.426	-1.212	-7.755		46.811	0.059	14.643	0.004		2479.28	41.3214	52.0	11.1	40.9	2.823	0.008	0.009	0.000	0.208	0.18	
1784	9/1/2004	1:13:39 AM		25.36	25.6	24.698	26.063	25.175		48.247	52.498	15.938	33.508	-1.215	-7.822		49.943	0.058	14.643	0.003		2480.28	41.3381	51.4	11.9	40.9	2.818	0.008	0.008	0.000	0.205	0.17	
1785	9/1/2004	1:14:39 AM		25.37	25.61	24.683	26.078	25.175		48.434	53.189	15.975	33.313	-1.215	-7.752		49.155	0.058	14.643	0.003		2481.28	41.3547	52.1	11.7	40.9	2.818	0.008	0.008	0.000	0.205	0.17	
1786	9/1/2004	1:15:39 AM		25.355	25.6	24.668	26.063	25.185		48.417	53.052	15.843	33.764	-1.212	-7.749		48.093	0.058	14.643	0.003		2482.28	41.3714	51.9	11.5	41.1	2.833	0.008	0.008	0.000	0.204	0.17	
1787	9/1/2004	1:16:39 AM		25.356	25.611	24.689	26.054	25.201		48.594	53.331	15.97	33.407	-1.209	-7.784		49.808	0.057	14.643	0.004		2483.28	41.3881	52.2	11.9	41.0	2.827	0.008	0.008	0.000	0.201	0.17	
1788	9/1/2004	1:17:39 AM		25.362	25.607	24.69	26.04	25.192		48.523	53.039	15.862	33.836	-1.212	-7.775		48.546	0.059	14.643	0.003		2484.28	41.4047	51.9	11.6	41.2	2.839	0.008	0.009	0.000	0.207	0.18	
1789	9/1/2004	1:18:39 AM		25.359	25.619	24.672	26.047	25.169		48.621	53.429	15.856	33.534	-1.212	-7.775		49.378	0.059	14.643	0.004		2485.28	41.4214	52.3	11.8	41.1	2.832	0.008	0.009	0.000	0.208	0.18	
1790	9/1/2004	1:19:39 AM		25.36	25.615	24.668	26.052	25.159		48.457	52.979	15.826	33.709	-1.215	-7.787		49.328	0.057	14.643	0.003		2486.28	41.4381	51.9	11.7	41.1	2.833	0.008	0.008	0.000	0.200	0.17	
1791	9/1/2004	1:20:39 AM		25.34	25.605	24.653	26.027	25.164		48.546	53.168	15.801	33.902	-1.212	-7.775		47.81	0.06	14.643	0.003		2487.28	41.4547	52.0	11.4	41.2	2.842	0.009	0.009	0.000	0.210	0.18	
1792	9/1/2004	1:21:39 AM		25.34	25.605	24.663	26.052	25.174		48.446	52.987	15.844	33.694	-1.215	-7.827		48.8	0.056	14.643	0.003		2488.28	41.4714	51.9	11.6	41.1	2.832	0.008	0.008	0.000	0.197	0.17	
1793	9/1/2004	1:22:39 AM		25.344	25.609	24.662	26.047	25.209		48.853	53.686	15.832	34.076	-1.215	-7.654		49.067	0.059	14.643	0.003		2489.28	41.4881	52.6	11.7	41.5	2.859	0.008	0.009	0.000	0.206	0.18	
1794	9/1/2004	1:23:39 AM		25.339	25.609	24.647	26.052	25.204		48.517	52.865	15.893	33.764	-1.212	-7.593		49.147	0.06	14.643	0.003		2490.28	41.5047	51.7	11.7	41.1	2.836	0.009	0.009	0.000	0.211	0.18	
1795	9/1/2004	1:24:39 AM		25.359	25.624	24.692	26.092	25.189		48.909	53.636	15.86	34.049	-1.209	-7.671		47.693	0.058	14.643	0.003		2491.28	41.5214	52.5	11.4	41.5	2.860	0.008	0.008	0.000	0.202	0.17	
1796	9/1/2004	1:25:39 AM		25.348	25.618	24.686	26.065	25.197		48.646	52.981	15.855	33.865	-1.212	-7.735		48.909	0.057	14.643	0.003		2492.28	41.5381	51.9	11.6	41.3	2.844	0.008	0.008	0.000	0.200	0.17	
1797	9/1/2004	1:26:39 AM		25.353	25.623	24.681	26.095	25.192		48.523	53.085	15.748	33.885	-1.212	-7.726		49.879	0.058	14.643	0.003		2493.28	41.5547	52.0	11.9	41.2	2.841	0.008	0.008	0.000	0.203	0.17	
1798	9/1/2004	1:27:39 AM		25.353	25.628	24.661	26.09	25.177		48.488	52.996	15.792	33.633	-1.212	-7.72		50.379	0.058	14.643	0.003		2494.28	41.5714	51.9	12.0	41.1	2.831	0.008	0.008	0.000	0.204	0.17	
1799	9/1/2004	1:28:39 AM		25.353	25.618	24.671	26.065	25.197		48.689	53.267	15.804	34.109	-1.215	-7.718		46.633	0.058	14.643	0.004		2495.28	41.5881	52.1	11.1	41.4	2.854	0.008	0.008	0.000	0.202	0.17	
1800	9/1/2004	1:29:39 AM		25.348	25.618	24.671	26.056	25.203		48.776	53.34	15.968	33.838	-1.215	-7.723		48.381	0.058	14.643	0.003		2496.28	41.6047	52.2	11.5	41.3	2.848	0.008	0.008	0.000	0.203	0.17	
1801	9/1/2004	1:30:39 AM		25.348	25.613	24.671	26.055	25.227		48.465	52.95	15.759	33.82	-1.215	-7.726		48.515	0.057	14.643	0.003		2497.28	41.6214	51.8	11.6	41.1	2.837	0.008	0.008	0.000	0.200	0.17	
1802	9/1/2004	1:31:39 AM		25.356	25.621	24.729	26.079	25.216		48.921	53.645	15.983	33.939	-1.209	-7.729		48.296	0.057	14.643	0.004		2498.28	41.6381	52.5	11.5	41.4	2.856	0.008	0.008	0.000	0.198	0.17	
1803	9/1/2004	1:32:39 AM		25.34	25.61	24.713	26.083	25.21		48.193	52.675	15.791	33.621	-1.215	-7.726		47.772	0.058	14.643	0.003		2499.28	41.6547	51.5	11.4	40.9	2.820	0.008	0.008	0.000	0.205	0.17	
1804	9/1/2004	1:33:39 AM		25.361	25.621	24.729	26.073	25.17		48.598	53.045	15.804	33.859	-1.209	-7.732		47.92	0.057	14.643	0.004		2500.28	41.6714	51.9	11.4	41.2	2.843	0.008	0.008	0.000	0.199	0.17	
1805	9/1/2004	1:34:39 AM		25.351	25.616	24.704	26.058	25.155		48.648	53.348	15.914	33.74	-1.215	-7.744		48.488	0.056	14.643	0.003		2501.28	41.6881	52.2	11.5	41.2	2.840	0.008	0.008	0.000	0.196	0.17	
1806	9/1/2004	1:35:39 AM		25.351	25.606	24.664	26.048	25.2		48.559	53.159	15.879	33.766	-1.215	-7.735		48.25	0.058	14.643	0.003		2502.28	41.7047	52.0	11.5	41.2	2.838	0.008	0.008	0.000	0.204	0.17	
1807	9/1/2004	1:36:39 AM		25.366	25.626	24.684	26.069	25.136		48.256	52.635	15.754	33.774	-1.218	-7.723		48.669	0.059	14.643	0.003		2503.28	41.7214	51.5	11.6	41.0	2.828	0.008	0.009	0.000	0.208	0.18	
1808	9/1/2004	1:37:39 AM		25.37	25.625	24.698	26.073	25.145		48.461	52.925	15.695	33.893	-1.212	-7.547		47.979	0.058	14.643	0.003		2504.28	41.7381	51.8	11.4	41.2	2.839	0.008	0.008	0.000	0.203	0.17	
1809	9/1/2004	1:38:39 AM		25.366	25.626	24.694	26.068	25.09		48.388	53.039	15.943	33.444	-1.212	-7.686		48.694	0.054	14.643	0.003		2505.28	41.7547	51.9	11.6	40.9	2.821	0.008	0.008	0.000	0.191	0.16	
1810	9/1/2004	1:39:39 AM		25.361	25.616	24.669	26.068	25.15		48.295	52.776	15.751	33.623	-1.215	-7.671		47.24	0.057	14.643	0.003		2506.28	41.7714	51.7	11.3	41.0	2.824	0.008	0.008	0.000	0.201	0.17	
1811	9/1/2004	1:40:39 AM		25.361	25.616	24.659	26.069	25.146		48.498	53.263	15.902	33.579	-1.215	-7.674		51.499	0.057	14.643	0.003		2507.28	41.7881	52.1	12.3	41.0	2.829	0.008	0.008	0.000	0.201	0.17	
1812	9/1/2004	1:41:39 AM		25.356	25.611	24.669	26.059	25.186		48.671	53.545	15.772	33.807	-1.212	-7.666		47.14	0.058	14.643	0.003		2508.28	41.8047	52.4	11.2	41.2	2.843	0.008	0.008	0.000	0.203	0.17	
1813	9/1/2004	1:42:39 AM		25.362	25.627	24.68	26.075	25.172		48.125	52.84	15.659	33.707	-1.212	-7.666		50.452	0.058	14.643	0.003		2509.28	41.8214	51.7	12.0	40.9	2.821	0.008	0.008	0.000	0.205	0.17	
1814	9/1/2004	1:43:39 AM		25.356	25.616	24.664	26.054	25.186		48.581	53.288	15.99	33.647	-1.212	-7.666		47.374	0.058	14.643	0.003		2510.28	41.8381	52.2	11.3	41.1	2.835	0.008	0.008	0.000	0.204	0.17	
1815	9/1/2004	1:44:39 AM		25.351	25.616	24.639	26.049	25.186		48.671	53.367	15.899	33.797	-1.218	-7.608		48.3	0.057	14.643	0.003		2511.28	41.8547	52.2	11.5	41.2	2.843	0.008	0.008	0.000	0.200	0.17	
1816	9/1/2004	1:45:39 AM		25.356	25.611	24.659	26.054	25.156		48.372	53.311	15.81	33.438	-1.212	-7.654		47.935	0.058	14.643	0.003		2512.28	41.8714	52.2	11.4	40.9	2.820	0.008	0.008	0.000	0.205	0.17	
1817	9/1/2004	1:46:39 AM		25.356	25.616	24.659	26.029	25.181		48.393	52.88	15.886	33.688	-1.212	-7.66		48.415	0.057	14.643	0.003		2513.28	41.8881	51.8	11.5	41.0	2.830	0.008	0.008	0.000	0.201	0.17	
1818	9/1/2004	1:47:39 AM		25.361	25.626	24.669	26.074	25.186		48.673	53.452	15.794	33.93	-1.209	-7.666		48.648	0.056	14.643	0.004		2514.28	41.9047	52.3	11.6	41.3	2.848	0.008	0.008	0.000	0.196	0.17	
1819	9/1/2004	1:48:39 AM		25.361	25.621	24.654	26.059	25.176		48.38	53.099	15.967	33.442	-1.212	-7.671		47.313	0.055	14.643	0.003		2515.28	41.9214	52.0	11.3	40.9	2.821	0.008	0.008	0.000	0.194	0.17	
1820	9/1/2004	1:49:39 AM		25.341	25.616	24.649	26.038	25.165		48.22	53.072	15.723	33.621	-1.215	-7.634		49.837	0.055	14.643	0.003		2516.28	41.9381	51.9	11.9	40.9	2.821	0.008	0.008	0.000	0.194	0.17	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1821	9/1/2004	1:50:39 AM		25.346	25.611	24.654	26.023	25.14		48.513	53.331	15.958	33.495	-1.212	-7.553		49.022	0.06	14.643	0.003		2517.28	41.9547	52.2	11.7	41.0	2.827	0.009	0.009	0.000	0.212	0.18	
1822	9/1/2004	1:51:39 AM		25.35	25.615	24.658	26.048	25.185		48.741	53.236	15.868	33.891	-1.212	-7.683		49.472	0.065	14.643	0.003		2518.28	41.9714	52.1	11.8	41.3	2.849	0.009	0.009	0.000	0.227	0.19	
1823	9/1/2004	1:52:39 AM		25.349	25.614	24.662	26.022	25.244		47.416	52.654	16.671	31.642	-1.215	-6.524		49.111	0.041	14.643	0.003		2519.28	41.9881	51.5	11.7	39.5	2.725	0.006	0.006	0.000	0.150	0.13	
1824	9/1/2004	1:53:39 AM		25.324	25.599	24.657	26.007	25.219		47.945	52.418	16.585	32.519	-1.212	-7.194		50.586	0.065	14.643	0.003		2520.28	42.0047	51.3	12.0	40.2	2.774	0.009	0.009	0.000	0.234	0.20	
1825	9/1/2004	1:54:39 AM		25.341	25.611	24.714	25.999	25.216		47.895	52.832	16.512	32.309	-1.215	-7.322		51.531	0.056	14.643	0.003		2521.28	42.0214	51.7	12.3	40.1	2.765	0.008	0.008	0.000	0.202	0.17	
1826	9/1/2004	1:55:39 AM		25.332	25.607	24.745	26.02	25.192		47.81	52.625	16.451	32.332	-1.215	-7.362		51.55	0.056	14.643	0.003		2522.28	42.0381	51.5	12.3	40.1	2.763	0.008	0.008	0.000	0.202	0.17	
1827	9/1/2004	1:56:39 AM		25.348	25.608	24.751	26.045	25.117		47.746	52.252	16.336	32.58	-1.209	-7.379		50.774	0.057	14.643	0.004		2523.28	42.0547	51.1	12.1	40.2	2.769	0.008	0.008	0.000	0.205	0.17	
1828	9/1/2004	1:57:39 AM		25.332	25.597	24.705	25.995	25.152		48.146	52.911	16.321	32.773	-1.218	-7.397		50.333	0.056	14.643	0.003		2524.28	42.0714	51.8	12.0	40.5	2.790	0.008	0.008	0.000	0.200	0.17	
1829	9/1/2004	1:58:39 AM		25.358	25.618	24.726	26.025	25.177		47.97	52.712	16.586	32.381	-1.215	-7.397		50.805	0.055	14.643	0.003		2525.28	42.0881	51.6	12.1	40.2	2.770	0.008	0.008	0.000	0.198	0.17	
1830	9/1/2004	1:59:39 AM		25.363	25.618	24.736	26.025	25.207		47.982	52.942	16.299	32.644	-1.212	-7.272		49.597	0.055	14.643	0.003		2526.28	42.1047	51.8	11.8	40.3	2.779	0.008	0.008	0.000	0.197	0.17	
1831	9/1/2004	2:00:39 AM		25.368	25.618	24.741	26.025	25.217		47.82	52.183	16.406	32.609	-1.212	-7.258		48.415	0.056	14.643	0.003		2527.28	42.1214	51.1	11.5	40.2	2.773	0.008	0.008	0.000	0.201	0.17	
1832	9/1/2004	2:01:39 AM		25.366	25.616	24.719	26.054	25.166		47.955	52.577	16.336	32.711	-1.212	-7.327		49.403	0.057	14.643	0.003		2528.28	42.1381	51.5	11.8	40.3	2.781	0.008	0.008	0.000	0.204	0.17	
1833	9/1/2004	2:02:39 AM		25.371	25.616	24.724	26.049	25.196		48.059	52.95	16.478	32.588	-1.212	-7.33		49.641	0.055	14.643	0.003		2529.28	42.1547	51.8	11.8	40.3	2.780	0.008	0.008	0.000	0.197	0.17	
1834	9/1/2004	2:03:39 AM		25.371	25.626	24.734	26.074	25.166		48.233	52.759	16.446	32.814	-1.212	-7.446		52.641	0.061	14.643	0.003		2530.28	42.1714	51.6	12.5	40.5	2.794	0.009	0.009	0.000	0.217	0.18	
1835	9/1/2004	2:04:39 AM		25.376	25.626	24.749	26.034	25.146		47.546	52.397	16.474	32.196	-1.212	-7.376		49.95	0.056	14.643	0.003		2531.28	42.1881	51.3	11.9	39.9	2.749	0.008	0.008	0.000	0.203	0.17	
1836	9/1/2004	2:05:39 AM		25.372	25.627	24.735	26.025	25.192		47.557	52.415	16.773	31.704	-1.215	-7.391		50.69	0.055	14.643	0.003		2532.28	42.2047	51.3	12.1	39.6	2.732	0.008	0.008	0.000	0.200	0.17	
1837	9/1/2004	2:06:39 AM		25.376	25.626	24.729	26.034	25.246		47.534	52.102	16.601	32.03	-1.215	-7.391		52.348	0.056	14.643	0.003		2533.28	42.2214	51.0	12.5	39.8	2.743	0.008	0.008	0.000	0.203	0.17	
1838	9/1/2004	2:07:39 AM		25.371	25.626	24.739	26.014	25.226		47.551	52.129	16.548	32.127	-1.215	-7.501		49.42	0.052	14.643	0.003		2534.28	42.2381	51.0	11.8	39.8	2.747	0.007	0.007	0.000	0.188	0.16	
1839	9/1/2004	2:08:39 AM		25.367	25.622	24.75	26.03	25.182		47.914	52.677	16.704	32.243	-1.212	-7.541		51.241	0.055	14.643	0.003		2535.28	42.2547	51.6	12.2	40.1	2.763	0.008	0.008	0.000	0.198	0.17	
1840	9/1/2004	2:09:39 AM		25.378	25.628	24.756	26.031	25.228		47.822	52.563	16.664	32.047	-1.215	-7.593		51.157	0.056	14.643	0.003		2536.28	42.2714	51.4	12.2	39.9	2.753	0.008	0.008	0.000	0.202	0.17	
1841	9/1/2004	2:10:39 AM		25.379	25.624	24.752	26.037	25.184		48.019	52.641	16.69	32.416	-1.212	-7.596		48.21	0.056	14.643	0.003		2537.28	42.2881	51.5	11.5	40.2	2.773	0.008	0.008	0.000	0.201	0.17	
1842	9/1/2004	2:11:39 AM		25.386	25.631	24.759	26.039	25.201		47.679	52.395	16.536	32.266	-1.212	-7.541		49.747	0.057	14.643	0.003		2538.28	42.3047	51.3	11.8	40.0	2.756	0.008	0.008	0.000	0.206	0.17	
1843	9/1/2004	2:12:39 AM		25.387	25.627	24.775	26.035	25.197		47.797	52.297	16.463	32.424	-1.215	-7.619		50.924	0.055	14.643	0.003		2539.28	42.3214	51.2	12.1	40.1	2.765	0.008	0.008	0.000	0.198	0.17	
1844	9/1/2004	2:13:39 AM		25.373	25.618	24.746	26.006	25.213		47.839	52.552	16.561	32.301	-1.215	-7.625		50.171	0.056	14.643	0.003		2540.28	42.3381	51.4	11.9	40.1	2.763	0.008	0.008	0.000	0.202	0.17	
1845	9/1/2004	2:14:39 AM		25.394	25.634	24.798	26.072	25.224		47.899	52.523	16.457	32.453	-1.206	-7.562		50.215	0.056	14.643	0.003		2541.28	42.3547	51.4	12.0	40.2	2.770	0.008	0.008	0.000	0.201	0.17	
1846	9/1/2004	2:15:39 AM		25.39	25.63	24.768	26.033	25.21		47.903	52.513	16.494	32.412	-1.212	-7.53		50.878	0.056	14.643	0.003		2542.28	42.3714	51.4	12.1	40.2	2.769	0.008	0.008	0.000	0.201	0.17	
1847	9/1/2004	2:16:39 AM		25.38	25.62	24.768	26.023	25.21		47.607	52.364	16.468	32.194	-1.215	-7.547		50.982	0.057	14.643	0.003		2543.28	42.3881	51.2	12.1	39.9	2.751	0.008	0.008	0.000	0.206	0.18	
1848	9/1/2004	2:17:39 AM		25.384	25.624	24.818	26.022	25.234		47.972	52.596	16.424	32.621	-1.212	-7.588		50.137	0.057	14.643	0.003		2544.28	42.4047	51.5	11.9	40.3	2.778	0.008	0.008	0.000	0.204	0.17	
1849	9/1/2004	2:18:39 AM		25.384	25.619	24.822	26.041	25.213		47.721	52.316	16.587	32.278	-1.212	-7.59		49.76	0.057	14.643	0.003		2545.28	42.4214	51.2	11.9	40.0	2.758	0.008	0.008	0.000	0.205	0.17	
1850	9/1/2004	2:19:39 AM		25.394	25.624	24.808	26.027	25.229		47.743	52.507	16.453	32.328	-1.209	-7.599		50.792	0.054	14.643	0.003		2546.28	42.4381	51.4	12.1	40.0	2.760	0.008	0.008	0.000	0.194	0.17	
1851	9/1/2004	2:20:39 AM		25.394	25.629	24.802	26.036	25.248		47.928	52.476	16.505	32.531	-1.212	-7.602		51.049	0.056	14.643	0.003		2547.28	42.4547	51.4	12.2	40.2	2.774	0.008	0.008	0.000	0.200	0.17	
1852	9/1/2004	2:21:39 AM		25.405	25.64	24.813	26.048	25.27		47.638	52.405	16.246	32.467	-1.212	-7.605		49.122	0.055	14.643	0.003		2548.28	42.4714	51.3	11.7	40.1	2.761	0.008	0.008	0.000	0.198	0.17	
1853	9/1/2004	2:22:39 AM		25.4	25.625	24.798	26.028	25.24		47.492	52.152	16.24	32.315	-1.215	-7.602		51.7	0.056	14.643	0.003		2549.28	42.4881	51.0	12.3	39.9	2.751	0.008	0.008	0.000	0.202	0.17	
1854	9/1/2004	2:23:39 AM		25.401	25.631	24.784	26.043	25.245		47.845	52.658	16.444	32.336	-1.212	-7.616		50.19	0.057	14.643	0.003		2550.28	42.5047	51.5	12.0	40.1	2.764	0.008	0.008	0.000	0.205	0.17	
1855	9/1/2004	2:24:39 AM		25.401	25.631	24.774	26.063	25.226		47.94	52.627	16.36	32.796	-1.212	-7.599		50.607	0.057	14.643	0.003		2551.28	42.5214	51.5	12.1	40.4	2.783	0.008	0.008	0.000	0.203	0.17	
1856	9/1/2004	2:25:39 AM		25.392	25.622	24.76	26.035	25.257		47.889	52.565	16.521	32.412	-1.215	-7.605		51.875	0.056	14.643	0.003		2552.28	42.5381	51.4	12.4	40.2	2.768	0.008	0.008	0.000	0.201	0.17	
1857	9/1/2004	2:26:39 AM		25.397	25.627	24.775	26.04	25.247		47.575	52.048	16.419	32.307	-1.212	-7.605		50.273	0.056	14.643	0.003		2553.28	42.5547	50.9	12.0	39.9	2.754	0.008	0.008	0.000	0.202	0.17	
1858	9/1/2004	2:27:39 AM		25.401	25.626	24.775	26.049	25.201		47.938	52.733	16.614	32.324	-1.212	-7.611		50.284	0.056	14.643	0.003		2554.28	42.5714	51.6	12.0	40.1	2.767	0.008	0.008	0.000	0.201	0.17	
1859	9/1/2004	2:28:39 AM		25.411	25.636	24.78	26.069	25.251		48.052	52.84	16.631	32.367	-1.212	-7.625		48.414	0.056	14.643	0.003		2555.28	42.5881	51.7	11.5	40.2	2.772	0.008	0.008	0.000	0.201	0.17	
1860	9/1/2004	2:29:39 AM		25.422	25.657	24.81	26.065	25.217		47.536	52.214	16.529	32.071	-1.209	-7.507		50.847	0.043	14.643	0.004		2556.28	42.6047	51.1	12.1	39.8	2.744	0.006	0.006	0.000	0.155	0.13	
1861	9/1/2004	2:30:39 AM		25.418	25.648	24.796	26.051	25.188		47.799	52.473	16.359	32.408	-1.212	-7.588		51.086	0.059	14.643	0.004		2557.28	42.6214	51.3	12.2	40.1	2.765	0.008	0.008	0.000	0.212	0.18	
1862	9/1/2004	2:31:39 AM		25.418	25.643	24.787	26.036	25.223		47.69	52.277	16.61	32.083	-1.212	-7.663		50.632	0.058	14.643	0.003		2558.28	42.6381	51.2	12.1	39.9	2.750	0.008	0.008	0.000	0.209	0.18	
1863	9/1/2004	2:32:39 AM		25.418	25.648	24.796	26.041	25.223		47.737	52.231	16.38	32.531	-1.212	-7.489		50.279	0.049	14.643	0.004		2559.28	42.6547	51.1	12.0	40.1	2.767	0.007	0.007	0.000	0.176	0.15	
1864	9/1/2004	2:33:39 AM		25.403	25.638	24.787	26.016	25.168		47.986	53.004	16.466	32.596	-1.212	-7.217		49.101	0.055	14.643	0.003		2560.28	42.6714	51.9	11.7	40.3	2.778	0.008	0.008	0.000	0.197	0.17	
1865	9/1/2004	2:34:39 AM		25.408	25.633	24.782	26.006	25.208		47.953	52.517	16.444	32.416	-1.212	-7.457		49.17	0.055	14.643	0.003		2561.28	42.6881	51.4	11.7	40.2	2.771	0.008	0.008	0.000	0.197	0.17	
1866	9/1/2004	2:35:39 AM		25.413	25.643	24.792	26.031	25.208		48.032	52.828	16.43	32.596	-1.215	-7.469		50.169	0.055	14.643	0.003		2562.28	42.7047	51.7	11.9	40.3	2.780	0.008	0.008	0.000	0.196	0.17	
1867	9/1/2004	2:36:39 AM		25.413	25.638	24.776	26.025	25.223		47.831	52.519	16.222	32.689	-1.212	-7.481		50.461	0.057	14.643	0.003		2563.28	42.7214	51.4	12.0	40.3	2.776	0.008	0.008	0.000	0.204	0.17	
1868	9/1/2004	2:37:39 AM		25.412	25.637	24.78	26.005	25.257		48.204	52.778	16.319	32.923	-1.212	-7.489		50.233	0.055	14.643	0.003		2564.28	42.7381	51.7	12.0	40.6	2.797	0.008	0.008	0.000	0.195	0.17	
1869	9/1/2004	2:38:39 AM		25.413	25.633	24.786	26.005	25.203		47.775	52.105	16.342	32.642	-1.215	-7.498		51.712	0.057	14.643	0.003		2565.28	42.7547	51.0	12.3	40.2	2.772	0.008	0.008	0.000	0.204	0.17	
1870	9/1/2004	2:39:39 AM		25.411	25.636	24.795	26.024	25.216		48.287	53.249	16.377	32.939	-1.212	-7.521		49.095	0.056	14.643	0.003		2566.28	42.7714	52.1	11.7	40.6	2.800	0.008	0.008	0.000	0.199	0.17	
1871	9/1/2004	2:40:39 AM		25.42	25.64	24.783	26.033	25.285		48.395	53.191	16.407	32.878	-1.212	-7.576		50.774	0.057	14.643	0.003		2567.28	42.7881	52.1	12.1	40.6	2.802	0.008	0.008	0.000	0.202	0.17	
1872	9/1/2004	2:41:39 AM		25.423	25.653	24.856	26.051	25.243		47.835	52.43	16.308	32.531	-1.209	-7.596		47.853	0.056	14.643	0.003		2568.28	42.8047	51.3	11.4	40.2	2.770	0.008	0.008	0.000	0.200	0.17	
1873	9/1/2004	2:42:39 AM		25.417	25.637	24.84	26.039	25.231		47.957	52.708	16.39	32.679	-1.215	-7.616		49.998	0.055	14.643	0.003		2569.28	42.8214	51.6	11.9	40.3	2.780	0.008	0.008	0.000	0.196	0.17	
1874	9/1/2004	2:43:39 AM		25.417	25.642	24.845	26.029	25.261		48.119	53.124	16.438	32.59	-1.212	-7.611		49.078	0.055	14.643	0.003		2570.28	42.8381	52.0	11.7	40.4	2.782	0.008	0.008	0.000	0.196	0.17	
1875	9/1/2004	2:44:39 AM		25.422	25.642	24.815	26.024	25.221		48.077	52.691	16.164	33.054	-1.212	-7.608		49.973	0.056	14.643	0.003		2571.28	42.8547	51.6	11.9	40.6	2.797	0.008	0.008	0.000	0.199	0.17	
1876	9/1/2004	2:45:39 AM		25.422	25.642	24.805	26.019	25.191		48.098	52.824	16.209	33.101	-1.215	-7.611		49.614	0.055	14.643	0.003		2572.28	42.8714	51.7	11.8	40.6	2.799	0.008	0.008	0.000	0.195	0.17	
1877	9/1/2004	2:46:39 AM		25.422	25.637	24.805	26.019	25.191		48.052	53.006	16.093	33.003	-1.212	-7.611		49.051	0.056	14.643	0.003		2573.28	42.8881	51.9	11.7	40.5	2.794	0.008	0.008	0.000	0.199	0.17	
1878	9/1/2004	2:47:39 AM		25.417	25.627	24.791	25.98	25.222		48.077	52.486	16.257	32.906	-1.212	-7.489		50.167	0.055	14.643	0.003		2574.28	42.9047	51.4	11.9	40.5	2.792	0.008	0.008	0.000	0.196	0.17	
1879	9/1/2004	2:48:39 AM		25.429	25.649	24.797	26.016	25.198		47.969	52.851	16.141	32.954	-1.212	-7.512		49.268	0.057	14.643	0.003		2575.28	42.9214	51.7	11.7	40.5	2.790	0.008	0.008	0.000	0.203	0.17	
1880	9/1/2004	2:49:39 AM		25.424	25.649	24.788	26.027	25.204		47.911	52.349	16.165	32.937	-1.215	-7.547		49.516	0.056	14.643	0.003		2576.28	42.9381	51.2	11.8	40.4	2.787	0.008	0.008	0.000	0.200	0.17	
1881	9/1/2004	2:50:39 AM		25.419	25.634	24.782	26.011	25.208		47.955	52.789	16.153	32.841	-1.215	-7.547		49.28	0.056	14.643	0.003		2577.28	42.9547	51.7	11.7	40.4	2.785	0.008	0.008	0.000	0.200	0.17	
1882	9/1/2004	2:51:39 AM		25.42	25.645	24.793	26.033	25.19		48.287	53.066	16.271	33.03	-1.212	-7.556		49.42	0.056	14.643	0.004		2578.28	42.9714	51.9	11.8	40.7	2.803	0.008	0.008	0.000	0.198	0.17	
1883	9/1/2004	2:52:39 AM		25.421	25.651	24.789	25.998	25.146		48.216	53.025	16.304	33.015	-1.218	-7.562		49.403	0.056	14.643	0.003		2579.28	42.9881	51.9	11.8	40.6	2.800	0.008	0.008	0.000	0.199	0.17	
1884	9/1/2004	2:53:39 AM		25.41	25.64	24.768	26.023	25.175		48.283	53.131	16.254	32.931	-1.212	-7.562		50.744	0.057	14.643	0.003		2580.28	43.0047	52.0	12.1	40.6	2.800	0.008	0.008	0.000	0.202	0.17	
1885	9/1/2004	2:54:39 AM		25.406	25.636	24.765	26.004	25.186		48.245	53.077	16.283	32.958	-1.215	-7.57		49.58	0.059	14.643	0.003		2581.28	43.0214	52.0	11.8	40.6	2.799	0.008	0.009	0.000	0.209	0.18	
1886	9/1/2004	2:55:39 AM		25.416	25.641	24.785	26.019	25.171		48.378	53.135	16.169	33.268	-1.212	-7.05		50.187	0.028	14.643	0.003		2582.28	43.0381	52.0	12.0	40.8	2.815	0.004	0.004	0.000	0.099	0.08	
1887	9/1/2004	2:56:39 AM		25.411	25.641	24.779	26.013	25.181		47.69	53.072	16.266	32.408	-1.09	-6.527		50.129	0.06	14.643	0.003		2583.28	43.0547	51.9	11.9	40.0	2.761	0.009	0.009	0.000	0.216	0.18	
1888	9/1/2004	2:57:39 AM		25.41	25.63	24.763	26.013	25.2		48.223	52.975	16.305	32.984	-1.215	-7.105		50.532	0.053	14.643	0.003		2584.28	43.0714	51.8	12.0	40.6	2.799	0.008	0.008	0.000	0.188	0.16	
1889	9/1/2004	2:58:39 AM		25.405	25.64	24.778	25.998	25.235		47.999	52.697	16.086	33.128	-1.212	-7.345		50.225	0.056	14.643	0.003		2585.28	43.0881	51.6	12.0	40.6	2.797	0.008	0.008	0.000	0.199	0.17	
1890	9/1/2004	2:59:39 AM		25.409	25.639	24.787	25.981	25.228		48.05	52.78	16.224	32.91	-1.215	-7.356		49.387	0.056	14.643	0.003		2586.28	43.1047	51.7	11.8	40.5	2.791	0.008	0.008	0.000	0.199	0.17	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1891	9/1/2004	3:00:02 AM		25.403	25.633	24.771	25.991	25.243		48.202	53.135	16.242	32.984	-1.215	-7.33		49.812	0.054	14.643	0.003		2586.67	43.1111	52.0	11.9	40.6	2.799	0.008	0.008	0.000	0.192	0.16	
1892	9/1/2004	3:01:02 AM		25.423	25.653	24.811	26.016	25.253		48.204	53.05	16.366	32.839	-1.209	-7.29		50.728	0.055	14.643	0.004		2587.67	43.1278	51.9	12.1	40.5	2.794	0.008	0.008	0.000	0.195	0.17	
1893	9/1/2004	3:02:02 AM		25.407	25.637	24.786	25.975	25.257		48.113	52.762	16.23	33.087	-1.212	-7.322		48.571	0.057	14.643	0.003		2588.67	43.1444	51.6	11.6	40.6	2.799	0.008	0.008	0.000	0.202	0.17	
1894	9/1/2004	3:03:02 AM		25.408	25.643	24.781	25.991	25.218		48.351	53.103	16.274	33.126	-1.215	-7.368		50.369	0.059	14.643	0.003		2589.67	43.1611	52.0	12.0	40.7	2.809	0.008	0.008	0.000	0.209	0.18	
1895	9/1/2004	3:04:02 AM		25.407	25.647	24.78	25.994	25.246		48.183	52.691	16.207	33.081	-1.212	-7.457		51.681	0.056	14.643	0.003		2590.67	43.1778	51.6	12.3	40.6	2.801	0.008	0.008	0.000	0.199	0.17	
1896	9/1/2004	3:05:02 AM		25.407	25.642	24.785	25.964	25.256		48.368	52.96	16.335	33.194	-1.218	-7.483		50.525	0.062	14.643	0.003		2591.67	43.1944	51.8	12.0	40.8	2.812	0.009	0.009	0.000	0.219	0.19	
1897	9/1/2004	3:06:02 AM		25.4	25.64	24.794	25.968	25.27		48.167	53.031	16.255	32.773	-1.215	-7.576		49.069	0.056	14.643	0.003		2592.67	43.2111	51.9	11.7	40.5	2.790	0.008	0.008	0.000	0.199	0.17	
1898	9/1/2004	3:07:02 AM		25.406	25.641	24.789	25.999	25.221		48.301	52.923	16.278	33.11	-1.212	-7.533		48.832	0.056	14.643	0.003		2593.67	43.2278	51.8	11.6	40.7	2.807	0.008	0.008	0.000	0.198	0.17	
1899	9/1/2004	3:08:02 AM		25.401	25.646	24.789	26.009	25.226		48.065	52.662	16.238	32.945	-1.215	-7.533		50.659	0.055	14.643	0.003		2594.67	43.2444	51.5	12.1	40.5	2.793	0.008	0.008	0.000	0.196	0.17	
1900	9/1/2004	3:09:02 AM		25.407	25.652	24.805	26.014	25.201		48.16	52.969	16.229	32.988	-1.212	-7.53		50.872	0.056	14.643	0.003		2595.67	43.2611	51.8	12.1	40.6	2.797	0.008	0.008	0.000	0.199	0.17	
1901	9/1/2004	3:10:02 AM		25.401	25.641	24.819	26.009	25.226		48.608	53.207	16.405	33.196	-1.212	-7.524		49.145	0.055	14.643	0.004		2596.67	43.2778	52.1	11.7	40.9	2.820	0.008	0.008	0.000	0.193	0.16	
1902	9/1/2004	3:11:02 AM		25.406	25.651	24.844	26.004	25.246		48.486	53.3	16.419	33.068	-1.215	-7.53		50.2	0.056	14.643	0.003		2597.67	43.2944	52.2	12.0	40.8	2.811	0.008	0.008	0.000	0.197	0.17	
1903	9/1/2004	3:12:02 AM		25.39	25.635	24.848	25.987	25.254		48.025	52.751	16.27	32.773	-1.212	-7.521		49.71	0.056	14.643	0.003		2598.67	43.3111	51.6	11.8	40.4	2.785	0.008	0.008	0.000	0.199	0.17	
1904	9/1/2004	3:13:02 AM		25.395	25.635	24.839	25.978	25.255		48.318	52.925	16.246	33.05	-1.218	-7.524		50.342	0.055	14.643	0.003		2599.67	43.3278	51.8	12.0	40.7	2.805	0.008	0.008	0.000	0.194	0.17	
1905	9/1/2004	3:14:02 AM		25.39	25.63	24.833	25.962	25.294		48.028	52.795	16.147	32.982	-1.218	-7.518		49.797	0.056	14.643	0.003		2600.67	43.3444	51.7	11.9	40.5	2.793	0.008	0.008	0.000	0.199	0.17	
1906	9/1/2004	3:15:02 AM		25.41	25.645	24.858	25.987	25.284		48.614	53.468	16.389	33.185	-1.212	-7.518		49.998	0.057	14.643	0.003		2601.67	43.3611	52.3	11.9	40.9	2.820	0.008	0.008	0.000	0.200	0.17	
1907	9/1/2004	3:16:02 AM		25.411	25.646	24.829	25.969	25.251		48.577	53.195	16.302	33.37	-1.212	-7.535		48.892	0.054	14.643	0.003		2602.67	43.3778	52.1	11.6	41.0	2.825	0.008	0.008	0.000	0.190	0.16	
1908	9/1/2004	3:17:02 AM		25.417	25.652	24.835	25.979	25.221		48.231	53.259	16.106	33.153	-1.212	-7.53		50.208	0.056	14.643	0.003		2603.67	43.3944	52.1	12.0	40.7	2.806	0.008	0.008	0.000	0.198	0.17	
1909	9/1/2004	3:18:02 AM		25.412	25.647	24.836	25.95	25.232		48.299	53.039	16.355	33.032	-1.212	-7.544		51.258	0.055	14.643	0.004		2604.67	43.4111	51.9	12.2	40.7	2.804	0.008	0.008	0.000	0.195	0.17	
1910	9/1/2004	3:19:02 AM		25.413	25.643	24.831	25.976	25.273		48.073	52.732	16.046	33.112	-1.212	-7.541		51.598	0.057	14.643	0.003		2605.67	43.4278	51.6	12.3	40.6	2.799	0.008	0.008	0.000	0.202	0.17	
1911	9/1/2004	3:20:02 AM		25.418	25.653	24.826	26.001	25.243		48.391	53.468	16.202	32.99	-1.212	-7.585		49.226	0.057	14.643	0.003		2606.67	43.4444	52.3	11.7	40.7	2.805	0.008	0.008	0.000	0.202	0.17	
1912	9/1/2004	3:21:02 AM		25.408	25.648	24.816	25.991	25.228		48.25	53.045	16.443	32.755	-1.209	-7.582		49.806	0.056	14.643	0.004		2607.67	43.4611	51.9	11.9	40.5	2.793	0.008	0.008	0.000	0.199	0.17	
1913	9/1/2004	3:22:02 AM		25.413	25.643	24.821	25.976	25.243		47.916	52.867	16.111	32.81	-1.212	-7.33		48.949	0.058	14.643	0.003		2608.67	43.4778	51.7	11.7	40.4	2.783	0.008	0.008	0.000	0.207	0.18	
1914	9/1/2004	3:23:02 AM		25.397	25.637	24.816	25.955	25.237		48.306	53.118	16.273	33.011	-1.212	-7.544		49.259	0.055	14.643	0.003		2609.67	43.4944	52.0	11.7	40.7	2.803	0.008	0.008	0.000	0.195	0.17	
1915	9/1/2004	3:24:02 AM		25.397	25.637	24.805	25.939	25.231		48.295	52.952	16.289	33.122	-1.212	-7.556		49.222	0.057	14.643	0.003		2610.67	43.5111	51.8	11.7	40.7	2.807	0.008	0.008	0.000	0.202	0.17	
1916	9/1/2004	3:25:02 AM		25.401	25.641	24.789	25.959	25.256		48.53	53.149	16.343	33.229	-1.218	-7.556		49.631	0.057	14.643	0.003		2611.67	43.5278	52.0	11.8	40.9	2.818	0.008	0.008	0.000	0.201	0.17	
1917	9/1/2004	3:26:02 AM		25.399	25.629	24.802	25.952	25.269		48.204	53.081	16.274	32.787	-1.212	-7.57		49.789	0.055	14.643	0.003		2612.67	43.5444	52.0	11.9	40.5	2.792	0.008	0.008	0.000	0.196	0.17	
1918	9/1/2004	3:27:02 AM		25.403	25.628	24.817	25.961	25.273		48.05	52.629	16.225	32.945	-1.212	-7.567		49.931	0.058	14.643	0.003		2613.67	43.5611	51.5	11.9	40.5	2.792	0.008	0.008	0.000	0.206	0.18	
1919	9/1/2004	3:28:02 AM		25.408	25.638	24.816	25.96	25.247		48.391	53.373	16.185	33.22	-1.215	-7.567		48.827	0.058	14.643	0.003		2614.67	43.5778	52.2	11.6	40.8	2.813	0.008	0.008	0.000	0.205	0.17	
1920	9/1/2004	3:29:02 AM		25.401	25.626	24.794	25.968	25.25		48.208	52.942	16.334	32.886	-1.212	-7.573		49.583	0.056	14.643	0.003		2615.67	43.5944	51.8	11.8	40.5	2.796	0.008	0.008	0.000	0.199	0.17	
1921	9/1/2004	3:30:02 AM		25.409	25.634	24.812	25.971	25.258		47.99	52.813	16.269	32.884	-1.212	-7.57		50.135	0.056	14.643	0.003		2616.67	43.6111	51.7	11.9	40.4	2.788	0.008	0.008	0.000	0.199	0.17	
1922	9/1/2004	3:31:02 AM		25.408	25.633	24.821	25.951	25.263		48.127	53.062	16.152	33.009	-1.209	-7.27		49.935	0.06	14.643	0.003		2617.67	43.6278	51.9	11.9	40.6	2.797	0.009	0.009	0.000	0.213	0.18	
1923	9/1/2004	3:32:02 AM		25.402	25.632	24.825	25.93	25.257		48.225	53.052	16.424	32.896	-1.218	-7.324		49.455	0.056	14.643	0.003		2618.67	43.6444	51.9	11.8	40.6	2.797	0.008	0.008	0.000	0.199	0.17	
1924	9/1/2004	3:33:02 AM		25.408	25.638	24.856	25.961	25.248		47.801	52.581	16.248	32.596	-1.212	-7.509		49.021	0.057	14.643	0.003		2619.67	43.6611	51.5	11.7	40.2	2.772	0.008	0.008	0.000	0.204	0.17	
1925	9/1/2004	3:34:02 AM		25.412	25.637	24.861	25.97	25.252		48.177	52.996	16.258	32.839	-1.215	-7.527		50.636	0.053	14.643	0.003		2620.67	43.6778	51.9	12.1	40.5	2.793	0.008	0.008	0.000	0.188	0.16	
1926	9/1/2004	3:35:02 AM		25.412	25.632	24.861	25.96	25.227		48.225	52.838	16.392	32.898	-1.215	-7.512		49.848	0.056	14.643	0.003		2621.67	43.6944	51.7	11.9	40.6	2.797	0.008	0.008	0.000	0.198	0.17	
1927	9/1/2004	3:36:02 AM		25.412	25.637	24.855	25.959	25.216		48.086	53.083	16.119	32.976	-1.212	-7.515		50.229	0.056	14.643	0.003		2622.67	43.7111	52.0	12.0	40.5	2.794	0.008	0.008	0.000	0.199	0.17	
1928	9/1/2004	3:37:02 AM		25.417	25.632	24.83	25.96	25.217		48.052	52.776	16.299	32.711	-1.212	-7.507		50.882	0.056	14.643	0.003		2623.67	43.7278	51.7	12.1	40.4	2.784	0.008	0.008	0.000	0.199	0.17	
1929	9/1/2004	3:38:02 AM		25.412	25.627	24.836	25.965	25.202		47.941	52.963	16.208	32.769	-1.212	-7.509		49.994	0.056	14.643	0.003		2624.67	43.7444	51.8	11.9	40.4	2.782	0.008	0.008	0.000	0.200	0.17	
1930	9/1/2004	3:39:02 AM		25.418	25.633	24.841	25.971	25.188		48.422	53.153	16.268	33.206	-1.212	-7.521		48.375	0.054	14.643	0.003		2625.67	43.7611	52.0	11.5	40.8	2.814	0.008	0.008	0.000	0.190	0.16	
1931	9/1/2004	3:40:02 AM		25.407	25.622	24.82	25.949	25.186		47.837	52.507	16.019	32.984	-1.212	-7.518		49.555	0.055	14.643	0.003		2626.67	43.7778	51.4	11.8	40.4	2.786	0.008	0.008	0.000	0.196	0.17	
1932	9/1/2004	3:41:02 AM		25.407	25.622	24.8	25.945	25.187		47.673	52.498	16.195	32.533	-1.215	-7.507		53.683	0.057	14.643	0.003		2627.67	43.7944	51.4	12.8	40.1	2.765	0.008	0.008	0.000	0.205	0.17	
1933	9/1/2004	3:42:02 AM		25.392	25.617	24.785	25.934	25.181		47.885	52.596	16.072	32.906	-1.215	-7.509		49.633	0.055	14.643	0.003		2628.67	43.8111	51.5	11.8	40.4	2.785	0.008	0.008	0.000	0.196	0.17	
1934	9/1/2004	3:43:02 AM		25.402	25.622	24.815	25.944	25.161		48.256	53.178	16.155	33.04	-1.212	-7.501		50.281	0.055	14.643	0.003		2629.67	43.8278	52.1	12.0	40.6	2.803	0.008	0.008	0.000	0.195	0.17	
1935	9/1/2004	3:44:02 AM		25.396	25.616	24.809	25.934	25.161		48.05	52.67	16.169	32.958	-1.209	-7.504		49.695	0.055	14.643	0.003		2630.67	43.8444	51.5	11.8	40.5	2.793	0.008	0.008	0.000	0.195	0.17	
1936	9/1/2004	3:45:02 AM		25.401	25.626	24.804	25.964	25.196		48.214	53.298	16.208	32.991	-1.212	-7.498		49.724	0.056	14.643	0.003		2631.67	43.8611	52.2	11.8	40.6	2.799	0.008	0.008	0.000	0.199	0.17	
1937	9/1/2004	3:46:02 AM		25.401	25.626	24.809	26.009	25.211		48.316	52.701	16.144	33.344	-1.209	-7.489		48.752	0.056	14.643	0.003		2632.67	43.8778	51.6	11.6	40.8	2.815	0.008	0.008	0.000	0.197	0.17	
1938	9/1/2004	3:47:02 AM		25.397	25.632	24.81	25.994	25.216		48.542	53.356	16.063	33.424	-1.209	-7.495		49.457	0.056	14.643	0.003		2633.67	43.8944	52.2	11.8	41.0	2.826	0.008	0.008	0.000	0.197	0.17	
1939	9/1/2004	3:48:02 AM		25.403	25.628	24.816	25.986	25.198		47.76	52.469	15.955	33.03	-1.212	-7.515		49.51	0.052	14.643	0.003		2634.67	43.9111	51.3	11.8	40.4	2.785	0.007	0.007	0.000	0.185	0.16	
1940	9/1/2004	3:49:02 AM		25.379	25.609	24.782	25.942	25.189		48.359	53.28	16.143	33.202	-1.218	-7.495		45.432	0.058	14.643	0.003		2635.67	43.9278	52.2	10.8	40.8	2.812	0.008	0.008	0.000	0.205	0.17	
1941	9/1/2004	3:50:02 AM		25.396	25.626	24.794	25.974	25.181		48.094	52.689	16.043	33.19	-1.212	-7.249		50.605	0.053	14.643	0.003		2636.67	43.9444	51.6	12.1	40.6	2.802	0.008	0.008	0.000	0.188	0.16	
1942	9/1/2004	3:51:02 AM		25.401	25.616	24.804	25.964	25.206		48.063	53.159	16.446	32.603	-1.212	-7.168		46.408	0.057	14.643	0.003		2637.67	43.9611	52.0	11.1	40.3	2.781	0.008	0.008	0.000	0.203	0.17	
1943	9/1/2004	3:52:02 AM		25.391	25.616	24.804	25.964	25.186		48.388	52.938	16.191	33.265	-1.212	-7.472		50.002	0.056	14.643	0.003		2638.67	43.9778	51.8	11.9	40.8	2.815	0.008	0.008	0.000	0.197	0.17	
1944	9/1/2004	3:53:02 AM		25.391	25.616	24.804	25.939	25.161		48.05	52.801	16.072	33.194	-1.212	-7.521		48.392	0.055	14.643	0.003		2639.67	43.9944	51.7	11.5	40.6	2.801	0.008	0.008	0.000	0.195	0.17	
1945	9/1/2004	3:54:02 AM		25.396	25.611	24.789	25.953	25.19		48.548	53.356	16.34	33.354	-1.212	-7.521		49.065	0.055	14.643	0.003		2640.67	44.0111	52.2	11.7	41.0	2.823	0.008	0.008	0.000	0.193	0.16	
1946	9/1/2004	3:55:02 AM		25.391	25.611	24.809	25.953	25.22		48.507	53.346	16.17	33.458	-1.212	-7.521		49.324	0.055	14.643	0.003		2641.67	44.0278	52.2	11.7	41.0	2.826	0.008	0.008	0.000	0.193	0.16	
1947	9/1/2004	3:56:02 AM		25.393	25.613	24.856	25.92	25.262		48.782	53.705	16.465	33.354	-1.212	-7.429		49.303	0.053	14.643	0.003		2642.67	44.0444	52.6	11.7	41.1	2.831	0.008	0.008	0.000	0.186	0.16	
1948	9/1/2004	3:57:02 AM		25.378	25.598	24.851	25.925	25.187		48.397	53.159	16.054	33.518	-1.212	-7.457		48.3	0.056	14.643	0.003		2643.67	44.0611	52.0	11.5	41.0	2.824	0.008	0.008	0.000	0.197	0.17	
1949	9/1/2004	3:58:02 AM		25.388	25.608	24.832	25.951	25.193		48.252	53.23	16.148	33.048	-1.212	-7.527		48.727	0.052	14.643	0.003		2644.67	44.0778	52.1	11.6	40.7	2.803	0.007	0.007	0.000	0.184	0.16	
1950	9/1/2004	3:59:02 AM		25.378	25.593	24.801	25.92	25.167		48.067	52.791	16.184	32.968	-1.218	-7.483		50.897	0.054	14.643	0.003		2645.67	44.0944	51.7	12.1	40.5	2.794	0.008	0.008	0.000	0.192	0.16	
1951	9/1/2004	4:00:02 AM		25.383	25.598	24.801	25.896	25.173		48.279	53.215	16.181	33.029	-1.215	-7.469		49.326	0.056	14.643	0.003		2646.67	44.1111	52.1	11.7	40.7	2.803	0.008	0.008	0.000	0.198	0.17	
1952	9/1/2004	4:01:02 AM		25.388	25.603	24.812	25.916	25.153		48.129	53.13	16.218	32.869	-1.215	-7.475		50.45	0.054	14.643	0.003		2647.67	44.1278	52.0	12.0	40.5	2.792	0.008	0.008	0.000	0.192	0.16	
1953	9/1/2004	4:02:02 AM		25.389	25.599	24.792	25.902	25.154		48.341	53.11	16.209	33.14	-1.215	-7.469		50.709	0.056	14.643	0.003		2648.67	44.1444	52.0	12.1	40.7	2.809	0.008	0.008	0.000	0.198	0.17	
1954	9/1/2004	4:03:02 AM		25.394	25.604	24.792	25.917	25.149		47.984	52.741	16.067	33.003	-1.212	-7.463		49.906	0.054	14.643	0.003		2649.67	44.1611	51.6	11.9	40.5	2.792	0.008	0.008	0.000	0.192	0.16	
1955	9/1/2004	4:04:02 AM		25.375	25.595	24.768	25.897	25.174		48.357	53.319	16.303	32.949	-1.215	-7.469		50.25	0.055	14.643	0.003		2650.67	44.1778	52.2	12.0	40.7	2.803	0.008	0.008	0.000	0.195	0.17	
1956	9/1/2004	4:05:02 AM		25.39	25.6	24.794	25.908	25.1		48.359	53.315	16.117	33.475	-1.215	-7.391		49.434	0.056	14.643	0.003		2651.67	44.1944	52.2	11.8	40.9	2.821	0.008	0.008	0.000	0.197	0.17	
1957	9/1/2004	4:06:02 AM		25.375	25.595	24.773	25.907	25.104		48.447	53.203	16.146	33.352	-1.215	-7.466		48.615	0.058	14.643	0.003		2652.67	44.2111	52.1	11.6	40.9	2.820	0.008	0.008	0.000	0.204	0.17	
1958	9/1/2004	4:07:02 AM		25.379	25.599	24.777	25.917	25.109		47.698	52.453	16.08	32.656	-1.212	-7.324		48.431	0.055	14.643	0.003		2653.67	44.2278	51.3	11.5	40.2	2.770	0.008	0.008	0.000	0.197	0.17	
1959	9/1/2004	4:08:02 AM		25.38	25.6	24.773	25.928	25.09		48.193	53.085	16.208	32.98	-1.215	-7.278		49.931	0.057	14.643	0.003		2654.67	44.2444	52.0	11.9	40.6	2.798	0.008	0.008	0.000	0.202	0.17	
1960	9/1/2004	4:09:02 AM		25.38	25.6	24.788	25.937	25.035		48.119	53.006	16.096	33.073	-1.212	-7.411		49.58	0.055	14.643	0.003		2655.67	44.2611	51.9	11.8	40.6	2.799	0.008	0.008	0.000	0.195	0.17	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1961	9/1/2004	4:10:02 AM		25.378	25.593	24.771	25.916	25.093		48.391	53.367	15.995	33.446	-1.215	-7.405		49.925	0.056	14.643	0.003		2656.67	44.2778	52.2	11.9	40.9	2.821	0.008	0.008	0.000	0.197	0.17	
1962	9/1/2004	4:11:02 AM		25.378	25.593	24.766	25.926	25.093		48.32	52.909	16.244	33.142	-1.215	-7.397		48.811	0.056	14.643	0.003		2657.67	44.2944	51.8	11.6	40.7	2.808	0.008	0.008	0.000	0.198	0.17	
1963	9/1/2004	4:12:02 AM		25.378	25.603	24.786	25.961	25.103		48.27	53.271	16.188	33.107	-1.209	-7.403		49.628	0.055	14.643	0.004		2658.67	44.3111	52.1	11.8	40.7	2.805	0.008	0.008	0.000	0.195	0.17	
1964	9/1/2004	4:13:02 AM		25.357	25.577	24.755	25.905	25.072		48.229	52.917	16.098	33.343	-1.215	-7.411		50.73	0.055	14.643	0.003		2659.67	44.3278	51.8	12.1	40.8	2.812	0.008	0.008	0.000	0.194	0.17	
1965	9/1/2004	4:14:02 AM		25.367	25.592	24.78	25.93	25.112		48.301	53.576	16.152	32.949	-1.212	-7.475		49.971	0.056	14.643	0.003		2660.67	44.3444	52.5	11.9	40.6	2.801	0.008	0.008	0.000	0.199	0.17	
1966	9/1/2004	4:15:02 AM		25.372	25.597	24.765	25.945	25.122		48.156	52.834	16.119	33.259	-1.212	-7.475		49.664	0.049	14.643	0.003		2661.67	44.3611	51.7	11.8	40.7	2.807	0.007	0.007	0.000	0.173	0.15	
1967	9/1/2004	4:16:02 AM		25.376	25.596	24.774	25.929	25.121		48.573	53.854	16.262	33.185	-1.212	-7.252		48.592	0.054	14.643	0.003		2662.67	44.3778	52.7	11.6	40.9	2.818	0.008	0.008	0.000	0.190	0.16	
1968	9/1/2004	4:17:02 AM		25.376	25.591	24.789	25.918	25.09		48.376	53.439	16.205	33.19	-1.212	-7.42		48.974	0.056	14.643	0.003		2663.67	44.3944	52.3	11.7	40.8	2.812	0.008	0.008	0.000	0.198	0.17	
1969	9/1/2004	4:18:02 AM		25.369	25.579	24.782	25.906	25.133		48.042	52.973	16.124	32.974	-1.218	-7.414		50.359	0.056	14.643	0.003		2664.67	44.4111	51.8	12.0	40.5	2.793	0.008	0.008	0.000	0.199	0.17	
1970	9/1/2004	4:19:02 AM		25.382	25.597	24.82	25.935	25.172		47.959	52.525	15.998	33.192	-1.206	-7.414		49.983	0.055	14.643	0.004		2665.67	44.4278	51.4	11.9	40.6	2.798	0.008	0.008	0.000	0.195	0.17	
1971	9/1/2004	4:20:02 AM		25.387	25.597	24.846	25.96	25.167		47.928	52.876	16.135	32.849	-1.212	-7.423		50.763	0.055	14.643	0.004		2666.67	44.4444	51.8	12.1	40.4	2.785	0.008	0.008	0.000	0.196	0.17	
1972	9/1/2004	4:21:02 AM		25.377	25.587	24.836	25.95	25.192		48.026	52.826	16.147	32.96	-1.215	-7.446		50.315	0.052	14.643	0.003		2667.67	44.4611	51.7	12.0	40.5	2.792	0.007	0.007	0.000	0.185	0.16	
1973	9/1/2004	4:22:02 AM		25.383	25.588	24.826	25.901	25.128		48.2	53.172	16.121	33.122	-1.215	-7.443		47.995	0.056	14.643	0.003		2668.67	44.4778	52.0	11.4	40.7	2.803	0.008	0.008	0.000	0.198	0.17	
1974	9/1/2004	4:23:02 AM		25.378	25.588	24.826	25.931	25.108		48.422	53.195	16.332	33.188	-1.212	-7.359		47.887	0.054	14.643	0.003		2669.67	44.4944	52.1	11.4	40.8	2.813	0.008	0.008	0.000	0.190	0.16	
1975	9/1/2004	4:24:02 AM		25.378	25.583	24.791	25.916	25.113		48.374	53.186	16.232	33.202	-1.218	-7.426		50.784	0.054	14.643	0.003		2670.67	44.5111	52.1	12.1	40.8	2.812	0.008	0.008	0.000	0.191	0.16	
1976	9/1/2004	4:25:02 AM		25.383	25.588	24.806	25.931	25.098		47.976	53	16.195	32.734	-1.212	-7.403		48.782	0.055	14.643	0.003		2671.67	44.5278	51.9	11.6	40.4	2.782	0.008	0.008	0.000	0.196	0.17	
1977	9/1/2004	4:26:02 AM		25.389	25.584	24.817	25.916	25.143		47.887	52.66	16.162	32.752	-1.212	-7.345		48.022	0.059	14.643	0.003		2672.67	44.5444	51.5	11.4	40.3	2.780	0.008	0.008	0.000	0.211	0.18	
1978	9/1/2004	4:27:02 AM		25.389	25.579	24.807	25.921	25.108		47.895	52.971	16.194	32.642	-1.215	-7.371		50.926	0.053	14.643	0.003		2673.67	44.5611	51.8	12.1	40.3	2.776	0.008	0.008	0.000	0.189	0.16	
1979	9/1/2004	4:28:02 AM		25.394	25.589	24.797	25.922	25.064		48.198	53.017	16.277	32.952	-1.212	-7.362		50.843	0.054	14.643	0.003		2674.67	44.5778	51.9	12.1	40.6	2.798	0.008	0.008	0.000	0.192	0.16	
1980	9/1/2004	4:29:02 AM		25.394	25.579	24.797	25.902	25.079		48.37	53.46	16.261	33.025	-1.212	-7.365		49.414	0.054	14.643	0.003		2675.67	44.5944	52.3	11.8	40.7	2.806	0.008	0.008	0.000	0.191	0.16	
1981	9/1/2004	4:30:02 AM		25.405	25.59	24.813	25.928	25.075		48.05	52.751	16.2	32.984	-1.212	-7.376		49.501	0.057	14.643	0.003		2676.67	44.6111	51.6	11.8	40.5	2.794	0.008	0.008	0.000	0.202	0.17	
1982	9/1/2004	4:31:02 AM		25.39	25.585	24.808	25.923	25.095		48.366	53.452	16.269	32.894	-1.215	-7.284		48.341	0.05	14.643	0.003		2677.67	44.6278	52.3	11.5	40.6	2.801	0.007	0.007	0.000	0.177	0.15	
1983	9/1/2004	4:32:02 AM		25.39	25.57	24.778	25.898	25.095		47.926	52.811	16.21	32.894	-1.218	-7.246		49.447	0.058	14.643	0.003		2678.67	44.6444	51.7	11.8	40.4	2.786	0.008	0.008	0.000	0.207	0.18	
1984	9/1/2004	4:33:02 AM		25.39	25.575	24.788	25.918	25.11		48.264	53.166	16.199	33.068	-1.215	-7.333		49.276	0.057	14.643	0.003		2679.67	44.6611	52.0	11.7	40.7	2.804	0.008	0.008	0.000	0.202	0.17	
1985	9/1/2004	4:34:02 AM		25.39	25.575	24.798	25.903	25.09		47.721	52.61	15.844	32.991	-1.212	-7.345		50.056	0.055	14.643	0.003		2680.67	44.6778	51.5	11.9	40.4	2.782	0.008	0.008	0.000	0.196	0.17	
1986	9/1/2004	4:35:02 AM		25.389	25.574	24.807	25.907	25.104		48.119	53.307	16.156	32.802	-1.215	-7.362		47.457	0.056	14.643	0.003		2681.67	44.6944	52.2	11.3	40.5	2.790	0.008	0.008	0.000	0.199	0.17	
1987	9/1/2004	4:36:02 AM		25.394	25.569	24.802	25.881	25.083		47.992	53.072	16.118	32.833	-1.215	-7.359		48.661	0.056	14.643	0.003		2682.67	44.7111	51.9	11.6	40.4	2.786	0.008	0.008	0.000	0.199	0.17	
1988	9/1/2004	4:37:02 AM		25.397	25.582	24.795	25.885	25.102		48.11	53.052	16.165	32.939	-1.215	-7.365		49.96	0.054	14.643	0.003		2683.67	44.7278	51.9	11.9	40.5	2.794	0.008	0.008	0.000	0.192	0.16	
1989	9/1/2004	4:38:02 AM		25.391	25.571	24.804	25.869	25.071		47.957	52.716	16.19	32.945	-1.212	-7.339		50.261	0.055	14.643	0.003		2684.67	44.7444	51.6	12.0	40.5	2.789	0.008	0.008	0.000	0.196	0.17	
1990	9/1/2004	4:39:02 AM		25.381	25.566	24.794	25.859	25.116		48.198	53.414	16.161	32.962	-1.218	-7.258		50.649	0.057	14.643	0.003		2685.67	44.7611	52.3	12.1	40.6	2.798	0.008	0.008	0.000	0.202	0.17	
1991	9/1/2004	4:40:02 AM		25.401	25.576	24.824	25.884	25.096		48.011	52.886	16.195	32.872	-1.209	-7.298		50.238	0.056	14.643	0.004		2686.67	44.7778	51.8	12.0	40.4	2.788	0.008	0.008	0.000	0.199	0.17	
1992	9/1/2004	4:41:02 AM		25.396	25.581	24.804	25.914	25.136		48.33	53.383	16.245	32.997	-1.215	-7.324		49.524	0.053	14.643	0.003		2687.67	44.7944	52.3	11.8	40.7	2.804	0.008	0.008	0.000	0.188	0.16	
1993	9/1/2004	4:42:02 AM		25.396	25.576	24.809	25.879	25.136		47.959	52.764	16.138	32.968	-1.212	-7.319		50.346	0.056	14.643	0.003		2688.67	44.8111	51.6	12.0	40.5	2.790	0.008	0.008	0.000	0.199	0.17	
1994	9/1/2004	4:43:02 AM		25.396	25.571	24.814	25.879	25.101		48.488	53.57	16.19	33.212	-1.215	-7.307		50.953	0.06	14.643	0.003		2689.67	44.8278	52.4	12.1	40.9	2.816	0.009	0.009	0.000	0.211	0.18	
1995	9/1/2004	4:44:02 AM		25.391	25.571	24.824	25.879	25.081		48.167	53.278	16.082	33.069	-1.212	-6.995		51.545	0.054	14.643	0.003		2690.67	44.8444	52.2	12.3	40.6	2.800	0.008	0.008	0.000	0.191	0.16	
1996	9/1/2004	4:45:02 AM		25.407	25.587	24.85	25.914	25.086		48.515	53.475	16.283	33.239	-1.212	-7.267		52.342	0.055	14.643	0.003		2691.67	44.8611	52.3	12.5	40.9	2.818	0.008	0.008	0.000	0.193	0.16	
1997	9/1/2004	4:46:02 AM		25.392	25.572	24.815	25.905	25.072		48.376	53.381	16.334	33.029	-1.212	-7.29		49.612	0.053	14.643	0.003		2692.67	44.8778	52.3	11.8	40.7	2.806	0.008	0.008	0.000	0.187	0.16	
1998	9/1/2004	4:47:02 AM		25.387	25.562	24.841	25.885	25.072		48.079	53.05	16.181	32.939	-1.212	-7.287		50.375	0.054	14.643	0.003		2693.67	44.8944	51.9	12.0	40.5	2.793	0.008	0.008	0.000	0.192	0.16	
1999	9/1/2004	4:48:02 AM		25.387	25.567	24.881	25.89	25.062		47.92	53.008	16.189	32.755	-1.212	-7.281		48.536	0.055	14.643	0.003		2694.67	44.9111	51.9	11.6	40.3	2.781	0.008	0.008	0.000	0.196	0.17	
2000	9/1/2004	4:49:02 AM		25.387	25.567	24.881	25.905	25.072		48.343	53.443	16.293	32.993	-1.212	-7.298		46.254	0.054	14.643	0.003		2695.67	44.9278	52.3	11.0	40.7	2.804	0.008	0.008	0.000	0.191	0.16	
2001	9/1/2004	4:50:02 AM		25.392	25.562	24.851	25.905	25.112		47.752	52.832	16.077	32.668	-1.215	-7.296		49.293	0.055	14.643	0.003		2696.67	44.9444	51.7	11.7	40.2	2.772	0.008	0.008	0.000	0.197	0.17	
2002	9/1/2004	4:51:02 AM		25.397	25.562	24.846	25.91	25.112		48.177	53.236	16.194	32.89	-1.215	-7.298		48.488	0.054	14.643	0.003		2697.67	44.9611	52.1	11.5	40.5	2.795	0.008	0.008	0.000	0.192	0.16	
2003	9/1/2004	4:52:02 AM		25.408	25.568	24.866	25.901	25.068		48.05	53.068	16.156	32.952	-1.212	-7.298		48.44	0.054	14.643	0.003		2698.67	44.9778	51.9	11.5	40.5	2.792	0.008	0.008	0.000	0.192	0.16	
2004	9/1/2004	4:53:02 AM		25.398	25.558	24.846	25.871	25.068		48.096	52.925	16.212	33.085	-1.215	-7.296		50.39	0.054	14.643	0.003		2699.67	44.9944	51.8	12.0	40.6	2.799	0.008	0.008	0.000	0.191	0.16	
2005	9/1/2004	4:54:02 AM		25.408	25.563	24.841	25.901	25.078		48.09	53.101	16.218	32.925	-1.209	-7.298		52.373	0.053	14.643	0.004		2700.67	45.0111	52.0	12.5	40.5	2.793	0.008	0.008	0.000	0.188	0.16	
2006	9/1/2004	4:55:02 AM		25.387	25.547	24.81	25.88	25.102		47.94	52.654	16.228	32.876	-1.215	-7.287		48.415	0.056	14.643	0.003		2701.67	45.0278	51.5	11.5	40.4	2.786	0.008	0.008	0.000	0.199	0.17	
2007	9/1/2004	4:56:02 AM		25.402	25.552	24.83	25.864	25.056		48.198	53.611	16.183	32.882	-1.209	-7.212		49.62	0.056	14.643	0.004		2702.67	45.0444	52.5	11.8	40.5	2.795	0.008	0.008	0.000	0.199	0.17	
2008	9/1/2004	4:57:02 AM		25.387	25.542	24.81	25.819	25.056		48.39	53.545	16.108	33.237	-1.218	-7.272		49.253	0.055	14.643	0.003		2703.67	45.0611	52.4	11.7	40.8	2.814	0.008	0.008	0.000	0.194	0.17	
2009	9/1/2004	4:58:02 AM		25.396	25.551	24.814	25.849	25.061		48.023	53.052	16.194	32.937	-1.212	-7.275		49.301	0.054	14.643	0.003		2704.67	45.0778	51.9	11.7	40.5	2.791	0.008	0.008	0.000	0.192	0.16	
2010	9/1/2004	4:59:02 AM		25.396	25.556	24.809	25.859	25.056		48.303	53.342	16.177	33.064	-1.212	-7.261		49.286	0.056	14.643	0.003		2705.67	45.0944	52.2	11.7	40.7	2.805	0.008	0.008	0.000	0.198	0.17	
2011	9/1/2004	5:00:02 AM		25.402	25.557	24.82	25.859	25.086		48.052	53.048	16.225	32.863	-1.212	-7.267		48.742	0.055	14.643	0.003		2706.67	45.1111	51.9	11.6	40.5	2.789	0.008	0.008	0.000	0.196	0.17	
2012	9/1/2004	5:01:02 AM		25.391	25.551	24.814	25.874	25.061		48.171	53.356	16.255	33.001	-1.212	-7.255		49.074	0.057	14.643	0.003		2707.67	45.1278	52.2	11.7	40.6	2.798	0.008	0.008	0.000	0.202	0.17	
2013	9/1/2004	5:02:02 AM		25.386	25.541	24.794	25.854	25.041		48.415	53.307	16.24	33.216	-1.218	-7.217		50.448	0.055	14.643	0.003		2708.67	45.1444	52.2	12.0	40.8	2.814	0.008	0.008	0.000	0.194	0.17	
2014	9/1/2004	5:03:02 AM		25.396	25.556	24.804	25.879	25.021		47.961	53.079	16.173	32.845	-1.209	-7.264		49.445	0.054	14.643	0.004		2709.67	45.1611	52.0	11.8	40.4	2.786	0.008	0.008	0.000	0.192	0.16	
2015	9/1/2004	5:04:02 AM		25.397	25.547	24.81	25.854	25.026		48.306	53.296	16.32	33.071	-1.215	-7.298		48.871	0.054	14.643	0.003		2710.67	45.1778	52.2	11.6	40.7	2.805	0.008	0.008	0.000	0.191	0.16	
2016	9/1/2004	5:04:32 AM		25.391	25.546	24.804	25.869	25.016		47.974	52.614	16.254	32.832	-1.215	-7.333		48.55	0.053	14.643	0.003		2711.17	45.1861	51.5	11.6	40.4	2.786	0.008	0.008	0.000	0.189	0.16	
2017	9/1/2004	5:05:32 AM		25.395	25.545	24.803	25.878	25.075		48.245	53.452	16.102	33.225	-1.215	-7.322		49.968	0.055	14.643	0.003		2712.17	45.2028	52.3	11.9	40.7	2.809	0.008	0.008	0.000	0.194	0.17	
2018	9/1/2004	5:06:32 AM		25.385	25.54	24.813	25.877	25.119		48.169	53.021	16.351	32.835	-1.212	-7.31		49.155	0.053	14.643	0.003		2713.17	45.2194	51.9	11.7	40.5	2.792	0.008	0.008	0.000	0.188	0.16	
2019	9/1/2004	5:07:32 AM		25.385	25.545	24.813	25.897	25.069		48.279	53.564	16.414	32.833	-1.212	-6.686		50.482	0.016	14.643	0.003		2714.17	45.2361	52.4	12.0	40.6	2.796	0.002	0.002	0.000	0.057	0.05	
2020	9/1/2004	5:08:32 AM		25.406	25.561	24.839	25.919	25.051		47.974	53.371	16.166	32.88	-0.911	-6.379		48.588	0.058	14.643	0.003		2715.17	45.2528	52.2	11.6	40.4	2.787	0.008	0.008	0.000	0.206	0.18	
2021	9/1/2004	5:09:32 AM		25.392	25.547	24.81	25.88	25.022		48.252	53.164	16.108	33.265	-1.212	-6.972		49.564	0.053	14.643	0.003		2716.17	45.2694	52.0	11.8	40.8	2.810	0.008	0.008	0.000	0.187	0.16	
2022	9/1/2004	5:10:32 AM		25.387	25.542	24.81	25.879	25.026		47.969	52.944	16.071	33.132	-1.212	-6.983		50.553	0.054	14.643	0.003		2717.17	45.2861	51.8	12.0	40.6	2.796	0.008	0.008	0.000	0.192	0.16	
2023	9/1/2004	5:11:32 AM		25.386	25.531	24.849	25.854	25.081		48.21	53.309	16.244	32.814	-1.215	-6.98		52.155	0.056	14.643	0.003		2718.17	45.3028	52.2	12.4	40.5	2.793	0.008	0.008	0.000	0.199	0.17	
2024	9/1/2004	5:12:32 AM		25.395	25.535	24.869	25.878	25.095		47.677	52.6	16.208	32.549	-1.212	-7.004		49.024	0.055	14.643	0.003		2719.17	45.3194	51.5	11.7	40.1	2.766	0.008	0.008	0.000	0.197	0.17	
2025	9/1/2004	5:13:32 AM		25.395	25.54	24.858	25.897	25.099		48.053	53.358	16.359	32.67	-1.209	-6.891		48.12	0.056	14.643	0.004		2720.17	45.3361	52.2	11.5	40.4	2.783	0.008	0.008	0.000	0.199	0.17	
2026	9/1/2004	5:14:32 AM		25.384	25.539	24.837	25.882	25.174		48.123	53.097	16.336	32.839	-1.212	-7.035		48.283	0.053	14.643	0.003		2721.17	45.3528	52.0	11.5	40.5	2.791	0.008	0.008	0.000	0.188	0.16	
2027	9/1/2004	5:15:32 AM		25.398	25.543	24.862	25.886	25.158		47.764	52.948	16.184	32.584	-1.209	-7.027		50.84	0.054	14.643	0.004		2722.17	45.3694	51.8	12.1	40.2	2.770	0.008	0.008	0.000	0.193	0.16	
2028	9/1/2004	5:16:32 AM		25.396	25.536	24.855	25.869	25.131		48.341	53.296	16.289	33.048	-1.212	-7.093		50.651	0.054	14.643	0.003		2723.17	45.3861	52.2	12.1	40.7	2.806	0.008	0.008	0.000	0.191	0.16	
2029	9/1/2004	5:17:32 AM		25.396	25.541	24.834	25.864	25.101		47.835	53.029	16.077	32.711	-1.212	-7.105		49.983	0.054	14.643	0.003		2724.17	45.4028	51.9	11.9	40.3	2.777	0.008	0.008	0.000	0.193	0.16	
2030	9/1/2004	5:18:32 AM		25.391	25.531	24.809	25.848	25.105		48.515	53.551	16.324	33.255	-1.218	-7.113		49.049	0.055	14.643	0.003		2725.17	45.4194	52.4	11.7	40.9	2.819	0.008	0.008	0.000	0.194	0.16	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2031	9/1/2004	5:19:32 AM		25.395	25.54	24.823	25.873	25.09		48.086	53.383	16.268	32.804	-1.212	-7.122		51.27	0.053	14.643	0.003		2726.17	45.4361	52.3	12.2	40.4	2.789	0.008	0.008	0.000	0.189	0.16	
2032	9/1/2004	5:20:32 AM		25.396	25.541	24.834	25.888	25.085		48.079	53.126	16.213	32.876	-1.212	-7.122		48.527	0.053	14.643	0.003		2727.17	45.4528	52.0	11.6	40.5	2.791	0.008	0.008	0.000	0.188	0.16	
2033	9/1/2004	5:21:32 AM		25.39	25.54	24.833	25.883	25.115		47.949	53.087	16.244	32.697	-1.212	-7.102		49.399	0.055	14.643	0.003		2728.17	45.4694	52.0	11.8	40.3	2.780	0.008	0.008	0.000	0.196	0.17	
2034	9/1/2004	5:22:32 AM		25.389	25.539	24.812	25.872	25.079		48.418	53.823	16.33	32.96	-1.212	-7.165		48.456	0.048	14.643	0.003		2729.17	45.4861	52.7	11.5	40.7	2.805	0.007	0.007	0.000	0.170	0.14	
2035	9/1/2004	5:23:32 AM		25.399	25.554	24.847	25.912	25.124		48.075	52.892	16.064	33.054	-1.212	-7.174		49.263	0.054	14.643	0.003		2730.17	45.5028	51.8	11.7	40.6	2.797	0.008	0.008	0.000	0.191	0.16	
2036	9/1/2004	5:24:32 AM		25.379	25.534	24.822	25.856	25.088		48.262	53.58	16.154	33.023	-1.212	-7.22		50.767	0.057	14.643	0.003		2731.17	45.5194	52.5	12.1	40.6	2.802	0.008	0.008	0.000	0.202	0.17	
2037	9/1/2004	5:25:32 AM		25.379	25.534	24.812	25.856	25.088		48.42	53.458	16.244	33.185	-1.218	-7.267		49.503	0.06	14.643	0.003		2732.17	45.5361	52.3	11.8	40.8	2.813	0.009	0.009	0.000	0.212	0.18	
2038	9/1/2004	5:26:32 AM		25.383	25.538	24.811	25.861	25.113		48.471	53.358	16.308	33.249	-1.215	-7.405		48.548	0.054	14.643	0.003		2733.17	45.5528	52.2	11.6	40.9	2.817	0.008	0.008	0.000	0.190	0.16	
2039	9/1/2004	5:27:32 AM		25.384	25.544	24.827	25.886	25.088		48.171	53.168	16.258	32.937	-1.209	-7.394		48.675	0.056	14.643	0.004		2734.17	45.5694	52.0	11.6	40.6	2.796	0.008	0.008	0.000	0.199	0.17	
2040	9/1/2004	5:28:32 AM		25.384	25.544	24.832	25.882	25.044		48.04	52.824	16.062	33.032	-1.212	-7.374		49.174	0.052	14.643	0.003		2735.17	45.5861	51.7	11.7	40.5	2.795	0.007	0.007	0.000	0.185	0.16	
2041	9/1/2004	5:29:32 AM		25.374	25.524	24.817	25.862	25.029		48.2	53.255	16.379	32.847	-1.218	-7.281		50.853	0.056	14.643	0.003		2736.17	45.6028	52.1	12.1	40.5	2.794	0.008	0.008	0.000	0.199	0.17	
2042	9/1/2004	5:30:32 AM		25.384	25.539	24.832	25.886	25.068		48.129	52.967	16.058	33.089	-1.212	-7.391		48.821	0.054	14.643	0.003		2737.17	45.6194	51.8	11.6	40.6	2.800	0.008	0.008	0.000	0.191	0.16	
2043	9/1/2004	5:31:32 AM		25.384	25.534	24.812	25.886	25.038		48.32	52.989	16.263	33.304	-1.212	-7.336		48.227	0.052	14.643	0.003		2738.17	45.6361	51.9	11.5	40.8	2.814	0.007	0.007	0.000	0.183	0.16	
2044	9/1/2004	5:32:32 AM		25.389	25.544	24.837	25.886	25.078		48.37	53.53	16.208	33.185	-1.212	-7.272		49.989	0.056	14.643	0.004		2739.17	45.6528	52.4	11.9	40.8	2.811	0.008	0.008	0.000	0.198	0.17	
2045	9/1/2004	5:33:32 AM		25.394	25.534	24.837	25.871	25.108		48.102	52.799	16.163	33.114	-1.212	-7.365		49.391	0.053	14.643	0.003		2740.17	45.6694	51.7	11.8	40.6	2.800	0.008	0.008	0.000	0.188	0.16	
2046	9/1/2004	5:34:32 AM		25.393	25.538	24.851	25.886	25.113		48.177	53.323	16.298	32.806	-1.212	-7.249		48.615	0.053	14.643	0.003		2741.17	45.6861	52.2	11.6	40.5	2.792	0.008	0.008	0.000	0.188	0.16	
2047	9/1/2004	5:35:32 AM		25.383	25.528	24.821	25.856	25.113		48.446	53.396	16.295	33.155	-1.218	-7.327		48.992	0.055	14.643	0.003		2742.17	45.7028	52.3	11.7	40.8	2.813	0.008	0.008	0.000	0.194	0.17	
2048	9/1/2004	5:36:32 AM		25.394	25.539	24.857	25.876	25.113		47.911	52.915	16.153	32.687	-1.212	-7.327		48.671	0.053	14.643	0.003		2743.17	45.7194	51.8	11.6	40.3	2.778	0.008	0.008	0.000	0.189	0.16	
2049	9/1/2004	5:37:32 AM		25.388	25.528	24.901	25.866	25.093		48.349	53.504	16.292	33.048	-1.212	-7.327		49.276	0.054	14.643	0.003		2744.17	45.7361	52.4	11.7	40.7	2.806	0.008	0.008	0.000	0.190	0.16	
2050	9/1/2004	5:38:32 AM		25.394	25.534	24.907	25.876	25.078		48.362	53.201	16.359	33.243	-1.215	-7.324		50.373	0.055	14.643	0.003		2745.17	45.7528	52.1	12.0	40.8	2.813	0.008	0.008	0.000	0.193	0.16	
2051	9/1/2004	5:39:32 AM		25.399	25.539	24.898	25.897	25.074		47.982	52.998	16.104	32.968	-1.215	-7.319		46.859	0.055	14.643	0.003		2746.17	45.7694	51.9	11.2	40.5	2.791	0.008	0.008	0.000	0.195	0.17	
2052	9/1/2004	5:40:32 AM		25.394	25.534	24.872	25.896	25.078		48.558	53.526	16.25	33.165	-1.215	-7.319		49.649	0.055	14.643	0.003		2747.17	45.7861	52.4	11.8	40.9	2.817	0.008	0.008	0.000	0.193	0.16	
2053	9/1/2004	5:41:32 AM		25.393	25.523	24.866	25.876	25.073		48.135	53.153	16.17	33.021	-1.212	-7.316		47.887	0.054	14.643	0.003		2748.17	45.8028	52.0	11.4	40.6	2.798	0.008	0.008	0.000	0.191	0.16	
2054	9/1/2004	5:42:32 AM		25.393	25.528	24.871	25.866	25.048		48.2	53.238	16.288	32.748	-1.212	-7.301		49.833	0.056	14.643	0.003		2749.17	45.8194	52.1	11.9	40.5	2.791	0.008	0.008	0.000	0.199	0.17	
2055	9/1/2004	5:43:32 AM		25.419	25.549	24.897	25.896	25.053		47.943	52.936	16.238	32.839	-1.209	-7.209		47.611	0.055	14.643	0.004		2750.17	45.8361	51.8	11.3	40.4	2.785	0.008	0.008	0.000	0.196	0.17	
2056	9/1/2004	5:44:32 AM		25.408	25.543	24.876	25.891	25.048		48.685	53.931	16.385	33.208	-1.212	-7.22		47.29	0.054	14.643	0.003		2751.17	45.8528	52.8	11.3	40.9	2.823	0.008	0.008	0.000	0.189	0.16	
2057	9/1/2004	5:45:32 AM		25.397	25.527	24.861	25.87	25.057		48.471	53.172	16.393	33.194	-1.212	-7.261		50.638	0.054	14.643	0.004		2752.17	45.8694	52.0	12.1	40.8	2.815	0.008	0.008	0.000	0.190	0.16	
2058	9/1/2004	5:46:32 AM		25.391	25.526	24.859	25.834	25.056		48.125	53.197	16.231	32.892	-1.215	-7.275		49.326	0.053	14.643	0.003		2753.17	45.8861	52.1	11.7	40.5	2.793	0.008	0.008	0.000	0.188	0.16	
2059	9/1/2004	5:47:32 AM		25.391	25.526	24.864	25.829	25.056		48.393	53.4	16.421	33.017	-1.212	-7.264		49.059	0.057	14.643	0.003		2754.17	45.9028	52.3	11.7	40.7	2.806	0.008	0.008	0.000	0.201	0.17	
2060	9/1/2004	5:48:32 AM		25.407	25.552	24.875	25.854	25.101		48.274	53.211	16.232	33.009	-1.209	-7.171		48.25	0.055	14.643	0.003		2755.17	45.9194	52.1	11.5	40.6	2.802	0.008	0.008	0.000	0.194	0.17	
2061	9/1/2004	5:49:32 AM		25.402	25.527	24.861	25.835	25.087		48.258	53.226	16.164	33.186	-1.212	-7.061		49.804	0.054	14.643	0.003		2756.17	45.9361	52.1	11.9	40.7	2.808	0.008	0.008	0.000	0.191	0.16	
2062	9/1/2004	5:50:32 AM		25.382	25.517	24.851	25.82	25.087		48.474	53.605	16.352	33.124	-1.212	-7.246		48.802	0.053	14.643	0.003		2757.17	45.9528	52.5	11.6	40.8	2.813	0.008	0.008	0.000	0.187	0.16	
2063	9/1/2004	5:51:32 AM		25.391	25.521	24.859	25.844	25.096		48.067	52.965	16.118	33.062	-1.212	-7.255		48.435	0.054	14.643	0.003		2758.17	45.9694	51.8	11.5	40.6	2.797	0.008	0.008	0.000	0.191	0.16	
2064	9/1/2004	5:52:32 AM		25.386	25.511	24.829	25.824	25.106		48.413	53.754	16.24	33.075	-1.218	-7.27		48.83	0.055	14.643	0.003		2759.17	45.9861	52.6	11.6	40.7	2.809	0.008	0.008	0.000	0.194	0.17	
2065	9/1/2004	5:53:32 AM		25.385	25.52	24.838	25.828	25.105		47.837	52.706	16.227	32.607	-1.212	-7.229		48.961	0.055	14.643	0.004		2760.17	46.0028	51.6	11.7	40.2	2.773	0.008	0.008	0.000	0.197	0.17	
2066	9/1/2004	5:54:32 AM		25.39	25.52	24.858	25.842	25.044		48.339	53.445	16.267	33.167	-1.212	-7.226		49.399	0.054	14.643	0.003		2761.17	46.0194	52.3	11.8	40.8	2.810	0.008	0.008	0.000	0.190	0.16	
2067	9/1/2004	5:55:32 AM		25.387	25.512	24.855	25.829	25.081		48.127	53.201	16.317	32.835	-1.212	-7.235		48.798	0.052	14.643	0.003		2762.17	46.0361	52.1	11.6	40.5	2.791	0.007	0.007	0.000	0.185	0.16	
2068	9/1/2004	5:56:32 AM		25.374	25.499	24.847	25.817	25.039		48.388	53.524	16.216	33.163	-1.212	-7.229		48.329	0.053	14.643	0.003		2763.17	46.0528	52.4	11.5	40.8	2.811	0.008	0.008	0.000	0.187	0.16	
2069	9/1/2004	5:57:32 AM		25.366	25.475	24.829	25.813	25.095		48.774	53.744	16.212	33.643	-1.212	-7.229		49.228	0.052	14.643	0.003		2764.17	46.0694	52.6	11.7	41.2	2.841	0.007	0.007	0.000	0.182	0.15	
2070	9/1/2004	5:58:32 AM		25.378	25.493	24.862	25.826	25.058		48.222	53.13	16.279	33.046	-1.212	-7.235		47.964	0.052	14.643	0.003		2765.17	46.0861	52.0	11.4	40.6	2.802	0.007	0.007	0.000	0.184	0.16	
2071	9/1/2004	5:59:32 AM		25.366	25.471	24.844	25.804	25.061		48.357	53.412	16.235	33.083	-1.212	-7.226		49.581	0.053	14.643	0.003		2766.17	46.1028	52.3	11.8	40.7	2.808	0.008	0.008	0.000	0.187	0.16	
2072	9/1/2004	6:00:32 AM		25.352	25.457	24.84	25.779	25.042		48.223	53.609	16.292	32.728	-1.215	-7.22		48.982	0.055	14.643	0.003		2767.17	46.1194	52.5	11.7	40.5	2.791	0.008	0.008	0.000	0.195	0.17	
2073	9/1/2004	6:01:32 AM		25.358	25.462	24.836	25.8	25.002		48.368	53.603	16.18	33.038	-1.212	-7.226		48.957	0.052	14.643	0.003		2768.17	46.1361	52.5	11.7	40.7	2.806	0.007	0.007	0.000	0.184	0.16	
2074	9/1/2004	6:02:32 AM		25.359	25.459	24.842	25.797	24.974		48.446	53.559	16.478	32.939	-1.192	-7.157		50.446	0.054	14.643	0.003		2769.17	46.1528	52.4	12.0	40.7	2.806	0.008	0.008	0.000	0.191	0.16	
2075	9/1/2004	6:03:32 AM		25.364	25.449	24.862	25.792	24.979		48.183	53.133	16.19	33.208	-1.209	-7.186		48.7	0.055	14.643	0.004		2770.17	46.1694	52.0	11.6	40.7	2.806	0.008	0.008	0.000	0.194	0.17	
2076	9/1/2004	6:04:32 AM		25.348	25.428	24.831	25.751	24.953		48.303	53.417	16.33	33.06	-1.203	-7.122		50.006	0.055	14.643	0.003		2771.17	46.1861	52.3	11.9	40.7	2.805	0.008	0.008	0.000	0.194	0.17	
2077	9/1/2004	6:05:32 AM		25.351	25.425	24.834	25.778	24.975		48.162	53.077	16.293	32.958	-1.163	-7.145		48.857	0.052	14.643	0.003		2772.17	46.2028	52.0	11.6	40.6	2.796	0.007	0.007	0.000	0.184	0.16	
2078	9/1/2004	6:06:32 AM		25.364	25.434	24.842	25.797	24.989		48.295	53.475	16.337	32.923	-1.212	-7.209		48.805	0.052	14.643	0.003		2773.17	46.2194	52.3	11.6	40.6	2.800	0.007	0.007	0.000	0.184	0.16	
2079	9/1/2004	6:07:32 AM		25.365	25.435	24.863	25.803	24.985		48.015	53.046	16.932	32.053	-1.212	-7.238		51.862	0.055	14.643	0.003		2774.17	46.2361	51.9	12.4	40.0	2.760	0.008	0.008	0.000	0.197	0.17	
2080	9/1/2004	6:08:32 AM		25.374	25.449	24.883	25.817	25.014		47.866	52.921	16.77	32.01	-1.215	-7.232		49.216	0.055	14.643	0.003		2775.17	46.2528	51.8	11.7	39.9	2.754	0.008	0.008	0.000	0.198	0.17	
2081	9/1/2004	6:09:32 AM		25.384	25.453	24.907	25.821	25.053		47.845	53.104	16.689	32.19	-1.212	-7.096		50.162	0.052	14.643	0.003		2776.17	46.2694	52.0	11.9	40.0	2.759	0.007	0.007	0.000	0.187	0.16	
2082	9/1/2004	6:10:32 AM		25.381	25.451	24.899	25.849	25.066		48.067	53.645	16.619	32.282	-1.148	-7.056		49.921	0.054	14.643	0.004		2777.17	46.2861	52.5	11.9	40.2	2.770	0.008	0.008	0.000	0.193	0.16	
2083	9/1/2004	6:11:32 AM		25.38	25.445	24.909	25.838	25.045		47.689	52.788	16.735	31.88	-1.215	-7.145		50.117	0.053	14.643	0.003		2778.17	46.3028	51.7	11.9	39.8	2.743	0.008	0.008	0.000	0.191	0.16	
2084	9/1/2004	6:12:32 AM		25.385	25.45	24.934	25.838	25.04		47.932	52.855	16.719	32.377	-1.212	-7.16		49.641	0.052	14.643	0.003		2779.17	46.3194	51.7	11.8	40.2	2.769	0.007	0.007	0.000	0.186	0.16	
2085	9/1/2004	6:13:32 AM		25.394	25.459	24.952	25.827	25.004		47.652	52.703	16.806	31.925	-1.209	-7.194		49.737	0.051	14.643	0.003		2780.17	46.3361	51.6	11.8	39.8	2.743	0.007	0.007	0.000	0.184	0.16	
2086	9/1/2004	6:14:32 AM		25.398	25.453	24.927	25.806	25.063		47.976	53.074	16.917	32.157	-1.215	-7.203		49.255	0.051	14.643	0.003		2781.17	46.3528	51.9	11.7	40.1	2.762	0.007	0.007	0.000	0.183	0.16	
2087	9/1/2004	6:15:32 AM		25.401	25.461	24.989	25.818	25.09		48.044	53.182	16.906	32.086	-1.195	-7.189		48.279	0.053	14.643	0.003		2782.17	46.3694	52.1	11.5	40.1	2.762	0.008	0.008	0.000	0.189	0.16	
2088	9/1/2004	6:16:32 AM		25.414	25.469	25.043	25.827	25.109		47.928	53.143	16.968	31.884	-1.209	-7.206		49.835	0.049	14.643	0.003		2783.17	46.3861	52.0	11.9	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2089	9/1/2004	6:17:32 AM		25.409	25.464	25.047	25.806	25.104		47.802	53.054	16.648	32.198	-1.151	-7.191		50.669	0.052	14.643	0.003		2784.17	46.4028	51.9	12.1	40.0	2.758	0.007	0.007	0.000	0.186	0.16	
2090	9/1/2004	6:18:32 AM		25.423	25.473	25.031	25.866	25.048		47.685	52.54	16.756	32.024	-1.212	-7.186		49.693	0.053	14.643	0.004		2785.17	46.4194	51.4	11.8	39.9	2.748	0.008	0.008	0.000	0.190	0.16	
2091	9/1/2004	6:19:32 AM		25.433	25.473	25.026	25.891	25.038		48.009	53.133	16.739	32.326	-1.145	-7.105		50.119	0.053	14.643	0.004		2786.17	46.4361	52.0	11.9	40.2	2.769	0.008	0.008	0.000	0.189	0.16	
2092	9/1/2004	6:20:32 AM		25.426	25.471	25.024	25.864	25.041		47.945	53.068	16.757	32.106	-1.16	-7.177		51.174	0.051	14.643	0.003		2787.17	46.4528	51.9	12.2	40.0	2.760	0.007	0.007	0.000	0.182	0.16	
2093	9/1/2004	6:21:32 AM		25.438	25.468	25.016	25.846	25.068		47.524	52.488	16.657	31.897	-1.148	-7.165		50.181	0.053	14.643	0.003		2788.17	46.4694	51.4	12.0	39.7	2.738	0.008	0.008	0.000	0.191	0.16	
2094	9/1/2004	6:22:32 AM		25.433	25.468	24.996	25.816	25.038		47.949	53.188	16.747	32.176	-1.145	-7.177		49.774	0.05	14.643	0.004		2789.17	46.4861	52.1	11.9	40.1	2.762	0.007	0.007	0.000	0.179	0.15	
2095	9/1/2004	6:23:32 AM		25.433	25.463	24.991	25.851	25.023		48.142	53.388	16.779	32.248	-1.143	-7.168		50.657	0.052	14.643	0.004		2790.17	46.5028	52.3	12.1	40.2	2.771	0.007	0.007	0.000	0.185	0.16	
2096	9/1/2004	6:24:32 AM		25.422	25.452	24.976	25.81	25.042		47.777	52.992	16.451	32.258	-1.148	-7.076		50.204	0.052	14.643	0.003		2791.17	46.5194	51.9	12.0	40.0	2.759	0.007	0.007	0.000	0.186	0.16	
2097	9/1/2004	6:25:32 AM		25.441	25.461	24.994	25.819	25.071		48.001	53.331	16.708	32.165	-1.143	-7.145		50.242	0.053	14.643	0.004		2792.17	46.5361	52.2	12.0	40.1	2.764	0.008	0.008	0.000	0.189	0.16	
2098	9/1/2004	6:26:32 AM		25.441	25.466	24.989	25.839	25.101		47.586	52.594	16.686	31.919	-1.145	-7.142		52.084	0.052	14.643	0.003		2793.17	46.5528	51.5	12.4	39.8	2.741	0.007	0.007	0.000	0.187	0.16	
2099	9/1/2004	6:27:32 AM		25.435	25.455	24.958	25.842	25.09		47.874	52.942	16.702	32.211	-1.145	-7.139		50.206	0.052	14.643	0.003		2794.17	46.5694	51.8	12.0	40.0	2.761	0.007	0.007	0.000	0.186	0.16	
2100	9/1/2004	6:28:32 AM		25.435	25.46	24.973	25.827	25.055		47.849	52.801	16.611	32.344	-1.145	-7.148		50.39	0.051	14.643	0.004		2795.17	46.5861	51.7	12.0	40.1	2.765	0.007	0.007	0.000	0.182	0.16	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2101	9/1/2004	6:29:32 AM		25.43	25.455	24.979	25.843	25.045		47.967	53.213	16.725	32.2	-1.145	-7.142		50.628	0.052	14.643	0.004		2796.17	46.6028	52.1	12.1	40.1	2.764	0.007	0.007	0.000	0.186	0.16	
2102	9/1/2004	6:30:32 AM		25.431	25.451	24.964	25.809	25.066		47.557	52.496	16.509	32.186	-1.09	-7.024		50.496	0.051	14.643	0.003		2797.17	46.6194	51.4	12.0	39.9	2.749	0.007	0.007	0.000	0.183	0.16	
2103	9/1/2004	6:31:32 AM		25.431	25.456	24.949	25.799	25.061		47.793	53.031	16.623	32.127	-1.125	-7.096		48.8	0.051	14.643	0.003		2798.17	46.6361	51.9	11.6	40.0	2.755	0.007	0.007	0.000	0.183	0.16	
2104	9/1/2004	6:32:32 AM		25.42	25.45	24.969	25.813	25.07		47.97	52.95	16.5	32.551	-1.096	-7.087		49.385	0.052	14.643	0.004		2799.17	46.6528	51.8	11.8	40.3	2.776	0.007	0.007	0.000	0.185	0.16	
2105	9/1/2004	6:33:32 AM		25.405	25.425	24.958	25.798	25.14		48.082	53.16	16.611	32.58	-1.09	-7.108		50.354	0.051	14.643	0.003		2800.17	46.6694	52.0	12.0	40.3	2.781	0.007	0.007	0.000	0.181	0.15	
2106	9/1/2004	6:34:32 AM		25.402	25.417	24.956	25.775	25.172		47.943	53.238	16.385	32.576	-1.093	-7.113		49.827	0.053	14.643	0.003		2801.17	46.6861	52.1	11.9	40.3	2.776	0.008	0.008	0.000	0.189	0.16	
2107	9/1/2004	6:35:32 AM		25.405	25.42	24.943	25.778	25.22		47.775	52.875	16.52	32.307	-1.096	-7.102		49.165	0.051	14.643	0.003		2802.17	46.7028	51.7	11.7	40.0	2.761	0.007	0.007	0.000	0.183	0.16	
2108	9/1/2004	6:36:32 AM		25.426	25.44	24.964	25.803	25.185		48.137	53.292	16.605	32.625	-1.09	-7.018		49.706	0.053	14.643	0.004		2803.17	46.7194	52.2	11.8	40.4	2.784	0.008	0.008	0.000	0.188	0.16	
2109	9/1/2004	6:37:32 AM		25.433	25.453	24.976	25.806	25.148		48.009	53.296	16.472	32.578	-1.09	-7.105		49.464	0.053	14.643	0.003		2804.17	46.7361	52.2	11.8	40.3	2.778	0.008	0.008	0.000	0.188	0.16	
2110	9/1/2004	6:38:32 AM		25.442	25.457	24.985	25.789	25.136		47.974	53.056	16.395	32.521	-1.09	-7.09		50.569	0.05	14.643	0.003		2805.17	46.7528	51.9	12.0	40.2	2.775	0.007	0.007	0.000	0.178	0.15	
2111	9/1/2004	6:39:32 AM		25.435	25.445	24.974	25.768	25.125		47.862	53	16.576	32.34	-1.09	-7.096		49.274	0.051	14.643	0.003		2806.17	46.7694	51.9	11.7	40.1	2.765	0.007	0.007	0.000	0.182	0.16	
2112	9/1/2004	6:40:32 AM		25.434	25.449	24.977	25.807	25.124		48.017	53.153	16.551	32.471	-1.088	-7.087		50.676	0.055	14.643	0.003		2807.17	46.7861	52.0	12.1	40.2	2.775	0.008	0.008	0.000	0.196	0.17	
2113	9/1/2004	6:41:32 AM		25.447	25.462	24.986	25.8	25.062		48.27	53.63	16.625	32.666	-1.09	-7.087		49.87	0.052	14.643	0.004		2808.17	46.8028	52.5	11.9	40.5	2.790	0.007	0.007	0.000	0.184	0.16	
2114	9/1/2004	6:42:32 AM		25.454	25.474	25.018	25.797	25.084		48.021	53.338	16.824	32.256	-0.998	-6.96		49.916	0.052	14.643	0.003		2809.17	46.8194	52.2	11.9	40.1	2.767	0.007	0.007	0.000	0.185	0.16	
2115	9/1/2004	6:43:32 AM		25.442	25.462	25.03	25.789	25.036		48.198	53.522	16.871	32.303	-1.07	-7.03		50.669	0.052	14.643	0.003		2810.17	46.8361	52.4	12.1	40.3	2.775	0.007	0.007	0.000	0.185	0.16	
2116	9/1/2004	6:44:32 AM		25.425	25.445	25.043	25.767	25.035		48.081	53.448	16.76	32.27	-1.056	-7.035		50.169	0.052	14.643	0.003		2811.17	46.8528	52.3	11.9	40.2	2.770	0.007	0.007	0.000	0.185	0.16	
2117	9/1/2004	6:45:32 AM		25.411	25.426	25.025	25.794	25.071		47.468	52.6	16.888	31.611	-1.09	-7.047		51.27	0.052	14.643	0.003		2812.17	46.8694	51.5	12.2	39.5	2.726	0.007	0.007	0.000	0.188	0.16	
2118	9/1/2004	6:46:32 AM		25.405	25.415	25.018	25.757	25.075		47.801	53.305	16.88	31.786	-1.03	-7.038		49.322	0.053	14.643	0.003		2813.17	46.8861	52.2	11.7	39.8	2.744	0.008	0.008	0.000	0.191	0.16	
2119	9/1/2004	6:47:32 AM		25.419	25.418	25.027	25.771	25.103		47.484	52.587	16.526	32.116	-1.073	-7.035		50.625	0.053	14.643	0.003		2814.17	46.9028	51.5	12.1	39.8	2.744	0.008	0.008	0.000	0.191	0.16	
2120	9/1/2004	6:48:32 AM		25.428	25.423	25.016	25.771	25.088		47.928	52.975	16.85	32.149	-1.018	-7.044		51.103	0.05	14.643	0.003		2815.17	46.9194	51.8	12.2	40.0	2.761	0.007	0.007	0.000	0.179	0.15	
2121	9/1/2004	6:49:32 AM		25.422	25.406	24.985	25.754	25.061		47.922	53.209	16.577	32.541	-1.021	-7.032		49.895	0.052	14.643	0.003		2816.17	46.9361	52.1	11.9	40.2	2.774	0.007	0.007	0.000	0.185	0.16	
2122	9/1/2004	6:50:32 AM		25.427	25.416	24.99	25.744	25.066		47.795	52.983	16.761	32.092	-1.012	-7.041		50.997	0.05	14.643	0.003		2817.17	46.9528	51.9	12.1	39.9	2.754	0.007	0.007	0.000	0.179	0.15	
2123	9/1/2004	6:51:32 AM		25.442	25.421	25.01	25.749	25.086		48.05	53.388	16.668	32.383	-1.015	-7.032		49.276	0.054	14.643	0.003		2818.17	46.9694	52.3	11.7	40.2	2.773	0.008	0.008	0.000	0.192	0.16	
2124	9/1/2004	6:52:32 AM		25.446	25.426	25.009	25.759	25.081		48.063	53.388	16.896	32.038	-1.018	-7.041		49.403	0.052	14.643	0.003		2819.17	46.9861	52.3	11.8	40.1	2.761	0.007	0.007	0.000	0.186	0.16	
2125	9/1/2004	6:53:32 AM		25.457	25.431	25.01	25.784	25.086		47.725	52.99	16.686	32.116	-1.079	-7.018		49.952	0.05	14.643	0.004		2820.17	47.0028	51.9	11.9	39.9	2.752	0.007	0.007	0.000	0.179	0.15	
2126	9/1/2004	6:54:32 AM		25.437	25.416	24.985	25.779	25.046		48.082	53.41	16.765	32.297	-0.925	-6.847		49.56	0.045	14.643	0.003		2821.17	47.0194	52.3	11.8	40.2	2.771	0.006	0.006	0.000	0.160	0.14	
2127	9/1/2004	6:55:32 AM		25.43	25.4	24.994	25.763	25.065		47.716	53.143	16.648	32.053	-0.986	-6.972		49.674	0.053	14.643	0.004		2822.17	47.0361	52.0	11.8	39.9	2.750	0.008	0.008	0.000	0.190	0.16	
2128	9/1/2004	6:56:32 AM		25.417	25.392	24.99	25.765	25.097		48.106	52.662	16.732	32.484	-1.212	-6.865		48.348	0.04	14.643	0.003		2823.17	47.0528	51.5	11.5	40.3	2.778	0.006	0.006	0.000	0.142	0.12	
2129	9/1/2004	6:57:32 AM		25.44	25.404	24.983	25.767	25.074		46.97	53.062	16.646	31.324	-0.173	-4.925		51.049	0.046	14.643	0.003		2824.17	47.0694	51.9	12.2	39.1	2.699	0.007	0.007	0.000	0.168	0.14	
2130	9/1/2004	6:58:32 AM		25.415	25.4	24.983	25.743	25.01		47.882	53.137	16.625	32.194	-0.992	-6.483		48.527	0.058	14.643	0.004		2825.17	47.0861	52.0	11.6	40.0	2.760	0.008	0.008	0.000	0.207	0.18	
2131	9/1/2004	6:59:32 AM		25.436	25.406	25	25.739	24.976		47.88	52.846	16.743	32.33	-1.09	-6.619		51.205	0.051	14.643	0.003		2826.17	47.1028	51.7	12.2	40.1	2.765	0.007	0.007	0.000	0.182	0.15	
2132	9/1/2004	7:00:32 AM		25.438	25.418	25.006	25.78	24.993		47.797	52.82	16.665	32.141	-1.108	-6.671		49.009	0.051	14.643	0.004		2827.17	47.1194	51.7	11.7	40.0	2.756	0.007	0.007	0.000	0.183	0.16	
2133	9/1/2004	7:01:32 AM		25.435	25.41	24.983	25.747	25.01		48.278	53.628	16.773	32.453	-1.131	-6.686		50.455	0.052	14.643	0.003		2828.17	47.1361	52.5	12.0	40.4	2.783	0.007	0.007	0.000	0.185	0.16	
2134	9/1/2004	7:02:32 AM		25.435	25.41	24.989	25.783	25.035		47.909	53.081	16.625	32.256	-1.09	-6.665		49.766	0.053	14.643	0.003		2829.17	47.1528	52.0	11.9	40.1	2.764	0.008	0.008	0.000	0.189	0.16	
2135	9/1/2004	7:03:32 AM		25.427	25.406	24.98	25.734	24.986		47.92	53.151	16.651	32.395	-1.096	-6.677		50.519	0.051	14.643	0.003		2830.17	47.1694	52.0	12.0	40.2	2.769	0.007	0.007	0.000	0.182	0.15	
2136	9/1/2004	7:04:32 AM		25.433	25.413	25.011	25.766	24.973		48.053	53.398	16.737	32.291	-1.088	-6.677		49.802	0.051	14.643	0.004		2831.17	47.1861	52.3	11.9	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2137	9/1/2004	7:05:32 AM		25.434	25.403	25.002	25.766	24.973		47.885	52.82	16.775	32.166	-1.088	-6.668		49.581	0.051	14.643	0.003		2832.17	47.2028	51.7	11.8	40.0	2.760	0.007	0.007	0.000	0.182	0.16	
2138	9/1/2004	7:06:32 AM		25.43	25.405	24.983	25.757	24.995		47.605	52.784	16.661	32.034	-1.044	-6.665		50.382	0.053	14.643	0.003		2833.17	47.2194	51.7	12.0	39.8	2.745	0.008	0.008	0.000	0.191	0.16	
2139	9/1/2004	7:07:27 AM		25.435	25.41	25.018	25.762	24.995		48.208	53.416	16.804	32.519	-1.05	-6.665		49.889	0.052	14.643	0.003		2834.08	47.2347	52.3	11.9	40.4	2.783	0.007	0.007	0.000	0.184	0.16	
2140	9/1/2004	7:08:27 AM		25.431	25.411	25.015	25.774	25.031		48.1	53.622	16.77	32.28	-1.079	-6.668		47.943	0.051	14.643	0.003		2835.08	47.2514	52.5	11.4	40.2	2.771	0.007	0.007	0.000	0.182	0.15	
2141	9/1/2004	7:09:27 AM		25.421	25.401	25.01	25.734	25.076		47.98	53.147	16.691	32.299	-1.024	-6.668		49.779	0.052	14.643	0.003		2836.08	47.2681	52.0	11.9	40.1	2.767	0.007	0.007	0.000	0.185	0.16	
2142	9/1/2004	7:10:27 AM		25.422	25.402	24.995	25.759	25.032		47.86	52.923	16.74	32.225	-1.102	-6.816		52.958	0.053	14.643	0.003		2837.08	47.2847	51.8	12.6	40.0	2.761	0.008	0.008	0.000	0.190	0.16	
2143	9/1/2004	7:11:27 AM		25.428	25.407	25.011	25.78	24.997		47.855	52.876	16.566	32.475	-1.119	-6.83		49.455	0.051	14.643	0.003		2838.08	47.3014	51.8	11.8	40.2	2.769	0.007	0.007	0.000	0.182	0.15	
2144	9/1/2004	7:12:27 AM		25.423	25.403	25.047	25.731	25.043		47.802	53.075	16.742	32.007	-1.137	-6.836		49.697	0.052	14.643	0.003		2839.08	47.3181	51.9	11.8	39.9	2.751	0.007	0.007	0.000	0.186	0.16	
2145	9/1/2004	7:13:27 AM		25.444	25.419	25.112	25.766	25.059		48.086	53.342	16.861	32.207	-1.111	-6.827		49.937	0.052	14.643	0.003		2840.08	47.3347	52.2	11.9	40.1	2.768	0.007	0.007	0.000	0.185	0.16	
2146	9/1/2004	7:14:27 AM		25.421	25.396	25.069	25.713	25.046		47.907	53.056	16.776	32.215	-0.989	-6.567		49.695	0.039	14.643	0.003		2841.08	47.3514	51.9	11.8	40.1	2.762	0.006	0.006	0.000	0.139	0.12	
2147	9/1/2004	7:15:27 AM		25.411	25.391	25.064	25.733	25.041		47.638	52.618	16.753	31.985	-1.212	-7.087		50.949	0.047	14.643	0.003		2842.08	47.3681	51.5	12.1	39.8	2.745	0.007	0.007	0.000	0.169	0.14	
2148	9/1/2004	7:16:27 AM		25.645	25.39	25.054	25.758	25.01		48.587	53.168	16.824	32.754	-1.212	-7.382		48.994	0.062	14.643	0.003		2843.08	47.3847	52.0	11.7	40.7	2.804	0.009	0.009	0.000	0.218	0.19	
2149	9/1/2004	7:17:27 AM		25.845	25.39	25.064	25.743	24.98		47.905	53.075	16.705	32.124	-1.212	-5.552		50.046	0.027	14.643	0.003		2844.08	47.4014	51.9	11.9	40.0	2.759	0.004	0.004	0.000	0.096	0.08	
2150	9/1/2004	7:18:27 AM		25.589	25.384	25.033	25.762	24.994		46.617	52.496	16.647	31.084	-0.019	-3.587		50.651	0.074	14.643	0.003		2845.08	47.4181	51.4	12.1	38.9	2.679	0.011	0.011	0.000	0.272	0.23	
2151	9/1/2004	7:19:27 AM		25.574	25.394	25.047	25.776	24.964		47.984	53.197	16.627	32.317	-1.143	-5.917		50.236	0.05	14.643	0.004		2846.08	47.4347	52.1	12.0	40.2	2.768	0.007	0.007	0.000	0.178	0.15	
2152	9/1/2004	7:20:27 AM		25.548	25.398	25.057	25.761	24.903		48.142	53.139	16.785	32.367	-1.209	-6.428		50.479	0.064	14.643	0.004		2847.08	47.4514	52.0	12.0	40.3	2.775	0.009	0.009	0.000	0.227	0.19	
2153	9/1/2004	7:21:27 AM		25.488	25.382	25.026	25.74	24.987		48.525	53.162	16.655	32.925	-1.212	-6.761		50.121	0.054	14.643	0.003		2848.08	47.4681	52.0	11.9	40.7	2.808	0.008	0.008	0.000	0.190	0.16	
2154	9/1/2004	7:22:27 AM		25.472	25.402	25.035	25.764	25.012		48.411	53.122	16.561	32.872	-1.212	-6.816		51.178	0.052	14.643	0.004		2849.08	47.4847	52.0	12.2	40.6	2.802	0.007	0.007	0.000	0.183	0.16	
2155	9/1/2004	7:23:27 AM		25.465	25.41	25.048	25.797	24.995		48.424	52.975	16.629	32.851	-1.209	-7.021		50.459	0.052	14.643	0.003		2850.08	47.5014	51.8	12.0	40.6	2.802	0.007	0.007	0.000	0.183	0.16	
2156	9/1/2004	7:24:27 AM		25.444	25.393	25.037	25.786	25.023		48.666	53.274	16.602	33.159	-1.212	-7.177		49.929	0.057	14.643	0.003		2851.08	47.5181	52.1	11.9	40.9	2.821	0.008	0.008	0.000	0.199	0.17	
2157	9/1/2004	7:25:27 AM		25.424	25.388	25.012	25.726	24.998		48.405	53.083	16.578	32.867	-1.215	-7.012		50.177	0.054	14.643	0.003		2852.08	47.5347	52.0	12.0	40.6	2.802	0.008	0.008	0.000	0.190	0.16	
2158	9/1/2004	7:26:27 AM		25.413	25.403	25.021	25.745	24.993		48.523	53.242	16.716	32.689	-1.212	-7.099		49.681	0.053	14.643	0.004		2853.08	47.5514	52.1	11.8	40.6	2.800	0.008	0.008	0.000	0.187	0.16	
2159	9/1/2004	7:27:27 AM		25.428	25.413	25.031	25.76	24.958		48.486	53.427	16.562	32.863	-1.209	-7.093		50.494	0.054	14.643	0.003		2854.08	47.5681	52.3	12.0	40.7	2.804	0.008	0.008	0.000	0.190	0.16	
2160	9/1/2004	7:28:27 AM		25.396	25.391	25.004	25.749	25.001		48.633	53.128	16.731	33.019	-1.215	-7.099		49.612	0.053	14.643	0.003		2855.08	47.5847	52.0	11.8	40.8	2.815	0.008	0.008	0.000	0.186	0.16	
2161	9/1/2004	7:29:27 AM		25.397	25.397	25.031	25.74	25.022		48.697	53.365	16.699	33.05	-1.212	-7.096		50.25	0.053	14.643	0.003		2856.08	47.6014	52.2	12.0	40.9	2.818	0.008	0.008	0.000	0.185	0.16	
2162	9/1/2004	7:30:27 AM		25.372	25.386	25.02	25.719	24.986		48.26	53.039	17.043	32.176	-1.215	-7.111		50.167	0.052	14.643	0.003		2857.08	47.6181	51.9	11.9	40.2	2.773	0.007	0.007	0.000	0.185	0.16	
2163	9/1/2004	7:31:27 AM		25.362	25.387	25.016	25.75	25.007		48.308	52.952	17.149	32.112	-1.212	-7.108		50.903	0.052	14.643	0.003		2858.08	47.6347	51.8	12.1	40.2	2.772	0.007	0.007	0.000	0.185	0.16	
2164	9/1/2004	7:32:27 AM		25.342	25.386	25.03	25.754	25.026		48.366	52.996	17.086	32.246	-1.209	-7.102		49.683	0.053	14.643	0.003		2859.08	47.6514	51.9	11.8	40.3	2.779	0.008	0.008	0.000	0.188	0.16	
2165	9/1/2004	7:33:27 AM		25.327	25.391	25.04	25.729	24.986		48.326	52.846	17.202	32.055	-1.215	-7.111		49.925	0.052	14.643	0.003		2860.08	47.6681	51.7	11.9	40.2	2.771	0.007	0.007	0.000	0.185	0.16	
2166	9/1/2004	7:34:27 AM		25.295	25.385	25.054	25.738	24.965		48.384	52.971	17.132	32.135	-1.212	-7.108		51.143	0.052	14.643	0.003		2861.08	47.6847	51.8	12.2	40.3	2.776	0.007	0.007	0.000	0.185	0.16	
2167	9/1/2004	7:35:27 AM		25.32	25.394	25.058	25.747	24.945		48.22	52.847	17.122	32.157	-1.212	-7.108		51.135	0.052	14.643	0.003		2862.08	47.7014	51.7	12.2	40.2	2.771	0.007	0.007	0.000	0.185	0.16	
2168	9/1/2004	7:36:27 AM		25.34	25.394	25.048	25.752	24.91		48.364	53.074	17.118	32.25	-1.215	-7.108		50.78	0.053	14.643	0.003		2863.08	47.7181	51.9	12.1	40.3	2.779	0.008	0.008	0.000	0.188	0.16	
2169	9/1/2004	7:37:27 AM		25.36	25.394	25.083	25.742	24.91		48.403	53.066	17.23	32.174	-1.212	-7.113		51.6	0.05	14.643	0.003		2864.08	47.7347	51.9	12.3	40.3	2.778	0.007	0.007	0.000	0.177	0.15	
2170	9/1/2004	7:38:27 AM		25.388	25.393	25.142	25.766	24.938		48.359	52.952	17.038	32.379	-1.212	-7.108		50.392	0.051	14.643	0.003		2865.08	47.7514	51.8	12.0	40.4	2.783	0.007	0.007	0.000	0.180	0.15	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2171	9/1/2004	7:39:27 AM		25.392	25.381	25.13	25.744	24.996		47.909	52.422	16.898	32.116	-1.215	-7.102		51.992	0.052	14.643	0.003		2866.08	47.7681	51.3	12.4	40.0	2.759	0.007	0.007	0.000	0.185	0.16	
2172	9/1/2004	7:40:27 AM		25.394	25.379	25.097	25.726	25.044		48.314	52.983	17.288	32.118	-1.212	-7.105		49.422	0.052	14.643	0.003		2867.08	47.7847	51.9	11.8	40.2	2.773	0.007	0.007	0.000	0.185	0.16	
2173	9/1/2004	7:41:27 AM		25.397	25.357	25.076	25.695	25.017		47.878	52.592	17.317	31.589	-1.215	-7.105		51.134	0.052	14.643	0.003		2868.08	47.8014	51.5	12.2	39.7	2.739	0.007	0.007	0.000	0.187	0.16	
2174	9/1/2004	7:42:27 AM		25.406	25.356	25.095	25.683	25.036		48.142	52.909	17.347	31.786	-1.212	-7.105		52.2	0.051	14.643	0.003		2869.08	47.8181	51.8	12.4	40.0	2.755	0.007	0.007	0.000	0.182	0.16	
2175	9/1/2004	7:43:27 AM		25.41	25.344	25.083	25.657	25.009		48.098	52.884	17.24	31.757	-1.212	-7.102		51.879	0.052	14.643	0.003		2870.08	47.8347	51.8	12.4	39.9	2.753	0.007	0.007	0.000	0.186	0.16	
2176	9/1/2004	7:44:27 AM		25.408	25.342	25.051	25.65	25.032		47.634	52.225	17.194	31.556	-1.212	-7.105		50.684	0.051	14.643	0.003		2871.08	47.8514	51.1	12.1	39.6	2.730	0.007	0.007	0.000	0.184	0.16	
2177	9/1/2004	7:45:27 AM		25.399	25.314	25.043	25.622	25.069		47.974	52.801	17.193	31.712	-1.212	-7.105		50.684	0.051	14.643	0.003		2872.08	47.8681	51.7	12.1	39.8	2.747	0.007	0.007	0.000	0.183	0.16	
2178	9/1/2004	7:46:27 AM		25.411	25.311	25.05	25.623	25.016		47.926	52.807	17.127	31.782	-1.212	-7.099		51.956	0.052	14.643	0.003		2873.08	47.8847	51.7	12.4	39.9	2.748	0.007	0.007	0.000	0.187	0.16	
2179	9/1/2004	7:47:27 AM		25.419	25.303	25.042	25.596	25.003		47.816	52.548	17.296	31.447	-1.212	-7.105		50.26	0.051	14.643	0.003		2874.08	47.9014	51.4	12.0	39.6	2.732	0.007	0.007	0.000	0.184	0.16	
2180	9/1/2004	7:48:27 AM		25.419	25.288	25.028	25.606	25.049		48.299	52.886	17.295	32.04	-1.212	-7.108		51.191	0.051	14.643	0.003		2875.08	47.9181	51.8	12.2	40.2	2.770	0.007	0.007	0.000	0.182	0.15	
2181	9/1/2004	7:49:27 AM		25.425	25.3	25.039	25.622	25.015		47.814	52.49	17.239	31.654	-1.206	-7.09		51.268	0.052	14.643	0.004		2876.08	47.9347	51.4	12.2	39.7	2.740	0.007	0.007	0.000	0.187	0.16	
2182	9/1/2004	7:50:27 AM		25.421	25.285	25.029	25.588	25.016		47.967	52.71	17.286	31.644	-1.212	-7.108		50.465	0.05	14.643	0.003		2877.08	47.9514	51.6	12.0	39.8	2.744	0.007	0.007	0.000	0.180	0.15	
2183	9/1/2004	7:51:27 AM		25.431	25.286	25.04	25.608	25.066		48.021	52.733	17.177	31.704	-1.212	-7.099		51.305	0.052	14.643	0.003		2878.08	47.9681	51.6	12.2	39.9	2.748	0.007	0.007	0.000	0.187	0.16	
2184	9/1/2004	7:52:27 AM		25.435	25.28	25.039	25.588	25.01		47.853	52.376	17.223	31.901	-1.212	-7.099		50.832	0.051	14.643	0.003		2879.08	47.9847	51.3	12.1	39.9	2.749	0.007	0.007	0.000	0.183	0.16	
2185	9/1/2004	7:53:27 AM		25.434	25.268	25.017	25.576	24.994		47.955	52.708	17.05	31.966	-1.215	-7.108		51.42	0.051	14.643	0.003		2880.08	48.0014	51.6	12.2	40.0	2.755	0.007	0.007	0.000	0.183	0.16	
2186	9/1/2004	7:54:27 AM		25.427	25.257	25.016	25.554	25.047		47.748	52.523	17.106	31.698	-1.212	-7.113		51.923	0.05	14.643	0.003		2881.08	48.0181	51.4	12.4	39.7	2.739	0.007	0.007	0.000	0.180	0.15	
2187	9/1/2004	7:55:27 AM		25.441	25.256	25.03	25.559	25.026		48.198	52.824	17.266	31.936	-1.215	-7.108		50.893	0.051	14.643	0.003		2882.08	48.0347	51.7	12.1	40.1	2.762	0.007	0.007	0.000	0.182	0.15	
2188	9/1/2004	7:56:27 AM		25.454	25.259	25.048	25.591	25.009		48.21	52.859	17.194	32.032	-1.209	-7.105		52.876	0.051	14.643	0.003		2883.08	48.0514	51.7	12.6	40.1	2.766	0.007	0.007	0.000	0.182	0.15	
2189	9/1/2004	7:57:27 AM		25.458	25.252	25.036	25.595	25.008		47.424	52.009	17.155	31.359	-1.212	-7.102		51.182	0.052	14.643	0.003		2884.08	48.0681	50.9	12.2	39.4	2.716	0.007	0.007	0.000	0.189	0.16	
2190	9/1/2004	7:58:27 AM		25.46	25.25	25.034	25.568	24.976		48.059	52.849	17.048	31.993	-1.215	-7.108		52.62	0.051	14.643	0.003		2885.08	48.0847	51.7	12.5	40.0	2.760	0.007	0.007	0.000	0.182	0.16	
2191	9/1/2004	7:59:27 AM		25.468	25.253	25.062	25.576	24.958		48.098	52.892	17.229	31.811	-1.209	-7.111		50.805	0.051	14.643	0.004		2886.08	48.1014	51.8	12.1	40.0	2.755	0.007	0.007	0.000	0.182	0.16	
2192	9/1/2004	8:00:27 AM		25.465	25.245	25.054	25.548	24.935		47.997	52.749	17.297	31.702	-1.212	-7.105		49.14	0.051	14.643	0.003		2887.08	48.1181	51.6	11.7	39.8	2.747	0.007	0.007	0.000	0.183	0.16	
2193	9/1/2004	8:01:27 AM		25.467	25.242	25.051	25.56	25.018		47.748	52.589	17.158	31.572	-1.206	-7.102		50.4	0.052	14.643	0.004		2888.08	48.1347	51.5	12.0	39.7	2.734	0.007	0.007	0.000	0.187	0.16	
2194	9/1/2004	8:02:27 AM		25.46	25.234	25.048	25.557	25.035		47.654	52.498	17.072	31.603	-1.212	-7.113		50.479	0.05	14.643	0.003		2889.08	48.1514	51.4	12.0	39.6	2.732	0.007	0.007	0.000	0.180	0.15	
2195	9/1/2004	8:03:27 AM		25.477	25.232	25.066	25.56	24.997		48.295	53.245	17.118	32.135	-1.212	-7.116		50.769	0.05	14.643	0.003		2890.08	48.1681	52.1	12.1	40.2	2.773	0.007	0.007	0.000	0.178	0.15	
2196	9/1/2004	8:04:27 AM		25.479	25.233	25.078	25.571	24.909		48.142	52.809	17.232	31.929	-1.209	-7.108		48.805	0.051	14.643	0.003		2891.08	48.1847	51.7	11.6	40.0	2.760	0.007	0.007	0.000	0.182	0.15	
2197	9/1/2004	8:05:27 AM		25.48	25.23	25.094	25.618	24.92		47.839	52.65	17.103	31.722	-1.212	-7.099		51.96	0.052	14.643	0.003		2892.08	48.2014	51.5	12.4	39.8	2.743	0.007	0.007	0.000	0.187	0.16	
2198	9/1/2004	8:06:27 AM		25.502	25.242	25.136	25.67	24.997		48.198	53.027	17.139	32.147	-1.212	-7.099		50.721	0.052	14.643	0.003		2893.08	48.2181	51.9	12.1	40.2	2.770	0.007	0.007	0.000	0.185	0.16	
2199	9/1/2004	8:07:27 AM		25.504	25.244	25.154	25.712	24.99		47.743	52.631	17.211	31.4	-1.215	-7.113		53.21	0.05	14.643	0.003		2894.08	48.2347	51.5	12.7	39.6	2.728	0.007	0.007	0.000	0.180	0.15	
2200	9/1/2004	8:08:27 AM		25.507	25.236	25.146	25.764	25.112		47.864	52.428	17.248	31.654	-1.215	-7.111		52.011	0.05	14.643	0.003		2895.08	48.2514	51.3	12.4	39.8	2.741	0.007	0.007	0.000	0.179	0.15	
2201	9/1/2004	8:09:27 AM		25.53	25.26	25.144	25.833	25.095		47.853	52.791	17.336	31.533	-1.209	-7.099		50.915	0.051	14.643	0.003		2896.08	48.2681	51.7	12.1	39.7	2.737	0.007	0.007	0.000	0.183	0.16	
2202	9/1/2004	8:10:27 AM		25.529	25.238	25.083	25.821	25.229		47.748	52.571	17.157	31.64	-1.218	-7.105		50.4	0.051	14.643	0.003		2897.08	48.2847	51.4	12.0	39.7	2.737	0.007	0.007	0.000	0.184	0.16	
2203	9/1/2004	8:11:27 AM		25.552	25.261	25.051	25.869	25.252		47.555	52.351	17.312	31.308	-1.212	-7.102		51.575	0.051	14.643	0.003		2898.08	48.3014	51.2	12.3	39.4	2.719	0.007	0.007	0.000	0.185	0.16	
2204	9/1/2004	8:12:27 AM		25.549	25.259	24.978	25.862	25.255		47.509	52.148	17.151	31.263	-1.212	-7.099		49.887	0.051	14.643	0.003		2899.08	48.3181	51.0	11.9	39.4	2.716	0.007	0.007	0.000	0.185	0.16	
2205	9/1/2004	8:13:27 AM		25.547	25.256	24.92	25.819	25.252		48.154	52.855	17.309	31.761	-1.215	-7.096		51.228	0.051	14.643	0.003		2900.08	48.3347	51.7	12.2	40.0	2.755	0.007	0.007	0.000	0.183	0.16	
2206	9/1/2004	8:14:27 AM		25.544	25.258	24.883	25.801	25.269		48.067	52.878	17.364	31.538	-1.212	-7.102		50.536	0.05	14.643	0.003		2901.08	48.3514	51.8	12.0	39.8	2.744	0.007	0.007	0.000	0.180	0.15	
2207	9/1/2004	8:15:27 AM		25.526	25.245	24.79	25.769	25.261		47.901	52.741	17.064	31.884	-1.215	-7.108		51.931	0.05	14.643	0.003		2902.08	48.3681	51.6	12.4	39.9	2.750	0.007	0.007	0.000	0.181	0.15	
2208	9/1/2004	8:16:27 AM		25.538	25.263	24.792	25.791	25.193		48.011	52.689	17.105	31.968	-1.212	-7.099		49.845	0.051	14.643	0.003		2903.08	48.3847	51.6	11.9	40.0	2.757	0.007	0.007	0.000	0.184	0.16	
2209	9/1/2004	8:17:27 AM		25.54	25.275	24.754	25.803	25.23		47.951	52.635	17.247	31.72	-1.206	-7.099		50.461	0.05	14.643	0.003		2904.08	48.4014	51.5	12.0	39.8	2.747	0.007	0.007	0.000	0.181	0.15	
2210	9/1/2004	8:18:27 AM		25.522	25.271	24.705	25.794	25.167		47.658	52.453	16.955	31.794	-1.212	-7.102		52.461	0.05	14.643	0.003		2905.08	48.4181	51.3	12.5	39.7	2.739	0.007	0.007	0.000	0.182	0.15	
2211	9/1/2004	8:19:27 AM		25.508	25.268	24.672	25.771	25.233		47.725	52.65	17.182	31.458	-1.212	-7.099		50.348	0.05	14.643	0.003		2906.08	48.4347	51.5	12.0	39.6	2.730	0.007	0.007	0.000	0.182	0.16	
2212	9/1/2004	8:20:27 AM		25.495	25.27	24.624	25.773	25.24		47.81	52.548	16.949	31.843	-1.215	-7.111		50.644	0.049	14.643	0.003		2907.08	48.4514	51.4	12.1	39.8	2.746	0.007	0.007	0.000	0.178	0.15	
2213	9/1/2004	8:21:27 AM		25.498	25.277	24.626	25.79	25.268		47.837	52.507	17.172	31.663	-1.215	-7.111		51.96	0.049	14.643	0.003		2908.08	48.4681	51.4	12.4	39.8	2.741	0.007	0.007	0.000	0.178	0.15	
2214	9/1/2004	8:22:27 AM		25.478	25.273	24.572	25.766	25.138		47.835	52.733	17.252	31.696	-1.215	-7.096		50.861	0.05	14.643	0.003		2909.08	48.4847	51.6	12.1	39.8	2.742	0.007	0.007	0.000	0.182	0.16	
2215	9/1/2004	8:23:27 AM		25.46	25.269	24.543	25.777	25.185		47.882	52.789	17.041	31.741	-1.212	-7.108		51.679	0.049	14.643	0.003		2910.08	48.5014	51.7	12.3	39.8	2.745	0.007	0.007	0.000	0.178	0.15	
2216	9/1/2004	8:24:27 AM		25.451	25.271	24.524	25.754	25.161		47.636	52.407	17.02	31.464	-1.215	-7.102		50.815	0.05	14.643	0.003		2911.08	48.5181	51.3	12.1	39.6	2.727	0.007	0.007	0.000	0.183	0.16	
2217	9/1/2004	8:25:27 AM		25.427	25.261	24.475	25.774	25.202		47.897	52.732	17.155	31.739	-1.212	-7.102		51.329	0.049	14.643	0.003		2912.08	48.5347	51.6	12.2	39.8	2.745	0.007	0.007	0.000	0.179	0.15	
2218	9/1/2004	8:26:27 AM		25.428	25.272	24.491	25.745	25.178		47.752	52.538	17.015	31.88	-1.215	-7.102		49.799	0.05	14.643	0.003		2913.08	48.5514	51.4	11.9	39.8	2.745	0.007	0.007	0.000	0.182	0.16	
2219	9/1/2004	8:27:27 AM		25.408	25.272	24.461	25.765	25.113		47.604	52.25	17.088	31.735	-1.209	-7.087		50.087	0.051	14.643	0.004		2914.08	48.5681	51.1	11.9	39.7	2.735	0.007	0.007	0.000	0.187	0.16	
2220	9/1/2004	8:28:27 AM		25.383	25.257	24.436	25.715	25.138		48.069	52.774	17.143	31.985	-1.212	-7.099		49.272	0.05	14.643	0.003		2915.08	48.5847	51.6	11.7	40.0	2.760	0.007	0.007	0.000	0.182	0.15	
2221	9/1/2004	8:29:27 AM		25.374	25.268	24.412	25.737	25.189		48.026	52.689	17.187	31.944	-1.215	-7.099		51.216	0.05	14.643	0.003		2916.08	48.6014	51.6	12.2	40.0	2.757	0.007	0.007	0.000	0.182	0.15	
2222	9/1/2004	8:30:27 AM		25.37	25.269	24.408	25.742	25.15		47.831	52.753	17.137	31.689	-1.212	-7.099		52.242	0.05	14.643	0.003		2917.08	48.6181	51.6	12.4	39.8	2.741	0.007	0.007	0.000	0.183	0.16	
2223	9/1/2004	8:31:27 AM		25.346	25.27	24.394	25.743	25.176		48.137	53.008	17.256	31.876	-1.215	-7.096		51.581	0.05	14.643	0.003		2918.08	48.6347	51.9	12.3	40.0	2.758	0.007	0.007	0.000	0.182	0.15	
2224	9/1/2004	8:32:27 AM		25.347	25.271	24.385	25.76	25.172		48.005	52.737	17.246	31.778	-1.212	-7.096		50.217	0.05	14.643	0.003		2919.08	48.6514	51.6	12.0	39.9	2.750	0.007	0.007	0.000	0.183	0.16	
2225	9/1/2004	8:33:27 AM		25.343	25.277	24.386	25.735	25.243		47.766	52.604	17.164	31.636	-1.209	-7.096		52.044	0.05	14.643	0.003		2920.08	48.6681	51.5	12.4	39.7	2.737	0.007	0.007	0.000	0.183	0.16	
2226	9/1/2004	8:34:27 AM		25.323	25.268	24.386	25.731	25.234		47.992	52.817	17.017	32.114	-1.212	-7.096		48.83	0.05	14.643	0.003		2921.08	48.6847	51.7	11.6	40.1	2.762	0.007	0.007	0.000	0.182	0.15	
2227	9/1/2004	8:35:27 AM		25.309	25.264	24.412	25.747	25.209		47.746	52.728	17.038	31.712	-1.215	-7.096		49.243	0.05	14.643	0.003		2922.08	48.7014	51.6	11.7	39.7	2.739	0.007	0.007	0.000	0.183	0.16	
2228	9/1/2004	8:36:27 AM		25.299	25.259	24.437	25.762	25.239		47.932	52.699	17.231	31.654	-1.212	-7.105		50.594	0.047	14.643	0.003		2923.08	48.7181	51.6	12.1	39.8	2.744	0.007	0.007	0.000	0.172	0.15	
2229	9/1/2004	8:37:27 AM		25.3	25.269	24.418	25.767	25.205		47.578	52.374	17.142	31.513	-1.215	-7.096		50.473	0.05	14.643	0.003		2924.08	48.7347	51.2	12.0	39.5	2.727	0.007	0.007	0.000	0.184	0.16	
2230	9/1/2004	8:38:27 AM		25.291	25.27	24.404	25.778	25.221		47.414	52.314	17.18	31.213	-1.212	-7.09		50.26	0.049	14.643	0.004		2925.08	48.7514	51.2	12.0	39.3	2.711	0.007	0.007	0.000	0.181	0.15	
2231	9/1/2004	8:39:27 AM		25.282	25.271	24.38	25.745	25.212		47.405	52.063	17.127	31.265	-1.212	-7.093		51.164	0.05	14.643	0.003		2926.08	48.7681	50.9	12.2	39.3	2.712	0.007	0.007	0.000	0.185	0.16	
2232	9/1/2004	8:40:27 AM		25.273	25.267	24.331	25.745	25.243		47.878	52.691	17.345	31.552	-1.215	-7.093		50.882	0.05	14.643	0.003		2927.08	48.7847	51.6	12.1	39.7	2.738	0.007	0.007	0.000	0.184	0.16	
2233	9/1/2004	8:41:27 AM		25.269	25.273	24.336	25.711	25.164		47.92	52.737	17.167	31.798	-1.215	-7.093		50.965	0.05	14.643	0.003		2928.08	48.8014	51.6	12.1	39.9	2.748	0.007	0.007	0.000	0.183	0.16	
2234	9/1/2004	8:42:27 AM		25.253	25.262	24.306	25.73	25.148		48.005	52.938	17.353	31.706	-1.212	-7.087		48.629	0.05	14.643	0.003		2929.08	48.8181	51.8	11.6	39.9	2.748	0.007	0.007	0.000	0.183	0.16	
2235	9/1/2004	8:43:27 AM		25.249	25.268	24.301	25.741	25.204		47.522	52.532	17.102	31.273	-1.212	-7.093		49.57	0.049	14.643	0.003		2930.08	48.8347	51.4	11.8	39.4	2.716	0.007	0.007	0.000	0.182	0.15	
2236	9/1/2004	8:44:27 AM		25.234	25.258	24.291	25.706	25.224		47.542	52.335	17.164	31.441	-1.221	-7.093		49.057	0.05	14.643	0.003		2931.08	48.8514	51.2	11.7	39.5	2.723	0.007	0.007	0.000	0.185	0.16	
2237	9/1/2004	8:45:27 AM		25.234	25.269	24.292	25.742	25.189		47.526	52.608	17.07	31.496	-1.209	-7.09		49.908	0.049	14.643	0.004		2932.08	48.8681	51.5	11.9	39.5	2.724	0.007	0.007	0.000	0.181	0.15	
2238	9/1/2004	8:46:27 AM		25.214	25.259	24.272	25.747	25.229		47.75	52.589	17.295	31.497	-1.215	-7.093		50.048	0.049	14.643	0.003		2933.08	48.8847	51.5	11.9	39.6	2.732	0.007	0.007	0.000	0.181	0.15	
2239	9/1/2004	8:47:27 AM		25.216	25.27	24.274	25.753	25.241		48.11	52.929	17.291	31.94	-1.212	-7.087		50.897	0.049	14.643	0.003		2934.08	48.9014	51.8	12.1	40.0	2.760	0.007	0.007	0.000	0.179	0.15	
2240	9/1/2004	8:48:27 AM		25.212	25.271	24.254	25.774	25.062		47.692	52.542	17.154	31.54	-1.215	-7.09		49.508	0.049	14.643	0.003		2935.08	48.9181	51.4	11.8	39.6	2.731	0.007	0.007	0.000	0.181	0.15	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2241	9/1/2004	8:49:27 AM		25.202	25.262	24.25	25.755	25.117		47.887	52.772	17.449	31.48	-1.215	-7.082		50.25	0.05	14.643	0.003		2936.08	48.9347	51.6	12.0	39.7	2.736	0.007	0.007	0.000	0.184	0.16	
2242	9/1/2004	8:50:27 AM		25.188	25.262	24.241	25.715	25.118		47.758	52.589	17.174	31.554	-1.215	-7.099		51.433	0.049	14.643	0.003		2937.08	48.9514	51.5	12.3	39.7	2.734	0.007	0.007	0.000	0.181	0.15	
2243	9/1/2004	8:51:27 AM		25.199	25.273	24.246	25.756	25.179		47.727	52.558	17.212	31.634	-1.212	-7.087		50.753	0.049	14.643	0.003		2938.08	48.9681	51.4	12.1	39.7	2.736	0.007	0.007	0.000	0.181	0.15	
2244	9/1/2004	8:52:27 AM		25.194	25.273	24.251	25.746	25.214		48.044	53.064	17.149	31.749	-1.212	-7.085		49.224	0.05	14.643	0.003		2939.08	48.9847	51.9	11.7	39.9	2.751	0.007	0.007	0.000	0.183	0.16	
2245	9/1/2004	8:53:27 AM		25.184	25.274	24.242	25.737	25.23		48.167	53.184	17.33	31.743	-1.215	-7.085		50.292	0.05	14.643	0.003		2940.08	49.0014	52.1	12.0	40.0	2.755	0.007	0.007	0.000	0.183	0.16	
2246	9/1/2004	8:54:27 AM		25.179	25.274	24.247	25.742	25.185		47.994	53.029	17.277	31.704	-1.212	-7.09		50.667	0.05	14.643	0.003		2941.08	49.0181	51.9	12.1	39.8	2.747	0.007	0.007	0.000	0.183	0.16	
2247	9/1/2004	8:55:27 AM		25.175	25.275	24.223	25.768	25.175		48.038	52.95	17.163	31.876	-1.212	-7.085		51.366	0.05	14.643	0.003		2942.08	49.0347	51.8	12.2	40.0	2.755	0.007	0.007	0.000	0.183	0.16	
2248	9/1/2004	8:56:27 AM		25.165	25.27	24.233	25.753	25.265		48.013	52.822	17.078	32.149	-1.212	-7.093		50.294	0.049	14.643	0.003		2943.08	49.0514	51.7	12.0	40.1	2.763	0.007	0.007	0.000	0.179	0.15	
2249	9/1/2004	8:57:27 AM		25.169	25.279	24.262	25.767	25.2		47.748	52.699	17.166	31.558	-1.212	-7.087		49.729	0.049	14.643	0.003		2944.08	49.0681	51.6	11.8	39.7	2.734	0.007	0.007	0.000	0.181	0.15	
2250	9/1/2004	8:58:27 AM		25.16	25.275	24.228	25.783	25.22		47.696	52.631	17.272	31.503	-1.209	-7.09		49.009	0.049	14.643	0.004		2945.08	49.0847	51.5	11.7	39.6	2.730	0.007	0.007	0.000	0.181	0.15	
2251	9/1/2004	8:59:27 AM		25.154	25.269	24.227	25.752	25.18		47.862	52.799	17.155	31.767	-1.215	-7.096		51.028	0.049	14.643	0.003		2946.08	49.1014	51.7	12.2	39.8	2.745	0.007	0.007	0.000	0.180	0.15	
2252	9/1/2004	9:00:27 AM		25.159	25.274	24.217	25.762	25.265		47.739	52.687	17.196	31.406	-1.218	-7.093		50.928	0.049	14.643	0.003		2947.08	49.1181	51.6	12.1	39.6	2.728	0.007	0.007	0.000	0.181	0.15	
2253	9/1/2004	9:01:27 AM		25.16	25.28	24.243	25.758	25.31		47.615	52.391	17.102	31.556	-1.215	-7.09		49.603	0.049	14.643	0.003		2948.08	49.1347	51.3	11.8	39.6	2.729	0.007	0.007	0.000	0.181	0.15	
2254	9/1/2004	9:02:27 AM		25.162	25.281	24.224	25.804	25.322		47.961	52.886	17.125	31.909	-1.215	-7.087		50.632	0.05	14.643	0.003		2949.08	49.1514	51.8	12.1	39.9	2.753	0.007	0.007	0.000	0.183	0.16	
2255	9/1/2004	9:03:27 AM		25.142	25.276	24.239	25.759	25.282		47.797	52.743	17.173	31.654	-1.218	-7.096		50.636	0.048	14.643	0.003		2950.08	49.1681	51.6	12.1	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2256	9/1/2004	9:04:27 AM		25.173	25.313	24.371	25.806	25.243		47.646	52.61	17.19	31.577	-1.212	-7.087		51.141	0.048	14.643	0.003		2951.08	49.1847	51.5	12.2	39.6	2.731	0.007	0.007	0.000	0.177	0.15	
2257	9/1/2004	9:05:27 AM		25.168	25.298	24.376	25.796	25.218		47.673	52.507	17.247	31.574	-1.212	-7.082		52.528	0.05	14.643	0.003		2952.08	49.2014	51.4	12.5	39.6	2.732	0.007	0.007	0.000	0.184	0.16	
2258	9/1/2004	9:06:27 AM		25.154	25.283	24.327	25.801	25.199		47.658	52.583	17.098	31.515	-1.212	-7.087		53.003	0.049	14.643	0.003		2953.08	49.2181	51.5	12.6	39.6	2.729	0.007	0.007	0.000	0.181	0.15	
2259	9/1/2004	9:07:27 AM		25.159	25.293	24.322	25.801	25.274		47.847	52.844	17.346	31.513	-1.212	-7.09		51.084	0.048	14.643	0.003		2954.08	49.2347	51.7	12.2	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2260	9/1/2004	9:08:27 AM		25.18	25.305	24.308	25.843	25.345		47.6	52.546	17.226	31.334	-1.212	-7.085		49.743	0.049	14.643	0.003		2955.08	49.2514	51.4	11.8	39.5	2.721	0.007	0.007	0.000	0.181	0.15	
2261	9/1/2004	9:09:18 AM		25.166	25.296	24.294	25.814	25.296		47.602	52.484	17.325	31.273	-1.215	-7.09		51.151	0.048	14.643	0.003		2955.93	49.2656	51.4	12.2	39.4	2.719	0.007	0.007	0.000	0.178	0.15	
2262	9/1/2004	9:10:18 AM		25.16	25.295	24.298	25.803	25.245		47.368	52.219	17.243	31.053	-1.212	-7.079		50.732	0.05	14.643	0.003		2956.93	49.2822	51.1	12.1	39.2	2.703	0.007	0.007	0.000	0.186	0.16	
2263	9/1/2004	9:11:18 AM		25.156	25.285	24.249	25.789	25.296		47.752	52.49	17.307	31.587	-1.218	-7.09		50.642	0.048	14.643	0.003		2957.93	49.2989	51.4	12.1	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2264	9/1/2004	9:12:18 AM		25.166	25.296	24.264	25.839	25.201		47.582	52.498	17.115	31.548	-1.212	-7.082		50.212	0.049	14.643	0.003		2958.93	49.3156	51.4	12.0	39.6	2.728	0.007	0.007	0.000	0.181	0.15	
2265	9/1/2004	9:13:18 AM		25.168	25.307	24.26	25.835	25.328		47.327	52.287	17.162	31.244	-1.215	-7.079		49.497	0.05	14.643	0.003		2959.93	49.3322	51.2	11.8	39.3	2.709	0.007	0.007	0.000	0.186	0.16	
2266	9/1/2004	9:14:18 AM		25.168	25.302	24.265	25.805	25.343		47.679	52.675	17.223	31.419	-1.215	-7.087		49.038	0.049	14.643	0.003		2960.93	49.3489	51.5	11.7	39.5	2.727	0.007	0.007	0.000	0.181	0.15	
2267	9/1/2004	9:15:18 AM		25.163	25.302	24.245	25.86	25.348		47.472	52.312	17.153	31.355	-1.212	-7.067		51.844	0.051	14.643	0.003		2961.93	49.3656	51.2	12.3	39.4	2.717	0.007	0.007	0.000	0.189	0.16	
2268	9/1/2004	9:16:18 AM		25.163	25.308	24.246	25.841	25.298		47.621	52.66	17.097	31.47	-1.218	-7.087		51.097	0.049	14.643	0.003		2962.93	49.3822	51.5	12.2	39.5	2.727	0.007	0.007	0.000	0.181	0.15	
2269	9/1/2004	9:17:18 AM		25.174	25.324	24.257	25.807	25.264		47.706	52.867	17.02	31.572	-1.212	-7.079		51.103	0.049	14.643	0.003		2963.93	49.3989	51.7	12.2	39.6	2.733	0.007	0.007	0.000	0.181	0.15	
2270	9/1/2004	9:18:18 AM		25.164	25.313	24.252	25.782	25.274		47.884	52.873	17.084	31.95	-1.212	-7.076		50.736	0.05	14.643	0.003		2964.93	49.4156	51.7	12.1	39.9	2.752	0.007	0.007	0.000	0.183	0.16	
2271	9/1/2004	9:19:18 AM		25.159	25.319	24.217	25.782	25.194		47.824	52.776	17.243	31.638	-1.212	-7.085		49.833	0.048	14.643	0.003		2965.93	49.4322	51.7	11.9	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2272	9/1/2004	9:20:18 AM		25.15	25.309	24.232	25.772	25.285		47.978	52.834	17.195	31.85	-1.212	-7.079		50.696	0.049	14.643	0.003		2966.93	49.4489	51.7	12.1	39.9	2.752	0.007	0.007	0.000	0.180	0.15	
2273	9/1/2004	9:21:18 AM		25.151	25.325	24.213	25.783	25.251		47.507	52.42	16.894	31.907	-1.212	-7.082		51.31	0.048	14.643	0.003		2967.93	49.4656	51.3	12.2	39.7	2.738	0.007	0.007	0.000	0.177	0.15	
2274	9/1/2004	9:22:18 AM		25.131	25.316	24.204	25.739	25.201		47.88	53.033	17.222	31.663	-1.212	-7.082		50.025	0.049	14.643	0.003		2968.93	49.4822	51.9	11.9	39.8	2.742	0.007	0.007	0.000	0.180	0.15	
2275	9/1/2004	9:23:18 AM		25.138	25.327	24.23	25.735	25.328		47.783	52.913	16.998	31.726	-1.212	-7.082		49.887	0.049	14.643	0.003		2969.93	49.4989	51.8	11.9	39.8	2.741	0.007	0.007	0.000	0.180	0.15	
2276	9/1/2004	9:24:18 AM		25.127	25.321	24.2	25.735	25.407		47.947	52.743	17.144	31.845	-1.212	-7.073		51.57	0.05	14.643	0.003		2970.93	49.5156	51.6	12.3	39.9	2.751	0.007	0.007	0.000	0.184	0.16	
2277	9/1/2004	9:25:18 AM		25.118	25.332	24.205	25.775	25.373		47.646	52.59	17.116	31.503	-1.218	-7.076		51.107	0.049	14.643	0.003		2971.93	49.5322	51.5	12.2	39.6	2.729	0.007	0.007	0.000	0.181	0.15	
2278	9/1/2004	9:26:18 AM		25.128	25.342	24.205	25.79	25.323		47.646	52.674	17.06	31.638	-1.212	-7.067		49.437	0.05	14.643	0.003		2972.93	49.5489	51.5	11.8	39.6	2.733	0.007	0.007	0.000	0.185	0.16	
2279	9/1/2004	9:27:18 AM		25.113	25.332	24.195	25.78	25.288		47.702	52.803	17.13	31.552	-1.215	-7.076		50.09	0.049	14.643	0.003		2973.93	49.5656	51.7	11.9	39.6	2.732	0.007	0.007	0.000	0.181	0.15	
2280	9/1/2004	9:28:18 AM		25.123	25.347	24.21	25.78	25.383		47.843	52.598	17.134	31.708	-1.206	-7.061		51.16	0.05	14.643	0.004		2974.93	49.5822	51.5	12.2	39.8	2.742	0.007	0.007	0.000	0.184	0.16	
2281	9/1/2004	9:29:18 AM		25.118	25.358	24.231	25.726	25.458		47.52	52.482	16.976	31.661	-1.212	-7.073		50.519	0.049	14.643	0.003		2975.93	49.5989	51.4	12.0	39.6	2.730	0.007	0.007	0.000	0.181	0.15	
2282	9/1/2004	9:30:18 AM		25.118	25.352	24.2	25.755	25.228		47.901	52.958	17.046	31.868	-1.212	-7.076		49.96	0.048	14.643	0.003		2976.93	49.6156	51.8	11.9	39.9	2.750	0.007	0.007	0.000	0.176	0.15	
2283	9/1/2004	9:31:18 AM		25.118	25.352	24.215	25.785	25.168		47.947	52.714	17.025	32.118	-1.212	-7.07		50.859	0.05	14.643	0.003		2977.93	49.6322	51.6	12.1	40.0	2.760	0.007	0.007	0.000	0.183	0.16	
2284	9/1/2004	9:32:18 AM		25.118	25.352	24.21	25.83	25.188		47.801	52.979	17.188	31.556	-1.215	-7.067		49.393	0.05	14.643	0.003		2978.93	49.6489	51.9	11.8	39.7	2.736	0.007	0.007	0.000	0.184	0.16	
2285	9/1/2004	9:33:18 AM		25.122	25.367	24.235	25.845	25.127		47.862	52.71	17.093	31.944	-1.209	-7.07		53.143	0.048	14.643	0.004		2979.93	49.6656	51.6	12.7	39.9	2.751	0.007	0.007	0.000	0.176	0.15	
2286	9/1/2004	9:34:18 AM		25.118	25.362	24.205	25.875	25.248		47.422	52.293	16.995	31.552	-1.209	-7.076		49.234	0.048	14.643	0.003		2980.93	49.6822	51.2	11.7	39.5	2.722	0.007	0.007	0.000	0.178	0.15	
2287	9/1/2004	9:35:18 AM		25.113	25.353	24.271	25.831	25.259		47.866	53.004	17.254	31.564	-1.218	-7.073		49.545	0.049	14.643	0.003		2981.93	49.6989	51.9	11.8	39.7	2.738	0.007	0.007	0.000	0.180	0.15	
2288	9/1/2004	9:36:18 AM		25.113	25.362	24.291	25.875	25.293		47.605	52.795	17.133	31.462	-1.212	-7.07		52.321	0.049	14.643	0.003		2982.93	49.7156	51.7	12.5	39.5	2.726	0.007	0.007	0.000	0.181	0.15	
2289	9/1/2004	9:37:18 AM		25.128	25.378	24.321	25.906	25.229		47.69	52.921	17.133	31.501	-1.212	-7.064		49.823	0.05	14.643	0.003		2983.93	49.7322	51.8	11.9	39.6	2.730	0.007	0.007	0.000	0.184	0.16	
2290	9/1/2004	9:38:18 AM		25.119	25.369	24.267	25.912	25.344		47.793	52.905	17.201	31.55	-1.212	-7.064		50.419	0.049	14.643	0.003		2984.93	49.7489	51.8	12.0	39.7	2.735	0.007	0.007	0.000	0.181	0.15	
2291	9/1/2004	9:39:18 AM		25.131	25.39	24.294	25.903	25.276		47.644	52.39	17.159	31.665	-1.212	-7.064		50.158	0.049	14.643	0.003		2985.93	49.7656	51.3	11.9	39.7	2.734	0.007	0.007	0.000	0.180	0.15	
2292	9/1/2004	9:40:18 AM		25.136	25.391	24.254	25.919	25.402		47.582	52.623	17.009	31.691	-1.212	-7.061		50.542	0.049	14.643	0.003		2986.93	49.7822	51.5	12.0	39.6	2.733	0.007	0.007	0.000	0.181	0.15	
2293	9/1/2004	9:41:18 AM		25.132	25.382	24.245	25.915	25.342		47.669	52.699	17.199	31.542	-1.212	-7.061		47.167	0.049	14.643	0.003		2987.93	49.7989	51.6	11.2	39.6	2.731	0.007	0.007	0.000	0.181	0.15	
2294	9/1/2004	9:42:18 AM		25.138	25.398	24.256	25.931	25.363		47.806	52.764	17.327	31.392	-1.215	-7.073		50.459	0.048	14.643	0.003		2988.93	49.8156	51.6	12.0	39.6	2.730	0.007	0.007	0.000	0.177	0.15	
2295	9/1/2004	9:43:18 AM		25.139	25.399	24.247	25.932	25.37		47.546	52.536	17.15	31.513	-1.212	-7.058		51.072	0.049	14.643	0.003		2989.93	49.8322	51.4	12.2	39.5	2.725	0.007	0.007	0.000	0.181	0.15	
2296	9/1/2004	9:44:18 AM		25.139	25.409	24.222	25.947	25.325		47.692	52.822	16.995	31.681	-1.2	-7.067		49.67	0.048	14.643	0.004		2990.93	49.8489	51.7	11.8	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2297	9/1/2004	9:45:18 AM		25.135	25.41	24.223	25.918	25.34		47.733	52.778	16.905	31.997	-1.174	-7.073		49.507	0.048	14.643	0.003		2991.93	49.8656	51.7	11.8	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2298	9/1/2004	9:46:18 AM		25.135	25.41	24.193	25.958	25.285		47.41	52.417	16.941	31.47	-1.16	-7.067		50.855	0.048	14.643	0.003		2992.93	49.8822	51.3	12.1	39.4	2.719	0.007	0.007	0.000	0.178	0.15	
2299	9/1/2004	9:47:18 AM		25.145	25.425	24.223	25.968	25.34		47.887	52.994	17.014	31.921	-1.183	-7.061		50.5	0.049	14.643	0.003		2993.93	49.8989	51.9	12.0	39.9	2.751	0.007	0.007	0.000	0.180	0.15	
2300	9/1/2004	9:48:18 AM		25.146	25.421	24.224	25.959	25.336		47.76	53.172	16.942	31.739	-1.186	-7.061		50.613	0.049	14.643	0.003		2994.93	49.9156	52.0	12.1	39.7	2.741	0.007	0.007	0.000	0.180	0.15	
2301	9/1/2004	9:49:18 AM		25.152	25.436	24.214	25.969	25.402		48.079	53.159	17.081	31.929	-1.169	-7.07		49.833	0.048	14.643	0.003		2995.93	49.9322	52.0	11.9	40.0	2.758	0.007	0.007	0.000	0.176	0.15	
2302	9/1/2004	9:50:18 AM		25.153	25.448	24.221	26.001	25.393		47.789	53.014	17.153	31.679	-1.143	-7.061		51.087	0.048	14.643	0.003		2996.93	49.9489	51.9	12.2	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2303	9/1/2004	9:51:18 AM		25.145	25.444	24.192	25.987	25.375		47.822	52.869	16.96	31.954	-1.151	-7.058		49.631	0.049	14.643	0.003		2997.93	49.9656	51.7	11.8	39.9	2.750	0.007	0.007	0.000	0.180	0.15	
2304	9/1/2004	9:52:18 AM		25.145	25.444	24.207	25.972	25.3		47.546	52.627	17.022	31.542	-1.148	-7.056		50.273	0.05	14.643	0.003		2998.93	49.9822	51.5	12.0	39.5	2.726	0.007	0.007	0.000	0.185	0.16	
2305	9/1/2004	9:53:18 AM		25.15	25.445	24.183	26.013	25.291		47.675	52.875	17.07	31.513	-1.151	-7.064		49.491	0.048	14.643	0.003		2999.93	49.9989	51.7	11.8	39.6	2.730	0.007	0.007	0.000	0.178	0.15	
2306	9/1/2004	9:54:18 AM		25.146	25.451	24.204	25.999	25.286		48.013	53.141	16.961	32.055	-1.148	-7.056		49.487	0.049	14.643	0.003		3000.93	50.0156	52.0	11.8	40.0	2.760	0.007	0.007	0.000	0.179	0.15	
2307	9/1/2004	9:55:18 AM		25.148	25.457	24.18	26.015	25.318		47.49	52.791	16.826	31.671	-1.148	-7.056		50.286	0.049	14.643	0.003		3001.93	50.0322	51.7	12.0	39.6	2.729	0.007	0.007	0.000	0.181	0.15	
2308	9/1/2004	9:56:18 AM		25.148	25.468	24.186	26.001	25.254		47.569	52.878	17.048	31.421	-1.111	-7.053		50.663	0.049	14.643	0.003		3002.93	50.0489	51.8	12.1	39.5	2.723	0.007	0.007	0.000	0.182	0.15	
2309	9/1/2004	9:57:18 AM		25.159	25.479	24.192	26.012	25.364		47.563	52.728	16.884	31.616	-1.145	-7.053		48.429	0.049	14.643	0.003		3003.93	50.0656	51.6	11.5	39.6	2.730	0.007	0.007	0.000	0.181	0.15	
2310	9/1/2004	9:58:18 AM		25.166	25.49	24.203	26.028	25.381		47.407	52.442	16.767	31.726	-1.119	-7.053		49.741	0.049	14.643	0.003		3004.93	50.0822	51.3	11.8	39.6	2.728	0.007	0.007	0.000	0.181	0.15	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2311	9/1/2004	9:59:18 AM		25.166	25.496	24.199	26.064	25.391		47.901	53.124	17.037	31.936	-1.111	-7.056		49.439	0.048	14.643	0.003		3005.93	50.0989	52.0	11.8	39.9	2.752	0.007	0.007	0.000	0.176	0.15	
2312	9/1/2004	10:00:18 AM		25.157	25.492	24.195	26.025	25.317		47.785	53	16.921	31.808	-1.143	-7.047		51.729	0.05	14.643	0.003		3006.93	50.1156	51.9	12.3	39.8	2.744	0.007	0.007	0.000	0.184	0.16	
2313	9/1/2004	10:01:18 AM		25.163	25.498	24.236	26.071	25.383		47.524	52.73	16.856	31.622	-1.128	-7.056		50.432	0.048	14.643	0.003		3007.93	50.1322	51.6	12.0	39.6	2.728	0.007	0.007	0.000	0.177	0.15	
2314	9/1/2004	10:02:18 AM		25.149	25.493	24.191	26.016	25.249		47.714	52.884	16.993	31.796	-1.108	-7.058		48.208	0.048	14.643	0.003		3008.93	50.1489	51.8	11.5	39.8	2.741	0.007	0.007	0.000	0.177	0.15	
2315	9/1/2004	10:03:18 AM		25.149	25.488	24.186	25.981	25.254		47.752	53.126	17.024	31.755	-1.096	-7.056		49.672	0.049	14.643	0.003		3009.93	50.1656	52.0	11.8	39.8	2.741	0.007	0.007	0.000	0.181	0.15	
2316	9/1/2004	10:04:18 AM		25.149	25.493	24.186	25.911	25.354		47.984	53.046	17.033	32.094	-1.122	-7.053		51.854	0.049	14.643	0.003		3010.93	50.1822	51.9	12.4	40.0	2.761	0.007	0.007	0.000	0.179	0.15	
2317	9/1/2004	10:05:18 AM		25.132	25.477	24.18	25.815	25.322		47.963	53.201	17.113	31.864	-1.102	-7.056		50.079	0.05	14.643	0.003		3011.93	50.1989	52.1	11.9	39.9	2.752	0.007	0.007	0.000	0.184	0.16	
2318	9/1/2004	10:06:18 AM		25.134	25.479	24.172	25.802	25.159		47.646	52.674	16.96	31.852	-1.117	-7.079		50.225	0.048	14.643	0.003		3012.93	50.2156	51.5	12.0	39.7	2.741	0.007	0.007	0.000	0.177	0.15	
2319	9/1/2004	10:07:18 AM		25.148	25.492	24.205	25.79	25.048		47.799	53.095	17.024	31.761	-1.122	-7.082		49.608	0.048	14.643	0.003		3013.93	50.2322	52.0	11.8	39.8	2.743	0.007	0.007	0.000	0.177	0.15	
2320	9/1/2004	10:08:18 AM		25.12	25.465	24.208	25.708	25.081		47.685	52.865	16.967	31.747	-1.096	-7.076		49.996	0.049	14.643	0.003		3014.93	50.2489	51.7	11.9	39.7	2.738	0.007	0.007	0.000	0.181	0.15	
2321	9/1/2004	10:09:18 AM		25.13	25.474	24.288	25.727	25.175		47.773	52.782	17.058	31.73	-1.093	-7.079		52.046	0.048	14.643	0.003		3015.93	50.2656	51.7	12.4	39.8	2.741	0.007	0.007	0.000	0.176	0.15	
2322	9/1/2004	10:10:18 AM		25.129	25.469	24.302	25.766	25.139		47.646	52.722	16.971	31.761	-1.09	-7.076		49.268	0.049	14.643	0.003		3016.93	50.2822	51.6	11.7	39.7	2.737	0.007	0.007	0.000	0.180	0.15	
2323	9/1/2004	10:11:18 AM		25.153	25.498	24.321	25.821	25.203		47.588	52.952	17.042	31.535	-1.088	-7.073		51.068	0.047	14.643	0.003		3017.93	50.2989	51.8	12.2	39.6	2.728	0.007	0.007	0.000	0.173	0.15	
2324	9/1/2004	10:12:18 AM		25.137	25.477	24.295	25.76	25.228		47.532	52.786	17.154	31.419	-1.09	-7.079		49.906	0.048	14.643	0.003		3018.93	50.3156	51.7	11.9	39.5	2.722	0.007	0.007	0.000	0.178	0.15	
2325	9/1/2004	10:13:18 AM		25.143	25.483	24.261	25.806	25.253		47.936	53.255	17.213	31.683	-1.09	-7.073		50.655	0.049	14.643	0.003		3019.93	50.3322	52.1	12.1	39.8	2.745	0.007	0.007	0.000	0.180	0.15	
2326	9/1/2004	10:14:18 AM		25.142	25.477	24.26	25.825	25.278		47.785	52.987	17.149	31.669	-1.093	-7.061		50.513	0.05	14.643	0.003		3020.93	50.3489	51.9	12.0	39.7	2.739	0.007	0.007	0.000	0.184	0.16	
2327	9/1/2004	10:15:18 AM		25.153	25.493	24.251	25.876	25.333		47.638	52.838	17.146	31.466	-1.082	-7.067		50.183	0.048	14.643	0.003		3021.93	50.3656	51.7	12.0	39.6	2.727	0.007	0.007	0.000	0.177	0.15	
2328	9/1/2004	10:16:18 AM		25.16	25.489	24.242	25.922	25.345		47.75	53.085	17.135	31.689	-1.093	-7.067		50.129	0.048	14.643	0.003		3022.93	50.3822	52.0	11.9	39.7	2.739	0.007	0.007	0.000	0.177	0.15	
2329	9/1/2004	10:17:18 AM		25.16	25.505	24.233	25.953	25.306		47.443	52.662	16.964	31.443	-1.093	-7.073		50.49	0.046	14.643	0.003		3023.93	50.3989	51.5	12.0	39.4	2.719	0.007	0.007	0.000	0.171	0.15	
2330	9/1/2004	10:18:18 AM		25.156	25.496	24.239	25.909	25.316		47.75	52.99	17.002	31.804	-1.067	-7.07		49.576	0.047	14.643	0.003		3024.93	50.4156	51.9	11.8	39.8	2.742	0.007	0.007	0.000	0.173	0.15	
2331	9/1/2004	10:19:18 AM		25.157	25.502	24.215	25.965	25.317		47.916	53.081	16.9	32.03	-1.062	-7.067		49.309	0.048	14.643	0.003		3025.93	50.4322	52.0	11.7	40.0	2.756	0.007	0.007	0.000	0.176	0.15	
2332	9/1/2004	10:20:18 AM		25.168	25.518	24.241	26.001	25.284		47.358	52.417	16.914	31.603	-1.079	-7.064		49.749	0.048	14.643	0.004		3026.93	50.4489	51.3	11.8	39.5	2.722	0.007	0.007	0.000	0.178	0.15	
2333	9/1/2004	10:21:18 AM		25.159	25.504	24.227	25.967	25.259		47.648	52.747	17.083	31.724	-1.024	-7.064		51.093	0.048	14.643	0.003		3027.93	50.4656	51.6	12.2	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2334	9/1/2004	10:22:18 AM		25.166	25.51	24.228	25.953	25.346		47.468	52.762	17.024	31.589	-1.07	-7.056		50.286	0.049	14.643	0.003		3028.93	50.4822	51.6	12.0	39.5	2.725	0.007	0.007	0.000	0.181	0.15	
2335	9/1/2004	10:23:18 AM		25.161	25.511	24.199	25.969	25.277		47.536	52.666	16.937	31.646	-1.021	-7.053		49.726	0.05	14.643	0.003		3029.93	50.4989	51.5	11.8	39.6	2.730	0.007	0.007	0.000	0.185	0.16	
2336	9/1/2004	10:24:18 AM		25.157	25.512	24.215	25.92	25.332		47.677	52.946	17.047	31.593	-1.021	-7.061		49.973	0.048	14.643	0.003		3030.93	50.5156	51.8	11.9	39.6	2.733	0.007	0.007	0.000	0.177	0.15	
2337	9/1/2004	10:25:18 AM		25.157	25.517	24.225	25.92	25.267		47.495	52.612	16.929	31.577	-1.024	-7.05		50.227	0.05	14.643	0.004		3031.93	50.5322	51.5	12.0	39.5	2.726	0.007	0.007	0.000	0.185	0.16	
2338	9/1/2004	10:26:18 AM		25.157	25.522	24.205	25.96	25.312		47.619	52.95	17.099	31.505	-1.056	-7.05		49.983	0.05	14.643	0.003		3032.93	50.5489	51.8	11.9	39.6	2.728	0.007	0.007	0.000	0.185	0.16	
2339	9/1/2004	10:27:18 AM		25.152	25.517	24.195	25.985	25.282		47.528	52.706	17	31.577	-1.073	-7.056		50.765	0.049	14.643	0.003		3033.93	50.5656	51.6	12.1	39.6	2.727	0.007	0.007	0.000	0.181	0.15	
2340	9/1/2004	10:28:18 AM		25.157	25.532	24.195	26.01	25.312		47.455	52.672	16.9	31.533	-1.018	-7.05		49.674	0.049	14.643	0.003		3034.93	50.5822	51.5	11.8	39.5	2.723	0.007	0.007	0.000	0.182	0.15	
2341	9/1/2004	10:29:18 AM		25.163	25.528	24.211	26.041	25.308		47.748	53.149	17.056	31.683	-0.873	-6.717		51.314	0.041	14.643	0.003		3035.93	50.5989	52.0	12.2	39.7	2.738	0.006	0.006	0.000	0.151	0.13	
2342	9/1/2004	10:30:18 AM		25.154	25.533	24.181	26.026	25.294		47.92	53.448	16.871	31.899	-0.954	-6.937		48.967	0.057	14.643	0.003		3036.93	50.6156	52.3	11.7	39.9	2.752	0.008	0.008	0.000	0.209	0.18	
2343	9/1/2004	10:31:18 AM		25.149	25.528	24.181	26.016	25.349		47.725	53.035	16.99	31.765	-0.992	-6.986		51.289	0.048	14.643	0.003		3037.93	50.6322	51.9	12.2	39.7	2.740	0.007	0.007	0.000	0.177	0.15	
2344	9/1/2004	10:32:18 AM		25.174	25.549	24.212	26.087	25.18		48.09	53.396	17.071	31.938	-0.983	-6.983		51.174	0.048	14.643	0.003		3038.93	50.6489	52.3	12.2	40.0	2.759	0.007	0.007	0.000	0.176	0.15	
2345	9/1/2004	10:33:18 AM		25.164	25.549	24.217	26.067	25.33		47.457	52.857	16.948	31.447	-0.969	-6.98		50.146	0.048	14.643	0.003		3039.93	50.6656	51.7	11.9	39.5	2.720	0.007	0.007	0.000	0.178	0.15	
2346	9/1/2004	10:34:18 AM		25.16	25.54	24.178	26.028	25.25		47.75	53.006	17.088	31.614	-0.989	-6.98		50.655	0.048	14.643	0.003		3040.93	50.6822	51.9	12.1	39.7	2.736	0.007	0.007	0.000	0.177	0.15	
2347	9/1/2004	10:35:18 AM		25.164	25.538	24.206	25.986	25.174		47.689	52.909	16.901	31.839	-0.943	-6.98		52.213	0.049	14.643	0.003		3041.93	50.6989	51.8	12.4	39.8	2.742	0.007	0.007	0.000	0.180	0.15	
2348	9/1/2004	10:36:18 AM		25.168	25.548	24.226	25.951	25.098		47.422	52.662	16.84	31.63	-0.946	-6.983		50.834	0.048	14.643	0.003		3042.93	50.7156	51.5	12.1	39.5	2.725	0.007	0.007	0.000	0.178	0.15	
2349	9/1/2004	10:37:18 AM		25.171	25.546	24.214	25.919	25.117		48.154	53.504	17.108	32.057	-0.972	-6.983		49.741	0.047	14.643	0.003		3043.93	50.7322	52.4	11.8	40.1	2.765	0.007	0.007	0.000	0.172	0.15	
2350	9/1/2004	10:38:18 AM		25.166	25.55	24.223	25.858	25.111		47.561	52.853	17.18	31.33	-0.96	-6.96		50.094	0.05	14.643	0.003		3044.93	50.7489	51.7	11.9	39.4	2.720	0.007	0.007	0.000	0.185	0.16	
2351	9/1/2004	10:39:18 AM		25.153	25.538	24.206	25.826	24.974		47.613	53.033	16.961	31.566	-0.934	-6.96		49.681	0.049	14.643	0.003		3045.93	50.7656	51.9	11.8	39.6	2.730	0.007	0.007	0.000	0.181	0.15	
2352	9/1/2004	10:40:18 AM		25.158	25.532	24.276	25.745	25.048		47.596	52.768	17.137	31.427	-0.928	-6.972		49.777	0.047	14.643	0.003		3046.93	50.7822	51.6	11.9	39.5	2.724	0.007	0.007	0.000	0.174	0.15	
2353	9/1/2004	10:41:18 AM		25.145	25.53	24.283	25.738	25.071		47.772	53.05	17.187	31.607	-0.943	-6.96		50.406	0.049	14.643	0.003		3047.93	50.7989	51.9	12.0	39.7	2.736	0.007	0.007	0.000	0.180	0.15	
2354	9/1/2004	10:42:18 AM		25.149	25.524	24.307	25.731	25.079		47.847	53.24	17.067	31.772	-0.952	-6.972		50.359	0.047	14.643	0.003		3048.93	50.8156	52.1	12.0	39.8	2.745	0.007	0.007	0.000	0.172	0.15	
2355	9/1/2004	10:43:18 AM		25.153	25.528	24.321	25.741	25.073		47.464	52.938	17.016	31.336	-0.931	-6.885		51.545	0.047	14.643	0.003		3049.93	50.8322	51.8	12.3	39.4	2.716	0.007	0.007	0.000	0.174	0.15	
2356	9/1/2004	10:44:18 AM		25.147	25.517	24.285	25.76	25.048		47.557	52.973	17.034	31.497	-0.931	-6.917		50.331	0.047	14.643	0.003		3050.93	50.8489	51.8	12.0	39.5	2.725	0.007	0.007	0.000	0.174	0.15	
2357	9/1/2004	10:45:18 AM		25.178	25.543	24.311	25.856	25.048		47.455	52.745	17.251	31.199	-0.928	-6.96		50.452	0.048	14.643	0.003		3051.93	50.8656	51.6	12.0	39.3	2.711	0.007	0.007	0.000	0.178	0.15	
2358	9/1/2004	10:46:18 AM		25.162	25.522	24.275	25.825	25.058		47.785	53.052	17.121	31.745	-0.925	-6.963		50.1	0.048	14.643	0.003		3052.93	50.8822	51.9	11.9	39.8	2.742	0.007	0.007	0.000	0.176	0.15	
2359	9/1/2004	10:47:18 AM		25.173	25.523	24.261	25.846	25.073		47.546	53.054	17.029	31.353	-0.928	-6.966		52.716	0.048	14.643	0.003		3053.93	50.8989	51.9	12.6	39.4	2.720	0.007	0.007	0.000	0.178	0.15	
2360	9/1/2004	10:48:18 AM		25.163	25.523	24.256	25.846	25.133		47.812	53.383	17.055	31.673	-0.931	-6.969		49.445	0.046	14.643	0.003		3054.93	50.9156	52.3	11.8	39.7	2.740	0.007	0.007	0.000	0.169	0.14	
2361	9/1/2004	10:49:18 AM		25.163	25.523	24.276	25.886	25.103		47.698	53.135	17.132	31.449	-0.876	-6.821		48.692	0.047	14.643	0.003		3055.93	50.9322	52.0	11.6	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2362	9/1/2004	10:50:18 AM		25.169	25.519	24.237	25.897	25.339		47.451	52.826	16.842	31.626	-0.879	-6.888		49.95	0.046	14.643	0.003		3056.93	50.9489	51.7	11.9	39.5	2.726	0.007	0.007	0.000	0.170	0.14	
2363	9/1/2004	10:51:18 AM		25.165	25.524	24.242	25.912	25.245		47.41	52.789	17.079	31.458	-0.925	-6.905		49.001	0.048	14.643	0.003		3057.93	50.9656	51.7	11.7	39.4	2.719	0.007	0.007	0.000	0.178	0.15	
2364	9/1/2004	10:52:18 AM		25.165	25.525	24.233	25.908	25.271		47.464	52.834	16.708	31.765	-0.882	-6.902		53.794	0.049	14.643	0.003		3058.93	50.9822	51.7	12.8	39.6	2.731	0.007	0.007	0.000	0.181	0.15	
2365	9/1/2004	10:53:18 AM		25.186	25.546	24.279	25.944	25.216		47.636	53.108	17.185	31.38	-0.873	-6.894		50.127	0.048	14.643	0.003		3059.93	50.9989	52.0	11.9	39.5	2.724	0.007	0.007	0.000	0.178	0.15	
2366	9/1/2004	10:54:18 AM		25.177	25.542	24.255	25.975	25.302		47.652	53.021	17.027	31.418	-0.902	-6.885		50.709	0.049	14.643	0.004		3060.93	51.0156	51.9	12.1	39.5	2.726	0.007	0.007	0.000	0.181	0.15	
2367	9/1/2004	10:55:18 AM		25.178	25.537	24.25	25.95	25.328		47.503	52.927	16.906	31.568	-0.876	-6.894		51.769	0.048	14.643	0.003		3061.93	51.0322	51.8	12.3	39.5	2.726	0.007	0.007	0.000	0.178	0.15	
2368	9/1/2004	10:56:18 AM		25.173	25.537	24.245	25.97	25.288		47.689	52.938	17.059	31.728	-0.876	-6.885		51.21	0.049	14.643	0.003		3062.93	51.0489	51.8	12.2	39.7	2.738	0.007	0.007	0.000	0.180	0.15	
2369	9/1/2004	10:57:18 AM		25.173	25.542	24.24	25.955	25.268		47.835	53.203	17.148	31.737	-0.876	-6.897		49.695	0.047	14.643	0.003		3063.93	51.0656	52.1	11.8	39.8	2.743	0.007	0.007	0.000	0.173	0.15	
2370	9/1/2004	10:58:18 AM		25.174	25.539	24.222	25.982	25.274		47.611	53.025	16.952	31.657	-0.891	-6.879		50.041	0.05	14.643	0.003		3064.93	51.0822	51.9	11.9	39.6	2.733	0.007	0.007	0.000	0.185	0.16	
2371	9/1/2004	10:59:18 AM		25.163	25.538	24.221	25.966	25.294		47.555	53.072	16.943	31.542	-0.879	-6.868		51.055	0.048	14.643	0.003		3065.93	51.0989	51.9	12.2	39.5	2.727	0.007	0.007	0.000	0.178	0.15	
2372	9/1/2004	11:00:18 AM		25.174	25.549	24.252	25.952	25.279		47.634	52.94	16.92	31.753	-0.876	-6.885		50.755	0.048	14.643	0.003		3066.93	51.1156	51.8	12.1	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2373	9/1/2004	11:00:21 AM		25.174	25.554	24.252	25.957	25.279		47.943	53.329	17.066	31.944	-0.876	-6.879		49.418	0.05	14.643	0.003		3066.98	51.1164	52.2	11.8	39.9	2.754	0.007	0.007	0.000	0.183	0.16	
2374	9/1/2004	11:01:21 AM		25.18	25.56	24.238	26.018	25.32		48.007	53.3	17.174	31.847	-0.879	-6.879		49.213	0.05	14.643	0.003		3067.98	51.1331	52.2	11.7	39.9	2.753	0.007	0.007	0.000	0.183	0.16	
2375	9/1/2004	11:02:21 AM		25.191	25.571	24.264	26.054	25.311		47.617	53.081	17.105	31.533	-0.873	-6.897		49.422	0.047	14.643	0.003		3068.98	51.1497	52.0	11.8	39.6	2.729	0.007	0.007	0.000	0.174	0.15	
2376	9/1/2004	11:03:21 AM		25.17	25.555	24.233	26.033	25.295		47.511	52.96	17.119	31.412	-0.876	-6.902		50.031	0.047	14.643	0.003		3069.98	51.1664	51.8	11.9	39.5	2.721	0.007	0.007	0.000	0.174	0.15	
2377	9/1/2004	11:04:21 AM		25.181	25.565	24.259	26.054	25.286		47.644	53.205	17.007	31.739	-0.876	-6.894		48.951	0.048	14.643	0.003		3070.98	51.1831	52.1	11.7	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2378	9/1/2004	11:05:21 AM		25.19	25.575	24.238	26.063	25.225		47.679	53.166	16.962	31.71	-0.876	-6.894		49.774	0.048	14.643	0.003		3071.98	51.1997	52.0	11.9	39.7	2.737	0.007	0.007	0.000	0.177	0.15	
2379	9/1/2004	11:06:21 AM		25.168	25.558	24.236	25.981	25.134		47.335	52.861	16.897	31.421	-0.81	-6.798		50.623	0.049	14.643	0.004		3072.98	51.2164	51.7	12.1	39.4	2.715	0.007	0.007	0.000	0.182	0.15	
2380	9/1/2004	11:07:21 AM		25.183	25.568	24.26	25.955	25.118		47.586	52.956	16.992	31.776	-0.813	-6.85		49.985	0.046	14.643	0.004		3073.98	51.2331	51.8	11.9	39.7	2.736	0.007	0.007	0.000	0.169	0.14	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2381	9/1/2004	11:08:21 AM		25.171	25.556	24.239	25.924	25.056		47.517	53.199	16.738	31.854	-0.876	-6.871		50.321	0.049	14.643	0.003		3074.98	51.2497	52.1	12.0	39.7	2.736	0.007	0.007	0.000	0.181	0.15	
2382	9/1/2004	11:09:21 AM		25.174	25.554	24.232	25.892	25.019		47.64	53.3	16.981	31.501	-0.87	-6.882		48.054	0.047	14.643	0.003		3075.98	51.2664	52.2	11.4	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2383	9/1/2004	11:10:21 AM		25.182	25.562	24.25	25.85	25.023		47.905	53.485	16.993	31.837	-0.87	-6.873		51.109	0.048	14.643	0.003		3076.98	51.2831	52.4	12.2	39.9	2.749	0.007	0.007	0.000	0.176	0.15	
2384	9/1/2004	11:11:21 AM		25.165	25.545	24.303	25.748	24.96		47.464	52.824	17.035	31.54	-0.818	-6.897		49.941	0.046	14.643	0.003		3077.98	51.2997	51.7	11.9	39.5	2.724	0.007	0.007	0.000	0.170	0.14	
2385	9/1/2004	11:12:21 AM		25.174	25.544	24.332	25.771	25.054		47.476	52.766	17.068	31.451	-0.81	-6.752		49.996	0.046	14.643	0.003		3078.98	51.3164	51.6	11.9	39.5	2.721	0.007	0.007	0.000	0.170	0.14	
2386	9/1/2004	11:13:21 AM		25.173	25.548	24.341	25.745	25.083		47.889	53.17	17.078	31.821	-0.807	-6.821		49.674	0.047	14.643	0.003		3079.98	51.3331	52.0	11.8	39.9	2.748	0.007	0.007	0.000	0.172	0.15	
2387	9/1/2004	11:14:21 AM		25.173	25.543	24.326	25.761	25.048		47.378	52.78	17.001	31.533	-0.81	-6.833		50.081	0.048	14.643	0.003		3080.98	51.3497	51.7	11.9	39.5	2.720	0.007	0.007	0.000	0.178	0.15	
2388	9/1/2004	11:15:21 AM		25.189	25.554	24.332	25.806	25.109		47.495	53.066	17.141	31.222	-0.81	-6.827		50.058	0.047	14.643	0.003		3081.98	51.3664	51.9	11.9	39.4	2.714	0.007	0.007	0.000	0.174	0.15	
2389	9/1/2004	11:16:21 AM		25.168	25.528	24.286	25.851	25.173		47.627	53.081	17.044	31.548	-0.81	-6.827		51.587	0.048	14.643	0.003		3082.98	51.3831	52.0	12.3	39.6	2.729	0.007	0.007	0.000	0.177	0.15	
2390	9/1/2004	11:17:21 AM		25.189	25.554	24.317	25.867	25.2		47.943	53.464	17.25	31.587	-0.81	-6.819		48.759	0.049	14.643	0.003		3083.98	51.3997	52.3	11.6	39.8	2.742	0.007	0.007	0.000	0.180	0.15	
2391	9/1/2004	11:18:21 AM		25.184	25.544	24.312	25.892	25.205		47.513	53.054	17.033	31.437	-0.813	-6.827		50.281	0.048	14.643	0.003		3084.98	51.4164	51.9	12.0	39.5	2.722	0.007	0.007	0.000	0.177	0.15	
2392	9/1/2004	11:19:21 AM		25.195	25.545	24.303	25.908	25.19		47.7	53.228	17.019	31.57	-0.807	-6.821		51.894	0.047	14.643	0.003		3085.98	51.4331	52.1	12.4	39.6	2.733	0.007	0.007	0.000	0.173	0.15	
2393	9/1/2004	11:20:21 AM		25.19	25.54	24.278	25.968	25.125		47.885	53.363	17.291	31.648	-0.813	-6.827		48.903	0.047	14.643	0.003		3086.98	51.4497	52.2	11.6	39.8	2.742	0.007	0.007	0.000	0.173	0.15	
2394	9/1/2004	11:21:21 AM		25.2	25.545	24.288	25.968	25.22		47.53	52.975	17.049	31.599	-0.81	-6.819		50.066	0.049	14.643	0.003		3087.98	51.4664	51.8	11.9	39.6	2.728	0.007	0.007	0.000	0.181	0.15	
2395	9/1/2004	11:22:21 AM		25.197	25.552	24.259	25.994	25.242		47.542	53.238	16.893	31.616	-0.769	-6.824		51.414	0.048	14.643	0.003		3088.98	51.4831	52.1	12.2	39.6	2.729	0.007	0.007	0.000	0.177	0.15	
2396	9/1/2004	11:23:21 AM		25.191	25.551	24.264	25.999	25.251		47.667	53.29	17.087	31.425	-0.763	-6.761		50.515	0.049	14.643	0.003		3089.98	51.4997	52.2	12.0	39.5	2.727	0.007	0.007	0.000	0.181	0.15	
2397	9/1/2004	11:24:21 AM		25.203	25.563	24.276	26.021	25.323		47.899	53.419	16.959	31.911	-0.76	-6.712		49.593	0.046	14.643	0.003		3090.98	51.5164	52.3	11.8	39.9	2.751	0.007	0.007	0.000	0.168	0.14	
2398	9/1/2004	11:25:21 AM		25.204	25.554	24.262	26.047	25.394		47.669	53.207	17.113	31.507	-0.763	-6.738		49.793	0.047	14.643	0.003		3091.98	51.5331	52.1	11.9	39.6	2.729	0.007	0.007	0.000	0.174	0.15	
2399	9/1/2004	11:26:21 AM		25.199	25.554	24.237	26.052	25.359		47.204	52.66	16.766	31.484	-0.804	-6.787		49.827	0.049	14.643	0.003		3092.98	51.5497	51.5	11.9	39.3	2.713	0.007	0.007	0.000	0.182	0.16	
2400	9/1/2004	11:27:21 AM		25.2	25.56	24.243	26.073	25.41		47.665	53.079	16.916	31.81	-0.769	-6.795		51.176	0.047	14.643	0.003		3093.98	51.5664	52.0	12.2	39.7	2.740	0.007	0.007	0.000	0.173	0.15	
2401	9/1/2004	11:28:21 AM		25.211	25.571	24.229	26.094	25.411		47.351	52.612	16.832	31.673	-0.76	-6.787		49.572	0.049	14.643	0.004		3094.98	51.5831	51.5	11.8	39.5	2.724	0.007	0.007	0.000	0.181	0.15	
2402	9/1/2004	11:29:21 AM		25.185	25.56	24.213	26.038	25.37		47.395	52.88	16.989	31.455	-0.778	-6.79		50.334	0.048	14.643	0.003		3095.98	51.5997	51.8	12.0	39.4	2.718	0.007	0.007	0.000	0.178	0.15	
2403	9/1/2004	11:30:21 AM		25.189	25.559	24.242	25.957	25.294		47.52	53.103	17.042	31.544	-0.766	-6.781		48.905	0.049	14.643	0.003		3096.98	51.6164	52.0	11.6	39.5	2.726	0.007	0.007	0.000	0.181	0.15	
2404	9/1/2004	11:31:21 AM		25.182	25.552	24.205	25.92	25.103		47.605	53.317	16.989	31.523	-0.763	-6.795		50.573	0.047	14.643	0.003		3097.98	51.6331	52.2	12.0	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2405	9/1/2004	11:32:21 AM		25.177	25.552	24.219	25.864	25.097		47.642	53.207	17.065	31.48	-0.763	-6.787		49.971	0.047	14.643	0.003		3098.98	51.6497	52.1	11.9	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2406	9/1/2004	11:33:21 AM		25.175	25.54	24.218	25.798	25.065		47.963	53.371	16.875	32.034	-0.763	-6.787		49.455	0.047	14.643	0.003		3099.98	51.6664	52.2	11.8	40.0	2.758	0.007	0.007	0.000	0.172	0.15	
2407	9/1/2004	11:34:21 AM		25.172	25.542	24.22	25.775	25.047		47.576	53.085	16.901	31.72	-0.76	-6.807		49.351	0.046	14.643	0.003		3100.98	51.6831	52.0	11.8	39.6	2.734	0.007	0.007	0.000	0.170	0.14	
2408	9/1/2004	11:35:21 AM		25.176	25.551	24.204	25.759	25.017		47.804	53.336	16.987	31.704	-0.763	-6.686		48.961	0.047	14.643	0.003		3101.98	51.6997	52.2	11.7	39.8	2.741	0.007	0.007	0.000	0.173	0.15	
2409	9/1/2004	11:36:21 AM		25.175	25.54	24.218	25.707	25.07		47.48	53.162	16.885	31.55	-0.763	-6.712		49.927	0.047	14.643	0.003		3102.98	51.7164	52.0	11.9	39.5	2.724	0.007	0.007	0.000	0.174	0.15	
2410	9/1/2004	11:37:21 AM		25.169	25.539	24.242	25.707	25.094		47.588	52.89	16.912	31.753	-0.763	-6.746		51.385	0.048	14.643	0.003		3103.98	51.7331	51.8	12.2	39.7	2.735	0.007	0.007	0.000	0.177	0.15	
2411	9/1/2004	11:38:21 AM		25.169	25.529	24.217	25.787	25.084		47.381	52.9	16.617	31.739	-0.76	-6.767		50.651	0.047	14.643	0.003		3104.98	51.7497	51.8	12.1	39.6	2.728	0.007	0.007	0.000	0.174	0.15	
2412	9/1/2004	11:39:21 AM		25.174	25.544	24.247	25.832	25.134		47.661	53.23	17.133	31.552	-0.763	-6.772		51.404	0.046	14.643	0.003		3105.98	51.7664	52.1	12.2	39.6	2.731	0.007	0.007	0.000	0.170	0.14	
2413	9/1/2004	11:40:21 AM		25.169	25.539	24.302	25.862	25.199		47.658	53.421	17.07	31.552	-0.763	-6.758		49.495	0.044	14.643	0.003		3106.98	51.7831	52.3	11.8	39.6	2.731	0.006	0.006	0.000	0.162	0.14	
2414	9/1/2004	11:41:21 AM		25.164	25.534	24.342	25.882	25.144		47.949	53.545	17.169	31.673	-0.697	-6.674		50.461	0.049	14.643	0.003		3107.98	51.7997	52.4	12.0	39.8	2.745	0.007	0.007	0.000	0.180	0.15	
2415	9/1/2004	11:42:21 AM		25.18	25.54	24.333	25.928	25.23		47.754	53.215	17.142	31.683	-0.694	-6.717		52.522	0.046	14.643	0.004		3108.98	51.8164	52.1	12.5	39.7	2.738	0.007	0.007	0.000	0.169	0.14	
2416	9/1/2004	11:43:21 AM		25.176	25.536	24.329	25.918	25.236		47.679	53.238	17.217	31.533	-0.7	-6.712		49.676	0.048	14.643	0.004		3109.98	51.8331	52.1	11.8	39.6	2.731	0.007	0.007	0.000	0.177	0.15	
2417	9/1/2004	11:44:21 AM		25.181	25.546	24.299	25.949	25.317		47.575	53.159	17.182	31.418	-0.697	-6.691		48.375	0.045	14.643	0.004		3110.98	51.8497	52.0	11.5	39.5	2.723	0.006	0.007	0.000	0.166	0.14	
2418	9/1/2004	11:45:21 AM		25.198	25.553	24.326	25.976	25.308		47.148	52.876	16.989	31.166	-0.697	-6.651		50.304	0.048	14.643	0.003		3111.98	51.8664	51.8	12.0	39.2	2.700	0.007	0.007	0.000	0.179	0.15	
2419	9/1/2004	11:46:21 AM		25.177	25.537	24.255	25.98	25.367		47.64	53.46	17.2	31.221	-0.703	-6.691		49.651	0.048	14.643	0.003		3112.98	51.8831	52.3	11.8	39.4	2.719	0.007	0.007	0.000	0.178	0.15	
2420	9/1/2004	11:47:21 AM		25.182	25.537	24.26	25.975	25.367		47.43	52.948	17.037	31.361	-0.703	-6.688		49.95	0.049	14.643	0.003		3113.98	51.8997	51.8	11.9	39.4	2.716	0.007	0.007	0.000	0.182	0.15	
2421	9/1/2004	11:48:21 AM		25.198	25.548	24.251	26.021	25.403		47.445	53.017	16.89	31.652	-0.697	-6.694		49.03	0.048	14.643	0.003		3114.98	51.9164	51.9	11.7	39.5	2.727	0.007	0.007	0.000	0.177	0.15	
2422	9/1/2004	11:49:21 AM		25.199	25.544	24.267	26.027	25.294		47.698	53.446	17.097	31.484	-0.697	-6.697		49.503	0.047	14.643	0.003		3115.98	51.9331	52.3	11.8	39.6	2.730	0.007	0.007	0.000	0.174	0.15	
2423	9/1/2004	11:50:21 AM		25.199	25.549	24.242	26.062	25.365		47.403	52.956	17.064	31.384	-0.7	-6.694		49.516	0.048	14.643	0.003		3116.98	51.9497	51.8	11.8	39.4	2.716	0.007	0.007	0.000	0.178	0.15	
2424	9/1/2004	11:51:21 AM		25.2	25.56	24.263	26.058	25.335		47.461	53.087	17.057	31.355	-0.7	-6.697		49.024	0.047	14.643	0.003		3117.98	51.9664	52.0	11.7	39.4	2.717	0.007	0.007	0.000	0.174	0.15	
2425	9/1/2004	11:52:21 AM		25.196	25.561	24.229	26.064	25.446		47.642	53.305	17.04	31.566	-0.645	-6.636		50.204	0.041	14.643	0.003		3118.98	51.9831	52.2	12.0	39.6	2.731	0.006	0.006	0.000	0.151	0.13	
2426	9/1/2004	11:53:21 AM		25.202	25.557	24.234	26.11	25.462		47.397	53.052	16.862	31.626	-0.598	-6.521		51.942	0.047	14.643	0.003		3119.98	51.9997	51.9	12.4	39.5	2.724	0.007	0.007	0.000	0.174	0.15	
2427	9/1/2004	11:54:21 AM		25.207	25.557	24.235	26.15	25.487		47.49	53.489	16.875	31.536	-0.645	-6.619		49.42	0.046	14.643	0.003		3120.98	52.0164	52.4	11.8	39.5	2.724	0.007	0.007	0.000	0.170	0.14	
2428	9/1/2004	11:55:21 AM		25.209	25.574	24.247	26.157	25.559		47.511	53.269	16.922	31.609	-0.645	-6.651		51.168	0.048	14.643	0.003		3121.98	52.0331	52.1	12.2	39.6	2.728	0.007	0.007	0.000	0.177	0.15	
2429	9/1/2004	11:56:21 AM		25.215	25.57	24.217	26.163	25.485		47.642	53.245	17.134	31.507	-0.645	-6.683		48.575	0.047	14.643	0.003		3122.98	52.0497	52.1	11.6	39.6	2.729	0.007	0.007	0.000	0.174	0.15	
2430	9/1/2004	11:57:21 AM		25.204	25.574	24.227	26.097	25.459		47.507	53.224	16.955	31.478	-0.648	-6.602		49.823	0.047	14.643	0.003		3123.98	52.0664	52.1	11.9	39.5	2.723	0.007	0.007	0.000	0.174	0.15	
2431	9/1/2004	11:58:21 AM		25.208	25.568	24.236	26.031	25.423		47.808	53.559	17.156	31.575	-0.535	-6.373		50.398	0.05	14.643	0.003		3124.98	52.0831	52.4	12.0	39.7	2.737	0.007	0.007	0.000	0.184	0.16	
2432	9/1/2004	11:59:21 AM		25.208	25.578	24.226	26.011	25.393		47.787	53.584	17.228	31.435	-0.63	-6.564		49.439	0.048	14.643	0.004		3125.98	52.0997	52.5	11.8	39.6	2.731	0.007	0.007	0.000	0.177	0.15	
2433	9/1/2004	12:00:21 PM		25.191	25.561	24.204	25.944	25.296		47.366	52.851	16.942	31.464	-0.645	-6.61		50.74	0.047	14.643	0.003		3126.98	52.1164	51.7	12.1	39.4	2.718	0.007	0.007	0.000	0.175	0.15	
2434	9/1/2004	12:01:21 PM		25.2	25.575	24.228	25.928	25.2		47.636	53.267	17.008	31.568	-0.639	-6.599		49.205	0.046	14.643	0.004		3127.98	52.1331	52.1	11.7	39.6	2.730	0.007	0.007	0.000	0.170	0.14	
2435	9/1/2004	12:02:21 PM		25.177	25.547	24.21	25.83	25.207		47.586	53.11	17.025	31.638	-0.645	-6.593		49.749	0.048	14.643	0.003		3128.98	52.1497	52.0	11.8	39.6	2.731	0.007	0.007	0.000	0.177	0.15	
2436	9/1/2004	12:03:21 PM		25.186	25.556	24.193	25.813	25.106		47.575	53.147	16.977	31.72	-0.642	-6.596		50.031	0.048	14.643	0.003		3129.98	52.1664	52.0	11.9	39.6	2.734	0.007	0.007	0.000	0.177	0.15	
2437	9/1/2004	12:04:21 PM		25.173	25.538	24.205	25.74	25.048		47.515	53.17	16.869	31.626	-0.642	-6.599		50.092	0.048	14.643	0.003		3130.98	52.1831	52.0	11.9	39.6	2.728	0.007	0.007	0.000	0.178	0.15	
2438	9/1/2004	12:05:21 PM		25.181	25.546	24.239	25.729	25.001		48.013	53.539	17.027	32.12	-0.627	-6.59		49.507	0.048	14.643	0.003		3131.98	52.1997	52.4	11.8	40.1	2.762	0.007	0.007	0.000	0.175	0.15	
2439	9/1/2004	12:06:21 PM		25.168	25.528	24.231	25.726	25.059		48.017	53.609	17.209	31.765	-0.636	-6.59		51.21	0.047	14.643	0.003		3132.98	52.2164	52.5	12.2	39.9	2.750	0.007	0.007	0.000	0.172	0.15	
2440	9/1/2004	12:07:21 PM		25.178	25.537	24.25	25.765	25.128		48.073	53.638	16.83	32.19	-0.593	-6.59		49.77	0.048	14.643	0.003		3133.98	52.2331	52.5	11.9	40.1	2.767	0.007	0.007	0.000	0.175	0.15	
2441	9/1/2004	12:08:21 PM		25.171	25.526	24.254	25.744	25.201		48.073	53.817	17.272	31.788	-0.572	-6.587		50.865	0.048	14.643	0.003		3134.98	52.2497	52.7	12.1	39.9	2.753	0.007	0.007	0.000	0.176	0.15	
2442	9/1/2004	12:09:21 PM		25.171	25.531	24.289	25.739	25.261		48.401	54.001	17.162	32.268	-0.561	-6.587		49.831	0.048	14.643	0.003		3135.98	52.2664	52.9	11.9	40.3	2.781	0.007	0.007	0.000	0.174	0.15	
2443	9/1/2004	12:10:21 PM		25.165	25.52	24.303	25.778	25.185		48.108	53.829	17.121	31.993	-0.575	-6.593		49.71	0.047	14.643	0.003		3136.98	52.2831	52.7	11.8	40.1	2.761	0.007	0.007	0.000	0.171	0.15	
2444	9/1/2004	12:11:21 PM		25.165	25.52	24.368	25.828	25.195		47.876	53.663	17.34	31.455	-0.575	-6.593		51.402	0.047	14.643	0.003		3137.98	52.2997	52.5	12.2	39.7	2.735	0.007	0.007	0.000	0.173	0.15	
2445	9/1/2004	12:12:21 PM		25.182	25.522	24.38	25.87	25.287		47.918	53.611	17.098	31.786	-0.566	-6.59		51.716	0.047	14.643	0.003		3138.98	52.3164	52.5	12.3	39.9	2.748	0.007	0.007	0.000	0.172	0.15	
2446	9/1/2004	12:13:21 PM		25.188	25.532	24.401	25.885	25.273		48.03	53.661	17.221	31.815	-0.555	-6.582		50.169	0.048	14.643	0.003		3139.98	52.3331	52.5	11.9	39.9	2.753	0.007	0.007	0.000	0.175	0.15	
2447	9/1/2004	12:14:21 PM		25.188	25.528	24.381	25.896	25.258		47.806	53.487	16.982	31.831	-0.564	-6.582		50.002	0.047	14.643	0.003		3140.98	52.3497	52.4	11.9	39.8	2.745	0.007	0.007	0.000	0.172	0.15	
2448	9/1/2004	12:15:21 PM		25.203	25.537	24.381	25.93	25.253		47.988	53.512	17.228	31.774	-0.54	-6.582		50.11	0.047	14.643	0.004		3141.98	52.3664	52.4	11.9	39.9	2.750	0.007	0.007	0.000	0.172	0.15	
2449	9/1/2004	12:16:21 PM		25.208	25.533	24.376	25.936	25.338		47.878	53.74	17.316	31.404	-0.561	-6.576		50.292	0.048	14.643	0.003		3142.98	52.3831	52.6	12.0	39.6	2.733	0.007	0.007	0.000	0.176	0.15	
2450	9/1/2004	12:17:21 PM		25.203	25.528	24.341	25.956	25.468		47.652	53.34	17.122	31.443	-0.538	-6.576		50.357	0.049	14.643	0.003		3143.98	52.3997	52.2	12.0	39.5	2.727	0.007	0.007	0.000	0.181	0.15	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2451	9/1/2004	12:18:21 PM		25.213	25.538	24.361	25.951	25.498		47.702	53.559	17.106	31.552	-0.561	-6.582		50.089	0.048	14.643	0.003		3144.98	52.4164	52.4	11.9	39.6	2.732	0.007	0.007	0.000	0.177	0.15	
2452	9/1/2004	12:19:21 PM		25.222	25.532	24.34	25.985	25.407		47.764	53.518	17.058	31.677	-0.552	-6.596		51.36	0.046	14.643	0.003		3145.98	52.4331	52.4	12.2	39.7	2.739	0.007	0.007	0.000	0.169	0.14	
2453	9/1/2004	12:20:21 PM		25.227	25.552	24.365	26.04	25.407		48.05	53.713	17.163	31.862	-0.535	-6.57		50.578	0.049	14.643	0.003		3146.98	52.4497	52.6	12.0	40.0	2.755	0.007	0.007	0.000	0.179	0.15	
2454	9/1/2004	12:21:21 PM		25.243	25.552	24.356	26.11	25.488		47.839	53.566	17.173	31.683	-0.54	-6.561		49.989	0.047	14.643	0.003		3147.98	52.4664	52.4	11.9	39.8	2.741	0.007	0.007	0.000	0.172	0.15	
2455	9/1/2004	12:22:21 PM		25.243	25.558	24.361	26.126	25.493		48.034	53.806	17.317	31.574	-0.535	-6.564		49.998	0.048	14.643	0.003		3148.98	52.4831	52.7	11.9	39.8	2.744	0.007	0.007	0.000	0.176	0.15	
2456	9/1/2004	12:23:21 PM		25.251	25.576	24.359	26.134	25.546		47.82	53.323	17.08	31.761	-0.535	-6.567		50.475	0.047	14.643	0.003		3149.98	52.4997	52.2	12.0	39.8	2.743	0.007	0.007	0.000	0.172	0.15	
2457	9/1/2004	12:24:21 PM		25.258	25.578	24.371	26.181	25.483		48.125	53.835	17.3	31.858	-0.52	-6.477		50.584	0.048	14.643	0.003		3150.98	52.5164	52.7	12.0	40.0	2.757	0.007	0.007	0.000	0.175	0.15	
2458	9/1/2004	12:25:21 PM		25.255	25.585	24.373	26.208	25.51		47.748	53.429	17.165	31.575	-0.535	-6.524		49.409	0.047	14.643	0.003		3151.98	52.5331	52.3	11.8	39.7	2.735	0.007	0.007	0.000	0.173	0.15	
2459	9/1/2004	12:26:21 PM		25.257	25.587	24.35	26.23	25.537		47.953	53.727	17.209	31.679	-0.532	-6.547		49.122	0.049	14.643	0.003		3152.98	52.5497	52.6	11.7	39.8	2.745	0.007	0.007	0.000	0.179	0.15	
2460	9/1/2004	12:27:21 PM		25.254	25.589	24.357	26.182	25.684		47.797	53.696	17.063	31.669	-0.538	-6.535		50.626	0.049	14.643	0.003		3153.98	52.5664	52.6	12.1	39.7	2.739	0.007	0.007	0.000	0.180	0.15	
2461	9/1/2004	12:28:21 PM		25.266	25.596	24.349	26.209	25.651		47.779	53.437	17.282	31.41	-0.535	-6.541		49.332	0.047	14.643	0.003		3154.98	52.5831	52.3	11.8	39.6	2.730	0.007	0.007	0.000	0.173	0.15	
2462	9/1/2004	12:29:21 PM		25.261	25.591	24.359	26.159	25.566		47.858	53.479	16.816	32.051	-0.535	-6.538		49.462	0.048	14.643	0.003		3155.98	52.5997	52.4	11.8	40.0	2.755	0.007	0.007	0.000	0.175	0.15	
2463	9/1/2004	12:30:21 PM		25.257	25.592	24.365	26.105	25.507		47.739	53.3	17.285	31.267	-0.506	-6.538		50.897	0.048	14.643	0.003		3156.98	52.6164	52.2	12.1	39.5	2.724	0.007	0.007	0.000	0.177	0.15	
2464	9/1/2004	12:31:21 PM		25.252	25.587	24.35	26.08	25.442		47.754	53.336	16.945	31.907	-0.471	-6.411		50.528	0.046	14.643	0.003		3157.98	52.6331	52.2	12.0	39.8	2.746	0.007	0.007	0.000	0.168	0.14	
2465	9/1/2004	12:32:21 PM		25.256	25.591	24.349	26.059	25.366		48.04	53.843	17.454	31.503	-0.491	-6.457		50.824	0.048	14.643	0.003		3158.98	52.6497	52.7	12.1	39.8	2.742	0.007	0.007	0.000	0.176	0.15	
2466	9/1/2004	12:33:21 PM		25.254	25.594	24.357	25.987	25.285		47.52	53.203	17.127	31.367	-0.488	-6.509		49.9	0.047	14.643	0.003		3159.98	52.6664	52.1	11.9	39.4	2.719	0.007	0.007	0.000	0.174	0.15	
2467	9/1/2004	12:34:21 PM		25.253	25.588	24.341	25.976	25.248		47.801	53.502	17.268	31.515	-0.503	-6.521		49.823	0.048	14.643	0.003		3160.98	52.6831	52.4	11.9	39.7	2.734	0.007	0.007	0.000	0.177	0.15	
2468	9/1/2004	12:35:21 PM		25.262	25.592	24.365	25.93	25.227		47.901	53.559	17.021	31.969	-0.509	-6.518		50.219	0.047	14.643	0.003		3161.98	52.6997	52.4	12.0	39.9	2.753	0.007	0.007	0.000	0.172	0.15	
2469	9/1/2004	12:36:21 PM		25.256	25.591	24.339	25.918	25.216		48.069	54.129	17.062	31.852	-0.477	-6.524		49.401	0.046	14.643	0.003		3162.98	52.7164	53.0	11.8	40.0	2.755	0.007	0.007	0.000	0.168	0.14	
2470	9/1/2004	12:37:21 PM		25.244	25.579	24.342	25.862	25.104		47.947	53.91	17.101	31.827	-0.474	-6.509		50.513	0.051	14.643	0.003		3163.98	52.7331	52.8	12.0	39.9	2.750	0.007	0.007	0.000	0.186	0.16	
2471	9/1/2004	12:38:21 PM		25.269	25.588	24.402	25.846	25.059		47.951	53.74	17.149	31.743	-0.471	-6.396		48.926	0.046	14.643	0.003		3164.98	52.7497	52.6	11.7	39.8	2.747	0.007	0.007	0.000	0.168	0.14	
2472	9/1/2004	12:39:21 PM		25.263	25.588	24.386	25.885	25.163		47.746	53.578	17.102	31.63	-0.416	-6.33		50.609	0.049	14.643	0.004		3165.98	52.7664	52.5	12.1	39.7	2.736	0.007	0.007	0.000	0.180	0.15	
2473	9/1/2004	12:40:21 PM		25.268	25.578	24.391	25.92	25.253		47.88	53.678	17.292	31.609	-0.465	-6.405		50.102	0.047	14.643	0.003		3166.98	52.7831	52.6	11.9	39.7	2.740	0.007	0.007	0.000	0.172	0.15	
2474	9/1/2004	12:41:21 PM		25.269	25.589	24.412	25.972	25.344		47.75	53.487	17.389	31.269	-0.465	-6.446		50.131	0.048	14.643	0.003		3167.98	52.7997	52.4	11.9	39.5	2.724	0.007	0.007	0.000	0.177	0.15	
2475	9/1/2004	12:42:21 PM		25.28	25.59	24.463	26.033	25.38		47.864	53.74	17.282	31.466	-0.474	-6.451		50.469	0.047	14.643	0.003		3168.98	52.8164	52.6	12.0	39.7	2.735	0.007	0.007	0.000	0.172	0.15	
2476	9/1/2004	12:43:21 PM		25.282	25.597	24.516	26.02	25.417		47.955	53.881	17.282	31.726	-0.471	-6.475		50.075	0.048	14.643	0.003		3169.98	52.8331	52.8	11.9	39.8	2.747	0.007	0.007	0.000	0.175	0.15	
2477	9/1/2004	12:44:21 PM		25.273	25.578	24.461	26.061	25.393		47.781	53.862	17.21	31.515	-0.474	-6.457		50.576	0.046	14.643	0.003		3170.98	52.8497	52.7	12.0	39.6	2.734	0.007	0.007	0.000	0.169	0.14	
2478	9/1/2004	12:45:21 PM		25.29	25.59	24.494	26.098	25.335		47.64	53.421	16.906	31.747	-0.459	-6.475		46.466	0.047	14.643	0.003		3171.98	52.8664	52.3	11.1	39.7	2.737	0.007	0.007	0.000	0.172	0.15	
2479	9/1/2004	12:46:21 PM		25.301	25.591	24.464	26.164	25.276		47.868	53.86	17.21	31.48	-0.454	-6.466		48.442	0.048	14.643	0.003		3172.98	52.8831	52.7	11.5	39.7	2.735	0.007	0.007	0.000	0.176	0.15	
2480	9/1/2004	12:47:21 PM		25.323	25.618	24.502	26.191	25.353		47.81	53.591	17.206	31.638	-0.462	-6.44		50.402	0.052	14.643	0.003		3173.98	52.8997	52.5	12.0	39.7	2.739	0.007	0.008	0.000	0.190	0.16	
2481	9/1/2004	12:48:21 PM		25.3	25.59	24.438	26.173	25.545		47.847	53.688	17.135	31.728	-0.419	-6.365		50.346	0.047	14.643	0.003		3174.98	52.9164	52.6	12.0	39.8	2.743	0.007	0.007	0.000	0.172	0.15	
2482	9/1/2004	12:49:21 PM		25.327	25.612	24.455	26.225	25.522		47.87	53.518	17.148	31.776	-0.41	-6.344		50.448	0.046	14.643	0.003		3175.98	52.9331	52.4	12.0	39.8	2.746	0.007	0.007	0.000	0.168	0.14	
2483	9/1/2004	12:50:21 PM		25.328	25.618	24.446	26.241	25.667		47.849	53.684	17.233	31.63	-0.419	-6.405		52.182	0.045	14.643	0.003		3176.98	52.9497	52.6	12.4	39.7	2.740	0.006	0.007	0.000	0.165	0.14	
2484	9/1/2004	12:51:21 PM		25.328	25.613	24.407	26.271	25.688		47.432	53.13	16.959	31.663	-0.422	-6.414		49.43	0.047	14.643	0.003		3177.98	52.9664	52.0	11.8	39.5	2.727	0.007	0.007	0.000	0.173	0.15	
2485	9/1/2004	12:52:21 PM		25.335	25.625	24.428	26.243	25.62		47.667	53.622	17.092	31.527	-0.419	-6.414		49.095	0.048	14.643	0.003		3178.98	52.9831	52.5	11.7	39.6	2.730	0.007	0.007	0.000	0.176	0.15	
2486	9/1/2004	12:53:21 PM		25.345	25.635	24.398	26.248	25.555		47.808	53.632	17.312	31.439	-0.419	-6.417		51.481	0.049	14.643	0.003		3179.98	52.9997	52.5	12.3	39.6	2.732	0.007	0.007	0.000	0.180	0.15	
2487	9/1/2004	12:54:21 PM		25.335	25.625	24.408	26.183	25.565		47.777	53.69	17.139	31.521	-0.419	-6.42		51.268	0.047	14.643	0.003		3180.98	53.0164	52.6	12.2	39.6	2.734	0.007	0.007	0.000	0.173	0.15	
2488	9/1/2004	12:55:21 PM		25.346	25.636	24.404	26.174	25.496		47.858	53.661	17.028	31.919	-0.419	-6.414		53.539	0.047	14.643	0.003		3181.98	53.0331	52.5	12.8	39.9	2.750	0.007	0.007	0.000	0.172	0.15	
2489	9/1/2004	12:56:21 PM		25.334	25.624	24.397	26.097	25.434		47.735	53.684	17.102	31.626	-0.419	-6.437		49.624	0.047	14.643	0.003		3182.98	53.0497	52.6	11.8	39.7	2.736	0.007	0.007	0.000	0.172	0.15	
2490	9/1/2004	12:57:21 PM		25.338	25.628	24.391	26.086	25.408		47.812	53.669	17.195	31.675	-0.416	-6.428		49.19	0.047	14.643	0.003		3183.98	53.0664	52.5	11.7	39.7	2.740	0.007	0.007	0.000	0.172	0.15	
2491	9/1/2004	12:58:21 PM		25.342	25.627	24.385	26.035	25.392		47.447	53.207	17.027	31.496	-0.422	-6.434		49.61	0.047	14.643	0.003		3184.98	53.0831	52.1	11.8	39.5	2.721	0.007	0.007	0.000	0.173	0.15	
2492	9/1/2004	12:59:21 PM		25.33	25.615	24.368	26.007	25.375		47.858	53.624	16.937	32.061	-0.419	-6.44		49.416	0.048	14.643	0.003		3185.98	53.0997	52.5	11.8	40.0	2.755	0.007	0.007	0.000	0.175	0.15	
2493	9/1/2004	12:59:24 PM		25.335	25.62	24.373	26.017	25.385		48.05	53.868	17.227	31.895	-0.419	-6.446		49.854	0.047	14.643	0.003		3186.03	53.1006	52.7	11.9	40.0	2.756	0.007	0.007	0.000	0.171	0.15	
2494	9/1/2004	1:00:24 PM		25.342	25.632	24.391	25.995	25.328		48.044	53.945	17.179	31.835	-0.349	-6.318		49.971	0.044	14.643	0.003		3187.03	53.1172	52.8	11.9	39.9	2.754	0.006	0.006	0.000	0.160	0.14	
2495	9/1/2004	1:01:24 PM		25.331	25.611	24.374	25.959	25.296		47.64	53.238	17.094	31.693	-0.349	-6.269		49.891	0.047	14.643	0.003		3188.03	53.1339	52.1	11.9	39.7	2.735	0.007	0.007	0.000	0.173	0.15	
2496	9/1/2004	1:02:24 PM		25.314	25.599	24.367	25.876	25.259		47.969	53.866	17.167	31.788	-0.422	-6.396		50.836	0.047	14.643	0.003		3189.03	53.1506	52.7	12.1	39.9	2.749	0.007	0.007	0.000	0.172	0.15	
2497	9/1/2004	1:03:24 PM		25.317	25.602	24.365	25.91	25.307		47.969	53.901	17.322	31.667	-0.416	-6.382		50.25	0.048	14.643	0.003		3190.03	53.1672	52.8	12.0	39.8	2.745	0.007	0.007	0.000	0.176	0.15	
2498	9/1/2004	1:04:24 PM		25.316	25.606	24.39	25.864	25.282		47.53	53.354	16.849	31.718	-0.404	-6.385		49.266	0.047	14.643	0.003		3191.03	53.1839	52.2	11.7	39.6	2.732	0.007	0.007	0.000	0.173	0.15	
2499	9/1/2004	1:05:24 PM		25.321	25.606	24.374	25.873	25.156		47.924	53.752	17.107	31.872	-0.396	-6.396		50.183	0.046	14.643	0.004		3192.03	53.2006	52.6	12.0	39.9	2.751	0.007	0.007	0.000	0.168	0.14	
2500	9/1/2004	1:06:24 PM		25.325	25.6	24.388	25.858	25.14		47.969	53.891	17.203	31.702	-0.396	-6.399		48.535	0.048	14.643	0.003		3193.03	53.2172	52.8	11.6	39.8	2.747	0.007	0.007	0.000	0.176	0.15	
2501	9/1/2004	1:07:24 PM		25.319	25.594	24.387	25.882	25.284		47.837	53.744	17.23	31.423	-0.361	-6.396		49.835	0.046	14.643	0.003		3194.03	53.2339	52.6	11.9	39.6	2.732	0.007	0.007	0.000	0.169	0.14	
2502	9/1/2004	1:08:24 PM		25.314	25.594	24.402	25.942	25.404		47.961	53.744	17.123	31.829	-0.349	-6.396		49.787	0.044	14.643	0.003		3195.03	53.2506	52.6	11.9	39.9	2.751	0.006	0.006	0.000	0.161	0.14	
2503	9/1/2004	1:09:24 PM		25.32	25.595	24.388	26.048	25.39		47.872	53.848	17.013	31.712	-0.349	-6.37		50.198	0.048	14.643	0.003		3196.03	53.2672	52.7	12.0	39.8	2.744	0.007	0.007	0.000	0.176	0.15	
2504	9/1/2004	1:10:24 PM		25.326	25.601	24.409	26.139	25.426		47.818	53.781	16.941	31.815	-0.352	-6.333		49.704	0.047	14.643	0.003		3197.03	53.2839	52.7	11.8	39.8	2.745	0.007	0.007	0.000	0.172	0.15	
2505	9/1/2004	1:11:24 PM		25.325	25.605	24.398	26.188	25.43		48.148	54.098	17.195	31.907	-0.349	-6.365		50.156	0.047	14.643	0.003		3198.03	53.3006	53.0	11.9	40.0	2.760	0.007	0.007	0.000	0.171	0.15	
2506	9/1/2004	1:12:24 PM		25.341	25.606	24.414	26.234	25.715		48.245	54.107	17.06	32.301	-0.372	-6.373		48.268	0.047	14.643	0.003		3199.03	53.3172	53.0	11.5	40.3	2.777	0.007	0.007	0.000	0.170	0.14	
2507	9/1/2004	1:13:24 PM		25.337	25.607	24.395	26.26	25.642		48.272	54.304	17.284	31.849	-0.352	-6.385		50.037	0.046	14.643	0.003		3200.03	53.3339	53.2	11.9	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2508	9/1/2004	1:14:24 PM		25.339	25.609	24.397	26.292	25.788		47.857	53.727	16.907	31.847	-0.364	-6.379		50.655	0.048	14.643	0.003		3201.03	53.3506	52.6	12.1	39.9	2.748	0.007	0.007	0.000	0.175	0.15	
2509	9/1/2004	1:15:24 PM		25.345	25.615	24.388	26.318	25.74		48.017	53.814	17.108	31.829	-0.358	-6.388		50.35	0.045	14.643	0.003		3202.03	53.3672	52.7	12.0	39.9	2.753	0.006	0.007	0.000	0.164	0.14	
2510	9/1/2004	1:16:24 PM		25.357	25.627	24.391	26.385	25.762		48.001	53.864	17.129	31.856	-0.349	-6.394		49.595	0.045	14.643	0.003		3203.03	53.3839	52.7	11.8	39.9	2.753	0.006	0.007	0.000	0.164	0.14	
2511	9/1/2004	1:17:24 PM		25.385	25.655	24.443	26.438	25.734		48.326	54.185	17.183	32.131	-0.303	-6.292		49.578	0.047	14.643	0.003		3204.03	53.4006	53.1	11.8	40.2	2.774	0.007	0.007	0.000	0.170	0.14	
2512	9/1/2004	1:18:24 PM		25.386	25.656	24.409	26.459	25.821		47.963	53.767	17.049	31.942	-0.349	-6.316		49.393	0.051	14.643	0.003		3205.03	53.4172	52.6	11.8	40.0	2.755	0.007	0.007	0.000	0.186	0.16	
2513	9/1/2004	1:19:24 PM		25.398	25.663	24.441	26.476	25.677		48.053	54.051	16.987	32.129	-0.32	-6.255		50.404	0.046	14.643	0.003		3206.03	53.4339	52.9	12.0	40.1	2.764	0.007	0.007	0.000	0.167	0.14	
2514	9/1/2004	1:20:24 PM		25.389	25.664	24.397	26.457	25.639		48.264	54.192	17.254	31.915	-0.352	-6.301		46.133	0.049	14.643	0.003		3207.03	53.4506	53.1	11.0	40.1	2.764	0.007	0.007	0.000	0.178	0.15	
2515	9/1/2004	1:21:24 PM		25.396	25.666	24.414	26.409	25.68		48.243	54.244	17.045	31.938	-0.352	-6.327		49.797	0.046	14.643	0.003		3208.03	53.4672	53.1	11.9	40.1	2.764	0.007	0.007	0.000	0.167	0.14	
2516	9/1/2004	1:22:24 PM		25.408	25.688	24.461	26.461	25.608		48.337	54.308	17.251	32.081	-0.352	-6.376		49.47	0.045	14.643	0.003		3209.03	53.4839	53.2	11.8	40.2	2.772	0.006	0.007	0.000	0.163	0.14	
2517	9/1/2004	1:23:24 PM		25.414	25.704	24.527	26.482	25.644		48.37	53.785	17.216	32.235	-0.81	-5.865		50.279	0.038	14.643	0.003		3210.03	53.5006	52.7	12.0	40.3	2.779	0.005	0.006	0.000	0.137	0.12	
2518	9/1/2004	1:24:24 PM		25.421	25.711	24.559	26.469	25.721		46.989	53.611	17.302	30.593	0.484	-4.182		49.85	0.023	14.643	0.003		3211.03	53.5172	52.5	11.9	38.8	2.675	0.003	0.003	0.000	0.086	0.07	
2519	9/1/2004	1:25:24 PM		25.427	25.712	24.536	26.445	25.642		47.916	53.862	17.371	31.457	-0.349	-5.931		49.234	0.101	14.643	0.003		3212.03	53.5339	52.7	11.7	39.7	2.736	0.014	0.015	0.000	0.369	0.31	
2520	9/1/2004	1:26:24 PM		25.444	25.719	24.542	26.417	25.514		48.032	53.734	17.229	31.788	-0.529	-6.081		50.275	0.046	14.643	0.004		3213.03	53.5506	52.6	12.0	39.9	2.752	0.007	0.007	0.000	0.167	0.14	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2521	9/1/2004	1:27:24 PM		25.459	25.729	24.522	26.382	25.704		48.202	53.908	17.287	31.888	-0.642	-6.388		49.434	0.048	14.643	0.003		3214.03	53.5672	52.8	11.8	40.0	2.761	0.007	0.007	0.000	0.174	0.15	
2522	9/1/2004	1:28:24 PM		25.454	25.724	24.502	26.287	25.574		48.036	53.752	17.391	31.679	-0.682	-6.399		49.664	0.046	14.643	0.003		3215.03	53.5839	52.6	11.8	39.9	2.748	0.007	0.007	0.000	0.168	0.14	
2523	9/1/2004	1:29:24 PM		25.474	25.734	24.487	26.312	25.634		48.154	53.912	17.302	31.65	-0.671	-6.394		50.751	0.047	14.643	0.003		3216.03	53.6006	52.8	12.1	39.9	2.751	0.007	0.007	0.000	0.171	0.15	
2524	9/1/2004	1:30:24 PM		25.457	25.717	24.461	26.245	25.542		48.125	53.827	17.226	31.802	-0.645	-6.391		49.288	0.048	14.643	0.003		3217.03	53.6172	52.7	11.7	40.0	2.755	0.007	0.007	0.000	0.175	0.15	
2525	9/1/2004	1:31:24 PM		25.466	25.721	24.454	26.204	25.491		48.216	53.976	17.534	31.542	-0.645	-6.405		49.774	0.046	14.643	0.003		3218.03	53.6339	52.9	11.9	39.9	2.750	0.007	0.007	0.000	0.168	0.14	
2526	9/1/2004	1:32:24 PM		25.464	25.724	24.443	26.242	25.474		48.579	54.09	17.169	32.438	-0.639	-6.391		49.843	0.048	14.643	0.003		3219.03	53.6506	53.0	11.9	40.5	2.793	0.007	0.007	0.000	0.172	0.15	
2527	9/1/2004	1:33:24 PM		25.458	25.723	24.441	26.201	25.473		48.104	53.856	17.312	31.72	-0.639	-6.394		48.02	0.048	14.643	0.003		3220.03	53.6672	52.7	11.4	39.9	2.752	0.007	0.007	0.000	0.175	0.15	
2528	9/1/2004	1:34:24 PM		25.456	25.721	24.42	26.184	25.436		48.148	53.775	17.169	31.903	-0.642	-6.405		51.328	0.046	14.643	0.003		3221.03	53.6839	52.6	12.2	40.0	2.760	0.007	0.007	0.000	0.167	0.14	
2529	9/1/2004	1:35:24 PM		25.461	25.721	24.439	26.144	25.561		48.16	53.748	17.407	31.771	-0.645	-6.405		50.617	0.047	14.643	0.003		3222.03	53.7006	52.6	12.1	40.0	2.755	0.007	0.007	0.000	0.171	0.15	
2530	9/1/2004	1:36:24 PM		25.455	25.715	24.418	26.193	25.68		47.959	53.497	17.279	31.691	-0.642	-6.402		50.313	0.047	14.643	0.003		3223.03	53.7172	52.4	12.0	39.8	2.746	0.007	0.007	0.000	0.172	0.15	
2531	9/1/2004	1:37:24 PM		25.444	25.714	24.427	26.177	25.699		47.938	53.512	17.028	31.929	-0.639	-6.399		49.741	0.047	14.643	0.003		3224.03	53.7339	52.4	11.8	39.9	2.753	0.007	0.007	0.000	0.171	0.15	
2532	9/1/2004	1:38:24 PM		25.45	25.715	24.413	26.243	25.78		48.117	53.73	17.277	31.866	-0.645	-6.396		48.364	0.048	14.643	0.003		3225.03	53.7506	52.6	11.5	40.0	2.757	0.007	0.007	0.000	0.175	0.15	
2533	9/1/2004	1:39:24 PM		25.456	25.721	24.424	26.319	25.83		48.16	53.904	17.212	31.893	-0.645	-6.402		49.289	0.047	14.643	0.003		3226.03	53.7672	52.8	11.7	40.0	2.760	0.007	0.007	0.000	0.171	0.15	
2534	9/1/2004	1:40:24 PM		25.455	25.72	24.418	26.318	25.805		47.965	53.615	17.241	31.677	-0.624	-6.411		49.789	0.045	14.643	0.003		3227.03	53.7839	52.5	11.9	39.8	2.746	0.006	0.007	0.000	0.164	0.14	
2535	9/1/2004	1:41:24 PM		25.444	25.719	24.382	26.337	25.819		48.121	53.713	17.147	32.022	-0.593	-6.396		51.577	0.048	14.643	0.003		3228.03	53.8006	52.6	12.3	40.1	2.763	0.007	0.007	0.000	0.175	0.15	
2536	9/1/2004	1:42:24 PM		25.461	25.736	24.425	26.414	25.866		48.283	53.957	17.237	32.09	-0.593	-6.405		50.277	0.047	14.643	0.003		3229.03	53.8172	52.8	12.0	40.2	2.771	0.007	0.007	0.000	0.170	0.14	
2537	9/1/2004	1:43:24 PM		25.468	25.748	24.406	26.516	25.927		47.965	53.642	17.286	31.735	-0.645	-6.402		51.671	0.047	14.643	0.003		3230.03	53.8339	52.5	12.3	39.9	2.748	0.007	0.007	0.000	0.172	0.15	
2538	9/1/2004	1:44:24 PM		25.469	25.744	24.422	26.537	25.868		48.15	53.719	16.982	32.258	-0.61	-6.399		49.716	0.047	14.643	0.003		3231.03	53.8506	52.6	11.8	40.2	2.772	0.007	0.007	0.000	0.170	0.14	
2539	9/1/2004	1:45:24 PM		25.474	25.749	24.422	26.537	25.883		48.417	54.086	17.247	32.188	-0.624	-6.408		49.8	0.046	14.643	0.003		3232.03	53.8672	53.0	11.9	40.3	2.779	0.007	0.007	0.000	0.166	0.14	
2540	9/1/2004	1:46:24 PM		25.474	25.739	24.408	26.497	25.819		48.353	54.047	17.236	31.964	-0.598	-6.405		52.557	0.047	14.643	0.003		3233.03	53.8839	52.9	12.5	40.2	2.769	0.007	0.007	0.000	0.170	0.14	
2541	9/1/2004	1:47:24 PM		25.464	25.739	24.392	26.427	25.923		48.388	54.032	17.216	32.096	-0.578	-6.411		49.722	0.046	14.643	0.003		3234.03	53.9006	52.9	11.8	40.2	2.775	0.007	0.007	0.000	0.166	0.14	
2542	9/1/2004	1:48:24 PM		25.474	25.754	24.397	26.452	25.813		48.256	53.939	17.175	32.129	-0.572	-6.405		50.417	0.046	14.643	0.004		3235.03	53.9172	52.8	12.0	40.2	2.771	0.007	0.007	0.000	0.167	0.14	
2543	9/1/2004	1:49:24 PM		25.462	25.737	24.39	26.385	25.712		48.496	54.231	17.427	32.063	-0.575	-6.405		50.196	0.047	14.643	0.003		3236.03	53.9339	53.1	12.0	40.3	2.777	0.007	0.007	0.000	0.170	0.14	
2544	9/1/2004	1:50:24 PM		25.446	25.736	24.4	26.324	25.796		48.247	53.877	17.268	31.839	-0.575	-6.402		49.856	0.047	14.643	0.003		3237.03	53.9506	52.8	11.9	40.0	2.761	0.007	0.007	0.000	0.171	0.15	
2545	9/1/2004	1:51:24 PM		25.461	25.751	24.409	26.364	25.72		48.37	54.096	17.283	32.012	-0.546	-6.408		48.362	0.046	14.643	0.003		3238.03	53.9672	53.0	11.5	40.2	2.771	0.007	0.007	0.000	0.167	0.14	
2546	9/1/2004	1:52:24 PM		25.465	25.755	24.493	26.378	25.62		48.196	53.933	17.138	32.086	-0.575	-6.408		50.102	0.046	14.643	0.003		3239.03	53.9839	52.8	11.9	40.1	2.768	0.007	0.007	0.000	0.166	0.14	
2547	9/1/2004	1:53:24 PM		25.468	25.753	24.537	26.381	25.533		48.291	53.989	17.514	31.763	-0.558	-6.402		47.929	0.047	14.643	0.003		3240.03	54.0006	52.9	11.4	40.0	2.760	0.007	0.007	0.000	0.170	0.14	
2548	9/1/2004	1:54:24 PM		25.467	25.752	24.515	26.325	25.682		47.938	53.597	17.311	31.546	-0.561	-6.405		49.149	0.046	14.643	0.003		3241.03	54.0172	52.5	11.7	39.7	2.740	0.007	0.007	0.000	0.168	0.14	
2549	9/1/2004	1:55:24 PM		25.471	25.746	24.51	26.294	25.686		47.953	53.736	17.251	31.735	-0.538	-6.405		49.662	0.047	14.643	0.003		3242.03	54.0339	52.6	11.8	39.8	2.747	0.007	0.007	0.000	0.171	0.15	
2550	9/1/2004	1:56:24 PM		25.476	25.756	24.485	26.329	25.676		48.096	53.908	17.3	31.792	-0.535	-6.402		49.904	0.047	14.643	0.003		3243.03	54.0506	52.8	11.9	39.9	2.754	0.007	0.007	0.000	0.171	0.15	
2551	9/1/2004	1:57:24 PM		25.487	25.752	24.5	26.335	25.677		48.073	53.605	17.355	31.8	-0.532	-6.402		50.682	0.046	14.643	0.004		3244.03	54.0672	52.5	12.1	39.9	2.753	0.007	0.007	0.000	0.167	0.14	
2552	9/1/2004	1:58:24 PM		25.482	25.747	24.465	26.34	25.582		48.235	53.918	17.243	32.036	-0.535	-6.402		49.787	0.047	14.643	0.003		3245.03	54.0839	52.8	11.9	40.1	2.767	0.007	0.007	0.000	0.170	0.14	
2553	9/1/2004	1:59:24 PM		25.483	25.748	24.471	26.271	25.563		48.148	53.887	17.428	31.667	-0.538	-6.399		49.75	0.048	14.643	0.003		3246.03	54.1006	52.8	11.8	39.9	2.751	0.007	0.007	0.000	0.175	0.15	
2554	9/1/2004	2:00:24 PM		25.462	25.737	24.435	26.265	25.562		48.318	54.127	17.382	31.718	-0.535	-6.411		51.087	0.045	14.643	0.003		3247.03	54.1172	53.0	12.2	40.0	2.759	0.006	0.007	0.000	0.164	0.14	
2555	9/1/2004	2:01:24 PM		25.476	25.741	24.449	26.269	25.556		48.115	53.816	17.224	31.864	-0.532	-6.402		49.716	0.046	14.643	0.004		3248.03	54.1339	52.7	11.8	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2556	9/1/2004	2:02:24 PM		25.465	25.735	24.418	26.218	25.644		48.146	53.968	17.294	31.714	-0.535	-6.408		50.058	0.045	14.643	0.003		3249.03	54.1506	52.8	11.9	39.9	2.753	0.006	0.007	0.000	0.164	0.14	
2557	9/1/2004	2:03:24 PM		25.46	25.725	24.398	26.163	25.615		48.025	53.495	17.26	31.876	-0.538	-6.408		49.727	0.046	14.643	0.003		3250.03	54.1672	52.4	11.8	40.0	2.754	0.007	0.007	0.000	0.168	0.14	
2558	9/1/2004	2:04:24 PM		25.479	25.749	24.447	26.207	25.759		47.959	53.651	17.225	31.751	-0.532	-6.408		50.674	0.046	14.643	0.003		3251.03	54.1839	52.5	12.1	39.9	2.748	0.007	0.007	0.000	0.168	0.14	
2559	9/1/2004	2:05:24 PM		25.459	25.734	24.392	26.292	25.669		48.2	53.993	17.248	31.891	-0.54	-6.402		49.33	0.048	14.643	0.003		3252.03	54.2006	52.9	11.7	40.0	2.761	0.007	0.007	0.000	0.175	0.15	
2560	9/1/2004	2:06:24 PM		25.47	25.755	24.433	26.358	25.724		47.941	53.518	17.144	31.899	-0.535	-6.405		50.598	0.046	14.643	0.003		3253.03	54.2172	52.4	12.1	39.9	2.752	0.007	0.007	0.000	0.168	0.14	
2561	9/1/2004	2:07:24 PM		25.465	25.75	24.414	26.403	25.77		48.167	53.87	17.363	31.817	-0.535	-6.405		50.188	0.047	14.643	0.003		3254.03	54.2339	52.7	12.0	40.0	2.757	0.007	0.007	0.000	0.171	0.15	
2562	9/1/2004	2:08:24 PM		25.463	25.758	24.431	26.416	25.757		48.245	53.839	17.187	32.225	-0.538	-6.405		50.248	0.046	14.643	0.003		3255.03	54.2506	52.7	12.0	40.2	2.774	0.007	0.007	0.000	0.166	0.14	
2563	9/1/2004	2:09:24 PM		25.465	25.76	24.418	26.438	25.775		48.092	53.827	17.264	31.874	-0.535	-6.405		49.906	0.046	14.643	0.003		3256.03	54.2672	52.7	11.9	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2564	9/1/2004	2:10:24 PM		25.461	25.751	24.414	26.459	25.78		48.303	54.142	17.134	32.145	-0.538	-6.405		49.883	0.047	14.643	0.003		3257.03	54.2839	53.0	11.9	40.2	2.773	0.007	0.007	0.000	0.170	0.14	
2565	9/1/2004	2:11:24 PM		25.463	25.763	24.416	26.526	25.967		47.884	53.605	17.354	31.609	-0.535	-6.405		49.337	0.046	14.643	0.003		3258.03	54.3006	52.5	11.8	39.7	2.740	0.007	0.007	0.000	0.168	0.14	
2566	9/1/2004	2:12:24 PM		25.46	25.765	24.393	26.603	26.024		47.945	53.601	17.1	31.886	-0.523	-6.411		49.681	0.046	14.643	0.003		3259.03	54.3172	52.5	11.8	39.9	2.752	0.007	0.007	0.000	0.168	0.14	
2567	9/1/2004	2:13:24 PM		25.472	25.782	24.425	26.665	25.996		48.044	53.75	17.209	31.854	-0.5	-6.411		47.991	0.046	14.643	0.003		3260.03	54.3339	52.6	11.4	39.9	2.754	0.007	0.007	0.000	0.168	0.14	
2568	9/1/2004	2:14:24 PM		25.478	25.783	24.416	26.686	25.993		48.092	53.895	17.167	31.839	-0.488	-6.408		49.831	0.046	14.643	0.003		3261.03	54.3506	52.8	11.9	40.0	2.755	0.007	0.007	0.000	0.168	0.14	
2569	9/1/2004	2:15:24 PM		25.484	25.789	24.437	26.612	25.958		48.042	53.891	17.284	31.755	-0.494	-6.417		50.217	0.044	14.643	0.003		3262.03	54.3672	52.8	12.0	39.9	2.751	0.006	0.006	0.000	0.160	0.14	
2570	9/1/2004	2:16:24 PM		25.483	25.788	24.421	26.621	25.873		48.249	54.185	16.896	32.083	-0.483	-6.408		49.877	0.046	14.643	0.004		3263.03	54.3839	53.1	11.9	40.2	2.769	0.007	0.007	0.000	0.167	0.14	
2571	9/1/2004	2:17:24 PM		25.483	25.783	24.411	26.506	25.963		47.953	53.653	17.211	31.796	-0.488	-6.411		48.018	0.046	14.643	0.003		3264.03	54.4006	52.5	11.4	39.9	2.749	0.007	0.007	0.000	0.168	0.14	
2572	9/1/2004	2:18:24 PM		25.482	25.782	24.405	26.46	25.916		48.082	53.941	17.206	31.786	-0.474	-6.408		50.392	0.046	14.643	0.003		3265.03	54.4172	52.8	12.0	39.9	2.753	0.007	0.007	0.000	0.168	0.14	
2573	9/1/2004	2:19:24 PM		25.492	25.787	24.42	26.45	25.796		48.181	54.084	17.042	32.077	-0.474	-6.414		49.249	0.046	14.643	0.003		3266.03	54.4339	53.0	11.7	40.1	2.767	0.007	0.007	0.000	0.167	0.14	
2574	9/1/2004	2:20:24 PM		25.486	25.796	24.419	26.399	25.831		48.21	54.055	17.156	32.104	-0.471	-6.411		50.108	0.046	14.643	0.003		3267.03	54.4506	52.9	11.9	40.2	2.769	0.007	0.007	0.000	0.167	0.14	
2575	9/1/2004	2:21:24 PM		25.497	25.808	24.421	26.37	25.882		48.542	54.413	17.074	32.498	-0.471	-6.405		51.072	0.046	14.643	0.004		3268.03	54.4672	53.3	12.2	40.5	2.794	0.007	0.007	0.000	0.165	0.14	
2576	9/1/2004	2:22:24 PM		25.481	25.791	24.414	26.349	25.791		48.409	54.185	17.128	32.225	-0.474	-6.408		49.051	0.046	14.643	0.003		3269.03	54.4839	53.1	11.7	40.3	2.780	0.007	0.007	0.000	0.166	0.14	
2577	9/1/2004	2:23:24 PM		25.48	25.795	24.413	26.338	25.665		48.453	54.322	17.36	31.991	-0.471	-6.414		48.982	0.045	14.643	0.004		3270.03	54.5006	53.2	11.7	40.2	2.773	0.006	0.007	0.000	0.163	0.14	
2578	9/1/2004	2:24:24 PM		25.469	25.785	24.418	26.327	25.644		48.055	53.91	17.186	31.774	-0.48	-6.414		50.073	0.045	14.643	0.003		3271.03	54.5172	52.8	11.9	39.9	2.752	0.006	0.007	0.000	0.164	0.14	
2579	9/1/2004	2:25:24 PM		25.478	25.798	24.556	26.371	25.638		47.816	53.651	17.228	31.533	-0.471	-6.408		49.428	0.046	14.643	0.003		3272.03	54.5339	52.5	11.8	39.7	2.735	0.007	0.007	0.000	0.168	0.14	
2580	9/1/2004	2:26:24 PM		25.477	25.792	24.556	26.375	25.617		47.911	53.576	17.391	31.505	-0.471	-6.411		50.05	0.045	14.643	0.003		3273.03	54.5506	52.5	11.9	39.7	2.738	0.006	0.007	0.000	0.164	0.14	
2581	9/1/2004	2:27:24 PM		25.476	25.781	24.514	26.429	25.621		47.887	53.734	17.373	31.396	-0.474	-6.411		50.146	0.046	14.643	0.003		3274.03	54.5672	52.6	11.9	39.6	2.733	0.007	0.007	0.000	0.168	0.14	
2582	9/1/2004	2:28:24 PM		25.494	25.784	24.518	26.402	25.579		48.183	54.129	17.326	31.788	-0.474	-6.408		48.83	0.046	14.643	0.003		3275.03	54.5839	53.0	11.6	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2583	9/1/2004	2:29:24 PM		25.498	25.788	24.516	26.441	25.647		48.057	53.906	17.323	31.765	-0.471	-6.411		50.911	0.045	14.643	0.003		3276.03	54.6006	52.8	12.1	39.9	2.752	0.006	0.007	0.000	0.164	0.14	
2584	9/1/2004	2:30:24 PM		25.503	25.788	24.491	26.446	25.642		48.135	53.928	17.324	31.927	-0.474	-6.417		51.671	0.045	14.643	0.003		3277.03	54.6172	52.8	12.3	40.0	2.760	0.006	0.007	0.000	0.163	0.14	
2585	9/1/2004	2:31:24 PM		25.497	25.787	24.48	26.455	25.642		47.878	53.68	17.42	31.492	-0.468	-6.414		50.753	0.045	14.643	0.003		3278.03	54.6339	52.6	12.1	39.7	2.736	0.006	0.007	0.000	0.165	0.14	
2586	9/1/2004	2:32:24 PM		25.498	25.778	24.436	26.441	25.657		48.034	53.96	17.461	31.418	-0.451	-6.408		51.001	0.047	14.643	0.003		3279.03	54.6506	52.8	12.1	39.7	2.739	0.007	0.007	0.000	0.172	0.15	
2587	9/1/2004	2:33:24 PM		25.497	25.782	24.47	26.485	25.522		48.017	53.761	17.266	31.763	-0.471	-6.411		50.052	0.046	14.643	0.003		3280.03	54.6672	52.6	11.9	39.9	2.750	0.007	0.007	0.000	0.168	0.14	
2588	9/1/2004	2:34:24 PM		25.497	25.777	24.44	26.54	25.597		47.994	53.57	17.335	31.73	-0.427	-6.414		51.508	0.046	14.643	0.003		3281.03	54.6839	52.4	12.3	39.9	2.748	0.007	0.007	0.000	0.168	0.14	
2589	9/1/2004	2:35:24 PM		25.518	25.799	24.467	26.496	25.683		47.999	53.937	17.47	31.554	-0.43	-6.408		49.274	0.047	14.643	0.003		3282.03	54.7006	52.8	11.7	39.8	2.742	0.007	0.007	0.000	0.172	0.15	
2590	9/1/2004	2:36:24 PM		25.514	25.789	24.442	26.462	25.594		47.884	53.763	17.335	31.505	-0.43	-6.417		49.881	0.045	14.643	0.003		3283.03	54.7172	52.6	11.9	39.7	2.737	0.006	0.007	0.000	0.165	0.14	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2591	9/1/2004	2:37:24 PM		25.504	25.779	24.437	26.417	25.619		47.984	53.895	17.381	31.515	-0.416	-6.411		47.83	0.046	14.643	0.004		3284.03	54.7339	52.8	11.4	39.7	2.741	0.007	0.007	0.000	0.168	0.14	
2592	9/1/2004	2:38:24 PM		25.495	25.77	24.408	26.363	25.605		48.119	53.96	17.281	31.895	-0.454	-6.42		50.575	0.045	14.643	0.003		3285.03	54.7506	52.8	12.0	40.0	2.758	0.006	0.007	0.000	0.164	0.14	
2593	9/1/2004	2:39:24 PM		25.506	25.791	24.429	26.419	25.511		48.048	53.986	17.287	31.655	-0.419	-6.414		51.714	0.046	14.643	0.003		3286.03	54.7672	52.9	12.3	39.9	2.748	0.007	0.007	0.000	0.168	0.14	
2594	9/1/2004	2:40:24 PM		25.501	25.792	24.43	26.429	25.596		47.754	53.576	17.153	31.544	-0.419	-6.414		49.397	0.046	14.643	0.003		3287.03	54.7839	52.5	11.8	39.6	2.734	0.007	0.007	0.000	0.169	0.14	
2595	9/1/2004	2:41:24 PM		25.519	25.804	24.422	26.562	25.649		47.876	53.678	17.19	31.671	-0.419	-6.414		48.65	0.046	14.643	0.003		3288.03	54.8006	52.6	11.6	39.8	2.742	0.007	0.007	0.000	0.168	0.14	
2596	9/1/2004	2:42:24 PM		25.515	25.8	24.438	26.613	25.805		48.121	53.902	17.284	31.856	-0.419	-6.411		50.628	0.046	14.643	0.003		3289.03	54.8172	52.8	12.1	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2597	9/1/2004	2:43:24 PM		25.518	25.808	24.421	26.661	25.888		48.249	54.127	17.3	32.018	-0.419	-6.411		50.079	0.046	14.643	0.003		3290.03	54.8339	53.0	11.9	40.1	2.767	0.007	0.007	0.000	0.167	0.14	
2598	9/1/2004	2:44:24 PM		25.515	25.816	24.439	26.703	25.905		48.372	54.158	17.214	32.065	-0.419	-6.408		48.268	0.046	14.643	0.003		3291.03	54.8506	53.0	11.5	40.2	2.773	0.007	0.007	0.000	0.166	0.14	
2599	9/1/2004	2:45:24 PM		25.518	25.828	24.426	26.726	25.962		48.156	54.049	17.034	32.001	-0.416	-6.411		50.611	0.046	14.643	0.003		3292.03	54.8672	52.9	12.1	40.1	2.763	0.007	0.007	0.000	0.167	0.14	
2600	9/1/2004	2:46:24 PM		25.519	25.829	24.407	26.787	25.999		48.334	54.219	17.154	32.149	-0.399	-6.414		47.999	0.046	14.643	0.003		3293.03	54.8839	53.1	11.4	40.2	2.775	0.007	0.007	0.000	0.166	0.14	
2601	9/1/2004	2:47:24 PM		25.536	25.846	24.449	26.784	25.985		48.287	54.044	17.228	31.946	-0.419	-6.411		49.314	0.046	14.643	0.003		3294.03	54.9006	52.9	11.7	40.1	2.766	0.007	0.007	0.000	0.167	0.14	
2602	9/1/2004	2:48:24 PM		25.522	25.837	24.395	26.745	25.917		48.194	54.123	17.266	31.934	-0.419	-6.414		51.003	0.046	14.643	0.003		3295.03	54.9172	53.0	12.1	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2603	9/1/2004	2:49:24 PM		25.522	25.837	24.411	26.725	25.957		47.831	53.808	17.001	31.813	-0.419	-6.414		49.852	0.045	14.643	0.003		3296.03	54.9339	52.7	11.9	39.8	2.746	0.006	0.007	0.000	0.164	0.14	
2604	9/1/2004	2:50:24 PM		25.533	25.843	24.401	26.706	25.913		48.415	54.188	17.309	32.192	-0.361	-6.428		50.924	0.044	14.643	0.003		3297.03	54.9506	53.1	12.1	40.3	2.779	0.006	0.006	0.000	0.159	0.14	
2605	9/1/2004	2:51:24 PM		25.533	25.853	24.421	26.651	25.883		48.152	54.092	17.178	31.96	-0.37	-6.411		49.985	0.046	14.643	0.003		3298.03	54.9672	53.0	11.9	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2606	9/1/2004	2:52:24 PM		25.533	25.848	24.411	26.656	25.763		47.882	53.651	16.74	32.055	-0.358	-6.373		48.11	0.046	14.643	0.003		3299.03	54.9839	52.5	11.5	40.0	2.756	0.007	0.007	0.000	0.168	0.14	
2607	9/1/2004	2:53:24 PM		25.533	25.843	24.406	26.611	25.788		48.225	54.115	17.049	32.042	-0.349	-6.272		49.706	0.048	14.643	0.003		3300.03	55.0006	53.0	11.8	40.1	2.767	0.007	0.007	0.000	0.174	0.15	
2608	9/1/2004	2:54:24 PM		25.529	25.844	24.402	26.592	25.714		47.909	53.804	17.004	31.927	-0.349	-6.339		45.786	0.046	14.643	0.003		3301.03	55.0172	52.7	10.9	39.9	2.752	0.007	0.007	0.000	0.168	0.14	
2609	9/1/2004	2:55:24 PM		25.539	25.854	24.392	26.747	25.649		48.446	54.422	17.22	32.098	-0.416	-6.408		49.994	0.048	14.643	0.003		3302.03	55.0339	53.3	11.9	40.3	2.777	0.007	0.007	0.000	0.174	0.15	
2610	9/1/2004	2:56:24 PM		25.539	25.859	24.422	26.762	25.764		47.955	54.034	16.791	32.114	-0.413	-6.414		49.203	0.046	14.643	0.003		3303.03	55.0506	52.9	11.7	40.0	2.760	0.007	0.007	0.000	0.167	0.14	
2611	9/1/2004	2:57:24 PM		25.544	25.854	24.392	26.782	25.759		48.158	54.086	17.187	31.954	-0.419	-6.391		47.305	0.046	14.643	0.003		3304.03	55.0672	53.0	11.3	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2612	9/1/2004	2:58:24 PM		25.54	25.85	24.403	26.738	25.774		48.278	54.287	17.091	32.202	-0.352	-6.336		48.713	0.046	14.643	0.003		3305.03	55.0839	53.2	11.6	40.2	2.774	0.007	0.007	0.000	0.166	0.14	
2613	9/1/2004	2:59:24 PM		25.555	25.86	24.418	26.783	25.804		48.337	54.382	17.232	32.114	-0.349	-6.362		49.977	0.046	14.643	0.004		3306.03	55.1006	53.3	11.9	40.2	2.773	0.007	0.007	0.000	0.166	0.14	
2614	9/1/2004	3:00:24 PM		25.565	25.87	24.434	26.748	25.71		48.511	54.48	17.258	32.018	-0.419	-6.402		48.344	0.046	14.643	0.003		3307.03	55.1172	53.4	11.5	40.3	2.776	0.007	0.007	0.000	0.166	0.14	
2615	9/1/2004	3:01:24 PM		25.57	25.875	24.594	26.798	25.68		48.108	53.891	17.304	31.87	-0.419	-6.423		50.371	0.046	14.643	0.003		3308.03	55.1339	52.8	12.0	40.0	2.757	0.007	0.007	0.000	0.167	0.14	
2616	9/1/2004	3:01:53 PM		25.576	25.886	24.59	26.834	25.666		47.845	53.678	17.367	31.375	-0.413	-6.42		49.827	0.046	14.643	0.003		3308.52	55.1419	52.6	11.9	39.6	2.731	0.007	0.007	0.000	0.168	0.14	
2617	9/1/2004	3:02:53 PM		25.573	25.878	24.571	26.741	25.717		47.7	53.373	17.239	31.529	-0.419	-6.411		49.145	0.048	14.643	0.003		3309.52	55.1586	52.2	11.7	39.6	2.731	0.007	0.007	0.000	0.176	0.15	
2618	9/1/2004	3:03:53 PM		25.588	25.878	24.541	26.736	25.702		48.247	54.426	17.285	32.016	-0.349	-6.339		49.906	0.045	14.643	0.003		3310.52	55.1753	53.3	11.9	40.1	2.767	0.006	0.007	0.000	0.163	0.14	
2619	9/1/2004	3:04:53 PM		25.588	25.874	24.517	26.746	25.733		48.086	54.187	17.235	31.654	-0.349	-6.379		49.795	0.046	14.643	0.003		3311.52	55.1919	53.1	11.9	39.9	2.749	0.007	0.007	0.000	0.167	0.14	
2620	9/1/2004	3:05:53 PM		25.593	25.879	24.502	26.701	25.763		47.965	53.875	17.39	31.501	-0.37	-6.417		48.075	0.047	14.643	0.003		3312.52	55.2086	52.7	11.5	39.7	2.739	0.007	0.007	0.000	0.172	0.15	
2621	9/1/2004	3:06:53 PM		25.593	25.868	24.471	26.731	25.797		47.997	53.736	17.125	31.962	-0.407	-6.396		48.392	0.05	14.643	0.004		3313.52	55.2253	52.6	11.5	40.0	2.756	0.007	0.007	0.000	0.182	0.15	
2622	9/1/2004	3:07:53 PM		25.598	25.873	24.486	26.696	25.752		47.717	53.729	16.994	31.839	-0.277	-6.142		48.606	0.049	14.643	0.004		3314.52	55.2419	52.6	11.6	39.8	2.743	0.007	0.007	0.000	0.179	0.15	
2623	9/1/2004	3:08:53 PM		25.597	25.862	24.455	26.72	25.612		47.936	54.1	16.914	31.966	-0.338	-6.229		50.736	0.048	14.643	0.003		3315.52	55.2586	53.0	12.1	40.0	2.754	0.007	0.007	0.000	0.175	0.15	
2624	9/1/2004	3:09:53 PM		25.586	25.856	24.449	26.734	25.616		48.077	53.877	17.249	31.79	-0.419	-6.42		49.718	0.049	14.643	0.003		3316.52	55.2753	52.8	11.8	39.9	2.753	0.007	0.007	0.000	0.178	0.15	
2625	9/1/2004	3:10:53 PM		25.585	25.86	24.434	26.773	25.55		48.351	54.1	17.216	32.104	-0.419	-6.431		51.451	0.045	14.643	0.003		3317.52	55.2919	53.0	12.3	40.2	2.774	0.006	0.007	0.000	0.163	0.14	
2626	9/1/2004	3:11:53 PM		25.597	25.867	24.425	26.8	25.567		47.833	53.844	17.163	31.589	-0.419	-6.451		49.624	0.044	14.643	0.003		3318.52	55.3086	52.7	11.8	39.7	2.738	0.006	0.006	0.000	0.161	0.14	
2627	9/1/2004	3:12:53 PM		25.602	25.872	24.445	26.765	25.642		47.941	53.806	16.963	32.053	-0.349	-6.304		49.13	0.047	14.643	0.003		3319.52	55.3253	52.7	11.7	40.0	2.758	0.007	0.007	0.000	0.171	0.15	
2628	9/1/2004	3:13:53 PM		25.607	25.867	24.41	26.77	25.607		48.303	54.393	17.177	31.981	-0.381	-6.359		49.111	0.047	14.643	0.003		3320.52	55.3419	53.3	11.7	40.1	2.768	0.007	0.007	0.000	0.170	0.15	
2629	9/1/2004	3:14:53 PM		25.602	25.872	24.425	26.73	25.647		47.797	53.727	17.227	31.552	-0.372	-6.417		50.288	0.046	14.643	0.003		3321.52	55.3586	52.6	12.0	39.7	2.735	0.007	0.007	0.000	0.169	0.14	
2630	9/1/2004	3:15:53 PM		25.603	25.868	24.401	26.701	25.747		48.142	54.04	17.16	31.895	-0.422	-6.411		48.992	0.049	14.643	0.003		3322.52	55.3753	52.9	11.7	40.0	2.759	0.007	0.007	0.000	0.178	0.15	
2631	9/1/2004	3:16:53 PM		25.593	25.868	24.411	26.646	25.782		48.096	53.904	17.314	31.696	-0.419	-6.399		49.574	0.046	14.643	0.003		3323.52	55.3919	52.8	11.8	39.9	2.751	0.007	0.007	0.000	0.168	0.14	
2632	9/1/2004	3:17:53 PM		25.603	25.874	24.407	26.636	25.783		48.169	54.071	17.185	31.911	-0.419	-6.443		49.355	0.045	14.643	0.003		3324.52	55.4086	52.9	11.8	40.0	2.761	0.006	0.007	0.000	0.164	0.14	
2633	9/1/2004	3:18:53 PM		25.598	25.864	24.397	26.626	25.668		48.042	53.765	17.071	32.001	-0.416	-6.431		49.003	0.045	14.643	0.003		3325.52	55.4253	52.6	11.7	40.0	2.759	0.006	0.007	0.000	0.164	0.14	
2634	9/1/2004	3:19:53 PM		25.599	25.874	24.402	26.582	25.729		48.048	54.061	17.176	31.893	-0.323	-6.261		47.733	0.045	14.643	0.003		3326.52	55.4419	52.9	11.4	40.0	2.756	0.006	0.007	0.000	0.164	0.14	
2635	9/1/2004	3:20:53 PM		25.594	25.864	24.387	26.627	25.724		48.208	54.127	17.311	31.817	-0.349	-6.356		49.472	0.048	14.643	0.003		3327.52	55.4586	53.0	11.8	40.0	2.759	0.007	0.007	0.000	0.175	0.15	
2636	9/1/2004	3:21:53 PM		25.604	25.884	24.417	26.607	25.699		47.802	53.759	17.004	31.761	-0.393	-6.408		49.679	0.048	14.643	0.004		3328.52	55.4753	52.6	11.8	39.8	2.743	0.007	0.007	0.000	0.176	0.15	
2637	9/1/2004	3:22:53 PM		25.588	25.869	24.377	26.591	25.663		48.142	54.049	17.247	31.804	-0.419	-6.414		51.479	0.046	14.643	0.003		3329.52	55.4919	52.9	12.3	40.0	2.756	0.007	0.007	0.000	0.168	0.14	
2638	9/1/2004	3:23:53 PM		25.572	25.857	24.38	26.5	25.692		48.382	54.26	17.058	32.383	-0.352	-6.356		50.406	0.047	14.643	0.003		3330.52	55.5086	53.1	12.0	40.4	2.784	0.007	0.007	0.000	0.170	0.14	
2639	9/1/2004	3:24:53 PM		25.58	25.86	24.379	26.528	25.605		47.996	53.808	17.133	31.843	-0.416	-6.414		50.945	0.046	14.643	0.003		3331.52	55.5253	52.7	12.1	39.9	2.752	0.007	0.007	0.000	0.168	0.14	
2640	9/1/2004	3:25:53 PM		25.57	25.85	24.383	26.488	25.599		48.751	54.461	17.336	32.508	-0.419	-6.428		50.119	0.046	14.643	0.003		3332.52	55.5419	53.3	11.9	40.6	2.801	0.007	0.007	0.000	0.165	0.14	
2641	9/1/2004	3:26:53 PM		25.57	25.865	24.393	26.528	25.724		48.588	54.552	17.903	31.523	-0.422	-6.417		51.829	0.046	14.643	0.003		3333.52	55.5586	53.4	12.3	40.1	2.762	0.007	0.007	0.000	0.167	0.14	
2642	9/1/2004	3:27:53 PM		25.568	25.863	24.416	26.561	25.693		48.405	54.592	17.485	31.85	-0.352	-6.298		49.022	0.047	14.643	0.003		3334.52	55.5753	53.5	11.7	40.1	2.767	0.007	0.007	0.000	0.170	0.15	
2643	9/1/2004	3:28:53 PM		25.572	25.867	24.426	26.56	25.667		48.368	54.513	17.35	31.946	-0.335	-6.281		50.029	0.047	14.643	0.003		3335.52	55.5919	53.4	11.9	40.2	2.769	0.007	0.007	0.000	0.170	0.14	
2644	9/1/2004	3:29:53 PM		25.561	25.857	24.425	26.525	25.666		48.364	54.272	17.588	31.811	-0.349	-6.356		48.986	0.046	14.643	0.003		3336.52	55.6086	53.1	11.7	40.1	2.764	0.007	0.007	0.000	0.167	0.14	
2645	9/1/2004	3:30:53 PM		25.566	25.866	24.459	26.519	25.721		48.544	54.579	17.482	31.93	-0.349	-6.362		49.674	0.046	14.643	0.003		3337.52	55.6253	53.5	11.8	40.2	2.774	0.007	0.007	0.000	0.166	0.14	
2646	9/1/2004	3:31:53 PM		25.56	25.855	24.448	26.548	25.7		48.654	54.523	17.528	32.001	-0.349	-6.376		49.75	0.045	14.643	0.003		3338.52	55.6419	53.4	11.8	40.3	2.780	0.006	0.007	0.000	0.162	0.14	
2647	9/1/2004	3:32:53 PM		25.566	25.851	24.479	26.554	25.661		48.222	54.293	17.373	31.56	-0.349	-6.37		50.847	0.047	14.643	0.003		3339.52	55.6586	53.2	12.1	39.9	2.750	0.007	0.007	0.000	0.171	0.15	
2648	9/1/2004	3:33:53 PM		25.565	25.85	24.468	26.648	25.575		48.444	54.523	17.397	31.989	-0.349	-6.368		49.868	0.047	14.643	0.003		3340.52	55.6753	53.4	11.9	40.2	2.773	0.007	0.007	0.000	0.170	0.14	
2649	9/1/2004	3:34:53 PM		25.576	25.856	24.494	26.659	25.546		48.469	54.525	17.156	32.219	-0.332	-6.269		49.664	0.048	14.643	0.003		3341.52	55.6919	53.4	11.8	40.3	2.782	0.007	0.007	0.000	0.173	0.15	
2650	9/1/2004	3:35:53 PM		25.586	25.852	24.5	26.67	25.626		48.509	54.517	17.346	32.098	-0.346	-6.324		49.276	0.046	14.643	0.004		3342.52	55.7086	53.4	11.7	40.3	2.779	0.007	0.007	0.000	0.166	0.14	
2651	9/1/2004	3:36:53 PM		25.603	25.873	24.547	26.621	25.678		48.554	54.55	17.584	31.895	-0.349	-6.342		49.956	0.047	14.643	0.003		3343.52	55.7253	53.4	11.9	40.2	2.773	0.007	0.007	0.000	0.169	0.14	
2652	9/1/2004	3:37:53 PM		25.578	25.843	24.501	26.596	25.628		48.422	54.554	17.646	31.636	-0.355	-6.35		50.275	0.047	14.643	0.003		3344.52	55.7419	53.4	12.0	40.0	2.760	0.007	0.007	0.000	0.170	0.15	
2653	9/1/2004	3:38:53 PM		25.598	25.858	24.552	26.631	25.623		48.488	54.523	17.616	31.821	-0.349	-6.353		50.93	0.046	14.643	0.003		3345.52	55.7586	53.4	12.1	40.2	2.769	0.007	0.007	0.000	0.166	0.14	
2654	9/1/2004	3:39:53 PM		25.588	25.853	24.612	26.591	25.623		48.316	54.471	17.383	31.823	-0.335	-6.35		49.854	0.046	14.643	0.004		3346.52	55.7753	53.3	11.9	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
2655	9/1/2004	3:40:53 PM		25.592	25.847	24.676	26.605	25.667		48.256	54.196	17.677	31.527	-0.344	-6.344		48.46	0.046	14.643	0.004		3347.52	55.7919	53.1	11.5	39.9	2.750	0.007	0.007	0.000	0.167	0.14	
2656	9/1/2004	3:41:53 PM		25.598	25.848	24.667	26.601	25.678		48.31	54.272	17.808	31.285	-0.349	-6.353		51.89	0.046	14.643	0.003		3348.52	55.8086	53.1	12.4	39.8	2.744	0.007	0.007	0.000	0.167	0.14	
2657	9/1/2004	3:42:53 PM		25.613	25.853	24.647	26.596	25.638		48.196	54.144	17.659	31.47	-0.344	-6.359		50.177	0.045	14.643	0.003		3349.52	55.8253	53.0	12.0	39.8	2.746	0.006	0.007	0.000	0.163	0.14	
2658	9/1/2004	3:43:53 PM		25.612	25.837	24.641	26.565	25.667		48.212	54.268	17.796	31.353	-0.326	-6.359		49.896	0.046	14.643	0.003		3350.52	55.8419	53.1	11.9	39.8	2.743	0.007	0.007	0.000	0.167	0.14	
2659	9/1/2004	3:44:53 PM		25.632	25.852	24.636	26.595	25.647		48.175	54.196	17.782	31.32	-0.294	-6.22		50.094	0.048	14.643	0.004		3351.52	55.8586	53.1	11.9	39.7	2.740	0.007	0.007	0.000	0.175	0.15	
2660	9/1/2004	3:45:53 PM		25.641	25.847	24.62	26.625	25.512		48.368	54.505	17.774	31.501	-0.297	-6.281		49.234	0.046	14.643	0.003		3352.52	55.8753	53.4	11.7	39.9	2.753	0.007	0.007	0.000	0.167	0.14	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2661	9/1/2004	3:46:53 PM		25.626	25.836	24.609	26.614	25.546		48.637	54.542	17.953	31.626	-0.303	-6.336		51.326	0.045	14.643	0.003		3353.52	55.8919	53.4	12.2	40.1	2.767	0.006	0.007	0.000	0.162	0.14	
2662	9/1/2004	3:47:53 PM		25.624	25.829	24.588	26.647	25.474		47.522	53.493	17.931	30.624	-0.323	-6.333		52.88	0.044	14.643	0.003		3354.52	55.9086	52.4	12.6	39.1	2.694	0.006	0.006	0.000	0.163	0.14	
2663	9/1/2004	3:48:53 PM		25.648	25.839	24.632	26.646	25.528		47.746	53.47	18.009	30.866	-0.303	-6.324		51.683	0.046	14.643	0.003		3355.52	55.9253	52.3	12.3	39.3	2.710	0.007	0.007	0.000	0.169	0.14	
2664	9/1/2004	3:49:53 PM		25.643	25.833	24.601	26.626	25.573		47.866	53.787	18.005	30.832	-0.3	-6.339		50.738	0.044	14.643	0.003		3356.52	55.9419	52.7	12.1	39.3	2.713	0.006	0.006	0.000	0.162	0.14	
2665	9/1/2004	3:50:53 PM		25.653	25.839	24.607	26.621	25.558		47.876	53.804	17.951	31.031	-0.3	-6.333		53.594	0.045	14.643	0.003		3357.52	55.9586	52.7	12.8	39.5	2.720	0.006	0.007	0.000	0.165	0.14	
2666	9/1/2004	3:51:53 PM		25.653	25.839	24.622	26.651	25.603		48.16	54.094	18.042	31.283	-0.3	-6.316		51.318	0.047	14.643	0.004		3358.52	55.9753	53.0	12.2	39.7	2.739	0.007	0.007	0.000	0.171	0.15	
2667	9/1/2004	3:52:53 PM		25.648	25.828	24.581	26.631	25.583		48.044	53.955	17.869	31.267	-0.234	-6.243		51.898	0.045	14.643	0.003		3359.52	55.9919	52.8	12.4	39.7	2.734	0.006	0.007	0.000	0.164	0.14	
2668	9/1/2004	3:53:53 PM		25.653	25.823	24.601	26.581	25.588		48.042	54.02	18.003	31.004	-0.173	-6.197		51.654	0.045	14.643	0.003		3360.52	56.0086	52.9	12.3	39.5	2.725	0.006	0.007	0.000	0.165	0.14	
2669	9/1/2004	3:54:53 PM		25.643	25.813	24.571	26.551	25.518		48.125	54.103	17.841	31.283	-0.286	-6.278		51.537	0.045	14.643	0.003		3361.52	56.0253	53.0	12.3	39.7	2.737	0.006	0.007	0.000	0.164	0.14	
2670	9/1/2004	3:55:53 PM		25.658	25.828	24.601	26.551	25.558		48.374	54.617	17.987	31.314	-0.236	-6.295		51.183	0.045	14.643	0.003		3362.52	56.0419	53.5	12.2	39.8	2.747	0.006	0.007	0.000	0.164	0.14	
2671	9/1/2004	3:56:53 PM		25.662	25.822	24.601	26.595	25.577		47.714	53.624	17.853	30.895	-0.234	-6.287		49.531	0.047	14.643	0.003		3363.52	56.0586	52.5	11.8	39.3	2.710	0.007	0.007	0.000	0.173	0.15	
2672	9/1/2004	3:57:53 PM		25.656	25.816	24.575	26.559	25.511		48.467	54.633	18.074	31.26	-0.236	-6.295		51.289	0.046	14.643	0.003		3364.52	56.0753	53.5	12.2	39.9	2.748	0.007	0.007	0.000	0.167	0.14	
2673	9/1/2004	3:58:53 PM		25.656	25.816	24.585	26.559	25.506		48.583	54.413	17.421	32.085	-0.193	-6.301		49.822	0.046	14.643	0.003		3365.52	56.0919	53.3	11.9	40.3	2.781	0.007	0.007	0.000	0.165	0.14	
2674	9/1/2004	3:59:53 PM		25.656	25.816	24.57	26.559	25.561		48.53	54.486	17.007	32.557	-0.199	-6.29		49.399	0.046	14.643	0.003		3366.52	56.1086	53.4	11.8	40.5	2.795	0.007	0.007	0.000	0.164	0.14	
2675	9/1/2004	4:00:53 PM		25.661	25.816	24.585	26.559	25.571		48.102	54.214	17.345	31.737	-0.179	-6.171		49.916	0.047	14.643	0.003		3367.52	56.1253	53.1	11.9	39.9	2.752	0.007	0.007	0.000	0.171	0.15	
2676	9/1/2004	4:01:53 PM		25.645	25.811	24.564	26.588	25.58		48.559	54.532	17.454	32.274	-0.176	-6.174		51.062	0.045	14.643	0.003		3368.52	56.1419	53.4	12.2	40.4	2.787	0.006	0.007	0.000	0.161	0.14	
2677	9/1/2004	4:02:53 PM		25.665	25.821	24.584	26.583	25.585		48.403	54.382	17.684	31.749	-0.187	-6.252		51.164	0.047	14.643	0.003		3369.52	56.1586	53.3	12.2	40.1	2.763	0.007	0.007	0.000	0.170	0.14	
2678	9/1/2004	4:03:53 PM		25.649	25.804	24.573	26.642	25.504		48.15	54.339	17.534	31.449	-0.236	-6.278		51.328	0.045	14.643	0.003		3370.52	56.1753	53.2	12.2	39.8	2.744	0.006	0.007	0.000	0.164	0.14	
2679	9/1/2004	4:04:53 PM		25.648	25.798	24.537	26.711	25.568		48.084	54.173	17.877	31.185	-0.187	-6.237		52.421	0.044	14.643	0.003		3371.52	56.1919	53.0	12.5	39.6	2.733	0.006	0.006	0.000	0.161	0.14	
2680	9/1/2004	4:05:53 PM		25.672	25.812	24.59	26.705	25.517		48.214	54.349	17.739	31.464	-0.173	-6.232		50.071	0.046	14.643	0.004		3372.52	56.2086	53.2	11.9	39.8	2.747	0.007	0.007	0.000	0.167	0.14	
2681	9/1/2004	4:06:53 PM		25.666	25.806	24.574	26.639	25.501		48.187	54.204	17.649	31.56	-0.196	-6.255		49.19	0.047	14.643	0.003		3373.52	56.2253	53.1	11.7	39.9	2.749	0.007	0.007	0.000	0.171	0.15	
2682	9/1/2004	4:07:53 PM		25.676	25.811	24.59	26.539	25.471		48.592	54.776	17.544	31.944	-0.213	-6.266		50.567	0.046	14.643	0.003		3374.52	56.2419	53.7	12.0	40.3	2.776	0.007	0.007	0.000	0.165	0.14	
2683	9/1/2004	4:08:53 PM		25.664	25.805	24.573	26.517	25.549		48.615	54.708	17.447	31.954	-0.179	-6.258		49.376	0.048	14.643	0.003		3375.52	56.2586	53.6	11.8	40.3	2.777	0.007	0.007	0.000	0.173	0.15	
2684	9/1/2004	4:09:53 PM		25.675	25.815	24.579	26.503	25.605		48.726	54.888	17.393	32.258	-0.179	-6.249		49.639	0.047	14.643	0.003		3376.52	56.2753	53.8	11.8	40.5	2.792	0.007	0.007	0.000	0.168	0.14	
2685	9/1/2004	4:10:53 PM		25.679	25.815	24.593	26.507	25.589		48.509	54.552	17.107	32.397	-0.164	-6.159		51.506	0.046	14.643	0.004		3377.52	56.2919	53.4	12.3	40.5	2.789	0.007	0.007	0.000	0.165	0.14	
2686	9/1/2004	4:11:53 PM		25.664	25.804	24.562	26.467	25.574		48.401	54.639	17.046	32.293	-0.176	-6.197		50.092	0.048	14.643	0.003		3378.52	56.3086	53.5	11.9	40.3	2.782	0.007	0.007	0.000	0.172	0.15	
2687	9/1/2004	4:12:53 PM		25.647	25.782	24.551	26.4	25.632		48.521	54.527	17.002	32.512	-0.179	-6.232		49.08	0.048	14.643	0.003		3379.52	56.3253	53.4	11.7	40.5	2.793	0.007	0.007	0.000	0.172	0.15	
2688	9/1/2004	4:13:53 PM		25.668	25.803	24.571	26.466	25.598		48.436	54.486	17.162	32.194	-0.152	-6.223		49.499	0.048	14.643	0.004		3380.52	56.3419	53.4	11.8	40.3	2.780	0.007	0.007	0.000	0.173	0.15	
2689	9/1/2004	4:14:53 PM		25.657	25.797	24.581	26.415	25.627		48.561	54.515	17.237	32.319	-0.181	-6.24		51.558	0.046	14.643	0.003		3381.52	56.3586	53.4	12.3	40.4	2.788	0.007	0.007	0.000	0.165	0.14	
2690	9/1/2004	4:15:53 PM		25.661	25.802	24.575	26.429	25.656		48.677	54.865	17.373	32.211	-0.103	-6.116		49.608	0.046	14.643	0.003		3382.52	56.3753	53.7	11.8	40.4	2.788	0.007	0.007	0.000	0.165	0.14	
2691	9/1/2004	4:16:53 PM		25.655	25.795	24.583	26.473	25.68		48.507	54.451	17.167	32.381	-0.109	-6.165		50.778	0.047	14.643	0.003		3383.52	56.3919	53.3	12.1	40.4	2.788	0.007	0.007	0.000	0.168	0.14	
2692	9/1/2004	4:17:53 PM		25.649	25.789	24.573	26.442	25.689		48.378	54.459	17.14	32.344	-0.106	-6.209		49.337	0.045	14.643	0.003		3384.52	56.4086	53.3	11.8	40.4	2.783	0.006	0.007	0.000	0.162	0.14	
2693	9/1/2004	4:18:53 PM		25.659	25.804	24.573	26.497	25.669		48.695	54.78	17.048	32.668	-0.164	-6.2		49.745	0.046	14.643	0.003		3385.52	56.4253	53.7	11.8	40.7	2.805	0.007	0.007	0.000	0.164	0.14	
2694	9/1/2004	4:19:53 PM		25.648	25.794	24.597	26.516	25.653		48.619	54.697	17.101	32.358	-0.109	-6.194		50.446	0.047	14.643	0.003		3386.52	56.4419	53.6	12.0	40.5	2.792	0.007	0.007	0.000	0.168	0.14	
2695	9/1/2004	4:20:53 PM		25.648	25.799	24.582	26.546	25.648		48.332	54.335	17.355	31.977	-0.161	-6.188		49.918	0.047	14.643	0.003		3387.52	56.4586	53.2	11.9	40.2	2.769	0.007	0.007	0.000	0.170	0.14	
2696	9/1/2004	4:21:53 PM		25.647	25.787	24.6	26.45	25.692		48.403	54.484	17.463	31.944	-0.106	-6.139		48.586	0.047	14.643	0.003		3388.52	56.4753	53.4	11.6	40.2	2.770	0.007	0.007	0.000	0.169	0.14	
2697	9/1/2004	4:22:53 PM		25.647	25.792	24.6	26.565	25.682		48.505	54.729	17.38	32.03	-0.106	-6.159		50.965	0.048	14.643	0.003		3389.52	56.4919	53.6	12.1	40.3	2.776	0.007	0.007	0.000	0.173	0.15	
2698	9/1/2004	4:23:53 PM		25.653	25.793	24.611	26.581	25.747		48.615	54.77	17.426	32.071	-0.106	-6.197		49.752	0.045	14.643	0.003		3390.52	56.5086	53.6	11.9	40.3	2.782	0.006	0.007	0.000	0.161	0.14	
2699	9/1/2004	4:24:53 PM		25.653	25.798	24.611	26.571	25.742		48.305	54.387	16.752	32.596	-0.121	-6.185		50.751	0.047	14.643	0.003		3391.52	56.5253	53.3	12.1	40.5	2.789	0.007	0.007	0.000	0.168	0.14	
2700	9/1/2004	4:25:53 PM		25.653	25.794	24.612	26.596	25.693		48.623	54.842	17.059	32.531	-0.106	-6.185		49.337	0.047	14.643	0.003		3392.52	56.5419	53.7	11.8	40.6	2.798	0.007	0.007	0.000	0.168	0.14	
2701	9/1/2004	4:26:53 PM		25.668	25.799	24.667	26.676	25.728		48.575	54.633	17.367	32.194	-0.106	-6.185		47.217	0.047	14.643	0.003		3393.52	56.5586	53.5	11.2	40.4	2.784	0.007	0.007	0.000	0.168	0.14	
2702	9/1/2004	4:27:53 PM		25.663	25.803	24.681	26.661	25.687		48.131	54.101	17.308	31.835	-0.103	-6.194		49.566	0.045	14.643	0.003		3394.52	56.5753	53.0	11.8	40.0	2.757	0.006	0.007	0.000	0.163	0.14	
2703	9/1/2004	4:28:53 PM		25.674	25.809	24.703	26.632	25.669		48.395	54.484	17.182	32.385	-0.109	-6.177		49.441	0.048	14.643	0.003		3395.52	56.5919	53.4	11.8	40.4	2.785	0.007	0.007	0.000	0.172	0.15	
2704	9/1/2004	4:29:53 PM		25.673	25.804	24.672	26.601	25.673		48.604	54.726	17.401	32.18	-0.106	-6.18		50.868	0.047	14.643	0.003		3396.52	56.6086	53.6	12.1	40.4	2.785	0.007	0.007	0.000	0.168	0.14	
2705	9/1/2004	4:30:53 PM		25.678	25.798	24.666	26.556	25.608		48.598	54.842	17.439	32.127	-0.109	-6.151		50.123	0.05	14.643	0.003		3397.52	56.6253	53.7	11.9	40.4	2.783	0.007	0.007	0.000	0.179	0.15	
2706	9/1/2004	4:31:53 PM		25.683	25.803	24.671	26.566	25.608		48.546	54.679	17.277	32.285	-0.089	-6.073		49.862	0.043	14.643	0.004		3398.52	56.6419	53.6	11.9	40.4	2.787	0.006	0.006	0.000	0.154	0.13	
2707	9/1/2004	4:32:53 PM		25.673	25.799	24.622	26.531	25.573		48.291	54.49	17.295	31.93	-0.083	-6.073		49.724	0.048	14.643	0.003		3399.52	56.6586	53.4	11.8	40.1	2.765	0.007	0.007	0.000	0.173	0.15	
2708	9/1/2004	4:33:53 PM		25.678	25.803	24.656	26.556	25.538		48.353	54.329	17.261	32.083	-0.106	-6.119		51.395	0.045	14.643	0.003		3400.52	56.6753	53.2	12.2	40.2	2.773	0.006	0.007	0.000	0.162	0.14	
2709	9/1/2004	4:34:53 PM		25.688	25.809	24.647	26.536	25.568		48.457	54.451	17.366	32.217	-0.086	-6.113		49.211	0.046	14.643	0.003		3401.52	56.6919	53.3	11.7	40.3	2.781	0.007	0.007	0.000	0.165	0.14	
2710	9/1/2004	4:35:53 PM		25.683	25.798	24.636	26.481	25.593		48.503	54.571	17.396	32.295	-0.092	-6.113		50.571	0.046	14.643	0.003		3402.52	56.7086	53.4	12.0	40.4	2.785	0.007	0.007	0.000	0.165	0.14	
2711	9/1/2004	4:36:53 PM		25.688	25.803	24.641	26.511	25.608		48.335	54.482	17.107	32.307	-0.092	-6.116		50.523	0.046	14.643	0.003		3403.52	56.7253	53.4	12.0	40.3	2.780	0.007	0.007	0.000	0.165	0.14	
2712	9/1/2004	4:37:53 PM		25.687	25.812	24.626	26.55	25.577		48.274	54.49	17.287	31.817	-0.095	-6.116		50.265	0.046	14.643	0.003		3404.52	56.7419	53.4	12.0	40.0	2.761	0.007	0.007	0.000	0.166	0.14	
2713	9/1/2004	4:38:53 PM		25.692	25.802	24.651	26.555	25.542		48.428	54.49	17.384	31.987	-0.08	-6.116		52.106	0.046	14.643	0.003		3405.52	56.7586	53.4	12.4	40.2	2.772	0.007	0.007	0.000	0.165	0.14	
2714	9/1/2004	4:39:53 PM		25.693	25.798	24.626	26.556	25.538		48.403	54.569	17.219	32.231	-0.086	-6.125		50.089	0.046	14.643	0.003		3406.52	56.7753	53.4	11.9	40.3	2.780	0.007	0.007	0.000	0.165	0.14	
2715	9/1/2004	4:40:53 PM		25.688	25.798	24.641	26.506	25.637		48.374	54.561	17.513	31.798	-0.08	-6.125		50.338	0.046	14.643	0.003		3407.52	56.7919	53.4	12.0	40.1	2.764	0.007	0.007	0.000	0.166	0.14	
2716	9/1/2004	4:41:53 PM		25.688	25.803	24.626	26.521	25.598		48.399	54.598	16.996	32.453	-0.097	-6.116		49.743	0.047	14.643	0.003		3408.52	56.8086	53.5	11.8	40.4	2.787	0.007	0.007	0.000	0.168	0.14	
2717	9/1/2004	4:42:53 PM		25.687	25.802	24.631	26.48	25.642		48.606	54.735	17.443	32.083	-0.08	-6.125		47.624	0.045	14.643	0.003		3409.52	56.8253	53.6	11.3	40.3	2.782	0.006	0.007	0.000	0.161	0.14	
2718	9/1/2004	4:43:53 PM		25.703	25.818	24.666	26.541	25.637		48.693	54.88	17.385	32.192	-0.08	-6.125		51.5	0.045	14.643	0.003		3410.52	56.8419	53.8	12.3	40.4	2.788	0.006	0.007	0.000	0.161	0.14	
2719	9/1/2004	4:44:53 PM		25.691	25.801	24.64	26.579	25.546		48.295	54.644	17.272	31.954	-0.077	-6.128		49.927	0.045	14.643	0.003		3411.52	56.8586	53.5	11.9	40.1	2.766	0.006	0.007	0.000	0.162	0.14	
2720	9/1/2004	4:45:53 PM		25.696	25.811	24.665	26.574	25.586		48.594	54.876	17.279	32.338	-0.08	-6.119		49.799	0.047	14.643	0.003		3412.52	56.8753	53.8	11.9	40.5	2.790	0.007	0.007	0.000	0.168	0.14	
2721	9/1/2004	4:46:53 PM		25.691	25.796	24.63	26.564	25.571		48.828	55.128	17.381	32.422	-0.077	-6.133		47.409	0.045	14.643	0.003		3413.52	56.8919	54.0	11.3	40.6	2.801	0.006	0.007	0.000	0.160	0.14	
2722	9/1/2004	4:47:53 PM		25.691	25.811	24.66	26.599	25.516		48.565	54.695	17.122	32.35	-0.08	-6.122		50.192	0.046	14.643	0.003		3414.52	56.9086	53.6	12.0	40.5	2.789	0.007	0.007	0.000	0.164	0.14	
2723	9/1/2004	4:48:53 PM		25.693	25.808	24.641	26.581	25.578		48.587	54.797	16.954	32.635	-0.083	-6.113		50.096	0.047	14.643	0.003		3415.52	56.9253	53.7	11.9	40.6	2.800	0.007	0.007	0.000	0.167	0.14	
2724	9/1/2004	4:49:53 PM		25.687	25.802	24.621	26.63	25.602		48.446	54.639	17.035	32.4	-0.031	-6.047		49.727	0.046	14.643	0.003		3416.52	56.9419	53.5	11.8	40.4	2.787	0.007	0.007	0.000	0.165	0.14	
2725	9/1/2004	4:50:53 PM		25.687	25.802	24.646	26.65	25.542		48.629	54.842	17.169	32.402	-0.037	-6.073		48.709	0.047	14.643	0.003		3417.52	56.9586	53.7	11.6	40.5	2.793	0.007	0.007	0.000	0.168	0.14	
2726	9/1/2004	4:51:53 PM		25.687	25.797	24.631	26.695	25.572		48.569	54.614	17.301	32.205	-0.08	-6.093		52.144	0.046	14.643	0.003		3418.52	56.9753	53.5	12.4	40.4	2.785	0.007	0.007	0.000	0.165	0.14	
2727	9/1/2004	4:52:53 PM		25.698	25.808	24.656	26.701	25.538		48.697	54.834	17.395	32.397	-0.08	-6.102		50.53	0.045	14.643	0.003		3419.52	56.9919	53.7	12.0	40.5	2.796	0.006	0.007	0.000	0.160	0.14	
2728	9/1/2004	4:53:53 PM		25.682	25.807	24.646	26.72	25.602		48.334	54.329	17.197	32.196	-0.074	-6.096		51.837	0.045	14.643	0.003		3420.52	57.0086	53.2	12.3	40.3	2.776	0.006	0.007	0.000	0.162	0.14	
2729	9/1/2004	4:54:53 PM		25.693	25.814	24.647	26.721	25.588		48.469	54.733	17.057	32.41	-0.08	-6.093		49.531	0.045	14.643	0.003		3421.52	57.0253	53.6	11.8	40.4	2.788	0.006	0.007	0.000	0.161	0.14	
2730	9/1/2004	4:55:53 PM		25.699	25.819	24.853	26.672	25.569		48.241	54.413	17.497	31.739	-0.048	-6.087		51.097	0.046	14.643	0.004		3422.52	57.0419	53.3	12.2	40.0	2.757	0.007	0.007	0.000	0.165	0.14	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2731	9/1/2004	4:56:53 PM		25.691	25.821	24.795	26.689	25.571		48.859	54.934	17.633	32.321	-0.066	-6.09		49.535	0.046	14.643	0.003		3423.52	57.0586	53.8	11.8	40.6	2.799	0.007	0.007	0.000	0.163	0.14	
2732	9/1/2004	4:57:53 PM		25.696	25.821	24.795	26.634	25.69		48.05	54.241	17.558	31.554	-0.022	-6.09		48.404	0.047	14.643	0.003		3424.52	57.0753	53.1	11.5	39.8	2.744	0.007	0.007	0.000	0.170	0.14	
2733	9/1/2004	4:58:53 PM		25.716	25.821	24.775	26.639	25.641		48.602	54.768	17.461	32.143	-0.077	-6.078		49.076	0.047	14.643	0.003		3425.52	57.0919	53.6	11.7	40.4	2.784	0.007	0.007	0.000	0.168	0.14	
2734	9/1/2004	4:59:09 PM		25.711	25.812	24.755	26.629	25.586		48.349	54.699	17.396	31.936	-0.077	-5.992		52.223	0.045	14.643	0.004		3425.78	57.0964	53.6	12.4	40.1	2.768	0.006	0.006	0.000	0.162	0.14	
2735	9/1/2004	5:00:09 PM		25.706	25.811	24.714	26.609	25.611		48.351	54.706	17.579	31.767	0.027	-5.882		50.044	0.047	14.643	0.003		3426.78	57.1131	53.6	11.9	40.1	2.762	0.007	0.007	0.000	0.169	0.14	
2736	9/1/2004	5:01:09 PM		25.721	25.821	24.724	26.579	25.591		48.511	54.664	17.594	31.88	-0.025	-6.035		51.378	0.05	14.643	0.003		3427.78	57.1297	53.5	12.2	40.2	2.771	0.007	0.007	0.000	0.179	0.15	
2737	9/1/2004	5:02:09 PM		25.721	25.811	24.694	26.539	25.626		48.422	54.548	17.56	31.866	-0.022	-5.98		50.448	0.047	14.643	0.003		3428.78	57.1464	53.4	12.0	40.1	2.768	0.007	0.007	0.000	0.169	0.14	
2738	9/1/2004	5:03:09 PM		25.725	25.815	24.699	26.473	25.525		48.364	54.482	17.601	31.778	-0.025	-6.026		47.791	0.046	14.643	0.003		3429.78	57.1631	53.4	11.4	40.1	2.763	0.007	0.007	0.000	0.166	0.14	
2739	9/1/2004	5:04:09 PM		25.724	25.814	24.688	26.497	25.529		47.978	54.293	17.278	31.564	-0.022	-6.018		49.616	0.047	14.643	0.004		3430.78	57.1797	53.2	11.8	39.8	2.742	0.007	0.007	0.000	0.171	0.15	
2740	9/1/2004	5:05:09 PM		25.713	25.799	24.647	26.491	25.448		48.538	54.66	17.481	32.155	-0.025	-6.024		49.954	0.045	14.643	0.003		3431.78	57.1964	53.5	11.9	40.3	2.782	0.006	0.007	0.000	0.161	0.14	
2741	9/1/2004	5:06:09 PM		25.719	25.794	24.663	26.467	25.539		48.092	54.403	17.411	31.652	-0.022	-6.021		48.208	0.046	14.643	0.003		3432.78	57.2131	53.3	11.5	39.9	2.749	0.007	0.007	0.000	0.167	0.14	
2742	9/1/2004	5:07:09 PM		25.713	25.804	24.652	26.531	25.478		48.594	55.039	17.494	31.907	-0.022	-6.026		52.144	0.044	14.643	0.003		3433.78	57.2297	53.9	12.4	40.3	2.775	0.006	0.006	0.000	0.158	0.13	
2743	9/1/2004	5:08:09 PM		25.719	25.809	24.648	26.467	25.489		48.542	54.77	17.37	32.211	-0.025	-6.021		50.231	0.045	14.643	0.003		3434.78	57.2464	53.6	12.0	40.4	2.784	0.006	0.007	0.000	0.161	0.14	
2744	9/1/2004	5:09:09 PM		25.708	25.804	24.637	26.481	25.513		48.21	54.329	17.411	31.854	-0.022	-6.015		49.28	0.046	14.643	0.003		3435.78	57.2631	53.2	11.7	40.0	2.760	0.007	0.007	0.000	0.166	0.14	
2745	9/1/2004	5:10:09 PM		25.703	25.793	24.611	26.456	25.473		48.376	54.602	17.34	31.942	-0.016	-6.021		49.334	0.045	14.643	0.003		3436.78	57.2797	53.5	11.8	40.2	2.769	0.006	0.007	0.000	0.162	0.14	
2746	9/1/2004	5:11:09 PM		25.708	25.788	24.621	26.436	25.423		48.287	54.42	17.351	32.018	0.03	-5.934		51.873	0.044	14.643	0.003		3437.78	57.2964	53.3	12.4	40.2	2.768	0.006	0.006	0.000	0.159	0.13	
2747	9/1/2004	5:12:09 PM		25.703	25.798	24.611	26.436	25.408		48.276	54.42	17.421	32.005	0.03	-5.977		49.518	0.046	14.643	0.003		3438.78	57.3131	53.3	11.8	40.1	2.768	0.007	0.007	0.000	0.166	0.14	
2748	9/1/2004	5:13:09 PM		25.703	25.793	24.611	26.416	25.483		48.357	54.677	17.436	31.884	0.03	-6		49.823	0.046	14.643	0.003		3439.78	57.3297	53.6	11.9	40.1	2.766	0.007	0.007	0.000	0.166	0.14	
2749	9/1/2004	5:14:09 PM		25.691	25.776	24.605	26.389	25.476		48.523	54.791	17.36	32.149	0.007	-6.006		49.864	0.046	14.643	0.003		3440.78	57.3464	53.7	11.9	40.3	2.781	0.007	0.007	0.000	0.165	0.14	
2750	9/1/2004	5:15:09 PM		25.68	25.776	24.574	26.363	25.41		48.463	54.838	17.124	32.28	0.024	-6.003		49.047	0.046	14.643	0.003		3441.78	57.3631	53.7	11.7	40.4	2.783	0.007	0.007	0.000	0.165	0.14	
2751	9/1/2004	5:16:09 PM		25.675	25.77	24.588	26.288	25.405		48.324	54.507	17.373	31.925	0.013	-6		51.039	0.045	14.643	0.003		3442.78	57.3797	53.4	12.2	40.1	2.766	0.006	0.007	0.000	0.162	0.14	
2752	9/1/2004	5:17:09 PM		25.673	25.768	24.572	26.321	25.398		48.614	54.84	17.344	32.246	0.015	-6		49.311	0.046	14.643	0.003		3443.78	57.3964	53.7	11.7	40.4	2.788	0.007	0.007	0.000	0.165	0.14	
2753	9/1/2004	5:18:09 PM		25.678	25.773	24.612	26.326	25.373		48.629	55.015	17.464	32.137	0.021	-6.003		48.723	0.045	14.643	0.003		3444.78	57.4131	53.9	11.6	40.4	2.784	0.006	0.007	0.000	0.161	0.14	
2754	9/1/2004	5:19:09 PM		25.652	25.763	24.561	26.315	25.397		48.532	54.847	17.322	32.221	0.027	-6.003		50.279	0.045	14.643	0.003		3445.78	57.4297	53.7	12.0	40.4	2.784	0.006	0.007	0.000	0.162	0.14	
2755	9/1/2004	5:20:09 PM		25.651	25.756	24.564	26.274	25.336		48.546	54.971	17.317	32.192	0.03	-6.009		49.405	0.045	14.643	0.003		3446.78	57.4464	53.8	11.8	40.4	2.783	0.006	0.007	0.000	0.162	0.14	
2756	9/1/2004	5:21:09 PM		25.655	25.76	24.594	26.248	25.365		48.5	54.797	17.377	31.829	0.03	-5.992		49.629	0.047	14.643	0.003		3447.78	57.4631	53.7	11.8	40.2	2.769	0.007	0.007	0.000	0.169	0.14	
2757	9/1/2004	5:22:09 PM		25.629	25.729	24.533	26.207	25.34		48.782	55.131	17.357	32.334	0.024	-6.006		51.101	0.046	14.643	0.003		3448.78	57.4797	54.0	12.2	40.6	2.796	0.007	0.007	0.000	0.165	0.14	
2758	9/1/2004	5:23:09 PM		25.628	25.733	24.566	26.201	25.328		48.442	54.681	17.206	32.367	0.033	-5.998		48.761	0.047	14.643	0.004		3449.78	57.4964	53.6	11.6	40.4	2.786	0.007	0.007	0.000	0.169	0.14	
2759	9/1/2004	5:24:09 PM		25.622	25.727	24.551	26.225	25.317		48.519	54.778	17.259	32.231	0.03	-5.974		49.385	0.046	14.643	0.003		3450.78	57.5131	53.7	11.8	40.4	2.784	0.007	0.007	0.000	0.165	0.14	
2760	9/1/2004	5:25:09 PM		25.621	25.726	24.564	26.244	25.256		48.463	54.925	17.134	32.272	0.065	-5.986		49.572	0.044	14.643	0.003		3451.78	57.5297	53.8	11.8	40.4	2.783	0.006	0.006	0.000	0.158	0.13	
2761	9/1/2004	5:26:09 PM		25.616	25.721	24.559	26.304	25.331		48.494	54.652	17.119	32.363	0.03	-5.899		48.156	0.047	14.643	0.003		3452.78	57.5464	53.5	11.5	40.4	2.787	0.007	0.007	0.000	0.169	0.14	
2762	9/1/2004	5:27:09 PM		25.615	25.725	24.548	26.353	25.41		48.602	54.88	17.235	32.332	0.105	-5.841		49.278	0.047	14.643	0.004		3453.78	57.5631	53.8	11.7	40.5	2.790	0.007	0.007	0.000	0.168	0.14	
2763	9/1/2004	5:28:09 PM		25.621	25.732	24.57	26.414	25.561		48.334	54.538	16.986	32.244	0.03	-5.969		48.796	0.046	14.643	0.003		3454.78	57.5797	53.4	11.6	40.3	2.778	0.007	0.007	0.000	0.165	0.14	
2764	9/1/2004	5:29:09 PM		25.627	25.727	24.556	26.535	25.617		49.058	55.263	17.072	33.083	0.027	-5.983		48.573	0.046	14.643	0.003		3455.78	57.5964	54.1	11.6	41.1	2.832	0.007	0.007	0.000	0.162	0.14	
2765	9/1/2004	5:30:09 PM		25.624	25.739	24.597	26.567	25.678		48.079	54.3	17.753	31.349	0.027	-5.986		50.075	0.045	14.643	0.003		3456.78	57.6131	53.2	11.9	39.7	2.738	0.006	0.007	0.000	0.164	0.14	
2766	9/1/2004	5:31:09 PM		25.616	25.736	24.569	26.619	25.691		47.955	54.357	17.468	31.535	0.088	-5.902		51.032	0.042	14.643	0.003		3457.78	57.6297	53.2	12.2	39.7	2.740	0.006	0.006	0.000	0.153	0.13	
2767	9/1/2004	5:32:09 PM		25.628	25.748	24.602	26.671	25.783		48.09	54.409	17.724	31.345	0.03	-5.931		47.313	0.045	14.643	0.003		3458.78	57.6464	53.3	11.3	39.7	2.738	0.006	0.007	0.000	0.164	0.14	
2768	9/1/2004	5:33:09 PM		25.625	25.755	24.619	26.718	25.91		48.137	54.482	17.733	31.23	0.027	-5.977		50.521	0.044	14.643	0.004		3459.78	57.6631	53.4	12.0	39.7	2.736	0.006	0.006	0.000	0.160	0.14	
2769	9/1/2004	5:34:09 PM		25.633	25.763	24.606	26.821	25.887		48.339	54.791	17.677	31.616	0.027	-5.986		51.091	0.045	14.643	0.003		3460.78	57.6797	53.7	12.2	40.0	2.756	0.006	0.007	0.000	0.163	0.14	
2770	9/1/2004	5:35:09 PM		25.625	25.755	24.603	26.798	25.914		48.272	54.65	17.556	31.767	0.024	-5.986		50.425	0.046	14.643	0.003		3461.78	57.6964	53.5	12.0	40.0	2.759	0.007	0.007	0.000	0.166	0.14	
2771	9/1/2004	5:36:09 PM		25.637	25.772	24.601	26.83	25.892		48.249	54.606	17.566	31.517	0.03	-5.983		48.725	0.046	14.643	0.003		3462.78	57.7131	53.5	11.6	39.9	2.750	0.007	0.007	0.000	0.167	0.14	
2772	9/1/2004	5:37:09 PM		25.648	25.778	24.627	26.876	25.872		48.372	54.747	17.244	31.997	0.036	-5.974		50.819	0.046	14.643	0.003		3463.78	57.7297	53.6	12.1	40.2	2.771	0.007	0.007	0.000	0.166	0.14	
2773	9/1/2004	5:38:09 PM		25.654	25.784	24.627	26.802	25.813		48.567	55.174	17.366	32.016	0.024	-5.972		49.23	0.044	14.643	0.003		3464.78	57.7464	54.0	11.7	40.3	2.778	0.006	0.006	0.000	0.158	0.13	
2774	9/1/2004	5:39:09 PM		25.649	25.789	24.617	26.792	25.788		48.357	54.602	17.305	31.811	0.108	-5.85		49.629	0.039	14.643	0.003		3465.78	57.7631	53.5	11.8	40.1	2.764	0.006	0.006	0.000	0.141	0.12	
2775	9/1/2004	5:40:09 PM		25.664	25.8	24.648	26.772	25.779		48.341	54.527	17.412	31.858	0.099	-5.899		50.075	0.046	14.643	0.003		3466.78	57.7797	53.4	11.9	40.1	2.765	0.007	0.007	0.000	0.166	0.14	
2776	9/1/2004	5:41:09 PM		25.655	25.785	24.614	26.693	25.725		48.602	54.699	17.391	32.194	0.033	-5.974		47.941	0.045	14.643	0.003		3467.78	57.7964	53.6	11.4	40.4	2.785	0.006	0.007	0.000	0.161	0.14	
2777	9/1/2004	5:42:09 PM		25.671	25.811	24.64	26.719	25.691		48.579	54.801	17.492	32.092	0.091	-5.992		50.467	0.043	14.643	0.003		3468.78	57.8131	53.7	12.0	40.3	2.781	0.006	0.006	0.000	0.154	0.13	
2778	9/1/2004	5:43:09 PM		25.666	25.801	24.645	26.674	25.746		48.629	54.975	17.475	32.034	0.056	-5.972		50.749	0.045	14.643	0.003		3469.78	57.8297	53.8	12.1	40.3	2.781	0.006	0.007	0.000	0.161	0.14	
2779	9/1/2004	5:44:09 PM		25.676	25.806	24.635	26.689	25.731		48.561	54.899	17.538	31.769	0.073	-5.974		50.066	0.045	14.643	0.003		3470.78	57.8464	53.8	11.9	40.2	2.769	0.006	0.007	0.000	0.162	0.14	
2780	9/1/2004	5:45:09 PM		25.676	25.811	24.67	26.659	25.656		48.71	55.035	17.494	32.09	0.091	-5.943		49.107	0.044	14.643	0.003		3471.78	57.8631	53.9	11.7	40.4	2.785	0.006	0.006	0.000	0.157	0.13	
2781	9/1/2004	5:46:09 PM		25.686	25.811	24.755	26.649	25.681		48.218	54.61	17.752	31.404	0.094	-5.972		49.823	0.044	14.643	0.003		3472.78	57.8797	53.5	11.9	39.8	2.745	0.006	0.006	0.000	0.159	0.14	
2782	9/1/2004	5:47:09 PM		25.681	25.811	24.735	26.619	25.701		48.27	54.782	17.523	31.624	0.094	-5.943		49.774	0.048	14.643	0.003		3473.78	57.8964	53.7	11.9	39.9	2.754	0.007	0.007	0.000	0.173	0.15	
2783	9/1/2004	5:48:09 PM		25.696	25.821	24.735	26.619	25.691		48.181	54.706	17.46	31.535	0.14	-5.784		49.541	0.046	14.643	0.003		3474.78	57.9131	53.6	11.8	39.9	2.748	0.007	0.007	0.000	0.166	0.14	
2784	9/1/2004	5:49:09 PM		25.7	25.82	24.714	26.653	25.675		48.615	55.143	17.609	31.774	0.14	-5.867		50.325	0.047	14.643	0.003		3475.78	57.9297	54.0	12.0	40.2	2.771	0.007	0.007	0.000	0.169	0.14	
2785	9/1/2004	5:50:09 PM		25.706	25.821	24.725	26.694	25.691		48.314	54.803	17.188	32.153	0.143	-5.798		49.361	0.045	14.643	0.003		3476.78	57.9464	53.7	11.8	40.2	2.774	0.006	0.006	0.000	0.161	0.14	
2786	9/1/2004	5:51:09 PM		25.696	25.811	24.68	26.634	25.751		48.384	54.818	17.319	31.889	0.14	-5.853		50.231	0.045	14.643	0.003		3477.78	57.9631	53.7	12.0	40.1	2.767	0.006	0.007	0.000	0.162	0.14	
2787	9/1/2004	5:52:09 PM		25.716	25.826	24.685	26.699	25.721		48.372	54.621	17.303	32.135	0.14	-5.899		50.102	0.044	14.643	0.003		3478.78	57.9797	53.5	11.9	40.3	2.775	0.006	0.006	0.000	0.158	0.13	
2788	9/1/2004	5:53:09 PM		25.716	25.816	24.685	26.654	25.641		48.26	54.826	17.319	32.051	0.14	-5.899		49.153	0.045	14.643	0.003		3479.78	57.9964	53.7	11.7	40.2	2.769	0.006	0.006	0.000	0.162	0.14	
2789	9/1/2004	5:54:09 PM		25.721	25.826	24.665	26.669	25.611		48.65	55.122	17.421	32.104	0.134	-5.896		49.727	0.046	14.643	0.003		3480.78	58.0131	54.0	11.8	40.4	2.784	0.007	0.007	0.000	0.165	0.14	
2790	9/1/2004	5:55:09 PM		25.726	25.831	24.68	26.614	25.711		48.256	54.567	17.159	32.209	0.143	-5.833		50.069	0.045	14.643	0.003		3481.78	58.0297	53.4	11.9	40.2	2.774	0.006	0.007	0.000	0.162	0.14	
2791	9/1/2004	5:56:09 PM		25.721	25.831	24.665	26.619	25.751		48.612	55.042	17.317	32.252	0.143	-5.853		53.287	0.044	14.643	0.003		3482.78	58.0464	53.9	12.7	40.4	2.788	0.006	0.006	0.000	0.157	0.13	
2792	9/1/2004	5:57:09 PM		25.717	25.822	24.645	26.625	25.776		47.92	54.158	17.236	31.774	0.14	-5.87		49.507	0.044	14.643	0.003		3483.78	58.0631	53.0	11.8	39.8	2.747	0.006	0.006	0.000	0.160	0.14	
2793	9/1/2004	5:58:09 PM		25.727	25.827	24.66	26.635	25.811		48.492	54.956	17.109	32.283	0.143	-5.862		50.137	0.046	14.643	0.003		3484.78	58.0797	53.8	11.9	40.4	2.785	0.007	0.007	0.000	0.165	0.14	
2794	9/1/2004	5:59:09 PM		25.727	25.833	24.651	26.655	25.822		48.637	54.959	17.366	32.25	0.143	-5.862		51.036	0.045	14.643	0.003		3485.78	58.0964	53.8	12.2	40.4	2.788	0.006	0.007	0.000	0.161	0.14	
2795	9/1/2004	6:00:09 PM		25.723	25.828	24.662	26.621	25.848		48.395	54.807	17.071	32.467	0.14	-5.873		49.693	0.045	14.643	0.003		3486.78	58.1131	53.7	11.8	40.4	2.788	0.006	0.007	0.000	0.161	0.14	
2796	9/1/2004	6:01:09 PM		25.729	25.839	24.648	26.607	25.764		48.459	54.865	17.289	32.007	0.14	-5.867		50.434	0.045	14.643	0.003		3487.78	58.1297	53.7	12.0	40.2	2.774	0.006	0.007	0.000	0.162	0.14	
2797	9/1/2004	6:02:09 PM		25.735	25.835	24.638	26.593	25.719		48.623	55.137	17.375	32.075	0.172	-5.873		49.574	0.044	14.643	0.003		3488.78	58.1464	54.0	11.8	40.3	2.782	0.006	0.006	0.000	0.158	0.13	
2798	9/1/2004	6:03:09 PM		25.73	25.836	24.659	26.638	25.745		48.664	55.118	17.283	32.309	0.143	-5.873		49.243	0.044	14.643	0.003		3489.78	58.1631	54.0	11.7	40.5	2.791	0.006	0.006	0.000	0.157	0.13	
2799	9/1/2004	6:04:09 PM		25.735	25.831	24.629	26.648	25.625		48.388	54.695	17.308	32.026	0.143	-5.87		50.071	0.045	14.643	0.003		3490.78	58.1797	53.6	11.9	40.2	2.772	0.006	0.007	0.000	0.162	0.14	
2800	9/1/2004	6:05:09 PM		25.73	25.831	24.649	26.588	25.68		48.322	54.799	17.135	32.266	0.163	-5.873		48.035	0.044	14.643	0.003		3491.78	58.1964	53.7	11.4	40.3	2.778	0.006	0.006	0.000	0.158	0.13	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2801	9/1/2004	6:06:09 PM		25.725	25.825	24.633	26.593	25.66		48.693	55.11	17.256	32.385	0.14	-5.867		48.98	0.046	14.643	0.003		3492.78	58.2131	54.0	11.7	40.5	2.795	0.007	0.007	0.000	0.164	0.14	
2802	9/1/2004	6:07:09 PM		25.72	25.825	24.613	26.568	25.719		48.726	55.348	16.828	32.777	0.146	-5.87		49.03	0.045	14.643	0.003		3493.78	58.2297	54.2	11.7	40.8	2.810	0.006	0.007	0.000	0.160	0.14	
2803	9/1/2004	6:08:09 PM		25.724	25.824	24.643	26.557	25.649		48.689	54.961	17.094	32.654	0.204	-5.873		49.261	0.045	14.643	0.003		3494.78	58.2464	53.8	11.7	40.7	2.804	0.006	0.007	0.000	0.160	0.14	
2804	9/1/2004	6:09:09 PM		25.724	25.829	24.618	26.562	25.694		48.758	55.236	16.9	32.716	0.149	-5.867		48.963	0.045	14.643	0.003		3495.78	58.2631	54.1	11.7	40.7	2.809	0.006	0.007	0.000	0.160	0.14	
2805	9/1/2004	6:10:09 PM		25.713	25.828	24.632	26.516	25.678		48.886	55.327	17.125	32.638	0.16	-5.859		50.035	0.045	14.643	0.003		3496.78	58.2797	54.2	11.9	40.8	2.810	0.006	0.007	0.000	0.160	0.14	
2806	9/1/2004	6:11:09 PM		25.719	25.829	24.623	26.542	25.694		48.811	55.151	17.156	32.732	0.204	-5.839		47.989	0.048	14.643	0.003		3497.78	58.2964	54.0	11.4	40.8	2.811	0.007	0.007	0.000	0.170	0.14	
2807	9/1/2004	6:12:09 PM		25.668	25.823	24.612	26.576	25.673		51.033	55.185	17.193	34.934	-1.212	-4.948		49.58	0.009	14.643	0.003		3498.78	58.3131	54.1	11.8	43.0	2.964	0.001	0.001	0.000	0.030	0.03	
2808	9/1/2004	6:13:09 PM		25.703	25.823	24.627	26.516	25.673		49.38	55.543	17.505	32.88	-0.118	-3.297		48.921	0.033	14.643	0.003		3499.78	58.3297	54.4	11.7	41.1	2.836	0.005	0.005	0.000	0.116	0.10	
2809	9/1/2004	6:14:09 PM		25.723	25.823	24.612	26.531	25.663		48.278	55.69	17.546	31.642	1.269	-0.69		49.253	0.033	14.643	0.003		3500.78	58.3464	54.6	11.7	40.0	2.755	0.005	0.005	0.000	0.120	0.10	
2810	9/1/2004	6:15:09 PM		25.717	25.828	24.801	26.515	25.677		50.093	55.276	17.943	32.993	-1.209	-5.414		49.841	0.044	14.643	0.004		3501.78	58.3631	54.2	11.9	41.5	2.864	0.006	0.006	0.000	0.152	0.13	
2811	9/1/2004	6:16:09 PM		25.717	25.823	24.741	26.53	25.672		50.16	54.865	17.743	33.467	-1.215	-5.983		49.925	0.05	14.643	0.003		3502.78	58.3797	53.7	11.9	41.8	2.883	0.007	0.007	0.000	0.172	0.15	
2812	9/1/2004	6:17:09 PM		25.712	25.812	24.715	26.585	25.577		50.413	55.286	17.721	33.688	-1.212	-6.365		49.593	0.05	14.643	0.003		3503.78	58.3964	54.2	11.8	42.1	2.899	0.007	0.007	0.000	0.172	0.15	
2813	9/1/2004	6:18:09 PM		25.711	25.811	24.705	26.574	25.591		49.921	54.631	17.519	33.407	-1.212	-6.394		49.241	0.048	14.643	0.003		3504.78	58.4131	53.5	11.7	41.7	2.873	0.007	0.007	0.000	0.166	0.14	
2814	9/1/2004	6:19:09 PM		25.72	25.805	24.664	26.508	25.565		50.475	55.054	17.603	33.885	-1.212	-6.399		48.838	0.048	14.643	0.003		3505.78	58.4297	53.9	11.6	42.2	2.908	0.007	0.007	0.000	0.164	0.14	
2815	9/1/2004	6:20:09 PM		25.73	25.805	24.674	26.448	25.615		50.33	55.315	17.378	33.904	-1.212	-6.394		49.084	0.048	14.643	0.003		3506.78	58.4464	54.2	11.7	42.1	2.904	0.007	0.007	0.000	0.165	0.14	
2816	9/1/2004	6:21:09 PM		25.734	25.81	24.658	26.462	25.619		50.431	55.222	17.531	33.852	-1.209	-6.399		49.43	0.049	14.643	0.004		3507.78	58.4631	54.1	11.8	42.1	2.906	0.007	0.007	0.000	0.168	0.14	
2817	9/1/2004	6:22:09 PM		25.733	25.798	24.607	26.456	25.618		50.477	55.226	17.286	34.265	-1.218	-6.408		49.345	0.048	14.643	0.003		3508.78	58.4797	54.1	11.8	42.4	2.921	0.007	0.007	0.000	0.164	0.14	
2818	9/1/2004	6:23:09 PM		25.737	25.797	24.626	26.445	25.617		50.253	55.166	17.398	33.793	-1.215	-6.399		49.203	0.048	14.643	0.003		3509.78	58.4964	54.0	11.7	42.0	2.897	0.007	0.007	0.000	0.165	0.14	
2819	9/1/2004	6:24:09 PM		25.731	25.797	24.6	26.499	25.596		50.643	55.597	17.421	34.103	-1.212	-6.414		49.716	0.048	14.643	0.003		3510.78	58.5131	54.5	11.8	42.4	2.921	0.007	0.007	0.000	0.164	0.14	
2820	9/1/2004	6:25:09 PM		25.751	25.811	24.619	26.494	25.65		50.475	55.185	17.395	34.109	-1.209	-6.396		47.883	0.047	14.643	0.003		3511.78	58.5297	54.1	11.4	42.3	2.916	0.007	0.007	0.000	0.161	0.14	
2821	9/1/2004	6:26:09 PM		25.728	25.784	24.577	26.476	25.623		50.33	55.224	16.888	34.505	-1.212	-6.405		47.493	0.049	14.643	0.003		3512.78	58.5464	54.1	11.3	42.4	2.925	0.007	0.007	0.000	0.167	0.14	
2822	9/1/2004	6:27:09 PM		25.733	25.794	24.562	26.536	25.568		50.493	55.429	17.285	34.216	-1.212	-6.408		48.754	0.048	14.643	0.004		3513.78	58.5631	54.3	11.6	42.4	2.920	0.007	0.007	0.000	0.164	0.14	
2823	9/1/2004	6:28:09 PM		25.728	25.784	24.567	26.566	25.533		50.659	55.578	17.379	34.249	-1.212	-6.402		49.618	0.048	14.643	0.003		3514.78	58.5797	54.5	11.8	42.5	2.927	0.007	0.007	0.000	0.164	0.14	
2824	9/1/2004	6:29:09 PM		25.739	25.799	24.578	26.657	25.699		50.558	55.396	17.247	34.304	-1.212	-6.405		49.804	0.048	14.643	0.003		3515.78	58.5964	54.3	11.9	42.4	2.925	0.007	0.007	0.000	0.164	0.14	
2825	9/1/2004	6:30:09 PM		25.746	25.806	24.569	26.704	25.77		50.527	55.524	17.496	33.904	-1.209	-6.405		50.55	0.047	14.643	0.004		3516.78	58.6131	54.4	12.0	42.2	2.911	0.007	0.007	0.000	0.161	0.14	
2826	9/1/2004	6:31:09 PM		25.728	25.803	24.551	26.771	25.798		50.298	55.224	17.272	34.084	-1.215	-6.405		48.88	0.048	14.643	0.003		3517.78	58.6297	54.1	11.6	42.2	2.909	0.007	0.007	0.000	0.165	0.14	
2827	9/1/2004	6:32:09 PM		25.735	25.82	24.544	26.828	25.825		50.091	54.741	16.96	34.166	-1.215	-6.396		47.776	0.047	14.643	0.003		3518.78	58.6464	53.6	11.4	42.1	2.905	0.007	0.007	0.000	0.162	0.14	
2828	9/1/2004	6:33:09 PM		25.737	25.828	24.556	26.86	25.922		50.446	55.348	17.136	34.302	-1.212	-6.414		47.407	0.047	14.643	0.003		3519.78	58.6631	54.2	11.3	42.4	2.922	0.007	0.007	0.000	0.161	0.14	
2829	9/1/2004	6:34:09 PM		25.745	25.835	24.563	26.933	25.999		50.334	55.18	17.361	34.025	-1.212	-6.405		48.974	0.047	14.643	0.003		3520.78	58.6797	54.1	11.7	42.2	2.908	0.007	0.007	0.000	0.162	0.14	
2830	9/1/2004	6:35:09 PM		25.732	25.837	24.525	26.96	26.066		50.411	55.242	17.076	34.308	-1.215	-6.405		48.648	0.048	14.643	0.003		3521.78	58.6964	54.1	11.6	42.4	2.921	0.007	0.007	0.000	0.164	0.14	
2831	9/1/2004	6:36:09 PM		25.733	25.843	24.541	26.911	26.012		50.616	55.5	17.103	34.563	-1.215	-6.405		49.243	0.047	14.643	0.003		3522.78	58.7131	54.4	11.7	42.6	2.936	0.007	0.007	0.000	0.160	0.14	
2832	9/1/2004	6:37:09 PM		25.718	25.829	24.492	26.861	25.928		50.668	55.628	17.232	34.411	-1.218	-6.411		48.696	0.047	14.643	0.003		3523.78	58.7297	54.5	11.6	42.5	2.933	0.007	0.007	0.000	0.160	0.14	
2833	9/1/2004	6:38:09 PM		25.729	25.849	24.523	26.857	25.959		50.394	55.122	17.095	34.22	-1.212	-6.405		49.038	0.047	14.643	0.003		3524.78	58.7464	54.0	11.7	42.3	2.917	0.007	0.007	0.000	0.161	0.14	
2834	9/1/2004	6:39:09 PM		25.72	25.855	24.508	26.778	25.895		50.585	55.611	16.971	34.599	-1.212	-6.408		50.073	0.047	14.643	0.004		3525.78	58.7631	54.5	11.9	42.6	2.937	0.007	0.007	0.000	0.160	0.14	
2835	9/1/2004	6:40:09 PM		25.71	25.845	24.478	26.768	25.885		51.012	55.966	17.08	34.998	-1.215	-6.405		49.001	0.047	14.643	0.003		3526.78	58.7797	54.8	11.7	43.0	2.965	0.007	0.007	0.000	0.159	0.14	
2836	9/1/2004	6:41:09 PM		25.731	25.876	24.519	26.744	25.865		50.568	55.398	17.046	34.565	-1.215	-6.405		48.542	0.048	14.643	0.003		3527.78	58.7964	54.3	11.6	42.6	2.935	0.007	0.007	0.000	0.164	0.14	
2837	9/1/2004	6:42:09 PM		25.715	25.865	24.488	26.723	25.82		50.632	55.498	16.909	34.61	-1.212	-6.402		48.342	0.048	14.643	0.003		3528.78	58.8131	54.4	11.5	42.6	2.939	0.007	0.007	0.000	0.164	0.14	
2838	9/1/2004	6:43:09 PM		25.704	25.854	24.468	26.617	25.809		50.877	55.589	17.167	34.819	-1.215	-6.411		47.313	0.047	14.643	0.003		3529.78	58.8297	54.5	11.3	42.8	2.954	0.007	0.007	0.000	0.159	0.14	
2839	9/1/2004	6:44:09 PM		25.703	25.864	24.482	26.616	25.723		50.937	55.97	17.015	34.852	-1.215	-6.405		48.552	0.047	14.643	0.003		3530.78	58.8464	54.8	11.6	42.9	2.957	0.007	0.007	0.000	0.159	0.14	
2840	9/1/2004	6:45:09 PM		25.708	25.873	24.476	26.616	25.737		50.836	55.711	17.097	34.749	-1.212	-6.402		47.24	0.047	14.643	0.004		3531.78	58.8631	54.6	11.3	42.8	2.950	0.007	0.007	0.000	0.160	0.14	
2841	9/1/2004	6:46:09 PM		25.701	25.861	24.495	26.574	25.761		50.898	55.79	17.018	34.893	-1.212	-6.402		48.148	0.047	14.643	0.003		3532.78	58.8797	54.7	11.5	42.9	2.957	0.007	0.007	0.000	0.159	0.14	
2842	9/1/2004	6:47:09 PM		25.694	25.859	24.472	26.547	25.714		50.929	55.96	17.089	34.829	-1.212	-6.405		47.928	0.047	14.643	0.003		3533.78	58.8964	54.8	11.4	42.9	2.956	0.007	0.007	0.000	0.159	0.14	
2843	9/1/2004	6:48:09 PM		25.699	25.859	24.457	26.557	25.674		51.19	56.248	17.317	34.86	-1.215	-6.414		47.778	0.046	14.643	0.003		3534.78	58.9131	55.1	11.4	43.0	2.966	0.007	0.007	0.000	0.155	0.13	
2844	9/1/2004	6:49:09 PM		25.694	25.864	24.482	26.517	25.684		50.466	55.272	16.748	34.716	-1.215	-6.414		47.678	0.046	14.643	0.003		3535.78	58.9297	54.1	11.4	42.6	2.937	0.007	0.007	0.000	0.157	0.13	
2845	9/1/2004	6:50:09 PM		25.683	25.858	24.462	26.506	25.668		50.74	55.473	17.195	34.585	-1.215	-6.408		48.239	0.047	14.643	0.003		3536.78	58.9464	54.3	11.5	42.7	2.941	0.007	0.007	0.000	0.160	0.14	
2846	9/1/2004	6:51:09 PM		25.688	25.853	24.487	26.491	25.698		51.064	55.955	17.236	34.916	-1.215	-6.414		48.258	0.046	14.643	0.003		3537.78	58.9631	54.8	11.5	43.0	2.964	0.007	0.007	0.000	0.155	0.13	
2847	9/1/2004	6:52:09 PM		25.677	25.853	24.476	26.475	25.622		51.201	56.001	17.17	35.059	-1.212	-6.405		48.765	0.047	14.643	0.003		3538.78	58.9797	54.9	11.6	43.1	2.974	0.007	0.007	0.000	0.158	0.13	
2848	9/1/2004	6:53:09 PM		25.682	25.857	24.48	26.46	25.612		50.803	55.665	16.993	34.809	-1.215	-6.405		47.58	0.046	14.643	0.003		3539.78	58.9964	54.5	11.3	42.8	2.951	0.007	0.007	0.000	0.156	0.13	
2849	9/1/2004	6:54:09 PM		25.67	25.835	24.509	26.443	25.54		49.147	53.91	19.005	31.154	-1.215	-6.425		49.026	0.044	14.643	0.003		3540.78	59.0131	52.8	11.7	40.2	2.768	0.006	0.006	0.000	0.159	0.14	
2850	9/1/2004	6:55:09 PM		25.67	25.835	24.504	26.468	25.585		49.148	53.908	19.083	31.146	-1.215	-6.428		51.122	0.043	14.643	0.003		3541.78	59.0297	52.8	12.2	40.1	2.768	0.006	0.006	0.000	0.155	0.13	
2851	9/1/2004	6:56:09 PM		25.659	25.83	24.538	26.437	25.579		49.832	54.799	18.979	31.728	-1.215	-6.428		51.873	0.044	14.643	0.003		3542.78	59.0464	53.7	12.4	40.8	2.812	0.006	0.006	0.000	0.156	0.13	
2852	9/1/2004	6:57:09 PM		25.67	25.83	24.559	26.458	25.555		49.376	54.1	18.356	31.977	-1.212	-6.425		51.449	0.044	14.643	0.003		3543.78	59.0631	53.0	12.3	40.7	2.805	0.006	0.006	0.000	0.157	0.13	
2853	9/1/2004	6:58:09 PM		25.66	25.83	24.589	26.478	25.56		49.249	54.287	18.91	31.365	-1.212	-6.423		52.388	0.044	14.643	0.003		3544.78	59.0797	53.2	12.5	40.3	2.779	0.006	0.006	0.000	0.158	0.13	
2854	9/1/2004	6:59:09 PM		25.664	25.82	24.593	26.547	25.459		49.228	54.067	18.733	31.517	-1.212	-6.423		52.228	0.044	14.643	0.003		3545.78	59.0964	52.9	12.4	40.4	2.784	0.006	0.006	0.000	0.158	0.13	
2855	9/1/2004	7:00:09 PM		25.664	25.809	24.597	26.452	25.484		49.666	54.484	18.411	32.17	-1.212	-6.42		48.773	0.044	14.643	0.003		3546.78	59.1131	53.4	11.6	40.9	2.821	0.006	0.006	0.000	0.156	0.13	
2856	9/1/2004	7:01:09 PM		25.662	25.807	24.626	26.445	25.502		49.438	54.273	18.68	31.868	-1.215	-6.417		48.17	0.044	14.643	0.003		3547.78	59.1297	53.1	11.5	40.7	2.803	0.006	0.006	0.000	0.157	0.13	
2857	9/1/2004	7:02:09 PM		25.667	25.807	24.661	26.425	25.522		49.793	54.571	18.589	32.188	-1.212	-6.417		51.658	0.044	14.643	0.003		3548.78	59.1464	53.4	12.3	41.0	2.826	0.006	0.006	0.000	0.155	0.13	
2858	9/1/2004	7:03:09 PM		25.655	25.795	24.639	26.398	25.48		49.828	54.722	18.462	32.356	-1.212	-6.411		50.665	0.045	14.643	0.003		3549.78	59.1631	53.6	12.1	41.1	2.833	0.006	0.007	0.000	0.158	0.13	
2859	9/1/2004	7:04:09 PM		25.669	25.794	24.688	26.367	25.459		49.867	54.689	18.28	32.709	-1.212	-6.405		48.942	0.045	14.643	0.004		3550.78	59.1797	53.6	11.7	41.3	2.847	0.006	0.006	0.000	0.157	0.13	
2860	9/1/2004	7:05:09 PM		25.658	25.789	24.762	26.336	25.433		49.195	54.034	18.421	31.944	-1.215	-6.417		50.884	0.044	14.643	0.003		3551.78	59.1964	52.9	12.1	40.6	2.797	0.006	0.006	0.000	0.156	0.13	
2861	9/1/2004	7:06:09 PM		25.663	25.783	24.762	26.336	25.448		49.311	54.231	18.711	31.636	-1.215	-6.417		49.209	0.044	14.643	0.003		3552.78	59.2131	53.1	11.7	40.5	2.791	0.006	0.006	0.000	0.157	0.13	
2862	9/1/2004	7:07:09 PM		25.688	25.798	24.787	26.406	25.488		49.732	54.53	18.894	31.811	-1.209	-6.408		50.029	0.044	14.643	0.003		3553.78	59.2297	53.4	11.9	40.8	2.811	0.006	0.006	0.000	0.155	0.13	
2863	9/1/2004	7:08:09 PM		25.673	25.788	24.736	26.416	25.428		49.533	54.31	18.624	31.903	-1.215	-6.414		49.745	0.044	14.643	0.003		3554.78	59.2464	53.2	11.8	40.7	2.807	0.006	0.006	0.000	0.156	0.13	
2864	9/1/2004	7:09:09 PM		25.668	25.784	24.737	26.411	25.568		49.226	54.204	18.356	31.852	-1.218	-6.414		51.289	0.044	14.643	0.003		3555.78	59.2631	53.1	12.2	40.5	2.795	0.006	0.006	0.000	0.157	0.13	
2865	9/1/2004	7:10:09 PM		25.674	25.789	24.733	26.487	25.579		49.508	54.391	18.57	31.927	-1.218	-6.408		51.159	0.045	14.643	0.003		3556.78	59.2797	53.3	12.2	40.7	2.807	0.006	0.006	0.000	0.159	0.14	
2866	9/1/2004	7:11:09 PM		25.695	25.8	24.759	26.548	25.585		49.564	54.459	18.676	31.802	-1.212	-6.417		51.366	0.044	14.643	0.003		3557.78	59.2964	53.3	12.2	40.7	2.805	0.006	0.006	0.000	0.156	0.13	
2867	9/1/2004	7:12:09 PM		25.706	25.801	24.755	26.589	25.641		49.436	54.335	18.422	31.977	-1.212	-6.402		50.2	0.045	14.643	0.004		3558.78	59.3131	53.2	12.0	40.7	2.807	0.006	0.006	0.000	0.159	0.14	
2868	9/1/2004	7:13:09 PM		25.716	25.817	24.755	26.654	25.696		49.537	54.571	18.389	32.159	-1.212	-6.402		51.998	0.044	14.643	0.003		3559.78	59.3297	53.4	12.4	40.8	2.816	0.006	0.006	0.000	0.155	0.13	
2869	9/1/2004	7:14:09 PM		25.713	25.813	24.747	26.631	25.668		49.49	54.324	18.417	32.069	-1.212	-6.405		50.728	0.044	14.643	0.003		3560.78	59.3464	53.2	12.1	40.8	2.812	0.006	0.006	0.000	0.156	0.13	
2870	9/1/2004	7:15:09 PM		25.714	25.815	24.733	26.667	25.614		49.492	54.469	18.298	32.192	-1.212	-6.405		50.467	0.044	14.643	0.003		3561.78	59.3631	53.3	12.0	40.8	2.816	0.006	0.006	0.000	0.155	0.13	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2871	9/1/2004	7:16:09 PM		25.726	25.826	24.74	26.699	25.671		49.268	54.302	18.444	31.743	-1.215	-6.405		50.53	0.044	14.643	0.003		3562.78	59.3797	53.2	12.0	40.5	2.793	0.006	0.006	0.000	0.157	0.13	
2872	9/1/2004	7:17:09 PM		25.733	25.843	24.757	26.726	25.808		49.407	54.459	18.645	31.687	-1.212	-6.396		50.085	0.045	14.643	0.003		3563.78	59.3964	53.3	11.9	40.5	2.796	0.006	0.006	0.000	0.160	0.14	
2873	9/1/2004	7:18:09 PM		25.724	25.829	24.713	26.742	25.799		49.481	54.436	18.511	32.012	-1.215	-6.405		54.357	0.044	14.643	0.003		3564.78	59.4131	53.3	12.9	40.7	2.809	0.006	0.006	0.000	0.156	0.13	
2874	9/1/2004	7:19:09 PM		25.74	25.846	24.734	26.728	25.8		49.152	54.144	18.17	32.081	-1.215	-6.399		50.286	0.045	14.643	0.003		3565.78	59.4297	53.0	12.0	40.6	2.800	0.006	0.006	0.000	0.160	0.14	
2875	9/1/2004	7:20:09 PM		25.725	25.841	24.719	26.683	25.655		49.597	54.683	18.593	31.911	-1.215	-6.396		50.744	0.045	14.643	0.003		3566.78	59.4464	53.6	12.1	40.8	2.810	0.006	0.006	0.000	0.159	0.14	
2876	9/1/2004	7:21:09 PM		25.735	25.846	24.704	26.628	25.56		49.676	54.635	18.406	32.246	-1.215	-6.399		51.312	0.044	14.643	0.003		3567.78	59.4631	53.5	12.2	41.0	2.824	0.006	0.006	0.000	0.155	0.13	
2877	9/1/2004	7:22:09 PM		25.73	25.84	24.714	26.578	25.56		49.174	54.044	18.44	31.646	-1.212	-6.402		50.965	0.044	14.643	0.003		3568.78	59.4797	52.9	12.1	40.4	2.786	0.006	0.006	0.000	0.157	0.13	
2878	9/1/2004	7:23:09 PM		25.724	25.839	24.693	26.497	25.474		49.139	53.931	18.482	31.72	-1.215	-6.402		49.307	0.044	14.643	0.003		3569.78	59.4964	52.8	11.7	40.4	2.787	0.006	0.006	0.000	0.157	0.13	
2879	9/1/2004	7:24:09 PM		25.729	25.844	24.718	26.422	25.454		49.61	54.579	18.514	32.098	-1.212	-6.399		52.184	0.044	14.643	0.003		3570.78	59.5131	53.5	12.4	40.9	2.817	0.006	0.006	0.000	0.155	0.13	
2880	9/1/2004	7:25:09 PM		25.723	25.843	24.702	26.441	25.478		49.649	54.648	18.322	32.404	-1.215	-6.399		50.125	0.044	14.643	0.003		3571.78	59.5297	53.5	11.9	41.0	2.829	0.006	0.006	0.000	0.155	0.13	
2881	9/1/2004	7:26:09 PM		25.722	25.848	24.721	26.48	25.393		49.419	54.347	18.235	32.196	-1.215	-6.396		50.169	0.044	14.643	0.003		3572.78	59.5464	53.2	11.9	40.8	2.814	0.006	0.006	0.000	0.156	0.13	
2882	9/1/2004	7:27:09 PM		25.717	25.833	24.711	26.42	25.393		49.498	54.442	18.552	31.856	-1.212	-6.396		51.339	0.044	14.643	0.003		3573.78	59.5631	53.3	12.2	40.7	2.805	0.006	0.006	0.000	0.156	0.13	
2883	9/1/2004	7:28:09 PM		25.717	25.832	24.695	26.375	25.397		49.44	54.447	17.994	32.313	-1.215	-6.396		50.442	0.044	14.643	0.003		3574.78	59.5797	53.3	12.0	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2884	9/1/2004	7:29:09 PM		25.721	25.836	24.745	26.369	25.336		49.608	54.556	18.389	32.147	-1.212	-6.391		48.828	0.044	14.643	0.003		3575.78	59.5964	53.4	11.6	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2885	9/1/2004	7:30:09 PM		25.699	25.81	24.698	26.312	25.37		49.419	54.413	18.354	31.944	-1.212	-6.394		51.504	0.044	14.643	0.003		3576.78	59.6131	53.3	12.3	40.7	2.805	0.006	0.006	0.000	0.156	0.13	
2886	9/1/2004	7:31:09 PM		25.698	25.808	24.717	26.261	25.238		49.251	54.204	18.387	31.891	-1.212	-6.388		49.47	0.044	14.643	0.003		3577.78	59.6297	53.1	11.8	40.6	2.797	0.006	0.006	0.000	0.157	0.13	
2887	9/1/2004	7:32:09 PM		25.691	25.802	24.71	26.249	25.182		48.977	53.93	18.193	31.839	-1.212	-6.388		48.485	0.044	14.643	0.003		3578.78	59.6464	52.8	11.5	40.4	2.786	0.006	0.006	0.000	0.157	0.13	
2888	9/1/2004	7:33:09 PM		25.696	25.807	24.725	26.279	25.182		49.496	54.451	18.349	32.285	-1.212	-6.388		50.676	0.044	14.643	0.003		3579.78	59.6631	53.3	12.1	40.9	2.819	0.006	0.006	0.000	0.155	0.13	
2889	9/1/2004	7:34:09 PM		25.686	25.796	24.719	26.244	25.271		49.367	54.48	18.415	31.983	-1.215	-6.388		50.261	0.044	14.643	0.003		3580.78	59.6797	53.4	12.0	40.7	2.804	0.006	0.006	0.000	0.156	0.13	
2890	9/1/2004	7:35:09 PM		25.696	25.797	24.715	26.309	25.317		49.218	54.273	17.983	32.326	-1.215	-6.391		50.24	0.044	14.643	0.003		3581.78	59.6964	53.1	12.0	40.8	2.811	0.006	0.006	0.000	0.156	0.13	
2891	9/1/2004	7:36:09 PM		25.696	25.806	24.755	26.319	25.261		49.094	54.129	18.218	31.694	-1.212	-6.385		52.015	0.044	14.643	0.003		3582.78	59.7131	53.0	12.4	40.4	2.785	0.006	0.006	0.000	0.157	0.13	
2892	9/1/2004	7:37:09 PM		25.691	25.802	24.74	26.369	25.307		49.745	54.648	18.195	32.519	-1.212	-6.388		50.686	0.044	14.643	0.003		3583.78	59.7297	53.5	12.1	41.1	2.836	0.006	0.006	0.000	0.154	0.13	
2893	9/1/2004	7:38:09 PM		25.671	25.786	24.729	26.364	25.311		49.569	54.523	18.392	32.176	-1.218	-6.388		50.663	0.044	14.643	0.003		3584.78	59.7464	53.4	12.1	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2894	9/1/2004	7:39:09 PM		25.681	25.801	24.755	26.384	25.361		49.268	54.194	18.389	31.88	-1.212	-6.382		50.502	0.044	14.643	0.003		3585.78	59.7631	53.1	12.0	40.6	2.797	0.006	0.006	0.000	0.156	0.13	
2895	9/1/2004	7:40:09 PM		25.681	25.796	24.729	26.434	25.411		49.4	54.254	18.087	32.336	-1.212	-6.385		50.421	0.044	14.643	0.003		3586.78	59.7797	53.1	12.0	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2896	9/1/2004	7:40:51 PM		25.691	25.817	24.77	26.444	25.377		49.678	54.724	18.368	32.307	-1.212	-6.382		50.042	0.044	14.643	0.003		3587.48	59.7914	53.6	11.9	41.0	2.826	0.006	0.006	0.000	0.155	0.13	
2897	9/1/2004	7:41:51 PM		25.692	25.812	24.776	26.445	25.402		49.537	54.523	18.339	32.008	-1.215	-6.385		49.904	0.044	14.643	0.003		3588.48	59.8081	53.4	11.9	40.8	2.811	0.006	0.006	0.000	0.155	0.13	
2898	9/1/2004	7:42:51 PM		25.693	25.828	24.757	26.511	25.388		49.486	54.37	18.166	32.393	-1.212	-6.379		51.137	0.045	14.643	0.003		3589.48	59.8247	53.2	12.2	40.9	2.823	0.006	0.006	0.000	0.158	0.13	
2899	9/1/2004	7:43:51 PM		25.689	25.819	24.773	26.482	25.374		49.289	54.185	18.171	32.149	-1.221	-6.385		50.596	0.044	14.643	0.003		3590.48	59.8414	53.1	12.1	40.7	2.807	0.006	0.006	0.000	0.156	0.13	
2900	9/1/2004	7:44:51 PM		25.69	25.835	24.774	26.533	25.4		49.598	54.673	18.128	32.465	-1.212	-6.382		49.843	0.044	14.643	0.003		3591.48	59.8581	53.5	11.9	41.0	2.829	0.006	0.006	0.000	0.155	0.13	
2901	9/1/2004	7:45:51 PM		25.686	25.826	24.785	26.514	25.501		49.092	54.047	18.099	32.047	-1.215	-6.376		50.354	0.044	14.643	0.003		3592.48	59.8747	52.9	12.0	40.6	2.797	0.006	0.006	0.000	0.156	0.13	
2902	9/1/2004	7:46:51 PM		25.702	25.848	24.801	26.5	25.512		49.537	54.393	18.499	31.979	-1.215	-6.376		49.109	0.044	14.643	0.003		3593.48	59.8914	53.3	11.7	40.8	2.810	0.006	0.006	0.000	0.155	0.13	
2903	9/1/2004	7:47:51 PM		25.698	25.843	24.772	26.461	25.428		49.569	54.484	18.206	32.428	-1.215	-6.379		50.951	0.044	14.643	0.003		3594.48	59.9081	53.4	12.1	41.0	2.827	0.006	0.006	0.000	0.155	0.13	
2904	9/1/2004	7:48:51 PM		25.698	25.843	24.797	26.406	25.478		49.842	54.637	18.419	32.467	-1.212	-6.376		50.594	0.044	14.643	0.003		3595.48	59.9247	53.5	12.1	41.2	2.837	0.006	0.006	0.000	0.154	0.13	
2905	9/1/2004	7:49:51 PM		25.703	25.848	24.802	26.391	25.363		49.535	54.629	17.961	32.57	-1.212	-6.376		51.71	0.044	14.643	0.003		3596.48	59.9414	53.5	12.3	41.1	2.830	0.006	0.006	0.000	0.154	0.13	
2906	9/1/2004	7:50:51 PM		25.697	25.843	24.806	26.305	25.293		49.415	54.42	18.151	32.346	-1.212	-6.376		51.366	0.044	14.643	0.003		3597.48	59.9581	53.3	12.2	40.9	2.819	0.006	0.006	0.000	0.155	0.13	
2907	9/1/2004	7:51:51 PM		25.692	25.827	24.801	26.25	25.197		49.185	53.968	17.732	32.693	-1.215	-6.376		52.006	0.044	14.643	0.003		3598.48	59.9747	52.8	12.4	40.9	2.823	0.006	0.006	0.000	0.155	0.13	
2908	9/1/2004	7:52:51 PM		25.685	25.83	24.784	26.268	25.185		49.291	54.337	18.257	31.94	-1.212	-6.37		50.315	0.044	14.643	0.003		3599.48	59.9914	53.2	12.0	40.6	2.800	0.006	0.006	0.000	0.156	0.13	
2909	9/1/2004	7:53:51 PM		25.685	25.835	24.934	26.193	25.08		48.998	54.134	18.468	31.529	-1.212	-6.373		50.025	0.044	14.643	0.003		3600.48	60.0081	53.0	11.9	40.3	2.776	0.006	0.006	0.000	0.157	0.13	
2910	9/1/2004	7:54:51 PM		25.684	25.819	24.888	26.187	25.119		49.226	54.194	18.532	31.595	-1.212	-6.376		51.596	0.044	14.643	0.003		3601.48	60.0247	53.1	12.3	40.4	2.786	0.006	0.006	0.000	0.156	0.13	
2911	9/1/2004	7:55:51 PM		25.678	25.813	24.877	26.091	25.048		49.16	54.063	18.535	31.677	-1.215	-6.376		49.487	0.044	14.643	0.003		3602.48	60.0414	52.9	11.8	40.4	2.787	0.006	0.006	0.000	0.156	0.13	
2912	9/1/2004	7:56:51 PM		25.682	25.807	24.861	26.045	25.002		49.259	54.016	18.517	31.786	-1.215	-6.379		53.229	0.043	14.643	0.003		3603.48	60.0581	52.9	12.7	40.5	2.794	0.006	0.006	0.000	0.153	0.13	
2913	9/1/2004	7:57:51 PM		25.681	25.801	24.825	26.059	25.066		49.253	54.366	18.62	31.62	-1.209	-6.37		50.369	0.044	14.643	0.004		3604.48	60.0747	53.2	12.0	40.4	2.788	0.006	0.006	0.000	0.157	0.13	
2914	9/1/2004	7:58:51 PM		25.669	25.789	24.818	26.007	25.169		49.355	54.436	18.541	31.691	-1.218	-6.376		50.767	0.043	14.643	0.003		3605.48	60.0914	53.3	12.1	40.5	2.794	0.006	0.006	0.000	0.153	0.13	
2915	9/1/2004	7:59:51 PM		25.678	25.793	24.797	26.051	25.118		49.226	54.229	18.398	31.845	-1.212	-6.37		49.57	0.044	14.643	0.003		3606.48	60.1081	53.1	11.8	40.5	2.795	0.006	0.006	0.000	0.156	0.13	
2916	9/1/2004	8:00:51 PM		25.671	25.786	24.78	26.094	25.156		49.284	54.463	18.403	31.626	-1.212	-6.365		51.109	0.044	14.643	0.003		3607.48	60.1247	53.3	12.2	40.5	2.789	0.006	0.006	0.000	0.157	0.13	
2917	9/1/2004	8:01:51 PM		25.671	25.781	24.78	26.114	25.156		49.486	54.53	18.122	32.348	-1.212	-6.365		49.691	0.044	14.643	0.003		3608.48	60.1414	53.4	11.8	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
2918	9/1/2004	8:02:51 PM		25.671	25.781	24.755	26.179	25.216		49.463	54.529	18.303	32.096	-1.209	-6.365		51.604	0.044	14.643	0.004		3609.48	60.1581	53.4	12.3	40.8	2.812	0.006	0.006	0.000	0.156	0.13	
2919	9/1/2004	8:03:51 PM		25.655	25.78	24.764	26.163	25.185		49.359	54.48	18.277	31.96	-1.212	-6.365		51.716	0.044	14.643	0.003		3610.48	60.1747	53.4	12.3	40.7	2.803	0.006	0.006	0.000	0.156	0.13	
2920	9/1/2004	8:04:51 PM		25.665	25.78	24.754	26.233	25.255		49.322	54.227	18.15	32.114	-1.209	-6.362		52.407	0.044	14.643	0.004		3611.48	60.1914	53.1	12.5	40.7	2.807	0.006	0.006	0.000	0.156	0.13	
2921	9/1/2004	8:05:51 PM		25.66	25.78	24.733	26.233	25.315		49.191	54.283	18.128	32.278	-1.212	-6.362		48.919	0.044	14.643	0.003		3612.48	60.2081	53.2	11.7	40.7	2.809	0.006	0.006	0.000	0.156	0.13	
2922	9/1/2004	8:06:51 PM		25.648	25.773	24.732	26.201	25.223		49.554	54.772	18.33	32.244	-1.215	-6.368		49.793	0.044	14.643	0.004		3613.48	60.2247	53.6	11.9	40.9	2.820	0.006	0.006	0.000	0.155	0.13	
2923	9/1/2004	8:07:51 PM		25.644	25.779	24.708	26.222	25.189		49.624	54.728	18.244	32.5	-1.218	-6.368		50.384	0.044	14.643	0.003		3614.48	60.2414	53.6	12.0	41.1	2.831	0.006	0.006	0.000	0.155	0.13	
2924	9/1/2004	8:08:51 PM		25.648	25.788	24.732	26.251	25.213		49.475	54.538	18.325	32.207	-1.212	-6.362		51.408	0.044	14.643	0.003		3615.48	60.2581	53.4	12.2	40.8	2.816	0.006	0.006	0.000	0.155	0.13	
2925	9/1/2004	8:09:51 PM		25.649	25.794	24.718	26.272	25.329		49.176	54.212	18.09	32.165	-1.212	-6.362		51.107	0.044	14.643	0.003		3616.48	60.2747	53.1	12.2	40.7	2.804	0.006	0.006	0.000	0.156	0.13	
2926	9/1/2004	8:10:51 PM		25.634	25.784	24.693	26.277	25.274		49.338	54.239	18.188	32.25	-1.215	-6.362		49.391	0.044	14.643	0.003		3617.48	60.2914	53.1	11.8	40.8	2.813	0.006	0.006	0.000	0.156	0.13	
2927	9/1/2004	8:11:51 PM		25.629	25.779	24.708	26.282	25.294		49.517	54.758	18.12	32.272	-1.215	-6.356		50.836	0.044	14.643	0.003		3618.48	60.3081	53.6	12.1	40.9	2.820	0.006	0.006	0.000	0.155	0.13	
2928	9/1/2004	8:12:51 PM		25.639	25.804	24.718	26.332	25.324		49.371	54.449	18.336	31.821	-1.212	-6.353		50.417	0.044	14.643	0.003		3619.48	60.3247	53.3	12.0	40.6	2.799	0.006	0.006	0.000	0.156	0.13	
2929	9/1/2004	8:13:51 PM		25.63	25.79	24.703	26.318	25.285		49.268	54.449	18.239	32.01	-1.218	-6.362		51.8	0.044	14.643	0.003		3620.48	60.3414	53.3	12.3	40.6	2.802	0.006	0.006	0.000	0.156	0.13	
2930	9/1/2004	8:14:51 PM		25.641	25.816	24.72	26.349	25.286		49.564	54.635	18.333	32.204	-1.212	-6.356		50.073	0.044	14.643	0.003		3621.48	60.3581	53.5	11.9	40.9	2.819	0.006	0.006	0.000	0.155	0.13	
2931	9/1/2004	8:15:51 PM		25.631	25.811	24.68	26.379	25.316		49.096	54.393	18.103	31.921	-1.215	-6.356		53.099	0.044	14.643	0.003		3622.48	60.3747	53.3	12.6	40.5	2.793	0.006	0.006	0.000	0.157	0.13	
2932	9/1/2004	8:16:51 PM		25.648	25.828	24.731	26.346	25.288		49.125	54.297	18.054	32.007	-1.212	-6.35		50.976	0.044	14.643	0.003		3623.48	60.3914	53.2	12.1	40.6	2.797	0.006	0.006	0.000	0.156	0.13	
2933	9/1/2004	8:17:51 PM		25.623	25.808	24.681	26.291	25.233		49.087	54.188	18.008	32.061	-1.212	-6.353		51.268	0.044	14.643	0.003		3624.48	60.4081	53.1	12.2	40.6	2.797	0.006	0.006	0.000	0.157	0.13	
2934	9/1/2004	8:18:51 PM		25.623	25.814	24.697	26.241	25.149		49.473	54.625	18.047	32.406	-1.215	-6.359		51.468	0.044	14.643	0.003		3625.48	60.4247	53.5	12.3	40.9	2.823	0.006	0.006	0.000	0.155	0.13	
2935	9/1/2004	8:19:51 PM		25.628	25.818	24.706	26.231	25.148		49.732	54.826	18.362	32.379	-1.2	-6.353		48.39	0.044	14.643	0.003		3626.48	60.4414	53.7	11.5	41.1	2.831	0.006	0.006	0.000	0.155	0.13	
2936	9/1/2004	8:20:51 PM		25.608	25.798	24.656	26.166	25.088		49.349	54.5	17.838	32.41	-1.154	-6.35		50.859	0.044	14.643	0.003		3627.48	60.4581	53.4	12.1	40.9	2.818	0.006	0.006	0.000	0.156	0.13	
2937	9/1/2004	8:21:51 PM		25.602	25.792	24.676	26.07	25.012		49.556	54.749	18.091	32.381	-1.174	-6.347		51.103	0.044	14.643	0.003		3628.48	60.4747	53.6	12.2	41.0	2.825	0.006	0.006	0.000	0.155	0.13	
2938	9/1/2004	8:22:51 PM		25.59	25.786	24.654	26.063	25.006		49.732	54.971	18.199	32.373	-1.18	-6.342		51.199	0.045	14.643	0.003		3629.48	60.4914	53.8	12.2	41.1	2.830	0.006	0.007	0.000	0.158	0.13	
2939	9/1/2004	8:23:51 PM		25.6	25.795	24.693	26.002	24.985		49.718	54.83	18.023	32.697	-1.169	-6.344		50.188	0.044	14.643	0.004		3630.48	60.5081	53.7	12.0	41.2	2.841	0.006	0.006	0.000	0.154	0.13	
2940	9/1/2004	8:24:51 PM		25.582	25.768	24.651	25.955	24.888		49.45	54.573	18.076	32.307	-1.154	-6.347		50.867	0.044	14.643	0.003		3631.48	60.5247	53.4	12.1	40.9	2.818	0.006	0.006	0.000	0.156	0.13	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
2941	9/1/2004	8:25:51 PM		25.57	25.76	24.654	25.953	24.97		49.456	54.449	18.069	32.387	-1.148	-6.347		50.269	0.044	14.643	0.003		3632.48	60.5414	53.3	12.0	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
2942	9/1/2004	8:26:51 PM		25.564	25.76	24.648	25.962	24.965		49.442	54.505	17.761	32.779	-1.151	-6.342		51.22	0.044	14.643	0.003		3633.48	60.5581	53.4	12.2	41.1	2.834	0.006	0.006	0.000	0.155	0.13	
2943	9/1/2004	8:27:51 PM		25.563	25.753	24.632	25.996	25.053		49.477	54.617	18.084	32.377	-1.148	-6.344		50.772	0.044	14.643	0.003		3634.48	60.5747	53.5	12.1	40.9	2.822	0.006	0.006	0.000	0.156	0.13	
2944	9/1/2004	8:28:51 PM		25.562	25.757	24.661	26	25.127		49.071	54.188	17.822	32.166	-1.151	-6.347		50.546	0.044	14.643	0.003		3635.48	60.5914	53.1	12.0	40.6	2.801	0.006	0.006	0.000	0.157	0.13	
2945	9/1/2004	8:29:51 PM		25.561	25.751	24.654	26.024	25.106		49.929	54.992	18.091	32.715	-1.148	-6.347		50.525	0.044	14.643	0.003		3636.48	60.6081	53.9	12.0	41.3	2.849	0.006	0.006	0.000	0.154	0.13	
2946	9/1/2004	8:30:51 PM		25.556	25.746	24.669	26.019	25.176		49.357	54.434	18.102	32.207	-1.151	-6.35		51.771	0.044	14.643	0.003		3637.48	60.6247	53.3	12.3	40.8	2.812	0.006	0.006	0.000	0.156	0.13	
2947	9/1/2004	8:31:51 PM		25.556	25.757	24.675	26.074	25.227		49.257	54.339	17.99	32.182	-1.145	-6.347		51.124	0.044	14.643	0.004		3638.48	60.6414	53.2	12.2	40.7	2.807	0.006	0.006	0.000	0.156	0.13	
2948	9/1/2004	8:32:51 PM		25.541	25.747	24.65	26.099	25.227		49.705	54.799	17.936	32.754	-1.145	-6.35		49.631	0.044	14.643	0.003		3639.48	60.6581	53.7	11.8	41.2	2.843	0.006	0.006	0.000	0.154	0.13	
2949	9/1/2004	8:33:51 PM		25.552	25.752	24.691	26.08	25.237		49.612	54.563	18.064	32.484	-1.148	-6.344		52.77	0.044	14.643	0.003		3640.48	60.6747	53.4	12.6	41.0	2.830	0.006	0.006	0.000	0.155	0.13	
2950	9/1/2004	8:34:51 PM		25.547	25.747	24.666	26.115	25.207		49.363	54.459	17.966	32.463	-1.151	-6.347		49.458	0.044	14.643	0.003		3641.48	60.6914	53.3	11.8	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
2951	9/1/2004	8:35:51 PM		25.542	25.742	24.681	26.13	25.237		49.537	54.758	17.895	32.72	-1.148	-6.347		50.853	0.044	14.643	0.003		3642.48	60.7081	53.6	12.1	41.1	2.836	0.006	0.006	0.000	0.155	0.13	
2952	9/1/2004	8:36:51 PM		25.563	25.763	24.707	26.191	25.233		49.206	54.453	17.905	32.25	-1.143	-6.339		51.839	0.044	14.643	0.004		3643.48	60.7247	53.3	12.3	40.7	2.808	0.006	0.006	0.000	0.156	0.13	
2953	9/1/2004	8:37:51 PM		25.548	25.748	24.677	26.201	25.283		49.736	55.008	17.953	32.603	-1.145	-6.344		50.747	0.044	14.643	0.003		3644.48	60.7414	53.9	12.1	41.2	2.838	0.006	0.006	0.000	0.154	0.13	
2954	9/1/2004	8:38:51 PM		25.544	25.749	24.697	26.222	25.359		49.237	54.459	17.892	32.213	-1.145	-6.342		50.352	0.044	14.643	0.004		3645.48	60.7581	53.3	12.0	40.7	2.808	0.006	0.006	0.000	0.156	0.13	
2955	9/1/2004	8:39:51 PM		25.549	25.755	24.678	26.227	25.345		49.714	54.787	18	32.662	-1.128	-6.342		49.161	0.044	14.643	0.003		3646.48	60.7747	53.7	11.7	41.2	2.840	0.006	0.006	0.000	0.154	0.13	
2956	9/1/2004	8:40:51 PM		25.55	25.755	24.709	26.213	25.29		49.604	54.791	18.012	32.636	-1.151	-6.342		49.956	0.044	14.643	0.003		3647.48	60.7914	53.7	11.9	41.1	2.835	0.006	0.006	0.000	0.154	0.13	
2957	9/1/2004	8:41:51 PM		25.561	25.771	24.725	26.274	25.356		49.662	54.728	18.009	32.703	-1.143	-6.336		49.045	0.044	14.643	0.003		3648.48	60.8081	53.6	11.7	41.2	2.839	0.006	0.006	0.000	0.154	0.13	
2958	9/1/2004	8:42:51 PM		25.552	25.752	24.69	26.26	25.337		49.494	54.681	17.854	32.677	-1.105	-6.339		51.168	0.044	14.643	0.003		3649.48	60.8247	53.6	12.2	41.1	2.833	0.006	0.006	0.000	0.155	0.13	
2959	9/1/2004	8:43:51 PM		25.557	25.757	24.71	26.255	25.382		49.38	54.635	18.058	32.266	-1.096	-6.336		50.069	0.044	14.643	0.003		3650.48	60.8414	53.5	11.9	40.8	2.815	0.006	0.006	0.000	0.156	0.13	
2960	9/1/2004	8:44:51 PM		25.558	25.768	24.717	26.296	25.333		49.403	54.671	17.686	32.732	-1.096	-6.336		51.022	0.044	14.643	0.004		3651.48	60.8581	53.5	12.2	41.1	2.831	0.006	0.006	0.000	0.155	0.13	
2961	9/1/2004	8:45:51 PM		25.549	25.759	24.718	26.242	25.219		49.407	54.643	17.989	32.332	-1.143	-6.336		49.82	0.044	14.643	0.003		3652.48	60.8747	53.5	11.9	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2962	9/1/2004	8:46:51 PM		25.554	25.764	24.723	26.222	25.059		49.096	54.391	17.76	32.336	-1.09	-6.336		51.11	0.044	14.643	0.003		3653.48	60.8914	53.3	12.2	40.7	2.807	0.006	0.006	0.000	0.156	0.13	
2963	9/1/2004	8:47:51 PM		25.544	25.744	24.698	26.112	25.114		49.174	54.422	17.99	32.155	-1.105	-6.339		50.738	0.044	14.643	0.003		3654.48	60.9081	53.3	12.1	40.7	2.804	0.006	0.006	0.000	0.156	0.13	
2964	9/1/2004	8:48:51 PM		25.549	25.759	24.733	26.092	25.149		49.359	54.583	18	32.332	-1.128	-6.336		50.799	0.044	14.643	0.004		3655.48	60.9247	53.5	12.1	40.8	2.816	0.006	0.006	0.000	0.155	0.13	
2965	9/1/2004	8:49:51 PM		25.537	25.742	24.701	26.08	25.038		49.598	54.685	18.192	32.443	-1.093	-6.342		50.523	0.044	14.643	0.003		3656.48	60.9414	53.6	12.0	41.0	2.828	0.006	0.006	0.000	0.155	0.13	
2966	9/1/2004	8:50:51 PM		25.536	25.736	24.715	25.949	24.976		49.409	54.565	17.973	32.319	-1.096	-6.339		49.943	0.044	14.643	0.003		3657.48	60.9581	53.4	11.9	40.9	2.817	0.006	0.006	0.000	0.155	0.13	
2967	9/1/2004	8:51:51 PM		25.544	25.744	24.732	25.951	24.914		49.56	54.793	18.071	32.455	-1.088	-6.33		50.444	0.044	14.643	0.004		3658.48	60.9747	53.7	12.0	41.0	2.827	0.006	0.006	0.000	0.155	0.13	
2968	9/1/2004	8:52:51 PM		25.543	25.738	24.752	25.936	24.953		49.334	54.625	18.014	32.272	-1.09	-6.333		48.763	0.044	14.643	0.003		3659.48	60.9914	53.5	11.6	40.8	2.813	0.006	0.006	0.000	0.155	0.13	
2969	9/1/2004	8:53:51 PM		25.542	25.737	24.746	25.91	25.007		49.525	54.726	18.072	32.319	-1.09	-6.327		51.718	0.044	14.643	0.003		3660.48	61.0081	53.6	12.3	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
2970	9/1/2004	8:54:51 PM		25.536	25.732	24.73	25.954	24.892		49.747	54.855	17.937	32.66	-1.093	-6.33		50.769	0.044	14.643	0.003		3661.48	61.0247	53.7	12.1	41.2	2.841	0.006	0.006	0.000	0.154	0.13	
2971	9/1/2004	8:55:51 PM		25.536	25.731	24.775	25.948	25.021		49.608	54.747	17.892	32.793	-1.088	-6.324		51.839	0.044	14.643	0.004		3662.48	61.0414	53.6	12.3	41.2	2.841	0.006	0.006	0.000	0.154	0.13	
2972	9/1/2004	8:56:51 PM		25.541	25.721	24.739	25.948	25.006		49.378	54.37	17.677	32.859	-1.093	-6.333		50.325	0.044	14.643	0.003		3663.48	61.0581	53.2	12.0	41.1	2.835	0.006	0.006	0.000	0.154	0.13	
2973	9/1/2004	8:57:51 PM		25.529	25.714	24.823	25.937	24.924		49.427	54.567	18.016	32.537	-1.09	-6.33		50.492	0.044	14.643	0.003		3664.48	61.0747	53.4	12.0	41.0	2.826	0.006	0.006	0.000	0.154	0.13	
2974	9/1/2004	8:58:51 PM		25.528	25.724	24.822	25.991	25.009		49.629	54.795	18.185	32.486	-1.088	-6.327		50.842	0.044	14.643	0.003		3665.48	61.0914	53.7	12.1	41.1	2.831	0.006	0.006	0.000	0.154	0.13	
2975	9/1/2004	8:59:51 PM		25.533	25.719	24.802	26.011	25.014		49.359	54.718	18.056	32.283	-1.093	-6.336		49.918	0.043	14.643	0.003		3666.48	61.1081	53.6	11.9	40.8	2.814	0.006	0.006	0.000	0.152	0.13	
2976	9/1/2004	9:00:51 PM		25.539	25.719	24.808	26.037	25.114		49.179	54.252	18.229	31.85	-1.085	-6.327		51.329	0.043	14.643	0.003		3667.48	61.1247	53.1	12.2	40.5	2.793	0.006	0.006	0.000	0.153	0.13	
2977	9/1/2004	9:01:51 PM		25.535	25.715	24.764	26.073	25.07		49.28	54.401	18.122	32.096	-1.073	-6.327		52.121	0.044	14.643	0.003		3668.48	61.1414	53.3	12.4	40.7	2.805	0.006	0.006	0.000	0.156	0.13	
2978	9/1/2004	9:02:51 PM		25.539	25.719	24.793	26.102	25.104		48.911	54.045	17.921	32.044	-1.059	-6.324		51.821	0.044	14.643	0.003		3669.48	61.1581	52.9	12.3	40.5	2.791	0.006	0.006	0.000	0.157	0.13	
2979	9/1/2004	9:03:51 PM		25.546	25.721	24.78	26.104	25.156		49.355	54.598	18.165	32.237	-1.085	-6.324		50.454	0.044	14.643	0.003		3670.48	61.1747	53.5	12.0	40.8	2.813	0.006	0.006	0.000	0.155	0.13	
2980	9/1/2004	9:04:51 PM		25.54	25.715	24.744	26.128	25.11		49.218	54.399	18.166	32.065	-1.041	-6.327		49.797	0.044	14.643	0.003		3671.48	61.1914	53.3	11.9	40.6	2.802	0.006	0.006	0.000	0.156	0.13	
2981	9/1/2004	9:05:09 PM		25.556	25.721	24.765	26.149	25.106		49.309	54.65	18.08	32.278	-1.076	-6.324		51.061	0.044	14.643	0.003		3671.78	61.1964	53.5	12.2	40.8	2.813	0.006	0.006	0.000	0.155	0.13	
2982	9/1/2004	9:06:09 PM		25.551	25.732	24.765	26.154	25.092		49.371	54.6	17.865	32.576	-1.027	-6.318		50.3	0.044	14.643	0.003		3672.78	61.2131	53.5	12.0	41.0	2.825	0.006	0.006	0.000	0.155	0.13	
2983	9/1/2004	9:07:09 PM		25.541	25.722	24.73	26.139	25.162		49.403	54.76	17.969	32.424	-1.053	-6.324		49.528	0.044	14.643	0.003		3673.78	61.2297	53.6	11.8	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
2984	9/1/2004	9:08:09 PM		25.561	25.732	24.77	26.189	25.202		49.371	54.575	17.942	32.525	-1.015	-6.313		50.989	0.044	14.643	0.004		3674.78	61.2464	53.4	12.1	40.9	2.823	0.006	0.006	0.000	0.155	0.13	
2985	9/1/2004	9:09:09 PM		25.547	25.727	24.741	26.215	25.182		49.247	54.527	17.864	32.43	-1.018	-6.318		50.807	0.043	14.643	0.003		3675.78	61.2631	53.4	12.1	40.8	2.816	0.006	0.006	0.000	0.152	0.13	
2986	9/1/2004	9:10:09 PM		25.558	25.743	24.752	26.226	25.153		49.299	54.639	18.13	32.17	-1.018	-6.316		49.545	0.044	14.643	0.003		3676.78	61.2797	53.5	11.8	40.7	2.809	0.006	0.006	0.000	0.156	0.13	
2987	9/1/2004	9:11:09 PM		25.564	25.749	24.747	26.212	25.219		49.299	54.523	18.086	32.317	-1.001	-6.313		50.842	0.044	14.643	0.003		3677.78	61.2964	53.4	12.1	40.8	2.814	0.006	0.006	0.000	0.155	0.13	
2988	9/1/2004	9:12:09 PM		25.544	25.729	24.697	26.192	25.169		49.264	54.443	18.247	32.073	-1.012	-6.318		50.805	0.043	14.643	0.003		3678.78	61.3131	53.3	12.1	40.7	2.804	0.006	0.006	0.000	0.153	0.13	
2989	9/1/2004	9:13:09 PM		25.549	25.739	24.732	26.187	25.249		49.382	54.683	17.932	32.354	-1.001	-6.316		50.697	0.044	14.643	0.003		3679.78	61.3297	53.6	12.1	40.9	2.818	0.006	0.006	0.000	0.155	0.13	
2990	9/1/2004	9:14:09 PM		25.556	25.746	24.715	26.214	25.311		49.759	55.116	18.012	32.711	-1.015	-6.318		48.108	0.043	14.643	0.003		3680.78	61.3464	54.0	11.5	41.2	2.843	0.006	0.006	0.000	0.150	0.13	
2991	9/1/2004	9:15:09 PM		25.556	25.746	24.715	26.254	25.376		49.749	55.135	17.806	32.812	-0.983	-6.304		50.062	0.045	14.643	0.004		3681.78	61.3631	54.0	11.9	41.3	2.846	0.006	0.006	0.000	0.157	0.13	
2992	9/1/2004	9:16:09 PM		25.557	25.747	24.695	26.23	25.402		49.896	55.251	17.584	33.183	-0.989	-6.31		49.535	0.044	14.643	0.003		3682.78	61.3797	54.1	11.8	41.5	2.864	0.006	0.006	0.000	0.153	0.13	
2993	9/1/2004	9:17:09 PM		25.552	25.737	24.67	26.24	25.362		49.616	54.71	17.384	33.206	-0.989	-6.304		50.26	0.044	14.643	0.003		3683.78	61.3964	53.6	12.0	41.4	2.855	0.006	0.006	0.000	0.154	0.13	
2994	9/1/2004	9:18:09 PM		25.551	25.736	24.69	26.199	25.326		49.552	54.629	17.357	33.36	-0.957	-6.31		50.607	0.044	14.643	0.003		3684.78	61.4131	53.5	12.1	41.5	2.858	0.006	0.006	0.000	0.153	0.13	
2995	9/1/2004	9:19:09 PM		25.551	25.731	24.66	26.139	25.246		49.6	54.959	17.206	33.536	-0.989	-6.307		50.25	0.044	14.643	0.003		3685.78	61.4297	53.8	12.0	41.6	2.866	0.006	0.006	0.000	0.153	0.13	
2996	9/1/2004	9:20:09 PM		25.554	25.724	24.663	26.062	25.21		49.772	55.122	17.609	33.14	-0.952	-6.304		50.19	0.044	14.643	0.003		3686.78	61.4464	54.0	12.0	41.5	2.858	0.006	0.006	0.000	0.153	0.13	
2997	9/1/2004	9:21:09 PM		25.559	25.735	24.683	26.027	25.015		49.782	55.185	17.537	33.27	-0.946	-6.298		50.367	0.044	14.643	0.003		3687.78	61.4631	54.1	12.0	41.5	2.863	0.006	0.006	0.000	0.153	0.13	
2998	9/1/2004	9:22:09 PM		25.543	25.713	24.622	25.971	24.933		49.728	54.905	17.528	33.27	-0.975	-6.304		48.755	0.044	14.643	0.003		3688.78	61.4797	53.8	11.6	41.5	2.861	0.006	0.006	0.000	0.153	0.13	
2999	9/1/2004	9:23:09 PM		25.527	25.697	24.646	25.945	24.867		49.753	55.052	17.465	33.179	-0.96	-6.301		48.686	0.044	14.643	0.003		3689.78	61.4964	53.9	11.6	41.5	2.859	0.006	0.006	0.000	0.153	0.13	
3000	9/1/2004	9:24:09 PM		25.531	25.686	24.619	25.968	24.946		49.707	55.12	17.474	33.233	-0.975	-6.301		49.324	0.044	14.643	0.003		3690.78	61.5131	54.0	11.7	41.5	2.859	0.006	0.006	0.000	0.154	0.13	
3001	9/1/2004	9:25:09 PM		25.523	25.678	24.632	25.921	24.939		50.089	55.574	17.498	33.499	-0.96	-6.301		52.495	0.044	14.643	0.003		3691.78	61.5297	54.4	12.5	41.8	2.882	0.006	0.006	0.000	0.152	0.13	
3002	9/1/2004	9:26:09 PM		25.512	25.672	24.626	25.865	24.867		49.68	54.965	17.707	32.886	-0.931	-6.298		50.795	0.044	14.643	0.003		3692.78	61.5464	53.8	12.1	41.3	2.846	0.006	0.006	0.000	0.154	0.13	
3003	9/1/2004	9:27:09 PM		25.505	25.64	24.608	25.867	24.79		49.653	54.932	17.291	33.337	-0.931	-6.295		49.75	0.044	14.643	0.003		3693.78	61.5631	53.8	11.8	41.5	2.861	0.006	0.006	0.000	0.153	0.13	
3004	9/1/2004	9:28:09 PM		25.494	25.639	24.623	25.822	24.744		49.639	54.811	17.202	33.579	-0.931	-6.298		50.888	0.044	14.643	0.003		3694.78	61.5797	53.7	12.1	41.6	2.869	0.006	0.006	0.000	0.153	0.13	
3005	9/1/2004	9:29:09 PM		25.493	25.622	24.606	25.835	24.903		49.948	55.423	17.393	33.481	-0.931	-6.29		49.549	0.044	14.643	0.003		3695.78	61.5964	54.3	11.8	41.7	2.876	0.006	0.006	0.000	0.153	0.13	
3006	9/1/2004	9:30:09 PM		25.485	25.605	24.634	25.763	24.826		50.008	55.394	17.453	33.54	-0.928	-6.29		50.336	0.044	14.643	0.003		3696.78	61.6131	54.3	12.0	41.8	2.880	0.006	0.006	0.000	0.152	0.13	
3007	9/1/2004	9:31:09 PM		25.474	25.594	24.617	25.731	24.844		49.071	54.355	18.419	31.558	-0.986	-6.301		51.299	0.043	14.643	0.003		3697.78	61.6297	53.2	12.2	40.3	2.780	0.006	0.006	0.000	0.154	0.13	
3008	9/1/2004	9:32:09 PM		25.466	25.571	24.639	25.698	24.741		48.733	54.072	17.877	31.87	-0.957	-6.301		51.354	0.042	14.643	0.003		3698.78	61.6464	52.9	12.2	40.3	2.779	0.006	0.006	0.000	0.151	0.13	
3009	9/1/2004	9:33:09 PM		25.475	25.58	24.669	25.738	24.695		49.139	54.563	18.454	31.55	-0.928	-6.298		51.011	0.043	14.643	0.003		3699.78	61.6631	53.4	12.1	40.3	2.782	0.006	0.006	0.000	0.154	0.13	
3010	9/1/2004	9:34:09 PM		25.47	25.575	24.679	25.763	24.75		49.067	54.225	18.59	31.589	-0.983	-6.301		50.74	0.042	14.643	0.003		3700.78	61.6797	53.1	12.1	40.3	2.780	0.006	0.006	0.000	0.150	0.13	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3011	9/1/2004	9:35:09 PM		25.444	25.559	24.698	25.777	24.87		48.917	54.25	18.156	31.767	-0.923	-6.295		50.857	0.043	14.643	0.004		3701.78	61.6964	53.1	12.1	40.3	2.781	0.006	0.006	0.000	0.154	0.13	
3012	9/1/2004	9:36:09 PM		25.454	25.549	24.713	25.782	24.86		48.967	54.347	18.023	31.837	-0.928	-6.298		51.883	0.043	14.643	0.003		3702.78	61.7131	53.2	12.4	40.4	2.786	0.006	0.006	0.000	0.154	0.13	
3013	9/1/2004	9:37:09 PM		25.445	25.525	24.684	25.808	24.875		49.011	54.219	18.255	31.862	-0.931	-6.295		51.084	0.043	14.643	0.003		3703.78	61.7297	53.1	12.2	40.4	2.788	0.006	0.006	0.000	0.154	0.13	
3014	9/1/2004	9:38:09 PM		25.459	25.529	24.728	25.842	24.84		49.264	54.726	18.319	31.788	-0.928	-6.292		50.93	0.043	14.643	0.003		3704.78	61.7464	53.6	12.1	40.5	2.794	0.006	0.006	0.000	0.153	0.13	
3015	9/1/2004	9:39:09 PM		25.47	25.525	24.729	25.863	24.905		49.322	54.65	18.146	32.239	-0.928	-6.295		51.593	0.043	14.643	0.003		3705.78	61.7631	53.5	12.3	40.8	2.812	0.006	0.006	0.000	0.152	0.13	
3016	9/1/2004	9:40:09 PM		25.464	25.519	24.728	25.922	24.95		49.444	54.666	18.261	32.262	-0.928	-6.292		50.911	0.043	14.643	0.003		3706.78	61.7797	53.5	12.1	40.9	2.817	0.006	0.006	0.000	0.152	0.13	
3017	9/1/2004	9:41:09 PM		25.464	25.514	24.743	25.887	25.005		49.307	54.824	18.041	32.049	-0.931	-6.29		49.968	0.043	14.643	0.003		3707.78	61.7964	53.7	11.9	40.7	2.805	0.006	0.006	0.000	0.152	0.13	
3018	9/1/2004	9:42:09 PM		25.474	25.519	24.758	25.937	25.065		49.513	54.633	18.264	32.174	-0.925	-6.287		51.349	0.043	14.643	0.003		3708.78	61.8131	53.5	12.2	40.8	2.816	0.006	0.006	0.000	0.152	0.13	
3019	9/1/2004	9:43:09 PM		25.475	25.51	24.774	25.943	25.07		49.583	54.901	18.272	32.231	-0.925	-6.287		50.532	0.043	14.643	0.003		3709.78	61.8297	53.8	12.0	40.9	2.820	0.006	0.006	0.000	0.151	0.13	
3020	9/1/2004	9:44:09 PM		25.472	25.496	24.76	25.959	25.117		49.535	54.921	18.201	32.227	-0.928	-6.287		50.605	0.043	14.643	0.003		3710.78	61.8464	53.8	12.1	40.9	2.819	0.006	0.006	0.000	0.152	0.13	
3021	9/1/2004	9:45:09 PM		25.472	25.501	24.76	25.974	25.167		49.249	54.465	18.148	32.036	-0.931	-6.284		51.187	0.043	14.643	0.003		3711.78	61.8631	53.3	12.2	40.6	2.802	0.006	0.006	0.000	0.152	0.13	
3022	9/1/2004	9:46:09 PM		25.482	25.496	24.79	26.004	25.152		49.083	54.287	18.335	31.646	-0.928	-6.284		50.131	0.043	14.643	0.003		3712.78	61.8797	53.2	11.9	40.4	2.783	0.006	0.006	0.000	0.153	0.13	
3023	9/1/2004	9:47:09 PM		25.487	25.497	24.771	26.015	25.148		49.324	54.459	18.246	32.083	-0.928	-6.284		50.588	0.043	14.643	0.003		3713.78	61.8964	53.3	12.0	40.7	2.806	0.006	0.006	0.000	0.152	0.13	
3024	9/1/2004	9:48:09 PM		25.482	25.487	24.801	26	25.253		49.226	54.513	18.147	32.067	-0.928	-6.284		50.707	0.043	14.643	0.003		3714.78	61.9131	53.4	12.1	40.6	2.802	0.006	0.006	0.000	0.152	0.13	
3025	9/1/2004	9:49:09 PM		25.484	25.474	24.783	26.002	25.184		49.537	54.917	18.179	32.295	-0.931	-6.287		50.048	0.043	14.643	0.003		3715.78	61.9297	53.8	11.9	40.9	2.821	0.006	0.006	0.000	0.151	0.13	
3026	9/1/2004	9:50:09 PM		25.499	25.479	24.808	26.052	25.204		49.141	54.459	18.181	31.897	-0.928	-6.284		50.667	0.043	14.643	0.003		3716.78	61.9464	53.3	12.1	40.5	2.794	0.006	0.006	0.000	0.153	0.13	
3027	9/1/2004	9:51:09 PM		25.5	25.485	24.824	26.008	25.225		49.461	54.764	18.057	32.502	-0.928	-6.29		50.527	0.043	14.643	0.003		3717.78	61.9631	53.6	12.0	41.0	2.826	0.006	0.006	0.000	0.151	0.13	
3028	9/1/2004	9:52:09 PM		25.501	25.481	24.81	25.989	25.116		49.272	54.679	18.207	32.051	-0.931	-6.287		52.749	0.043	14.643	0.003		3718.78	61.9797	53.6	12.6	40.7	2.803	0.006	0.006	0.000	0.152	0.13	
3029	9/1/2004	9:53:09 PM		25.492	25.457	24.811	25.895	25.107		49.259	54.677	18.401	31.85	-0.931	-6.287		49.092	0.043	14.643	0.003		3719.78	61.9964	53.6	11.7	40.6	2.796	0.006	0.006	0.000	0.153	0.13	
3030	9/1/2004	9:54:09 PM		25.496	25.461	24.815	25.869	25.081		49.436	54.981	18.227	32.217	-0.931	-6.281		50.012	0.043	14.643	0.003		3720.78	62.0131	53.9	11.9	40.8	2.815	0.006	0.006	0.000	0.152	0.13	
3031	9/1/2004	9:55:09 PM		25.495	25.454	24.828	25.832	24.945		49.23	54.673	17.994	32.26	-0.928	-6.281		50.373	0.043	14.643	0.003		3721.78	62.0297	53.5	12.0	40.7	2.809	0.006	0.006	0.000	0.152	0.13	
3032	9/1/2004	9:56:09 PM		25.505	25.454	24.828	25.772	25.025		49.108	54.509	18.115	32.1	-0.925	-6.278		52.071	0.043	14.643	0.004		3722.78	62.0464	53.4	12.4	40.6	2.800	0.006	0.006	0.000	0.152	0.13	
3033	9/1/2004	9:57:09 PM		25.497	25.432	24.801	25.76	24.893		49.077	54.451	18.129	31.946	-0.928	-6.284		50.348	0.043	14.643	0.003		3723.78	62.0631	53.3	12.0	40.5	2.793	0.006	0.006	0.000	0.153	0.13	
3034	9/1/2004	9:58:09 PM		25.496	25.426	24.825	25.733	24.761		49.089	54.37	18.127	32.022	-0.931	-6.284		47.486	0.043	14.643	0.003		3724.78	62.0797	53.2	11.3	40.6	2.796	0.006	0.006	0.000	0.153	0.13	
3035	9/1/2004	9:59:09 PM		25.499	25.414	24.818	25.722	24.725		49.26	54.675	18.236	32.026	-0.928	-6.281		49.797	0.043	14.643	0.003		3725.78	62.0964	53.5	11.9	40.6	2.802	0.006	0.006	0.000	0.152	0.13	
3036	9/1/2004	10:00:09 PM		25.502	25.412	24.856	25.635	24.802		49.409	54.986	17.84	32.615	-0.911	-6.278		50.571	0.043	14.643	0.004		3726.78	62.1131	53.9	12.0	41.0	2.828	0.006	0.006	0.000	0.151	0.13	
3037	9/1/2004	10:01:09 PM		25.489	25.399	24.923	25.602	24.624		49.164	54.577	18.332	31.769	-0.928	-6.278		51.233	0.043	14.643	0.003		3727.78	62.1297	53.5	12.2	40.5	2.790	0.006	0.006	0.000	0.152	0.13	
3038	9/1/2004	10:02:09 PM		25.497	25.387	24.991	25.629	24.652		48.685	54.015	18.223	31.535	-0.891	-6.275		49.789	0.043	14.643	0.003		3728.78	62.1464	52.9	11.9	40.1	2.765	0.006	0.006	0.000	0.154	0.13	
3039	9/1/2004	10:03:09 PM		25.495	25.379	24.949	25.647	24.675		48.946	54.185	18.285	31.691	-0.925	-6.272		51.343	0.043	14.643	0.003		3729.78	62.1631	53.1	12.2	40.3	2.780	0.006	0.006	0.000	0.153	0.13	
3040	9/1/2004	10:04:09 PM		25.514	25.389	24.933	25.682	24.849		48.951	54.281	18.358	31.56	-0.891	-6.272		51.731	0.043	14.643	0.004		3730.78	62.1797	53.2	12.3	40.3	2.775	0.006	0.006	0.000	0.153	0.13	
3041	9/1/2004	10:05:09 PM		25.519	25.379	24.913	25.647	24.929		48.874	54.312	18.25	31.519	-0.92	-6.275		50.096	0.043	14.643	0.003		3731.78	62.1964	53.2	11.9	40.2	2.771	0.006	0.006	0.000	0.154	0.13	
3042	9/1/2004	10:06:09 PM		25.519	25.374	24.883	25.672	24.939		49.148	54.501	18.367	31.942	-0.899	-6.272		50.815	0.043	14.643	0.003		3732.78	62.2131	53.4	12.1	40.5	2.795	0.006	0.006	0.000	0.152	0.13	
3043	9/1/2004	10:07:09 PM		25.513	25.363	24.882	25.686	24.904		49.463	54.928	18.36	31.946	-0.908	-6.275		48.802	0.043	14.643	0.003		3733.78	62.2297	53.8	11.6	40.7	2.806	0.006	0.006	0.000	0.152	0.13	
3044	9/1/2004	10:08:09 PM		25.524	25.369	24.863	25.762	24.869		49.166	54.596	18.142	31.948	-0.902	-6.269		52.34	0.043	14.643	0.003		3734.78	62.2464	53.5	12.5	40.6	2.796	0.006	0.006	0.000	0.152	0.13	
3045	9/1/2004	10:09:09 PM		25.518	25.363	24.832	25.831	24.884		49.235	54.55	18.222	32.047	-0.908	-6.266		49.195	0.043	14.643	0.004		3735.78	62.2631	53.4	11.7	40.6	2.802	0.006	0.006	0.000	0.152	0.13	
3046	9/1/2004	10:10:09 PM		25.524	25.369	24.848	25.807	24.969		49.056	54.467	18.232	31.747	-0.914	-6.269		48.827	0.043	14.643	0.003		3736.78	62.2797	53.3	11.6	40.4	2.786	0.006	0.006	0.000	0.153	0.13	
3047	9/1/2004	10:11:09 PM		25.53	25.369	24.839	25.848	24.985		48.944	54.341	18.23	31.589	-0.911	-6.266		50.265	0.043	14.643	0.004		3737.78	62.2964	53.2	12.0	40.3	2.776	0.006	0.006	0.000	0.154	0.13	
3048	9/1/2004	10:12:09 PM		25.515	25.354	24.799	25.823	25.075		49.34	54.542	18.289	31.997	-0.894	-6.272		50.029	0.043	14.643	0.003		3738.78	62.3131	53.4	11.9	40.7	2.804	0.006	0.006	0.000	0.152	0.13	
3049	9/1/2004	10:13:09 PM		25.526	25.371	24.815	25.864	25.117		49.372	54.683	18.189	32.088	-0.925	-6.266		50.43	0.043	14.643	0.003		3739.78	62.3297	53.6	12.0	40.7	2.808	0.006	0.006	0.000	0.152	0.13	
3050	9/1/2004	10:14:09 PM		25.532	25.372	24.796	25.905	25.132		49.293	54.776	18.28	32.069	-0.92	-6.266		50.096	0.043	14.643	0.003		3740.78	62.3464	53.7	11.9	40.7	2.805	0.006	0.006	0.000	0.152	0.13	
3051	9/1/2004	10:15:09 PM		25.524	25.368	24.797	25.891	25.154		49.154	54.389	18.23	31.946	-0.894	-6.264		48.972	0.043	14.643	0.003		3741.78	62.3631	53.3	11.7	40.6	2.796	0.006	0.006	0.000	0.153	0.13	
3052	9/1/2004	10:16:09 PM		25.524	25.373	24.792	25.906	25.094		49.243	54.588	18.343	31.85	-0.911	-6.264		51.084	0.043	14.643	0.003		3742.78	62.3797	53.5	12.2	40.5	2.796	0.006	0.006	0.000	0.153	0.13	
3053	9/1/2004	10:17:09 PM		25.514	25.358	24.767	25.846	25.064		49.272	54.478	18.18	32.196	-0.876	-6.266		50.886	0.043	14.643	0.003		3743.78	62.3964	53.4	12.1	40.7	2.808	0.006	0.006	0.000	0.152	0.13	
3054	9/1/2004	10:18:09 PM		25.503	25.352	24.752	25.77	24.898		49.39	54.845	18.318	31.921	-0.885	-6.261		49.253	0.043	14.643	0.003		3744.78	62.4131	53.7	11.7	40.7	2.803	0.006	0.006	0.000	0.152	0.13	
3055	9/1/2004	10:19:09 PM		25.497	25.352	24.726	25.74	24.832		49.49	54.84	18.212	32.174	-0.908	-6.264		49.985	0.043	14.643	0.003		3745.78	62.4297	53.7	11.9	40.8	2.815	0.006	0.006	0.000	0.152	0.13	
3056	9/1/2004	10:20:09 PM		25.475	25.329	24.704	25.632	24.755		49.282	54.656	18.157	32.114	-0.908	-6.266		48.435	0.043	14.643	0.003		3746.78	62.4464	53.5	11.5	40.7	2.806	0.006	0.006	0.000	0.153	0.13	
3057	9/1/2004	10:21:09 PM		25.469	25.324	24.693	25.602	24.759		48.973	54.358	17.869	32.159	-0.882	-6.264		50.651	0.043	14.643	0.003		3747.78	62.4631	53.2	12.1	40.6	2.797	0.006	0.006	0.000	0.153	0.13	
3058	9/1/2004	10:22:09 PM		25.452	25.311	24.671	25.604	24.682		49.233	54.666	17.82	32.256	-0.879	-6.255		49.199	0.044	14.643	0.003		3748.78	62.4797	53.5	11.7	40.7	2.809	0.006	0.006	0.000	0.156	0.13	
3059	9/1/2004	10:23:09 PM		25.456	25.32	24.694	25.593	24.711		49.471	54.892	17.864	32.596	-0.879	-6.255		48.905	0.043	14.643	0.003		3749.78	62.4964	53.8	11.6	41.0	2.829	0.006	0.006	0.000	0.151	0.13	
3060	9/1/2004	10:24:09 PM		25.448	25.313	24.667	25.621	24.723		49.353	54.65	17.929	32.4	-0.876	-6.252		49.168	0.044	14.643	0.003		3750.78	62.5131	53.5	11.7	40.9	2.818	0.006	0.006	0.000	0.156	0.13	
3061	9/1/2004	10:25:09 PM		25.463	25.333	24.712	25.656	24.804		49.371	54.641	17.879	32.486	-0.876	-6.255		50.125	0.044	14.643	0.003		3751.78	62.5297	53.5	11.9	40.9	2.822	0.006	0.006	0.000	0.155	0.13	
3062	9/1/2004	10:26:09 PM		25.448	25.312	24.681	25.705	24.838		49.073	54.393	17.482	32.654	-0.876	-6.249		50.438	0.043	14.643	0.003		3752.78	62.5464	53.3	12.0	40.9	2.817	0.006	0.006	0.000	0.152	0.13	
3063	9/1/2004	10:27:09 PM		25.448	25.317	24.696	25.705	24.828		49.568	55.131	17.97	32.51	-0.876	-6.246		49.435	0.044	14.643	0.003		3753.78	62.5631	54.0	11.8	41.0	2.829	0.006	0.006	0.000	0.155	0.13	
3064	9/1/2004	10:28:09 PM		25.443	25.317	24.681	25.725	24.793		49.602	54.894	17.927	32.705	-0.876	-6.249		47.845	0.043	14.643	0.003		3754.78	62.5797	53.8	11.4	41.2	2.837	0.006	0.006	0.000	0.151	0.13	
3065	9/1/2004	10:29:09 PM		25.427	25.306	24.65	25.764	24.832		49.498	55.066	18.012	32.381	-0.876	-6.249		48.016	0.044	14.643	0.003		3755.78	62.5964	53.9	11.4	40.9	2.823	0.006	0.006	0.000	0.155	0.13	
3066	9/1/2004	10:30:09 PM		25.433	25.317	24.696	25.76	24.918		49.16	54.623	17.788	32.404	-0.873	-6.243		50.611	0.043	14.643	0.004		3756.78	62.6131	53.5	12.1	40.8	2.812	0.006	0.006	0.000	0.152	0.13	
3067	9/1/2004	10:31:09 PM		25.423	25.312	24.661	25.77	24.988		48.967	54.492	17.911	31.948	-0.876	-6.252		51.268	0.043	14.643	0.003		3757.78	62.6297	53.4	12.2	40.5	2.789	0.006	0.006	0.000	0.154	0.13	
3068	9/1/2004	10:32:09 PM		25.418	25.308	24.682	25.771	24.974		49.797	55.222	17.784	33.081	-0.876	-6.246		49.049	0.043	14.643	0.003		3758.78	62.6464	54.1	11.7	41.4	2.857	0.006	0.006	0.000	0.150	0.13	
3069	9/1/2004	10:33:09 PM		25.424	25.314	24.663	25.802	25.054		49.409	54.656	17.873	32.512	-0.873	-6.243		50.657	0.044	14.643	0.003		3759.78	62.6631	53.5	12.1	41.0	2.824	0.006	0.006	0.000	0.155	0.13	
3070	9/1/2004	10:34:09 PM		25.419	25.309	24.673	25.837	24.949		49.427	54.818	17.913	32.436	-0.868	-6.243		53.248	0.044	14.643	0.003		3760.78	62.6797	53.7	12.7	40.9	2.822	0.006	0.006	0.000	0.155	0.13	
3071	9/1/2004	10:35:09 PM		25.425	25.319	24.678	25.842	25.05		49.318	54.799	17.386	32.976	-0.847	-6.243		50.819	0.043	14.643	0.003		3761.78	62.6964	53.7	12.1	41.1	2.837	0.006	0.006	0.000	0.151	0.13	
3072	9/1/2004	10:36:09 PM		25.426	25.321	24.66	25.884	25.136		49.338	54.743	17.72	32.49	-0.815	-6.237		51.746	0.044	14.643	0.003		3762.78	62.7131	53.6	12.3	40.9	2.821	0.006	0.006	0.000	0.155	0.13	
3073	9/1/2004	10:37:09 PM		25.417	25.331	24.686	25.88	25.012		49.656	55.042	17.955	32.683	-0.873	-6.24		51.003	0.043	14.643	0.003		3763.78	62.7297	53.9	12.1	41.2	2.838	0.006	0.006	0.000	0.151	0.13	
3074	9/1/2004	10:38:09 PM		25.407	25.321	24.666	25.87	24.992		49.593	55.118	17.81	32.771	-0.815	-6.237		47.272	0.044	14.643	0.003		3764.78	62.7464	54.0	11.3	41.2	2.839	0.006	0.006	0.000	0.154	0.13	
3075	9/1/2004	10:39:09 PM		25.412	25.326	24.681	25.885	25.007		49.417	54.7	17.833	32.724	-0.847	-6.246		49.956	0.042	14.643	0.003		3765.78	62.7631	53.6	11.9	41.1	2.832	0.006	0.006	0.000	0.148	0.13	
3076	9/1/2004	10:40:09 PM		25.413	25.342	24.676	25.87	25.058		49.718	55.174	17.861	32.832	-0.813	-6.24		50.344	0.043	14.643	0.004		3766.78	62.7797	54.0	12.0	41.3	2.846	0.006	0.006	0.000	0.151	0.13	
3077	9/1/2004	10:41:09 PM		25.418	25.337	24.666	25.865	25.048		49.446	54.917	17.463	32.982	-0.818	-6.252		50.062	0.043	14.643	0.003		3767.78	62.7964	53.8	11.9	41.2	2.842	0.006	0.006	0.000	0.151	0.13	
3078	9/1/2004	10:42:09 PM		25.418	25.353	24.707	25.876	25.084		49.226	54.656	17.681	32.488	-0.813	-6.249		52.338	0.044	14.643	0.004		3768.78	62.8131	53.5	12.5	40.9	2.817	0.006	0.006	0.000	0.155	0.13	
3079	9/1/2004	10:43:09 PM		25.408	25.337	24.661	25.85	25.088		49.403	54.826	17.706	32.646	-0.818	-6.261		50.236	0.043	14.643	0.003		3769.78	62.8297	53.7	12.0	41.0	2.828	0.006	0.006	0.000	0.151	0.13	
3080	9/1/2004	10:44:09 PM		25.403	25.343	24.697	25.881	25.064		49.591	55.06	17.515	33.114	-0.81	-6.258		47.732	0.043	14.643	0.003		3770.78	62.8464	53.9	11.4	41.4	2.851	0.006	0.006	0.000	0.150	0.13	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3081	9/1/2004	10:45:09 PM		25.41	25.354	24.683	25.893	25.195		49.564	55.267	17.622	32.818	-0.833	-6.255		49.464	0.043	14.643	0.003		3771.78	62.8631	54.1	11.8	41.2	2.840	0.006	0.006	0.000	0.151	0.13	
3082	9/1/2004	10:46:09 PM		25.415	25.359	24.678	25.918	25.115		49.882	55.371	17.842	32.976	-0.81	-6.252		51.429	0.044	14.643	0.003		3772.78	62.8797	54.2	12.2	41.4	2.856	0.006	0.006	0.000	0.153	0.13	
3083	9/1/2004	10:47:09 PM		25.431	25.375	24.714	25.913	25.061		49.469	54.969	17.65	32.644	-0.81	-6.252		50.175	0.043	14.643	0.003		3773.78	62.8964	53.8	12.0	41.1	2.831	0.006	0.006	0.000	0.151	0.13	
3084	9/1/2004	10:48:09 PM		25.426	25.371	24.695	25.929	25.072		49.569	55.046	17.794	32.81	-0.81	-6.252		49.672	0.043	14.643	0.003		3774.78	62.9131	53.9	11.8	41.2	2.840	0.006	0.006	0.000	0.151	0.13	
3085	9/1/2004	10:49:09 PM		25.421	25.371	24.705	25.899	25.027		49.645	55.07	17.601	33.003	-0.81	-6.252		51.452	0.043	14.643	0.003		3775.78	62.9297	53.9	12.3	41.3	2.849	0.006	0.006	0.000	0.150	0.13	
3086	9/1/2004	10:50:09 PM		25.422	25.377	24.701	25.925	25.087		49.118	54.362	17.57	32.438	-0.81	-6.246		50.548	0.044	14.643	0.003		3776.78	62.9464	53.2	12.0	40.8	2.812	0.006	0.006	0.000	0.156	0.13	
3087	9/1/2004	10:51:09 PM		25.429	25.383	24.707	25.951	25.144		49.064	54.239	17.668	32.531	-0.807	-6.237		51.881	0.044	14.643	0.003		3777.78	62.9631	53.1	12.4	40.8	2.813	0.006	0.006	0.000	0.156	0.13	
3088	9/1/2004	10:52:09 PM		25.429	25.384	24.708	25.932	25.129		49.34	54.733	17.493	32.898	-0.813	-6.258		50.751	0.043	14.643	0.003		3778.78	62.9797	53.6	12.1	41.1	2.835	0.006	0.006	0.000	0.151	0.13	
3089	9/1/2004	10:53:09 PM		25.43	25.395	24.709	25.973	25.105		49.649	55.184	18.042	32.504	-0.772	-6.246		50.206	0.043	14.643	0.003		3779.78	62.9964	54.1	12.0	41.1	2.832	0.006	0.006	0.000	0.151	0.13	
3090	9/1/2004	10:54:09 PM		25.446	25.4	24.734	25.939	25.141		49.608	55.01	17.863	32.744	-0.81	-6.24		49.368	0.044	14.643	0.003		3780.78	63.0131	53.9	11.8	41.2	2.839	0.006	0.006	0.000	0.154	0.13	
3091	9/1/2004	10:55:09 PM		25.442	25.396	24.72	25.974	25.207		49.523	54.965	17.766	32.718	-0.81	-6.249		47.812	0.042	14.643	0.003		3781.78	63.0297	53.8	11.4	41.1	2.835	0.006	0.006	0.000	0.147	0.13	
3092	9/1/2004	10:56:09 PM		25.443	25.403	24.727	25.991	25.168		49.442	55.075	17.568	32.726	-0.815	-6.249		49.902	0.043	14.643	0.003		3782.78	63.0464	53.9	11.9	41.1	2.833	0.006	0.006	0.000	0.151	0.13	
3093	9/1/2004	10:57:09 PM		25.444	25.408	24.732	25.961	25.119		49.177	54.598	17.821	32.225	-0.813	-6.243		49.633	0.044	14.643	0.003		3783.78	63.0631	53.5	11.8	40.7	2.806	0.006	0.006	0.000	0.156	0.13	
3094	9/1/2004	10:58:09 PM		25.449	25.408	24.717	25.966	25.134		49.535	55.07	17.868	32.34	-0.772	-6.243		51.149	0.042	14.643	0.003		3784.78	63.0797	53.9	12.2	40.9	2.822	0.006	0.006	0.000	0.148	0.13	
3095	9/1/2004	10:59:09 PM		25.454	25.413	24.757	25.921	25.159		49.78	55.442	17.817	32.845	-0.781	-6.24		49.512	0.043	14.643	0.003		3785.78	63.0964	54.3	11.8	41.3	2.848	0.006	0.006	0.000	0.150	0.13	
3096	9/1/2004	11:00:09 PM		25.459	25.424	24.748	25.967	25.135		49.649	55.193	17.932	32.58	-0.795	-6.243		50.778	0.043	14.643	0.003		3786.78	63.1131	54.1	12.1	41.1	2.835	0.006	0.006	0.000	0.151	0.13	
3097	9/1/2004	11:00:47 PM		25.449	25.414	24.733	25.972	25.2		49.523	55.149	17.726	32.738	-0.766	-6.246		49.952	0.042	14.643	0.003		3787.42	63.1236	54.0	11.9	41.1	2.836	0.006	0.006	0.000	0.147	0.13	
3098	9/1/2004	11:01:47 PM		25.465	25.435	24.769	25.948	25.155		49.481	55.06	17.851	32.539	-0.763	-6.237		48.292	0.043	14.643	0.003		3788.42	63.1403	53.9	11.5	41.0	2.827	0.006	0.006	0.000	0.151	0.13	
3099	9/1/2004	11:02:47 PM		25.471	25.436	24.765	25.999	25.191		49.573	55.114	17.778	32.662	-0.763	-6.232		49.109	0.044	14.643	0.003		3789.42	63.1569	54.0	11.7	41.1	2.835	0.006	0.006	0.000	0.154	0.13	
3100	9/1/2004	11:03:47 PM		25.471	25.436	24.775	25.974	25.101		49.573	55.149	17.596	32.828	-0.763	-6.24		50.158	0.042	14.643	0.003		3790.42	63.1736	54.0	11.9	41.2	2.841	0.006	0.006	0.000	0.147	0.12	
3101	9/1/2004	11:04:47 PM		25.482	25.442	24.781	25.915	25.068		49.423	54.917	17.245	33.214	-0.76	-6.24		49.226	0.042	14.643	0.003		3791.42	63.1903	53.8	11.7	41.3	2.849	0.006	0.006	0.000	0.146	0.12	
3102	9/1/2004	11:05:47 PM		25.472	25.432	24.766	25.945	25.008		49.931	55.498	17.677	33.144	-0.763	-6.249		51.076	0.041	14.643	0.003		3792.42	63.2069	54.4	12.2	41.5	2.864	0.006	0.006	0.000	0.142	0.12	
3103	9/1/2004	11:06:47 PM		25.487	25.442	24.801	25.9	25.048		50.066	55.632	17.916	32.925	-0.76	-6.235		49.883	0.043	14.643	0.003		3793.42	63.2236	54.5	11.9	41.5	2.861	0.006	0.006	0.000	0.149	0.13	
3104	9/1/2004	11:07:47 PM		25.477	25.426	24.775	25.854	24.902		49.5	54.956	17.305	33.027	-0.763	-6.235		49.092	0.043	14.643	0.003		3794.42	63.2403	53.8	11.7	41.3	2.845	0.006	0.006	0.000	0.150	0.13	
3105	9/1/2004	11:08:47 PM		25.476	25.426	24.785	25.778	24.961		49.651	55.187	17.782	32.818	-0.766	-6.237		49.568	0.043	14.643	0.003		3795.42	63.2569	54.1	11.8	41.2	2.843	0.006	0.006	0.000	0.150	0.13	
3106	9/1/2004	11:09:47 PM		25.484	25.429	24.803	25.762	24.84		49.807	55.284	18.152	32.64	-0.76	-6.237		49.666	0.042	14.643	0.003		3796.42	63.2736	54.2	11.8	41.2	2.842	0.006	0.006	0.000	0.147	0.12	
3107	9/1/2004	11:10:47 PM		25.473	25.428	24.852	25.73	24.828		49.442	54.998	18.328	31.995	-0.763	-6.24		49.472	0.042	14.643	0.003		3797.42	63.2903	53.9	11.8	40.7	2.807	0.006	0.006	0.000	0.148	0.13	
3108	9/1/2004	11:11:47 PM		25.482	25.426	24.87	25.689	24.807		49.349	54.923	17.981	32.352	-0.763	-6.232		50.713	0.043	14.643	0.003		3798.42	63.3069	53.8	12.1	40.9	2.816	0.006	0.006	0.000	0.151	0.13	
3109	9/1/2004	11:12:47 PM		25.475	25.425	24.844	25.713	24.695		49.892	55.388	18.387	32.492	-0.763	-6.232		50.83	0.043	14.643	0.003		3799.42	63.3236	54.3	12.1	41.2	2.840	0.006	0.006	0.000	0.150	0.13	
3110	9/1/2004	11:13:47 PM		25.49	25.435	24.859	25.753	24.765		49.23	55.002	17.915	32.143	-0.76	-6.229		49.583	0.043	14.643	0.004		3800.42	63.3403	53.9	11.8	40.7	2.805	0.006	0.006	0.000	0.152	0.13	
3111	9/1/2004	11:14:47 PM		25.49	25.43	24.849	25.783	24.825		49.145	54.78	17.79	32.311	-0.758	-6.237		47.036	0.042	14.643	0.003		3801.42	63.3569	53.7	11.2	40.7	2.808	0.006	0.006	0.000	0.148	0.13	
3112	9/1/2004	11:15:47 PM		25.49	25.43	24.814	25.813	24.85		49.315	55.052	17.794	32.586	-0.743	-6.226		49.483	0.043	14.643	0.003		3802.42	63.3736	53.9	11.8	41.0	2.823	0.006	0.006	0.000	0.151	0.13	
3113	9/1/2004	11:16:47 PM		25.5	25.435	24.844	25.813	24.915		49.606	55.153	17.675	32.935	-0.731	-6.229		49.871	0.043	14.643	0.003		3803.42	63.3903	54.0	11.9	41.3	2.845	0.006	0.006	0.000	0.150	0.13	
3114	9/1/2004	11:17:47 PM		25.511	25.435	24.825	25.813	24.931		49.33	54.909	17.771	32.545	-0.703	-6.223		48.727	0.043	14.643	0.003		3804.42	63.4069	53.8	11.6	40.9	2.822	0.006	0.006	0.000	0.151	0.13	
3115	9/1/2004	11:18:47 PM		25.502	25.441	24.825	25.804	24.887		49.315	54.814	17.788	32.588	-0.72	-6.223		48.098	0.043	14.643	0.003		3805.42	63.4236	53.7	11.5	41.0	2.823	0.006	0.006	0.000	0.151	0.13	
3116	9/1/2004	11:19:47 PM		25.502	25.431	24.79	25.784	24.867		49.456	55.025	17.675	32.806	-0.703	-6.22		51.028	0.044	14.643	0.003		3806.42	63.4403	53.9	12.2	41.1	2.836	0.006	0.006	0.000	0.154	0.13	
3117	9/1/2004	11:20:47 PM		25.502	25.436	24.795	25.834	24.902		49.527	55.087	17.653	32.941	-0.697	-6.217		52.524	0.043	14.643	0.003		3807.42	63.4569	54.0	12.5	41.2	2.843	0.006	0.006	0.000	0.150	0.13	
3118	9/1/2004	11:21:47 PM		25.482	25.416	24.78	25.804	24.867		49.641	55.102	18.042	32.599	-0.7	-6.22		51.009	0.043	14.643	0.003		3808.42	63.4736	54.0	12.1	41.1	2.835	0.006	0.006	0.000	0.151	0.13	
3119	9/1/2004	11:22:47 PM		25.502	25.432	24.781	25.88	24.892		49.473	55.164	17.889	32.576	-0.697	-6.214		51.791	0.043	14.643	0.004		3809.42	63.4903	54.0	12.3	41.0	2.828	0.006	0.006	0.000	0.151	0.13	
3120	9/1/2004	11:23:47 PM		25.487	25.427	24.776	25.865	24.912		49.674	55.24	17.668	32.984	-0.7	-6.22		49.587	0.042	14.643	0.003		3810.42	63.5069	54.1	11.8	41.3	2.849	0.006	0.006	0.000	0.146	0.12	
3121	9/1/2004	11:24:47 PM		25.498	25.438	24.772	25.871	24.938		49.448	55.124	17.874	32.537	-0.7	-6.22		49.063	0.042	14.643	0.003		3811.42	63.5236	54.0	11.7	41.0	2.826	0.006	0.006	0.000	0.148	0.13	
3122	9/1/2004	11:25:47 PM		25.498	25.438	24.752	25.891	24.928		49.819	55.404	17.658	33.218	-0.7	-6.211		49.017	0.043	14.643	0.003		3812.42	63.5403	54.3	11.7	41.5	2.863	0.006	0.006	0.000	0.149	0.13	
3123	9/1/2004	11:26:47 PM		25.499	25.443	24.782	25.876	24.944		49.355	54.934	17.836	32.516	-0.694	-6.211		48.719	0.043	14.643	0.004		3813.42	63.5569	53.8	11.6	40.9	2.822	0.006	0.006	0.000	0.151	0.13	
3124	9/1/2004	11:27:47 PM		25.494	25.444	24.748	25.857	25		49.481	55.025	17.672	32.847	-0.7	-6.211		49.299	0.043	14.643	0.003		3814.42	63.5736	53.9	11.7	41.2	2.838	0.006	0.006	0.000	0.151	0.13	
3125	9/1/2004	11:28:47 PM		25.495	25.445	24.749	25.873	24.965		49.66	55.346	17.744	32.736	-0.7	-6.214		49.107	0.043	14.643	0.003		3815.42	63.5903	54.2	11.7	41.2	2.840	0.006	0.006	0.000	0.150	0.13	
3126	9/1/2004	11:29:47 PM		25.49	25.445	24.759	25.873	24.935		49.647	55.234	17.723	32.865	-0.7	-6.209		47.549	0.043	14.643	0.003		3816.42	63.6069	54.1	11.3	41.3	2.844	0.006	0.006	0.000	0.150	0.13	
3127	9/1/2004	11:30:47 PM		25.499	25.454	24.763	25.937	24.91		49.316	54.826	17.432	33.023	-0.694	-6.214		49.224	0.042	14.643	0.003		3817.42	63.6236	53.7	11.7	41.2	2.838	0.006	0.006	0.000	0.147	0.13	
3128	9/1/2004	11:31:47 PM		25.495	25.455	24.764	25.918	24.95		49.83	55.493	17.683	33.069	-0.697	-6.211		49.966	0.043	14.643	0.003		3818.42	63.6403	54.4	11.9	41.4	2.858	0.006	0.006	0.000	0.150	0.13	
3129	9/1/2004	11:32:47 PM		25.496	25.456	24.75	25.924	24.991		49.625	55.174	17.656	32.867	-0.697	-6.209		49.387	0.043	14.643	0.003		3819.42	63.6569	54.0	11.8	41.2	2.844	0.006	0.006	0.000	0.150	0.13	
3130	9/1/2004	11:33:47 PM		25.502	25.466	24.75	25.919	25.017		49.782	55.41	17.677	33.101	-0.694	-6.217		48.752	0.042	14.643	0.003		3820.42	63.6736	54.3	11.6	41.4	2.857	0.006	0.006	0.000	0.146	0.12	
3131	9/1/2004	11:34:47 PM		25.486	25.456	24.745	25.909	25.026		49.846	55.618	17.548	33.126	-0.7	-6.209		48.143	0.043	14.643	0.003		3821.42	63.6903	54.5	11.5	41.5	2.860	0.006	0.006	0.000	0.149	0.13	
3132	9/1/2004	11:35:47 PM		25.491	25.461	24.73	25.934	25.041		49.782	55.493	17.807	32.802	-0.648	-6.203		50.861	0.044	14.643	0.003		3822.42	63.7069	54.4	12.1	41.3	2.847	0.006	0.006	0.000	0.154	0.13	
3133	9/1/2004	11:36:47 PM		25.502	25.471	24.76	25.929	25.097		49.548	55.054	17.561	33.093	-0.648	-6.203		49.937	0.043	14.643	0.003		3823.42	63.7236	53.9	11.9	41.3	2.849	0.006	0.006	0.000	0.150	0.13	
3134	9/1/2004	11:37:47 PM		25.482	25.456	24.725	25.914	25.087		49.819	55.325	17.635	33.112	-0.653	-6.2		50.292	0.044	14.643	0.003		3824.42	63.7403	54.2	12.0	41.5	2.859	0.006	0.006	0.000	0.153	0.13	
3135	9/1/2004	11:38:47 PM		25.492	25.467	24.731	25.96	25.048		49.521	55.135	17.395	33.147	-0.648	-6.206		54.914	0.042	14.643	0.003		3825.42	63.7569	54.0	13.1	41.3	2.850	0.006	0.006	0.000	0.147	0.12	
3136	9/1/2004	11:39:47 PM		25.483	25.463	24.722	25.901	25.083		49.428	55.131	17.509	32.871	-0.645	-6.2		49.845	0.043	14.643	0.003		3826.42	63.7736	54.0	11.9	41.1	2.837	0.006	0.006	0.000	0.151	0.13	
3137	9/1/2004	11:40:47 PM		25.499	25.489	24.728	25.937	25.104		49.067	54.621	17.437	32.605	-0.645	-6.197		49.503	0.043	14.643	0.003		3827.42	63.7903	53.5	11.8	40.8	2.815	0.006	0.006	0.000	0.152	0.13	
3138	9/1/2004	11:41:47 PM		25.505	25.494	24.763	25.967	25.05		49.411	55.004	17.433	33.03	-0.674	-6.206		48.435	0.042	14.643	0.003		3828.42	63.8069	53.9	11.5	41.2	2.842	0.006	0.006	0.000	0.147	0.12	
3139	9/1/2004	11:42:47 PM		25.495	25.494	24.743	25.942	25.06		49.488	55.004	17.376	33.222	-0.659	-6.223		48.951	0.042	14.643	0.003		3829.42	63.8236	53.9	11.7	41.4	2.851	0.006	0.006	0.000	0.146	0.12	
3140	9/1/2004	11:43:47 PM		25.49	25.484	24.728	25.972	25.03		49.629	55.168	17.53	33.005	-0.642	-6.214		48.592	0.043	14.643	0.003		3830.42	63.8403	54.0	11.6	41.3	2.849	0.006	0.006	0.000	0.150	0.13	
3141	9/1/2004	11:44:47 PM		25.494	25.489	24.748	25.947	25.039		49.72	55.323	17.358	33.424	-0.642	-6.22		50.592	0.042	14.643	0.003		3831.42	63.8569	54.2	12.1	41.6	2.866	0.006	0.006	0.000	0.146	0.12	
3142	9/1/2004	11:45:47 PM		25.5	25.495	24.734	26.003	25.096		49.676	55.151	17.569	33.239	-0.645	-6.22		49.701	0.043	14.643	0.003		3832.42	63.8736	54.0	11.8	41.5	2.858	0.006	0.006	0.000	0.150	0.13	
3143	9/1/2004	11:46:47 PM		25.492	25.497	24.736	25.99	25.017		49.71	55.257	17.707	32.808	-0.648	-6.217		48.467	0.043	14.643	0.003		3833.42	63.8903	54.1	11.5	41.3	2.845	0.006	0.006	0.000	0.150	0.13	
3144	9/1/2004	11:47:47 PM		25.502	25.502	24.746	25.96	24.917		49.622	55.162	17.597	33.081	-0.642	-6.217		49.391	0.043	14.643	0.004		3834.42	63.9069	54.0	11.8	41.4	2.851	0.006	0.006	0.000	0.150	0.13	
3145	9/1/2004	11:48:47 PM		25.481	25.481	24.71	25.934	24.801		49.712	55.276	17.611	33.128	-0.642	-6.214		47.597	0.043	14.643	0.003		3835.42	63.9236	54.2	11.3	41.4	2.856	0.006	0.006	0.000	0.150	0.13	
3146	9/1/2004	11:49:47 PM		25.5	25.505	24.764	25.878	24.746		49.403	55.126	17.391	32.935	-0.642	-6.214		49.309	0.042	14.643	0.003		3836.42	63.9403	54.0	11.7	41.2	2.838	0.006	0.006	0.000	0.147	0.13	
3147	9/1/2004	11:50:47 PM		25.475	25.479	24.713	25.772	24.65		49.452	55.042	17.355	33.12	-0.648	-6.226		46.617	0.042	14.643	0.003		3837.42	63.9569	53.9	11.1	41.3	2.847	0.006	0.006	0.000	0.147	0.12	
3148	9/1/2004	11:51:47 PM		25.488	25.498	24.752	25.746	24.748		49.49	55.046	17.137	33.504	-0.642	-6.217		46.208	0.043	14.643	0.003		3838.42	63.9736	53.9	11.0	41.5	2.861	0.006	0.006	0.000	0.149	0.13	
3149	9/1/2004	11:52:47 PM		25.477	25.492	24.731	25.73	24.793		49.745	55.454	17.44	33.339	-0.642	-6.214		49.253	0.042	14.643	0.003		3839.42	63.9903	54.3	11.7	41.5	2.864	0.006	0.006	0.000	0.146	0.12	
3150	9/1/2004	11:53:47 PM		25.477	25.491	24.745	25.754	24.807		49.685	55.34	17.448	33.177	-0.639	-6.211		49.074	0.042	14.643	0.004		3840.42	64.0069	54.2	11.7	41.4	2.857	0.006	0.006	0.000	0.146	0.12	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3151	9/1/2004	11:54:47 PM		25.47	25.48	24.739	25.723	24.835		49.844	55.709	17.53	33.093	-0.645	-6.214		50.258	0.043	14.643	0.003		3841.42	64.0236	54.6	12.0	41.5	2.859	0.006	0.006	0.000	0.150	0.13	
3152	9/1/2004	11:55:47 PM		25.47	25.48	24.734	25.763	24.75		49.848	55.576	17.654	33.161	-0.645	-6.22		47.503	0.041	14.643	0.003		3842.42	64.0403	54.5	11.3	41.5	2.862	0.006	0.006	0.000	0.142	0.12	
3153	9/1/2004	11:56:47 PM		25.475	25.48	24.764	25.753	24.78		49.776	55.456	17.619	33.101	-0.642	-6.209		48.219	0.042	14.643	0.004		3843.42	64.0569	54.3	11.5	41.4	2.857	0.006	0.006	0.000	0.146	0.12	
3154	9/1/2004	11:57:47 PM		25.459	25.464	24.728	25.737	24.85		49.792	55.352	17.671	33.083	-0.645	-6.211		49.013	0.042	14.643	0.003		3844.42	64.0736	54.2	11.7	41.4	2.857	0.006	0.006	0.000	0.146	0.12	
3155	9/1/2004	11:58:47 PM		25.479	25.474	24.753	25.792	24.86		49.631	55.33	17.45	33.155	-0.642	-6.214		48.888	0.043	14.643	0.003		3845.42	64.0903	54.2	11.6	41.4	2.854	0.006	0.006	0.000	0.150	0.13	
3156	9/1/2004	11:59:47 PM		25.469	25.468	24.762	25.781	24.934		49.79	55.51	17.619	33.147	-0.645	-6.206		49.799	0.042	14.643	0.003		3846.42	64.1069	54.4	11.9	41.5	2.859	0.006	0.006	0.000	0.146	0.12	
3157	9/2/2004	12:00:47 AM		25.469	25.468	24.757	25.861	24.884		50.07	55.736	17.904	33.048	-0.642	-6.211		48.321	0.042	14.643	0.003		3847.42	64.1236	54.6	11.5	41.6	2.865	0.006	0.006	0.000	0.146	0.12	
3158	9/2/2004	12:01:47 AM		25.463	25.463	24.772	25.841	24.923		49.973	55.585	17.523	33.364	-0.645	-6.214		49.143	0.042	14.643	0.003		3848.42	64.1403	54.5	11.7	41.7	2.873	0.006	0.006	0.000	0.145	0.12	
3159	9/2/2004	12:02:47 AM		25.469	25.473	24.777	25.886	24.994		49.759	55.595	17.813	32.869	-0.642	-6.217		48.056	0.041	14.643	0.003		3849.42	64.1569	54.5	11.4	41.3	2.848	0.006	0.006	0.000	0.143	0.12	
3160	9/2/2004	12:03:47 AM		25.469	25.473	24.782	25.896	25.004		49.71	55.187	17.697	33.038	-0.621	-6.209		50.388	0.042	14.643	0.003		3850.42	64.1736	54.1	12.0	41.4	2.853	0.006	0.006	0.000	0.146	0.12	
3161	9/2/2004	12:04:47 AM		25.474	25.474	24.788	25.907	24.97		49.681	55.203	17.638	33.007	-0.598	-6.203		49.176	0.042	14.643	0.003		3851.42	64.1903	54.1	11.7	41.3	2.851	0.006	0.006	0.000	0.146	0.12	
3162	9/2/2004	12:05:47 AM		25.479	25.474	24.783	25.942	24.95		49.494	55.299	17.69	32.835	-0.604	-6.211		49.443	0.041	14.643	0.003		3852.42	64.2069	54.2	11.8	41.2	2.838	0.006	0.006	0.000	0.143	0.12	
3163	9/2/2004	12:06:47 AM		25.48	25.475	24.809	25.893	25.005		49.595	55.253	18.446	32.073	-0.642	-6.211		51.205	0.041	14.643	0.003		3853.42	64.2236	54.1	12.2	40.8	2.815	0.006	0.006	0.000	0.145	0.12	
3164	9/2/2004	12:07:47 AM		25.491	25.481	24.815	25.919	24.986		49.712	55.41	18.085	32.642	-0.619	-6.206		50.845	0.042	14.643	0.003		3854.42	64.2403	54.3	12.1	41.2	2.839	0.006	0.006	0.000	0.147	0.12	
3165	9/2/2004	12:08:47 AM		25.476	25.471	24.815	25.914	24.951		49.71	55.431	18.152	32.539	-0.616	-6.214		50.375	0.041	14.643	0.003		3855.42	64.2569	54.3	12.0	41.1	2.835	0.006	0.006	0.000	0.143	0.12	
3166	9/2/2004	12:09:47 AM		25.492	25.477	24.831	25.91	24.953		49.683	55.539	17.994	32.716	-0.624	-6.209		50.213	0.042	14.643	0.003		3856.42	64.2736	54.4	12.0	41.2	2.841	0.006	0.006	0.000	0.147	0.12	
3167	9/2/2004	12:10:47 AM		25.498	25.483	24.832	25.896	24.918		49.654	55.015	18.252	32.551	-0.572	-6.203		49.432	0.041	14.643	0.003		3857.42	64.2903	53.9	11.8	41.1	2.834	0.006	0.006	0.000	0.143	0.12	
3168	9/2/2004	12:11:47 AM		25.488	25.473	24.852	25.861	24.973		49.685	55.359	18.256	32.451	-0.566	-6.209		49.795	0.041	14.643	0.003		3858.42	64.3069	54.2	11.9	41.1	2.831	0.006	0.006	0.000	0.144	0.12	
3169	9/2/2004	12:12:47 AM		25.504	25.494	24.873	25.937	25.004		49.581	55.091	18.335	32.527	-0.558	-6.206		49.931	0.04	14.643	0.003		3859.42	64.3236	54.0	11.9	41.1	2.831	0.006	0.006	0.000	0.140	0.12	
3170	9/2/2004	12:13:47 AM		25.51	25.489	24.874	25.922	24.97		49.554	55.081	18.238	32.229	-0.569	-6.209		47.922	0.041	14.643	0.003		3860.42	64.3403	54.0	11.4	40.9	2.819	0.006	0.006	0.000	0.144	0.12	
3171	9/2/2004	12:14:47 AM		25.521	25.501	24.895	25.909	24.936		49.336	54.961	17.855	32.414	-0.558	-6.206		48.972	0.041	14.643	0.003		3861.42	64.3569	53.8	11.7	40.9	2.818	0.006	0.006	0.000	0.144	0.12	
3172	9/2/2004	12:15:47 AM		25.516	25.486	24.865	25.919	24.951		49.606	55.311	17.693	32.787	-0.569	-6.211		49.351	0.04	14.643	0.003		3862.42	64.3736	54.2	11.8	41.2	2.840	0.006	0.006	0.000	0.140	0.12	
3173	9/2/2004	12:16:47 AM		25.516	25.481	24.885	25.894	24.941		49.751	55.427	17.934	32.742	-0.569	-6.206		48.898	0.041	14.643	0.003		3863.42	64.3903	54.3	11.6	41.2	2.844	0.006	0.006	0.000	0.143	0.12	
3174	9/2/2004	12:17:47 AM		25.516	25.496	24.89	25.899	24.981		49.513	55.151	18.049	32.492	-0.538	-6.203		48.969	0.04	14.643	0.004		3864.42	64.4069	54.0	11.7	41.0	2.827	0.006	0.006	0.000	0.140	0.12	
3175	9/2/2004	12:18:47 AM		25.531	25.496	24.92	25.919	25.081		49.992	55.694	18.198	32.754	-0.555	-6.203		50.202	0.041	14.643	0.003		3865.42	64.4236	54.6	12.0	41.4	2.853	0.006	0.006	0.000	0.142	0.12	
3176	9/2/2004	12:19:47 AM		25.525	25.489	25.009	25.897	25.045		49.581	55.089	18.189	32.463	-0.535	-6.209		50.909	0.04	14.643	0.003		3866.42	64.4403	54.0	12.1	41.0	2.828	0.006	0.006	0.000	0.140	0.12	
3177	9/2/2004	12:20:47 AM		25.53	25.5	25.009	25.928	25.056		49.434	55.135	18.255	32.063	-0.535	-6.194		49.604	0.041	14.643	0.003		3867.42	64.4569	54.0	11.8	40.7	2.809	0.006	0.006	0.000	0.144	0.12	
3178	9/2/2004	12:21:47 AM		25.542	25.507	25.046	25.895	25.147		49.695	55.392	18.268	32.301	-0.535	-6.194		49.998	0.042	14.643	0.003		3868.42	64.4736	54.3	11.9	41.0	2.827	0.006	0.006	0.000	0.146	0.12	
3179	9/2/2004	12:22:47 AM		25.548	25.507	25.022	25.945	25.133		49.415	55.263	18.243	32.227	-0.549	-6.197		51.043	0.041	14.643	0.003		3869.42	64.4903	54.1	12.2	40.8	2.814	0.006	0.006	0.000	0.144	0.12	
3180	9/2/2004	12:23:47 AM		25.553	25.513	25.022	25.966	25.113		49.577	55.413	17.703	33.021	-0.532	-6.2		47.578	0.04	14.643	0.004		3870.42	64.5069	54.3	11.3	41.3	2.847	0.006	0.006	0.000	0.139	0.12	
3181	9/2/2004	12:24:47 AM		25.571	25.515	24.995	25.928	25.166		49.508	55.384	17.776	32.677	-0.532	-6.197		48.569	0.041	14.643	0.003		3871.42	64.5236	54.3	11.6	41.1	2.833	0.006	0.006	0.000	0.143	0.12	
3182	9/2/2004	12:25:47 AM		25.571	25.511	24.965	25.939	25.291		49.515	55.168	17.941	32.539	-0.535	-6.194		47.539	0.04	14.643	0.003		3872.42	64.5403	54.0	11.3	41.0	2.829	0.006	0.006	0.000	0.140	0.12	
3183	9/2/2004	12:26:47 AM		25.567	25.502	24.966	25.925	25.207		49.877	55.514	17.961	32.675	-0.532	-6.191		45.853	0.041	14.643	0.003		3873.42	64.5569	54.4	10.9	41.3	2.846	0.006	0.006	0.000	0.142	0.12	
3184	9/2/2004	12:27:47 AM		25.573	25.508	24.948	25.936	25.229		50.046	55.711	17.98	33.046	-0.535	-6.194		45.728	0.041	14.643	0.003		3874.42	64.5736	54.6	10.9	41.5	2.864	0.006	0.006	0.000	0.141	0.12	
3185	9/2/2004	12:28:47 AM		25.579	25.499	24.933	25.907	25.184		49.857	55.46	17.823	33.048	-0.535	-6.191		49.472	0.041	14.643	0.003		3875.42	64.5903	54.3	11.8	41.5	2.858	0.006	0.006	0.000	0.142	0.12	
3186	9/2/2004	12:29:47 AM		25.591	25.51	24.945	25.888	25.196		49.612	55.226	17.767	32.931	-0.52	-6.185		49.095	0.042	14.643	0.003		3876.42	64.6069	54.1	11.7	41.3	2.846	0.006	0.006	0.000	0.146	0.12	
3187	9/2/2004	12:30:47 AM		25.592	25.507	24.916	25.915	25.177		49.569	55.077	17.669	33.06	-0.526	-6.194		49.022	0.041	14.643	0.003		3877.42	64.6236	54.0	11.7	41.3	2.848	0.006	0.006	0.000	0.142	0.12	
3188	9/2/2004	12:31:47 AM		25.588	25.513	24.932	25.911	25.188		49.763	55.431	17.858	32.814	-0.535	-6.185		48.269	0.042	14.643	0.003		3878.42	64.6403	54.3	11.5	41.3	2.847	0.006	0.006	0.000	0.146	0.12	
3189	9/2/2004	12:32:47 AM		25.598	25.503	24.917	25.881	25.133		49.492	55.518	17.474	32.913	-0.517	-6.185		48.853	0.041	14.643	0.004		3879.42	64.6569	54.4	11.6	41.2	2.841	0.006	0.006	0.000	0.143	0.12	
3190	9/2/2004	12:33:47 AM		25.592	25.507	24.911	25.895	25.147		48.865	54.693	19.255	30.513	-0.535	-6.197		50.098	0.04	14.643	0.003		3880.42	64.6736	53.6	11.9	39.7	2.736	0.006	0.006	0.000	0.145	0.12	
3191	9/2/2004	12:34:47 AM		25.592	25.507	24.946	25.85	25.032		49.264	55.149	19.188	31.23	-0.535	-6.2		51.256	0.039	14.643	0.003		3881.42	64.6903	54.0	12.2	40.2	2.775	0.006	0.006	0.000	0.139	0.12	
3192	9/2/2004	12:35:47 AM		25.592	25.507	24.946	25.895	25.022		49.32	54.813	19.42	30.836	-0.538	-6.2		50.006	0.039	14.643	0.003		3882.42	64.7069	53.7	11.9	40.1	2.763	0.006	0.006	0.000	0.140	0.12	
3193	9/2/2004	12:36:47 AM		25.591	25.505	24.985	25.903	24.966		49.069	54.749	19.399	30.756	-0.535	-6.197		51.22	0.039	14.643	0.003		3883.42	64.7236	53.6	12.2	39.9	2.752	0.006	0.006	0.000	0.140	0.12	
3194	9/2/2004	12:37:47 AM		25.596	25.516	25.001	25.909	25.057		49.181	54.925	19.318	30.963	-0.532	-6.185		51.424	0.04	14.643	0.003		3884.42	64.7403	53.8	12.2	40.1	2.763	0.006	0.006	0.000	0.143	0.12	
3195	9/2/2004	12:38:47 AM		25.606	25.521	25.001	25.909	25.052		49.007	54.867	19.204	30.887	-0.532	-6.194		50.296	0.04	14.643	0.003		3885.42	64.7569	53.7	12.0	39.9	2.754	0.006	0.006	0.000	0.143	0.12	
3196	9/2/2004	12:39:47 AM		25.606	25.521	25.045	25.878	24.976		48.998	54.61	18.94	31.061	-0.52	-6.183		52.09	0.04	14.643	0.003		3886.42	64.7736	53.5	12.4	40.0	2.760	0.006	0.006	0.000	0.143	0.12	
3197	9/2/2004	12:40:47 AM		25.596	25.51	25.025	25.843	24.876		49.276	55.151	19.356	30.581	-0.511	-6.191		51.545	0.039	14.643	0.003		3887.42	64.7903	54.0	12.3	39.9	2.753	0.006	0.006	0.000	0.140	0.12	
3198	9/2/2004	12:41:47 AM		25.611	25.526	25.085	25.813	24.916		49.289	55.147	19.238	30.983	-0.477	-6.188		53.871	0.04	14.643	0.003		3888.42	64.8069	54.0	12.8	40.1	2.767	0.006	0.006	0.000	0.142	0.12	
3199	9/2/2004	12:42:47 AM		25.595	25.51	25.064	25.738	24.85		49.336	55.122	19.109	31.105	-0.474	-6.188		51.729	0.039	14.643	0.003		3889.42	64.8236	54.0	12.3	40.2	2.773	0.006	0.006	0.000	0.139	0.12	
3200	9/2/2004	12:43:47 AM		25.609	25.514	25.073	25.747	24.724		49.569	55.388	19.429	31.049	-0.474	-6.18		49.854	0.04	14.643	0.003		3890.42	64.8403	54.3	11.9	40.3	2.779	0.006	0.006	0.000	0.142	0.12	
3201	9/2/2004	12:44:47 AM		25.607	25.502	25.101	25.684	24.687		49.318	54.959	19.166	30.977	-0.471	-6.183		51.504	0.04	14.643	0.003		3891.42	64.8569	53.8	12.3	40.1	2.768	0.006	0.006	0.000	0.142	0.12	
3202	9/2/2004	12:45:47 AM		25.616	25.511	25.121	25.669	24.651		49.168	55.029	18.968	31.174	-0.468	-6.174		47.883	0.041	14.643	0.004		3892.42	64.8736	53.9	11.4	40.2	2.770	0.006	0.006	0.000	0.146	0.12	
3203	9/2/2004	12:46:47 AM		25.615	25.51	25.129	25.652	24.67		48.812	54.513	18.796	31.066	-0.474	-6.183		49.62	0.04	14.643	0.003		3893.42	64.8903	53.4	11.8	39.9	2.754	0.006	0.006	0.000	0.143	0.12	
3204	9/2/2004	12:47:47 AM		25.623	25.513	25.158	25.626	24.698		49.625	55.444	19.227	31.289	-0.468	-6.18		51.819	0.04	14.643	0.003		3894.42	64.9069	54.3	12.3	40.5	2.789	0.006	0.006	0.000	0.141	0.12	
3205	9/2/2004	12:48:47 AM		25.622	25.497	25.126	25.629	24.767		49.301	55.014	18.717	31.63	-0.471	-6.18		52.784	0.04	14.643	0.003		3895.42	64.9236	53.9	12.6	40.5	2.790	0.006	0.006	0.000	0.141	0.12	
3206	9/2/2004	12:49:47 AM		25.621	25.491	25.15	25.628	24.761		49.145	54.899	18.972	30.983	-0.459	-6.183		50.867	0.04	14.643	0.003		3896.42	64.9403	53.8	12.1	40.1	2.762	0.006	0.006	0.000	0.142	0.12	
3207	9/2/2004	12:50:47 AM		25.616	25.491	25.155	25.679	24.741		49.027	54.898	18.717	31.283	-0.474	-6.185		50.496	0.039	14.643	0.003		3897.42	64.9569	53.8	12.0	40.2	2.769	0.006	0.006	0.000	0.138	0.12	
3208	9/2/2004	12:51:47 AM		25.635	25.495	25.175	25.693	24.746		49.328	55.203	19.124	31.146	-0.419	-6.11		49.578	0.041	14.643	0.003		3898.42	64.9736	54.1	11.8	40.2	2.774	0.006	0.006	0.000	0.145	0.12	
3209	9/2/2004	12:52:47 AM		25.625	25.489	25.169	25.672	24.78		49.461	55.466	18.944	31.373	-0.419	-6.131		52.025	0.04	14.643	0.003		3899.42	64.9903	54.3	12.4	40.4	2.787	0.006	0.006	0.000	0.141	0.12	
3210	9/2/2004	12:53:47 AM		25.645	25.499	25.194	25.732	24.765		49.11	55.162	18.64	31.394	-0.419	-6.125		50.59	0.04	14.643	0.003		3900.42	65.0069	54.0	12.0	40.3	2.775	0.006	0.006	0.000	0.141	0.12	
3211	9/2/2004	12:54:47 AM		25.643	25.493	25.202	25.701	24.803		49.749	55.41	18.842	31.969	-0.422	-6.131		50.513	0.04	14.643	0.003		3901.42	65.0236	54.3	12.0	40.9	2.817	0.006	0.006	0.000	0.139	0.12	
3212	9/2/2004	12:55:47 AM		25.642	25.491	25.201	25.694	24.837		49.498	55.23	18.8	31.747	-0.419	-6.122		50.64	0.04	14.643	0.003		3902.42	65.0403	54.1	12.1	40.6	2.801	0.006	0.006	0.000	0.140	0.12	
3213	9/2/2004	12:56:47 AM		25.662	25.496	25.206	25.729	24.807		49.517	55.383	18.733	31.577	-0.419	-6.122		50.359	0.04	14.643	0.003		3903.42	65.0569	54.3	12.0	40.5	2.796	0.006	0.006	0.000	0.140	0.12	
3214	9/2/2004	12:57:47 AM		25.652	25.486	25.201	25.724	24.807		49.736	55.705	18.907	31.488	-0.422	-6.119		50.373	0.041	14.643	0.003		3904.42	65.0736	54.6	12.0	40.6	2.800	0.006	0.006	0.000	0.144	0.12	
3215	9/2/2004	12:58:47 AM		25.667	25.491	25.211	25.754	24.887		50.014	55.819	18.44	32.662	-0.419	-6.119		49.555	0.041	14.643	0.003		3905.42	65.0903	54.7	11.8	41.3	2.850	0.006	0.006	0.000	0.141	0.12	
3216	9/2/2004	12:59:47 AM		25.671	25.491	25.23	25.748	24.881		49.672	55.813	18.524	31.73	-0.419	-6.131		51.568	0.039	14.643	0.003		3906.42	65.1069	54.7	12.3	40.7	2.806	0.006	0.006	0.000	0.136	0.12	
3217	9/2/2004	1:00:47 AM		25.687	25.501	25.251	25.774	24.887		49.805	55.815	18.897	31.757	-0.419	-6.122		49.549	0.04	14.643	0.003		3907.42	65.1236	54.7	11.8	40.8	2.812	0.006	0.006	0.000	0.139	0.12	
3218	9/2/2004	1:01:47 AM		25.686	25.496	25.31	25.778	24.941		49.471	55.193	18.769	31.4	-0.419	-6.122		50.724	0.04	14.643	0.003		3908.42	65.1403	54.1	12.1	40.4	2.788	0.006	0.006	0.000	0.140	0.12	
3219	9/2/2004	1:02:47 AM		25.68	25.49	25.325	25.763	24.94		49.519	55.52	18.795	31.743	-0.419	-6.116		50.909	0.041	14.643	0.003		3909.42	65.1569	54.4	12.1	40.6	2.801	0.006	0.006	0.000	0.143	0.12	
3220	9/2/2004	1:03:47 AM		25.701	25.506	25.325	25.794	25.001		49.548	55.39	18.739	31.866	-0.419	-6.119		53.095	0.04	14.643	0.003		3910.42	65.1736	54.3	12.6	40.7	2.807	0.006	0.006	0.000	0.139	0.12	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3221	9/2/2004	1:04:47 AM		25.706	25.501	25.29	25.804	24.921		49.608	55.458	18.556	32.003	-0.399	-6.122		47.833	0.04	14.643	0.003		3911.42	65.1903	54.3	11.4	40.8	2.813	0.006	0.006	0.000	0.139	0.12	
3222	9/2/2004	1:05:47 AM		25.712	25.507	25.312	25.79	24.953		49.51	55.437	18.48	31.815	-0.393	-6.119		50.989	0.041	14.643	0.003		3912.42	65.2069	54.3	12.1	40.7	2.804	0.006	0.006	0.000	0.143	0.12	
3223	9/2/2004	1:06:47 AM		25.717	25.497	25.292	25.81	24.928		49.508	55.224	18.433	32.166	-0.381	-6.105		49.833	0.042	14.643	0.003		3913.42	65.2236	54.1	11.9	40.8	2.816	0.006	0.006	0.000	0.146	0.12	
3224	9/2/2004	1:07:47 AM		25.712	25.492	25.267	25.79	24.933		49.316	55.122	18.436	31.735	-0.387	-6.116		50.77	0.041	14.643	0.003		3914.42	65.2403	54.0	12.1	40.5	2.794	0.006	0.006	0.000	0.144	0.12	
3225	9/2/2004	1:08:47 AM		25.717	25.502	25.282	25.755	24.973		49.664	55.614	18.553	32.04	-0.352	-6.11		49.403	0.041	14.643	0.003		3915.42	65.2569	54.5	11.8	40.9	2.817	0.006	0.006	0.000	0.143	0.12	
3226	9/2/2004	1:09:47 AM		25.728	25.508	25.258	25.801	24.978		49.944	55.887	18.4	32.451	-0.352	-6.119		50	0.04	14.643	0.003		3916.42	65.2736	54.8	11.9	41.2	2.840	0.006	0.006	0.000	0.138	0.12	
3227	9/2/2004	1:10:47 AM		25.749	25.519	25.298	25.852	24.939		49.919	55.672	18.552	32.519	-0.349	-6.113		49.574	0.04	14.643	0.003		3917.42	65.2903	54.5	11.8	41.2	2.842	0.006	0.006	0.000	0.138	0.12	
3228	9/2/2004	1:11:47 AM		25.739	25.509	25.273	25.791	24.899		49.693	55.614	18.453	32.172	-0.352	-6.107		51.005	0.041	14.643	0.003		3918.42	65.3069	54.5	12.1	40.9	2.822	0.006	0.006	0.000	0.142	0.12	
3229	9/2/2004	1:12:47 AM		25.739	25.514	25.268	25.806	24.904		49.627	55.537	18.47	31.979	-0.349	-6.113		50.527	0.04	14.643	0.003		3919.42	65.3236	54.4	12.0	40.8	2.813	0.006	0.006	0.000	0.139	0.12	
3230	9/2/2004	1:13:47 AM		25.734	25.509	25.273	25.801	24.944		49.653	55.45	18.264	32.338	-0.349	-6.11		51.404	0.041	14.643	0.003		3920.42	65.3403	54.3	12.2	41.0	2.826	0.006	0.006	0.000	0.142	0.12	
3231	9/2/2004	1:14:47 AM		25.754	25.519	25.284	25.812	24.87		50.014	55.943	18.703	32.227	-0.346	-6.107		51.13	0.041	14.643	0.004		3921.42	65.3569	54.8	12.2	41.1	2.835	0.006	0.006	0.000	0.142	0.12	
3232	9/2/2004	1:15:47 AM		25.745	25.505	25.24	25.823	24.896		49.803	55.622	18.474	32.221	-0.358	-6.157		49.449	0.041	14.643	0.003		3922.42	65.3736	54.5	11.8	41.0	2.828	0.006	0.006	0.000	0.142	0.12	
3233	9/2/2004	1:16:47 AM		25.745	25.515	25.27	25.798	24.996		49.809	55.413	18.504	32.289	-0.355	-6.159		50.217	0.041	14.643	0.003		3923.42	65.3903	54.3	12.0	41.0	2.830	0.006	0.006	0.000	0.142	0.12	
3234	9/2/2004	1:17:47 AM		25.745	25.514	25.259	25.827	24.93		49.624	55.506	17.814	32.874	-0.346	-6.154		49.111	0.041	14.643	0.004		3924.42	65.4069	54.4	11.7	41.2	2.844	0.006	0.006	0.000	0.141	0.12	
3235	9/2/2004	1:18:47 AM		25.75	25.514	25.234	25.837	24.895		49.763	55.659	18.317	32.418	-0.349	-6.157		52.117	0.042	14.643	0.003		3925.42	65.4236	54.5	12.4	41.1	2.833	0.006	0.006	0.000	0.145	0.12	
3236	9/2/2004	1:19:47 AM		25.754	25.519	25.269	25.797	24.92		49.737	55.676	18.415	32.35	-0.349	-6.157		50.986	0.041	14.643	0.003		3926.42	65.4403	54.6	12.1	41.0	2.830	0.006	0.006	0.000	0.142	0.12	
3237	9/2/2004	1:20:47 AM		25.761	25.531	25.276	25.819	24.921		49.732	55.748	18.342	32.367	-0.349	-6.159		49.412	0.04	14.643	0.003		3927.42	65.4569	54.6	11.8	41.0	2.830	0.006	0.006	0.000	0.138	0.12	
3238	9/2/2004	1:21:47 AM		25.756	25.526	25.245	25.814	24.916		50.07	55.916	18.52	32.5	-0.349	-6.157		47.226	0.041	14.643	0.003		3928.42	65.4736	54.8	11.2	41.3	2.846	0.006	0.006	0.000	0.141	0.12	
3239	9/2/2004	1:22:47 AM		25.752	25.522	25.266	25.774	24.937		49.739	55.603	18.626	32.348	-0.349	-6.151		51.074	0.042	14.643	0.003		3929.42	65.4903	54.5	12.2	41.0	2.830	0.006	0.006	0.000	0.145	0.12	
3240	9/2/2004	1:23:47 AM		25.763	25.533	25.258	25.816	24.899		49.606	55.601	18.321	32.285	-0.352	-6.162		50.146	0.04	14.643	0.003		3930.42	65.5069	54.5	11.9	40.9	2.823	0.006	0.006	0.000	0.139	0.12	
3241	9/2/2004	1:24:47 AM		25.768	25.533	25.258	25.841	24.969		49.946	55.885	18.427	32.529	-0.352	-6.162		49.026	0.04	14.643	0.003		3931.42	65.5236	54.8	11.7	41.2	2.843	0.006	0.006	0.000	0.138	0.12	
3242	9/2/2004	1:25:47 AM		25.763	25.533	25.328	25.821	24.969		49.533	55.439	18.721	31.761	-0.346	-6.145		48.266	0.041	14.643	0.004		3932.42	65.5403	54.3	11.5	40.6	2.802	0.006	0.006	0.000	0.143	0.12	
3243	9/2/2004	1:26:47 AM		25.774	25.539	25.303	25.857	24.934		49.676	55.551	18.533	32.024	-0.349	-6.151		51.789	0.041	14.643	0.003		3933.42	65.5569	54.4	12.3	40.9	2.816	0.006	0.006	0.000	0.142	0.12	
3244	9/2/2004	1:27:47 AM		25.764	25.534	25.298	25.847	25.004		49.649	55.614	18.356	32.315	-0.346	-6.142		47.776	0.041	14.643	0.004		3934.42	65.5736	54.5	11.4	41.0	2.826	0.006	0.006	0.000	0.142	0.12	
3245	9/2/2004	1:28:45 AM		25.775	25.535	25.304	25.802	24.98		49.591	55.479	17.861	32.652	-0.349	-6.151		49.017	0.04	14.643	0.003		3935.38	65.5897	54.4	11.7	41.1	2.835	0.006	0.006	0.000	0.138	0.12	
3246	9/2/2004	1:29:45 AM		25.775	25.535	25.28	25.813	25.006		49.372	55.168	18.476	31.87	-0.349	-6.157		52.853	0.04	14.643	0.003		3936.38	65.6064	54.0	12.6	40.6	2.801	0.006	0.006	0.000	0.140	0.12	
3247	9/2/2004	1:30:45 AM		25.765	25.525	25.26	25.793	24.931		49.958	55.848	18.518	32.395	-0.352	-6.154		50.87	0.041	14.643	0.003		3937.38	65.6231	54.7	12.1	41.2	2.839	0.006	0.006	0.000	0.142	0.12	
3248	9/2/2004	1:31:45 AM		25.781	25.536	25.281	25.804	25.051		49.726	55.711	18.643	31.966	-0.306	-6.142		52.336	0.041	14.643	0.004		3938.38	65.6397	54.6	12.5	40.8	2.816	0.006	0.006	0.000	0.143	0.12	
3249	9/2/2004	1:32:45 AM		25.782	25.542	25.276	25.84	24.987		49.521	55.415	18.245	32.317	-0.3	-6.139		50.248	0.041	14.643	0.004		3939.38	65.6564	54.3	12.0	40.9	2.821	0.006	0.006	0.000	0.142	0.12	
3250	9/2/2004	1:33:45 AM		25.772	25.532	25.266	25.835	24.987		49.394	55.394	18.381	31.946	-0.32	-6.142		52.63	0.041	14.643	0.003		3940.38	65.6731	54.3	12.5	40.7	2.804	0.006	0.006	0.000	0.143	0.12	
3251	9/2/2004	1:34:45 AM		25.782	25.537	25.261	25.845	24.942		49.203	55.278	17.922	32.258	-0.303	-6.145		50.44	0.041	14.643	0.003		3941.38	65.6897	54.2	12.0	40.7	2.808	0.006	0.006	0.000	0.143	0.12	
3252	9/2/2004	1:35:45 AM		25.778	25.538	25.252	25.86	25.053		49.765	55.589	18.562	31.952	-0.3	-6.145		47.743	0.041	14.643	0.003		3942.38	65.7064	54.5	11.4	40.9	2.817	0.006	0.006	0.000	0.143	0.12	
3253	9/2/2004	1:36:45 AM		25.773	25.543	25.273	25.886	25.029		49.633	55.634	18.676	31.784	-0.3	-6.136		50.795	0.042	14.643	0.003		3943.38	65.7231	54.5	12.1	40.7	2.807	0.006	0.006	0.000	0.147	0.12	
3254	9/2/2004	1:37:45 AM		25.783	25.543	25.263	25.871	25.049		49.577	55.535	18.595	31.831	-0.3	-6.145		50.175	0.041	14.643	0.003		3944.38	65.7397	54.4	12.0	40.7	2.806	0.006	0.006	0.000	0.143	0.12	
3255	9/2/2004	1:38:45 AM		25.789	25.549	25.254	25.867	25.064		49.919	55.707	18.764	32.124	-0.3	-6.142		49.495	0.041	14.643	0.003		3945.38	65.7564	54.6	11.8	41.0	2.828	0.006	0.006	0.000	0.142	0.12	
3256	9/2/2004	1:39:45 AM		25.779	25.534	25.269	25.817	25.039		49.875	55.869	18.477	32.438	-0.3	-6.142		50.884	0.041	14.643	0.003		3946.38	65.7731	54.7	12.1	41.2	2.838	0.006	0.006	0.000	0.142	0.12	
3257	9/2/2004	1:40:45 AM		25.778	25.538	25.258	25.816	24.989		49.803	55.893	18.724	31.964	-0.3	-6.142		49.822	0.041	14.643	0.003		3947.38	65.7897	54.8	11.9	40.9	2.819	0.006	0.006	0.000	0.143	0.12	
3258	9/2/2004	1:41:45 AM		25.79	25.55	25.244	25.858	25.07		49.902	55.877	18.496	32.42	-0.268	-6.148		50.407	0.04	14.643	0.003		3948.38	65.8064	54.8	12.0	41.2	2.838	0.006	0.006	0.000	0.138	0.12	
3259	9/2/2004	1:42:45 AM		25.791	25.551	25.275	25.808	24.996		49.602	55.498	18.583	31.971	-0.283	-6.136		49.795	0.041	14.643	0.003		3949.38	65.8231	54.4	11.9	40.8	2.812	0.006	0.006	0.000	0.143	0.12	
3260	9/2/2004	1:43:45 AM		25.791	25.546	25.275	25.803	24.836		49.629	55.502	18.732	31.841	-0.271	-6.139		49.71	0.04	14.643	0.003		3950.38	65.8397	54.4	11.8	40.7	2.809	0.006	0.006	0.000	0.139	0.12	
3261	9/2/2004	1:44:45 AM		25.786	25.541	25.285	25.778	24.786		49.542	55.524	18.611	31.962	-0.268	-6.139		49.581	0.041	14.643	0.003		3951.38	65.8564	54.4	11.8	40.8	2.810	0.006	0.006	0.000	0.143	0.12	
3262	9/2/2004	1:45:45 AM		25.779	25.534	25.269	25.672	24.704		49.639	55.638	18.45	31.989	-0.248	-6.145		50.559	0.039	14.643	0.003		3952.38	65.8731	54.5	12.0	40.8	2.814	0.006	0.006	0.000	0.136	0.12	
3263	9/2/2004	1:46:45 AM		25.768	25.528	25.262	25.665	24.648		49.805	55.819	18.578	32.131	-0.286	-6.133		50.323	0.041	14.643	0.003		3953.38	65.8897	54.7	12.0	41.0	2.825	0.006	0.006	0.000	0.142	0.12	
3264	9/2/2004	1:47:45 AM		25.772	25.532	25.342	25.664	24.637		49.477	55.433	18.527	32.12	-0.245	-6.136		50.098	0.04	14.643	0.003		3954.38	65.9064	54.3	11.9	40.8	2.813	0.006	0.006	0.000	0.139	0.12	
3265	9/2/2004	1:48:45 AM		25.775	25.53	25.325	25.593	24.656		49.714	55.618	18.803	31.786	-0.268	-6.131		51.652	0.041	14.643	0.003		3955.38	65.9231	54.5	12.3	40.8	2.810	0.006	0.006	0.000	0.143	0.12	
3266	9/2/2004	1:49:45 AM		25.769	25.519	25.293	25.576	24.759		49.415	55.185	18.741	31.646	-0.251	-6.131		50.357	0.041	14.643	0.003		3956.38	65.9397	54.1	12.0	40.5	2.794	0.006	0.006	0.000	0.144	0.12	
3267	9/2/2004	1:50:45 AM		25.773	25.523	25.318	25.556	24.719		49.548	55.384	18.468	31.934	-0.234	-6.133		49.499	0.04	14.643	0.003		3957.38	65.9564	54.3	11.8	40.7	2.809	0.006	0.006	0.000	0.139	0.12	
3268	9/2/2004	1:51:45 AM		25.76	25.51	25.3	25.548	24.686		49.427	55.468	18.527	31.811	-0.234	-6.136		49.779	0.04	14.643	0.003		3958.38	65.9731	54.3	11.9	40.6	2.801	0.006	0.006	0.000	0.140	0.12	
3269	9/2/2004	1:52:45 AM		25.764	25.519	25.288	25.631	24.664		49.43	55.466	18.147	32.373	-0.196	-6.136		47.676	0.04	14.643	0.003		3959.38	65.9897	54.3	11.4	40.9	2.820	0.006	0.006	0.000	0.139	0.12	
3270	9/2/2004	1:53:45 AM		25.774	25.519	25.323	25.621	24.804		49.303	55.315	18.771	31.488	-0.234	-6.128		49.589	0.041	14.643	0.003		3960.38	66.0064	54.2	11.8	40.4	2.785	0.006	0.006	0.000	0.144	0.12	
3271	9/2/2004	1:54:45 AM		25.783	25.528	25.323	25.706	24.848		49.456	55.707	18.355	31.907	-0.225	-6.128		50.231	0.04	14.643	0.003		3961.38	66.0231	54.6	12.0	40.7	2.805	0.006	0.006	0.000	0.139	0.12	
3272	9/2/2004	1:55:45 AM		25.778	25.513	25.303	25.666	24.848		49.566	55.585	18.467	32.036	-0.219	-6.131		48.031	0.04	14.643	0.003		3962.38	66.0397	54.5	11.4	40.8	2.813	0.006	0.006	0.000	0.139	0.12	
3273	9/2/2004	1:56:45 AM		25.762	25.502	25.302	25.645	24.893		49.72	55.835	18.678	31.923	-0.236	-6.133		50.432	0.04	14.643	0.003		3963.38	66.0564	54.7	12.0	40.8	2.814	0.006	0.006	0.000	0.139	0.12	
3274	9/2/2004	1:57:45 AM		25.772	25.512	25.332	25.67	24.888		49.49	55.67	18.475	31.987	-0.234	-6.128		50.457	0.041	14.643	0.003		3964.38	66.0731	54.5	12.0	40.7	2.809	0.006	0.006	0.000	0.143	0.12	
3275	9/2/2004	1:58:45 AM		25.782	25.512	25.352	25.705	24.853		49.616	55.529	18.993	31.638	-0.205	-6.139		51.504	0.039	14.643	0.003		3965.38	66.0897	54.4	12.3	40.6	2.801	0.006	0.006	0.000	0.136	0.12	
3276	9/2/2004	1:59:45 AM		25.782	25.516	25.346	25.684	24.782		49.32	55.299	18.639	31.552	-0.176	-6.131		51.426	0.04	14.643	0.003		3966.38	66.1064	54.2	12.2	40.4	2.788	0.006	0.006	0.000	0.140	0.12	
3277	9/2/2004	2:00:45 AM		25.776	25.501	25.32	25.668	24.751		49.191	55.019	18.242	31.999	-0.176	-6.128		52.709	0.04	14.643	0.003		3967.38	66.1231	53.9	12.6	40.6	2.799	0.006	0.006	0.000	0.140	0.12	
3278	9/2/2004	2:01:45 AM		25.774	25.504	25.334	25.697	24.78		49.5	55.547	18.567	31.882	-0.176	-6.119		48.296	0.041	14.643	0.003		3968.38	66.1397	54.4	11.5	40.7	2.806	0.006	0.006	0.000	0.143	0.12	
3279	9/2/2004	2:02:45 AM		25.779	25.508	25.323	25.681	24.734		49.498	55.632	18.798	31.357	-0.176	-6.122		49.674	0.04	14.643	0.003		3969.38	66.1564	54.5	11.8	40.4	2.787	0.006	0.006	0.000	0.140	0.12	
3280	9/2/2004	2:03:45 AM		25.779	25.503	25.313	25.696	24.744		49.651	55.728	18.649	31.909	-0.176	-6.128		52.509	0.039	14.643	0.003		3970.38	66.1731	54.6	12.5	40.8	2.812	0.006	0.006	0.000	0.136	0.12	
3281	9/2/2004	2:04:45 AM		25.778	25.503	25.322	25.68	24.818		49.419	55.541	19.008	31.267	-0.176	-6.119		51.671	0.04	14.643	0.003		3971.38	66.1897	54.4	12.3	40.3	2.782	0.006	0.006	0.000	0.141	0.12	
3282	9/2/2004	2:05:45 AM		25.778	25.498	25.307	25.72	24.763		49.212	55.247	18.52	31.733	-0.176	-6.122		51.016	0.041	14.643	0.003		3972.38	66.2064	54.1	12.2	40.5	2.790	0.006	0.006	0.000	0.144	0.12	
3283	9/2/2004	2:06:45 AM		25.773	25.498	25.287	25.705	24.838		49.311	55.533	18.718	31.449	-0.176	-6.119		53.469	0.04	14.643	0.003		3973.38	66.2231	54.4	12.7	40.4	2.784	0.006	0.006	0.000	0.141	0.12	
3284	9/2/2004	2:07:45 AM		25.773	25.498	25.312	25.69	24.873		48.986	54.813	18.054	31.841	-0.176	-6.122		49.887	0.04	14.643	0.003		3974.38	66.2397	53.7	11.9	40.4	2.786	0.006	0.006	0.000	0.140	0.12	
3285	9/2/2004	2:08:45 AM		25.779	25.503	25.308	25.746	24.864		49.401	55.346	18.605	31.86	-0.158	-6.125		52.169	0.039	14.643	0.003		3975.38	66.2564	54.2	12.4	40.6	2.801	0.006	0.006	0.000	0.136	0.12	
3286	9/2/2004	2:09:45 AM		25.779	25.499	25.299	25.762	24.895		49.344	55.566	18.344	31.728	-0.173	-6.116		51.658	0.04	14.643	0.003		3976.38	66.2731	54.4	12.3	40.5	2.795	0.006	0.006	0.000	0.140	0.12	
3287	9/2/2004	2:10:45 AM		25.79	25.51	25.325	25.798	24.905		49.33	55.363	18.14	32.049	-0.176	-6.11		50.046	0.041	14.643	0.003		3977.38	66.2897	54.2	11.9	40.7	2.805	0.006	0.006	0.000	0.143	0.12	
3288	9/2/2004	2:11:45 AM		25.775	25.505	25.305	25.818	24.875		49.896	56.132	18.74	31.925	-0.179	-6.113		51.437	0.04	14.643	0.003		3978.38	66.3064	55.0	12.3	40.9	2.821	0.006	0.006	0.000	0.139	0.12	
3289	9/2/2004	2:12:45 AM		25.765	25.49	25.285	25.788	24.795		49.801	55.924	18.571	32.077	-0.17	-6.116		52.125	0.04	14.643	0.003		3979.38	66.3231	54.8	12.4	40.9	2.823	0.006	0.006	0.000	0.139	0.12	
3290	9/2/2004	2:13:45 AM		25.782	25.511	25.316	25.819	24.807		49.857	55.895	18.712	32.34	-0.164	-6.102		54.199	0.041	14.643	0.004		3980.38	66.3397	54.8	12.9	41.1	2.834	0.006	0.006	0.000	0.142	0.12	

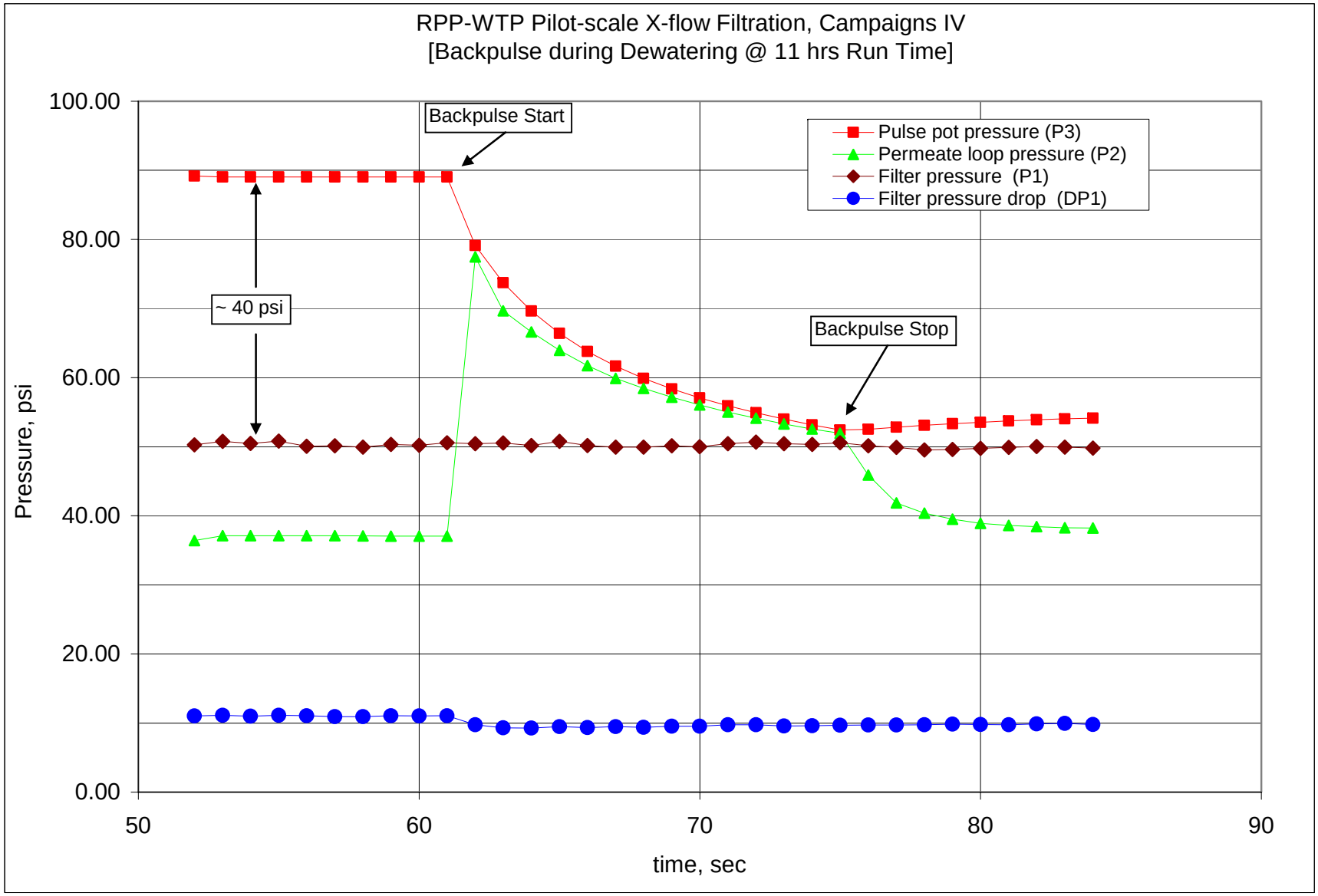
RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3291	9/2/2004	2:14:45 AM		25.773	25.493	25.283	25.811	24.898		49.568	55.504	18.436	32.083	-0.112	-6.119		50.229	0.038	14.643	0.003		3981.38	66.3564	54.4	12.0	40.8	2.815	0.005	0.005	0.000	0.132	0.11	
3292	9/2/2004	2:15:45 AM		25.772	25.492	25.312	25.775	24.858		49.49	55.245	18.338	32.001	-0.132	-6.11		49.841	0.041	14.643	0.003		3982.38	66.3731	54.1	11.9	40.7	2.809	0.006	0.006	0.000	0.143	0.12	
3293	9/2/2004	2:16:45 AM		25.767	25.491	25.286	25.699	24.757		49.788	55.738	18.429	32.328	-0.158	-6.11		48.604	0.042	14.643	0.003		3983.38	66.3897	54.6	11.6	41.1	2.831	0.006	0.006	0.000	0.145	0.12	
3294	9/2/2004	2:17:45 AM		25.771	25.481	25.28	25.678	24.691		49.734	55.848	18.571	31.909	-0.135	-6.113		50.415	0.039	14.643	0.003		3984.38	66.4064	54.7	12.0	40.8	2.814	0.006	0.006	0.000	0.136	0.12	
3295	9/2/2004	2:18:45 AM		25.77	25.485	25.31	25.638	24.67		49.678	55.871	18.392	32.322	-0.103	-6.102		49.272	0.042	14.643	0.003		3985.38	66.4231	54.7	11.7	41.0	2.827	0.006	0.006	0.000	0.145	0.12	
3296	9/2/2004	2:19:45 AM		25.77	25.48	25.295	25.628	24.665		49.627	55.825	18.435	32.088	-0.129	-6.096		43.905	0.042	14.643	0.003		3986.38	66.4397	54.7	10.5	40.9	2.817	0.006	0.006	0.000	0.146	0.12	
3297	9/2/2004	2:20:45 AM		25.759	25.464	25.264	25.587	24.55		49.803	55.993	18.579	31.79	-0.126	-6.102		52.657	0.041	14.643	0.004		3987.38	66.4564	54.9	12.5	40.8	2.813	0.006	0.006	0.000	0.143	0.12	
3298	9/2/2004	2:21:45 AM		25.759	25.468	25.293	25.506	24.524		49.676	55.937	18.395	32.227	-0.106	-6.096		51.57	0.041	14.643	0.003		3988.38	66.4731	54.8	12.3	41.0	2.823	0.006	0.006	0.000	0.142	0.12	
3299	9/2/2004	2:22:45 AM		25.753	25.448	25.292	25.49	24.518		49.444	55.429	18.699	31.685	-0.109	-6.102		50.665	0.041	14.643	0.003		3989.38	66.4897	54.3	12.1	40.6	2.797	0.006	0.006	0.000	0.144	0.12	
3300	9/2/2004	2:23:45 AM		25.741	25.441	25.296	25.474	24.447		50.002	55.941	18.788	32.19	-0.132	-6.102		53.07	0.041	14.643	0.003		3990.38	66.5064	54.8	12.6	41.1	2.833	0.006	0.006	0.000	0.142	0.12	
3301	9/2/2004	2:24:45 AM		25.744	25.434	25.284	25.466	24.369		49.388	55.348	18.266	32.088	-0.109	-6.105		51.404	0.04	14.643	0.003		3991.38	66.5231	54.2	12.2	40.7	2.809	0.006	0.006	0.000	0.139	0.12	
3302	9/2/2004	2:25:45 AM		25.736	25.421	25.261	25.448	24.346		49.77	55.864	18.782	31.778	-0.106	-6.11		48.423	0.04	14.643	0.003		3992.38	66.5397	54.7	11.5	40.8	2.811	0.006	0.006	0.000	0.139	0.12	
3303	9/2/2004	2:26:45 AM		25.735	25.425	25.289	25.402	24.375		49.525	55.622	18.738	31.751	-0.106	-6.096		49.044	0.04	14.643	0.003		3993.38	66.5564	54.5	11.7	40.6	2.802	0.006	0.006	0.000	0.140	0.12	
3304	9/2/2004	2:27:45 AM		25.749	25.434	25.289	25.431	24.469		49.481	55.595	18.341	32.225	-0.103	-6.081		49.677	0.042	14.643	0.003		3994.38	66.5731	54.5	11.8	40.9	2.817	0.006	0.006	0.000	0.146	0.12	
3305	9/2/2004	2:28:45 AM		25.733	25.417	25.257	25.45	24.458		49.828	56.157	18.45	32.112	-0.103	-6.084		51.529	0.042	14.643	0.003		3995.38	66.5897	55.0	12.3	41.0	2.825	0.006	0.006	0.000	0.146	0.12	
3306	9/2/2004	2:29:45 AM		25.737	25.422	25.296	25.429	24.452		49.863	56.287	18.425	32.363	-0.1	-6.096		51.451	0.038	14.643	0.003		3996.38	66.6064	55.2	12.3	41.1	2.835	0.005	0.005	0.000	0.131	0.11	
3307	9/2/2004	2:30:45 AM		25.717	25.407	25.251	25.404	24.467		49.386	55.442	18.368	31.921	-0.106	-6.087		50.661	0.041	14.643	0.003		3997.38	66.6231	54.3	12.1	40.7	2.803	0.006	0.006	0.000	0.143	0.12	
3308	9/2/2004	2:31:45 AM		25.722	25.407	25.266	25.444	24.532		49.807	55.808	18.172	32.625	-0.109	-6.09		50.984	0.04	14.643	0.003		3998.38	66.6397	54.7	12.1	41.2	2.842	0.006	0.006	0.000	0.138	0.12	
3309	9/2/2004	2:32:45 AM		25.727	25.407	25.281	25.429	24.572		49.72	55.937	18.497	32.147	-0.1	-6.076		46.94	0.041	14.643	0.003		3999.38	66.6564	54.8	11.2	40.9	2.822	0.006	0.006	0.000	0.142	0.12	
3310	9/2/2004	2:33:45 AM		25.732	25.417	25.291	25.479	24.652		49.525	55.665	18.313	32.112	-0.092	-6.078		48.681	0.042	14.643	0.003		4000.38	66.6731	54.5	11.6	40.8	2.814	0.006	0.006	0.000	0.146	0.12	
3311	9/2/2004	2:34:45 AM		25.72	25.4	25.285	25.413	24.561		49.552	55.713	18.312	32.1	-0.086	-6.078		50.169	0.041	14.643	0.003		4001.38	66.6897	54.6	11.9	40.8	2.815	0.006	0.006	0.000	0.143	0.12	
3312	9/2/2004	2:35:45 AM		25.711	25.386	25.251	25.418	24.636		49.421	55.593	18.161	32.243	-0.092	-6.078		48.888	0.041	14.643	0.003		4002.38	66.7064	54.5	11.6	40.8	2.815	0.006	0.006	0.000	0.143	0.12	
3313	9/2/2004	2:36:45 AM		25.711	25.386	25.236	25.488	24.716		49.477	55.727	18.191	32.223	-0.092	-6.09		48.183	0.039	14.643	0.003		4003.38	66.7231	54.6	11.5	40.9	2.816	0.006	0.006	0.000	0.136	0.12	
3314	9/2/2004	2:37:45 AM		25.697	25.382	25.241	25.474	24.662		49.873	56.049	18.833	32.008	-0.083	-6.073		49.483	0.042	14.643	0.003		4004.38	66.7397	54.9	11.8	40.9	2.823	0.006	0.006	0.000	0.146	0.12	
3315	9/2/2004	2:38:45 AM		25.713	25.392	25.257	25.53	24.598		49.848	56.101	18.65	31.942	-0.08	-6.081		52.165	0.041	14.643	0.003		4005.38	66.7564	55.0	12.4	40.9	2.820	0.006	0.006	0.000	0.142	0.12	
3316	9/2/2004	2:39:45 AM		25.703	25.387	25.237	25.545	24.633		49.515	55.495	18.272	32.243	-0.086	-6.078		48.536	0.04	14.643	0.003		4006.38	66.7731	54.4	11.6	40.9	2.818	0.006	0.006	0.000	0.139	0.12	
3317	9/2/2004	2:40:45 AM		25.693	25.382	25.242	25.495	24.718		49.566	55.609	18.527	32.065	-0.095	-6.081		50.363	0.041	14.643	0.003		4007.38	66.7897	54.5	12.0	40.8	2.814	0.006	0.006	0.000	0.143	0.12	
3318	9/2/2004	2:41:45 AM		25.703	25.387	25.232	25.54	24.768		49.811	56.059	18.435	32.215	-0.08	-6.078		48.419	0.041	14.643	0.003		4008.38	66.8064	54.9	11.5	41.0	2.828	0.006	0.006	0.000	0.142	0.12	
3319	9/2/2004	2:42:45 AM		25.697	25.377	25.226	25.554	24.717		49.622	55.701	18.13	32.521	-0.08	-6.081		47.046	0.04	14.643	0.003		4009.38	66.8231	54.6	11.2	41.1	2.832	0.006	0.006	0.000	0.139	0.12	
3320	9/2/2004	2:43:45 AM		25.696	25.381	25.241	25.559	24.746		49.726	55.982	18.296	32.34	-0.08	-6.07		52.768	0.041	14.643	0.003		4010.38	66.8397	54.9	12.6	41.0	2.829	0.006	0.006	0.000	0.142	0.12	
3321	9/2/2004	2:44:45 AM		25.701	25.381	25.226	25.604	24.726		49.672	55.912	18.088	32.555	-0.083	-6.081		52.196	0.039	14.643	0.003		4011.38	66.8564	54.8	12.4	41.1	2.835	0.006	0.006	0.000	0.135	0.11	
3322	9/2/2004	2:45:45 AM		25.696	25.386	25.236	25.604	24.696		49.902	55.997	18.081	32.763	-0.08	-6.073		49.151	0.041	14.643	0.003		4012.38	66.8731	54.9	11.7	41.3	2.850	0.006	0.006	0.000	0.141	0.12	
3323	9/2/2004	2:46:45 AM		25.706	25.396	25.246	25.599	24.746		49.541	55.75	18.192	32.289	-0.08	-6.076		47.931	0.04	14.643	0.003		4013.38	66.8897	54.6	11.4	40.9	2.821	0.006	0.006	0.000	0.139	0.12	
3324	9/2/2004	2:47:45 AM		25.7	25.384	25.224	25.627	24.795		49.681	55.672	18.445	32.459	-0.08	-6.073		50.651	0.041	14.643	0.003		4014.38	66.9064	54.5	12.1	41.1	2.832	0.006	0.006	0.000	0.142	0.12	
3325	9/2/2004	2:48:45 AM		25.694	25.384	25.243	25.606	24.739		50.021	56.113	18.528	32.644	-0.08	-6.067		51.527	0.041	14.643	0.003		4015.38	66.9231	55.0	12.3	41.3	2.850	0.006	0.006	0.000	0.141	0.12	
3326	9/2/2004	2:49:45 AM		25.705	25.389	25.239	25.592	24.735		49.981	56.268	18.411	32.391	-0.083	-6.067		49.877	0.041	14.643	0.003		4016.38	66.9397	55.1	11.9	41.2	2.840	0.006	0.006	0.000	0.142	0.12	
3327	9/2/2004	2:50:45 AM		25.71	25.395	25.23	25.638	24.821		49.892	56.24	18.437	32.43	-0.083	-6.084		47.874	0.038	14.643	0.003		4017.38	66.9564	55.1	11.4	41.2	2.838	0.005	0.005	0.000	0.131	0.11	
3328	9/2/2004	2:51:45 AM		25.715	25.405	25.275	25.618	24.761		49.817	56.24	18.576	32.01	-0.077	-6.067		51.952	0.04	14.643	0.003		4018.38	66.9731	55.1	12.4	40.9	2.821	0.006	0.006	0.000	0.139	0.12	
3329	9/2/2004	2:52:45 AM		25.706	25.396	25.246	25.654	24.826		49.94	56.092	18.21	32.654	-0.042	-6.07		50.1	0.041	14.643	0.003		4019.38	66.9897	55.0	11.9	41.3	2.847	0.006	0.006	0.000	0.141	0.12	
3330	9/2/2004	2:53:45 AM		25.707	25.397	25.241	25.664	24.782		49.672	55.653	18.584	31.969	-0.08	-6.081		49.518	0.039	14.643	0.003		4020.38	67.0064	54.5	11.8	40.8	2.814	0.006	0.006	0.000	0.136	0.12	
3331	9/2/2004	2:54:45 AM		25.713	25.398	25.273	25.646	24.824		50.079	56.009	18.682	32.397	-0.08	-6.064		51.85	0.04	14.643	0.004		4021.38	67.0231	54.9	12.3	41.2	2.843	0.006	0.006	0.000	0.138	0.12	
3332	9/2/2004	2:55:45 AM		25.703	25.393	25.248	25.671	24.824		49.765	55.951	18.854	31.704	-0.077	-6.064		50.202	0.041	14.643	0.003		4022.38	67.0397	54.8	12.0	40.7	2.809	0.006	0.006	0.000	0.143	0.12	
3333	9/2/2004	2:56:45 AM		25.703	25.383	25.243	25.646	24.844		49.548	55.763	18.162	32.25	-0.083	-6.061		48.385	0.041	14.643	0.003		4023.38	67.0564	54.6	11.5	40.9	2.820	0.006	0.006	0.000	0.143	0.12	
3334	9/2/2004	2:57:45 AM		25.71	25.395	25.264	25.642	24.87		49.766	55.897	18.671	32.038	-0.063	-6.073		51.837	0.04	14.643	0.003		4024.38	67.0731	54.8	12.3	40.9	2.820	0.006	0.006	0.000	0.139	0.12	
3335	9/2/2004	2:58:45 AM		25.709	25.394	25.238	25.652	24.829		49.824	55.895	18.395	32.379	-0.083	-6.067		50.083	0.041	14.643	0.003		4025.38	67.0897	54.8	11.9	41.1	2.834	0.006	0.006	0.000	0.142	0.12	
3336	9/2/2004	2:59:45 AM		25.708	25.388	25.268	25.666	24.844		49.933	56.125	18.34	32.41	-0.08	-6.078		49.908	0.038	14.643	0.003		4026.38	67.1064	55.0	11.9	41.2	2.839	0.005	0.005	0.000	0.131	0.11	
3337	9/2/2004	3:00:45 AM		25.723	25.398	25.283	25.686	24.824		49.726	55.887	18.701	31.913	-0.077	-6.064		49.115	0.04	14.643	0.003		4027.38	67.1231	54.8	11.7	40.8	2.814	0.006	0.006	0.000	0.139	0.12	
3338	9/2/2004	3:01:45 AM		25.714	25.394	25.254	25.707	24.789		50.191	56.577	18.6	32.461	-0.08	-6.064		50.179	0.04	14.643	0.003		4028.38	67.1397	55.5	12.0	41.3	2.849	0.006	0.006	0.000	0.138	0.12	
3339	9/2/2004	3:02:45 AM		25.709	25.394	25.269	25.702	24.919		50.133	56.005	18.739	32.551	-0.219	-6.012		50.371	0.047	14.643	0.003		4029.38	67.1564	54.9	12.0	41.3	2.850	0.007	0.007	0.000	0.162	0.14	
3340	9/2/2004	3:03:45 AM		25.725	25.405	25.274	25.702	24.855		49.824	56.25	18.355	32.482	0.328	-5.104		51.723	0.02	14.643	0.003		4030.38	67.1731	55.1	12.3	41.2	2.837	0.003	0.003	0.000	0.069	0.06	
3341	9/2/2004	3:04:45 AM		25.72	25.4	25.259	25.707	24.875		49.612	56.302	19.042	31.392	0.429	-5.006		49.305	0.039	14.643	0.003		4031.38	67.1897	55.2	11.7	40.5	2.792	0.006	0.006	0.000	0.137	0.12	
3342	9/2/2004	3:05:45 AM		25.885	25.395	25.269	25.632	24.82		50.591	56.461	19.163	32.486	-0.312	-6.37		52.275	0.055	14.643	0.003		4032.38	67.2064	55.3	12.5	41.5	2.864	0.008	0.008	0.000	0.188	0.16	
3343	9/2/2004	3:06:45 AM		26.271	25.401	25.271	25.664	25.007		50.12	55.997	18.839	32.248	-0.425	-6.047		49.674	0.032	14.643	0.003		4033.38	67.2231	54.9	11.8	41.2	2.839	0.005	0.005	0.000	0.110	0.09	
3344	9/2/2004	3:07:45 AM		26.128	25.413	25.298	25.681	25.124		49.627	55.887	18.809	31.85	0.207	-5.229		48.435	0.028	14.643	0.004		4034.38	67.2397	54.8	11.5	40.7	2.809	0.004	0.004	0.000	0.098	0.08	
3345	9/2/2004	3:08:45 AM		26.013	25.408	25.308	25.671	25.079		50.089	56.48	18.736	32.2	0.247	-5.177		47.878	0.039	14.643	0.003		4035.38	67.2564	55.4	11.4	41.1	2.837	0.006	0.006	0.000	0.135	0.11	
3346	9/2/2004	3:09:45 AM		25.959	25.409	25.284	25.712	24.909		49.506	55.947	18.749	31.447	0.253	-5.208		49.297	0.039	14.643	0.003		4036.38	67.2731	54.8	11.7	40.5	2.791	0.006	0.006	0.000	0.137	0.12	

RUN # 4.03A AND B; FIRST AND SECOND HALF OF SLURRY DEWATERING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
3349	Dewater 1 and 2																																
3350		Averages		25.6	25.6	24.9	26.3	25.2		47.4	52.2	15.3	33.1	-1.0	-6.8		49.6	0.1	14.6	0.0				51.1	11.8	40.2	2.775	0.011	0.011	0.000	0.3	0.2	
3351		Maximum		28.9	26.7	29.3	27.9	26.6		61.4	67.2	19.4	43.9	38.5	0.8		58.7	0.4	14.6	0.0				66.1	14.0	52.7	3.630	0.051	0.052	0.001	1.5	1.3	
3352		Median		25.5	25.6	24.7	26.2	25.2		47.7	52.7	16.0	33.0	-1.2	-7.0		49.7	0.1	14.6	0.0				51.6	11.8	40.3	2.775	0.008	0.009	0.000	0.2	0.2	
3353		Minimum		23.8	23.7	21.2	24.6	23.9		-0.1	2.1	0.6	-2.7	-1.2	-7.9		-0.1	0.0	14.6	0.0				0.9	0.0	-0.1	-0.004	0.000	0.000	-0.008	-8.2	-7.0	
3354		2 x Std Dev		1.685	0.803	2.475	1.010	0.746		4.297	5.234	5.262	3.382	2.093	1.444		3.657	0.103	0.000	0.001				5.234	0.871	2.847	0.196	0.015	0.015	0.000	0.475	0.405	
3355		Number of Points Used*		3242	3242	3242	3242	3242		3242	3242	3242	3242	3242	3242		3242	3242	3242	3242				3242	3242	3242	3242	3242	3242	3242	3242	3242	
3356		* Backpulse points in box are not included																															
3357																																	
3358	Dewater 1																																
3359		Averages		26.5	25.8	26.2	26.8	25.4		45.1	49.1	11.5	34.6	-1.0	-6.8		48.7	0.1	14.6	0.0				48.0	11.6	39.8	2.746	0.020	0.020	0.001	0.502	0.4	
3360		Maximum		28.9	26.7	29.3	27.9	26.6		47.4	52.6	14.0	36.8	38.5	0.8		58.7	0.4	14.6	0.0				51.4	14.0	41.9	2.892	0.051	0.052	0.001	1.495	1.3	
3361		Median		26.6	25.8	25.9	26.9	25.3		45.1	49.4	11.2	34.8	-1.2	-7.0		48.7	0.1	14.6	0.0				48.2	11.6	40.0	2.758	0.017	0.017	0.000	0.432	0.4	
3362		Minimum		24.8	24.3	24.1	25.7	24.1		6.4	44.8	9.3	-2.7	-1.2	-7.5		43.2	0.0	14.6	0.0				43.7	10.3	1.8	0.127	0.000	0.000	0.000	0.223	0.2	
3363		2 x Std Dev		1.898	1.078	2.618	1.031	1.011		4.041	3.897	2.520	4.056	3.718	1.809		3.960	0.116	0.000	0.001				3.897	0.943	3.849	0.265	0.017	0.017	0.000	0.437	0.372	
3364		Number of Points Used*		917	917	917	917	917		917	917	917	917	917	917		917	917	917	917				917	917	917	917	917	917	917	917	917	
3365		* Backpulse points in box are not included																															
3366																																	
3367	Dewater 2																																
3368		Averages		25.3	25.5	24.4	26.1	25.2		48.3	53.5	16.7	32.5	-0.9	-6.9		50.0	0.1	14.6	0.0				52.3	11.9	40.4	2.786	0.008	0.008	0.000	0.190	0.2	
3369		Maximum		26.3	25.9	27.4	27.0	26.1		61.4	67.2	19.4	43.9	1.3	-0.7		56.3	0.1	14.6	0.0				66.1	13.4	52.7	3.630	0.018	0.017	0.000	0.435	0.4	
3370		Median		25.4	25.6	24.6	26.0	25.2		48.0	53.2	16.9	32.5	-1.1	-7.0		50.0	0.1	14.6	0.0				52.0	11.9	40.4	2.783	0.007	0.007	0.000	0.183	0.2	
3371		Minimum		23.8	23.7	21.2	24.6	23.9		-0.1	2.1	0.6	0.0	-1.2	-7.9		-0.1	0.0	14.6	0.0				0.9	0.0	-0.1	-0.004	0.000	0.000	-0.008	-8.249	-7.0	
3372		2 x Std Dev		0.847	0.609	1.522	0.615	0.584		2.810	3.337	2.171	2.188	0.797	1.266		3.283	0.022	0.000	0.001				3.337	0.782	2.256	0.156	0.003	0.003	0.000	0.360	0.307	
3373		Number of Points Used*		2325	2325	2325	2325	2325		2325	2325	2325	2325	2325	2325		2325	2325	2325	2325				2325	2325	2325	2325	2325	2325	2325	2325	2325	
3374		* Backpulse points in box are not included																															
3375																																	
3376																																	
3377																																	
3378																									Average flux to 17% UDS =				0.016				
3379																									Average flux to 20% UDS=				0.013				

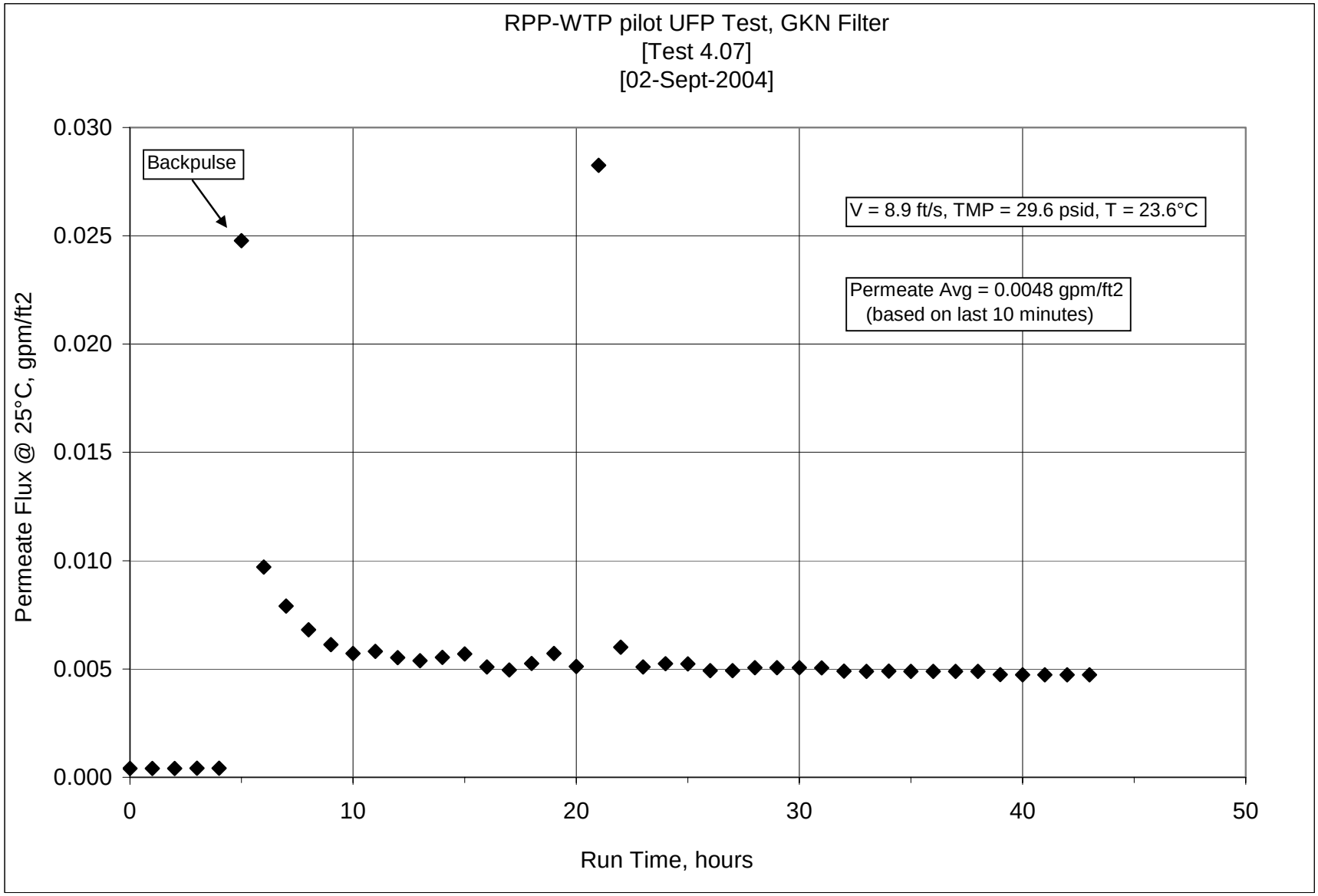
CAMPAIGN IV BACKPULSE DURING FIRST HALF OF SLURRY DEWATERING, RUN # 4.03A



CAMPAIGN IV BACKPULSE DURING FIRST HALF OF SLURRY DEWATERING, RUN # 4.03A – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface Ar		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Backpulse																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	8/30/2004	8:15:39 PM		27.017	26.229	26.553	26.772	25.629		8.043	50.256	11.028	-2.396	36.432	89.169		45.434	0.003	14.643	0.006		0.00	0	49.1	10.8	2.8	0.195	0.000	0.000	0.000	0.146	0.12	
18	8/30/2004	8:16:31 PM		27.017	26.229	26.553	26.772	25.629		8.043	50.256	11.028	-2.396	36.432	89.169		45.434	0.003	14.643	0.006		0.87	0.01444	49.1	10.8	2.8	0.195	0.000	0.000	0.000	0.146	0.12	
19	8/30/2004	8:16:32 PM		27.008	26.225	26.559	26.823	25.629		8.238	50.759	11.119	-2.213	37.11	89.051		46.089	0.003	14.643	0.005		0.88	0.01472	49.6	11.0	3.0	0.208	0.000	0.000	0.000	0.136	0.12	
20	8/30/2004	8:16:33 PM		27.013	26.22	26.559	26.828	25.629		7.883	50.475	10.991	-2.353	37.11	89.045		48.275	0.003	14.643	0.005		0.90	0.015	49.3	11.5	2.8	0.191	0.000	0.000	0.000	0.149	0.13	
21	8/30/2004	8:16:34 PM		27.008	26.22	26.559	26.833	25.629		8.041	50.792	11.123	-2.546	37.107	89.048		47.105	0.003	14.643	0.006		0.92	0.01528	49.7	11.2	2.7	0.189	0.000	0.000	0.000	0.150	0.13	
22	8/30/2004	8:16:35 PM		27.008	26.22	26.559	26.833	25.634		7.526	50.08	11.069	-2.872	37.11	89.048		47.438	0.003	14.643	0.005		0.93	0.01556	49.0	11.3	2.3	0.160	0.000	0.000	0.000	0.177	0.15	
23	8/30/2004	8:16:36 PM		27.008	26.215	26.559	26.838	25.634		7.634	50.142	10.943	-2.499	37.11	89.045		47.81	0.003	14.643	0.005		0.95	0.01583	49.0	11.4	2.6	0.177	0.000	0.000	0.000	0.160	0.14	
24	8/30/2004	8:16:37 PM		27.013	26.231	26.564	26.848	25.64		7.348	49.93	10.939	-2.973	37.087	89.042		46.229	0.003	14.643	0.006		0.97	0.01611	48.8	11.0	2.2	0.151	0.000	0.000	0.000	0.188	0.16	
25	8/30/2004	8:16:38 PM		27.013	26.225	26.559	26.838	25.634		7.775	50.334	11.06	-2.616	37.061	89.039		45.622	0.003	14.643	0.006		0.98	0.01639	49.2	10.9	2.6	0.178	0.000	0.000	0.000	0.159	0.14	
26	8/30/2004	8:16:39 PM		27.008	26.22	26.559	26.843	25.634		7.566	50.193	11.036	-2.895	37.055	89.042		46.817	0.003	14.643	0.005		1.00	0.01667	49.1	11.2	2.3	0.161	0.000	0.000	0.000	0.176	0.15	
27	8/30/2004	8:16:40 PM		27.013	26.226	26.564	26.858	25.64		7.725	50.565	11.062	-2.802	37.055	89.045		46.466	0.003	14.643	0.004		1.02	0.01694	49.4	11.1	2.5	0.170	0.000	0.000	0.000	0.167	0.14	
28	8/30/2004	8:16:41 PM		27.023	26.225	26.564	26.848	25.634		-7.261	50.44	9.747	-18.541	77.47	79.135		46.529	0.003	14.643	1.225		1.03	0.01722	49.3	11.1	-12.9	-0.889	0.000	0.000	0.000	-0.032	-0.03	
29	8/30/2004	8:16:42 PM		26.869	26.226	26.564	26.858	25.64		-7.267	50.544	9.31	-18.543	69.668	73.744		46.569	0.003	14.643	1.696		1.05	0.0175	49.4	11.1	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
30	8/30/2004	8:16:43 PM		26.499	26.22	26.559	26.868	25.634		-7.269	50.173	9.275	-18.545	66.625	69.636		45.743	0.003	14.643	1.546		1.07	0.01778	49.0	10.9	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
31	8/30/2004	8:16:44 PM		26.579	26.225	26.564	26.858	25.644		-7.269	50.761	9.474	-18.543	63.959	66.401		45.939	0.003	14.643	1.368		1.08	0.01806	49.6	10.9	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
32	8/30/2004	8:16:45 PM		26.618	26.22	26.564	26.863	25.634		-7.269	50.173	9.353	-18.543	61.726	63.796		46.677	0.003	14.643	1.226		1.10	0.01833	49.0	11.1	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
33	8/30/2004	8:16:46 PM		26.669	26.226	26.564	26.873	25.64		-7.269	49.941	9.469	-18.543	59.9	61.666		45.448	0.003	14.643	1.115		1.12	0.01861	48.8	10.8	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
34	8/30/2004	8:16:47 PM		26.699	26.231	26.559	26.868	25.65		-7.269	49.918	9.378	-18.545	58.446	59.885		46.677	0.003	14.643	1.025		1.13	0.01889	48.8	11.1	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
35	8/30/2004	8:16:48 PM		26.734	26.221	26.559	26.868	25.65		-7.269	50.144	9.548	-18.545	57.158	58.376		44.551	0.003	14.643	0.944		1.15	0.01917	49.0	10.6	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
36	8/30/2004	8:16:49 PM		26.769	26.221	26.554	26.873	25.64		-7.269	49.994	9.533	-18.543	56.046	57.069		46.01	0.003	14.643	0.873		1.17	0.01944	48.9	11.0	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
37	8/30/2004	8:16:50 PM		26.793	26.215	26.539	26.858	25.644		-7.269	50.434	9.746	-18.514	55.007	55.919		46.425	0.003	14.643	0.813		1.18	0.01972	49.3	11.1	-12.9	-0.889	0.000	0.000	0.000	-0.032	-0.03	
38	8/30/2004	8:16:51 PM		26.824	26.211	26.549	26.868	25.64		-7.269	50.666	9.753	-17.814	54.127	54.916		48.396	0.003	14.643	0.759		1.20	0.02	49.5	11.5	-12.5	-0.865	0.000	0.000	0.000	-0.033	-0.03	
39	8/30/2004	8:16:52 PM		26.833	26.205	26.539	26.853	25.649		-7.257	50.432	9.589	-17.238	53.308	54.005		48.961	0.003	14.643	0.713		1.22	0.02028	49.3	11.7	-12.2	-0.844	0.000	0.000	0.000	-0.034	-0.03	
40	8/30/2004	8:16:53 PM		26.859	26.211	26.539	26.848	25.655		-7.223	50.334	9.623	-16.63	52.543	53.17		49.814	0.003	14.643	0.673		1.23	0.02056	49.2	11.9	-11.9	-0.822	0.000	0.000	0.000	-0.034	-0.03	
41	8/30/2004	8:16:54 PM		26.879	26.211	26.544	26.858	25.65		-6.8	50.56	9.699	-15.826	51.964	52.418		47.468	0.003	14.643	0.635		1.25	0.02083	49.4	11.3	-11.3	-0.780	0.000	0.000	0.000	-0.036	-0.03	
42	8/30/2004	8:16:55 PM		26.888	26.205	26.549	26.863	25.649		0.168	50.127	9.734	-8.957	45.899	52.51		47.334	0.003	14.643	0.155		1.27	0.02111	49.0	11.3	-4.4	-0.303	0.000	0.000	0.000	-0.094	-0.08	
43	8/30/2004	8:16:56 PM		26.894	26.221	26.559	26.873	25.64		3.053	49.895	9.704	-5.907	41.872	52.831		46.46	0.003	14.643	0.017		1.28	0.02139	48.8	11.1	-1.4	-0.098	0.000	0.000	0.000	-0.288	-0.25	
44	8/30/2004	8:16:57 PM		26.894	26.221	26.559	26.873	25.65		4.233	49.528	9.754	-4.658	40.373	53.109		48.617	0.007	14.643	0.005		1.30	0.02167	48.4	11.6	-0.2	-0.015	0.001	0.001	-0.005	-4.515	-3.84	
45	8/30/2004	8:16:58 PM		26.884	26.221	26.564	26.878	25.64		4.996	49.588	9.864	-4.12	39.498	53.34		47.989	0.009	14.643	0.004		1.32	0.02194	48.5	11.4	0.4	0.030	0.001	0.001	0.003	2.816	2.40	
46	8/30/2004	8:16:59 PM		26.879	26.221	26.559	26.878	25.64		5.357	49.769	9.798	-3.866	38.896	53.545		48.204	0.003	14.643	0.004		1.33	0.02222	48.6	11.5	0.7	0.051	0.000	0.000	0.001	0.552	0.47	
47	8/30/2004	8:17:00 PM		26.878	26.215	26.554	26.878	25.634		5.819	49.91	9.76	-3.297	38.589	53.722		46.633	0.003	14.643	0.004		1.35	0.0225	48.8	11.1	1.3	0.087	0.000	0.000	0.000	0.326	0.28	
48	8/30/2004	8:17:01 PM		26.879	26.216	26.559	26.883	25.64		6.05	50.021	9.877	-3.147	38.439	53.886		46.612	0.003	14.643	0.004		1.37	0.02278	48.9	11.1	1.5	0.100	0.000	0.000	0.000	0.283	0.24	
49	8/30/2004	8:17:02 PM		26.878	26.215	26.559	26.878	25.634		6.317	49.932	9.958	-2.948	38.25	54.025		47.324	0.003	14.643	0.004		1.38	0.02306	48.8	11.3	1.7	0.116	0.000	0.000	0.000	0.244	0.21	
50	8/30/2004	8:17:03 PM		26.873	26.21	26.564	26.873	25.634		6.12	49.791	9.795	-2.928	38.245	54.15		48.152	0.003	14.643	0.005		1.40	0.02333	48.7	11.5	1.6	0.110	0.000	0.000	0.000	0.258	0.22	
51																																	
52																																	
53																																	
54		Averages		26.9	26.2	26.6	26.9	25.6		0.8	50.2	10.1	-9.5	47.2	68.3		46.9	0.0	14.6	0.4				49.1	11.2	-4.3	-0.3	0.0	0.0	0.0	0.0	0.0	
55		Maximum		27.0	26.2	26.6	26.9	25.7		8.2	50.8	11.1	-2.2	77.5	89.2		49.8	0.0	14.6	1.7				49.7	11.9	3.0	0.2	0.0	0.0	0.0	2.8	2.4	
56		Median		26.9	26.2	26.6	26.9	25.6		4.6	50.2	9.8	-4.4	39.9	60.8		46.7	0.0	14.6	0.0				49.0	11.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	
57		Minimum		26.5	26.2	26.5	26.8	25.6		-7.3	49.5	9.3	-18.5	36.4	52.4		44.6	0.0	14.6	0.0				48.4	10.6	-12.9	-0.9	0.0	0.0	0.0	-4.5	-3.8	
58		2 x Std Dev		0.274	0.013	0.015	0.052	0.014		13.764	0.652	1.343	14.650	23.316	31.172		2.299	0.002	0.000	1.096				0.652	0.548	####	0.978	0.000	0.000	0.002	1.856	1.580	
59		Number of Points Used*		34	34	34	34	34		34	34	34	34	34	34		34	34	34	34				34	34	34	34	34	34	34	34	34	
60		* Backpulse points in box are not included																															

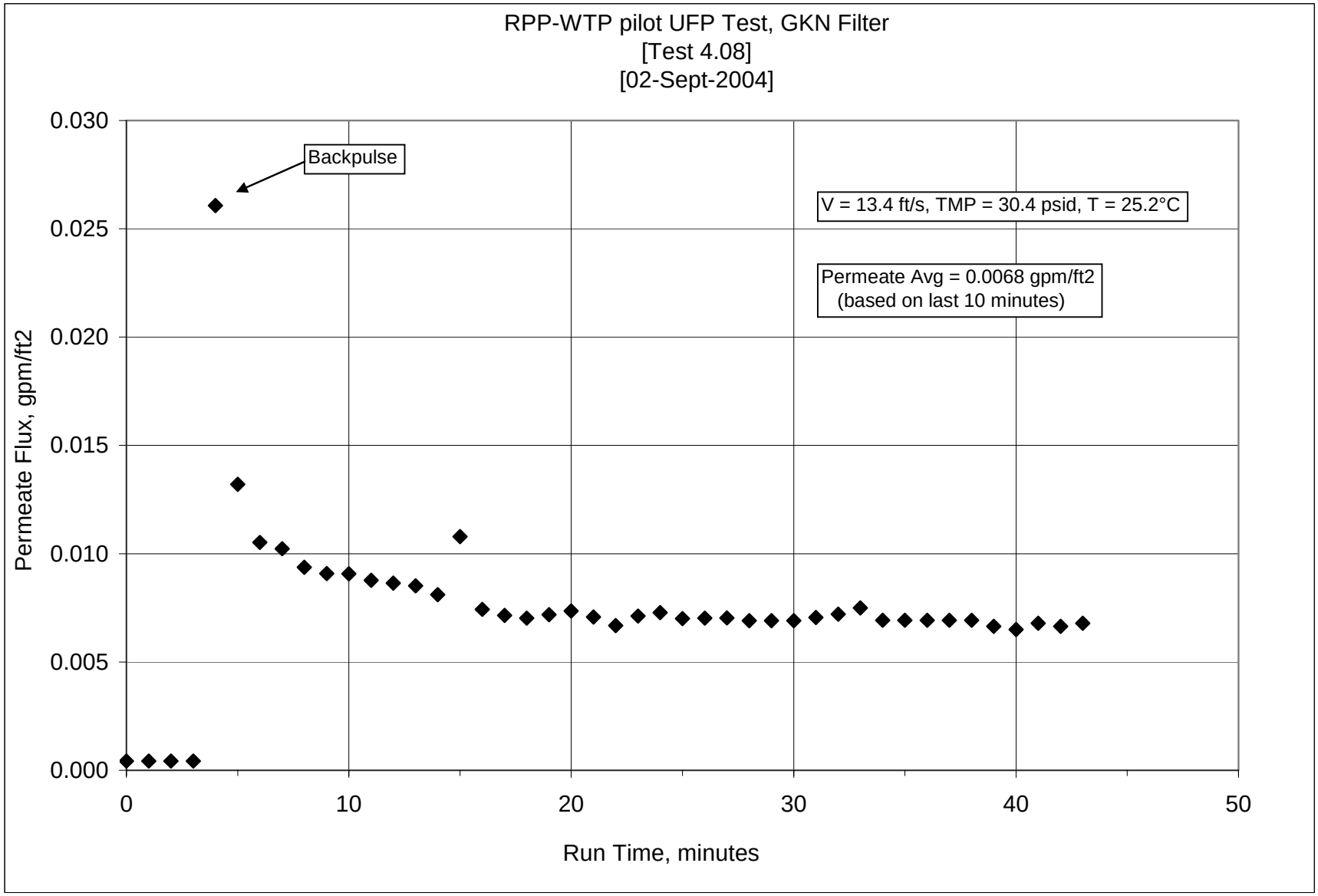
RUN # 4.07; STEADY STATE TEST AT 25 WT% UDS



RUN # 4.07; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A	6.985	FT2							
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	4:10:15 AM		26.578	25.404	24.277	25.507	25		30.775	42.452	14.278	17.158	5.678	21.055		38.298	0.003	14.643	0.003		0	0	41.3	9.1	24.0	1.652	0.000	0.000	0.000	0.017	0.01	
18	9/2/2004	4:11:15 AM		26.529	25.394	24.182	25.502	24.87		27.618	42.338	14.226	14.114	8.793	82.28		38.144	0.003	14.643	0.003		1.00	0.01667	41.2	9.1	20.9	1.439	0.000	0.000	0.000	0.020	0.02	
19	9/2/2004	4:12:15 AM		26.529	25.415	24.143	25.503	25.096		24.462	42.649	14.042	11.079	12.238	81.829		38.223	0.003	14.643	0.003		2.00	0.03333	41.5	9.1	17.8	1.225	0.000	0.000	0.000	0.023	0.02	
20	9/2/2004	4:13:15 AM		26.211	25.406	24.083	25.498	25.196		6.877	41.43	10.462	-2.895	28.917	49.192		40.396	0.003	14.643	0.003		3.00	0.05	40.3	9.6	2.0	0.137	0.000	0.000	0.000	0.209	0.18	
21	9/2/2004	4:14:15 AM		26.221	25.411	24.014	25.514	25.257		7.211	41.509	10.551	-2.759	28.688	0.296		40.348	0.003	14.643	0.005		4.00	0.06667	40.4	9.6	2.2	0.153	0.000	0.000	0.000	0.186	0.16	
22	9/2/2004	4:15:15 AM		26.201	25.416	23.944	25.529	25.167		29.999	41.766	11.684	18.992	5.785	0.374		40.23	0.179	14.643	0.003		5.00	0.08333	40.6	9.6	24.5	1.689	0.026	0.025	0.001	1.012	0.86	
23	9/2/2004	4:16:15 AM		26.156	25.401	23.858	25.473	25.061		32.21	41.986	12.579	20.359	3.524	0.406		39.206	0.07	14.643	0.003		6.00	0.1	40.9	9.3	26.3	1.812	0.010	0.010	0.000	0.369	0.31	
24	9/2/2004	4:17:15 AM		26.115	25.405	23.802	25.483	24.951		32.546	42.002	13.268	20.084	3.452	0.44		38.686	0.057	14.643	0.003		7.00	0.11667	40.9	9.2	26.3	1.814	0.008	0.008	0.000	0.301	0.26	
25	9/2/2004	4:18:15 AM		26.06	25.415	23.747	25.478	24.956		32.851	42.317	14.08	19.555	3.397	0.464		38.35	0.049	14.643	0.003		8.00	0.13333	41.2	9.1	26.2	1.807	0.007	0.007	0.000	0.260	0.22	
26	9/2/2004	4:19:15 AM		26.01	25.415	23.691	25.483	24.836		33.234	42.703	14.451	19.514	3.351	0.469		38.046	0.044	14.643	0.003		9.00	0.15	41.6	9.1	26.4	1.818	0.006	0.006	0.000	0.232	0.20	
27	9/2/2004	4:20:15 AM		25.943	25.408	23.609	25.455	24.833		32.985	42.408	14.796	18.939	3.333	0.487		37.948	0.041	14.643	0.003		10.00	0.16667	41.3	9.0	26.0	1.790	0.006	0.006	0.000	0.220	0.19	
28	9/2/2004	4:21:15 AM		25.903	25.413	23.569	25.455	24.838		33.554	42.862	15.09	19.282	3.33	0.527		37.635	0.039	14.643	0.003		11.00	0.18333	41.7	9.0	26.4	1.821	0.006	0.006	0.000	0.220	0.19	
29	9/2/2004	4:22:15 AM		25.841	25.406	23.507	25.469	24.767		33.759	43.136	15.237	19.251	3.324	0.516		37.478	0.037	14.643	0.003		12.00	0.2	42.0	8.9	26.5	1.827	0.005	0.006	0.000	0.208	0.18	
30	9/2/2004	4:23:15 AM		25.787	25.401	23.462	25.454	24.792		33.695	43.014	15.431	19.017	3.307	0.524		37.324	0.036	14.643	0.003		13.00	0.21667	41.9	8.9	26.4	1.817	0.005	0.005	0.000	0.204	0.17	
31	9/2/2004	4:24:15 AM		25.737	25.411	23.432	25.464	24.822		33.589	42.734	15.695	18.758	3.278	0.565		37.241	0.037	14.643	0.003		14.00	0.23333	41.6	8.9	26.2	1.805	0.005	0.006	0.000	0.212	0.18	
32	9/2/2004	4:25:15 AM		25.687	25.412	23.387	25.45	24.813		33.935	43.36	15.834	18.853	3.275	0.565		37.228	0.038	14.643	0.003		15.00	0.25	42.2	8.9	26.4	1.820	0.005	0.006	0.000	0.216	0.18	
33	9/2/2004	4:26:15 AM		25.653	25.423	23.378	25.48	24.813		33.614	42.939	15.996	18.457	3.281	0.579		37.12	0.034	14.643	0.004		16.00	0.26667	41.8	8.8	26.0	1.795	0.005	0.005	0.000	0.196	0.17	
34	9/2/2004	4:27:15 AM		25.594	25.413	23.324	25.461	24.809		33.672	42.995	16.133	18.307	3.243	0.573		37.038	0.033	14.643	0.003		17.00	0.28333	41.9	8.8	26.0	1.792	0.005	0.005	0.000	0.191	0.16	
35	9/2/2004	4:28:15 AM		25.554	25.413	23.289	25.471	24.784		33.651	43.028	16.039	18.5	3.238	0.614		36.932	0.035	14.643	0.003		18.00	0.3	41.9	8.8	26.1	1.798	0.005	0.005	0.000	0.202	0.17	
36	9/2/2004	4:29:15 AM		25.503	25.408	23.263	25.48	24.763		36.312	45.66	16.071	21.09	3.333	0.62		36.471	0.038	14.643	0.003		19.00	0.31667	44.5	8.7	28.7	1.979	0.005	0.006	0.000	0.199	0.17	
37	9/2/2004	4:30:15 AM		25.448	25.408	23.273	25.5	24.838		36.872	46.318	16.241	21.348	3.333	0.625		36.598	0.034	14.643	0.004		20.00	0.33333	45.2	8.7	29.1	2.007	0.005	0.005	0.000	0.176	0.15	
38	9/2/2004	4:31:15 AM		25.408	25.408	23.288	25.5	24.778		38.683	46.68	16.539	22.994	1.932	-2.329		36.627	0.188	14.643	0.003		21.00	0.35	45.6	8.7	30.8	2.126	0.027	0.028	0.001	0.916	0.78	
39	9/2/2004	4:32:15 AM		25.412	25.402	23.322	25.47	24.763		39.815	45.899	16.371	24.482	-0.179	-5.613		36.177	0.04	14.643	0.003		22.00	0.36667	44.8	8.6	32.1	2.217	0.006	0.006	0.000	0.187	0.16	
40	9/2/2004	4:33:15 AM		25.363	25.413	23.418	25.49	24.873		39.496	45.333	17.258	23.331	-0.413	-5.966		37.802	0.034	14.643	0.003		23.00	0.38333	44.2	9.0	31.4	2.166	0.005	0.005	0.000	0.162	0.14	
41	9/2/2004	4:34:15 AM		25.287	25.392	23.418	25.439	24.823		40.014	45.944	16.591	24.34	-0.387	-5.919		36.436	0.035	14.643	0.003		24.00	0.4	44.8	8.7	32.2	2.218	0.005	0.005	0.000	0.163	0.14	
42	9/2/2004	4:35:15 AM		25.252	25.411	23.487	25.459	24.797		39.728	45.582	16.92	23.821	-0.413	-5.914		36.826	0.035	14.643	0.003		25.00	0.41667	44.5	8.8	31.8	2.191	0.005	0.005	0.000	0.165	0.14	
43	9/2/2004	4:36:15 AM		25.197	25.391	23.507	25.439	24.847		38.965	44.782	17.604	22.342	-0.419	-5.928		38.065	0.033	14.643	0.003		26.00	0.43333	43.7	9.1	30.7	2.113	0.005	0.005	0.000	0.161	0.14	
44	9/2/2004	4:37:15 AM		25.162	25.397	23.563	25.455	24.833		39.327	45.035	17.357	22.943	-0.419	-5.925		37.737	0.033	14.643	0.003		27.00	0.45	43.9	9.0	31.1	2.147	0.005	0.005	0.000	0.158	0.13	
45	9/2/2004	4:38:15 AM		25.122	25.392	23.578	25.439	24.823		39.773	45.588	17.122	23.517	-0.419	-5.925		37.22	0.034	14.643	0.003		28.00	0.46667	44.5	8.9	31.6	2.182	0.005	0.005	0.000	0.160	0.14	
46	9/2/2004	4:39:15 AM		25.102	25.397	23.633	25.46	24.763		39.504	45.352	17.181	23.193	-0.416	-5.919		37.124	0.034	14.643	0.003		29.00	0.48333	44.2	8.8	31.3	2.161	0.005	0.005	0.000	0.161	0.14	
47	9/2/2004	4:40:15 AM		25.068	25.393	23.629	25.4	24.788		39.649	45.459	16.954	23.548	-0.419	-5.922		36.815	0.034	14.643	0.003		30.00	0.5	44.3	8.8	31.6	2.179	0.005	0.005	0.000	0.160	0.14	
48	9/2/2004	4:41:15 AM		25.028	25.383	23.654	25.405	24.843		39.693	45.574	16.888	23.719	-0.425	-5.928		36.611	0.034	14.643	0.003		31.00	0.51667	44.4	8.7	31.7	2.186	0.005	0.005	0.000	0.159	0.14	
49	9/2/2004	4:42:15 AM		25.002	25.377	23.699	25.419	24.798		39.392	45.289	17.135	23.173	-0.416	-5.925		37.579	0.033	14.643	0.003		32.00	0.53333	44.2	9.0	31.3	2.157	0.005	0.005	0.000	0.157	0.13	
50	9/2/2004	4:43:15 AM		24.999	25.393	23.75	25.461	24.879		39.427	45.466	17.165	23.115	-0.416	-5.925		37.664	0.033	14.643	0.003		33.00	0.55	44.3	9.0	31.3	2.156	0.005	0.005	0.000	0.157	0.13	
51	9/2/2004	4:44:15 AM		24.963	25.378	23.734	25.41	24.788		39.574	45.468	17.325	23.226	-0.416	-5.925		37.441	0.033	14.643	0.003		34.00	0.56667	44.3	8.9	31.4	2.165	0.005	0.005	0.000	0.156	0.13	
52	9/2/2004	4:45:15 AM		24.953	25.378	23.754	25.445	24.868		39.581	45.459	17.011	23.458	-0.419	-5.925		36.961	0.033	14.643	0.003		35.00	0.58333	44.3	8.8	31.5	2.173	0.005	0.005	0.000	0.155	0.13	
53	9/2/2004	4:46:15 AM		24.938	25.373	23.78	25.435	24.778		39.69	45.418	16.992	23.737	-0.416	-5.922		36.715	0.033	14.643	0.003		36.00	0.6	44.3	8.7	31.7	2.187	0.005	0.005	0.000	0.154	0.13	
54	9/2/2004	4:47:15 AM		24.917	25.351	23.768	25.404	24.747		40.091	46.088	17.002	23.833	-0.425	-5.928		36.596	0.033	14.643	0.003		37.00	0.61667	45.0	8.7	32.0	2.204	0.005	0.005	0.000	0.153	0.13	
55	9/2/2004	4:48:15 AM		24.911	25.36	23.797	25.443	24.721		39.873	45.81	16.95	23.776	-0.419	-5.928		36.49	0.033	14.643	0.003		38.00	0.63333	44.7	8.7	31.8	2.194	0.005	0.005	0.000	0.154	0.13	
56	9/2/2004	4:49:15 AM		24.902	25.361	23.818	25.424	24.907		39.046	44.875	17.625	22.475	-0.419	-5.925		38.135	0.032	14.643	0.003		39.00	0.65	43.7	9.1	30.8	2.121	0.005	0.005	0.000	0.154	0.13	
57	9/2/2004	4:50:15 AM		24.91	25.375	23.867	25.427	24.83		39.172	44.989	17.606	22.565	-0.419	-5.925		38.042	0.032	14.643	0.003		40.00	0.66667	43.9	9.1	30.9	2.128	0.005	0.005	0.000	0.153	0.13	
58	9/2/2004	4:51:15 AM		24.884	25.359	23.861	25.412	24.78		39.361	45.223	17.613	22.588	-0.419	-5.928		37.873	0.032	14.643	0.003		41.00	0.68333	44.1	9.0	31.0	2.136	0.005	0.005	0.000	0.153	0.13	
59	9/2/2004	4:52:15 AM		24.889	25.359	23.881	25.412	24.73		39.23	45.045	17.398	22.805	-0.419	-5.931		37.948	0.032	14.643	0.003		42.00	0.7	43.9	9.0	31.0	2.139	0.005	0.005	0.000	0.152	0.13	
60	9/2/2004	4:53:15 AM		24.884	25.359	23.896	25.391	24.68		39.309	45.084	17.175	23.15	-0.419	-5.928		37.733	0.032	14.643	0.003		43.00	0.71667	44.0	9.0	31.2	2.153	0.005	0.005	0.000	0.151	0.13	
61																																	
62		Averages		25.3	25.4	23.6	25.4	24.8	#	37.4	44.6	16.4	21.8	1.1	-3.4	#	37.3	0.0	14.6	0.0	#			43.5	8.9	29.6	2.040	0.006	0.006	0.000	0.2	0.2	
63		Maximum		26.1	25.4	23.9	25.5	25.0	#	40.1	46.7	17.6	24.5	3.5	0.6	#	38.7	0.2	14.6	0.0	#			45.6	9.2	32.2	2.218	0.027	0.028	0.001	0.9	0.8	
64		Median		25.3	25.4	23.6	25.5	24.8	#	39.2	45.2	16.9	22.8	-0.4	-5.9	#	37.2	0.0	14.6	0.0	#			44.1	8.9	31.0	2.136	0.005	0.005	0.000	0.2	0.1	
65		Minimum		24.9	25.4	23.3	25.4	24.7	#	32.5	42.0	13.3	18.3	-0.4	-6.0	#	36.2	0.0	14.6	0.0	#			40.9	8.6	26.0	1.790	0.005	0.005	0.000	0.2	0.1	
66		2 x Std Dev		0.779	0.040	0.390	0.058	0.113	#	5.663	2.667	2.114	4.084	3.596	6.217	#	1.232	0.050	0.000	0.000	#			2.667	0.293	4.836	0.333	0.007	0.008	0.000	0.248	0.211	
67		Number of Points Used*		37	37	37	37	37	0	37	37	37	37	37	37	0	37	37	37	37	0			37	37	37	37	37	37	37	37	37	
68		* Backpulse points in box are not included																															
69																							Average for the last 20 minutes =					0.0047	0.0049	gpm/ft2			
70																								2xStandard Deviation =				0.0003	0.0003	gpm/ft2			

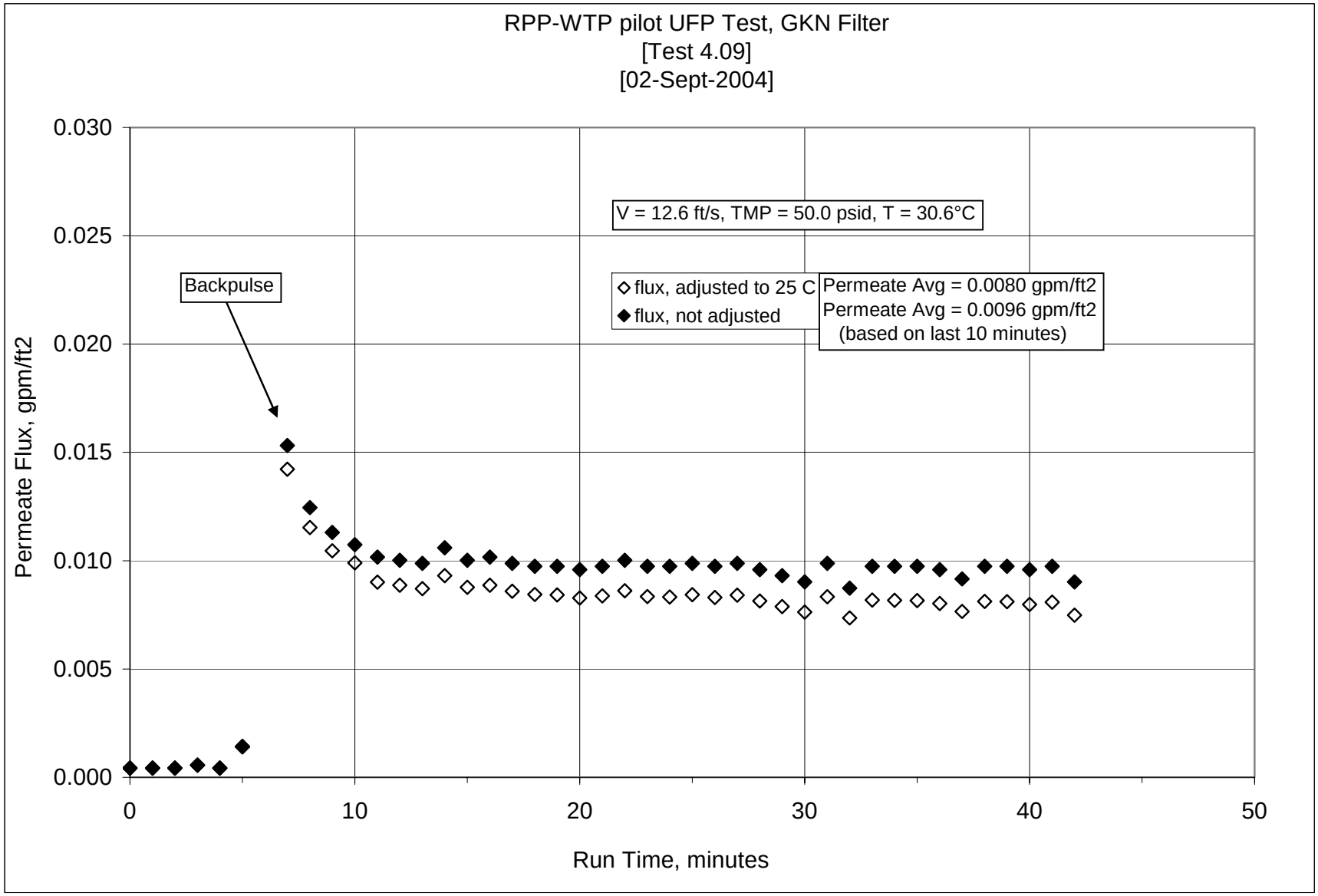
RUN # 4.08; STEADY STATE TEST AT 25 WT% UDS



RUN # 4.08; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	5:03:11 AM		25.338	25.322	25.727	25.39	24.683		35.103	51.588	26.093	4.799	10.493	18.951		54.841	0.003	14.643	0.004		0	0	50.5	13.4	20.0	1.376	0.000	0.000	0.000	0.021	0.02	
18	9/2/2004	5:04:11 AM		25.337	25.316	25.777	25.364	24.692		30.663	51.149	26.093	0.35	14.777	55.187		57.43	0.003	14.643	0.003		1.00	0.01667	50.0	14.1	15.5	1.069	0.000	0.000	0.000	0.027	0.02	
19	9/2/2004	5:05:11 AM		25.252	25.316	25.817	25.399	24.762		-6.448	44.811	17.59	-18.564	45.922	46.902		62.223	0.003	14.643	0.784		2.00	0.03333	43.7	15.2	-12.5	-0.862	0.000	0.000	0.000	-0.034	-0.03	
20	9/2/2004	5:06:11 AM		25.251	25.311	25.881	25.408	24.876		13.279	45.186	18.862	-4.982	26.366	30.167		64.094	0.003	14.643	0.004		3.00	0.05	44.1	15.7	4.1	0.286	0.000	0.000	0.000	0.103	0.09	
21	9/2/2004	5:07:11 AM		25.941	25.316	25.941	25.448	25.001		29.437	45.636	20.005	10.215	10.472	0.307		65.902	0.187	14.643	0.003		4.00	0.06667	44.5	16.2	19.8	1.367	0.027	0.026	0.001	1.315	1.12	
22	9/2/2004	5:08:11 AM		25.676	25.301	25.966	25.428	24.921		36.766	46.62	21.72	15.848	3.77	0.354		65.389	0.094	14.643	0.003		5.00	0.08333	45.5	16.0	26.3	1.814	0.013	0.013	0.001	0.502	0.43	
23	9/2/2004	5:09:11 AM		25.726	25.311	26.026	25.443	24.856		37.413	47.163	22.622	15.565	3.66	0.394		63.823	0.075	14.643	0.003		6.00	0.1	46.0	15.6	26.5	1.826	0.011	0.011	0.000	0.397	0.34	
24	9/2/2004	5:10:11 AM		25.766	25.301	26.006	25.418	24.906		38.763	48.43	21.928	17.587	3.64	0.42		58.938	0.073	14.643	0.003		7.00	0.11667	47.3	14.4	28.2	1.943	0.010	0.010	0.000	0.363	0.31	
25	9/2/2004	5:11:11 AM		25.81	25.289	26.034	25.427	24.81		39.093	48.741	22.614	17.252	3.608	0.443		59.981	0.067	14.643	0.003		8.00	0.13333	47.6	14.7	28.2	1.942	0.010	0.009	0.000	0.333	0.28	
26	9/2/2004	5:12:11 AM		25.866	25.306	26.041	25.458	24.766		38.962	48.701	22.627	17.026	3.565	0.469		57.605	0.065	14.643	0.003		9.00	0.15	47.6	14.1	28.0	1.930	0.009	0.009	0.000	0.324	0.28	
27	9/2/2004	5:13:11 AM		25.895	25.305	26.025	25.493	24.876		39.738	49.344	22.436	18.081	3.591	0.501		61.424	0.065	14.643	0.003		10.00	0.16667	48.2	15.1	28.9	1.993	0.009	0.009	0.000	0.314	0.27	
28	9/2/2004	5:14:11 AM		25.915	25.294	25.984	25.517	24.915		40.918	50.608	22.043	19.386	3.608	0.51		56.024	0.063	14.643	0.003		11.00	0.18333	49.5	13.7	30.2	2.079	0.009	0.009	0.000	0.291	0.25	
29	9/2/2004	5:15:11 AM		25.94	25.3	25.94	25.528	24.841		41.146	50.824	22.24	19.592	3.585	0.533		54.286	0.062	14.643	0.003		12.00	0.2	49.7	13.3	30.4	2.094	0.009	0.009	0.000	0.285	0.24	
30	9/2/2004	5:16:11 AM		25.961	25.301	25.881	25.528	24.816		41.754	51.462	22.256	20.154	3.547	0.562		56.378	0.061	14.643	0.003		13.00	0.21667	50.3	13.8	31.0	2.134	0.009	0.009	0.000	0.275	0.23	
31	9/2/2004	5:17:11 AM		25.976	25.301	25.826	25.554	24.801		41.559	51.027	22.359	19.949	3.547	0.602		53.844	0.058	14.643	0.003		14.00	0.23333	49.9	12.8	30.8	2.120	0.008	0.008	0.000	0.264	0.22	
32	9/2/2004	5:18:11 AM		25.966	25.291	25.761	25.544	24.726		41.404	51.203	22.309	19.94	3.579	0.518		56.351	0.077	14.643	0.003		15.00	0.25	50.1	13.4	30.7	2.115	0.011	0.011	0.000	0.352	0.30	
33	9/2/2004	5:19:11 AM		25.927	25.306	25.757	25.624	24.792		43.382	49.456	23.558	20.665	-0.019	-5.804		54.691	0.053	14.643	0.003		16.00	0.26667	48.3	13.0	32.0	2.208	0.008	0.007	0.000	0.232	0.20	
34	9/2/2004	5:20:11 AM		25.957	25.312	25.717	25.635	24.833		41.727	47.876	22.469	20.178	-0.147	-6.139		56.712	0.051	14.643	0.003		17.00	0.28333	46.8	13.5	31.0	2.134	0.007	0.007	0.000	0.231	0.20	
35	9/2/2004	5:21:11 AM		25.967	25.307	25.652	25.61	24.738		40.665	46.631	21.707	19.918	-0.173	-6.209		58.076	0.05	14.643	0.004		18.00	0.3	45.5	13.8	30.3	2.088	0.007	0.007	0.000	0.232	0.20	
36	9/2/2004	5:22:11 AM		25.952	25.302	25.542	25.55	24.658		40.833	46.807	21.806	19.867	-0.3	-6.339		57.43	0.051	14.643	0.003		19.00	0.31667	45.7	13.7	30.4	2.093	0.007	0.007	0.000	0.237	0.20	
37	9/2/2004	5:23:11 AM		25.927	25.271	25.426	25.489	24.642		41.151	47.109	21.826	20.254	-0.335	-6.342		52.882	0.052	14.643	0.003		20.00	0.33333	46.0	12.6	30.7	2.117	0.007	0.007	0.000	0.240	0.20	
38	9/2/2004	5:24:11 AM		25.936	25.291	25.371	25.503	24.586		41.001	46.892	21.68	20.17	-0.341	-6.342		54.263	0.05	14.643	0.004		21.00	0.35	45.8	12.9	30.6	2.109	0.007	0.007	0.000	0.232	0.20	
39	9/2/2004	5:25:11 AM		25.904	25.268	25.263	25.441	24.569		40.779	46.56	21.639	20.024	-0.349	-6.339		55.148	0.047	14.643	0.003		22.00	0.36667	45.4	13.1	30.4	2.096	0.007	0.007	0.000	0.220	0.19	
40	9/2/2004	5:26:11 AM		25.882	25.272	25.177	25.4	24.538		41.337	47.339	21.847	20.484	-0.3	-6.287		56.282	0.05	14.643	0.003		23.00	0.38333	46.2	13.4	30.9	2.131	0.007	0.007	0.000	0.230	0.20	
41	9/2/2004	5:27:11 AM		25.866	25.266	25.105	25.388	24.636		40.898	46.691	21.468	20.417	-0.349	-6.339		55.175	0.051	14.643	0.003		24.00	0.4	45.6	13.1	30.7	2.114	0.007	0.007	0.000	0.237	0.20	
42	9/2/2004	5:28:11 AM		25.835	25.264	25.034	25.357	24.54		41.271	47.051	21.737	20.527	-0.349	-6.344		57.573	0.049	14.643	0.003		25.00	0.41667	45.9	13.7	30.9	2.130	0.007	0.007	0.000	0.227	0.19	
43	9/2/2004	5:29:11 AM		25.819	25.253	24.948	25.356	24.599		41.016	47.07	21.376	20.527	-0.352	-6.35		53.644	0.049	14.643	0.003		26.00	0.43333	45.9	12.8	30.8	2.122	0.007	0.007	0.000	0.228	0.19	
44	9/2/2004	5:30:11 AM		25.794	25.258	24.888	25.366	24.479		41.314	47.339	21.644	20.39	-0.349	-6.35		53.496	0.049	14.643	0.003		27.00	0.45	46.2	12.7	30.9	2.127	0.007	0.007	0.000	0.228	0.19	
45	9/2/2004	5:31:11 AM		25.772	25.257	24.811	25.359	24.528		41.117	47.051	21.798	20.242	-0.349	-6.353		55.377	0.048	14.643	0.003		28.00	0.46667	45.9	13.2	30.7	2.115	0.007	0.007	0.000	0.225	0.19	
46	9/2/2004	5:32:11 AM		25.747	25.251	24.796	25.344	24.662		41.18	46.964	21.642	20.378	-0.355	-6.359		53.635	0.048	14.643	0.003		29.00	0.48333	45.8	12.8	30.8	2.122	0.007	0.007	0.000	0.225	0.19	
47	9/2/2004	5:33:11 AM		25.732	25.256	24.801	25.354	24.687		41.231	47.041	21.591	20.579	-0.349	-6.356		57.674	0.048	14.643	0.003		30.00	0.5	45.9	13.7	30.9	2.131	0.007	0.007	0.000	0.224	0.19	
48	9/2/2004	5:34:11 AM		25.697	25.256	24.79	25.354	24.672		41.42	47.306	21.84	20.523	-0.349	-6.353		54.881	0.049	14.643	0.003		31.00	0.51667	46.2	13.1	31.0	2.135	0.007	0.007	0.000	0.228	0.19	
49	9/2/2004	5:35:11 AM		25.682	25.257	24.766	25.405	24.653		41.211	47.095	21.521	20.585	-0.3	-6.258		55.421	0.05	14.643	0.003		32.00	0.53333	46.0	13.2	30.9	2.130	0.007	0.007	0.000	0.233	0.20	
50	9/2/2004	5:36:11 AM		25.647	25.247	24.761	25.375	24.598		41.613	47.559	21.567	20.919	-0.346	-6.353		54.906	0.052	14.643	0.003		33.00	0.55	46.4	13.1	31.3	2.156	0.007	0.007	0.000	0.240	0.20	
51	9/2/2004	5:37:11 AM		25.622	25.242	24.731	25.395	24.658		41.161	47.018	21.446	20.566	-0.349	-6.359		56.558	0.048	14.643	0.003		34.00	0.56667	45.9	13.5	30.9	2.128	0.007	0.007	0.000	0.224	0.19	
52	9/2/2004	5:38:11 AM		25.593	25.243	24.722	25.395	24.603		41.175	46.952	21.296	20.774	-0.352	-6.365		52.705	0.048	14.643	0.003		35.00	0.58333	45.8	12.6	31.0	2.136	0.007	0.007	0.000	0.224	0.19	
53	9/2/2004	5:39:11 AM		25.579	25.248	24.723	25.421	24.739		41.289	47.161	21.364	20.946	-0.349	-6.356		55.846	0.048	14.643	0.003		36.00	0.6	46.0	13.3	31.1	2.145	0.007	0.007	0.000	0.223	0.19	
54	9/2/2004	5:40:11 AM		25.559	25.243	24.688	25.446	24.709		41.153	46.85	21.333	20.921	-0.349	-6.365		54.778	0.048	14.643	0.003		37.00	0.61667	45.7	13.0	31.0	2.140	0.007	0.007	0.000	0.223	0.19	
55	9/2/2004	5:41:11 AM		25.53	25.239	24.683	25.427	24.765		41.491	47.441	21.495	20.85	-0.349	-6.359		51.472	0.048	14.643	0.003		38.00	0.63333	46.3	12.3	31.2	2.149	0.007	0.007	0.000	0.222	0.19	
56	9/2/2004	5:42:11 AM		25.515	25.24	24.669	25.483	24.721		40.966	46.798	21.677	20.174	-0.352	-6.368		51.596	0.046	14.643	0.003		39.00	0.65	45.7	12.3	30.6	2.108	0.007	0.007	0.000	0.217	0.19	
57	9/2/2004	5:43:11 AM		25.49	25.24	24.684	25.463	24.681		40.852	46.716	21.896	19.879	-0.349	-6.368		54.568	0.045	14.643	0.003		40.00	0.66667	45.6	13.0	30.4	2.094	0.006	0.007	0.000	0.214	0.18	
58	9/2/2004	5:44:11 AM		25.47	25.24	24.664	25.463	24.711		40.956	46.811	21.923	19.922	-0.346	-6.37		59.1	0.047	14.643	0.003		41.00	0.68333	45.7	14.1	30.4	2.099	0.007	0.007	0.000	0.223	0.19	
59	9/2/2004	5:45:11 AM		25.45	25.235	24.659	25.478	24.761		41.067	46.73	21.76	20.291	-0.349	-6.368		58.135	0.046	14.643	0.003		42.00	0.7	45.6	13.8	30.7	2.115	0.007	0.007	0.000	0.217	0.18	
60	9/2/2004	5:46:11 AM		25.435	25.235	24.664	25.453	24.721		40.897	46.707	21.948	19.871	-0.349	-6.368		53.147	0.047	14.643	0.003		43.00	0.71667	45.6	12.7	30.4	2.095	0.007	0.007	0.000	0.224	0.19	
61																																	
62		Averages		25.8	25.3	25.2	25.5	24.7	#	40.9	47.8	21.9	19.9	0.7	-4.5	#	55.9	0.1	14.6	0.0	#			46.7	13.4	30.4	2.096	0.008	0.008	0.000	0.3	0.2	
63		Maximum		26.0	25.3	26.0	25.6	24.9	#	43.4	51.5	23.6	20.9	3.7	0.6	#	63.8	0.1	14.6	0.0	#			50.3	15.6	32.0	2.208	0.011	0.011	0.000	0.4	0.3	
64		Median		25.8	25.3	25.1	25.4	24.7	#	41.1	47.1	21.8	20.2	-0.3	-6.3	#	55.4	0.1	14.6	0.0	#			46.0	13.3	30.7	2.116	0.007	0.007	0.000	0.2	0.2	
65		Minimum		25.4	25.2	24.7	25.3	24.5	#	37.4	46.6	21.3	15.6	-0.4	-6.4	#	51.5	0.0	14.6	0.0	#			45.4	12.3	26.5	1.826	0.006	0.007	0.000	0.2	0.2	
66		2 x Std Dev		0.340	0.052	1.052	0.156	0.217	#	1.945	2.882	0.925	2.358	3.447	6.002	#	5.137	0.017	0.000	0.000	#			2.882	1.435	2.097	0.145	0.002	0.002	0.000	0.092	0.078	
67		Number of Points Used*		38	38	38	38	38	0	38	38	38	38	38	38	0	38	38	38	38	0			38	38	38	38	38	38	38	38	38	
68		* Backpulse points in box are not included																															
69																							Average for the last 10 minutes =					0.0069	0.0069	gpm/ft2			
70																								2xStandard Deviation =				0.0005	0.0004	gpm/ft2			

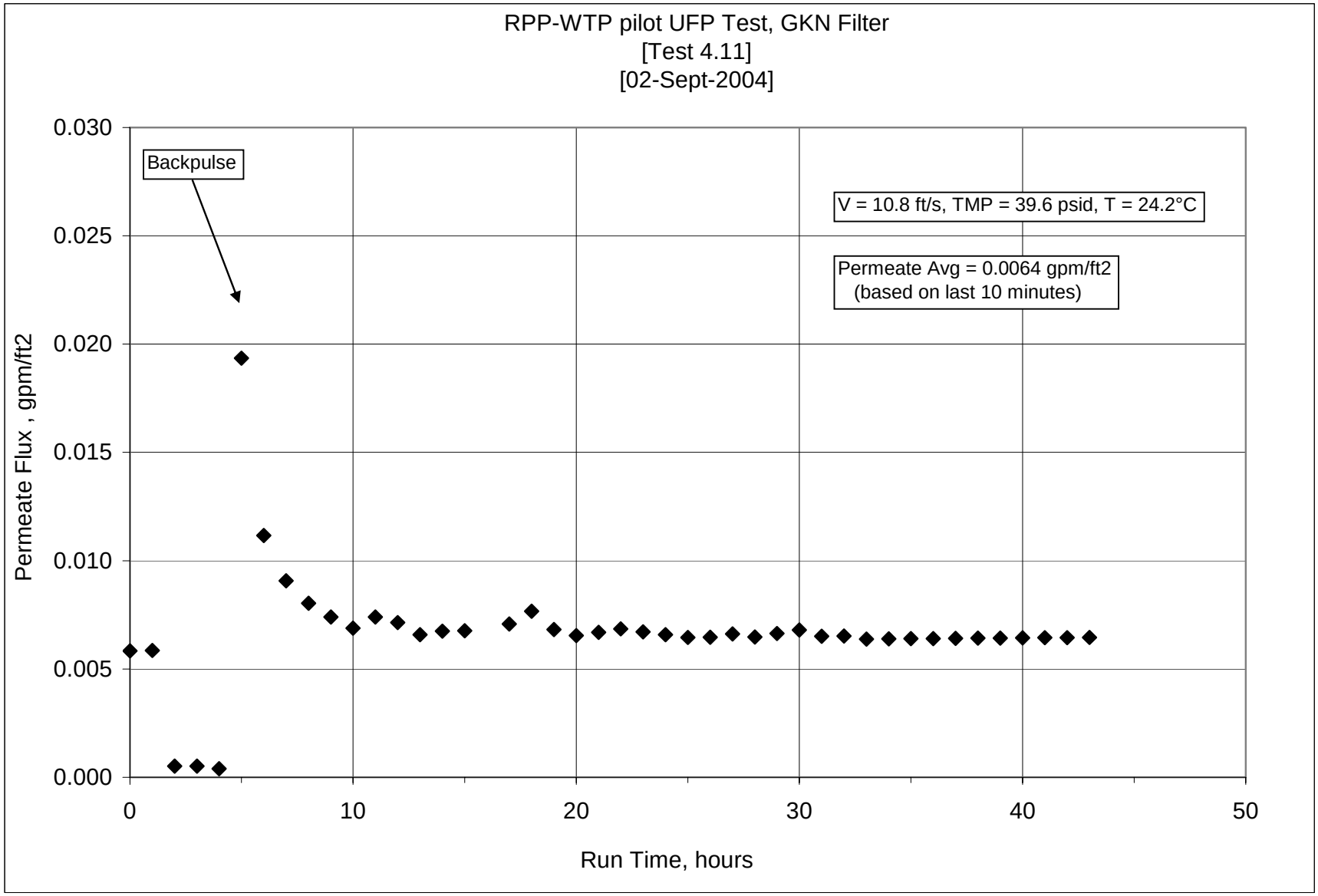
RUN # 4.09; STEADY STATE TEST AT 25 WT% UDS



RUN # 4.09; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A	6.985	FT2							
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	6:00:42 AM		26.161	25.261	27.718	25.609	24.901		19.868	67.511	22.41	-1.904	42.202	11.186		54.353	0.003	14.643	0.003		0	0	66.4	13.3	9.0	0.619	0.000	0.000	0.000	0.046	0.04	
18	9/2/2004	6:01:42 AM		26.132	25.261	27.854	25.599	24.942		19.733	67.834	22.48	-2.215	42.605	100.317		56.389	0.003	14.643	0.003		1.00	0.01667	66.7	13.8	8.8	0.604	0.000	0.000	0.000	0.048	0.04	
19	9/2/2004	6:02:42 AM		26.337	25.262	28.029	25.595	25.098		-7.253	69.695	19.891	-18.564	87.848	94.792		54.739	0.003	14.643	0.847		2.00	0.03333	68.6	13.4	-12.9	-0.890	0.000	0.000	0.000	-0.032	-0.03	
20	9/2/2004	6:03:42 AM		25.699	25.279	28.269	25.602	25.159		11.18	65.475	15.318	-3.554	48.884	63.34		56.869	0.004	14.643	0.004		3.00	0.05	64.4	13.9	3.8	0.263	0.001	0.001	0.000	0.147	0.13	
21	9/2/2004	6:04:42 AM		25.739	25.279	28.424	25.612	25.189		12.41	66.172	15.823	-2.973	48.334	29.97		57.111	0.003	14.643	0.004		4.00	0.06667	65.0	14.0	4.7	0.325	0.000	0.000	0.000	0.089	0.08	
22	9/2/2004	6:05:42 AM		25.761	25.291	28.59	25.664	25.276		12.379	65.643	15.77	-2.911	47.937	0.287		56.262	0.01	14.643	0.003		5.00	0.08333	64.5	13.8	4.7	0.326	0.001	0.001	0.000	0.296	0.25	
23	9/2/2004	6:06:42 AM		28.534	25.282	28.686	25.624	25.307		48.5	67.015	18.221	30.789	12.803	0.354		56.395	0.415	14.643	0.003		6.00	0.1	65.9	13.8	39.6	2.733	0.059	0.054	0.001	1.358	1.16	
24	9/2/2004	6:07:42 AM		27.674	25.287	28.821	25.66	25.268		57.445	67.189	21.164	37.031	3.657	0.414		54.716	0.107	14.643	0.003		7.00	0.11667	66.1	13.4	47.2	3.257	0.015	0.014	0.000	0.301	0.26	
25	9/2/2004	6:08:42 AM		27.757	25.276	28.939	25.644	25.102		58.022	67.552	22.704	36.069	3.53	0.443		53.754	0.087	14.643	0.003		8.00	0.13333	66.4	13.2	47.0	3.244	0.012	0.012	0.000	0.245	0.21	
26	9/2/2004	6:09:42 AM		27.826	25.27	29.067	25.573	24.821		58.652	68.321	24.019	35.205	3.521	0.481		55.079	0.079	14.643	0.003		9.00	0.15	67.2	13.5	46.9	3.236	0.011	0.010	0.000	0.223	0.19	
27	9/2/2004	6:10:42 AM		27.911	25.275	29.167	25.528	24.696		58.679	68.031	24.215	35.342	3.518	0.51		53.715	0.075	14.643	0.003		10.00	0.16667	66.9	13.2	47.0	3.241	0.011	0.010	0.000	0.211	0.18	
28	9/2/2004	6:11:42 AM		27.998	25.288	29.329	25.511	24.734		58.97	68.524	24.606	35.149	3.495	0.536		53.439	0.071	14.643	0.003		11.00	0.18333	67.4	12.7	47.1	3.245	0.010	0.009	0.000	0.192	0.16	
29	9/2/2004	6:12:42 AM		28.066	25.251	29.407	25.519	24.762		58.974	68.419	25.072	34.677	3.478	0.556		53.898	0.07	14.643	0.003		12.00	0.2	67.3	12.8	46.8	3.228	0.010	0.009	0.000	0.189	0.16	
30	9/2/2004	6:13:42 AM		28.178	25.278	29.548	25.566	24.809		59.306	68.578	25.089	34.934	3.521	0.585		53.483	0.069	14.643	0.003		13.00	0.21667	67.5	12.7	47.1	3.249	0.010	0.009	0.000	0.185	0.16	
31	9/2/2004	6:14:42 AM		27.949	25.299	29.678	25.622	24.835		62.313	68.574	24.862	38.293	0.157	-5.489		53.742	0.074	14.643	0.003		14.00	0.23333	67.4	12.8	50.3	3.468	0.011	0.009	0.000	0.185	0.16	
32	9/2/2004	6:15:42 AM		28.227	25.313	29.786	25.666	24.893		63.339	69.451	25.333	38.659	-0.083	-6.035		52.999	0.07	14.643	0.003		15.00	0.25	68.3	12.6	51.0	3.516	0.010	0.009	0.000	0.172	0.15	
33	9/2/2004	6:16:42 AM		28.437	25.348	29.921	25.741	24.944		62.841	68.79	25.154	38.53	-0.179	-6.197		53.986	0.071	14.643	0.003		16.00	0.26667	67.7	12.9	50.7	3.495	0.010	0.009	0.000	0.175	0.15	
34	9/2/2004	6:17:42 AM		28.591	25.368	30.05	25.796	24.939		63.178	69.146	25.294	38.413	-0.219	-6.217		51.274	0.069	14.643	0.003		17.00	0.28333	68.0	12.2	50.8	3.502	0.010	0.009	0.000	0.169	0.14	
35	9/2/2004	6:18:42 AM		28.72	25.383	30.139	25.806	24.963		62.775	68.549	25.313	38.353	-0.239	-6.278		48.256	0.068	14.643	0.003		18.00	0.3	67.4	11.5	50.6	3.486	0.010	0.008	0.000	0.167	0.14	
36	9/2/2004	6:19:42 AM		28.824	25.383	30.238	25.876	25.058		62.842	68.688	25.331	38.48	-0.176	-6.235		53.443	0.068	14.643	0.003		19.00	0.31667	67.6	12.7	50.7	3.493	0.010	0.008	0.000	0.166	0.14	
37	9/2/2004	6:20:42 AM		28.916	25.4	30.329	25.923	25.02		62.931	68.891	25.253	38.337	-0.222	-6.272		54.731	0.067	14.643	0.003		20.00	0.33333	67.8	13.0	50.6	3.491	0.010	0.008	0.000	0.163	0.14	
38	9/2/2004	6:21:42 AM		29.003	25.403	30.427	25.906	25.113		63.374	69.314	25.61	38.638	-0.176	-6.269		52.617	0.068	14.643	0.003		21.00	0.35	68.2	12.5	51.0	3.517	0.010	0.008	0.000	0.164	0.14	
39	9/2/2004	6:22:42 AM		29.067	25.402	30.5	25.91	25.112		63.175	68.987	25.398	38.659	-0.205	-6.183		53.126	0.07	14.643	0.003		22.00	0.36667	67.9	12.7	50.9	3.511	0.010	0.009	0.000	0.169	0.14	
40	9/2/2004	6:23:42 AM		29.168	25.424	30.601	25.927	25.079		62.945	68.74	25.51	38.363	-0.173	-6.171		49.282	0.068	14.643	0.003		23.00	0.38333	67.6	11.7	50.7	3.492	0.010	0.008	0.000	0.165	0.14	
41	9/2/2004	6:24:42 AM		29.207	25.418	30.649	25.926	25.113		63.082	68.893	25.289	38.817	-0.219	-6.281		52.561	0.068	14.643	0.004		24.00	0.4	67.8	12.5	50.9	3.513	0.010	0.008	0.000	0.163	0.14	
42	9/2/2004	6:25:42 AM		29.253	25.415	30.726	25.913	25.09		63.122	68.959	25.527	38.371	-0.187	-6.217		51.364	0.069	14.643	0.004		25.00	0.41667	67.8	12.2	50.7	3.499	0.010	0.008	0.000	0.166	0.14	
43	9/2/2004	6:26:42 AM		29.324	25.401	30.787	25.904	25.111		62.815	68.781	25.118	38.626	-0.234	-6.272		52.561	0.068	14.643	0.003		26.00	0.43333	67.7	12.5	50.7	3.497	0.010	0.008	0.000	0.164	0.14	
44	9/2/2004	6:27:42 AM		29.387	25.394	30.855	25.922	25.099		63.217	68.949	25.355	38.792	-0.3	-6.281		53.633	0.069	14.643	0.003		27.00	0.45	67.8	12.8	51.0	3.517	0.010	0.008	0.000	0.165	0.14	
45	9/2/2004	6:28:42 AM		29.446	25.403	30.943	25.961	25.138		62.358	68.321	26.093	37.023	-0.216	-6.22		55.984	0.067	14.643	0.003		28.00	0.46667	67.2	13.3	49.7	3.426	0.010	0.008	0.000	0.164	0.14	
46	9/2/2004	6:29:42 AM		29.502	25.395	31.024	25.998	25.13		62.418	68.464	25.956	37.173	-0.231	-6.287		54.97	0.065	14.643	0.003		29.00	0.48333	67.3	13.1	49.8	3.433	0.009	0.008	0.000	0.158	0.13	
47	9/2/2004	6:30:42 AM		29.563	25.396	31.1	26.004	25.081		62.53	68.425	25.912	37.505	-0.193	-6.229		54.635	0.063	14.643	0.003		30.00	0.5	67.3	13.0	50.0	3.449	0.009	0.008	0.000	0.152	0.13	
48	9/2/2004	6:31:42 AM		29.624	25.403	31.165	25.986	25.113		62.813	68.779	25.721	37.975	-0.176	-6.287		56.76	0.069	14.643	0.003		31.00	0.51667	67.7	13.5	50.4	3.474	0.010	0.008	0.000	0.165	0.14	
49	9/2/2004	6:32:42 AM		29.685	25.404	31.216	26.002	25.124		63.063	68.763	25.795	38.254	-0.297	-6.206		53.345	0.061	14.643	0.003		32.00	0.53333	67.6	12.7	50.7	3.493	0.009	0.007	0.000	0.145	0.12	
50	9/2/2004	6:33:42 AM		29.757	25.417	31.303	25.96	25.127		62.869	68.723	25.749	37.887	-0.17	-6.136		46.439	0.068	14.643	0.003		33.00	0.55	67.6	11.1	50.4	3.473	0.010	0.008	0.000	0.162	0.14	
51	9/2/2004	6:34:42 AM		29.818	25.408	31.349	25.986	25.118		62.468	68.522	25.338	37.901	-0.234	-6.29		50.657	0.068	14.643	0.003		34.00	0.56667	67.4	12.1	50.2	3.460	0.010	0.008	0.000	0.163	0.14	
52	9/2/2004	6:35:42 AM		29.873	25.404	31.404	25.992	25.124		62.792	68.564	25.282	38.423	-0.3	-6.284		52.811	0.068	14.643	0.003		35.00	0.58333	67.4	12.6	50.6	3.489	0.010	0.008	0.000	0.161	0.14	
53	9/2/2004	6:36:42 AM		29.955	25.421	31.472	26.049	25.146		62.676	68.47	25.122	38.532	-0.216	-6.264		54.447	0.067	14.643	0.003		36.00	0.6	67.3	13.0	50.6	3.489	0.010	0.008	0.000	0.159	0.13	
54	9/2/2004	6:37:42 AM		30.037	25.443	31.533	26.066	25.178		63.076	69.03	25.284	38.698	-0.193	-6.255		52.645	0.064	14.643	0.003		37.00	0.61667	67.9	12.5	50.9	3.508	0.009	0.008	0.000	0.150	0.13	
55	9/2/2004	6:38:42 AM		30.089	25.471	31.61	26.099	25.171		62.765	68.555	25.033	38.62	-0.173	-6.24		52.457	0.068	14.643	0.003		38.00	0.63333	67.4	12.5	50.7	3.495	0.010	0.008	0.000	0.160	0.14	
56	9/2/2004	6:39:42 AM		30.135	25.462	31.641	26.1	25.177		62.864	68.856	25.184	38.54	-0.234	-6.284		50.256	0.068	14.643	0.003		39.00	0.65	67.7	12.0	50.7	3.496	0.010	0.008	0.000	0.160	0.14	
57	9/2/2004	6:40:42 AM		30.174	25.467	31.695	26.105	25.147		62.999	69.217	25.126	38.562	-0.17	-6.206		54.536	0.067	14.643	0.004		40.00	0.66667	68.1	13.0	50.8	3.501	0.010	0.008	0.000	0.157	0.13	
58	9/2/2004	6:41:42 AM		30.22	25.463	31.726	26.081	25.128		62.881	68.584	25.082	38.669	-0.213	-6.275		53.281	0.068	14.643	0.004		41.00	0.68333	67.5	12.7	50.8	3.501	0.010	0.008	0.000	0.159	0.14	
59	9/2/2004	6:42:42 AM		30.241	25.434	31.742	26.117	25.189		63.032	69.015	25.201	38.718	-0.135	-6.168		51.919	0.063	14.643	0.003		42.00	0.7	67.9	12.4	50.9	3.508	0.009	0.007	0.000	0.147	0.13	
60																																	
61		Averages		29.1	25.4	30.6	25.9	25.0	#	62.2	68.7	25.2	37.8	0.4	-5.1	#	52.9	0.1	14.6	0.0	#			67.6	12.6	50.0	3.447	0.010	0.008	0.000	0.2	0.1	
62		Maximum		30.2	25.5	31.7	26.1	25.2	#	63.4	69.5	26.1	38.8	3.5	0.6	#	56.8	0.1	14.6	0.0	#			68.3	13.5	51.0	3.517	0.012	0.012	0.000	0.2	0.2	
63		Median		29.3	25.4	30.7	25.9	25.1	#	62.8	68.7	25.3	38.4	-0.2	-6.2	#	53.3	0.1	14.6	0.0	#			67.6	12.7	50.7	3.492	0.010	0.008	0.000	0.2	0.1	
64		Minimum		27.8	25.3	28.9	25.5	24.7	#	58.0	67.6	22.7	34.7	-0.3	-6.3	#	46.4	0.1	14.6	0.0	#			66.4	11.1	46.8	3.228	0.009	0.007	0.000	0.1	0.1	
65		2 x Std Dev		1.555	0.122	1.677	0.369	0.277	#	3.157	0.712	1.195	2.506	2.796	5.077	#	4.085	0.009	0.000	0.001	#			0.712	1.033	2.790	0.192	0.001	0.002	0.000	0.041	0.035	
66		Number of Points Used*		35	35	35	35	35	0	35	35	35	35	35	35	0	35	35	35	35	0			35	35	35	35	35	35	35	35	35	
67		* Backpulse points in box are not included																															
68																							Average for the last 10 minutes =					0.0096	0.0081	gpm/ft2			
69																								2xStandard Deviation =					0.0007	0.0006	gpm/ft2			

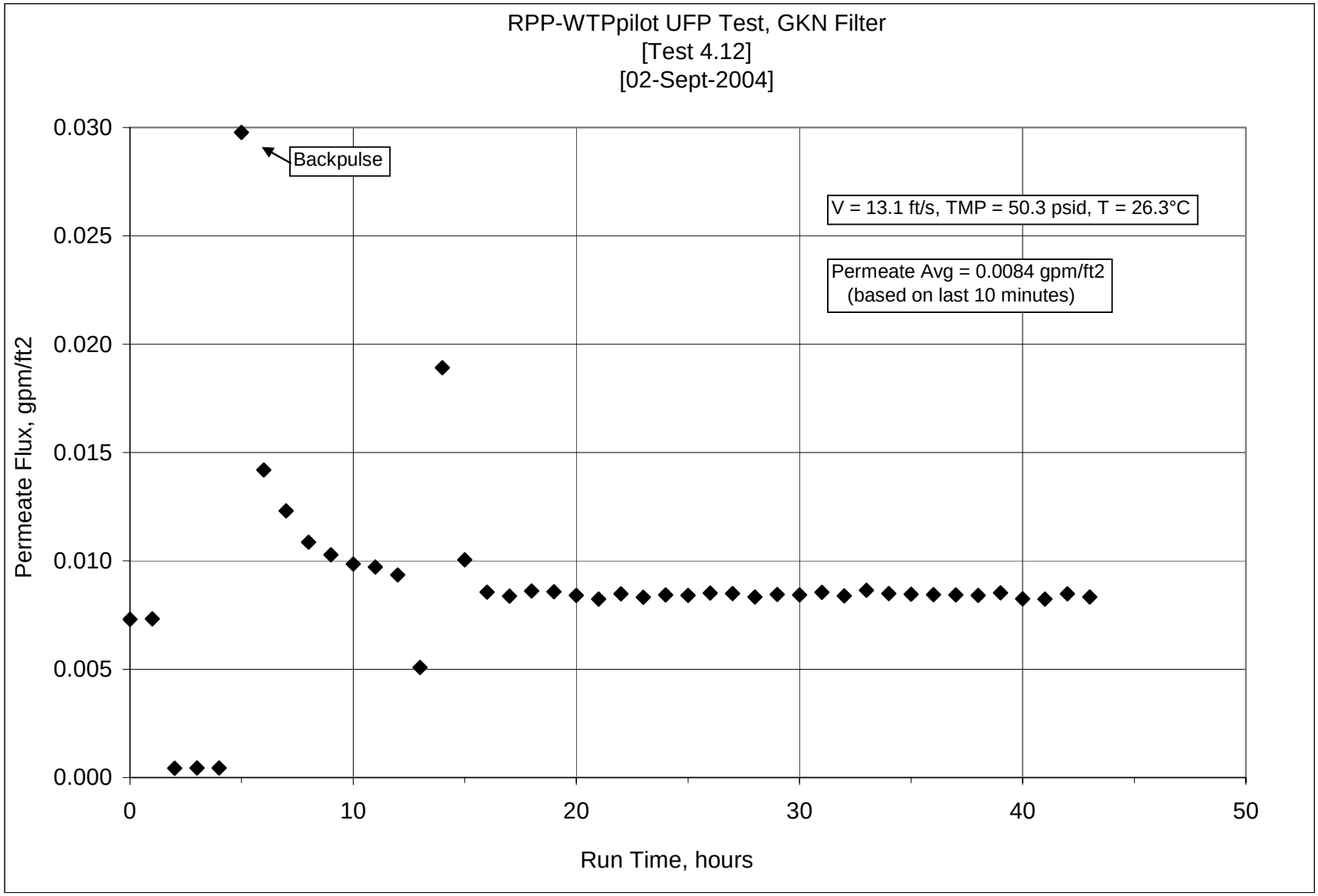
RUN # 4.11; STEADY STATE TEST AT 25 WT% UDS



RUN # 4.11; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface A	6.985	FT2							
5																								Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	6:55:11 AM		29.37	25.452	26.231	25.835	24.832		50.182	56.047	20.344	30.62	-0.349	-6.324		45.707	0.046	14.643	0.003		0	0	54.9	10.9	40.4	2.786	0.007	0.006	0.000	0.144	0.12	
15	9/2/2004	6:56:11 AM		29.212	25.433	26.102	25.821	24.828		50.145	56.101	20.49	30.429	-0.416	-6.362		45.019	0.046	14.643	0.003		1.00	0.01667	55.0	10.7	40.3	2.778	0.007	0.006	0.000	0.145	0.12	
16	9/2/2004	6:57:11 AM		29.061	25.436	26.03	25.879	24.871		47.171	55.933	20.351	27.587	2.702	21.39		44.9	0.004	14.643	0.003		2.00	0.03333	54.8	10.7	37.4	2.577	0.001	0.001	0.000	0.014	0.01	
17	9/2/2004	6:58:11 AM		28.921	25.44	25.919	25.898	24.92		42.54	55.939	19.698	23.704	7.545	21.385		44.896	0.004	14.643	0.003		3.00	0.05	54.8	10.7	33.1	2.284	0.001	0.001	0.000	0.016	0.01	
18	9/2/2004	6:59:11 AM		27.663	25.441	25.881	25.919	24.981		6.549	53.537	10.89	-3.671	41.771	52.398		49.837	0.003	14.643	0.004		4.00	0.06667	52.4	11.9	1.4	0.099	0.000	0.000	0.000	0.277	0.24	
19	9/2/2004	7:00:11 AM		28.011	25.446	25.75	25.924	24.941		45.688	54.617	13.933	32.547	3.058	0.385		47.83	0.147	14.643	0.003		5.00	0.08333	53.5	11.4	39.1	2.697	0.021	0.019	0.000	0.495	0.42	
20	9/2/2004	7:01:11 AM		28.103	25.448	25.643	25.951	24.888		46.76	55.498	16.37	31.217	2.751	0.423		45.292	0.085	14.643	0.003		6.00	0.1	54.4	10.8	39.0	2.688	0.012	0.011	0.000	0.286	0.24	
21	9/2/2004	7:02:11 AM		28.061	25.431	25.535	25.974	25.001		46.509	55.156	17.483	29.812	2.638	0.455		44.46	0.069	14.643	0.003		7.00	0.11667	54.0	10.6	38.2	2.631	0.010	0.009	0.000	0.238	0.20	
22	9/2/2004	7:03:11 AM		27.982	25.432	25.446	25.96	25.057		46.648	55.541	18.222	29.139	2.821	0.484		45.757	0.061	14.643	0.003		8.00	0.13333	54.4	10.9	37.9	2.613	0.009	0.008	0.000	0.212	0.18	
23	9/2/2004	7:04:11 AM		27.871	25.406	25.315	25.929	25.056		47.071	56.011	19.016	28.861	2.751	0.501		45.38	0.056	14.643	0.003		9.00	0.15	54.9	10.8	38.0	2.618	0.008	0.007	0.000	0.195	0.17	
24	9/2/2004	7:05:11 AM		27.804	25.433	25.262	25.946	25.048		47.538	56.304	19.871	28.402	2.702	0.518		44.777	0.052	14.643	0.003		10.00	0.16667	55.2	10.7	38.0	2.618	0.007	0.007	0.000	0.181	0.15	
25	9/2/2004	7:06:11 AM		27.727	25.461	25.185	25.939	25.046		47.661	56.287	20.119	28.186	2.702	0.547		44.8	0.052	14.643	0.003		11.00	0.18333	55.2	10.7	37.9	2.615	0.007	0.007	0.000	0.195	0.17	
26	9/2/2004	7:07:11 AM		27.644	25.473	25.097	25.951	25.013		47.36	56.146	20.574	27.669	2.702	0.565		43.675	0.05	14.643	0.003		12.00	0.2	55.0	10.4	37.5	2.586	0.007	0.007	0.000	0.190	0.16	
27	9/2/2004	7:08:11 AM		27.555	25.479	25.012	25.977	25.004		47.459	56.179	20.524	27.634	2.702	0.568		44.508	0.046	14.643	0.003		13.00	0.21667	55.1	10.6	37.5	2.589	0.007	0.007	0.000	0.175	0.15	
28	9/2/2004	7:09:11 AM		27.447	25.465	24.908	25.953	24.98		47.669	56.581	20.637	27.768	2.702	0.582		44.579	0.047	14.643	0.003		14.00	0.23333	55.5	10.6	37.7	2.601	0.007	0.007	0.000	0.179	0.15	
29	9/2/2004	7:10:11 AM		27.338	25.461	24.814	25.959	24.966		47.486	56.25	20.765	27.564	2.699	0.611		44.27	0.047	14.643	0.003		15.00	0.25	55.1	10.5	37.5	2.587	0.007	0.007	0.000	0.180	0.15	
30	9/2/2004	7:11:11 AM		27.244	25.457	24.735	25.979	24.987		49.264	56.032	20.822	29.393	0.841	-3.271		44.627	0.21	14.643	0.003		16.00	0.26667	54.9	10.6	39.3	2.712	0.030	0.030	0.001	0.770	0.66	
31	9/2/2004	7:12:11 AM		27.123	25.44	24.664	25.993	24.961		50.27	56.003	21.692	29.372	-0.645	-5.616		45.534	0.049	14.643	0.003		17.00	0.28333	54.9	10.8	39.8	2.746	0.007	0.007	0.000	0.178	0.15	
32	9/2/2004	7:13:11 AM		27.059	25.451	24.609	26.009	24.971		50.218	55.52	21.57	29.436	-0.841	-6.096		45.494	0.053	14.643	0.003		18.00	0.3	54.4	10.8	39.8	2.746	0.008	0.008	0.000	0.193	0.16	
33	9/2/2004	7:14:11 AM		26.962	25.423	24.501	25.951	24.948		50.44	55.92	21.293	29.851	-0.879	-6.171		45.384	0.047	14.643	0.003		19.00	0.31667	54.8	10.8	40.1	2.768	0.007	0.007	0.000	0.170	0.14	
34	9/2/2004	7:15:11 AM		26.888	25.425	24.457	25.978	24.95		50.425	55.798	21.372	30.035	-0.928	-6.295		46.204	0.045	14.643	0.003		20.00	0.33333	54.7	11.0	40.2	2.774	0.006	0.007	0.000	0.163	0.14	
35	9/2/2004	7:16:11 AM		26.814	25.436	24.403	25.954	24.941		49.548	54.592	21.607	29.001	-0.946	-6.284		47.701	0.046	14.643	0.003		21.00	0.35	53.5	11.4	39.3	2.708	0.007	0.007	0.000	0.171	0.15	
36	9/2/2004	7:17:11 AM		26.731	25.417	24.33	25.865	24.908		50.757	56.132	21.42	29.937	-0.943	-6.316		45.503	0.047	14.643	0.003		22.00	0.36667	55.0	10.8	40.3	2.782	0.007	0.007	0.000	0.170	0.14	
37	9/2/2004	7:18:11 AM		26.659	25.425	24.292	25.853	24.89		50.57	55.74	21.321	30.136	-0.957	-6.356		45.926	0.046	14.643	0.004		23.00	0.38333	54.6	10.9	40.4	2.782	0.007	0.007	0.000	0.166	0.14	
38	9/2/2004	7:19:11 AM		26.576	25.422	24.215	25.785	24.857		50.558	55.806	21.41	29.863	-0.992	-6.359		45.204	0.045	14.643	0.003		24.00	0.4	54.7	10.8	40.2	2.772	0.006	0.007	0.000	0.164	0.14	
39	9/2/2004	7:20:11 AM		26.499	25.415	24.147	25.757	24.805		50.516	55.757	21.614	29.727	-1.009	-6.365		44.998	0.044	14.643	0.003		25.00	0.41667	54.6	10.7	40.1	2.766	0.006	0.006	0.000	0.161	0.14	
40	9/2/2004	7:21:11 AM		26.42	25.396	24.093	25.774	24.776		50.583	55.902	21.527	30.08	-0.986	-6.365		45.619	0.044	14.643	0.003		26.00	0.43333	54.8	10.9	40.3	2.781	0.006	0.006	0.000	0.160	0.14	
41	9/2/2004	7:22:11 AM		26.357	25.393	24.035	25.795	24.768		50.429	55.653	21.391	30.099	-0.989	-6.362		45.494	0.045	14.643	0.003		27.00	0.45	54.5	10.8	40.3	2.776	0.006	0.007	0.000	0.164	0.14	
42	9/2/2004	7:23:11 AM		26.294	25.404	23.981	25.777	24.8		50.91	56.02	21.256	30.433	-0.992	-6.359		44.91	0.044	14.643	0.003		28.00	0.46667	54.9	10.7	40.7	2.804	0.006	0.006	0.000	0.159	0.14	
43	9/2/2004	7:24:11 AM		26.235	25.396	23.917	25.789	24.771		50.427	55.641	21.187	30.138	-0.937	-6.304		45.14	0.045	14.643	0.003		29.00	0.48333	54.5	10.8	40.3	2.777	0.006	0.007	0.000	0.165	0.14	
44	9/2/2004	7:25:11 AM		26.171	25.396	23.878	25.769	24.757		50.763	56.014	21.069	30.397	-0.966	-6.327		45.252	0.046	14.643	0.003		30.00	0.5	54.9	10.8	40.6	2.798	0.007	0.007	0.000	0.168	0.14	
45	9/2/2004	7:26:11 AM		26.107	25.397	23.823	25.745	24.782		50.775	55.982	20.622	31.014	-0.96	-6.359		45.624	0.044	14.643	0.003		31.00	0.51667	54.9	10.9	40.9	2.820	0.006	0.007	0.000	0.159	0.14	
46	9/2/2004	7:27:11 AM		26.052	25.397	23.773	25.734	24.802		50.454	55.64	21.94	29.225	-1.012	-6.362		46.318	0.044	14.643	0.004		32.00	0.53333	54.5	11.0	39.8	2.747	0.006	0.007	0.000	0.164	0.14	
47	9/2/2004	7:28:11 AM		26.012	25.402	23.748	25.769	24.797		49.9	55.054	21.128	29.51	-0.995	-6.362		46.197	0.043	14.643	0.003		33.00	0.55	53.9	11.0	39.7	2.738	0.006	0.006	0.000	0.161	0.14	
48	9/2/2004	7:29:11 AM		25.95	25.39	23.696	25.753	24.8		50.317	55.342	21.608	29.781	-0.983	-6.356		45.997	0.043	14.643	0.003		34.00	0.56667	54.2	11.0	40.0	2.761	0.006	0.006	0.000	0.159	0.14	
49	9/2/2004	7:30:11 AM		25.885	25.37	23.621	25.683	24.775		50.307	55.541	21.589	29.619	-1.018	-6.368		45.463	0.043	14.643	0.003		35.00	0.58333	54.4	10.8	40.0	2.755	0.006	0.006	0.000	0.160	0.14	
50	9/2/2004	7:31:11 AM		25.85	25.39	23.611	25.743	24.89		50.168	55.427	21.309	29.758	-0.992	-6.368		45.69	0.043	14.643	0.003		36.00	0.6	54.3	10.9	40.0	2.755	0.006	0.006	0.000	0.160	0.14	
51	9/2/2004	7:32:11 AM		25.788	25.383	23.559	25.726	24.913		49.987	55.158	21.405	29.481	-1.021	-6.359		44.191	0.043	14.643	0.003		37.00	0.61667	54.0	10.5	39.7	2.740	0.006	0.006	0.000	0.161	0.14	
52	9/2/2004	7:33:11 AM		25.736	25.376	23.516	25.703	24.881		50.359	55.68	21.289	29.881	-1.018	-6.362		46.226	0.043	14.643	0.003		38.00	0.63333	54.6	11.0	40.1	2.766	0.006	0.006	0.000	0.160	0.14	
53	9/2/2004	7:34:11 AM		25.694	25.378	23.469	25.696	24.799		50.471	55.773	21.039	30.161	-0.934	-6.29		45.64	0.043	14.643	0.003		39.00	0.65	54.6	10.9	40.3	2.780	0.006	0.006	0.000	0.159	0.14	
54	9/2/2004	7:35:11 AM		25.651	25.381	23.436	25.638	24.686		50.639	55.839	21.017	30.618	-0.954	-6.304		45.663	0.043	14.643	0.004		40.00	0.66667	54.7	10.9	40.6	2.801	0.006	0.006	0.000	0.158	0.13	
55	9/2/2004	7:36:11 AM		25.592	25.367	23.382	25.56	24.697		50.898	56.295	21.207	30.193	-0.986	-6.307		44.775	0.043	14.643	0.003		41.00	0.68333	55.2	10.7	40.5	2.795	0.006	0.006	0.000	0.159	0.14	
56	9/2/2004	7:37:11 AM		25.548	25.373	23.353	25.565	24.568		50.535	55.955	21.556	29.908	-0.978	-6.304		45.302	0.043	14.643	0.003		42.00	0.7	54.8	10.8	40.2	2.773	0.006	0.006	0.000	0.160	0.14	
57	9/2/2004	7:38:11 AM		25.499	25.368	23.298	25.536	24.429		50.545	55.844	20.78	30.778	-0.952	-6.31		45.482	0.043	14.643	0.003		43.00	0.71667	54.7	10.8	40.7	2.803	0.006	0.006	0.000	0.159	0.14	
58	9/2/2004	7:39:11 AM		25.449	25.358	23.268	25.481	24.469		50.479	55.893	20.795	30.686	-0.989	-6.307		45.557	0.043	14.643	0.003		44.00	0.73333	54.8	10.9	40.6	2.798	0.006	0.006	0.000	0.159	0.14	
59	9/2/2004	7:40:11 AM		25.414	25.359	23.244	25.472	24.449		50.477	55.755	21.489	29.908	-1.001	-6.304		45.342	0.042	14.643	0.003		45.00	0.75	54.6	10.8	40.2	2.771	0.006	0.006	0.000	0.157	0.13	
60																																	
61		Averages		26.6	25.4	24.2	25.8	24.8	#	49.6	55.8	20.8	29.6	0.0	-4.5	#	45.3	0.1	14.6	0.0	#			54.7	10.8	39.6	2.7	0.0	0.0	0.0	0.2	0.2	
62		Maximum		28.1	25.5	25.6	26.0	25.1	#	50.9	56.6	21.9	31.2	2.8	0.6	#	47.7	0.2	14.6	0.0	#			55.5	11.4	40.9	2.8	0.0	0.0	0.0	0.8	0.7	
63		Median		26.5	25.4	24.1	25.8	24.9	#	50.4	55.8	21.2	29.8	-1.0	-6.3	#	45.4	0.0	14.6	0.0	#			54.7	10.8	40.1	2.8	0.0	0.0	0.0	0.2	0.1	
64		Minimum		25.4	25.4	23.2	25.5	24.4	#	46.5	54.6	16.4	27.6	-1.0	-6.4	#	43.7	0.0	14.6	0.0	#			53.5	10.4	37.5	2.6	0.0	0.0	0.0	0.2	0.1	
65		2 x Std Dev		1.648	0.066	1.402	0.302	0.319	#	2.853	0.764	2.290	1.789	3.184	5.901	#	1.397	0.053	0.000	0.001	#			0.764	0.333	2.097	0.145	0.008	0.008	0.000	0.193	0.164	
66		Number of Points Used*		40	40	40	40	40	0	40	40	40	40	40	40	0	40	40	40	40	0			40	40	40	40	40	40	40	40	40	
67		* Backpulse points in box are not included																															
68																								Average for the last 10 minutes =				0.0062	0.0065	gpm/ft2			
69																								2xStandard Deviation =				0.0003	0.0002	gpm/ft2			

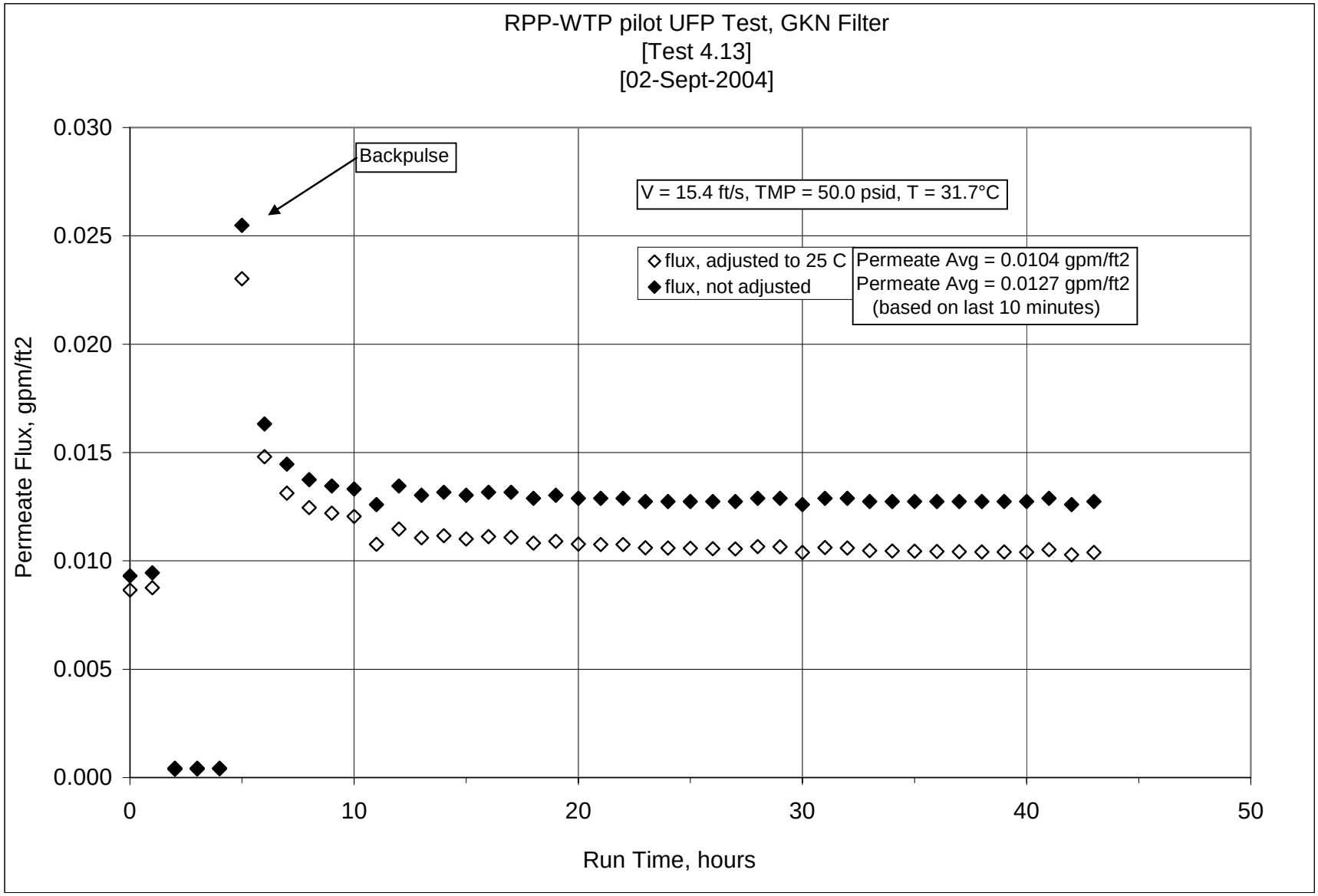
RUN # STEADY5; STEADY STATE TEST AT 25 WT% UDS



RUN # STEADY5; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface A	6.985	FT2							
5																								Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006								at 25C		x 1000			
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	7:50:38 AM		25.017	25.316	20.827	25.459	24.527		64.833	70.114	26.093	36.034	-0.928	-6.35		53.706	0.051	14.643	0.003		0	0	69.0	12.8	50.4	3.477	0.007	0.007	0.000	0.145	0.12	
15	9/2/2004	7:51:38 AM		24.919	25.323	21.192	25.481	24.619		64.947	70.129	26.093	35.535	-0.928	-6.35		53.081	0.051	14.643	0.004		1.00	0.01667	69.0	12.6	50.2	3.464	0.007	0.007	0.000	0.146	0.12	
16	9/2/2004	7:52:38 AM		24.889	25.313	21.574	25.456	24.619		61.914	70.75	26.093	32.465	2.818	20.095		50.89	0.003	14.643	0.003		2.00	0.03333	69.6	12.1	47.2	3.254	0.000	0.000	0.000	0.009	0.01	
17	9/2/2004	7:53:38 AM		24.045	25.33	21.974	25.503	24.616		54.988	70.929	26.093	26.048	10.139	20.301		53.256	0.003	14.643	0.003		3.00	0.05	69.8	12.7	40.5	2.794	0.000	0.000	0.000	0.011	0.01	
18	9/2/2004	7:54:38 AM		24.341	25.316	22.261	25.509	24.677		43.148	70.568	26.093	14.892	21.708	114.028		56.399	0.003	14.643	0.003		4.00	0.06667	69.4	13.4	29.0	2.001	0.000	0.000	0.000	0.015	0.01	
19	9/2/2004	7:55:38 AM		24.663	25.318	22.56	25.531	24.759		58.636	67.938	18.171	41.269	3.238	0.351		56.637	0.206	14.643	0.003		5.00	0.08333	66.8	13.5	50.0	3.444	0.029	0.030	0.001	0.596	0.51	
20	9/2/2004	7:56:38 AM		24.575	25.305	22.803	25.517	24.635		61.413	68.64	21.329	40.851	1.006	0.391		57.136	0.098	14.643	0.003		6.00	0.1	67.5	13.6	51.1	3.525	0.014	0.014	0.000	0.278	0.24	
21	9/2/2004	7:57:38 AM		24.601	25.315	23.085	25.518	24.656		61.645	68.893	23.336	39.055	1.246	0.443		56.005	0.085	14.643	0.003		7.00	0.11667	67.8	13.3	50.4	3.471	0.012	0.012	0.000	0.244	0.21	
22	9/2/2004	7:58:38 AM		24.587	25.307	23.332	25.51	24.708		62.402	69.78	24.299	38.876	1.176	0.472		54.22	0.075	14.643	0.003		8.00	0.13333	68.7	12.9	50.6	3.491	0.011	0.011	0.000	0.215	0.18	
23	9/2/2004	7:59:38 AM		24.574	25.309	23.565	25.527	24.685		62.481	69.627	24.933	38.423	1.118	0.498		52.972	0.071	14.643	0.003		9.00	0.15	68.5	12.6	50.5	3.478	0.010	0.010	0.000	0.204	0.17	
24	9/2/2004	8:00:38 AM		24.574	25.314	23.796	25.562	24.645		62.868	70.015	25.301	38.412	1.15	0.524		53.464	0.068	14.643	0.003		10.00	0.16667	68.9	12.7	50.6	3.491	0.010	0.010	0.000	0.195	0.17	
25	9/2/2004	8:01:38 AM		24.587	25.302	24.029	25.59	24.767		63.028	70.216	25.473	38.177	1.159	0.559		57.288	0.066	14.643	0.003		11.00	0.18333	69.1	13.6	50.6	3.489	0.009	0.010	0.000	0.192	0.16	
26	9/2/2004	8:02:38 AM		24.618	25.303	24.266	25.681	24.849		63.169	70.384	25.935	38	1.162	0.585		53.425	0.064	14.643	0.003		12.00	0.2	69.3	12.7	50.6	3.488	0.009	0.009	0.000	0.185	0.16	
27	9/2/2004	8:03:38 AM		24.688	25.328	24.496	25.801	24.913		63.148	70.798	25.733	38.082	1.405	0.599		55.938	0.035	14.643	0.003		13.00	0.21667	69.7	13.3	50.6	3.490	0.005	0.005	0.000	0.100	0.09	
28	9/2/2004	8:04:38 AM		24.769	25.344	24.707	25.847	24.944		65.836	70.419	25.833	41.183	-1.212	-4.87		49.458	0.131	14.643	0.003		14.00	0.23333	69.3	11.8	53.5	3.689	0.019	0.019	0.000	0.353	0.30	
29	9/2/2004	8:05:38 AM		24.836	25.366	24.915	25.889	24.981		66.017	70.332	25.344	41.577	-1.215	-6.038		53.875	0.07	14.643	0.003		15.00	0.25	69.2	12.8	53.8	3.709	0.010	0.010	0.000	0.187	0.16	
30	9/2/2004	8:06:38 AM		24.9	25.38	25.144	25.898	25.01		63.634	67.818	26.093	37.085	-1.212	-6.255		53.393	0.06	14.643	0.003		16.00	0.26667	66.7	12.7	50.4	3.472	0.009	0.009	0.000	0.170	0.14	
31	9/2/2004	8:07:38 AM		24.994	25.393	25.328	25.926	24.999		63.464	67.693	26.093	37.235	-1.215	-6.269		53.984	0.059	14.643	0.003		17.00	0.28333	66.6	12.9	50.3	3.471	0.008	0.008	0.000	0.166	0.14	
32	9/2/2004	8:08:38 AM		25.096	25.4	25.49	25.953	25.011		63.486	67.627	26.093	37.641	-1.212	-6.301		56.326	0.061	14.643	0.003		18.00	0.3	66.5	13.4	50.6	3.486	0.009	0.009	0.000	0.170	0.14	
33	9/2/2004	8:09:38 AM		25.202	25.402	25.641	25.95	25.002		63.372	67.432	25.939	38.585	-1.212	-6.304		57.056	0.061	14.643	0.004		19.00	0.31667	66.3	13.6	51.0	3.515	0.009	0.009	0.000	0.168	0.14	
34	9/2/2004	8:10:38 AM		25.286	25.406	25.791	25.969	24.996		63.389	67.494	26.093	37.347	-1.209	-6.304		56.702	0.06	14.643	0.003		20.00	0.33333	66.4	13.5	50.4	3.473	0.009	0.008	0.000	0.167	0.14	
35	9/2/2004	8:11:38 AM		25.376	25.401	25.915	25.984	24.966		61.958	66.13	25.988	36.806	-1.212	-6.31		54.73	0.059	14.643	0.003		21.00	0.35	65.0	13.0	49.4	3.405	0.008	0.008	0.000	0.167	0.14	
36	9/2/2004	8:12:38 AM		25.463	25.398	26.027	25.951	24.983		62.004	66.149	26.048	36.957	-1.212	-6.304		54.149	0.061	14.643	0.003		22.00	0.36667	65.0	12.9	49.5	3.412	0.009	0.008	0.000	0.171	0.15	
37	9/2/2004	8:13:38 AM		25.536	25.361	26.135	25.959	25.021		62.031	66.19	25.831	37.009	-1.209	-6.307		56.445	0.06	14.643	0.003		23.00	0.38333	65.1	13.4	49.5	3.414	0.009	0.008	0.000	0.168	0.14	
38	9/2/2004	8:14:38 AM		25.625	25.38	26.264	26.008	25.02		62.153	66.389	25.864	37.271	-1.209	-6.304		57.763	0.061	14.643	0.004		24.00	0.4	65.3	13.8	49.7	3.427	0.009	0.008	0.000	0.170	0.14	
39	9/2/2004	8:15:38 AM		25.708	25.362	26.351	25.995	25.022		62.143	66.36	25.554	37.789	-1.212	-6.307		54.559	0.061	14.643	0.003		25.00	0.41667	65.2	13.0	50.0	3.445	0.009	0.008	0.000	0.168	0.14	
40	9/2/2004	8:16:38 AM		25.811	25.396	26.485	25.994	25.021		62.199	66.296	25.676	37.575	-1.206	-6.298		56.257	0.062	14.643	0.004		26.00	0.43333	65.2	13.4	49.9	3.440	0.009	0.009	0.000	0.171	0.15	
41	9/2/2004	8:17:38 AM		25.919	25.409	26.583	26.007	24.959		62.026	66.234	25.281	37.696	-1.212	-6.298		57.761	0.062	14.643	0.003		27.00	0.45	65.1	13.8	49.9	3.438	0.009	0.008	0.000	0.170	0.14	
42	9/2/2004	8:18:38 AM		25.973	25.383	26.671	25.981	24.993		62.267	66.454	25.514	37.563	-1.212	-6.307		52.355	0.061	14.643	0.003		28.00	0.46667	65.3	12.5	49.9	3.441	0.009	0.008	0.000	0.167	0.14	
43	9/2/2004	8:19:38 AM		26.053	25.383	26.762	25.896	24.913		62.445	66.649	25.477	37.914	-1.212	-6.301		53.433	0.062	14.643	0.003		29.00	0.48333	65.5	12.7	50.2	3.460	0.009	0.008	0.000	0.168	0.14	
44	9/2/2004	8:20:38 AM		26.174	25.419	26.877	25.887	24.839		62.371	66.85	25.177	37.844	-1.212	-6.298		56.965	0.062	14.643	0.003		30.00	0.5	65.7	13.6	50.1	3.455	0.009	0.008	0.000	0.168	0.14	
45	9/2/2004	8:21:38 AM		26.232	25.407	26.946	25.81	24.817		62.221	66.431	25.23	37.926	-1.212	-6.298		55.995	0.063	14.643	0.003		31.00	0.51667	65.3	13.3	50.1	3.452	0.009	0.009	0.000	0.171	0.15	
46	9/2/2004	8:22:38 AM		26.305	25.4	27.044	25.803	24.77		62.134	66.449	25.237	37.75	-1.212	-6.304		56.919	0.062	14.643	0.003		32.00	0.53333	65.3	13.6	49.9	3.443	0.009	0.008	0.000	0.168	0.14	
47	9/2/2004	8:23:38 AM		26.37	25.375	27.103	25.838	24.785		61.935	66.207	25.243	37.557	-1.215	-6.295		54.712	0.064	14.643	0.003		33.00	0.55	65.1	13.0	49.7	3.430	0.009	0.009	0.000	0.174	0.15	
48	9/2/2004	8:24:38 AM		26.44	25.37	27.168	25.893	24.836		62.338	66.74	25.262	37.854	-1.215	-6.301		54.251	0.063	14.643	0.003		34.00	0.56667	65.6	12.9	50.1	3.454	0.009	0.008	0.000	0.169	0.14	
49	9/2/2004	8:25:38 AM		26.545	25.405	27.288	25.953	24.881		62.414	66.698	25.179	38.201	-1.209	-6.301		54.972	0.063	14.643	0.003		35.00	0.58333	65.6	13.1	50.3	3.469	0.009	0.008	0.000	0.168	0.14	
50	9/2/2004	8:26:38 AM		26.609	25.4	27.368	25.968	24.931		62.138	66.485	25.164	37.924	-1.212	-6.298		55.052	0.063	14.643	0.004		36.00	0.6	65.4	13.1	50.0	3.449	0.009	0.008	0.000	0.169	0.14	
51	9/2/2004	8:27:38 AM		26.669	25.4	27.447	25.983	24.925		62.626	67.173	25.44	37.797	-1.212	-6.301		55.596	0.063	14.643	0.003		37.00	0.61667	66.0	13.2	50.2	3.462	0.009	0.008	0.000	0.168	0.14	
52	9/2/2004	8:28:38 AM		26.721	25.392	27.504	25.975	24.982		62.518	66.961	25.394	37.848	-1.215	-6.298		53.9	0.063	14.643	0.003		38.00	0.63333	65.8	12.8	50.2	3.460	0.009	0.008	0.000	0.168	0.14	
53	9/2/2004	8:29:38 AM		26.791	25.398	27.57	25.976	25.008		62.205	66.476	25.336	37.809	-1.212	-6.301		53.535	0.064	14.643	0.003		39.00	0.65	65.4	12.8	50.0	3.448	0.009	0.009	0.000	0.171	0.15	
54	9/2/2004	8:30:38 AM		26.852	25.388	27.625	25.961	25.004		62.609	66.877	25.26	38.263	-1.212	-6.301		54.745	0.062	14.643	0.003		40.00	0.66667	65.8	13.0	50.4	3.477	0.009	0.008	0.000	0.164	0.14	
55	9/2/2004	8:31:38 AM		26.921	25.388	27.694	25.966	24.988		62.224	66.429	25.141	38.197	-1.212	-6.304		55.167	0.062	14.643	0.003		41.00	0.68333	65.3	13.1	50.2	3.462	0.009	0.008	0.000	0.164	0.14	
56	9/2/2004	8:32:38 AM		26.989	25.391	27.767	26.044	25.031		62.381	66.754	25.252	38.055	-1.212	-6.295		52.901	0.064	14.643	0.003		42.00	0.7	65.6	12.6	50.2	3.462	0.009	0.008	0.000	0.169	0.14	
57	9/2/2004	8:33:38 AM		27.067	25.404	27.835	26.062	25.044		62.315	66.669	25.157	38.098	-1.212	-6.301		54.443	0.063	14.643	0.003		43.00	0.71667	65.5	13.0	50.2	3.462	0.009	0.008	0.000	0.166	0.14	
58	9/2/2004	8:34:38 AM		27.139	25.411	27.907	26.064	25.091		62.267	66.561	25.021	38.064	-1.212	-6.298		53.957	0.064	14.643	0.003		44.00	0.73333	65.4	12.9	50.2	3.459	0.009	0.008	0.000	0.168	0.14	
59	9/2/2004	8:35:38 AM		27.191	25.413	27.964	26.081	25.098		61.991	66.284	24.963	38.084	-1.215	-6.304		54.9	0.063	14.643	0.003		45.00	0.75	65.2	13.1	50.0	3.450	0.009	0.008	0.000	0.166	0.14	
60	9/2/2004	8:36:38 AM		27.265	25.432	28.033	26.125	25.127		62.244	66.636	25.14	37.963	-1.209	-6.298		56.637	0.064	14.643	0.004		46.00	0.76667	65.5	13.5	50.1	3.454	0.009	0.008	0.000	0.168	0.14	
61	9/2/2004	8:37:38 AM		27.327	25.439	28.085	26.132	25.174		62.493	66.951	25.296	38.107	-1.215	-6.301		53.971	0.063	14.643	0.003		47.00	0.78333	65.8	12.9	50.3	3.468	0.009	0.008	0.000	0.165	0.14	
62																																	
63		Averages		25.9	25.4	26.3	25.9	24.9	#	62.7	67.4	25.5	38.0	-0.9	-5.2	#	54.9	0.1	14.6	0.0	#			66.3	13.1	50.3	3.5	0.0	0.0	0.0	0.2	0.1	
64		Maximum		27.3	25.4	28.1	26.1	25.2	#	66.0	70.8	26.1	41.6	1.4	0.6	#	57.8	0.1	14.6	0.0	#			69.7	13.8	53.8	3.7	0.0	0.0	0.0	0.4	0.3	
65		Median		25.9	25.4	26.6	26.0	25.0	#	62.4	66.7	25.3	37.9	-1.2	-6.3	#	54.7	0.1	14.6	0.0	#			65.6	13.0	50.2	3.5	0.0	0.0	0.0	0.2	0.1	
66		Minimum		24.6	25.3	23.3	25.5	24.6	#	61.9	66.1	24.3	36.8	-1.2	-6.3	#	49.5	0.0	14.6	0.0	#			65.0	11.8	49.4	3.4	0.0	0.0	0.0	0.1	0.1	
67		2 x Std Dev		1.789	0.070	2.699	0.299	0.237	#	1.762	2.932	0.791	1.776	1.721	4.869	#	3.335	0.024	0.000	0.001	#			2.932	0.794	1.659	0.114	0.003	0.004	0.000	0.065	0.055	
68		Number of Points Used*		40	40	40	40	40	0	40	40	40	40	40	40	0	40	40	40	40	0			40	40	40	40	40	40	40	40	40	
69		* Backpulse points in box are not included																															
70																																	

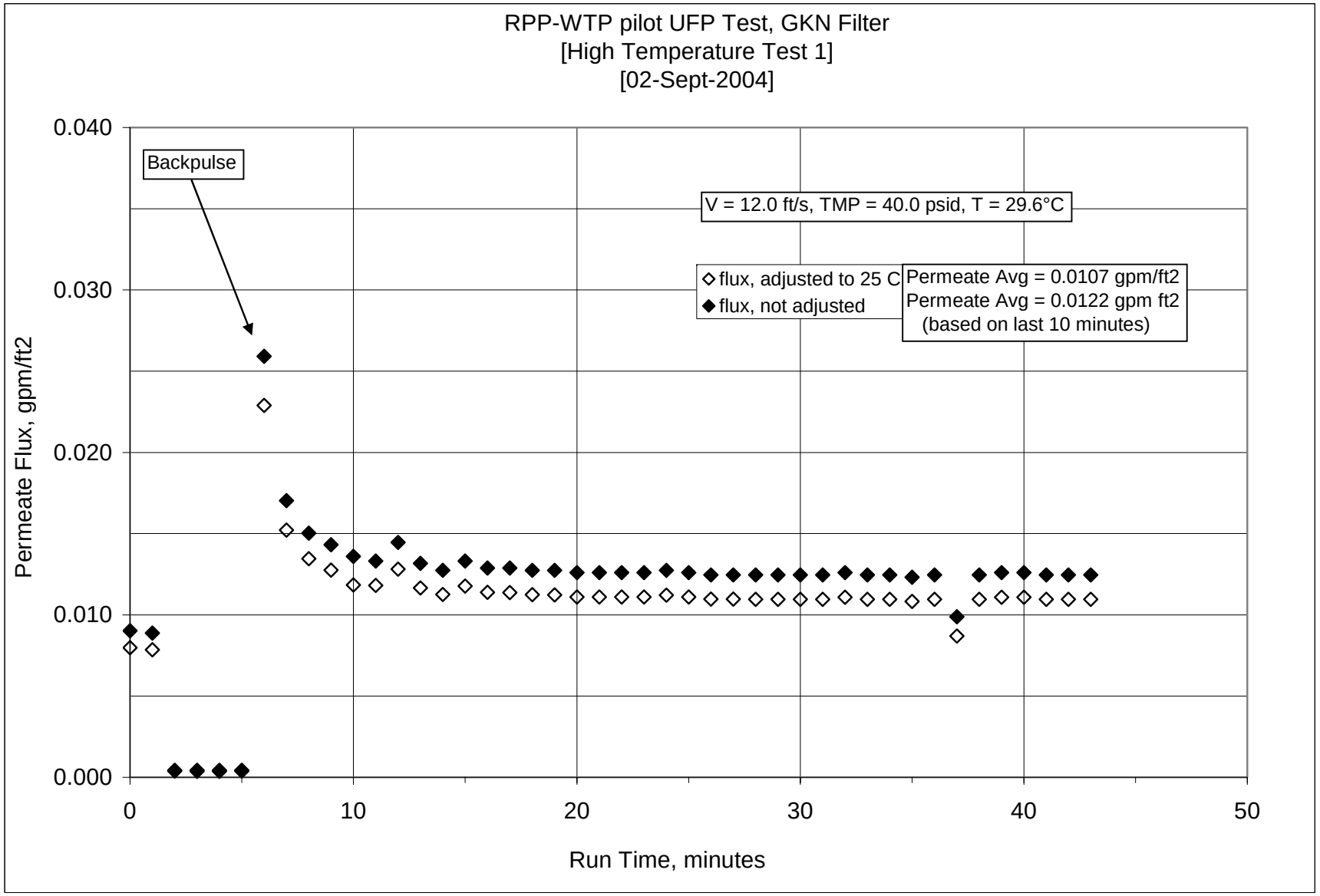
RUN # STEADY6; STEADY STATE TEST AT 25 WT% UDS



RUN # STEADY6; STEADY STATE TEST AT 25 WT% UDS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface A	6.985	FT2							
5																								Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	8:41:25 AM		27.603	25.442	28.988	26.18	25.231		65.448	69.853	26.093	35.117	-1.212	-6.298		60.948	0.065	14.643	0.003		0	0	68.7	14.5	50.3	3.467	0.009	0.009	0.000	0.172	0.15	
15	9/2/2004	8:42:25 AM		27.709	25.443	29.169	26.171	25.238		65.759	70.299	26.093	35.989	-1.212	-6.295		59.434	0.066	14.643	0.003		1.00	0.01667	69.2	14.2	50.9	3.508	0.009	0.009	0.000	0.172	0.15	
16	9/2/2004	8:43:25 AM		28.698	25.441	29.336	26.209	25.271		59.306	69.697	26.093	29.613	4.448	21.139		60.575	0.003	14.643	0.003		2.00	0.03333	68.6	14.4	44.5	3.065	0.000	0.000	0.000	0.009	0.01	
17	9/2/2004	8:44:25 AM		28.315	25.452	29.486	26.22	25.266		46.006	69.349	26.093	16.525	17.719	21.081		60.548	0.003	14.643	0.003		3.00	0.05	68.2	14.4	31.3	2.156	0.000	0.000	0.000	0.013	0.01	
18	9/2/2004	8:45:25 AM		26.468	25.449	29.632	26.247	25.314		11.141	67.254	18.525	-6.845	51.313	58.466		64.192	0.003	14.643	0.028		4.00	0.06667	66.1	15.3	2.1	0.148	0.000	0.000	0.000	0.192	0.16	
19	9/2/2004	8:46:25 AM		28.656	25.459	29.791	26.262	25.334		59.919	67.245	24.366	36.11	1.295	0.394		63.237	0.178	14.643	0.004		5.00	0.08333	66.1	15.1	48.0	3.310	0.025	0.023	0.000	0.479	0.41	
20	9/2/2004	8:47:25 AM		28.496	25.468	29.939	26.276	25.348		61.195	68.329	26.093	35.812	0.887	0.426		67.037	0.114	14.643	0.003		6.00	0.1	67.2	16.0	48.5	3.344	0.016	0.015	0.000	0.305	0.26	
21	9/2/2004	8:48:25 AM		28.471	25.478	30.118	26.266	25.358		61.572	68.669	26.093	34.782	0.794	0.464		63.089	0.101	14.643	0.003		7.00	0.11667	67.5	15.0	48.2	3.322	0.014	0.013	0.000	0.273	0.23	
22	9/2/2004	8:49:25 AM		28.513	25.521	30.315	26.299	25.316		62.163	69.045	26.093	35.211	0.812	0.498		65.813	0.096	14.643	0.004		8.00	0.13333	67.9	15.7	48.7	3.357	0.014	0.012	0.000	0.256	0.22	
23	9/2/2004	8:50:25 AM		28.515	25.463	30.421	26.236	25.217		61.975	69.167	26.093	34.85	0.826	0.539		65.836	0.094	14.643	0.003		9.00	0.15	68.0	15.7	48.4	3.338	0.013	0.012	0.000	0.252	0.21	
24	9/2/2004	8:51:25 AM		28.567	25.45	30.542	26.188	25.19		61.549	68.576	26.093	34.526	0.881	0.582		66.985	0.093	14.643	0.004		10.00	0.16667	67.5	16.0	48.0	3.312	0.013	0.012	0.000	0.251	0.21	
25	9/2/2004	8:52:25 AM		28.463	25.45	30.677	26.173	25.12		64.847	68.943	26.093	37.737	-1.209	-5.168		60.072	0.088	14.643	0.003		11.00	0.18333	67.8	14.3	51.3	3.536	0.013	0.011	0.000	0.210	0.18	
26	9/2/2004	8:53:25 AM		28.939	25.479	30.789	26.096	25.088		64.057	67.956	26.093	36.884	-1.218	-6.099		69.822	0.094	14.643	0.003		12.00	0.2	66.8	16.6	50.5	3.480	0.013	0.011	0.000	0.227	0.19	
27	9/2/2004	8:54:25 AM		29.24	25.506	30.916	26.069	25.026		63.968	67.37	26.093	37.368	-1.212	-6.136		67.752	0.091	14.643	0.003		13.00	0.21667	66.2	16.1	50.7	3.493	0.013	0.011	0.000	0.218	0.19	
28	9/2/2004	8:55:25 AM		29.368	25.5	30.994	25.978	24.96		64.011	67.927	26.093	36.832	-1.209	-6.119		70.349	0.092	14.643	0.003		14.00	0.23333	66.8	16.8	50.4	3.476	0.013	0.011	0.000	0.221	0.19	
29	9/2/2004	8:56:25 AM		29.482	25.469	31.078	25.947	25.029		64.024	68.019	26.093	37.093	-1.215	-6.136		65.848	0.091	14.643	0.003		15.00	0.25	66.9	15.7	50.6	3.486	0.013	0.011	0.000	0.218	0.19	
30	9/2/2004	8:57:25 AM		29.584	25.458	31.155	25.976	25.098		63.808	67.697	26.093	36.824	-1.212	-6.188		64.701	0.092	14.643	0.003		16.00	0.26667	66.6	15.4	50.3	3.469	0.013	0.011	0.000	0.221	0.19	
31	9/2/2004	8:58:25 AM		29.71	25.484	31.261	26.032	25.129		63.551	67.165	26.093	36.918	-1.212	-6.185		71.021	0.092	14.643	0.003		17.00	0.28333	66.0	16.9	50.2	3.463	0.013	0.011	0.000	0.221	0.19	
32	9/2/2004	8:59:25 AM		29.809	25.504	31.35	26.057	25.144		63.105	66.837	26.093	36.724	-1.215	-6.203		60.944	0.09	14.643	0.003		18.00	0.3	65.7	14.5	49.9	3.441	0.013	0.011	0.000	0.217	0.18	
33	9/2/2004	9:00:25 AM		29.904	25.525	31.44	26.108	25.155		63.337	67.094	26.093	36.873	-1.212	-6.145		71.593	0.091	14.643	0.004		19.00	0.31667	66.0	17.1	50.1	3.455	0.013	0.011	0.000	0.218	0.19	
34	9/2/2004	9:01:25 AM		29.939	25.515	31.475	26.068	25.2		62.877	66.425	26.093	36.551	-1.215	-6.191		67.953	0.09	14.643	0.003		20.00	0.33333	65.3	16.2	49.7	3.428	0.013	0.011	0.000	0.217	0.18	
35	9/2/2004	9:02:25 AM		29.994	25.53	31.569	26.108	25.225		62.939	66.848	26.093	36.672	-1.212	-6.188		63.975	0.09	14.643	0.004		21.00	0.35	65.7	15.2	49.8	3.434	0.013	0.011	0.000	0.216	0.18	
36	9/2/2004	9:03:25 AM		30.031	25.503	31.577	26.066	25.208		62.802	66.578	26.093	36.471	-1.215	-6.194		70.074	0.09	14.643	0.003		22.00	0.36667	65.5	16.7	49.6	3.422	0.013	0.011	0.000	0.217	0.18	
37	9/2/2004	9:04:25 AM		30.136	25.543	31.681	26.131	25.193		63.279	67.109	26.093	36.879	-1.209	-6.194		68.806	0.089	14.643	0.003		23.00	0.38333	66.0	16.4	50.1	3.453	0.013	0.011	0.000	0.212	0.18	
38	9/2/2004	9:05:25 AM		30.196	25.534	31.707	26.156	25.198		62.676	66.584	26.093	36.621	-1.212	-6.194		66.664	0.089	14.643	0.003		24.00	0.4	65.5	15.9	49.6	3.423	0.013	0.011	0.000	0.213	0.18	
39	9/2/2004	9:06:25 AM		30.239	25.538	31.76	26.165	25.232		62.924	66.777	26.093	36.59	-1.212	-6.2		68.291	0.089	14.643	0.003		25.00	0.41667	65.7	16.3	49.8	3.431	0.013	0.011	0.000	0.213	0.18	
40	9/2/2004	9:07:25 AM		30.304	25.553	31.82	26.176	25.238		62.85	66.667	26.093	36.656	-1.212	-6.194		62.907	0.089	14.643	0.003		26.00	0.43333	65.5	15.0	49.8	3.430	0.013	0.011	0.000	0.212	0.18	
41	9/2/2004	9:08:25 AM		30.374	25.553	31.87	26.211	25.253		63.231	67.104	26.093	37.216	-1.212	-6.197		67.717	0.089	14.643	0.003		27.00	0.45	66.0	16.1	50.2	3.463	0.013	0.011	0.000	0.210	0.18	
42	9/2/2004	9:09:25 AM		30.416	25.535	31.897	26.238	25.29		63.032	66.725	26.093	37.097	-1.212	-6.194		57.371	0.09	14.643	0.003		28.00	0.46667	65.6	13.7	50.1	3.452	0.013	0.011	0.000	0.213	0.18	
43	9/2/2004	9:10:25 AM		30.483	25.538	31.944	26.266	25.343		62.978	67.121	26.093	36.687	-1.218	-6.2		57.569	0.09	14.643	0.003		29.00	0.48333	66.0	13.7	49.8	3.436	0.013	0.011	0.000	0.214	0.18	
44	9/2/2004	9:11:25 AM		30.568	25.564	32.024	26.327	25.323		62.922	66.644	26.093	36.955	-1.209	-6.197		64.036	0.088	14.643	0.003		30.00	0.5	65.5	15.3	49.9	3.443	0.013	0.010	0.000	0.208	0.18	
45	9/2/2004	9:12:25 AM		30.634	25.58	32.065	26.378	25.365		63.3	67.351	26.093	36.957	-1.212	-6.197		64.096	0.09	14.643	0.003		31.00	0.51667	66.2	15.3	50.1	3.456	0.013	0.011	0.000	0.212	0.18	
46	9/2/2004	9:13:25 AM		30.69	25.591	32.106	26.454	25.381		63.346	67.069	26.093	37.524	-1.212	-6.188		68.772	0.09	14.643	0.003		32.00	0.53333	65.9	16.4	50.4	3.477	0.013	0.011	0.000	0.210	0.18	
47	9/2/2004	9:14:25 AM		30.741	25.598	32.132	26.486	25.383		63.561	67.558	26.093	37.475	-1.218	-6.203		59.182	0.089	14.643	0.003		33.00	0.55	66.4	14.1	50.5	3.483	0.013	0.010	0.000	0.207	0.18	
48	9/2/2004	9:15:25 AM		30.798	25.626	32.184	26.514	25.416		63.124	67.069	26.093	36.9	-1.212	-6.197		61.211	0.089	14.643	0.004		34.00	0.56667	65.9	14.6	50.0	3.448	0.013	0.010	0.000	0.209	0.18	
49	9/2/2004	9:16:25 AM		30.845	25.628	32.221	26.501	25.363		63.246	67.239	26.093	37.161	-1.212	-6.168		66.927	0.089	14.643	0.003		35.00	0.58333	66.1	15.9	50.2	3.461	0.013	0.010	0.000	0.208	0.18	
50	9/2/2004	9:17:25 AM		30.876	25.644	32.262	26.392	25.389		63.383	67.378	26.093	37.116	-1.209	-6.203		63.428	0.089	14.643	0.004		36.00	0.6	66.3	15.1	50.2	3.465	0.013	0.010	0.000	0.208	0.18	
51	9/2/2004	9:18:25 AM		30.895	25.669	32.311	26.362	25.368		62.98	67.061	26.093	36.972	-1.212	-6.211		63.769	0.089	14.643	0.003		37.00	0.61667	65.9	15.2	50.0	3.446	0.013	0.010	0.000	0.209	0.18	
52	9/2/2004	9:19:25 AM		30.897	25.67	32.337	26.328	25.315		63.289	67.241	26.093	37.005	-1.212	-6.209		55.162	0.089	14.643	0.003		38.00	0.63333	66.1	13.1	50.1	3.457	0.013	0.010	0.000	0.208	0.18	
53	9/2/2004	9:20:25 AM		30.912	25.671	32.362	26.289	25.23		63.304	67.216	26.093	37.438	-1.209	-6.206		65.642	0.089	14.643	0.003		39.00	0.65	66.1	15.6	50.4	3.473	0.013	0.010	0.000	0.207	0.18	
54	9/2/2004	9:21:25 AM		30.926	25.66	32.381	26.213	25.224		63.057	67.096	26.093	36.994	-1.212	-6.209		64.809	0.089	14.643	0.004		40.00	0.66667	66.0	15.4	50.0	3.449	0.013	0.010	0.000	0.208	0.18	
55	9/2/2004	9:22:25 AM		30.939	25.628	32.374	26.176	25.192		63.184	67.044	26.093	37.442	-1.215	-6.209		61.178	0.09	14.643	0.003		41.00	0.68333	65.9	14.6	50.3	3.469	0.013	0.011	0.000	0.209	0.18	
56	9/2/2004	9:23:25 AM		30.971	25.645	32.406	26.158	25.154		63.217	67.351	26.093	37.007	-1.212	-6.214		60.64	0.088	14.643	0.003		42.00	0.7	66.2	14.4	50.1	3.455	0.013	0.010	0.000	0.205	0.17	
57	9/2/2004	9:24:25 AM		30.992	25.642	32.423	26.094	25.102		63.072	67.117	26.093	37.031	-1.215	-6.211		65.523	0.089	14.643	0.003		43.00	0.71667	66.0	15.6	50.1	3.451	0.013	0.010	0.000	0.208	0.18	
58	9/2/2004	9:25:25 AM		31.019	25.639	32.44	26.056	25.109		63.041	67.086	26.093	37.171	-1.215	-6.206		62.484	0.089	14.643	0.003		44.00	0.73333	66.0	14.9	50.1	3.455	0.013	0.010	0.000	0.207	0.18	
59	9/2/2004	9:26:25 AM		31.022	25.622	32.458	26.039	25.136		63.271	67.165	26.093	37.579	-1.212	-6.211		65.688	0.089	14.643	0.003		45.00	0.75	66.0	15.6	50.4	3.477	0.013	0.010	0.000	0.206	0.18	
60	9/2/2004	9:27:25 AM		31.041	25.64	32.496	26.073	25.15		63.327	67.39	26.093	37.395	-1.212	-6.209		66.121	0.089	14.643	0.004		46.00	0.76667	66.3	15.7	50.4	3.472	0.013	0.010	0.000	0.206	0.18	
61																																	
62		Averages		30.1	25.6	31.7	26.2	25.2	#	63.2	67.4	26.1	36.8	-1.0	-5.5	#	64.8	0.1	14.6	0.0	#			66.2	15.4	50.0	3.4	0.0	0.0	0.0	0.2	0.2	
63		Maximum		31.0	25.7	32.5	26.5	25.4	#	64.8	69.2	26.1	37.7	0.9	0.6	#	71.6	0.1	14.6	0.0	#			68.0	17.1	51.3	3.5	0.0	0.0	0.0	0.3	0.2	
64		Median		30.3	25.5	31.8	26.2	25.2	#	63.2	67.1	26.1	37.0	-1.2	-6.2	#	65.6	0.1	14.6	0.0	#			66.0	15.6	50.1	3.5	0.0	0.0	0.0	0.2	0.2	
65		Minimum		28.5	25.5	30.1	25.9	25.0	#	61.5	66.4	26.1	34.5	-1.2	-6.2	#	55.2	0.1	14.6	0.0	#			65.3	13.1	48.0	3.3	0.0	0.0	0.0	0.2	0.2	
66		2 x Std Dev		1.643	0.139	1.341	0.295	0.224	#	1.228	1.355	0.000	1.444	1.225	4.022	#	7.672	0.005	0.000	0.001	#			1.355	1.827	1.271	0.088	0.001	0.001	0.000	0.030	0.025	
67		Number of Points Used*		40	40	40	40	40	0	40	40	40	40	40	40	0	40	40	40	40	0			40	40	40	40	40	40	40	40	40	
68		* Backpulse points in box are not included																															
69																							Average for the last 10 minutes =					0.0128	0.0105	gpm/ft2			
70																								2xStandard Deviation =					0.0002	0.0002	gpm/ft2		

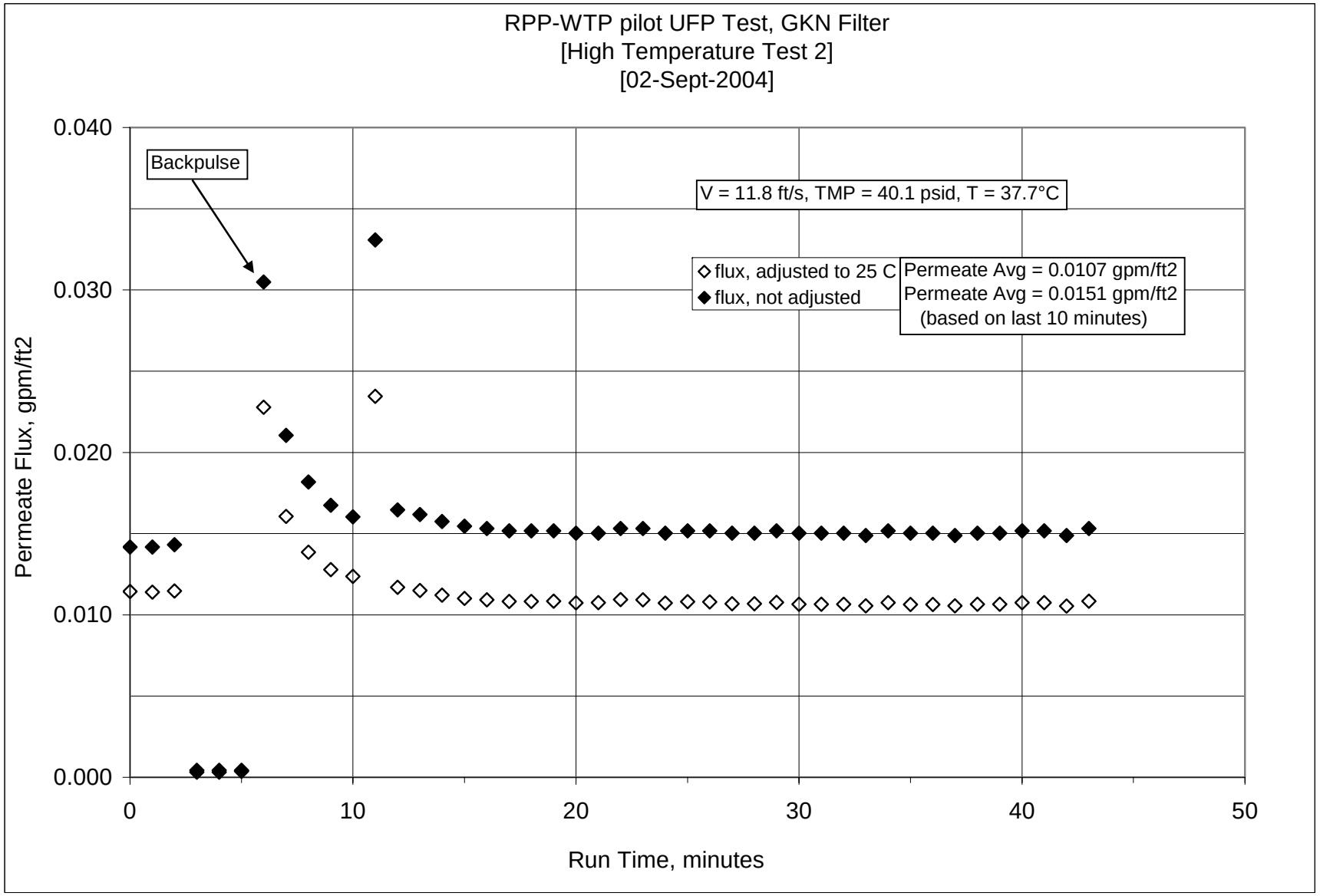
RUN # TEMP1; CAMPAIGN IV HIGH TEMPERATURE TEST



RUN # TEMP1; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm				Filter Surface A		6.985	FT2						
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
5																																	
6	Zeros- 04/19/2004																							Note: Gauge Pressure P1 is approximately 1.1 psig									
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004													
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	11:34:18 AM		29.397	25.599	30.309	25.707	25.319		49.21	53.638	18	32.104	-1.215	-6.313		49.831	0.063	14.643	0.003		0	0	52.5	11.9	40.7	2.803	0.009	0.008	0.000	0.196	0.17	
15	9/2/2004	11:35:18 AM		29.417	25.605	30.046	25.727	25.345		49.351	53.877	18.072	32.114	-1.212	-6.318		46.452	0.062	14.643	0.003		1.00	0.01667	52.8	11.1	40.7	2.808	0.009	0.008	0.000	0.193	0.16	
16	9/2/2004	11:36:18 AM		29.414	25.611	29.794	25.724	25.336		47.889	53.323	18.885	29.82	-0.703	20.503		49.478	0.003	14.643	0.003		2.00	0.03333	52.2	11.8	38.9	2.679	0.000	0.000	0.000	0.010	0.01	
17	9/2/2004	11:37:18 AM		30.428	25.618	29.582	25.74	25.368		41.387	53.124	18.546	23.515	5.724	20.318		51.606	0.003	14.643	0.003		3.00	0.05	52.0	12.3	32.5	2.237	0.000	0.000	0.000	0.011	0.01	
18	9/2/2004	11:38:18 AM		30.206	25.619	29.454	25.692	25.469		30.899	53.095	18.588	12.833	16.627	20.234		48.615	0.003	14.643	0.004		4.00	0.06667	52.0	11.6	21.9	1.508	0.000	0.000	0.000	0.017	0.01	
19	9/2/2004	11:39:18 AM		28.438	25.611	29.346	25.638	25.56		8.843	51.267	12.494	-2.969	36.919	0.278		53.297	0.003	14.643	0.004		5.00	0.08333	50.1	12.7	2.9	0.202	0.000	0.000	0.000	0.133	0.11	
20	9/2/2004	11:40:18 AM		29.464	25.622	29.268	25.624	25.512		44.595	51.928	14.599	30.78	1.405	0.383		50.759	0.181	14.643	0.003		6.00	0.1	50.8	12.1	37.7	2.598	0.026	0.023	0.001	0.608	0.52	
21	9/2/2004	11:41:18 AM		29.077	25.607	29.193	25.594	25.332		45.135	52.757	15.586	30.253	1.405	0.42		53.264	0.119	14.643	0.003		7.00	0.11667	51.6	12.7	37.7	2.599	0.017	0.015	0.000	0.404	0.34	
22	9/2/2004	11:42:18 AM		29.003	25.614	29.21	25.581	25.294		45.437	52.826	16.169	30.052	1.367	0.472		50.008	0.105	14.643	0.003		8.00	0.13333	51.7	11.9	37.7	2.602	0.015	0.013	0.000	0.356	0.30	
23	9/2/2004	11:43:18 AM		29.148	25.608	29.234	25.521	25.294		45.723	53.508	16.346	30.068	1.405	0.518		50	0.1	14.643	0.003		9.00	0.15	52.4	11.9	37.9	2.613	0.014	0.013	0.000	0.337	0.29	
24	9/2/2004	11:44:18 AM		30.009	25.625	29.286	25.557	25.365		45.379	52.726	16.375	29.769	1.402	0.556		50.413	0.095	14.643	0.003		10.00	0.16667	51.6	12.0	37.6	2.591	0.014	0.012	0.000	0.315	0.27	
25	9/2/2004	11:45:18 AM		29.955	25.621	29.326	25.563	25.411		45.726	53.108	16.54	29.931	1.411	0.588		50.657	0.093	14.643	0.003		11.00	0.18333	52.0	12.1	37.8	2.608	0.013	0.012	0.000	0.312	0.27	
26	9/2/2004	11:46:18 AM		28.896	25.606	29.341	25.568	25.401		48.712	53.35	16.667	32.826	-1.218	-5.208		48.681	0.101	14.643	0.003		12.00	0.2	52.2	11.6	40.8	2.811	0.014	0.013	0.000	0.314	0.27	
27	9/2/2004	11:47:18 AM		28.852	25.616	29.421	25.634	25.426		48.196	52.212	17.389	31.765	-1.209	-6.09		49.042	0.092	14.643	0.003		13.00	0.21667	51.1	11.7	40.0	2.757	0.013	0.012	0.000	0.291	0.25	
28	9/2/2004	11:48:18 AM		28.818	25.612	29.457	25.64	25.452		47.758	51.881	16.83	31.714	-1.212	-6.194		51.183	0.089	14.643	0.003		14.00	0.23333	50.8	12.2	39.7	2.740	0.013	0.011	0.000	0.283	0.24	
29	9/2/2004	11:49:18 AM		28.774	25.613	29.453	25.625	25.508		48.121	52.237	16.516	32.477	-1.218	-6.148		50.676	0.093	14.643	0.003		15.00	0.25	51.1	12.1	40.3	2.778	0.013	0.012	0.000	0.292	0.25	
30	9/2/2004	11:50:18 AM		28.739	25.613	29.488	25.64	25.408		48.156	52.146	16.744	32.246	-1.212	-6.194		51.055	0.09	14.643	0.003		16.00	0.26667	51.0	12.2	40.2	2.772	0.013	0.011	0.000	0.283	0.24	
31	9/2/2004	11:51:18 AM		28.705	25.609	29.508	25.651	25.384		48.034	52.179	16.771	32.108	-1.212	-6.197		51.927	0.09	14.643	0.003		17.00	0.28333	51.1	12.4	40.1	2.763	0.013	0.011	0.000	0.284	0.24	
32	9/2/2004	11:52:18 AM		28.675	25.609	29.538	25.651	25.374		48.017	51.939	16.784	32.182	-1.212	-6.2		52.951	0.089	14.643	0.003		18.00	0.3	50.8	12.6	40.1	2.765	0.013	0.011	0.000	0.280	0.24	
33	9/2/2004	11:53:18 AM		28.651	25.604	29.544	25.622	25.429		48.098	52.088	16.694	32.297	-1.212	-6.2		50.348	0.089	14.643	0.003		19.00	0.31667	51.0	12.0	40.2	2.771	0.013	0.011	0.000	0.279	0.24	
34	9/2/2004	11:54:18 AM		28.636	25.614	29.574	25.652	25.379		48.272	52.548	16.724	32.268	-1.212	-6.2		52.038	0.088	14.643	0.003		20.00	0.33333	51.4	12.4	40.3	2.776	0.013	0.011	0.000	0.276	0.23	
35	9/2/2004	11:55:18 AM		28.611	25.609	29.564	25.592	25.33		47.934	52.167	16.567	32.229	-1.212	-6.2		51.985	0.088	14.643	0.003		21.00	0.35	51.0	12.4	40.1	2.763	0.013	0.011	0.000	0.277	0.24	
36	9/2/2004	11:56:18 AM		28.602	25.595	29.569	25.542	25.27		48.125	52.347	16.452	32.523	-1.215	-6.211		50.959	0.088	14.643	0.003		22.00	0.36667	51.2	12.1	40.3	2.780	0.013	0.011	0.000	0.275	0.23	
37	9/2/2004	11:57:18 AM		28.599	25.602	29.586	25.599	25.347		47.93	51.881	16.392	32.473	-1.212	-6.209		56.103	0.088	14.643	0.003		23.00	0.38333	50.8	13.4	40.2	2.772	0.013	0.011	0.000	0.276	0.23	
38	9/2/2004	11:58:18 AM		28.599	25.597	29.601	25.625	25.392		47.872	51.93	16.452	32.313	-1.212	-6.203		51.981	0.089	14.643	0.003		24.00	0.4	50.8	12.4	40.1	2.764	0.013	0.011	0.000	0.280	0.24	
39	9/2/2004	11:59:18 AM		28.589	25.587	29.591	25.645	25.427		48.399	52.712	16.527	32.541	-1.212	-6.209		49.883	0.088	14.643	0.003		25.00	0.41667	51.6	11.9	40.5	2.790	0.013	0.011	0.000	0.274	0.23	
40	9/2/2004	12:00:18 PM		28.585	25.598	29.597	25.651	25.358		48.225	52.403	16.497	32.551	-1.212	-6.209		48.759	0.087	14.643	0.003		26.00	0.43333	51.3	11.6	40.4	2.785	0.012	0.011	0.000	0.271	0.23	
41	9/2/2004	12:01:18 PM		28.58	25.588	29.592	25.636	25.368		48.212	52.467	16.42	32.66	-1.212	-6.209		46.287	0.087	14.643	0.003		27.00	0.45	51.3	11.0	40.4	2.788	0.012	0.011	0.000	0.271	0.23	
42	9/2/2004	12:02:18 PM		28.59	25.588	29.612	25.621	25.348		48.034	52.15	16.461	32.535	-1.209	-6.206		51.65	0.087	14.643	0.004		28.00	0.46667	51.0	12.3	40.3	2.777	0.012	0.011	0.000	0.272	0.23	
43	9/2/2004	12:03:18 PM		28.585	25.583	29.612	25.621	25.398		47.758	51.69	16.204	32.512	-1.215	-6.214		50.749	0.087	14.643	0.003		29.00	0.48333	50.6	12.1	40.1	2.767	0.012	0.011	0.000	0.273	0.23	
44	9/2/2004	12:04:18 PM		28.596	25.589	29.623	25.641	25.409		48.121	52.287	16.498	32.369	-1.212	-6.209		53.273	0.087	14.643	0.003		30.00	0.5	51.2	12.7	40.2	2.775	0.012	0.011	0.000	0.272	0.23	
45	9/2/2004	12:05:18 PM		28.602	25.584	29.613	25.647	25.5		47.965	52.133	16.378	32.461	-1.209	-6.211		49.595	0.087	14.643	0.003		31.00	0.51667	51.0	11.8	40.2	2.773	0.012	0.011	0.000	0.273	0.23	
46	9/2/2004	12:06:18 PM		28.607	25.59	29.623	25.657	25.41		47.916	52.175	16.351	32.527	-1.212	-6.145		50.115	0.088	14.643	0.003		32.00	0.53333	51.1	11.9	40.2	2.773	0.013	0.011	0.000	0.276	0.23	
47	9/2/2004	12:07:18 PM		28.596	25.579	29.618	25.601	25.284		48.177	52.189	16.265	32.896	-1.212	-6.209		48.928	0.087	14.643	0.003		33.00	0.55	51.1	11.7	40.5	2.795	0.012	0.011	0.000	0.270	0.23	
48	9/2/2004	12:08:18 PM		28.597	25.584	29.628	25.597	25.33		48.015	52.138	16.475	32.346	-1.215	-6.206		50.398	0.087	14.643	0.003		34.00	0.56667	51.0	12.0	40.2	2.770	0.012	0.011	0.000	0.273	0.23	
49	9/2/2004	12:09:18 PM		28.617	25.605	29.659	25.653	25.335		48.303	52.643	16.301	32.738	-1.212	-6.209		47.578	0.086	14.643	0.003		35.00	0.58333	51.5	11.3	40.5	2.794	0.012	0.011	0.000	0.267	0.23	
50	9/2/2004	12:10:18 PM		28.608	25.596	29.635	25.654	25.391		47.913	52.059	16.285	32.555	-1.215	-6.211		50.179	0.087	14.643	0.003		36.00	0.6	50.9	12.0	40.2	2.774	0.012	0.011	0.000	0.272	0.23	
51	9/2/2004	12:11:18 PM		28.742	25.59	29.624	25.658	25.375		48.276	52.31	16.198	32.956	-1.212	-5.977		49.541	0.069	14.643	0.003		37.00	0.61667	51.2	11.8	40.6	2.800	0.010	0.009	0.000	0.214	0.18	
52	9/2/2004	12:12:18 PM		28.518	25.575	29.619	25.668	25.42		48.1	52.231	16.23	32.781	-1.212	-6.217		48.698	0.087	14.643	0.003		38.00	0.63333	51.1	11.6	40.4	2.788	0.012	0.011	0.000	0.271	0.23	
53	9/2/2004	12:13:18 PM		28.548	25.581	29.615	25.664	25.386		48.473	52.54	16.347	32.917	-1.215	-6.22		47.762	0.088	14.643	0.003		39.00	0.65	51.4	11.4	40.7	2.806	0.013	0.011	0.000	0.272	0.23	
54	9/2/2004	12:14:18 PM		28.572	25.585	29.639	25.678	25.345		48.411	52.677	16.103	33.163	-1.212	-6.211		48.246	0.088	14.643	0.003		40.00	0.66667	51.6	11.5	40.8	2.812	0.013	0.011	0.000	0.272	0.23	
55	9/2/2004	12:15:18 PM		28.573	25.591	29.635	25.674	25.391		48.191	52.447	16.212	32.748	-1.215	-6.22		46.37	0.087	14.643	0.003		41.00	0.68333	51.3	11.0	40.5	2.790	0.012	0.011	0.000	0.271	0.23	
56	9/2/2004	12:16:18 PM		28.559	25.592	29.631	25.664	25.467		48.21	52.527	16.271	32.787	-1.215	-6.22		47.28	0.087	14.643	0.003		42.00	0.7	51.4	11.3	40.5	2.792	0.012	0.011	0.000	0.270	0.23	
57	9/2/2004	12:17:18 PM		28.56	25.597	29.636	25.69	25.273		48.162	52.49	16.319	32.648	-1.215	-6.217		51.616	0.087	14.643	0.003		43.00	0.71667	51.4	12.3	40.4	2.786	0.012	0.011	0.000	0.271	0.23	
58	9/2/2004	12:18:18 PM		28.56	25.597	29.646	25.685	25.163		48.494	52.579	16.298	33.146	-1.212	-6.226		48.809	0.086	14.643	0.003		44.00	0.73333	51.5	11.6	40.8	2.814	0.012	0.011	0.000	0.265	0.23	
59	9/2/2004	12:19:18 PM		28.556	25.593	29.652	25.666	25.218		48.156	52.216	16.141	32.908	-1.212	-6.226		54.086	0.086	14.643	0.004		45.00	0.75	51.1	12.9	40.5	2.795	0.012	0.011	0.000	0.267	0.23	
60	9/2/2004	12:20:18 PM		28.576	25.599	29.822	25.531	25.434		48.351	52.536	16.136	32.949	-1.212	-6.223		47.995	0.086	14.643	0.003		46.00	0.76667	51.4	11.4	40.7	2.803	0.012	0.011	0.000	0.265	0.23	
61																																	
62		Averages		28.7	25.6	29.6	25.6	25.4	#	47.9	52.4	16.4	32.3	-0.9	-5.5	#	50.2	0.1	14.6	0.0	#			51.3	12.0	40.1	2.763	0.013	0.011	0.000	0.3	0.2	
63		Maximum		30.0	25.6	29.8	25.7	25.5	#	48.7	53.5	17.4	33.2	1.4	0.6	#	56.1	0.1	14.6	0.0	#			52.4	13.4	40.8	2.814	0.015	0.013	0.000	0.4	0.3	
64		Median		28.6	25.6	29.6	25.6	25.4	#	48.1	52.3	16.4	32.5	-1.2	-6.2	#	50.2	0.1	14.6	0.0	#			51.2	12.0	40.3	2.776	0.013	0.011	0.000	0.3	0.2	
65		Minimum		28.5	25.6	29.2	25.5	25.2	#	45.4	51.7	16.1	29.8	-1.2	-6.2	#	46.3	0.1	14.6	0.0	#			50.6	11.0	37.6	2.591	0.010	0.009	0.000	0.2	0.2	
66		2 x Std Dev		0.641	0.025	0.252	0.085	0.139	#	1.616	0.755	0.493	1.695	1.583	4.079	#	4.044	0.011	0.000	0.000	#			0.755	0.963	1.636	0.113	0.002	0.001	0.000	0.044	0.038	
67		Number of Points Used*		39	39	39	39	39	0	39	39	39	39	39	39	0	39	39	39	39	0			39	39	39	39	39	39	39	39	39	
68		* Backpulse points in box are not included																															
69																								Average for the last 10 minutes =				0.0123	0.0108	gpm/ft2			
70																								2xStandard Deviation =				0.0012	0.0010	gpm/ft2			

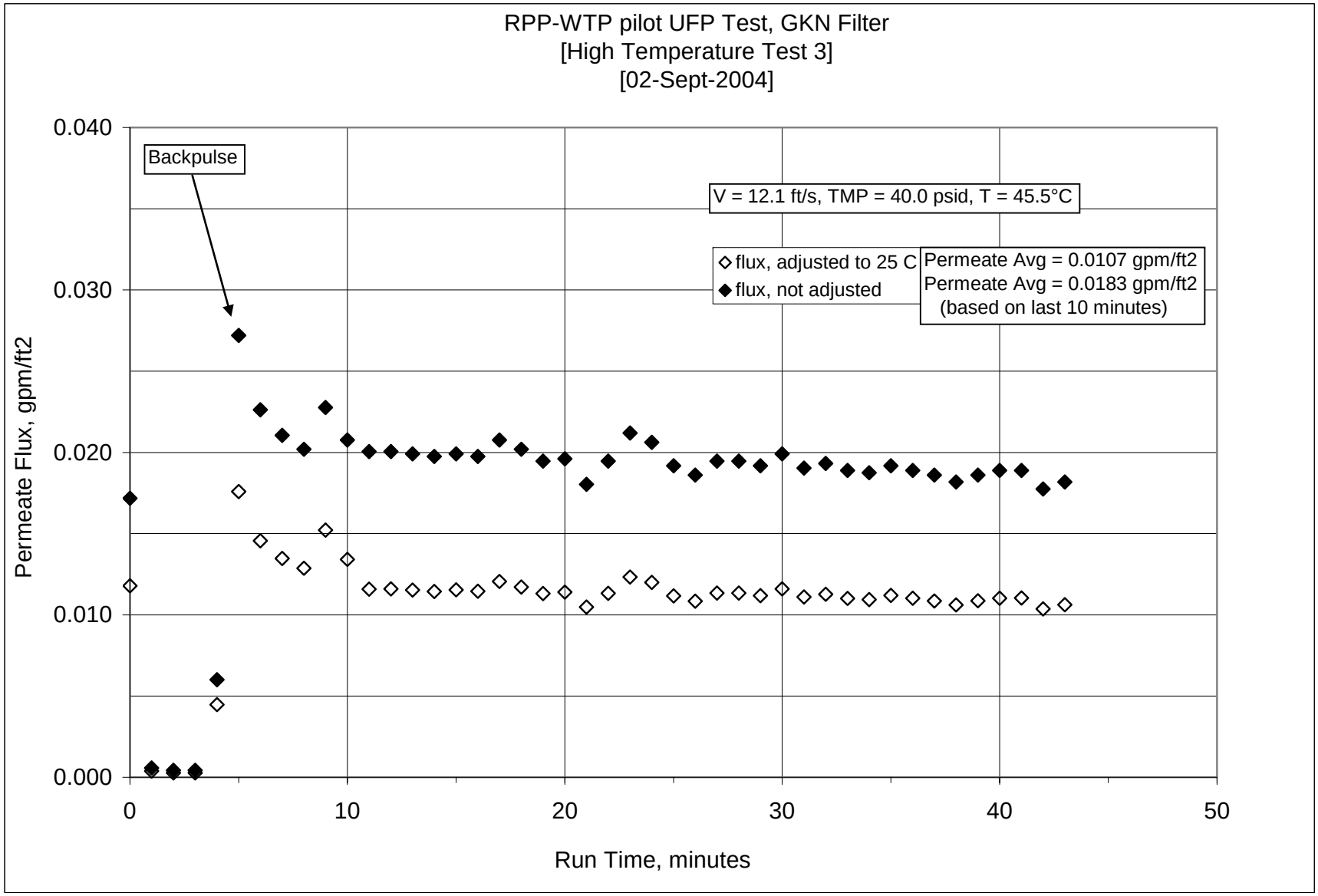
RUN # TEMP2; CAMPAIGN IV HIGH TEMPERATURE TEST



RUN # TEMP2; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface A		6.985	FT2						
5																								Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	12:35:53 PM		32.815	25.497	37.641	24.281	25.592		47.306	51.972	15.969	32.086	-1.215	-6.162		53.179	0.099	14.643	0.003		0	0	50.9	12.7	39.7	2.737	0.014	0.011	0.000	0.288	0.25	
15	9/2/2004	12:36:53 PM		32.952	25.495	37.708	24.4	25.351		47.331	52.051	15.814	32.358	-1.218	-6.162		54.91	0.099	14.643	0.003		1.00	0.01667	50.9	13.1	39.8	2.747	0.014	0.011	0.000	0.286	0.24	
16	9/2/2004	12:37:53 PM		33.079	25.504	37.781	24.534	25.404		47.2	52.113	15.27	32.553	-1.209	-6.151		51.016	0.1	14.643	0.004		2.00	0.03333	51.0	12.2	39.9	2.749	0.014	0.011	0.000	0.288	0.24	
17	9/2/2004	12:38:53 PM		36.636	25.482	37.769	24.633	25.398		39.014	52.163	15.071	24.496	7.184	19.919		47.422	0.003	14.643	0.003		3.00	0.05	51.0	11.3	31.8	2.189	0.000	0.000	0.000	0.010	0.01	
18	9/2/2004	12:39:53 PM		35.907	25.487	37.793	24.732	25.112		17.323	52.084	15.026	2.853	29.085	21.07		47.515	0.003	14.643	0.003		4.00	0.06667	51.0	11.3	10.1	0.696	0.000	0.000	0.000	0.032	0.03	
19	9/2/2004	12:40:53 PM		30.592	25.507	37.828	24.858	25.218		-7.277	52.104	10.213	-18.557	66.13	70.231		47.538	0.003	14.643	1.807		5.00	0.08333	51.0	11.3	-12.9	-0.891	0.000	0.000	0.000	-0.028	-0.02	
20	9/2/2004	12:41:53 PM		35.736	25.497	37.794	24.979	25.258		43.137	51.213	12.541	31.406	2.138	0.377		51.558	0.213	14.643	0.003		6.00	0.1	50.1	12.3	37.3	2.570	0.030	0.023	0.001	0.611	0.52	
21	9/2/2004	12:42:53 PM		34.919	25.508	37.795	25.05	25.448		44.328	51.893	14.005	31.088	1.466	0.423		48.79	0.147	14.643	0.004		7.00	0.11667	50.8	11.6	37.7	2.600	0.021	0.016	0.000	0.426	0.36	
22	9/2/2004	12:43:53 PM		34.955	25.51	37.791	25.111	25.33		44.846	52.247	14.784	30.727	1.347	0.495		50.849	0.127	14.643	0.003		8.00	0.13333	51.1	12.1	37.8	2.605	0.018	0.014	0.000	0.367	0.31	
23	9/2/2004	12:44:53 PM		34.91	25.52	37.801	25.151	25.115		44.836	52.123	15.01	30.645	1.35	0.544		49.507	0.117	14.643	0.004		9.00	0.15	51.0	11.8	37.7	2.602	0.017	0.013	0.000	0.339	0.29	
24	9/2/2004	12:45:53 PM		34.493	25.526	37.763	25.213	25.256		45.018	52.424	15.389	30.253	1.286	0.585		48.221	0.112	14.643	0.003		10.00	0.16667	51.3	11.5	37.6	2.595	0.016	0.012	0.000	0.329	0.28	
25	9/2/2004	12:46:53 PM		34.073	25.515	37.718	25.232	25.221		47.441	52.196	15.327	32.921	-1.215	-4.734		47.43	0.231	14.643	0.003		11.00	0.18333	51.1	11.3	40.2	2.770	0.033	0.023	0.001	0.584	0.50	
26	9/2/2004	12:47:53 PM		34.309	25.51	37.664	25.272	25.295		48.146	51.891	15.458	33.861	-1.215	-6.07		48.458	0.115	14.643	0.003		12.00	0.2	50.8	11.5	41.0	2.827	0.016	0.012	0.000	0.285	0.24	
27	9/2/2004	12:48:53 PM		34.364	25.535	37.65	25.332	25.361		48.278	52.536	15.692	33.276	-1.209	-6.151		47.05	0.113	14.643	0.004		13.00	0.21667	51.4	11.2	40.8	2.811	0.016	0.011	0.000	0.282	0.24	
28	9/2/2004	12:49:53 PM		34.289	25.53	37.585	25.327	25.215		48.345	52.453	15.75	33.467	-1.212	-6.168		47.228	0.11	14.643	0.003		14.00	0.23333	51.3	11.2	40.9	2.820	0.016	0.011	0.000	0.274	0.23	
29	9/2/2004	12:50:53 PM		34.191	25.54	37.541	25.347	25.311		47.872	51.876	16.075	32.668	-1.215	-6.136		52.265	0.108	14.643	0.003		15.00	0.25	50.8	12.4	40.3	2.776	0.015	0.011	0.000	0.274	0.23	
30	9/2/2004	12:51:53 PM		34.118	25.551	37.513	25.348	25.416		47.951	51.769	16.139	32.785	-1.215	-6.139		49.32	0.107	14.643	0.003		16.00	0.26667	50.6	11.7	40.4	2.783	0.015	0.011	0.000	0.271	0.23	
31	9/2/2004	12:52:53 PM		34.029	25.551	37.498	25.333	25.421		47.631	51.845	16.122	32.317	-1.215	-6.145		51.675	0.106	14.643	0.003		17.00	0.28333	50.7	12.3	40.0	2.756	0.015	0.011	0.000	0.271	0.23	
32	9/2/2004	12:53:53 PM		33.947	25.568	37.494	25.35	25.458		47.279	51.381	15.78	32.461	-1.209	-6.145		49.514	0.106	14.643	0.003		18.00	0.3	50.3	11.8	39.9	2.749	0.015	0.011	0.000	0.272	0.23	
33	9/2/2004	12:54:53 PM		33.882	25.563	37.47	25.35	25.488		47.866	51.986	15.987	32.681	-1.215	-6.139		48.183	0.106	14.643	0.003		19.00	0.31667	50.9	11.5	40.3	2.777	0.015	0.011	0.000	0.269	0.23	
34	9/2/2004	12:55:53 PM		33.83	25.574	37.462	25.366	25.469		47.81	51.966	15.953	32.677	-1.209	-6.145		48.882	0.105	14.643	0.003		20.00	0.33333	50.8	11.6	40.2	2.775	0.015	0.011	0.000	0.267	0.23	
35	9/2/2004	12:56:53 PM		33.785	25.569	37.412	25.351	25.409		47.77	52.005	15.649	33.025	-1.212	-6.151		48.913	0.105	14.643	0.003		21.00	0.35	50.9	11.7	40.4	2.785	0.015	0.011	0.000	0.266	0.23	
36	9/2/2004	12:57:53 PM		33.785	25.564	37.447	25.331	25.249		48.187	52.37	15.992	33.007	-1.212	-6.191		52.705	0.107	14.643	0.003		22.00	0.36667	51.2	12.6	40.6	2.799	0.015	0.011	0.000	0.270	0.23	
37	9/2/2004	12:58:53 PM		33.785	25.589	37.486	25.296	25.299		48.31	52.54	16.105	32.933	-1.206	-6.139		46.468	0.107	14.643	0.003		23.00	0.38333	51.4	11.1	40.6	2.801	0.015	0.011	0.000	0.269	0.23	
38	9/2/2004	12:59:53 PM		33.8	25.584	37.511	25.301	25.384		47.951	51.937	16.19	32.728	-1.212	-6.185		50.976	0.105	14.643	0.003		24.00	0.4	50.8	12.1	40.3	2.781	0.015	0.011	0.000	0.266	0.23	
39	9/2/2004	1:00:53 PM		33.781	25.59	37.536	25.287	25.315		47.996	52.107	16.136	32.796	-1.215	-6.183		49.979	0.106	14.643	0.003		25.00	0.41667	51.0	11.9	40.4	2.785	0.015	0.011	0.000	0.268	0.23	
40	9/2/2004	1:01:53 PM		33.816	25.601	37.601	25.313	25.356		48.15	52.436	16.087	32.937	-1.212	-6.183		49.774	0.106	14.643	0.003		26.00	0.43333	51.3	11.9	40.5	2.795	0.015	0.011	0.000	0.266	0.23	
41	9/2/2004	1:02:53 PM		33.817	25.596	37.626	25.293	25.366		47.924	52.432	16.144	32.516	-1.212	-6.188		49.685	0.105	14.643	0.003		27.00	0.45	51.3	11.8	40.2	2.773	0.015	0.011	0.000	0.266	0.23	
42	9/2/2004	1:03:53 PM		33.842	25.607	37.671	25.304	25.332		47.748	52.136	16.042	32.418	-1.215	-6.188		52.663	0.105	14.643	0.003		28.00	0.46667	51.0	12.5	40.1	2.764	0.015	0.011	0.000	0.266	0.23	
43	9/2/2004	1:04:53 PM		33.856	25.601	37.709	25.313	25.346		48.032	52.345	16.042	32.789	-1.212	-6.188		49.357	0.106	14.643	0.003		29.00	0.48333	51.2	11.8	40.4	2.786	0.015	0.011	0.000	0.266	0.23	
44	9/2/2004	1:05:53 PM		33.888	25.618	37.74	25.35	25.378		47.837	52.185	16.115	32.453	-1.212	-6.191		50.002	0.105	14.643	0.003		30.00	0.5	51.1	11.9	40.1	2.768	0.015	0.011	0.000	0.265	0.23	
45	9/2/2004	1:06:53 PM		33.916	25.612	37.759	25.364	25.482		47.646	51.808	16.088	32.332	-1.209	-6.185		46.535	0.105	14.643	0.004		31.00	0.51667	50.7	11.1	40.0	2.757	0.015	0.011	0.000	0.266	0.23	
46	9/2/2004	1:07:53 PM		33.951	25.622	37.74	25.359	25.532		47.982	52.32	16.185	32.646	-1.212	-6.191		50.709	0.105	14.643	0.003		32.00	0.53333	51.2	12.1	40.3	2.780	0.015	0.011	0.000	0.264	0.22	
47	9/2/2004	1:08:53 PM		33.966	25.622	37.749	25.379	25.362		47.76	52.032	16.114	32.59	-1.212	-6.197		51.727	0.104	14.643	0.003		33.00	0.55	50.9	12.3	40.2	2.770	0.015	0.011	0.000	0.263	0.22	
48	9/2/2004	1:09:53 PM		33.965	25.626	37.749	25.343	25.366		47.588	51.978	16.094	32.219	-1.215	-6.185		48.49	0.106	14.643	0.003		34.00	0.56667	50.9	11.5	39.9	2.751	0.015	0.011	0.000	0.270	0.23	
49	9/2/2004	1:10:53 PM		34	25.652	37.784	25.394	25.392		47.687	52.121	16.113	32.377	-1.209	-6.183		50.146	0.105	14.643	0.004		35.00	0.58333	51.0	11.9	40.0	2.760	0.015	0.011	0.000	0.266	0.23	
50	9/2/2004	1:11:53 PM		33.995	25.646	37.793	25.403	25.381		47.878	52.277	16.201	32.586	-1.206	-6.194		50.901	0.105	14.643	0.004		36.00	0.6	51.2	12.1	40.2	2.774	0.015	0.011	0.000	0.265	0.23	
51	9/2/2004	1:12:53 PM		33.98	25.646	37.768	25.378	25.306		47.943	52.361	16.12	32.551	-1.212	-6.203		51.787	0.104	14.643	0.003		37.00	0.61667	51.2	12.3	40.2	2.775	0.015	0.011	0.000	0.262	0.22	
52	9/2/2004	1:13:53 PM		33.985	25.662	37.774	25.399	25.382		47.976	52.196	16.062	32.693	-1.215	-6.206		51.068	0.105	14.643	0.003		38.00	0.63333	51.1	12.2	40.3	2.781	0.015	0.011	0.000	0.264	0.22	
53	9/2/2004	1:14:53 PM		33.976	25.663	37.765	25.415	25.483		47.797	52.102	16.084	32.599	-1.212	-6.18		47.438	0.105	14.643	0.003		39.00	0.65	51.0	11.3	40.2	2.772	0.015	0.011	0.000	0.265	0.23	
54	9/2/2004	1:15:53 PM		33.987	25.664	37.756	25.401	25.454		47.913	52.167	16.013	32.937	-1.212	-6.18		51.758	0.106	14.643	0.003		40.00	0.66667	51.0	12.3	40.4	2.787	0.015	0.011	0.000	0.266	0.23	
55	9/2/2004	1:16:53 PM		34.008	25.675	37.767	25.407	25.475		47.457	51.783	15.91	32.432	-1.215	-6.183		52.495	0.106	14.643	0.003		41.00	0.68333	50.7	12.5	39.9	2.754	0.015	0.011	0.000	0.269	0.23	
56	9/2/2004	1:17:53 PM		34.029	25.681	37.782	25.413	25.551		47.957	52.453	16.009	32.808	-1.209	-6.185		44.729	0.104	14.643	0.003		42.00	0.7	51.3	10.7	40.4	2.784	0.015	0.011	0.000	0.261	0.22	
57	9/2/2004	1:18:53 PM		34.05	25.697	37.808	25.449	25.492		47.389	51.767	16.016	32.285	-1.212	-6.174		47.021	0.107	14.643	0.003		43.00	0.71667	50.6	11.2	39.8	2.747	0.015	0.011	0.000	0.272	0.23	
58	9/2/2004	1:19:53 PM		34.04	25.672	37.774	25.404	25.452		47.947	52.386	16.13	32.677	-1.215	-6.2		48.965	0.104	14.643	0.003		44.00	0.73333	51.3	11.7	40.3	2.779	0.015	0.011	0.000	0.262	0.22	
59	9/2/2004	1:20:53 PM		34.074	25.687	37.764	25.439	25.492		47.677	52.046	16.01	32.447	-1.212	-6.194		51.679	0.105	14.643	0.003		45.00	0.75	50.9	12.3	40.1	2.762	0.015	0.011	0.000	0.266	0.23	
60	9/2/2004	1:21:53 PM		34.056	25.704	37.746	25.476	25.294		47.488	51.771	15.96	32.338	-1.212	-6.203		50.824	0.104	14.643	0.003		46.00	0.76667	50.6	12.1	39.9	2.752	0.015	0.011	0.000	0.264	0.23	
61	9/2/2004	1:22:53 PM		33.939	25.71	37.733	25.492	25.495		47.532	51.682	16.011	32.342	-1.215	-6.365		49.695	0.063	14.643	0.003		47.00	0.78333	50.6	11.8	39.9	2.754	0.009	0.006	0.000	0.160	0.14	
62		Averages		34.0	25.6	37.7	25.4	25.4	#	47.7	52.1	16.0	32.6	-1.1	-5.8	#	49.6	0.1	14.6	0.0	#			51.0	11.8	40.1	2.767	0.016	0.011	0.000	0.3	0.2	
63		Maximum		34.9	25.7	37.8	25.5	25.6	#	48.3	52.5	16.2	33.9	1.4	0.6	#	52.7	0.2	14.6	0.0	#			51.4	12.6	41.0	2.827	0.033	0.023	0.001	0.6	0.5	
64		Median		34.0	25.6	37.7	25.4	25.4	#	47.9	52.1	16.0	32.6	-1.2	-6.2	#	49.7	0.1	14.6	0.0	#			51.0	11.8	40.2	2.775	0.015	0.011	0.000	0.3	0.2	
65		Minimum		33.8	25.5	37.4	25.2	25.1	#	44.8	51.4	15.0	30.3	-1.2	-6.4	#	44.7	0.1	14.6	0.0	#			50.3	10.7	37.6	2.595	0.009	0.006	0.000	0.2	0.1	
66		2 x Std Dev		0.437	0.114	0.245	0.135	0.191	#	1.379	0.537	0.524	1.190	1.116	2.994	#	3.860	0.042	0.000	0.001	#			0.537	0.919	1.257	0.087	0.006	0.004	0.000	0.110	0.094	
67		Number of Points Used*		39	39	39	39	39	0	39	39	39	39	39	39	0	39	39	39	39	0			39	39	39	39	39	39	39	39	39	
68		* Backpulse points in box are not included																						Average for the last 10 minutes =				0.0150	0.0107	gpm/ft2			
69																								2xStandard Deviation =				0.0002	0.0002	gpm/ft2			

RUN # TEMP3; CAMPAIGN IV HIGH TEMPERATURE TEST



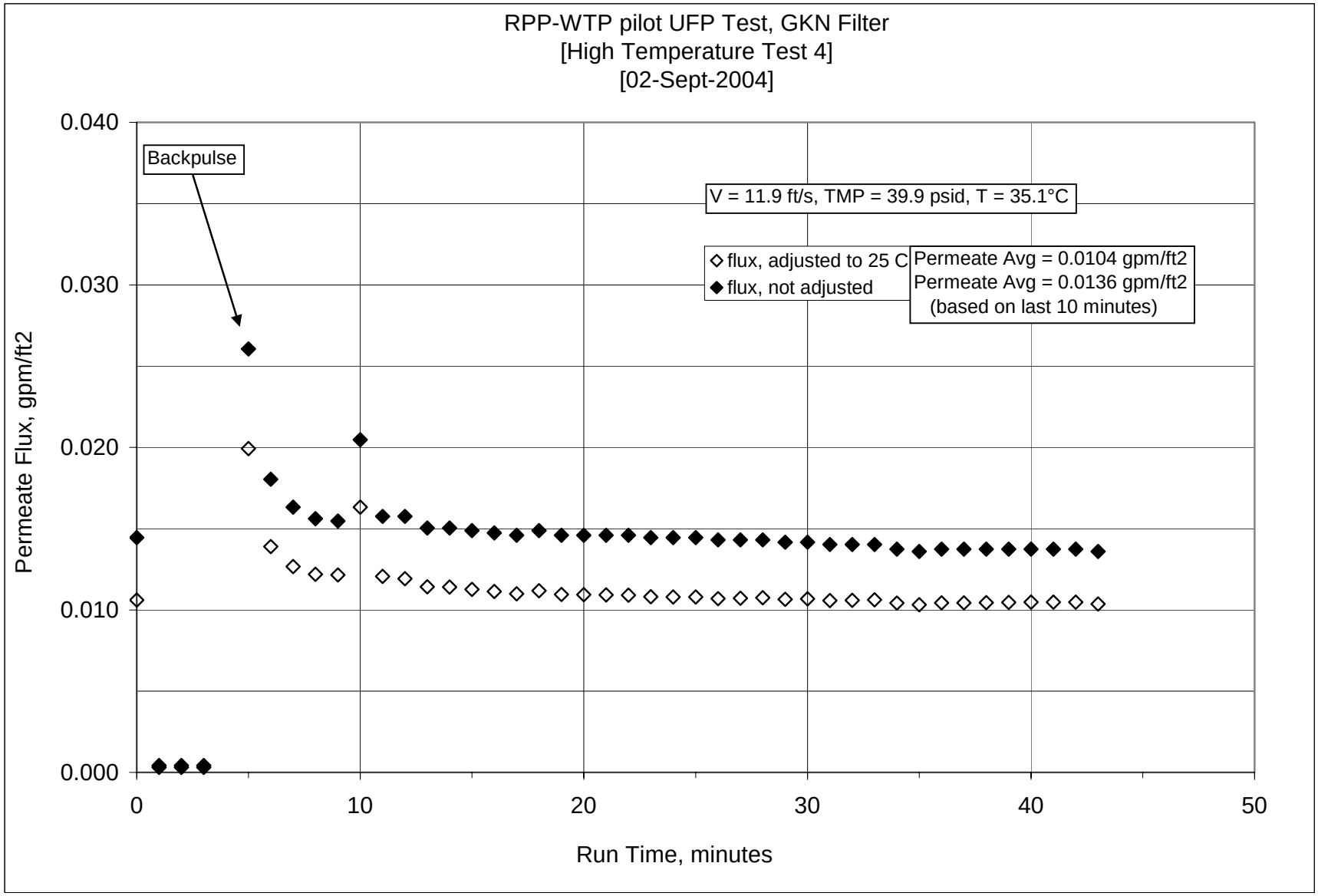
RUN # TEMP3; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface A		6.985	FT2						
5																								Conversion		851	m3m2/day/barg / gpm/ft2/barg						
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	1:42:02 PM		39.017	25.669	44.248	24.293	25.848		47.227	52.544	15.391	32.477	-1.015	-6.145		49.508	0.12	14.643	0.004		0	0	51.4	11.8	39.9	2.748	0.017	0.012	0.000	0.296	0.25	
15	9/2/2004	1:43:02 PM		39.084	25.658	44.339	24.302	25.937		46.31	52.598	15.561	31.523	0.262	16.363		47.43	0.004	14.643	0.003		1.00	0.01667	51.5	11.3	38.9	2.683	0.001	0.000	0.000	0.010	0.01	
16	9/2/2004	1:44:02 PM		43.111	25.65	44.473	24.295	26.039		26.733	52.254	15.207	12.009	19.78	20.046		50.288	0.003	14.643	0.004		2.00	0.03333	51.1	12.0	19.4	1.336	0.000	0.000	0.000	0.014	0.01	
17	9/2/2004	1:45:02 PM		41.663	25.64	44.671	24.329	26.193		10.513	52.388	14.926	-3.997	36.149	19.315		51.839	0.003	14.643	0.003		3.00	0.05	51.3	12.3	3.3	0.225	0.000	0.000	0.000	0.085	0.07	
18	9/2/2004	1:46:02 PM		35.86	25.639	44.938	24.323	26.278		9.189	51.561	11.101	-1.191	38.132	1.386		49.299	0.042	14.643	0.004		4.00	0.06667	50.4	11.7	4.0	0.276	0.006	0.004	0.001	1.120	0.95	
19	9/2/2004	1:47:02 PM		41.33	25.633	45.253	24.348	26.142		44.722	51.895	13.695	31.792	1.168	0.409		51.583	0.19	14.643	0.003		5.00	0.08333	50.8	12.3	38.3	2.638	0.027	0.018	0.000	0.460	0.39	
20	9/2/2004	1:48:02 PM		41.528	25.607	45.562	24.371	26.041		45.298	52.558	14.548	31.544	1.052	0.461		47.271	0.158	14.643	0.003		6.00	0.1	51.4	11.3	38.4	2.649	0.023	0.015	0.000	0.379	0.32	
21	9/2/2004	1:49:02 PM		41.756	25.61	45.741	24.54	25.65		45.558	52.619	15.118	31.08	1.008	0.516		49.837	0.147	14.643	0.004		7.00	0.11667	51.5	11.9	38.3	2.642	0.021	0.013	0.000	0.351	0.30	
22	9/2/2004	1:50:02 PM		41.902	25.625	45.886	24.71	25.509		45.348	52.25	15.168	31.045	1.055	0.562		51.364	0.141	14.643	0.003		8.00	0.13333	51.1	12.2	38.2	2.634	0.020	0.013	0.000	0.337	0.29	
23	9/2/2004	1:51:02 PM		40.016	25.624	45.953	24.795	25.589		48.368	52.37	15.287	33.951	-1.212	-5.61		50.252	0.159	14.643	0.004		9.00	0.15	51.3	12.0	41.2	2.838	0.023	0.015	0.000	0.370	0.31	
24	9/2/2004	1:52:02 PM		41.359	25.623	45.87	24.899	25.653		47.561	51.52	16.653	31.724	-1.212	-6.047		54.28	0.145	14.643	0.003		10.00	0.16667	50.4	12.9	39.6	2.733	0.021	0.013	0.000	0.338	0.29	
25	9/2/2004	1:53:02 PM		41.687	25.634	45.832	24.99	25.409		47.192	51.114	16	32.046	-1.215	-6.064		53.373	0.14	14.643	0.003		11.00	0.18333	50.0	12.7	39.6	2.732	0.020	0.012	0.000	0.292	0.25	
26	9/2/2004	1:54:02 PM		41.824	25.645	45.784	25.066	25.609		47.519	51.489	15.9	32.352	-1.215	-6.07		53.439	0.14	14.643	0.003		12.00	0.2	50.4	12.7	39.9	2.753	0.020	0.012	0.000	0.290	0.25	
27	9/2/2004	1:55:02 PM		41.908	25.65	45.76	25.152	25.66		47.414	51.412	15.853	32.432	-1.215	-6.076		55.335	0.139	14.643	0.003		13.00	0.21667	50.3	13.2	39.9	2.753	0.020	0.012	0.000	0.289	0.25	
28	9/2/2004	1:56:02 PM		42.046	25.662	45.742	25.203	25.691		47.101	51.195	15.635	32.27	-1.206	-6.003		52.273	0.138	14.643	0.004		14.00	0.23333	50.1	12.5	39.7	2.736	0.020	0.011	0.000	0.288	0.25	
29	9/2/2004	1:57:02 PM		42.071	25.667	45.704	25.209	25.697		47.723	52.026	15.84	32.519	-1.215	-6.087		48.859	0.139	14.643	0.003		15.00	0.25	50.9	11.6	40.1	2.766	0.020	0.012	0.000	0.288	0.24	
30	9/2/2004	1:58:02 PM		42.105	25.678	45.69	25.235	25.753		47.509	51.489	15.634	32.72	-1.209	-6.078		50.918	0.138	14.643	0.003		16.00	0.26667	50.4	12.1	40.1	2.766	0.020	0.011	0.000	0.286	0.24	
31	9/2/2004	1:59:02 PM		42.101	25.669	45.662	25.251	25.649		47.611	51.903	15.637	32.674	-1.215	-5.83		52.242	0.145	14.643	0.003		17.00	0.28333	50.8	12.4	40.1	2.768	0.021	0.012	0.000	0.300	0.26	
32	9/2/2004	2:00:02 PM		42.079	25.696	45.659	25.313	25.761		47.864	51.597	15.599	33.161	-1.212	-6.058		51.764	0.141	14.643	0.004		18.00	0.3	50.5	12.3	40.5	2.793	0.020	0.012	0.000	0.289	0.25	
33	9/2/2004	2:01:02 PM		42.076	25.708	45.642	25.345	25.858		47.561	51.479	15.676	32.752	-1.212	-6.078		50.119	0.136	14.643	0.003		19.00	0.31667	50.4	11.9	40.2	2.769	0.019	0.011	0.000	0.282	0.24	
34	9/2/2004	2:02:02 PM		42.086	25.698	45.617	25.335	25.863		47.698	51.789	15.544	32.964	-1.212	-6.093		50.505	0.137	14.643	0.003		20.00	0.33333	50.7	12.0	40.3	2.781	0.020	0.011	0.000	0.283	0.24	
35	9/2/2004	2:03:02 PM		42.145	25.718	45.613	25.32	25.923		47.913	52.034	15.624	33.073	-1.212	-6.038		49.351	0.126	14.643	0.003		21.00	0.35	50.9	11.8	40.5	2.792	0.018	0.010	0.000	0.259	0.22	
36	9/2/2004	2:04:02 PM		42.119	25.712	45.582	25.254	25.921		47.94	51.819	15.43	33.366	-1.215	-6.087		47.47	0.136	14.643	0.003		22.00	0.36667	50.7	11.3	40.7	2.803	0.019	0.011	0.000	0.279	0.24	
37	9/2/2004	2:05:02 PM		42.127	25.72	45.571	25.232	25.83		47.901	51.918	15.361	33.278	-1.212	-6.026		48.8	0.148	14.643	0.004		23.00	0.38333	50.8	11.6	40.6	2.799	0.021	0.012	0.000	0.304	0.26	
38	9/2/2004	2:06:02 PM		42.11	25.728	45.549	25.175	25.823		47.957	51.877	15.475	33.276	-1.212	-5.937		46.249	0.144	14.643	0.003		24.00	0.4	50.8	11.0	40.6	2.800	0.021	0.012	0.000	0.295	0.25	
39	9/2/2004	2:07:02 PM		42.122	25.72	45.532	25.127	25.775		48.094	51.765	15.611	33.268	-1.212	-6.087		51.159	0.134	14.643	0.003		25.00	0.41667	50.6	12.2	40.7	2.805	0.019	0.011	0.000	0.275	0.23	
40	9/2/2004	2:08:02 PM		42.199	25.745	45.536	25.151	25.754		48.283	52.16	15.489	33.703	-1.209	-6.024		48.419	0.13	14.643	0.004		26.00	0.43333	51.0	11.5	41.0	2.826	0.019	0.011	0.000	0.264	0.22	
41	9/2/2004	2:09:02 PM		42.188	25.728	45.506	25.135	25.803		47.947	51.964	15.451	33.29	-1.215	-6.09		50.409	0.136	14.643	0.003		27.00	0.45	50.8	12.0	40.6	2.801	0.019	0.011	0.000	0.279	0.24	
42	9/2/2004	2:10:02 PM		42.22	25.736	45.503	25.087	25.686		47.775	51.688	15.463	33.239	-1.212	-6.102		49.797	0.136	14.643	0.003		28.00	0.46667	50.6	11.9	40.5	2.793	0.019	0.011	0.000	0.280	0.24	
43	9/2/2004	2:11:02 PM		42.176	25.735	45.483	25.102	25.64		48.009	51.964	15.444	33.311	-1.212	-6.102		48.736	0.134	14.643	0.003		29.00	0.48333	50.8	11.6	40.7	2.803	0.019	0.011	0.000	0.275	0.23	
44	9/2/2004	2:12:02 PM		42.176	25.745	45.493	25.132	25.815		47.478	51.649	15.345	33.114	-1.212	-5.474		51.84	0.139	14.643	0.003		30.00	0.5	50.5	12.3	40.3	2.778	0.020	0.012	0.000	0.288	0.24	
45	9/2/2004	2:13:02 PM		42.156	25.755	45.508	25.162	25.84		47.387	51.412	16.041	32.034	-1.212	-6		50.492	0.133	14.643	0.003		31.00	0.51667	50.3	12.0	39.7	2.738	0.019	0.011	0.000	0.279	0.24	
46	9/2/2004	2:14:02 PM		42.156	25.755	45.502	25.191	25.874		47.327	51.155	15.962	32.192	-1.209	-5.983		52.676	0.135	14.643	0.003		32.00	0.53333	50.0	12.5	39.8	2.741	0.019	0.011	0.000	0.283	0.24	
47	9/2/2004	2:15:02 PM		42.156	25.75	45.502	25.206	25.814		47.677	51.97	16.101	32.256	-1.212	-6.119		56.299	0.132	14.643	0.003		33.00	0.55	50.9	13.4	40.0	2.756	0.019	0.011	0.000	0.276	0.23	
48	9/2/2004	2:16:02 PM		42.133	25.762	45.485	25.283	25.631		47.652	51.566	15.986	32.391	-1.209	-6.119		47.687	0.131	14.643	0.004		34.00	0.56667	50.4	11.4	40.0	2.759	0.019	0.011	0.000	0.273	0.23	
49	9/2/2004	2:17:02 PM		42.119	25.767	45.446	25.404	25.607		47.621	51.522	15.724	32.835	-1.215	-6.116		52.559	0.134	14.643	0.003		35.00	0.58333	50.4	12.5	40.2	2.774	0.019	0.011	0.000	0.278	0.24	
50	9/2/2004	2:18:02 PM		42.146	25.785	45.459	25.517	25.72		46.879	50.892	15.693	32.026	-1.212	-6.122		50.044	0.132	14.643	0.004		36.00	0.6	49.8	11.9	39.5	2.720	0.019	0.011	0.000	0.279	0.24	
51	9/2/2004	2:19:02 PM		42.203	25.833	45.471	25.605	25.703		47.194	50.909	15.729	32.416	-1.212	-6.125		50.436	0.13	14.643	0.004		37.00	0.61667	49.8	12.0	39.8	2.744	0.019	0.011	0.000	0.273	0.23	
52	9/2/2004	2:20:02 PM		42.217	25.868	45.466	25.715	25.777		47.13	51.025	15.486	32.51	-1.209	-6.107		50.548	0.127	14.643	0.003		38.00	0.63333	49.9	12.0	39.8	2.745	0.018	0.011	0.000	0.266	0.23	
53	9/2/2004	2:21:02 PM		42.163	25.877	45.422	25.719	25.771		46.96	50.737	15.585	32.309	-1.215	-6.128		51.251	0.13	14.643	0.003		39.00	0.65	49.6	12.2	39.6	2.733	0.019	0.011	0.000	0.274	0.23	
54	9/2/2004	2:22:02 PM		42.169	25.924	45.447	25.776	25.813		47.335	51.443	15.528	32.596	-1.209	-6.107		49.226	0.132	14.643	0.004		40.00	0.66667	50.3	11.7	40.0	2.755	0.019	0.011	0.000	0.276	0.23	
55	9/2/2004	2:23:02 PM		42.157	25.936	45.406	25.768	25.79		47.268	50.979	15.546	32.656	-1.215	-6.05		52.421	0.132	14.643	0.003		41.00	0.68333	49.9	12.5	40.0	2.755	0.019	0.011	0.000	0.276	0.24	
56	9/2/2004	2:24:02 PM		42.115	25.944	45.384	25.856	25.813		47.223	51.174	15.516	32.451	-1.212	-6.055		48.606	0.124	14.643	0.003		42.00	0.7	50.1	11.6	39.8	2.747	0.018	0.010	0.000	0.260	0.22	
57	9/2/2004	2:25:02 PM		42.152	25.977	45.382	25.899	25.806		47.163	50.96	15.468	32.576	-1.209	-6.012		49.507	0.127	14.643	0.004		43.00	0.71667	49.8	11.8	39.9	2.749	0.018	0.011	0.000	0.267	0.23	
58	9/2/2004	2:26:02 PM		42.144	25.978	45.33	25.961	25.827		47.407	51.47	15.593	32.59	-1.212	-5.914		51.673	0.126	14.643	0.004		44.00	0.73333	50.4	12.3	40.0	2.758	0.018	0.011	0.000	0.264	0.22	
59	9/2/2004	2:27:02 PM		42.123	25.991	45.304	25.964	25.84		47.096	50.992	15.487	32.531	-1.215	-5.925		48.688	0.128	14.643	0.003		45.00	0.75	49.9	11.6	39.8	2.745	0.018	0.011	0.000	0.270	0.23	
60	9/2/2004	2:28:02 PM		42.121	26.014	45.292	26.042	25.938		47.076	51.213	15.476	32.385	-1.215	-6.061		49.933	0.125	14.643	0.003		46.00	0.76667	50.1	11.9	39.7	2.739	0.018	0.010	0.000	0.264	0.22	
61	9/2/2004	2:29:02 PM		42.114	26.033	45.276	26.015	25.917		47.154	51.106	15.746	32.205	-1.209	-6.131		49.449	0.127	14.643	0.003		47.00	0.78333	50.0	11.8	39.7	2.736	0.018	0.011	0.000	0.269	0.23	
62	9/2/2004	2:30:02 PM		42.069	26.046	45.251	26.009	25.775		47.401	51.365	15.667	32.496	-1.209	-6.113		51.852	0.128	14.643	0.004		48.00	0.8	50.2	12.4	39.9	2.754	0.018	0.011	0.000	0.269	0.23	
63	9/2/2004	2:31:02 PM		41.278	26.046	45.235	25.993	25.675		46.781	51.184	15.631	31.927	-1.212	-5.87		47.445	0.13	14.643	0.004		49.00	0.81667	50.1	11.3	39.4	2.713	0.019	0.011	0.000	0.277	0.24	
64	9/2/2004	2:32:02 PM		40.979	26.06	45.191	25.942	25.744		47.051	51.402	15.637	32.184	-1.215	-6.044		52.117	0.132	14.643	0.003		50.00	0.83333	50.3	12.4	39.6	2.731	0.019	0.011	0.000	0.280	0.24	

RUN # TEMP3; CAMPAIGN IV HIGH TEMPERATURE TEST – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
66		Averages		42.0	25.8	45.5	25.4	25.7	#	47.4	51.5	15.6	32.6	-1.1	-5.7	#	50.7	0.1	14.6	0.0	#			50.4	12.1	40.0	2.8	0.0	0.0	0.0	0.3	0.2	
67		Maximum		42.2	26.1	46.0	26.0	25.9	#	48.4	52.6	16.7	34.0	1.1	0.6	#	56.3	0.2	14.6	0.0	#			51.5	13.4	41.2	2.8	0.0	0.0	0.0	0.4	0.3	
68		Median		42.1	25.7	45.5	25.3	25.8	#	47.4	51.5	15.6	32.5	-1.2	-6.1	#	50.5	0.1	14.6	0.0	#			50.4	12.0	40.0	2.8	0.0	0.0	0.0	0.3	0.2	
69		Minimum		40.0	25.6	45.2	24.5	25.4	#	45.3	50.7	15.1	31.0	-1.2	-6.1	#	46.2	0.1	14.6	0.0	#			49.6	11.0	38.2	2.6	0.0	0.0	0.0	0.3	0.2	
70		2 x Std Dev		0.787	0.271	0.361	0.766	0.223	#	1.130	0.862	0.529	1.183	0.935	2.747	#	4.133	0.014	0.000	0.001	#			0.862	0.984	1.119	0.077	0.002	0.002	0.000	0.046	0.039	
71		Number of Points Used*		44	44	44	44	44	0	44	44	44	44	44	44	0	44	44	44	44	0			44	44	44	44	44	44	44	44	44	
72		* Backpulse points in box are not included																															
73																																	
74																																	
75																							Average for the last 10 minutes =					0.0186	0.0109	gpm/ft2			
76																								2xStandard Deviation =				0.0079	0.0005	gpm/ft2			

RUN # TEMP4; CAMPAIGN IV HIGH TEMPERATURE TEST



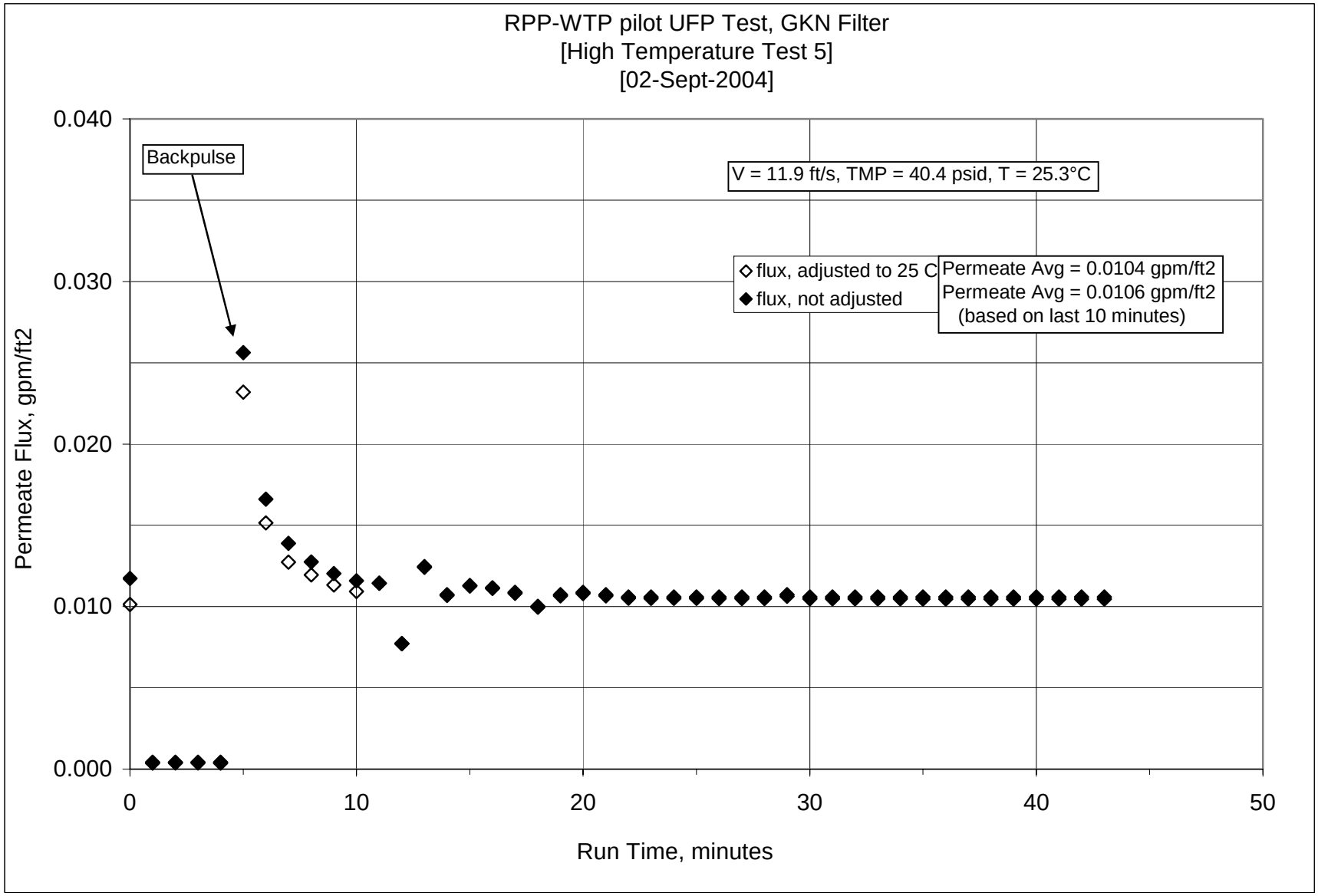
RUN # TEMP4; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A	6.985	FT2							
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	2:50:23 PM		36.412	26.085	34.216	26.413	25.635		47.858	52.138	17.347	31.349	-1.212	-6.249		53.5	0.101	14.643	0.003		0	0	51.0	12.7	39.6	2.731	0.014	0.011	0.000	0.268	0.23	
18	9/2/2004	2:51:23 PM		36.118	26.076	33.891	26.314	25.58		43.971	51.499	17.513	27.174	1.448	20.87		47.434	0.003	14.643	0.003		1.00	0.01667	50.4	11.3	35.6	2.453	0.000	0.000	0.000	0.009	0.01	
19	9/2/2004	2:52:23 PM		36.975	26.078	33.665	26.3	25.612		27.106	51.785	17.467	10.104	19.019	20.76		52.592	0.003	14.643	0.004		2.00	0.03333	50.7	12.5	18.6	1.283	0.000	0.000	0.000	0.017	0.01	
20	9/2/2004	2:53:23 PM		36.63	26.062	33.407	26.294	25.716		12.943	51.837	17.175	-3.642	33.343	91.447		49.434	0.003	14.643	0.003		3.00	0.05	50.7	11.8	4.7	0.321	0.000	0.000	0.000	0.067	0.06	
21	9/2/2004	2:54:23 PM		36.08	26.053	33.166	26.4	25.722		24.48	50.278	12.731	12.308	21.474	0.354		54.476	0.752	14.643	0.004		4.00	0.06667	49.2	13.0	18.4	1.268	0.108	0.080	0.004	4.333	3.69	
22	9/2/2004	2:55:23 PM		34.844	26.068	32.923	26.455	25.807		44.203	50.625	15.092	29.902	0.484	0.394		50.744	0.182	14.643	0.003		5.00	0.08333	49.5	12.1	37.1	2.555	0.026	0.020	0.001	0.538	0.46	
23	9/2/2004	2:56:23 PM		34.565	26.085	32.798	26.353	25.774		44.525	51.41	15.897	29.321	0.664	0.432		51.975	0.126	14.643	0.003		6.00	0.1	50.3	12.4	36.9	2.546	0.018	0.014	0.000	0.376	0.32	
24	9/2/2004	2:57:23 PM		34.296	26.083	32.691	26.33	25.791		44.608	51.539	16.311	28.985	0.626	0.475		50.722	0.114	14.643	0.003		7.00	0.11667	50.4	12.1	36.8	2.537	0.016	0.013	0.000	0.344	0.29	
25	9/2/2004	2:58:23 PM		34.04	26.088	33.062	26.27	25.762		44.5	51.319	16.491	28.718	0.603	0.51		51.222	0.109	14.643	0.003		8.00	0.13333	50.2	12.2	36.6	2.524	0.016	0.012	0.000	0.333	0.28	
26	9/2/2004	2:59:23 PM		33.805	26.085	33.771	26.097	25.799		44.94	51.719	16.7	29.056	0.658	0.544		53.852	0.108	14.643	0.004		9.00	0.15	50.6	12.8	37.0	2.551	0.015	0.012	0.000	0.328	0.28	
27	9/2/2004	3:00:23 PM		33.273	26.096	34.103	26.013	25.675		47.551	51.363	16.605	31.81	-1.212	-5.229		53.335	0.143	14.643	0.004		10.00	0.16667	50.2	12.7	39.7	2.736	0.020	0.016	0.000	0.411	0.35	
28	9/2/2004	3:01:23 PM		33.243	26.07	34.774	25.848	25.694		47.437	50.886	16.365	32.03	-1.212	-6.021		50.031	0.11	14.643	0.004		11.00	0.18333	49.8	11.9	39.7	2.739	0.016	0.012	0.000	0.304	0.26	
29	9/2/2004	3:02:23 PM		33.435	26.06	35.223	25.667	25.754		47.689	51.062	16.323	32.243	-1.212	-6.174		55.811	0.11	14.643	0.004		12.00	0.2	49.9	13.3	40.0	2.756	0.016	0.012	0.000	0.298	0.25	
30	9/2/2004	3:03:23 PM		33.523	26.049	35.083	25.441	25.603		46.897	50.374	15.9	31.732	-1.212	-6.211		50.976	0.105	14.643	0.004		13.00	0.21667	49.3	12.1	39.3	2.711	0.015	0.011	0.000	0.291	0.25	
31	9/2/2004	3:04:23 PM		33.57	26.057	35.111	25.369	25.376		47.285	50.703	15.734	32.399	-1.215	-6.214		50.227	0.105	14.643	0.003		14.00	0.23333	49.6	12.0	39.8	2.747	0.015	0.011	0.000	0.286	0.24	
32	9/2/2004	3:05:23 PM		33.577	26.049	35.245	25.3	25.198		47.41	50.707	15.674	32.599	-1.212	-6.217		51.764	0.104	14.643	0.004		15.00	0.25	49.6	12.3	40.0	2.758	0.015	0.011	0.000	0.282	0.24	
33	9/2/2004	3:06:23 PM		33.574	26.046	35.341	25.337	25.055		47.175	50.683	15.759	32.18	-1.218	-6.223		49.595	0.103	14.643	0.003		16.00	0.26667	49.6	11.8	39.7	2.736	0.015	0.011	0.000	0.281	0.24	
34	9/2/2004	3:07:23 PM		33.576	26.042	35.422	25.349	25.067		47.302	50.691	15.797	32.385	-1.215	-6.223		52.034	0.102	14.643	0.003		17.00	0.28333	49.6	12.4	39.8	2.747	0.015	0.011	0.000	0.276	0.23	
35	9/2/2004	3:08:23 PM		33.572	26.033	35.516	25.385	25.033		47.743	50.965	15.834	32.705	-1.212	-6.214		50.225	0.104	14.643	0.004		18.00	0.3	49.8	12.0	40.2	2.773	0.015	0.011	0.000	0.278	0.24	
36	9/2/2004	3:09:23 PM		33.602	26.034	35.591	25.456	24.979		47.399	50.803	15.697	32.648	-1.212	-6.226		49.797	0.102	14.643	0.004		19.00	0.31667	49.7	11.9	40.0	2.759	0.015	0.011	0.000	0.274	0.23	
37	9/2/2004	3:10:23 PM		33.642	26.02	35.661	25.507	25.005		47.538	50.896	15.789	32.701	-1.212	-6.229		47.709	0.102	14.643	0.004		20.00	0.33333	49.8	11.4	40.1	2.766	0.015	0.011	0.000	0.272	0.23	
38	9/2/2004	3:11:23 PM		33.693	26.017	35.687	25.569	24.916		47.702	50.969	15.707	32.943	-1.212	-6.226		49.382	0.102	14.643	0.003		21.00	0.35	49.8	11.8	40.3	2.780	0.015	0.011	0.000	0.271	0.23	
39	9/2/2004	3:12:23 PM		33.751	26.02	35.725	25.562	24.93		47.53	50.992	15.592	32.908	-1.212	-6.223		48.068	0.102	14.643	0.003		22.00	0.36667	49.9	11.4	40.2	2.773	0.015	0.011	0.000	0.271	0.23	
40	9/2/2004	3:13:23 PM		33.764	26.008	35.728	25.49	24.928		47.244	50.631	15.664	32.531	-1.215	-6.232		49.034	0.101	14.643	0.003		23.00	0.38333	49.5	11.7	39.9	2.750	0.014	0.011	0.000	0.271	0.23	
41	9/2/2004	3:14:23 PM		33.766	25.991	35.745	25.482	24.975		47.7	51.197	15.63	32.902	-1.212	-6.235		50.283	0.101	14.643	0.004		24.00	0.4	50.1	12.0	40.3	2.779	0.014	0.011	0.000	0.268	0.23	
42	9/2/2004	3:15:23 PM		33.809	25.994	35.787	25.56	25.033		47.88	51.331	15.774	32.888	-1.212	-6.229		49.322	0.101	14.643	0.004		25.00	0.41667	50.2	11.7	40.4	2.784	0.014	0.011	0.000	0.267	0.23	
43	9/2/2004	3:16:23 PM		33.861	25.992	35.716	25.784	25.211		47.48	50.846	15.505	32.911	-1.212	-6.235		48.135	0.1	14.643	0.003		26.00	0.43333	49.7	11.5	40.2	2.771	0.014	0.011	0.000	0.266	0.23	
44	9/2/2004	3:17:23 PM		33.893	25.999	35.65	25.891	25.288		47.729	50.9	15.526	33.208	-1.212	-6.235		48.692	0.1	14.643	0.004		27.00	0.45	49.8	11.6	40.5	2.790	0.014	0.011	0.000	0.265	0.23	
45	9/2/2004	3:18:23 PM		33.892	25.998	35.555	25.95	25.253		47.837	51.095	15.677	33.048	-1.215	-6.237		47.184	0.1	14.643	0.003		28.00	0.46667	50.0	11.2	40.4	2.788	0.014	0.011	0.000	0.266	0.23	
46	9/2/2004	3:19:23 PM		33.862	26.007	35.491	25.985	25.337		47.509	51.008	15.701	32.636	-1.212	-6.237		50.031	0.099	14.643	0.003		29.00	0.48333	49.9	11.9	40.1	2.763	0.014	0.011	0.000	0.266	0.23	
47	9/2/2004	3:20:23 PM		33.852	26.007	35.417	26.06	25.387		47.358	50.703	15.537	32.611	-1.212	-6.237		48.296	0.099	14.643	0.004		30.00	0.5	49.6	11.5	40.0	2.757	0.014	0.011	0.000	0.267	0.23	
48	9/2/2004	3:21:23 PM		33.847	26.002	35.367	26.1	25.417		47.876	51.275	15.667	33.056	-1.215	-6.246		48.686	0.098	14.643	0.003		31.00	0.51667	50.2	11.6	40.5	2.790	0.014	0.011	0.000	0.262	0.22	
49	9/2/2004	3:22:23 PM		33.818	26.022	35.308	26.14	25.517		47.947	51.545	15.531	33.259	-1.209	-6.243		47.793	0.098	14.643	0.004		32.00	0.53333	50.4	11.4	40.6	2.799	0.014	0.011	0.000	0.261	0.22	
50	9/2/2004	3:23:23 PM		33.794	26.023	35.245	26.176	25.562		47.679	51.06	15.495	33.179	-1.212	-6.243		48.097	0.098	14.643	0.004		33.00	0.55	49.9	11.5	40.4	2.787	0.014	0.011	0.000	0.263	0.22	
51	9/2/2004	3:24:23 PM		33.759	26.013	35.176	26.196	25.562		46.872	50.318	15.76	31.891	-1.212	-6.258		50.29	0.096	14.643	0.004		34.00	0.56667	49.2	12.0	39.4	2.715	0.014	0.010	0.000	0.265	0.23	
52	9/2/2004	3:25:23 PM		33.706	26.035	35.157	26.192	25.519		47.113	50.334	16.019	32.075	-1.212	-6.258		52.202	0.095	14.643	0.003		35.00	0.58333	49.2	12.4	39.6	2.730	0.014	0.010	0.000	0.261	0.22	
53	9/2/2004	3:26:23 PM		33.668	26.041	35.134	26.163	25.435		47.592	51.141	16.109	32.346	-1.212	-6.252		48.264	0.096	14.643	0.004		36.00	0.6	50.0	11.5	40.0	2.756	0.014	0.010	0.000	0.261	0.22	
54	9/2/2004	3:27:23 PM		33.61	26.042	35.101	26.12	25.396		47.723	51.286	16.206	32.315	-1.212	-6.252		49.249	0.096	14.643	0.004		37.00	0.61667	50.2	11.7	40.0	2.759	0.014	0.010	0.000	0.261	0.22	
55	9/2/2004	3:28:23 PM		33.565	26.032	35.042	26.085	25.367		47.48	51.265	15.941	32.402	-1.212	-6.255		51.831	0.096	14.643	0.004		38.00	0.63333	50.1	12.3	39.9	2.754	0.014	0.010	0.000	0.262	0.22	
56	9/2/2004	3:29:23 PM		33.535	26.032	34.997	26.039	25.351		47.768	51.168	16.051	32.566	-1.212	-6.255		52.138	0.096	14.643	0.003		39.00	0.65	50.0	12.4	40.2	2.769	0.014	0.010	0.000	0.261	0.22	
57	9/2/2004	3:30:23 PM		33.471	26.032	34.967	26.044	25.351		47.524	51.089	15.934	32.416	-1.215	-6.255		48.243	0.096	14.643	0.003		40.00	0.66667	50.0	11.5	40.0	2.756	0.014	0.010	0.000	0.262	0.22	
58	9/2/2004	3:31:23 PM		33.422	26.042	34.963	26.045	25.386		47.857	51.327	15.803	32.952	-1.212	-6.252		50.058	0.096	14.643	0.004		41.00	0.68333	50.2	11.9	40.4	2.786	0.014	0.010	0.000	0.259	0.22	
59	9/2/2004	3:32:23 PM		33.402	26.042	34.953	26.005	25.391		47.54	51.215	15.7	32.796	-1.212	-6.252		47.73	0.096	14.643	0.003		42.00	0.7	50.1	11.4	40.2	2.769	0.014	0.010	0.000	0.261	0.22	
60	9/2/2004	3:33:23 PM		33.382	26.047	34.957	25.949	25.321		47.685	51.193	15.813	32.835	-1.212	-6.258		50.329	0.095	14.643	0.003		43.00	0.71667	50.1	12.0	40.3	2.776	0.014	0.010	0.000	0.258	0.22	
61	9/2/2004	3:34:23 PM		33.357	26.047	34.977	25.904	25.231		47.492	51.163	15.808	32.484	-1.212	-6.255		51.472	0.095	14.643	0.003		44.00	0.73333	50.0	12.3	40.0	2.757	0.014	0.010	0.000	0.259	0.22	
62	9/2/2004	3:35:23 PM		33.311	26.04	34.975	25.842	25.294		47.797	51.224	15.974	32.64	-1.212	-6.252		49.677	0.096	14.643	0.003		45.00	0.75	50.1	11.8	40.2	2.773	0.014	0.010	0.000	0.260	0.22	
63	9/2/2004	3:36:23 PM		33.296	26.05	35	25.912	25.214		47.613	51.313	15.953	32.543	-1.209	-6.249		50.1	0.096	14.643	0.004		46.00	0.76667	50.2	11.9	40.1	2.763	0.014	0.010	0.000	0.261	0.22	
64	9/2/2004	3:37:23 PM		33.263	26.036	35.006	25.928	25.225		47.36	50.809	16.037	32.387	-1.212	-6.261		50.39	0.094	14.643	0.003		47.00	0.78333	49.7	12.0	39.9	2.749	0.013	0.010	0.000	0.257	0.22	
65	9/2/2004	3:38:23 PM		33.248	26.036	35.035	25.968	25.205		47.522	50.95	16.034	32.512	-1.212	-6.258		47.349	0.094	14.643	0.003		48.00	0.8	49.8	11.3	40.0	2.759	0.013	0.010	0.000	0.256	0.22	
66	9/2/2004	3:39:23 PM		33.259	26.027	35.061	25.929	25.276		47.87	51.518	16.207	32.434	-1.212	-6.255		49.399	0.095	14.643	0.003		49.00	0.81667	50.4	11.8	40.2	2.768	0.014	0.010	0.000	0.258	0.22	
67	9/2/2004	3:40:23 PM		33.234	26.037	35.085	25.949	25.381		47.2	50.739	15.821	32.317	-1.209	-6.194		49.61	0.095	14.643	0.003		50.00	0.83333	49.6	11.8	39.8	2.741	0.014	0.010	0.000	0.260	0.22	
68	9/2/2004	3:41:23 PM		33.075	26.036	35.104	25.943	25.505		49.203	51.468	16.004	34.119	-1.215	-6.775		48.246	0.003	14.643	0.003		51.00	0.85	50.3	11.5	41.7	2.872	0.000	0.000	0.000	0.008	0.01	

RUN # TEMP4; CAMPAIGN IV HIGH TEMPERATURE TEST – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
70		Averages		33.6	26.0	35.1	25.9	25.3	#	47.4	51.0	15.9	32.4	-1.1	-5.8	#	49.9	0.1	14.6	0.0	#			49.9	11.9	39.9	2.749	0.014	0.011	0.000	0.270	0.2	
71		Maximum		34.3	26.1	35.8	26.3	25.8	#	49.2	51.7	16.7	34.1	0.7	0.5	#	55.8	0.1	14.6	0.0	#			50.6	13.3	41.7	2.872	0.020	0.016	0.000	0.411	0.4	
72		Median		33.6	26.0	35.1	25.9	25.4	#	47.5	51.1	15.8	32.5	-1.2	-6.2	#	49.8	0.1	14.6	0.0	#			49.9	11.9	40.0	2.759	0.014	0.011	0.000	0.266	0.2	
73		Minimum		33.1	26.0	32.7	25.3	24.9	#	44.5	50.3	15.5	28.7	-1.2	-6.8	#	47.2	0.0	14.6	0.0	#			49.2	11.2	36.6	2.524	0.000	0.000	0.000	0.008	0.0	
74		2 x Std Dev		0.501	0.050	1.237	0.576	0.484	#	1.603	0.644	0.580	2.022	0.919	3.376	#	3.590	0.033	0.000	0.001	#			0.644	0.855	1.796	0.124	0.005	0.004	0.000	0.097	0.083	
75		Number of Points Used*		45	45	45	45	45	0	45	45	45	45	45	45	0	45	45	45	45	0			45	45	45	45	45	45	45	45	45	
76		* Backpulse points in box are not included																															
77																																	
78																																	
79																							Average for the last 10 minutes =					0.0137	0.0104	gpm/ft2			
80																								2xStandard Deviation =				0.0003	0.0002	gpm/ft2			

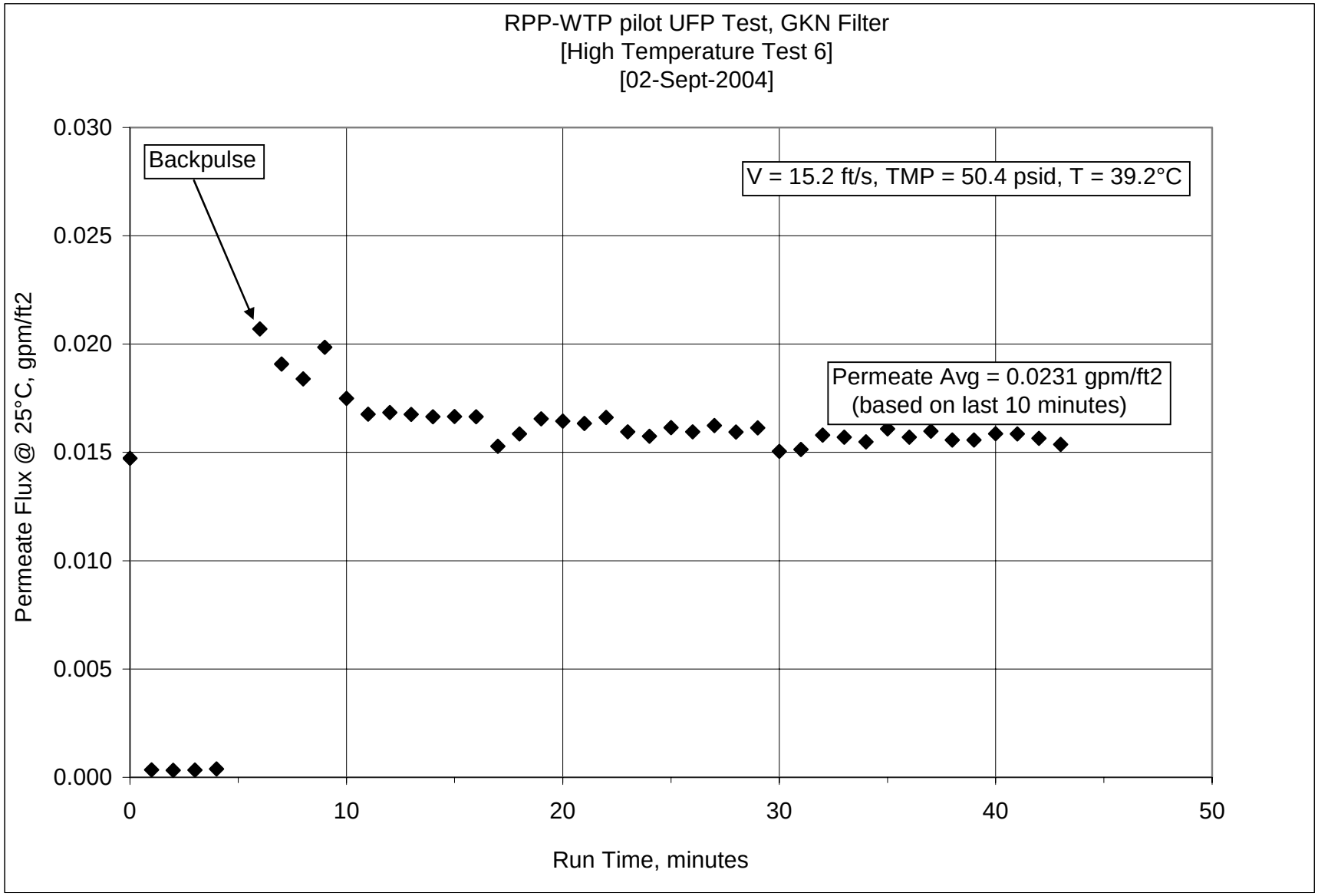
RUN # TEMP5; CAMPAIGN IV HIGH TEMPERATURE TEST



RUN # TEMP5; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp				Filter Surface	6.985	FT2							
5																								Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Note: Gauge Pressure P1 is approximately 1.1 psig									
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003													
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003				Pressure P1is corrected for 31.25 inches of water tubing									
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006									at 25C		x 1000		
12																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
13	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
14	9/2/2004	4:00:30 PM		30.3	26.004	25.022	26.491	25.558		48.934	53.008	17.485	32.389	-1.212	-6.255		50.09	0.082	14.643	0.003		0	0	51.9	11.9	40.7	2.803	0.012	0.010	0.000	0.249	0.21	
15	9/2/2004	4:01:30 PM		30.085	25.987	25.021	26.38	25.522		45.686	53.041	17.423	29.015	1.24	22.833		49.036	0.003	14.643	0.004		1.00	0.01667	51.9	11.7	37.4	2.575	0.000	0.000	0.000	0.010	0.01	
16	9/2/2004	4:02:30 PM		29.409	25.997	25.041	26.385	25.397		32.994	52.921	17.361	16.06	14.109	21.818		48.871	0.003	14.643	0.003		2.00	0.03333	51.8	11.6	24.5	1.691	0.000	0.000	0.000	0.015	0.01	
17	9/2/2004	4:03:30 PM		29.512	25.996	25.064	26.309	25.265		16.365	52.735	17.238	-0.342	30.851	20.754		47.906	0.003	14.643	0.003		3.00	0.05	51.6	11.4	8.0	0.552	0.000	0.000	0.000	0.047	0.04	
18	9/2/2004	4:04:30 PM		30.309	25.988	25.006	26.335	25.382		7.69	51.462	12.08	-3.855	38.43	52.456		51.827	0.003	14.643	0.004		4.00	0.06667	50.3	12.3	1.9	0.132	0.000	0.000	0.000	0.193	0.16	
19	9/2/2004	4:05:30 PM		28.577	25.991	24.989	26.258	25.39		44.153	51.752	13.738	31.088	1.564	0.362		48.967	0.179	14.643	0.003		5.00	0.08333	50.6	11.7	37.6	2.594	0.026	0.023	0.001	0.617	0.52	
20	9/2/2004	4:06:30 PM		28.31	25.997	24.95	26.254	25.321		45.717	52.521	15.033	31.57	0.78	0.406		48.609	0.116	14.643	0.003		6.00	0.1	51.4	11.6	38.6	2.664	0.017	0.015	0.000	0.392	0.33	
21	9/2/2004	4:07:30 PM		28.126	25.998	24.976	26.21	25.282		45.549	52.38	15.76	30.622	0.722	0.44		49.856	0.097	14.643	0.003		7.00	0.11667	51.3	11.9	38.1	2.626	0.014	0.013	0.000	0.334	0.28	
22	9/2/2004	4:08:30 PM		27.324	25.987	24.995	26.119	25.091		45.653	52.417	16.377	30.007	0.678	0.472		49.228	0.089	14.643	0.003		8.00	0.13333	51.3	11.7	37.8	2.608	0.013	0.012	0.000	0.316	0.27	
23	9/2/2004	4:09:30 PM		27.144	25.987	25.015	26.084	25.081		45.852	52.704	16.669	29.955	0.722	0.513		48.617	0.084	14.643	0.003		9.00	0.15	51.6	11.6	37.9	2.613	0.012	0.011	0.000	0.299	0.25	
24	9/2/2004	4:10:30 PM		27.112	25.975	25.038	26.047	25.084		46.003	52.817	16.69	30.122	0.748	0.547		48.2	0.081	14.643	0.004		10.00	0.16667	51.7	11.5	38.1	2.624	0.012	0.011	0.000	0.287	0.24	
25	9/2/2004	4:11:30 PM		26.948	25.98	25.068	26.027	25.094		46.259	53.124	16.902	30.068	0.794	0.57		47.824	0.08	14.643	0.003		11.00	0.18333	52.0	11.4	38.2	2.631	0.011	0.011	0.000	0.300	0.25	
26	9/2/2004	4:12:30 PM		27.111	25.969	25.072	26.032	25.134		49.641	53.056	16.865	33.83	-1.215	-5.448		46.343	0.054	14.643	0.003		12.00	0.2	51.9	11.0	41.7	2.878	0.008	0.008	0.000	0.185	0.16	
27	9/2/2004	4:13:30 PM		27.091	25.973	25.112	26.031	25.043		49.438	52.834	16.954	33.469	-1.212	-5.795		47.885	0.087	14.643	0.004		13.00	0.21667	51.7	11.4	41.5	2.858	0.012	0.012	0.000	0.300	0.25	
28	9/2/2004	4:14:30 PM		27.03	25.972	25.135	26.055	25.042		49.643	52.903	17.188	33.323	-1.212	-6.119		48.106	0.075	14.643	0.003		14.00	0.23333	51.8	11.5	41.5	2.860	0.011	0.011	0.000	0.258	0.22	
29	9/2/2004	4:15:30 PM		26.983	25.971	25.149	26.013	25.04		49.726	52.94	16.987	33.662	-1.215	-6.22		47.463	0.079	14.643	0.003		15.00	0.25	51.8	11.3	41.7	2.875	0.011	0.011	0.000	0.270	0.23	
30	9/2/2004	4:16:30 PM		26.938	25.961	25.164	25.968	24.93		49.927	53.006	17.023	33.932	-1.215	-6.229		50.202	0.078	14.643	0.003		16.00	0.26667	51.9	12.0	41.9	2.891	0.011	0.011	0.000	0.265	0.23	
31	9/2/2004	4:17:30 PM		26.894	25.961	25.204	25.963	24.95		49.033	52.243	17.929	32.141	-1.215	-6.232		50.227	0.076	14.643	0.004		17.00	0.28333	51.1	12.0	40.6	2.798	0.011	0.011	0.000	0.267	0.23	
32	9/2/2004	4:18:30 PM		26.844	25.956	25.214	25.928	24.945		49.164	52.561	17.632	32.432	-1.212	-6.168		47.399	0.07	14.643	0.003		18.00	0.3	51.4	11.3	40.8	2.813	0.010	0.010	0.000	0.244	0.21	
33	9/2/2004	4:19:30 PM		26.782	25.939	25.233	25.927	24.959		49.193	52.467	17.548	32.504	-1.212	-6.269		50.859	0.075	14.643	0.003		19.00	0.31667	51.3	12.1	40.8	2.816	0.011	0.011	0.000	0.261	0.22	
34	9/2/2004	4:20:30 PM		26.738	25.929	25.233	25.947	24.919		49.278	52.417	17.485	32.705	-1.215	-6.266		49.361	0.076	14.643	0.003		20.00	0.33333	51.3	11.8	41.0	2.826	0.011	0.011	0.000	0.264	0.22	
35	9/2/2004	4:21:30 PM		26.703	25.93	25.249	25.967	24.93		48.963	52.107	17.293	32.656	-1.215	-6.266		48.529	0.075	14.643	0.003		21.00	0.35	51.0	11.6	40.8	2.814	0.011	0.011	0.000	0.261	0.22	
36	9/2/2004	4:22:30 PM		26.654	25.921	25.264	25.963	24.945		48.608	51.597	17.807	31.802	-1.212	-6.272		49.873	0.074	14.643	0.003		22.00	0.36667	50.5	11.9	40.2	2.772	0.011	0.011	0.000	0.262	0.22	
37	9/2/2004	4:23:30 PM		26.614	25.916	25.284	25.938	24.91		48.988	52.339	17.892	31.876	-1.212	-6.272		51.153	0.074	14.643	0.003		23.00	0.38333	51.2	12.2	40.4	2.788	0.011	0.011	0.000	0.260	0.22	
38	9/2/2004	4:24:30 PM		26.573	25.904	25.293	25.907	24.909		48.895	52.162	18.063	31.654	-1.212	-6.275		49.147	0.074	14.643	0.003		24.00	0.4	51.0	11.7	40.3	2.777	0.011	0.011	0.000	0.261	0.22	
39	9/2/2004	4:25:30 PM		26.537	25.904	25.317	25.911	24.943		48.822	52.036	17.805	32.092	-1.212	-6.275		51.135	0.074	14.643	0.003		25.00	0.41667	50.9	12.2	40.5	2.789	0.011	0.011	0.000	0.260	0.22	
40	9/2/2004	4:26:30 PM		26.496	25.897	25.331	25.89	24.877		48.899	52.127	17.717	32.124	-1.212	-6.269		50.137	0.074	14.643	0.003		26.00	0.43333	51.0	11.9	40.5	2.793	0.011	0.010	0.000	0.259	0.22	
41	9/2/2004	4:27:30 PM		26.46	25.886	25.345	25.888	24.946		48.778	51.924	17.647	32.028	-1.215	-6.278		49.839	0.074	14.643	0.003		27.00	0.45	50.8	11.9	40.4	2.786	0.011	0.010	0.000	0.260	0.22	
42	9/2/2004	4:28:30 PM		26.438	25.889	25.367	25.911	24.993		48.994	52.148	17.536	32.582	-1.212	-6.272		51.635	0.074	14.643	0.004		28.00	0.46667	51.0	12.3	40.8	2.812	0.011	0.010	0.000	0.257	0.22	
43	9/2/2004	4:29:30 PM		26.412	25.888	25.372	25.931	25.068		48.895	52.024	17.72	32.024	-1.215	-6.272		50.029	0.075	14.643	0.003		29.00	0.48333	50.9	11.9	40.5	2.790	0.011	0.011	0.000	0.263	0.22	
44	9/2/2004	4:30:30 PM		26.386	25.893	25.401	25.985	25.132		48.822	52.121	17.494	32.143	-1.209	-6.275		49.706	0.074	14.643	0.003		30.00	0.5	51.0	11.8	40.5	2.791	0.011	0.010	0.000	0.259	0.22	
45	9/2/2004	4:31:30 PM		26.376	25.897	25.42	26.054	25.206		48.986	52.332	17.635	32.112	-1.212	-6.269		52.05	0.074	14.643	0.004		31.00	0.51667	51.2	12.4	40.5	2.796	0.011	0.010	0.000	0.258	0.22	
46	9/2/2004	4:32:30 PM		26.351	25.892	25.41	26.084	25.191		48.751	51.995	17.446	32.262	-1.212	-6.272		50.68	0.074	14.643	0.003		32.00	0.53333	50.9	12.1	40.5	2.793	0.011	0.010	0.000	0.259	0.22	
47	9/2/2004	4:33:30 PM		26.341	25.893	25.426	26.145	25.242		48.975	52.272	17.465	32.256	-1.212	-6.275		50.588	0.074	14.643	0.003		33.00	0.55	51.1	12.0	40.6	2.800	0.011	0.010	0.000	0.258	0.22	
48	9/2/2004	4:34:30 PM		26.321	25.892	25.425	26.204	25.316		48.623	51.843	17.541	31.966	-1.212	-6.275		52.449	0.074	14.643	0.003		34.00	0.56667	50.7	12.5	40.3	2.778	0.011	0.010	0.000	0.260	0.22	
49	9/2/2004	4:35:30 PM		26.322	25.913	25.452	26.261	25.288		48.764	52.098	17.504	32.122	-1.212	-6.272		50.319	0.074	14.643	0.003		35.00	0.58333	51.0	12.0	40.4	2.788	0.011	0.010	0.000	0.259	0.22	
50	9/2/2004	4:36:30 PM		26.293	25.904	25.438	26.256	25.333		48.422	51.462	17.495	31.911	-1.215	-6.272		51.863	0.074	14.643	0.003		36.00	0.6	50.3	12.4	40.2	2.769	0.011	0.010	0.000	0.261	0.22	
51	9/2/2004	4:37:30 PM		26.269	25.905	25.433	26.307	25.334		48.818	51.961	17.568	32.108	-1.215	-6.275		50.513	0.074	14.643	0.003		37.00	0.61667	50.8	12.0	40.5	2.790	0.011	0.010	0.000	0.259	0.22	
52	9/2/2004	4:38:30 PM		26.261	25.907	25.455	26.319	25.236		49.033	52.333	17.591	32.309	-1.212	-6.269		51.514	0.074	14.643	0.003		38.00	0.63333	51.2	12.3	40.7	2.804	0.011	0.010	0.000	0.257	0.22	
53	9/2/2004	4:39:30 PM		26.246	25.907	25.465	26.264	25.256		48.901	52.009	17.42	32.574	-1.212	-6.275		51.009	0.074	14.643	0.003		39.00	0.65	50.9	12.1	40.7	2.809	0.011	0.010	0.000	0.257	0.22	
54	9/2/2004	4:40:30 PM		26.221	25.897	25.451	26.185	25.232		48.919	52.059	17.484	32.321	-1.212	-6.275		52.332	0.074	14.643	0.003		40.00	0.66667	50.9	12.5	40.6	2.801	0.011	0.010	0.000	0.258	0.22	
55	9/2/2004	4:41:30 PM		26.208	25.904	25.452	26.166	25.173		48.785	52.007	17.38	32.342	-1.215	-6.272		49.412	0.074	14.643	0.003		41.00	0.68333	50.9	11.8	40.6	2.797	0.011	0.010	0.000	0.258	0.22	
56	9/2/2004	4:42:30 PM		26.182	25.893	25.452	26.15	25.108		48.731	51.939	17.43	32.25	-1.212	-6.272		50.45	0.074	14.643	0.003		42.00	0.7	50.8	12.0	40.5	2.792	0.011	0.010	0.000	0.258	0.22	
57	9/2/2004	4:43:30 PM		26.166	25.892	25.446	26.09	25.092		48.905	52.032	17.246	32.687	-1.212	-6.272		49.499	0.074	14.643	0.003		43.00	0.71667	50.9	11.8	40.8	2.813	0.011	0.010	0.000	0.256	0.22	
58	9/2/2004	4:44:30 PM		26.145	25.886	25.44	26.058	25.035		48.693	51.819	17.44	32.135	-1.215	-6.275		51.902	0.074	14.643	0.003		44.00	0.73333	50.7	12.4	40.4	2.786	0.011	0.010	0.000	0.259	0.22	
59	9/2/2004	4:45:30 PM		26.154	25.9	25.458	26.042	25.099		48.834	52.088	17.414	32.326	-1.209	-6.269		50.056	0.074	14.643	0.003		45.00	0.75	51.0	11.9	40.6	2.798	0.011	0.010	0.000	0.258	0.22	
60	9/2/2004	4:46:30 PM		26.132	25.893	25.437	26.071	25.183		48.604	51.901	17.288	32.211	-1.209	-6.269		47.758	0.073	14.643	0.004		46.00	0.76667	50.8	11.4	40.4	2.786	0.010	0.010	0.000	0.255	0.22	
61																																	
62		Averages		26.6	25.9	25.3	26.1	25.1	#	48.7	52.3	17.4	32.2	-1.0	-5.5	#	49.9	0.1	14.6	0.0	#	27.0	0.5	51.1	11.9	40.4	2.8	0.0108	0.0106	0.0003	0.2626	0.2	
63		Maximum		27.3	26.0	25.5	26.3	25.3	#	49.9	53.1	18.1	33.9	0.8	0.6	#	52.4	0.1	14.6	0.0	#	46.0	0.8	52.0	12.5	41.9	2.9	0.0127	0.0124	0.0003	0.3156	0.3	
64		Median		26.5	25.9	25.3	26.0	25.1	#	48.9	52.1	17.5	32.2	-1.2	-6.3	#	50.1	0.1	14.6	0.0	#	27.0	0.5	51.0	11.9	40.5	2.8	0.0106	0.0105	0.0003	0.2591	0.2	
65		Minimum		26.1	25.9	25.0	25.9	24.9	#	45.7	51.5	16.4	30.0	-1.2	-6.3	#	46.3	0.1	14.6	0.0	#	8.0	0.1	50.3	11.0	37.8	2.6	0.0077	0.0077	0.0002	0.1849	0.2	
66		2 x Std Dev		0.682	0.067	0.291	0.241	0.263	#	1.956	0.801	0.721	1.794	1.182	4.106	#	2.990	0.010	0.000	0.001	#	22.509	0.375	0.801	0.712	1.843	0.127	0.001	0.001	0.000	0.038	0.033	
67		Number of Points Used*		39	39	39	39	39	0	39	39	39	39	39	39	0	39	39	39	39	0	39	39	39	39	39	39	39	39	39	39	39	
68		* Backpulse points in box are not included																															
69																								Average for the last 10 minutes =				0.0106	0.0105	gpm/ft2			
70																								2xStandard Deviation =				0.0001	0.0001	gpm/ft2			

RUN # TEMP6; CAMPAIGN IV HIGH TEMPERATURE TEST



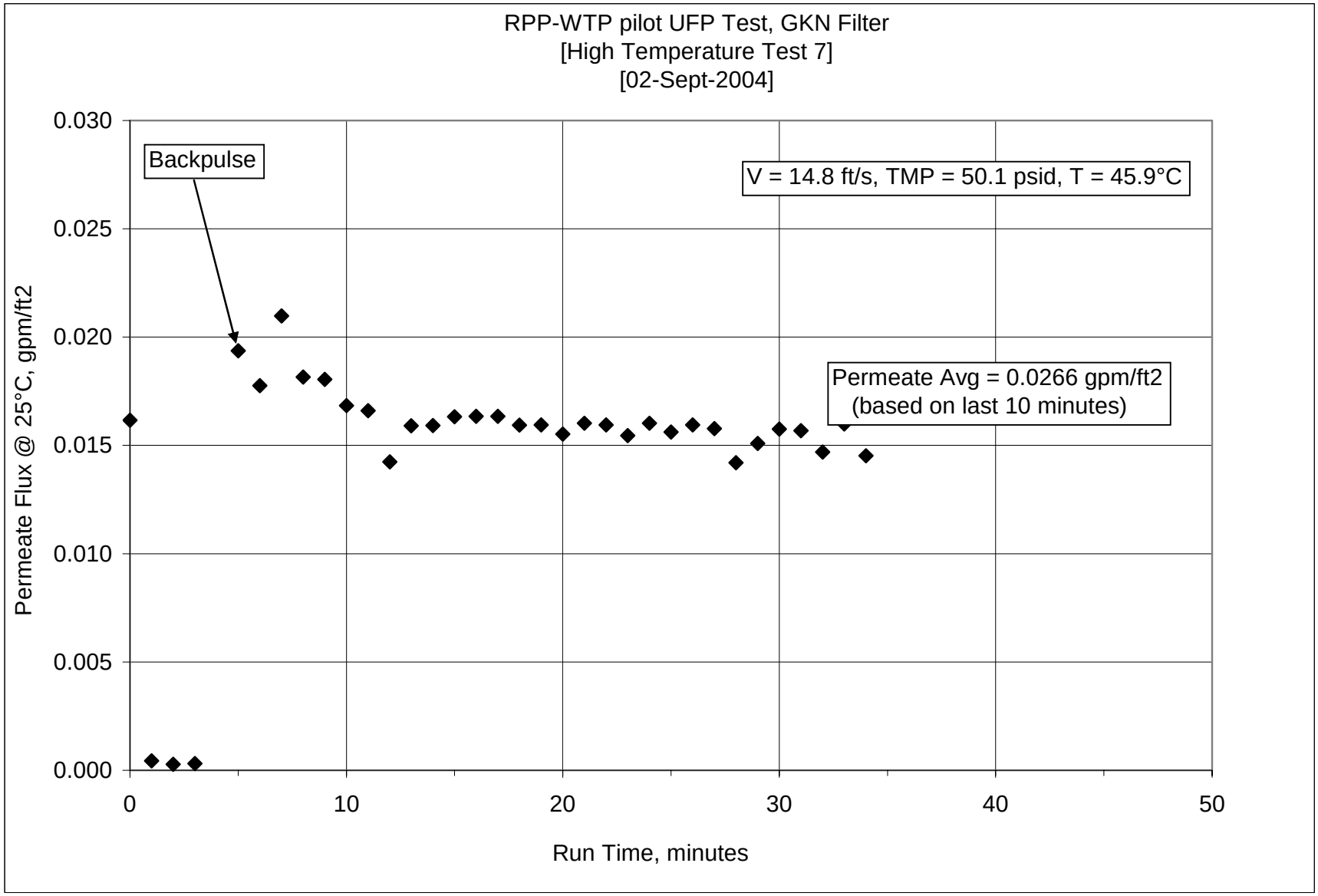
RUN # TEMP6; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	5:08:34 PM		32.392	25.665	37.919	24.705	25.145		60.714	64.514	22.307	39.389	-1.212	-6.096		61.044	0.126	14.643	0.003		0	0	63.4	14.5	50.1	3.451	0.018	0.015	0.000	0.294	0.25	
18	9/2/2004	5:09:34 PM		32.808	25.66	38.199	24.776	25.29		58.623	65.106	22.108	37.103	0.14	17.754		63.9	0.003	14.643	0.004		1.00	0.01667	64.0	15.2	47.9	3.300	0.000	0.000	0.000	0.007	0.01	
19	9/2/2004	5:10:34 PM		35.517	25.66	38.341	24.966	25.29		30.265	64.592	21.816	9.051	28.778	20.598		57.184	0.003	14.643	0.004		2.00	0.03333	63.5	13.6	19.7	1.355	0.000	0.000	0.000	0.016	0.01	
20	9/2/2004	5:11:34 PM		34.921	25.665	38.449	25.167	25.44		17.4	64.58	20.99	-3.004	41.973	19.971		62.484	0.003	14.643	0.003		3.00	0.05	63.5	14.9	7.2	0.496	0.000	0.000	0.000	0.046	0.04	
21	9/2/2004	5:12:34 PM		29.335	25.657	38.598	25.354	25.571		-0.599	63.003	16.018	-16.043	58.797	59.48		59.78	0.003	14.643	0.779		4.00	0.06667	61.9	14.2	-8.3	-0.574	0.000	0.000	0.000	-0.046	-0.04	
22	9/2/2004	5:13:34 PM		36.583	25.659	38.737	25.481	25.708		55.587	63.56	18.125	38.195	2.019	0.354		63.33	0.299	14.643	0.003		5.00	0.08333	62.4	15.1	46.9	3.233	0.043	0.031	0.001	0.667	0.57	
23	9/2/2004	5:14:34 PM		36.398	25.661	38.867	25.693	25.586		57.763	64.563	19.814	38.794	0.722	0.429		63.051	0.197	14.643	0.003		6.00	0.1	63.4	15.0	48.3	3.329	0.028	0.021	0.000	0.429	0.36	
24	9/2/2004	5:15:34 PM		36.061	25.673	38.933	25.901	25.528		57.678	64.443	20.124	38.275	0.8	0.49		59.309	0.18	14.643	0.003		7.00	0.11667	63.3	14.1	48.0	3.308	0.026	0.019	0.000	0.398	0.34	
25	9/2/2004	5:16:34 PM		35.958	25.674	38.968	26.117	25.519		58.267	65.417	20.54	38.222	0.887	0.559		64.405	0.173	14.643	0.003		8.00	0.13333	64.3	15.3	48.2	3.326	0.025	0.018	0.000	0.381	0.32	
26	9/2/2004	5:17:34 PM		35.194	25.688	39.006	26.275	25.632		60.967	64.829	20.354	41.559	-1.212	-5.645		64.369	0.183	14.643	0.003		9.00	0.15	63.7	15.3	51.3	3.534	0.026	0.020	0.000	0.387	0.33	
27	9/2/2004	5:18:34 PM		35.133	25.71	39.018	26.418	25.72		60.243	63.888	21.049	40.04	-1.215	-5.798		64.225	0.161	14.643	0.003		10.00	0.16667	62.8	15.3	50.1	3.457	0.023	0.017	0.000	0.349	0.30	
28	9/2/2004	5:19:34 PM		35.259	25.763	39.09	26.566	25.783		60.39	63.991	20.787	40.45	-1.215	-5.896		58.466	0.171	14.643	0.003		11.00	0.18333	62.9	13.9	50.4	3.476	0.024	0.017	0.000	0.332	0.28	
29	9/2/2004	5:20:34 PM		35.435	25.788	39.133	26.63	25.807		60.04	63.624	20.735	40.118	-1.212	-5.896		64.563	0.172	14.643	0.003		12.00	0.2	62.5	15.4	50.1	3.453	0.025	0.017	0.000	0.336	0.29	
30	9/2/2004	5:21:34 PM		36.669	25.792	39.123	26.705	25.811		59.739	63.486	20.525	39.866	-1.212	-5.902		60.769	0.171	14.643	0.003		13.00	0.21667	62.4	14.5	49.8	3.434	0.024	0.017	0.000	0.336	0.29	
31	9/2/2004	5:22:34 PM		37.075	25.8	39.125	26.742	25.804		60.038	63.799	20.194	40.534	-1.212	-5.905		68.239	0.17	14.643	0.003		14.00	0.23333	62.7	16.3	50.3	3.467	0.024	0.017	0.000	0.331	0.28	
32	9/2/2004	5:23:34 PM		37.331	25.79	39.116	26.698	25.76		60.044	63.767	20.365	40.483	-1.212	-5.694		65.283	0.17	14.643	0.003		15.00	0.25	62.6	15.5	50.3	3.465	0.024	0.017	0.000	0.331	0.28	
33	9/2/2004	5:24:34 PM		37.381	25.806	39.127	26.649	25.735		60.39	63.803	20.249	41.066	-1.215	-5.917		62.475	0.17	14.643	0.003		16.00	0.26667	62.7	14.9	50.7	3.498	0.024	0.017	0.000	0.328	0.28	
34	9/2/2004	5:25:34 PM		37.426	25.817	39.123	26.63	25.721		60.077	63.815	20.132	40.869	-1.212	-5.789		67.819	0.156	14.643	0.003		17.00	0.28333	62.7	16.2	50.5	3.480	0.022	0.015	0.000	0.303	0.26	
35	9/2/2004	5:26:34 PM		37.446	25.842	39.147	26.665	25.651		59.963	63.738	20.035	40.828	-1.212	-5.865		68.856	0.162	14.643	0.003		18.00	0.3	62.6	16.4	50.4	3.475	0.023	0.016	0.000	0.315	0.27	
36	9/2/2004	5:27:34 PM		37.48	25.832	39.137	26.645	25.571		59.834	63.488	20.159	40.666	-1.209	-5.876		62.949	0.169	14.643	0.003		19.00	0.31667	62.4	15.0	50.3	3.465	0.024	0.017	0.000	0.329	0.28	
37	9/2/2004	5:28:34 PM		37.474	25.841	39.151	26.604	25.586		59.81	63.434	20.17	40.465	-1.212	-5.795		62.467	0.168	14.643	0.003		20.00	0.33333	62.3	14.9	50.1	3.457	0.024	0.016	0.000	0.328	0.28	
38	9/2/2004	5:29:34 PM		37.468	25.849	39.164	26.562	25.529		60.488	64.225	20.342	40.996	-1.212	-5.931		64.88	0.167	14.643	0.003		21.00	0.35	63.1	15.5	50.7	3.498	0.024	0.016	0.000	0.322	0.27	
39	9/2/2004	5:30:34 PM		37.534	25.862	39.196	26.554	25.541		60.367	64.072	20.14	41.007	-1.212	-5.784		66.144	0.17	14.643	0.004		22.00	0.36667	63.0	15.8	50.7	3.495	0.024	0.017	0.000	0.328	0.28	
40	9/2/2004	5:31:34 PM		37.536	25.854	39.159	26.481	25.678		60.004	63.556	20.217	40.596	-1.212	-5.917		61.814	0.163	14.643	0.003		23.00	0.38333	62.4	14.7	50.3	3.468	0.023	0.016	0.000	0.317	0.27	
41	9/2/2004	5:32:34 PM		37.548	25.857	39.171	26.484	25.746		59.838	63.5	20.033	40.719	-1.209	-5.899		61.541	0.161	14.643	0.004		24.00	0.4	62.4	14.7	50.3	3.467	0.023	0.016	0.000	0.313	0.27	
42	9/2/2004	5:33:34 PM		37.556	25.845	39.164	26.417	25.579		59.768	63.488	20.012	40.658	-1.206	-5.919		63.806	0.165	14.643	0.004		25.00	0.41667	62.4	15.2	50.2	3.462	0.024	0.016	0.000	0.322	0.27	
43	9/2/2004	5:34:34 PM		37.563	25.827	39.171	26.364	25.471		59.971	63.664	20.168	40.699	-1.212	-5.911		65.742	0.163	14.643	0.003		26.00	0.43333	62.5	15.7	50.3	3.470	0.023	0.016	0.000	0.317	0.27	
44	9/2/2004	5:35:34 PM		37.55	25.813	39.173	26.331	25.448		59.959	63.678	20.211	40.592	-1.209	-5.937		61.733	0.166	14.643	0.004		27.00	0.45	62.6	14.7	50.3	3.466	0.024	0.016	0.000	0.323	0.27	
45	9/2/2004	5:36:34 PM		37.568	25.811	39.181	26.339	25.401		60.096	64.18	20.238	40.555	-1.209	-5.844		64.77	0.163	14.643	0.003		28.00	0.46667	63.1	15.4	50.3	3.470	0.023	0.016	0.000	0.317	0.27	
46	9/2/2004	5:37:34 PM		37.592	25.821	39.199	26.323	25.465		59.642	63.268	19.907	40.67	-1.209	-5.824		63.368	0.165	14.643	0.004		29.00	0.48333	62.1	15.1	50.2	3.458	0.024	0.016	0.000	0.322	0.27	
47	9/2/2004	5:38:34 PM		37.643	25.838	39.226	26.34	25.472		60.004	63.689	20.162	40.619	-1.215	-5.87		62.502	0.154	14.643	0.003		30.00	0.5	62.6	14.9	50.3	3.469	0.022	0.015	0.000	0.299	0.25	
48	9/2/2004	5:39:34 PM		37.636	25.84	39.253	26.363	25.495		59.826	63.691	19.967	40.643	-1.215	-5.873		62.54	0.155	14.643	0.003		31.00	0.51667	62.6	14.9	50.2	3.463	0.022	0.015	0.000	0.301	0.26	
49	9/2/2004	5:40:34 PM		37.645	25.84	39.302	26.378	25.495		59.586	63.49	19.871	40.516	-1.209	-5.931		63.583	0.162	14.643	0.003		32.00	0.53333	62.4	15.1	50.1	3.451	0.023	0.016	0.000	0.316	0.27	
50	9/2/2004	5:41:34 PM		37.619	25.808	39.275	26.326	25.517		59.832	63.442	20.042	40.686	-1.212	-5.917		67.947	0.161	14.643	0.003		33.00	0.55	62.3	16.2	50.3	3.465	0.023	0.016	0.000	0.313	0.27	
51	9/2/2004	5:42:34 PM		37.661	25.816	39.327	26.399	25.48		60.033	64.066	20.113	40.658	-1.212	-5.893		59.298	0.159	14.643	0.004		34.00	0.56667	62.9	14.1	50.3	3.471	0.023	0.015	0.000	0.308	0.26	
52	9/2/2004	5:43:34 PM		37.642	25.786	39.303	26.404	25.481		59.851	63.618	20.013	40.73	-1.206	-5.865		57.97	0.165	14.643	0.004		35.00	0.58333	62.5	13.8	50.3	3.467	0.024	0.016	0.000	0.320	0.27	
53	9/2/2004	5:44:34 PM		37.662	25.767	39.299	26.37	25.387		60.152	64.082	20.045	40.849	-1.215	-5.96		61.261	0.161	14.643	0.003		36.00	0.6	63.0	14.6	50.5	3.482	0.023	0.016	0.000	0.311	0.26	
54	9/2/2004	5:45:34 PM		37.692	25.778	39.334	26.396	25.383		60.116	64.114	19.938	41.011	-1.212	-5.859		67.39	0.164	14.643	0.003		37.00	0.61667	63.0	16.1	50.6	3.486	0.023	0.016	0.000	0.316	0.27	
55	9/2/2004	5:46:34 PM		37.702	25.788	39.363	26.406	25.412		59.778	63.461	19.792	40.961	-1.212	-5.908		60.072	0.16	14.643	0.004		38.00	0.63333	62.3	14.3	50.4	3.473	0.023	0.016	0.000	0.309	0.26	
56	9/2/2004	5:47:34 PM		37.721	25.793	39.368	26.455	25.457		60.181	64.004	19.921	41.029	-1.215	-5.954		62.306	0.16	14.643	0.003		39.00	0.65	62.9	14.8	50.6	3.489	0.023	0.016	0.000	0.308	0.26	
57	9/2/2004	5:48:34 PM		37.746	25.803	39.378	26.44	25.437		59.726	63.796	19.829	40.676	-1.215	-5.948		73.313	0.163	14.643	0.003		40.00	0.66667	62.7	17.5	50.2	3.461	0.023	0.016	0.000	0.316	0.27	
58	9/2/2004	5:49:34 PM		37.73	25.802	39.392	26.445	25.447		59.797	63.566	19.956	40.764	-1.215	-5.867		63.76	0.163	14.643	0.003		41.00	0.68333	62.4	15.2	50.3	3.467	0.023	0.016	0.000	0.315	0.27	
59	9/2/2004	5:50:34 PM		37.748	25.79	39.41	26.403	25.374		59.847	63.881	19.984	40.494	-1.212	-5.922		64.015	0.161	14.643	0.003		42.00	0.7	62.8	15.2	50.2	3.459	0.023	0.016	0.000	0.312	0.27	
60	9/2/2004	5:51:34 PM		37.734	25.76	39.386	26.398	25.355		59.948	63.915	19.884	40.789	-1.212	-5.879		63.983	0.158	14.643	0.003		43.00	0.71667	62.8	15.2	50.4	3.473	0.023	0.015	0.000	0.305	0.26	
61	9/2/2004	5:52:34 PM		37.737	25.744	39.35	26.377	25.369		59.762	63.454	19.98	40.67	-1.215	-5.963		64.344	0.161	14.643	0.003		44.00	0.73333	62.3	15.3	50.2	3.462	0.023	0.016	0.000	0.312	0.27	
62	9/2/2004	5:53:34 PM		37.729	25.756	39.342	26.418	25.44		60.332	64.31	19.965	41.074	-1.218	-5.974		65.229	0.162	14.643	0.003		45.00	0.75	63.2	15.5	50.7	3.496	0.023	0.016	0.000	0.311	0.26	
63	9/2/2004	5:54:34 PM		37.766	25.768	39.373	26.501	25.612		60.135	64.06	19.801	41.16	-1.212	-5.891		64.828	0.162	14.643	0.003		46.00	0.76667	62.9	15.4	50.6	3.492	0.023	0.016	0.000	0.311	0.26	
64	9/2/2004	5:55:34 PM		37.744	25.786	39.405	26.468	25.785		59.668	63.504	19.759	40.789	-1.212	-5.966		59.459	0.162	14.643	0.004		47.00	0.78333	62.4	14.2	50.2	3.463	0.023	0.016	0.000	0.314	0.27	
65	9/2/2004	5:56:34 PM		37.719	25.765	39.405	26.408	25.844		59.7	63.848	19.74	40.705	-1.212	-5.922		66.476	0.16	14.643	0.003		48.00	0.8	62.7	15.8	50.2	3.461	0.023	0.016	0.000	0.310	0.26	

RUN # TEMP6; CAMPAIGN IV HIGH TEMPERATURE TEST – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
67		Averages		37.3	25.8	39.2	26.5	25.6	#	60.0	63.8	20.1	40.7	-1.2	-5.9	#	63.9	0.2	14.6	0.0	#	28.5	0.5	62.7	15.2	50.4	3.5	0.0235	0.0161	0.0003	0.3198	0.3	
68		Maximum		37.8	25.9	39.4	26.7	25.8	#	61.0	64.8	21.0	41.6	-1.2	-5.6	#	73.3	0.2	14.6	0.0	#	48.0	0.8	63.7	17.5	51.3	3.5	0.0262	0.0199	0.0004	0.3872	0.3	
69		Median		37.6	25.8	39.2	26.4	25.5	#	60.0	63.8	20.0	40.7	-1.2	-5.9	#	63.9	0.2	14.6	0.0	#	28.5	0.5	62.6	15.2	50.3	3.5	0.0233	0.0159	0.0003	0.3160	0.3	
70		Minimum		35.1	25.7	39.0	26.3	25.4	#	59.6	63.3	19.7	39.9	-1.2	-6.0	#	58.0	0.2	14.6	0.0	#	9.0	0.2	62.1	13.8	49.8	3.4	0.0220	0.0150	0.0003	0.2990	0.3	
71		2 x Std Dev		1.445	0.077	0.228	0.246	0.298	#	0.542	0.610	0.552	0.597	0.005	0.137	#	6.013	0.011	0.000	0.001	#	23.087	0.385	0.610	1.432	0.490	0.034	0.0015	0.0016	0.0000	0.0301	0.026	
72		Number of Points Used*		40	40	40	40	40	0	40	40	40	40	40	40	0	40	40	40	40	0	40	40	40	40	40	40	40	40	40	40	40	
73		* Backpulse points in box are not included																															
74																																	
75																																	
76																							Average for the last 10 minutes =					0.0230	0.0157	gpm/ft2			
77																								2xStandard Deviation =				0.0008	0.0005	gpm/ft2			

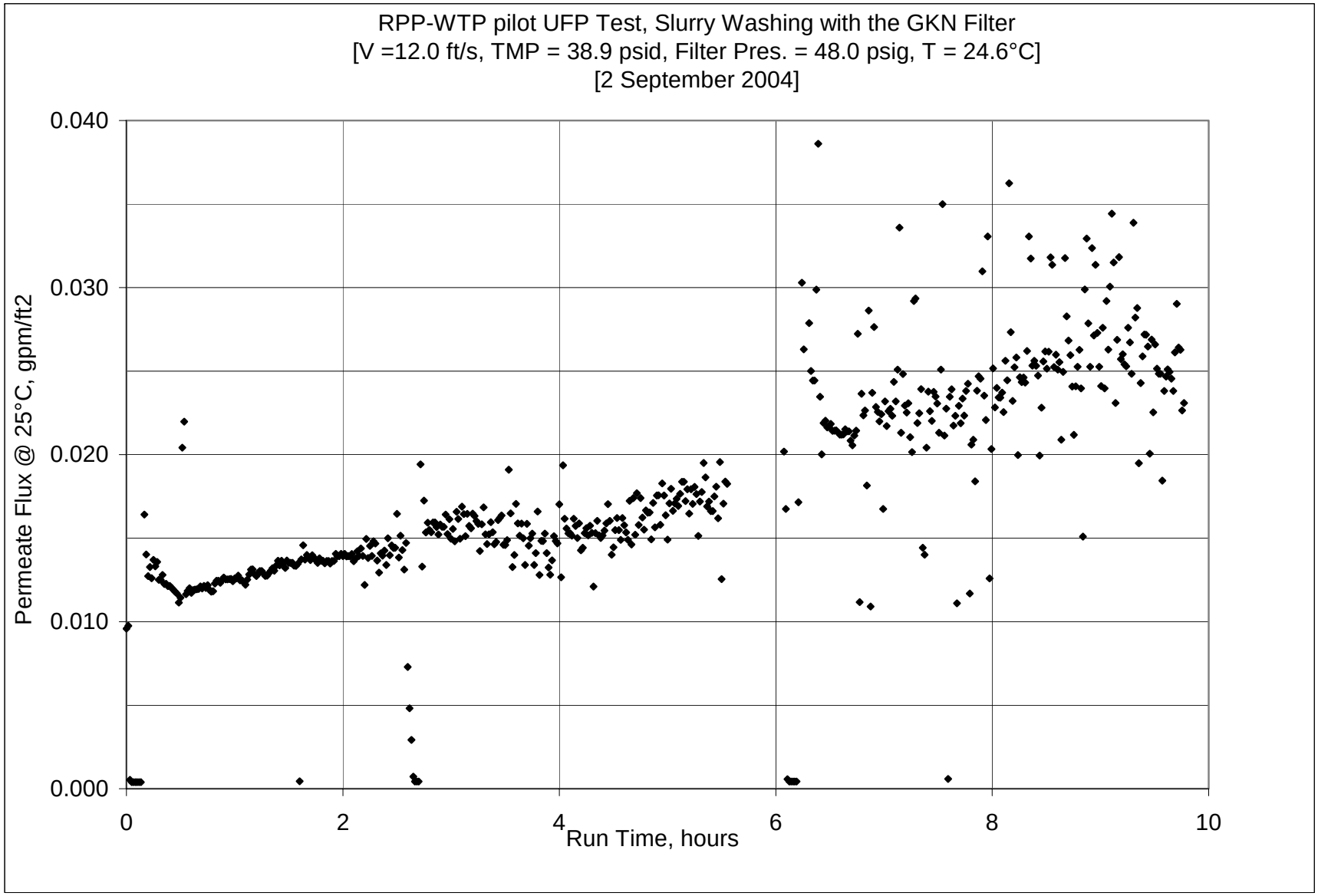
RUN # TEMP7; CAMPAIGN IV HIGH TEMPERATURE TEST



RUN # TEMP7; CAMPAIGN IV HIGH TEMPERATURE TEST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	6:07:36 PM		40.979	25.814	44.719	25.591	25.963		59.287	64.06	20.214	39.9	-1.215	-5.925		63.662	0.173	14.643	0.003		0	0	62.9	15.6	49.6	3.419	0.025	0.016	0.000	0.326	0.28	
18	9/2/2004	6:08:36 PM		42.958	25.833	44.941	25.515	25.877		46.41	64.288	20.268	26.62	11.943	21.009		66.491	0.005	14.643	0.003		1.00	0.01667	63.2	16.3	36.5	2.518	0.001	0.000	0.000	0.012	0.01	
19	9/2/2004	6:09:36 PM		41.505	25.838	45.117	25.485	25.833		14.841	63.929	19.808	-4.446	43.742	20.688		57.025	0.003	14.643	0.004		2.00	0.03333	62.8	14.0	5.2	0.358	0.000	0.000	0.000	0.053	0.05	
20	9/2/2004	6:10:36 PM		36.743	25.837	45.271	25.559	25.726		-1.945	62.229	15.492	-16.948	59.584	60.663		60.433	0.003	14.643	0.946		3.00	0.05	61.1	14.8	-9.4	-0.651	0.000	0.000	0.000	-0.033	-0.03	
21	9/2/2004	6:11:36 PM		43.035	25.847	45.417	25.619	25.961		55.075	62.721	18.159	37.711	1.868	0.38		66.756	0.317	14.643	0.003		4.00	0.06667	61.6	16.4	46.4	3.199	0.045	0.028	0.001	0.606	0.52	
22	9/2/2004	6:12:36 PM		44.237	25.848	45.597	25.69	26.032		56.145	63.112	19.311	37.546	1.037	0.455		62.125	0.225	14.643	0.003		5.00	0.08333	62.0	15.2	46.8	3.230	0.032	0.019	0.000	0.413	0.35	
23	9/2/2004	6:13:36 PM		44.744	25.884	45.773	25.817	26.088		56.487	63.403	19.491	37.682	1.078	0.53		66.774	0.209	14.643	0.003		6.00	0.1	62.3	16.4	47.1	3.246	0.030	0.018	0.000	0.377	0.32	
24	9/2/2004	6:14:36 PM		43.953	25.891	45.867	25.883	26.099		59.695	63.736	19.58	40.875	-1.212	-5.078		66.128	0.242	14.643	0.003		7.00	0.11667	62.6	16.2	50.3	3.467	0.035	0.021	0.000	0.417	0.36	
25	9/2/2004	6:15:36 PM		43.084	25.917	45.941	25.985	26.201		60.245	64.159	19.696	41.372	-1.215	-5.743		60.556	0.205	14.643	0.003		8.00	0.13333	63.0	14.8	50.8	3.503	0.029	0.018	0.000	0.357	0.30	
26	9/2/2004	6:16:36 PM		43.71	25.93	46.041	26.058	26.288		60.6	64.414	19.844	41.386	-1.212	-5.714		57.98	0.207	14.643	0.004		9.00	0.15	63.3	14.2	51.0	3.516	0.030	0.018	0.000	0.354	0.30	
27	9/2/2004	6:17:36 PM		43.892	25.948	46.107	26.121	26.336		59.22	62.563	19.356	40.98	-1.212	-5.682		53.882	0.194	14.643	0.004		10.00	0.16667	61.4	13.2	50.1	3.454	0.028	0.017	0.000	0.336	0.29	
28	9/2/2004	6:18:36 PM		43.895	25.961	46.1	26.284	25.98		58.928	62.632	19.428	40.395	-1.209	-5.792		59.716	0.202	14.643	0.004		11.00	0.18333	61.5	14.6	49.7	3.424	0.029	0.017	0.000	0.334	0.28	
29	9/2/2004	6:19:36 PM		43.989	25.967	46.053	26.325	25.332		59.129	62.797	19.213	40.725	-1.215	-5.541		58.266	0.173	14.643	0.003		12.00	0.2	61.7	14.3	49.9	3.442	0.025	0.014	0.000	0.285	0.24	
30	9/2/2004	6:20:36 PM		44.101	25.962	46	26.265	25.082		59.428	63.164	19.357	40.758	-1.212	-5.833		61.028	0.193	14.643	0.003		13.00	0.21667	62.0	15.0	50.1	3.454	0.028	0.016	0.000	0.318	0.27	
31	9/2/2004	6:21:36 PM		44.109	25.971	45.984	26.189	25.261		58.943	62.739	19.319	40.454	-1.215	-5.599		61.028	0.193	14.643	0.003		14.00	0.23333	61.6	15.0	49.7	3.427	0.028	0.016	0.000	0.320	0.27	
32	9/2/2004	6:22:36 PM		44.072	25.968	45.971	26.106	25.198		59.193	62.816	19.314	40.756	-1.212	-5.804		59.397	0.198	14.643	0.004		15.00	0.25	61.7	14.6	50.0	3.446	0.028	0.016	0.000	0.327	0.28	
33	9/2/2004	6:23:36 PM		44.087	25.964	45.928	26.011	25.163		59.096	62.505	19.304	40.711	-1.212	-5.659		61.203	0.198	14.643	0.003		16.00	0.26667	61.4	15.0	49.9	3.441	0.028	0.016	0.000	0.328	0.28	
34	9/2/2004	6:24:36 PM		44.221	25.971	45.925	26.008	25.39		58.922	62.458	19.371	40.567	-1.212	-5.636		65.051	0.198	14.643	0.003		17.00	0.28333	61.3	15.9	49.7	3.430	0.028	0.016	0.000	0.329	0.28	
35	9/2/2004	6:25:36 PM		44.154	25.967	45.902	25.915	25.172		59.366	62.928	19.416	40.809	-1.212	-5.813		57.809	0.193	14.643	0.004		18.00	0.3	61.8	14.2	50.1	3.453	0.028	0.016	0.000	0.318	0.27	
36	9/2/2004	6:26:36 PM		44.048	25.958	45.894	25.911	25.143		59.144	62.874	19.213	40.748	-1.212	-5.813		59.981	0.193	14.643	0.003		19.00	0.31667	61.8	14.7	49.9	3.444	0.028	0.016	0.000	0.319	0.27	
37	9/2/2004	6:27:36 PM		44.094	25.965	45.92	25.887	24.93		59.258	62.936	19.129	41.048	-1.212	-5.818		60.677	0.188	14.643	0.003		20.00	0.33333	61.8	14.9	50.2	3.458	0.027	0.016	0.000	0.310	0.26	
38	9/2/2004	6:28:36 PM		44.168	25.966	45.906	25.779	24.796		59.279	62.681	19.208	40.953	-1.212	-5.76		59.18	0.194	14.643	0.004		21.00	0.35	61.6	14.5	50.1	3.455	0.028	0.016	0.000	0.320	0.27	
39	9/2/2004	6:29:36 PM		44.168	25.957	45.888	25.784	25.052		59.405	62.94	19.176	40.992	-1.212	-5.755		60.039	0.193	14.643	0.004		22.00	0.36667	61.8	14.7	50.2	3.461	0.028	0.016	0.000	0.318	0.27	
40	9/2/2004	6:30:36 PM		44.144	25.942	45.888	25.809	24.772		59.171	63.113	19.219	40.639	-1.212	-5.746		67.363	0.187	14.643	0.003		23.00	0.38333	62.0	16.5	49.9	3.441	0.027	0.015	0.000	0.310	0.26	
41	9/2/2004	6:31:36 PM		44.116	25.943	45.904	25.821	25.023		59.418	63.059	19.239	40.937	-1.212	-5.784		70.366	0.194	14.643	0.003		24.00	0.4	61.9	17.2	50.2	3.460	0.028	0.016	0.000	0.319	0.27	
42	9/2/2004	6:32:36 PM		44.312	25.94	45.9	25.772	25.369		58.897	62.594	19.124	40.574	-1.215	-5.656		60.327	0.189	14.643	0.003		25.00	0.41667	61.5	14.8	49.7	3.429	0.027	0.016	0.000	0.314	0.27	
43	9/2/2004	6:33:36 PM		44.222	25.932	45.892	25.799	25.606		59.364	62.528	19.297	41	-1.212	-5.847		62.734	0.193	14.643	0.003		26.00	0.43333	61.4	15.4	50.2	3.460	0.028	0.016	0.000	0.318	0.27	
44	9/2/2004	6:34:36 PM		44.337	25.941	45.901	25.883	25.89		59.538	62.926	19.237	41.175	-1.212	-5.714		62.292	0.191	14.643	0.003		27.00	0.45	61.8	15.3	50.4	3.472	0.027	0.016	0.000	0.313	0.27	
45	9/2/2004	6:35:36 PM		44.294	25.946	45.935	25.949	25.89		59.573	63.328	19.328	41.08	-1.212	-5.607		65.904	0.172	14.643	0.004		28.00	0.46667	62.2	16.2	50.3	3.470	0.025	0.014	0.000	0.282	0.24	
46	9/2/2004	6:36:36 PM		44.202	25.956	45.96	25.934	25.815		59.196	62.617	19.075	40.896	-1.212	-5.859		57.167	0.183	14.643	0.003		29.00	0.48333	61.5	14.0	50.0	3.450	0.026	0.015	0.000	0.302	0.26	
47	9/2/2004	6:37:36 PM		44.46	25.962	45.965	25.919	25.926		59.171	62.659	19.067	41.082	-1.209	-5.763		58.458	0.191	14.643	0.004		30.00	0.5	61.5	14.3	50.1	3.456	0.027	0.016	0.000	0.314	0.27	
48	9/2/2004	6:38:36 PM		44.266	25.942	45.931	25.929	25.926		59.04	62.42	19.114	40.797	-1.212	-5.865		73.366	0.19	14.643	0.003		31.00	0.51667	61.3	18.0	49.9	3.442	0.027	0.016	0.000	0.314	0.27	
49	9/2/2004	6:39:36 PM		44.231	25.941	45.945	25.914	25.845		58.992	62.458	19.009	40.945	-1.209	-5.827		65.4	0.178	14.643	0.004		32.00	0.53333	61.3	16.0	50.0	3.445	0.025	0.015	0.000	0.294	0.25	
50	9/2/2004	6:40:36 PM		44.484	25.946	45.979	25.914	25.765		59.561	63.197	19.353	41.048	-1.209	-5.769		66.728	0.194	14.643	0.004		33.00	0.55	62.1	16.4	50.3	3.468	0.028	0.016	0.000	0.318	0.27	
51	9/2/2004	6:41:36 PM		44.265	25.946	45.955	25.839	25.74		59.005	62.82	19.229	40.645	-1.212	-5.674		62.913	0.176	14.643	0.003		34.00	0.56667	61.7	15.4	49.8	3.435	0.025	0.015	0.000	0.291	0.25	
52																																	
53		Averages		44.1	26.0	45.9	26.0	25.5	#	59.3	62.9	19.3	40.9	-1.2	-5.7	#	62.0	0.2	14.6	0.0	#	20.5	0.3	61.8	15.2	50.1	3.5	0.0276	0.0161	0.0003	0.3207	0.3	
54		Maximum		44.5	26.0	46.1	26.3	26.3	#	60.6	64.4	19.8	41.4	-1.2	-5.1	#	73.4	0.2	14.6	0.0	#	34.0	0.6	63.3	18.0	51.0	3.5	0.0346	0.0210	0.0004	0.4172	0.4	
55		Median		44.1	26.0	45.9	25.9	25.5	#	59.2	62.8	19.3	40.9	-1.2	-5.8	#	60.9	0.2	14.6	0.0	#	20.5	0.3	61.7	14.9	50.1	3.5	0.0276	0.0159	0.0003	0.3179	0.3	
56		Minimum		43.1	25.9	45.9	25.8	24.8	#	58.9	62.4	19.0	40.4	-1.2	-5.9	#	53.9	0.2	14.6	0.0	#	7.0	0.1	61.3	13.2	49.7	3.4	0.0246	0.0142	0.0003	0.2821	0.2	
57		2 x Std Dev		0.514	0.035	0.123	0.306	0.918	#	0.752	0.956	0.362	0.479	0.003	0.298	#	8.378	0.025	0.000	0.001	#	16.155	0.269	0.956	2.053	0.586	0.040	0.0036	0.0026	0.0001	0.0500	0.043	
58	Number of Points Used*			28	28	28	28	28	0	28	28	28	28	28	28	0	28	28	28	28	0	28	28	28	28	28	28	28	28	28	28	28	
59		* Backpulse points in box are not included																															
60																																	
61																																	
62																							Average for the last 10 minutes =					0.0272	0.0157	gpm/ft2			
63																								2xStandard Deviation =				0.0021	0.0012	gpm/ft2			

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING



RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/2/2004	7:26:34 PM		29.094	26.23	27.277	26.282	25.829		47.571	50.674	18.147	30.397	-1.212	-6.321		51.558	0.075	14.643	0.004		0	0	49.5	12.3	39.0	2.688	0.011	0.010	0.000	0.246	0.21	
18	9/2/2004	7:27:34 PM		28.955	26.231	27.288	26.293	25.795		47.476	50.687	18.204	30.212	-1.215	-6.316		48.4	0.076	14.643	0.003		1.00	0.01667	49.6	11.5	38.8	2.678	0.011	0.010	0.000	0.251	0.21	
19	9/2/2004	7:28:34 PM		28.277	26.229	27.281	26.256	25.837		42.673	50.726	17.965	25.496	2.077	-4.202		50.882	0.004	14.643	0.003		2.00	0.03333	49.6	12.1	34.1	2.350	0.001	0.001	0.000	0.015	0.01	
20	9/2/2004	7:29:34 PM		28.621	26.234	27.286	26.247	25.833		28.373	51.161	17.654	11.274	17.041	10.882		50.217	0.003	14.643	0.003		3.00	0.05	50.0	12.0	19.8	1.367	0.000	0.000	0.000	0.020	0.02	
21	9/2/2004	7:30:34 PM		28.561	26.224	27.286	26.237	25.743		13.953	51.004	17.512	-2.87	31.563	10.928		52.874	0.003	14.643	0.003		4.00	0.06667	49.9	12.6	5.5	0.382	0.000	0.000	0.000	0.070	0.06	
22	9/2/2004	7:31:34 PM		28.476	26.224	27.311	26.206	25.678		11.705	50.643	16.817	-4.379	33.563	67.274		53.489	0.003	14.643	0.003		5.00	0.08333	49.5	12.7	3.7	0.253	0.000	0.000	0.000	0.106	0.09	
23	9/2/2004	7:32:34 PM		28.793	26.203	27.285	26.155	25.662		9.136	49.675	12.624	-2.747	35.24	53.43		55.546	0.003	14.643	0.005		6.00	0.1	48.6	13.2	3.2	0.220	0.000	0.000	0.000	0.121	0.10	
24	9/2/2004	7:33:34 PM		28.453	26.201	27.258	26.103	25.555		9.152	50.092	12.723	-2.872	35.416	6.578		52.868	0.003	14.643	0.004		7.00	0.11667	49.0	12.6	3.1	0.216	0.000	0.000	0.000	0.124	0.11	
25	9/2/2004	7:34:34 PM		28.329	26.196	27.208	26.023	25.395		9.175	49.961	12.802	-3.055	35.416	0.273		51.485	0.003	14.643	0.005		8.00	0.13333	48.8	12.3	3.1	0.211	0.000	0.000	0.000	0.128	0.11	
26	9/2/2004	7:35:34 PM		28.705	26.194	27.206	25.986	25.338		38.261	50.245	13.819	24.929	6.15	0.342		49.727	0.365	14.643	0.003		9.00	0.15	49.1	11.8	31.6	2.178	0.052	0.047	0.001	1.492	1.27	
27	9/2/2004	7:36:34 PM		28.103	26.169	27.167	25.892	25.354		43.78	50.509	15.057	29.596	0.725	0.411		50.085	0.125	14.643	0.003		10.00	0.16667	49.4	11.9	36.7	2.530	0.018	0.016	0.000	0.447	0.38	
28	9/2/2004	7:37:34 PM		28.062	26.168	27.155	25.885	25.382		44.301	51.081	15.759	29.297	0.603	0.446		51.819	0.104	14.643	0.003		11.00	0.18333	50.0	12.3	36.8	2.537	0.015	0.014	0.000	0.381	0.32	
29	9/2/2004	7:38:34 PM		28.014	26.165	27.013	25.897	25.469		44.218	51.02	16.065	28.859	0.557	0.49		49.491	0.094	14.643	0.003		12.00	0.2	49.9	11.8	36.5	2.519	0.013	0.013	0.000	0.348	0.30	
30	9/2/2004	7:39:34 PM		27.977	26.158	26.991	25.96	25.452		44.052	50.732	15.891	29.001	0.597	0.501		54.123	0.098	14.643	0.004		13.00	0.21667	49.6	12.9	36.5	2.518	0.014	0.013	0.000	0.363	0.31	
31	9/2/2004	7:40:34 PM		27.816	26.146	26.969	25.938	25.475		43.934	50.718	15.927	28.839	0.722	0.727		50.778	0.093	14.643	0.003		14.00	0.23333	49.6	12.1	36.4	2.509	0.013	0.013	0.000	0.346	0.29	
32	9/2/2004	7:41:34 PM		27.721	26.145	26.943	25.963	25.51		43.986	50.6	16.023	28.853	0.722	0.683		50.859	0.101	14.643	0.003		15.00	0.25	49.5	12.1	36.4	2.511	0.014	0.014	0.000	0.376	0.32	
33	9/2/2004	7:42:34 PM		27.565	26.134	26.897	25.921	25.498		48.015	50.78	16.036	33.017	-1.212	-7.316		53.506	0.098	14.643	0.003		16.00	0.26667	49.7	12.7	40.5	2.793	0.014	0.013	0.000	0.328	0.28	
34	9/2/2004	7:43:34 PM		27.558	26.148	26.896	25.99	25.522		48.488	51.087	16.05	33.368	-1.209	-7.949		51.076	0.1	14.643	0.004		17.00	0.28333	50.0	12.2	40.9	2.822	0.014	0.014	0.000	0.332	0.28	
35	9/2/2004	7:44:34 PM		27.539	26.143	26.876	26.01	25.562		48.138	50.577	16.009	33.153	-1.215	-7.998		52.138	0.092	14.643	0.003		18.00	0.3	49.5	12.4	40.6	2.802	0.013	0.012	0.000	0.307	0.26	
36	9/2/2004	7:45:34 PM		27.487	26.121	26.844	25.988	25.54		48.511	51.128	16.098	33.265	-1.212	-8.033		50.26	0.092	14.643	0.003		19.00	0.31667	50.0	12.0	40.9	2.819	0.013	0.013	0.000	0.306	0.26	
37	9/2/2004	7:46:34 PM		27.45	26.114	26.812	25.951	25.588		48.517	51.317	16.172	33.212	-1.215	-8.024		49.435	0.094	14.643	0.003		20.00	0.33333	50.2	11.8	40.9	2.817	0.013	0.013	0.000	0.313	0.27	
38	9/2/2004	7:47:34 PM		27.419	26.123	26.796	25.99	25.567		48.312	50.927	16.165	32.978	-1.215	-8.033		51.954	0.09	14.643	0.003		21.00	0.35	49.8	12.4	40.6	2.802	0.013	0.012	0.000	0.301	0.26	
39	9/2/2004	7:48:34 PM		27.375	26.114	26.772	25.986	25.518		48.552	51.151	16.266	33.247	-1.215	-8.033		49.491	0.09	14.643	0.003		22.00	0.36667	50.0	11.8	40.9	2.820	0.013	0.012	0.000	0.300	0.26	
40	9/2/2004	7:49:34 PM		27.335	26.114	26.767	25.986	25.573		48.606	51.105	16.169	33.37	-1.215	-8.038		53.304	0.089	14.643	0.003		23.00	0.38333	50.0	12.7	41.0	2.826	0.013	0.012	0.000	0.296	0.25	
41	9/2/2004	7:50:34 PM		27.316	26.124	26.742	26.037	25.593		48.471	50.973	16.179	33.169	-1.209	-8.036		50.507	0.089	14.643	0.004		24.00	0.4	49.8	12.0	40.8	2.814	0.013	0.012	0.000	0.297	0.25	
42	9/2/2004	7:51:34 PM		27.266	26.119	26.672	26.062	25.558		48.594	51.151	16.164	33.304	-1.212	-8.024		53.043	0.088	14.643	0.004		25.00	0.41667	50.0	12.6	40.9	2.823	0.013	0.012	0.000	0.294	0.25	
43	9/2/2004	7:52:34 PM		27.211	26.104	26.573	26.067	25.593		48.643	51.309	16.259	33.202	-1.212	-8.038		51.725	0.087	14.643	0.003		26.00	0.43333	50.2	12.3	40.9	2.821	0.012	0.012	0.000	0.291	0.25	
44	9/2/2004	7:53:34 PM		27.172	26.1	26.538	26.077	25.584		48.83	51.412	16.242	33.514	-1.212	-8.041		50.757	0.086	14.643	0.004		27.00	0.45	50.3	12.1	41.2	2.839	0.012	0.012	0.000	0.286	0.24	
45	9/2/2004	7:54:34 PM		27.137	26.1	26.458	26.077	25.624		48.525	51.043	16.226	33.333	-1.215	-8.05		51.037	0.085	14.643	0.003		28.00	0.46667	49.9	12.2	40.9	2.822	0.012	0.012	0.000	0.285	0.24	
46	9/2/2004	7:55:34 PM		27.091	26.094	26.433	26.037	25.648		48.283	50.567	17.074	32.069	-1.212	-8.044		52.605	0.081	14.643	0.003		29.00	0.48333	49.4	12.5	40.2	2.770	0.012	0.011	0.000	0.277	0.24	
47	9/2/2004	7:56:34 PM		27.047	26.085	26.378	26.032	25.604		48.218	50.925	16.965	32.141	-1.212	-8.056		52.25	0.083	14.643	0.003		30.00	0.5	49.8	12.4	40.2	2.770	0.012	0.011	0.000	0.285	0.24	
48	9/2/2004	7:57:34 PM		26.973	26.081	26.319	26.038	25.65		47.268	50.629	16.869	31.269	-1.215	-6.275		51.201	0.148	14.643	0.003		31.00	0.51667	49.5	12.2	39.3	2.707	0.021	0.020	0.001	0.520	0.44	
49	9/2/2004	7:58:34 PM		26.946	26.073	26.262	26.046	25.672		47.509	50.705	16.838	31.63	-1.212	-6.576		52.517	0.159	14.643	0.003		32.00	0.53333	49.6	12.5	39.6	2.728	0.023	0.022	0.001	0.555	0.47	
50	9/2/2004	7:59:34 PM		26.892	26.064	26.153	26.056	25.658		47.773	50.419	16.588	32.018	-1.215	-8.07		53.717	0.084	14.643	0.003		33.00	0.55	49.3	12.8	39.9	2.751	0.012	0.012	0.000	0.292	0.25	
51	9/2/2004	8:00:34 PM		26.853	26.05	25.994	26.043	25.629		47.578	50.254	16.324	32.149	-1.215	-8.163		53.214	0.085	14.643	0.003		34.00	0.56667	49.1	12.7	39.9	2.748	0.012	0.012	0.000	0.297	0.25	
52	9/2/2004	8:01:34 PM		26.814	26.066	25.925	26.073	25.61		47.972	50.635	16.57	32.27	-1.212	-8.16		53.857	0.086	14.643	0.003		35.00	0.58333	49.5	12.8	40.1	2.766	0.012	0.012	0.000	0.299	0.25	
53	9/2/2004	8:02:34 PM		26.764	26.061	25.885	26.048	25.625		47.534	50.245	16.571	31.732	-1.215	-8.157		51.395	0.084	14.643	0.003		36.00	0.6	49.1	12.2	39.6	2.733	0.012	0.012	0.000	0.296	0.25	
54	9/2/2004	8:03:34 PM		26.719	26.066	25.82	26.053	25.605		47.636	50.351	16.423	32.026	-1.212	-8.154		54.307	0.085	14.643	0.003		37.00	0.61667	49.2	12.9	39.8	2.746	0.012	0.012	0.000	0.299	0.25	
55	9/2/2004	8:04:34 PM		26.653	26.05	25.733	26.047	25.584		47.681	50.231	16.517	32.12	-1.215	-8.157		53.364	0.085	14.643	0.003		38.00	0.63333	49.1	12.7	39.9	2.751	0.012	0.012	0.000	0.299	0.25	
56	9/2/2004	8:05:34 PM		26.613	26.06	25.683	26.037	25.634		47.916	50.517	16.234	32.662	-1.215	-8.163		50.665	0.085	14.643	0.003		39.00	0.65	49.4	12.1	40.3	2.778	0.012	0.012	0.000	0.296	0.25	
57	9/2/2004	8:06:34 PM		26.562	26.059	25.633	26.066	25.598		47.629	50.278	16.341	32.12	-1.212	-8.16		48.915	0.085	14.643	0.004		40.00	0.66667	49.2	11.7	39.9	2.749	0.012	0.012	0.000	0.300	0.26	
58	9/2/2004	8:07:34 PM		26.512	26.058	25.572	26.061	25.602		47.737	50.536	16.147	32.455	-1.212	-8.154		51.157	0.086	14.643	0.003		41.00	0.68333	49.4	12.2	40.1	2.764	0.012	0.012	0.000	0.302	0.26	
59	9/2/2004	8:08:34 PM		26.472	26.058	25.522	26.046	25.562		47.818	50.602	16.343	32.305	-1.212	-8.151		51.769	0.085	14.643	0.003		42.00	0.7	49.5	12.3	40.1	2.762	0.012	0.012	0.000	0.299	0.25	
60	9/2/2004	8:09:34 PM		26.411	26.042	25.476	26.039	25.581		47.797	50.546	16.152	32.531	-1.212	-8.151		52.545	0.086	14.643	0.003		43.00	0.71667	49.4	12.5	40.2	2.769	0.012	0.012	0.000	0.302	0.26	
61	9/2/2004	8:10:34 PM		26.376	26.048	25.436	26.065	25.562		47.866	50.749	16.21	32.5	-1.212	-8.151		50.532	0.085	14.643	0.003		44.00	0.73333	49.6	12.0	40.2	2.770	0.012	0.012	0.000	0.299	0.25	
62	9/2/2004	8:11:34 PM		26.32	26.046	25.365	26.074	25.55		47.818	50.519	16.097	32.603	-1.212	-8.151		51.562	0.086	14.643	0.003		45.00	0.75	49.4	12.3	40.2	2.772	0.012	0.012	0.000	0.303	0.26	
63	9/2/2004	8:12:34 PM		26.286	26.042	25.33	26.034	25.581		47.304	50.084	15.951	32.231	-1.215	-8.07		51.23	0.084	14.643	0.003		46.00	0.76667	49.0	12.2	39.8	2.742	0.012	0.012	0.000	0.300	0.25	
64	9/2/2004	8:13:34 PM		26.242	26.038	25.277	26.021	25.562		47.186	50.011	16.08	31.927	-1.212	-8.07		52.348	0.083	14.643	0.003		47.00	0.78333	48.9	12.5	39.6	2.727	0.012	0.012	0.000	0.298	0.25	
65	9/2/2004	8:14:34 PM		26.203	26.039	25.172	26.036	25.598		46.7	49.501	15.568	31.827	-1.215	-8.015		46.366	0.083	14.643	0.003		48.00	0.8	48.4	11.0	39.3	2.707	0.012	0.012	0.000	0.301	0.26	
66	9/2/2004	8:15:34 PM		26.147	26.033	25.107	26.001	25.533		46.908	49.628	15.626	32.256	-1.215	-8.044		50.465	0.086	14.643	0.003		49.00	0.81667	48.5	12.0	39.6	2.729	0.012	0.012	0.000	0.310	0.26	
67	9/2/2004	8:16:34 PM		26.102	26.028	25.041	25.99	25.537		46.704	49.632	15.609	31.966	-1.212	-8.033		51.748	0.087	14.643	0.003		50.00	0.83333	48.5	12.3	39.3	2.712	0.012	0.012	0.000	0.316	0.27	
68	9/2/2004	8:17:34 PM		26.061	26.027	25.01	25.979	25.516		46.603	49.242	15.606	31.964	-1.212	-8.033		52.096	0.087	14.643	0.004		51.00	0.85	48.1	12.4	39.3	2.708	0.012	0.012	0.000	0.317	0.27	
69	9/2/2004	8:18:34 PM		26.016	26.027	24.96	26.004	25.546		46.812	49.478	15.697	32.044	-1.212	-8.033		53.06	0.086	14.643	0.004		52.00	0.86667	48.4	12.6	39.4	2.718	0.012	0.012	0.000	0.313	0.27	
70	9/2/2004	8:19:34 PM		25.966	26.006	24.899	26.009	25.505		47.171	49.976	15.45	32.635	-1.215	-8.03		49.328	0.087	14.643	0.003		53.00	0.88333	48.9	11.7	39.9	2.751	0.012	0.012	0.000	0.313	0.27	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	9/2/2004	8:20:34 PM		25.926	26.011	24.864	25.964	25.555		46.74	49.404	15.534	32.153	-1.212	-8.027		50.029	0.088	14.643	0.003		54.00	0.9	48.3	11.9	39.4	2.720	0.013	0.013	0.000	0.321	0.27	
72	9/2/2004	8:21:34 PM		25.875	26.001	24.798	25.958	25.535		46.877	49.563	15.608	32.227	-1.212	-8.03		50.494	0.087	14.643	0.003		55.00	0.91667	48.4	12.0	39.6	2.727	0.012	0.013	0.000	0.317	0.27	
73	9/2/2004	8:22:34 PM		25.845	26.011	24.798	25.963	25.525		46.868	49.563	15.431	32.342	-1.212	-8.03		50.628	0.087	14.643	0.004		56.00	0.93333	48.4	12.1	39.6	2.731	0.012	0.013	0.000	0.316	0.27	
74	9/2/2004	8:23:34 PM		25.805	26.006	24.733	25.978	25.47		46.779	49.652	15.382	32.256	-1.215	-8.03		50.077	0.087	14.643	0.003		57.00	0.95	48.5	11.9	39.5	2.725	0.012	0.013	0.000	0.318	0.27	
75	9/2/2004	8:24:34 PM		25.775	26.006	24.713	26.003	25.52		46.796	49.65	15.288	32.243	-1.212	-8.012		49.013	0.087	14.643	0.003		58.00	0.96667	48.5	11.7	39.5	2.725	0.012	0.013	0.000	0.318	0.27	
76	9/2/2004	8:25:34 PM		25.734	25.999	24.672	25.987	25.498		47.003	49.81	15.353	32.596	-1.212	-8.018		52.985	0.086	14.643	0.004		59.00	0.98333	48.7	12.6	39.8	2.744	0.012	0.012	0.000	0.312	0.27	
77	9/2/2004	8:26:34 PM		25.698	25.993	24.626	25.956	25.513		47.439	50.573	15.48	32.679	-1.215	-8.015		49.741	0.087	14.643	0.003		60.00	1	49.4	11.8	40.1	2.762	0.012	0.013	0.000	0.314	0.27	
78	9/2/2004	8:27:34 PM		25.662	25.988	24.605	25.93	25.482		47.19	50.09	15.381	32.615	-1.215	-8.015		47.901	0.087	14.643	0.003		61.00	1.01667	49.0	11.4	39.9	2.751	0.012	0.013	0.000	0.316	0.27	
79	9/2/2004	8:28:34 PM		25.627	25.983	24.55	25.985	25.437		47.362	50.181	15.345	32.919	-1.212	-8.001		49.339	0.088	14.643	0.003		62.00	1.03333	49.1	11.8	40.1	2.768	0.013	0.013	0.000	0.318	0.27	
80	9/2/2004	8:29:34 PM		25.602	25.988	24.545	25.99	25.472		47.526	50.531	15.363	33.003	-1.212	-8.004		49.977	0.086	14.643	0.004		63.00	1.05	49.4	11.9	40.3	2.776	0.012	0.012	0.000	0.310	0.26	
81	9/2/2004	8:30:34 PM		25.567	25.983	24.525	25.95	25.487		47.119	49.823	15.315	32.757	-1.215	-8.015		49.852	0.086	14.643	0.003		64.00	1.06667	48.7	11.9	39.9	2.754	0.012	0.012	0.000	0.312	0.27	
82	9/2/2004	8:31:34 PM		25.542	25.973	24.495	25.965	25.432		47.099	50.021	15.42	32.551	-1.215	-8.018		45.428	0.085	14.643	0.003		65.00	1.08333	48.9	10.8	39.8	2.746	0.012	0.012	0.000	0.310	0.26	
83	9/2/2004	8:32:34 PM		25.512	25.978	24.47	25.955	25.447		47.181	50.256	15.464	32.475	-1.212	-8.024		49.989	0.084	14.643	0.003		66.00	1.1	49.1	11.9	39.8	2.746	0.012	0.012	0.000	0.306	0.26	
84	9/2/2004	8:33:34 PM		25.481	25.956	24.404	25.934	25.526		46.978	49.918	15.158	32.713	-1.215	-8.001		50.081	0.086	14.643	0.003		67.00	1.11667	48.8	11.9	39.8	2.747	0.012	0.013	0.000	0.314	0.27	
85	9/2/2004	8:34:34 PM		25.461	25.966	24.369	25.959	25.471		46.617	49.667	15.012	32.412	-1.215	-7.998		52.444	0.088	14.643	0.003		68.00	1.13333	48.5	12.5	39.5	2.724	0.013	0.013	0.000	0.325	0.28	
86	9/2/2004	8:35:34 PM		25.431	25.961	24.353	25.929	25.486		46.53	49.418	15.042	32.4	-1.212	-7.955		48.704	0.09	14.643	0.003		69.00	1.15	48.3	11.6	39.5	2.721	0.013	0.013	0.000	0.333	0.28	
87	9/2/2004	8:36:34 PM		25.405	25.955	24.332	25.937	25.464		46.545	49.833	15.096	32.319	-1.212	-7.978		50.932	0.09	14.643	0.003		70.00	1.16667	48.7	12.1	39.4	2.719	0.013	0.013	0.000	0.333	0.28	
88	9/2/2004	8:37:34 PM		25.375	25.95	24.297	25.937	25.464		46.634	49.686	15.059	32.399	-1.215	-7.989		48.896	0.088	14.643	0.003		71.00	1.18333	48.6	11.6	39.5	2.725	0.013	0.013	0.000	0.325	0.28	
89	9/2/2004	8:38:34 PM		25.349	25.949	24.246	25.917	25.469		46.696	49.791	15.086	32.363	-1.218	-7.998		50.085	0.087	14.643	0.003		72.00	1.2	48.7	11.9	39.5	2.725	0.012	0.013	0.000	0.322	0.27	
90	9/2/2004	8:39:34 PM		25.334	25.954	24.261	25.977	25.409		46.982	50.05	15.259	32.525	-1.212	-7.986		49.591	0.088	14.643	0.004		73.00	1.21667	48.9	11.8	39.8	2.741	0.013	0.013	0.000	0.324	0.28	
91	9/2/2004	8:40:34 PM		25.315	25.95	24.207	25.967	25.444		46.532	49.613	15.275	32.024	-1.212	-7.955		50.085	0.089	14.643	0.003		74.00	1.23333	48.5	11.9	39.3	2.708	0.013	0.013	0.000	0.332	0.28	
92	9/2/2004	8:41:34 PM		25.29	25.94	24.212	25.947	25.444		46.995	50.388	15.133	32.613	-1.215	-7.958		48.481	0.089	14.643	0.003		75.00	1.25	49.3	11.5	39.8	2.744	0.013	0.013	0.000	0.327	0.28	
93	9/2/2004	8:42:34 PM		25.27	25.945	24.212	25.937	25.384		46.794	49.827	15.067	32.566	-1.212	-7.958		49.927	0.088	14.643	0.003		76.00	1.26667	48.7	11.9	39.7	2.736	0.013	0.013	0.000	0.325	0.28	
94	9/2/2004	8:43:34 PM		25.25	25.945	24.192	25.952	25.414		46.763	49.907	15.087	32.574	-1.212	-7.958		49.418	0.087	14.643	0.004		77.00	1.28333	48.8	11.8	39.7	2.735	0.012	0.013	0.000	0.321	0.27	
95	9/2/2004	8:44:34 PM		25.235	25.935	24.172	25.912	25.464		46.848	49.999	15.169	32.473	-1.212	-7.96		52.461	0.087	14.643	0.004		78.00	1.3	48.9	12.5	39.7	2.734	0.012	0.013	0.000	0.321	0.27	
96	9/2/2004	8:45:34 PM		25.209	25.929	24.151	25.912	25.429		47.069	50.324	15.335	32.492	-1.212	-7.955		49.353	0.088	14.643	0.003		79.00	1.31667	49.2	11.8	39.8	2.743	0.013	0.013	0.000	0.324	0.28	
97	9/2/2004	8:46:34 PM		25.19	25.925	24.172	25.922	25.384		47.634	50.884	15.435	32.982	-1.215	-7.94		52.117	0.089	14.643	0.003		80.00	1.33333	49.8	12.4	40.3	2.779	0.013	0.013	0.000	0.324	0.28	
98	9/2/2004	8:47:34 PM		25.18	25.925	24.157	25.952	25.404		47.789	51.182	15.462	33.085	-1.215	-7.946		49.299	0.09	14.643	0.003		81.00	1.35	50.1	11.7	40.4	2.788	0.013	0.013	0.000	0.326	0.28	
99	9/2/2004	8:48:34 PM		25.164	25.919	24.146	25.922	25.454		47.339	50.656	15.141	32.991	-1.212	-7.949		49.781	0.089	14.643	0.003		82.00	1.36667	49.5	11.9	40.2	2.769	0.013	0.013	0.000	0.325	0.28	
100	9/2/2004	8:49:34 PM		25.154	25.919	24.141	25.912	25.419		47.273	50.446	15.248	32.755	-1.212	-7.94		49.795	0.091	14.643	0.003		83.00	1.38333	49.3	11.9	40.0	2.759	0.013	0.013	0.000	0.334	0.28	
101	9/2/2004	8:50:34 PM		25.138	25.914	24.13	25.936	25.403		47.179	50.337	15.146	32.822	-1.215	-7.911		50.834	0.093	14.643	0.003		84.00	1.4	49.2	12.1	40.0	2.758	0.013	0.014	0.000	0.341	0.29	
102	9/2/2004	8:51:34 PM		25.118	25.898	24.099	25.89	25.387		47.407	50.817	15.259	32.966	-1.215	-7.923		50.843	0.091	14.643	0.003		85.00	1.41667	49.7	12.1	40.2	2.771	0.013	0.013	0.000	0.333	0.28	
103	9/2/2004	8:52:34 PM		25.123	25.923	24.135	25.92	25.427		46.978	50.283	15.152	32.703	-1.209	-7.917		51.364	0.093	14.643	0.004		86.00	1.43333	49.2	12.2	39.8	2.747	0.013	0.014	0.000	0.342	0.29	
104	9/2/2004	8:53:34 PM		25.097	25.902	24.109	25.875	25.427		46.97	50.345	15.185	32.553	-1.212	-7.923		50.903	0.092	14.643	0.003		87.00	1.45	49.2	12.1	39.8	2.741	0.013	0.014	0.000	0.340	0.29	
105	9/2/2004	8:54:34 PM		25.076	25.897	24.093	25.919	25.426		47.082	50.521	15.196	32.594	-1.212	-7.92		52.252	0.09	14.643	0.003		88.00	1.46667	49.4	12.4	39.8	2.747	0.013	0.013	0.000	0.332	0.28	
106	9/2/2004	8:55:34 PM		25.071	25.897	24.093	25.869	25.366		46.912	50.053	15.086	32.75	-1.212	-7.908		50.219	0.093	14.643	0.003		89.00	1.48333	48.9	12.0	39.8	2.746	0.013	0.014	0.000	0.343	0.29	
107	9/2/2004	8:56:34 PM		25.05	25.881	24.067	25.858	25.35		46.957	50.227	15.216	32.64	-1.212	-7.908		49.702	0.092	14.643	0.003		90.00	1.5	49.1	11.8	39.8	2.744	0.013	0.014	0.000	0.340	0.29	
108	9/2/2004	8:57:34 PM		25.055	25.891	24.092	25.878	25.33		46.939	50.305	15.05	32.759	-1.212	-7.906		50.563	0.092	14.643	0.003		91.00	1.51667	49.2	12.0	39.8	2.747	0.013	0.014	0.000	0.339	0.29	
109	9/2/2004	8:58:34 PM		25.05	25.886	24.087	25.918	25.41		47.277	50.809	15.135	32.941	-1.212	-7.868		47.637	0.092	14.643	0.003		92.00	1.53333	49.7	11.3	40.1	2.765	0.013	0.014	0.000	0.337	0.29	
110	9/2/2004	8:59:34 PM		25.04	25.885	24.122	25.883	25.405		47.127	50.623	15.164	32.707	-1.212	-7.885		49.564	0.091	14.643	0.003		93.00	1.55	49.5	11.8	39.9	2.752	0.013	0.013	0.000	0.335	0.28	
111	9/2/2004	9:00:34 PM		25.025	25.875	24.167	25.863	25.325		47.196	50.78	15.069	32.867	-1.212	-7.839		48.909	0.091	14.643	0.003		94.00	1.56667	49.7	11.6	40.0	2.760	0.013	0.013	0.000	0.333	0.28	
112	9/2/2004	9:01:34 PM		25.03	25.875	24.217	25.878	25.365		47.103	50.546	15.172	32.691	-1.212	-7.877		53.425	0.092	14.643	0.003		95.00	1.58333	49.4	12.7	39.9	2.751	0.013	0.013	0.000	0.338	0.29	
113	9/2/2004	9:02:34 PM		25.08	25.87	24.257	25.868	25.345		45.348	50.869	15.226	30.776	-0.827	-1.601		51.739	0.003	14.643	0.003		96.00	1.6	49.7	12.3	38.1	2.624	0.000	0.000	0.000	0.012	0.01	
114	9/2/2004	9:03:34 PM		25.029	25.855	24.302	25.827	25.379		46.601	51.056	15.409	31.831	-1.212	-5.844		51.362	0.094	14.643	0.003		97.00	1.61667	49.9	12.2	39.2	2.704	0.013	0.014	0.000	0.350	0.30	
115	9/2/2004	9:04:34 PM		25.04	25.865	24.347	25.838	25.365		46.856	50.49	15.006	32.685	-1.209	-7.689		47.618	0.1	14.643	0.003		98.00	1.63333	49.4	11.3	39.8	2.742	0.014	0.015	0.000	0.367	0.31	
116	9/2/2004	9:05:34 PM		25.034	25.839	24.327	25.787	25.349		46.553	50.065	14.879	32.453	-1.212	-7.799		50.941	0.094	14.643	0.003		99.00	1.65	48.9	12.1	39.5	2.724	0.013	0.014	0.000	0.347	0.30	
117	9/2/2004	9:06:34 PM		25.048	25.844	24.356	25.816	25.388		46.914	50.351	14.885	32.933	-1.209	-7.807		50.379	0.096	14.643	0.004		100.00	1.66667	49.2	12.0	39.9	2.753	0.014	0.014	0.000	0.351	0.30	
118	9/2/2004	9:07:34 PM		25.052	25.832	24.37	25.79	25.402		46.847	50.355	14.936	32.746	-1.212	-7.839		48.46	0.095	14.643	0.003		101.00	1.68333	49.2	11.5	39.8	2.744	0.014	0.014	0.000	0.348	0.30	
119	9/2/2004	9:08:34 PM		25.056	25.832	24.399	25.784	25.366		46.843	50.417	15.059	32.484	-1.212	-7.845		49.981	0.094	14.643	0.003		102.00	1.7	49.3	11.9	39.7	2.735	0.013	0.014	0.000	0.345	0.29	
120	9/2/2004	9:09:34 PM		25.066	25.831	24.418	25.808	25.301		46.603	50.125	14.976	32.436	-1.212	-7.81		52.365	0.096	14.643	0.003		103.00	1.71667	49.0	12.5	39.5	2.725	0.014	0.014	0.000	0.354	0.30	
121	9/2/2004	9:10:34 PM		25.076	25.826	24.423	25.788	25.311		46.707	50.438	14.931	32.488	-1.215	-7.839		50.772	0.095	14.643	0.003		104.00	1.73333	49.3	12.1	39.6	2.730	0.014	0.014	0.000	0.349	0.30	
122	9/2/2004	9:11:34 PM		25.085	25.815	24.438	25.803	25.29		46.582	50.436	15	32.262	-1.212	-7.822		53.886	0.094	14.643	0.003		105.00	1.75	49.3	12.8	39.4	2.718	0.013	0.014	0.000	0.347	0.30	
123	9/2/2004	9:12:34 PM		25.079	25.809	24.461	25.796	25.284		46.547	50.144	14.946	32.344	-1.212	-7.853		51.201	0.093	14.643	0.003		106.00	1.76667	49.0	12.2	39.4	2.720	0.013	0.014	0.000	0.343	0.29	
124	9/2/2004	9:13:34 PM		25.104	25.814	24.486	25.801	25.294		46.727	50.372	14.953	32.66	-1.215	-7.804		51.52	0.095	14.643	0.003		107.00	1.78333	49.2	12.3	39.7	2.737	0.014	0.014	0.000	0.348	0.30	
125	9/2/2004	9:14:34 PM		25.107	25.808	24.5	25.81	25.277		46.441	50.079	14.998	32.233	-1.212	-7.836		48.636	0.094	14.643	0.003		108.00	1.8	49.0	11.6	39.3	2.712	0.013	0.014	0.000	0.347	0.30	
126	9/2/2004	9:15:34 PM		25.117	25.808	24.5	25.765	25.302		46.397	50.243	14.899	32.211	-1.215	-7.845		49.689	0.094	14.643	0.003		109.00	1.81667	49.1	11.8	39.3	2.710	0.013	0.014	0.000	0.347	0.30	
127	9/2/2004	9:16:34 PM		25.132	25.808	24.53	25.78	25.317		46.601	50.467	14.962	32.303	-1.206	-7.807		47.382	0.093	14.643	0.004		110.00	1.83333	49.3	11.3	39.5	2.720	0.013	0.013	0.000	0.342	0.29	
128	9/2/2004	9:17:34 PM		25.132	25.813	24.555	25.785	25.317		46.8	50.355	15.128	32.406	-1.212	-7.822		50.505	0.094	14.643	0.003		111.00	1.85	49.2	12.0	39.6	2.730	0.013	0.014	0.000	0.344	0.29	
129	9/2/2004	9:18:34 PM		25.137	25.797	24.555	25.799	25.317		46.099	49.907	14.889	31.913	-1.212	-7.825		48.696	0.094	14.643	0.003		112.00	1.86667	48.8	11.6	39.0	2.689	0.013	0.014	0.000	0.349	0.30	
130	9/2/2004	9:19:34 PM		25.146	25.796	24.574	25.799	25.341		46.692	50.386	15.031	32.465	-1.212	-7.833		51.256	0.093	14.643	0.004		113.00	1.88333	49.3	12.2	39.6	2.729	0.013	0.013	0.000	0.340	0.29	
131	9/2/2004	9:20:34 PM		25.15	25.791	24.553	25.763	25.335		46.404	50.274	14.783	32.391	-1.212	-7.833		50.805	0.094	14.643	0.003		114.00	1.9	49.1	12.1	39.4	2.716	0.013	0.014	0.000	0.346	0.29	
132	9/2/2004	9:21:34 PM		25.155	25.79	24.532	25.787	25.324		45.767	49.539	14.701	31.858	-1.212	-7.79		49.418	0.094	14.643	0.003		115.00	1.91667	48.4	11.8	38.8	2.676	0.013	0.014	0.000	0.351	0.30	
133	9/2/2004	9:22:34 PM		25.169	25.789	24.552	25.792	25.309		45.96	49.91	14.71	31.979	-1.212	-7.804		50.377	0.097	14.643	0.004		116.00	1.93333	48.8	12.0	39.0	2.687	0.014	0.014	0.000	0.361	0.31	
134	9/2/2004	9:23:34 PM		25.168	25.789	24.551	25.771	25.308		45.918	49.771	14.803	31.741	-1.212	-7.813		50.88	0.096	14.643	0.003		117.00	1.95	48.6	12.1	38.8	2.677	0.014	0.014	0.000	0.358	0.31	
135	9/2/2004	9:24:34 PM		25.162	25.782	24.545	25.76	25.277		45.864	49.601	14.737	32.042	-1.215	-7.793		50.041	0.096	14.643	0.003		118.00	1.96667	48.5	11.9	39.0	2.686	0.014	0.014	0.000	0.357	0.30	
136	9/2/2004	9:25:34 PM		25.172	25.787	24.555	25.77	25.297		45.923	49.881	14.789	31.827	-1.209	-7.793		51.312	0.097	14.643	0.004		119.00	1.98333	48.8	12.2	38.9	2.680	0.014	0.014	0.000	0.362	0.31	
137	9/2/2004	9:26:34 PM		25.166	25.771	24.543	25.758	25.295		45.591	49.532	14.566	31.743	-1.212	-7.807		49.057	0.096	14.643	0.003		120.00	2	48.4	11.7	38.7	2.666	0.014	0.014	0.000	0.360	0.31	
138	9/2/2004	9:27:34 PM		25.171	25.782	24.564	25.749	25.301		45.972	49.945	14.79	31.899	-1.212	-7.801		51.662	0.097	14.643	0.003		121.00	2.01667	48.8	12.3	38.9	2.684	0.014	0.014	0.000	0.361	0.31	
139	9/2/2004	9:28:34 PM		25.166	25.776	24.569	25.738	25.275		46.283	50.39	14.893	32.049	-1.212	-7.816		51.675	0.096	14.643	0.004		122.00	2.03333	49.3	12.3	39.2	2.700	0.014	0.014	0.000	0.355	0.30	
140	9/2/2004	9:29:34 PM		25.16	25.765	24.558	25.722	25.255		46.124	49.854	14.648	32.34	-1.215	-7.816		51.02	0.096	14.643	0.003		123.00	2.05	48.7	12.2	39.2	2.705	0.014	0.014	0.000	0.355	0.30	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	9/2/2004	9:30:34 PM		25.161	25.766	24.563	25.748	25.235		46.19	50.345	14.805	32.005	-1.212	-7.81		51.368	0.096	14.643	0.003		124.00	2.06667	49.2	12.2	39.1	2.696	0.014	0.014	0.000	0.356	0.30	
142	9/2/2004	9:31:34 PM		25.181	25.782	24.599	25.769	25.266		45.985	50.024	14.673	31.987	-1.209	-7.801		48.754	0.097	14.643	0.003		125.00	2.08333	48.9	11.6	39.0	2.688	0.014	0.014	0.000	0.360	0.31	
143	9/2/2004	9:32:34 PM		25.16	25.75	24.573	25.748	25.275		46.07	50.156	14.773	31.997	-1.215	-7.81		51.097	0.094	14.643	0.003		126.00	2.1	49.0	12.2	39.0	2.691	0.013	0.014	0.000	0.349	0.30	
144	9/2/2004	9:33:34 PM		25.17	25.755	24.568	25.743	25.275		45.601	49.814	14.485	31.784	-1.215	-7.781		50.248	0.095	14.643	0.003		127.00	2.11667	48.7	12.0	38.7	2.668	0.014	0.014	0.000	0.356	0.30	
145	9/2/2004	9:34:34 PM		25.164	25.75	24.532	25.752	25.244		45.51	49.669	14.372	31.921	-1.212	-7.77		54.987	0.098	14.643	0.003		128.00	2.13333	48.5	13.1	38.7	2.669	0.014	0.014	0.000	0.367	0.31	
146	9/2/2004	9:35:34 PM		25.164	25.744	24.506	25.736	25.258		45.522	49.601	14.398	31.839	-1.212	-7.72		52.734	0.096	14.643	0.003		129.00	2.15	48.5	12.6	38.7	2.667	0.014	0.014	0.000	0.360	0.31	
147	9/2/2004	9:36:34 PM		25.149	25.73	24.482	25.697	25.274		45.244	49.464	14.453	31.406	-1.215	-7.666		53.127	0.099	14.643	0.003		130.00	2.16667	48.3	12.7	38.3	2.642	0.014	0.014	0.000	0.375	0.32	
148	9/2/2004	9:37:34 PM		25.159	25.739	24.501	25.726	25.268		45.489	49.748	14.502	31.605	-1.212	-7.709		50.115	0.096	14.643	0.003		131.00	2.18333	48.6	11.9	38.5	2.658	0.014	0.014	0.000	0.362	0.31	
149	9/2/2004	9:38:34 PM		25.144	25.729	24.491	25.726	25.228		44.859	49.022	14.443	31.098	-1.215	-7.163		54.399	0.084	14.643	0.003		132.00	2.2	47.9	13.0	38.0	2.618	0.012	0.012	0.000	0.321	0.27	
150	9/2/2004	9:39:34 PM		25.149	25.74	24.502	25.757	25.214		45.539	49.814	14.483	31.652	-1.209	-7.64		51.105	0.103	14.643	0.004		133.00	2.21667	48.7	12.2	38.6	2.661	0.015	0.015	0.000	0.387	0.33	
151	9/2/2004	9:40:34 PM		25.139	25.73	24.472	25.742	25.244		45.477	49.599	14.483	31.677	-1.212	-7.622		51.535	0.095	14.643	0.003		134.00	2.23333	48.5	12.3	38.6	2.660	0.014	0.014	0.000	0.358	0.30	
152	9/2/2004	9:41:34 PM		25.129	25.72	24.472	25.727	25.274		45.833	49.988	14.486	32.001	-1.215	-7.694		50.371	0.1	14.643	0.003		135.00	2.25	48.9	12.0	38.9	2.683	0.014	0.015	0.000	0.373	0.32	
153	9/2/2004	9:42:34 PM		25.141	25.726	24.498	25.723	25.226		45.734	49.995	14.564	31.899	-1.215	-7.31		50.05	0.096	14.643	0.003		136.00	2.26667	48.9	11.9	38.8	2.676	0.014	0.014	0.000	0.359	0.31	
154	9/2/2004	9:43:34 PM		25.136	25.726	24.498	25.743	25.186		45.657	49.978	14.478	31.866	-1.215	-7.657		49.576	0.102	14.643	0.003		137.00	2.28333	48.9	11.8	38.8	2.672	0.015	0.015	0.000	0.382	0.33	
155	9/2/2004	9:44:34 PM		25.12	25.71	24.493	25.733	25.22		45.528	49.746	14.42	31.724	-1.209	-7.579		49.347	0.101	14.643	0.004		138.00	2.3	48.6	11.8	38.6	2.663	0.014	0.015	0.000	0.380	0.32	
156	9/2/2004	9:45:34 PM		25.119	25.709	24.477	25.737	25.244		45.564	49.829	14.479	31.761	-1.212	-7.614		51.281	0.094	14.643	0.004		139.00	2.31667	48.7	12.2	38.7	2.666	0.013	0.014	0.000	0.353	0.30	
157	9/2/2004	9:46:34 PM		25.091	25.686	24.459	25.698	25.226		45.5	49.582	14.487	31.702	-1.212	-7.241		51.431	0.089	14.643	0.003		140.00	2.33333	48.5	12.3	38.6	2.661	0.013	0.013	0.000	0.335	0.29	
158	9/2/2004	9:47:34 PM		25.105	25.7	24.482	25.692	25.224		45.52	49.69	14.504	31.694	-1.212	-7.31		50.596	0.097	14.643	0.003		141.00	2.35	48.6	12.1	38.6	2.662	0.014	0.014	0.000	0.365	0.31	
159	9/2/2004	9:48:34 PM		25.11	25.7	24.457	25.692	25.114		45.417	49.613	14.252	31.893	-1.212	-7.683		50.467	0.096	14.643	0.003		142.00	2.36667	48.5	12.0	38.7	2.665	0.014	0.014	0.000	0.361	0.31	
160	9/2/2004	9:49:34 PM		25.115	25.7	24.447	25.702	25.174		45.377	49.039	14.299	31.917	-1.212	-7.735		49.747	0.098	14.643	0.003		143.00	2.38333	47.9	11.8	38.6	2.665	0.014	0.014	0.000	0.369	0.31	
161	9/2/2004	9:50:34 PM		25.109	25.694	24.421	25.691	25.199		45.176	49.292	14.212	31.585	-1.212	-7.562		50.989	0.092	14.643	0.003		144.00	2.4	48.2	12.1	38.4	2.646	0.013	0.013	0.000	0.349	0.30	
162	9/2/2004	9:51:34 PM		25.104	25.694	24.421	25.691	25.209		44.913	49.159	14.17	31.388	-1.212	-7.651		50.79	0.103	14.643	0.003		145.00	2.41667	48.0	12.1	38.2	2.630	0.015	0.015	0.000	0.393	0.33	
163	9/2/2004	9:52:34 PM		25.094	25.684	24.411	25.671	25.249		45.078	49.184	14.239	31.441	-1.215	-7.628		49.802	0.096	14.643	0.003		146.00	2.43333	48.1	11.9	38.3	2.638	0.014	0.014	0.000	0.365	0.31	
164	9/2/2004	9:53:34 PM		25.094	25.689	24.411	25.671	25.239		45.035	49.454	14.328	31.314	-1.215	-7.449		48.907	0.1	14.643	0.003		147.00	2.45	48.3	11.6	38.2	2.632	0.014	0.015	0.000	0.381	0.32	
165	9/2/2004	9:54:34 PM		25.085	25.69	24.407	25.672	25.154		45.448	49.493	14.362	31.696	-1.212	-7.625		50.621	0.099	14.643	0.003		148.00	2.46667	48.4	12.1	38.6	2.659	0.014	0.014	0.000	0.374	0.32	
166	9/2/2004	9:55:34 PM		25.08	25.685	24.392	25.707	25.149		45.105	49.52	14.211	31.509	-1.215	-7.275		52.163	0.099	14.643	0.003		149.00	2.48333	48.4	12.4	38.3	2.641	0.014	0.014	0.000	0.376	0.32	
167	9/2/2004	9:56:34 PM		25.064	25.679	24.391	25.691	25.209		45.157	49.201	14.31	31.56	-1.212	-7.628		49.247	0.113	14.643	0.004		150.00	2.5	48.1	11.7	38.4	2.645	0.016	0.016	0.000	0.429	0.37	
168	9/2/2004	9:57:34 PM		25.064	25.664	24.391	25.666	25.209		45.269	49.331	14.268	31.595	-1.212	-7.559		51.468	0.095	14.643	0.003		151.00	2.51667	48.2	12.3	38.4	2.650	0.014	0.014	0.000	0.360	0.31	
169	9/2/2004	9:58:34 PM		25.054	25.669	24.396	25.671	25.229		45.427	49.663	14.37	31.671	-1.212	-7.512		53.754	0.104	14.643	0.003		152.00	2.53333	48.5	12.8	38.5	2.658	0.015	0.015	0.000	0.393	0.33	
170	9/2/2004	9:59:34 PM		25.049	25.659	24.381	25.681	25.229		45.228	49.186	14.271	31.687	-1.212	-7.611		51.255	0.098	14.643	0.003		153.00	2.55	48.1	12.2	38.5	2.652	0.014	0.014	0.000	0.371	0.32	
171	9/2/2004	10:00:34 PM		25.054	25.674	24.381	25.726	25.209		45.282	49.634	14.329	31.589	-1.212	-7.417		53.539	0.09	14.643	0.003		154.00	2.56667	48.5	12.8	38.4	2.650	0.013	0.013	0.000	0.341	0.29	
172	9/2/2004	10:01:34 PM		25.053	25.658	24.381	25.736	25.153		45.483	49.437	14.412	31.767	-1.215	-7.585		52.582	0.101	14.643	0.003		155.00	2.58333	48.3	12.5	38.6	2.663	0.014	0.015	0.000	0.381	0.32	
173	9/2/2004	10:02:34 PM		25.118	25.663	24.396	25.716	25.243		41.038	49.852	14.466	26.846	2.702	1.085		53.206	0.05	14.643	0.003		156.00	2.6	48.7	12.7	33.9	2.340	0.007	0.007	0.000	0.215	0.18	
174	9/2/2004	10:03:34 PM		25.089	25.649	24.376	25.676	25.209		39.243	49.054	14.167	25.65	4.057	3.213		49.62	0.033	14.643	0.003		157.00	2.61667	47.9	11.8	32.4	2.237	0.005	0.005	0.000	0.148	0.13	
175	9/2/2004	10:04:34 PM		24.904	25.654	24.346	25.676	25.264		26.743	48.948	14.021	13.141	16.856	16.965		50.056	0.02	14.643	0.003		158.00	2.63333	47.8	11.9	19.9	1.375	0.003	0.003	0.000	0.146	0.12	
176	9/2/2004	10:05:34 PM		24.944	25.649	24.331	25.696	25.189		12.727	49.126	14.112	-0.968	31.201	31.135		52.069	0.005	14.643	0.003		159.00	2.65	48.0	12.4	5.9	0.405	0.001	0.001	0.000	0.124	0.11	
177	9/2/2004	10:06:34 PM		24.952	25.638	24.315	25.69	25.192		10.195	49.192	13.816	-3.307	33.714	33.57		50.671	0.003	14.643	0.003		160.00	2.66667	48.1	12.1	3.4	0.237	0.000	0.000	0.000	0.127	0.11	
178	9/2/2004	10:07:34 PM		24.962	25.643	24.31	25.695	25.227		10.143	49.232	13.727	-3.283	33.676	33.538		51.827	0.003	14.643	0.003		161.00	2.68333	48.1	12.3	3.4	0.236	0.000	0.000	0.000	0.128	0.11	
179	9/2/2004	10:08:34 PM		24.987	25.653	24.33	25.735	25.172		9.639	48.597	13.404	-3.346	33.679	33.538		52.884	0.003	14.643	0.003		162.00	2.7	47.5	12.6	3.1	0.217	0.000	0.000	0.000	0.139	0.12	
180	9/2/2004	10:09:34 PM		24.993	25.638	24.305	25.705	25.172		44.373	48.836	13.782	31.16	-1.209	-7.258		52.826	0.133	14.643	0.004		163.00	2.71667	47.7	12.6	37.8	2.604	0.019	0.019	0.001	0.514	0.44	
181	9/2/2004	10:10:34 PM		24.972	25.627	24.274	25.694	25.212		44.784	49.226	13.858	31.515	-1.212	-6.469		52.991	0.091	14.643	0.003		164.00	2.73333	48.1	12.6	38.1	2.630	0.013	0.013	0.000	0.349	0.30	
182	9/2/2004	10:11:34 PM		24.937	25.627	24.279	25.709	25.187		44.809	48.9	13.833	31.529	-1.212	-7.03		53.273	0.118	14.643	0.003		165.00	2.75	47.8	12.7	38.2	2.632	0.017	0.017	0.000	0.452	0.38	
183	9/2/2004	10:12:34 PM		24.941	25.636	24.293	25.704	25.206		44.857	48.888	13.762	31.85	-1.209	-7.267		48.842	0.105	14.643	0.003		166.00	2.76667	47.8	11.6	38.4	2.644	0.015	0.015	0.000	0.400	0.34	
184	9/2/2004	10:13:34 PM		24.941	25.626	24.288	25.674	25.176		45.188	49.197	13.961	31.872	-1.212	-7.547		52.399	0.109	14.643	0.003		167.00	2.78333	48.1	12.5	38.5	2.657	0.016	0.016	0.000	0.413	0.35	
185	9/2/2004	10:14:34 PM		24.947	25.622	24.269	25.629	25.152		45.174	49.18	13.969	31.841	-1.212	-7.576		51.767	0.106	14.643	0.003		168.00	2.8	48.1	12.3	38.5	2.655	0.015	0.015	0.000	0.402	0.34	
186	9/2/2004	10:15:34 PM		24.935	25.616	24.248	25.623	25.15		44.823	48.991	13.782	31.712	-1.215	-7.582		51.787	0.105	14.643	0.003		169.00	2.81667	47.9	12.3	38.3	2.638	0.015	0.015	0.000	0.401	0.34	
187	9/2/2004	10:16:34 PM		24.935	25.611	24.248	25.628	25.18		46.095	50.256	13.445	33.317	-1.212	-7.567		51.174	0.109	14.643	0.003		170.00	2.83333	49.1	12.2	39.7	2.738	0.016	0.016	0.000	0.401	0.34	
188	9/2/2004	10:17:34 PM		24.947	25.617	24.254	25.654	25.187		46.3	50.395	13.441	33.495	-1.212	-7.53		49.291	0.109	14.643	0.003		171.00	2.85	49.3	11.7	39.9	2.751	0.016	0.016	0.000	0.399	0.34	
189	9/2/2004	10:18:34 PM		24.936	25.601	24.218	25.644	25.206		46.028	50.258	13.031	33.6	-1.212	-7.411		49.799	0.107	14.643	0.003		172.00	2.86667	49.1	11.9	39.8	2.745	0.015	0.016	0.000	0.393	0.33	
190	9/2/2004	10:19:34 PM		24.937	25.607	24.224	25.639	25.172		45.585	49.847	13.426	32.835	-1.212	-6.897		52.088	0.104	14.643	0.003		173.00	2.88333	48.7	12.4	39.2	2.703	0.015	0.015	0.000	0.388	0.33	
191	9/2/2004	10:20:34 PM		24.932	25.607	24.204	25.644	25.192		45.949	50.198	13.255	33.272	-1.212	-7.333		50.492	0.108	14.643	0.003		174.00	2.9	49.1	12.0	39.6	2.731	0.015	0.016	0.000	0.399	0.34	
192	9/2/2004	10:21:34 PM		24.916	25.601	24.183	25.654	25.226		45.977	50.359	13.346	33.142	-1.212	-7.408		50.78	0.107	14.643	0.004		175.00	2.91667	49.2	12.1	39.6	2.727	0.015	0.016	0.000	0.396	0.34	
193	9/2/2004	10:22:34 PM		24.916	25.601	24.188	25.664	25.161		46.064	50.388	12.967	33.701	-1.209	-7.327		49.432	0.107	14.643	0.003		176.00	2.93333	49.3	11.8	39.9	2.750	0.015	0.016	0.000	0.393	0.33	
194	9/2/2004	10:23:34 PM		24.907	25.602	24.174	25.654	25.152		46.337	50.654	12.889	34.097	-1.215	-7.053		51.55	0.112	14.643	0.003		177.00	2.95	49.5	12.3	40.2	2.773	0.016	0.016	0.000	0.408	0.35	
195	9/2/2004	10:24:34 PM		24.906	25.606	24.178	25.629	25.181		46.566	50.712	12.882	34.374	-1.212	-7.29		48.258	0.104	14.643	0.003		178.00	2.96667	49.6	11.5	40.5	2.790	0.015	0.015	0.000	0.377	0.32	
196	9/2/2004	10:25:34 PM		24.895	25.6	24.152	25.602	25.175		46.346	50.654	12.955	33.951	-1.212	-7.316		48.577	0.11	14.643	0.003		179.00	2.98333	49.5	11.6	40.1	2.768	0.016	0.016	0.000	0.402	0.34	
197	9/2/2004	10:26:34 PM		24.885	25.6	24.132	25.647	25.165		46.528	50.77	13.041	34.041	-1.209	-7.238		48.358	0.102	14.643	0.003		180.00	3	49.6	11.5	40.3	2.777	0.015	0.015	0.000	0.371	0.32	
198	9/2/2004	10:27:34 PM		24.875	25.585	24.132	25.622	25.175		46.167	50.332	13.433	33.348	-1.212	-7.313		50.467	0.106	14.643	0.003		181.00	3.01667	49.2	12.0	39.8	2.741	0.015	0.016	0.000	0.391	0.33	
199	9/2/2004	10:28:34 PM		24.869	25.589	24.136	25.607	25.169		46.163	50.293	13.394	33.426	-1.215	-7.229		51.566	0.101	14.643	0.003		182.00	3.03333	49.2	12.3	39.8	2.744	0.014	0.015	0.000	0.372	0.32	
200	9/2/2004	10:29:34 PM		24.863	25.589	24.14	25.601	25.123		46.18	50.426	13.382	33.288	-1.212	-7.301		48.692	0.113	14.643	0.003		183.00	3.05	49.3	11.6	39.7	2.740	0.016	0.017	0.000	0.417	0.36	
201	9/2/2004	10:30:34 PM		24.853	25.578	24.12	25.595	25.113		46.014	50.399	13.452	33.011	-1.215	-7.403		52.036	0.11	14.643	0.003		184.00	3.06667	49.3	12.4	39.5	2.724	0.016	0.016	0.000	0.409	0.35	
202	9/2/2004	10:31:34 PM		24.863	25.588	24.125	25.6	25.148		46.209	50.399	13.318	33.495	-1.212	-7.324		51.435	0.102	14.643	0.003		185.00	3.08333	49.3	12.3	39.9	2.748	0.015	0.015	0.000	0.376	0.32	
203	9/2/2004	10:32:34 PM		24.847	25.577	24.119	25.59	25.132		46.186	50.241	13.282	33.502	-1.212	-7.165		52.275	0.115	14.643	0.003		186.00	3.1	49.1	12.5	39.8	2.747	0.016	0.017	0.000	0.424	0.36	
204	9/2/2004	10:33:34 PM		24.841	25.582	24.113	25.594	25.141		45.879	50.154	13.194	33.224	-1.212	-7.061		53.083	0.112	14.643	0.003		187.00	3.11667	49.0	12.6	39.6	2.727	0.016	0.016	0.000	0.416	0.35	
205	9/2/2004	10:34:34 PM		24.851	25.592	24.118	25.589	25.116		46.07	50.39	13.099	33.582	-1.212	-7.009		50.494	0.103	14.643	0.003		188.00	3.13333	49.3	12.0	39.8	2.746	0.015	0.015	0.000	0.380	0.32	
206	9/2/2004	10:35:34 PM		24.831	25.571	24.083	25.568	25.141		45.692	50.189	12.901	33.225	-1.215	-7.252		49.971	0.112	14.643	0.003		189.00	3.15	49.1	11.9	39.5	2.721	0.016	0.016	0.000	0.417	0.35	
207	9/2/2004	10:36:34 PM		24.825	25.575	24.062	25.563	25.075		46.006	50.567	13.056	33.3	-1.212	-7.186		49.259	0.107	14.643	0.003		190.00	3.16667	49.4	11.7	39.7	2.734	0.015	0.016	0.000	0.397	0.34	
208	9/2/2004	10:37:34 PM		24.809	25.57	24.051	25.577	25.099		45.798	50.08	12.89	33.456	-1.209	-7.168		49.251	0.106	14.643	0.003		191.00	3.18333	49.0	11.7	39.6	2.732	0.015	0.016	0.000	0.393	0.33	
209	9/2/2004	10:38:34 PM		24.809	25.565	24.051	25.562	25.129		45.869	50.067	12.785	33.738	-1.215	-7.154		47.997	0.112	14.643	0.003		192.00	3.2	48.9	11.4	39.8	2.744	0.016	0.016	0.000	0.414	0.35	
210	9/2/2004	10:39:34 PM		24.799	25.564	24.05	25.571	25.094		46.082	50.26	12.745	33.959	-1.209	-7.298		50.722	0.111	14.643	0.004		193.00	3.21667	49.1	12.1	40.0	2.759	0.016	0.016	0.000	0.408	0.35	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	9/2/2004	10:40:34 PM		24.783	25.558	24.07	25.515	25.113		46.194	50.422	12.67	34.045	-1.212	-7.322		47.847	0.109	14.643	0.004		194.00	3.23333	49.3	11.4	40.1	2.766	0.016	0.016	0.000	0.399	0.34	
212	9/2/2004	10:41:34 PM		24.799	25.569	24.096	25.521	25.114		45.665	49.994	12.994	33.255	-1.212	-7.252		50.359	0.108	14.643	0.003		195.00	3.25	48.9	12.0	39.5	2.721	0.015	0.016	0.000	0.402	0.34	
213	9/2/2004	10:42:34 PM		24.799	25.559	24.136	25.511	25.094		46.078	50.413	13.223	33.327	-1.212	-7.053		50.515	0.097	14.643	0.003		196.00	3.26667	49.3	12.0	39.7	2.737	0.014	0.014	0.000	0.358	0.31	
214	9/2/2004	10:43:34 PM		24.793	25.553	24.16	25.515	25.038		45.881	50.038	12.927	33.658	-1.215	-7.122		49.462	0.108	14.643	0.003		197.00	3.28333	48.9	11.8	39.8	2.742	0.015	0.016	0.000	0.398	0.34	
215	9/2/2004	10:44:34 PM		24.793	25.548	24.185	25.505	24.988		46.086	50.216	12.849	33.869	-1.215	-7.246		49.497	0.115	14.643	0.003		198.00	3.3	49.1	11.8	40.0	2.756	0.016	0.017	0.000	0.421	0.36	
216	9/2/2004	10:45:34 PM		24.792	25.538	24.184	25.485	25.022		46.429	50.643	12.714	34.244	-1.212	-7.267		48.882	0.104	14.643	0.003		199.00	3.31667	49.5	11.6	40.3	2.781	0.015	0.015	0.000	0.378	0.32	
217	9/2/2004	10:46:34 PM		24.807	25.538	24.205	25.505	25.002		45.906	50.026	12.705	33.791	-1.212	-7.058		49.793	0.1	14.643	0.003		200.00	3.33333	48.9	11.9	39.8	2.747	0.014	0.015	0.000	0.367	0.31	
218	9/2/2004	10:47:34 PM		24.812	25.542	24.209	25.524	25.047		46.101	50.529	12.533	34.072	-1.212	-7.168		49.161	0.104	14.643	0.003		201.00	3.35	49.4	11.7	40.1	2.764	0.015	0.015	0.000	0.380	0.32	
219	9/2/2004	10:48:34 PM		24.827	25.537	24.229	25.514	25.047		46.012	50.312	12.584	33.879	-1.209	-7.171		47.09	0.109	14.643	0.004		202.00	3.36667	49.2	11.2	39.9	2.754	0.016	0.016	0.000	0.399	0.34	
220	9/2/2004	10:49:34 PM		24.842	25.552	24.249	25.529	25.037		46.089	50.31	12.563	34.109	-1.212	-7.301		52.609	0.105	14.643	0.003		203.00	3.38333	49.2	12.5	40.1	2.765	0.015	0.015	0.000	0.383	0.33	
221	9/2/2004	10:50:34 PM		24.831	25.531	24.228	25.508	25.001		46.453	50.571	12.631	34.407	-1.212	-7.067		51.308	0.1	14.643	0.004		204.00	3.4	49.4	12.2	40.4	2.788	0.014	0.015	0.000	0.362	0.31	
222	9/2/2004	10:51:34 PM		24.835	25.52	24.232	25.487	25.03		45.943	50.446	12.601	33.836	-1.215	-6.74		49.603	0.101	14.643	0.003		205.00	3.41667	49.3	11.8	39.9	2.750	0.014	0.015	0.000	0.370	0.32	
223	9/2/2004	10:52:34 PM		24.845	25.53	24.272	25.497	25.045		46.234	50.614	12.452	34.255	-1.209	-7.177		48.673	0.11	14.643	0.003		206.00	3.43333	49.5	11.6	40.2	2.775	0.016	0.016	0.000	0.399	0.34	
224	9/2/2004	10:53:34 PM		24.849	25.524	24.271	25.491	25.044		45.889	49.992	12.386	34.207	-1.215	-7.258		49.668	0.111	14.643	0.003		207.00	3.45	48.9	11.8	40.0	2.761	0.016	0.016	0.000	0.405	0.34	
225	9/2/2004	10:54:34 PM		24.864	25.524	24.286	25.486	25.059		46.456	50.641	12.613	34.357	-1.215	-7.226		50.267	0.112	14.643	0.003		208.00	3.46667	49.5	12.0	40.4	2.786	0.016	0.016	0.000	0.405	0.34	
226	9/2/2004	10:55:34 PM		24.858	25.513	24.29	25.455	25.073		45.344	49.594	12.871	33.027	-1.212	-6.842		48.715	0.1	14.643	0.003		209.00	3.48333	48.5	11.6	39.2	2.702	0.014	0.015	0.000	0.373	0.32	
227	9/2/2004	10:56:34 PM		24.863	25.513	24.325	25.46	25.048		45.763	49.903	13.084	33.249	-1.212	-6.94		50.066	0.1	14.643	0.003		210.00	3.5	48.8	11.9	39.5	2.724	0.014	0.015	0.000	0.369	0.31	
228	9/2/2004	10:57:34 PM		24.873	25.508	24.345	25.48	25.033		46.095	50.359	12.987	33.592	-1.209	-7.203		45.323	0.102	14.643	0.004		211.00	3.51667	49.2	10.8	39.8	2.747	0.015	0.015	0.000	0.373	0.32	
229	9/2/2004	10:58:34 PM		24.848	25.503	24.355	25.46	25.113		45.236	50.556	12.945	32.804	-0.535	-5.084		50.788	0.131	14.643	0.003		212.00	3.53333	49.4	12.1	39.0	2.690	0.019	0.019	0.000	0.489	0.42	
230	9/2/2004	10:59:34 PM		24.847	25.477	24.33	25.454	25.107		45.748	49.845	12.577	33.797	-1.215	-7.217		47.874	0.113	14.643	0.003		213.00	3.55	48.7	11.4	39.8	2.742	0.016	0.016	0.000	0.415	0.35	
231	9/2/2004	11:00:34 PM		24.901	25.487	24.354	25.439	25.116		45.512	50.063	12.575	33.497	-1.212	-5.931		50.181	0.091	14.643	0.003		214.00	3.56667	48.9	12.0	39.5	2.724	0.013	0.013	0.000	0.336	0.29	
232	9/2/2004	11:01:34 PM		24.896	25.492	24.354	25.464	25.131		45.943	50.063	12.667	33.854	-1.215	-6.544		50.275	0.096	14.643	0.003		215.00	3.58333	48.9	12.0	39.9	2.751	0.014	0.014	0.000	0.351	0.30	
233	9/2/2004	11:02:34 PM		24.911	25.487	24.364	25.469	25.051		46.526	50.374	12.554	34.593	-1.215	-7.168		48.859	0.117	14.643	0.003		216.00	3.6	49.2	11.6	40.6	2.796	0.017	0.017	0.000	0.420	0.36	
234	9/2/2004	11:03:34 PM		24.916	25.487	24.384	25.479	25.076		46.36	50.492	12.561	34.263	-1.212	-7.238		49.512	0.109	14.643	0.003		217.00	3.61667	49.4	11.8	40.3	2.779	0.016	0.016	0.000	0.394	0.34	
235	9/2/2004	11:04:34 PM		24.916	25.476	24.383	25.473	25.056		46.491	50.662	12.525	34.476	-1.212	-7.238		48.913	0.104	14.643	0.003		218.00	3.63333	49.5	11.7	40.5	2.791	0.015	0.015	0.000	0.374	0.32	
236	9/2/2004	11:05:34 PM		24.931	25.476	24.398	25.458	25.001		46.539	50.962	12.372	34.567	-1.209	-7.238		49.91	0.109	14.643	0.003		219.00	3.65	49.8	11.9	40.6	2.796	0.016	0.016	0.000	0.391	0.33	
237	9/2/2004	11:06:34 PM		24.936	25.481	24.408	25.443	25.016		46.478	50.753	12.273	34.649	-1.212	-7.261		51.141	0.103	14.643	0.003		220.00	3.66667	49.6	12.2	40.6	2.797	0.015	0.015	0.000	0.370	0.31	
238	9/2/2004	11:07:34 PM		24.934	25.469	24.417	25.442	25.039		45.69	49.909	12.471	33.816	-1.209	-6.706		50.444	0.092	14.643	0.003		221.00	3.68333	48.8	12.0	39.8	2.741	0.013	0.013	0.000	0.337	0.29	
239	9/2/2004	11:08:34 PM		24.934	25.469	24.421	25.456	25.034		45.9	49.984	12.69	33.867	-1.212	-6.714		50.294	0.109	14.643	0.003		222.00	3.7	48.9	12.0	39.9	2.750	0.016	0.016	0.000	0.398	0.34	
240	9/2/2004	11:09:34 PM		24.938	25.463	24.431	25.445	24.988		45.85	49.982	12.949	33.442	-1.212	-7.006		52.964	0.1	14.643	0.003		223.00	3.71667	48.9	12.6	39.6	2.733	0.014	0.015	0.000	0.367	0.31	
241	9/2/2004	11:10:34 PM		24.938	25.457	24.425	25.425	24.987		46.032	50.434	12.953	33.499	-1.215	-7.229		48.93	0.103	14.643	0.003		224.00	3.73333	49.3	11.7	39.8	2.742	0.015	0.015	0.000	0.377	0.32	
242	9/2/2004	11:11:34 PM		24.943	25.457	24.435	25.44	24.997		45.489	49.646	12.839	33.253	-1.215	-7.165		48.984	0.105	14.643	0.003		225.00	3.75	48.5	11.7	39.4	2.714	0.015	0.015	0.000	0.388	0.33	
243	9/2/2004	11:12:34 PM		24.938	25.437	24.415	25.42	24.987		45.825	50.156	12.642	33.707	-1.212	-7.223		51.249	0.092	14.643	0.003		226.00	3.76667	49.0	12.2	39.8	2.742	0.013	0.013	0.000	0.337	0.29	
244	9/2/2004	11:13:34 PM		24.973	25.463	24.446	25.435	25.013		45.253	49.491	12.556	33.253	-1.212	-6.697		51.47	0.097	14.643	0.003		227.00	3.78333	48.4	12.3	39.3	2.706	0.014	0.014	0.000	0.359	0.31	
245	9/2/2004	11:14:34 PM		24.943	25.442	24.415	25.385	24.968		45.439	49.702	12.488	33.374	-1.215	-7.03		49.301	0.114	14.643	0.003		228.00	3.8	48.6	11.7	39.4	2.717	0.016	0.017	0.000	0.421	0.36	
246	9/2/2004	11:15:34 PM		24.947	25.442	24.434	25.404	24.962		45.738	49.839	12.507	33.781	-1.212	-7.096		51.758	0.088	14.643	0.003		229.00	3.81667	48.7	12.3	39.8	2.741	0.013	0.013	0.000	0.322	0.27	
247	9/2/2004	11:16:34 PM		24.946	25.435	24.423	25.378	24.971		45.45	49.709	12.454	33.612	-1.215	-6.879		49.228	0.102	14.643	0.003		230.00	3.83333	48.6	11.7	39.5	2.726	0.015	0.015	0.000	0.375	0.32	
248	9/2/2004	11:17:34 PM		24.971	25.451	24.459	25.388	24.976		45.363	49.762	12.643	33.192	-1.206	-6.957		49.749	0.102	14.643	0.004		231.00	3.85	48.6	11.8	39.3	2.708	0.015	0.015	0.000	0.378	0.32	
249	9/2/2004	11:18:34 PM		24.956	25.441	24.439	25.378	24.991		45.728	49.957	12.644	33.516	-1.212	-7.157		52.098	0.105	14.643	0.003		232.00	3.86667	48.8	12.4	39.6	2.732	0.015	0.015	0.000	0.385	0.33	
250	9/2/2004	11:19:34 PM		24.956	25.435	24.438	25.368	24.971		45.558	49.814	12.554	33.475	-1.212	-7.148		52.077	0.097	14.643	0.003		233.00	3.88333	48.7	12.4	39.5	2.725	0.014	0.014	0.000	0.357	0.30	
251	9/2/2004	11:20:34 PM		24.954	25.429	24.432	25.381	24.989		45.719	50.075	12.561	33.651	-1.212	-6.761		48.283	0.091	14.643	0.003		234.00	3.9	48.9	11.5	39.7	2.736	0.013	0.013	0.000	0.334	0.28	
252	9/2/2004	11:21:34 PM		24.949	25.428	24.426	25.401	24.969		45.796	50.165	12.636	33.608	-1.212	-6.709		51.162	0.088	14.643	0.003		235.00	3.91667	49.0	12.2	39.7	2.737	0.013	0.013	0.000	0.323	0.27	
253	9/2/2004	11:22:34 PM		24.953	25.423	24.44	25.425	24.983		45.653	49.889	12.681	33.44	-1.212	-6.891		50.369	0.094	14.643	0.003		236.00	3.93333	48.8	12.0	39.5	2.727	0.013	0.014	0.000	0.346	0.29	
254	9/2/2004	11:23:34 PM		24.963	25.428	24.45	25.415	25.008		45.767	49.932	12.587	33.688	-1.212	-7.064		49.944	0.104	14.643	0.003		237.00	3.95	48.8	11.9	39.7	2.739	0.015	0.015	0.000	0.381	0.32	
255	9/2/2004	11:24:34 PM		24.952	25.417	24.454	25.399	24.997		46.339	50.426	12.821	33.976	-1.212	-7.122		51.362	0.102	14.643	0.003		238.00	3.96667	49.3	12.2	40.2	2.769	0.015	0.015	0.000	0.369	0.31	
256	9/2/2004	11:25:34 PM		24.956	25.416	24.454	25.373	24.931		46.043	50.322	12.642	33.896	-1.212	-7.151		49.643	0.101	14.643	0.003		239.00	3.98333	49.2	11.8	40.0	2.756	0.014	0.015	0.000	0.367	0.31	
257	9/2/2004	11:26:34 PM		24.956	25.426	24.438	25.408	24.966		45.444	49.286	12.309	33.592	-1.212	-7.015		50.098	0.117	14.643	0.004		240.00	4	48.2	11.9	39.5	2.725	0.017	0.017	0.000	0.431	0.37	
258	9/2/2004	11:27:34 PM		24.96	25.415	24.427	25.402	24.94		45.07	49.344	12.27	33.389	-1.212	-6.226		51.975	0.087	14.643	0.003		241.00	4.01667	48.2	12.4	39.2	2.705	0.012	0.013	0.000	0.323	0.27	
259	9/2/2004	11:28:34 PM		24.949	25.404	24.416	25.396	24.914		45.524	49.64	12.281	33.756	-1.212	-6.92		50.636	0.133	14.643	0.004		242.00	4.03333	48.5	12.1	39.6	2.733	0.019	0.019	0.000	0.488	0.42	
260	9/2/2004	11:29:34 PM		24.948	25.403	24.4	25.38	24.923		45.568	49.878	12.381	33.596	-1.212	-6.787		48.623	0.111	14.643	0.003		243.00	4.05	48.8	11.6	39.6	2.729	0.016	0.016	0.000	0.408	0.35	
261	9/2/2004	11:30:34 PM		24.951	25.406	24.414	25.408	24.891		45.545	49.655	12.281	33.74	-1.212	-7.024		49.562	0.107	14.643	0.003		244.00	4.06667	48.5	11.8	39.6	2.733	0.015	0.016	0.000	0.393	0.33	
262	9/2/2004	11:31:34 PM		24.951	25.406	24.414	25.393	24.861		45.686	49.858	12.294	33.873	-1.209	-7.111		48.002	0.105	14.643	0.004		245.00	4.08333	48.7	11.4	39.8	2.743	0.015	0.015	0.000	0.384	0.33	
263	9/2/2004	11:32:34 PM		24.941	25.396	24.398	25.363	24.906		45.47	49.567	12.23	33.738	-1.215	-7.082		49.013	0.105	14.643	0.003		246.00	4.1	48.4	11.7	39.6	2.731	0.015	0.015	0.000	0.386	0.33	
264	9/2/2004	11:33:34 PM		24.941	25.396	24.403	25.378	24.846		45.765	49.827	12.276	34.082	-1.212	-7.09		50.39	0.104	14.643	0.003		247.00	4.11667	48.7	12.0	39.9	2.753	0.015	0.015	0.000	0.379	0.32	
265	9/2/2004	11:34:34 PM		24.94	25.39	24.407	25.372	24.915		45.715	49.82	12.364	33.768	-1.212	-6.934		44.808	0.111	14.643	0.003		248.00	4.13333	48.7	10.7	39.7	2.740	0.016	0.016	0.000	0.407	0.35	
266	9/2/2004	11:35:34 PM		24.924	25.374	24.397	25.341	24.889		45.734	49.88	12.21	34.097	-1.212	-6.709		52.839	0.108	14.643	0.003		249.00	4.15	48.8	12.6	39.9	2.752	0.015	0.016	0.000	0.394	0.34	
267	9/2/2004	11:36:34 PM		24.934	25.379	24.392	25.326	24.924		45.614	49.891	12.334	33.729	-1.212	-6.723		50.281	0.103	14.643	0.003		250.00	4.16667	48.8	12.0	39.7	2.735	0.015	0.015	0.000	0.378	0.32	
268	9/2/2004	11:37:34 PM		24.929	25.374	24.387	25.326	24.904		45.551	49.478	12.217	33.947	-1.212	-7.015		49.948	0.109	14.643	0.003		251.00	4.18333	48.4	11.9	39.7	2.741	0.016	0.016	0.000	0.399	0.34	
269	9/2/2004	11:38:34 PM		24.929	25.374	24.387	25.301	24.874		45.68	49.874	12.234	33.967	-1.212	-7.032		52.809	0.098	14.643	0.003		252.00	4.2	48.7	12.6	39.8	2.746	0.014	0.014	0.000	0.358	0.31	
270	9/2/2004	11:39:34 PM		24.919	25.369	24.386	25.321	24.849		45.288	49.244	12.037	33.871	-1.206	-6.767		49.702	0.099	14.643	0.004		253.00	4.21667	48.1	11.8	39.6	2.729	0.014	0.014	0.000	0.364	0.31	
271	9/2/2004	11:40:34 PM		24.919	25.359	24.366	25.321	24.829		45.319	49.605	12.095	33.709	-1.215	-6.775		45.657	0.105	14.643	0.003		254.00	4.23333	48.5	10.9	39.5	2.724	0.015	0.015	0.000	0.387	0.33	
272	9/2/2004	11:41:34 PM		24.919	25.364	24.381	25.356	24.884		45.381	49.605	12.042	33.939	-1.209	-6.963		49.51	0.107	14.643	0.004		255.00	4.25	48.5	11.8	39.7	2.734	0.015	0.016	0.000	0.393	0.33	
273	9/2/2004	11:42:34 PM		24.913	25.358	24.35	25.35	24.978		45.365	49.847	12.207	33.479	-1.212	-6.801		49.76	0.104	14.643	0.003		256.00	4.26667	48.7	11.9	39.4	2.718	0.015	0.015	0.000	0.385	0.33	
274	9/2/2004	11:43:34 PM		24.897	25.342	24.344	25.369	25.032		45.329	49.74	12.048	33.623	-1.212	-6.966		51.458	0.108	14.643	0.003		257.00	4.28333	48.6	12.3	39.5	2.722	0.015	0.016	0.000	0.399	0.34	
275	9/2/2004	11:44:34 PM		24.902	25.347	24.359	25.464	25.132		45.311	49.485	12.036	33.785	-1.212	-7.035		50.3	0.105	14.643	0.003		258.00	4.3	48.4	12.0	39.5	2.727	0.015	0.015	0.000	0.387	0.33	
276	9/2/2004	11:45:34 PM		24.9	25.34	24.348	25.523	25.12		45.232	49.551	12.164	33.59	-1.218	-6.344		50.194	0.083	14.643	0.003		259.00	4.31667	48.4	12.0	39.4	2.717	0.012	0.012	0.000	0.307	0.26	
277	9/2/2004	11:46:34 PM		24.905	25.355	24.372	25.557	25.195		45.52	49.748	11.988	34.049	-1.212	-6.781		48.39	0.105	14.643	0.003		260.00	4.33333	48.6	11.5	39.8	2.743	0.015	0.015	0.000	0.385	0.33	
278	9/2/2004	11:47:34 PM		24.92	25.365	24.373	25.633	25.2		45.416	49.655	12.012	33.912	-1.212	-6.544		47.244	0.11	14.643	0.003		261.00	4.35	48.5	11.3	39.7	2.735	0.016	0.016	0.000	0.404	0.34	
279	9/2/2004	11:48:34 PM		24.916	25.366	24.368	25.654	25.186		45.545	49.696	12.064	34.082	-1.212	-6.856		49.835	0.104	14.643	0.003		262.00	4.36667	48.6	11.9	39.8	2.745	0.015	0.015	0.000	0.381	0.32	
280	9/2/2004	11:49:34 PM		24.912	25.362	24.364	25.619	25.202		45.275	49.547	11.974	33.776	-1.212	-7.024		50.081	0.103	14.643	0.004		263.00	4.38333	48.4	11.9	39.5	2.725	0.015	0.015	0.000	0.380	0.32	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	9/2/2004	11:50:34 PM		24.912	25.367	24.364	25.594	25.157		45.827	50.009	12.075	34.224	-1.212	-6.949		49.533	0.104	14.643	0.003		264.00	4.4	48.9	11.8	40.0	2.760	0.015	0.015	0.000	0.379	0.32	
282	9/2/2004	11:51:34 PM		24.907	25.357	24.359	25.564	25.157		45.224	49.466	11.978	33.69	-1.212	-6.888		50.644	0.106	14.643	0.003		265.00	4.41667	48.3	12.1	39.5	2.720	0.015	0.015	0.000	0.392	0.33	
283	9/2/2004	11:52:34 PM		24.897	25.352	24.37	25.535	25.137		45.773	49.905	12.097	34.129	-1.212	-6.833		50.017	0.109	14.643	0.003		266.00	4.43333	48.8	11.9	40.0	2.754	0.016	0.016	0.000	0.398	0.34	
284	9/2/2004	11:53:34 PM		24.899	25.364	24.386	25.526	25.189		45.394	50.206	12.007	33.789	-0.969	-5.891		48.26	0.117	14.643	0.003		267.00	4.45	49.1	11.5	39.6	2.730	0.017	0.017	0.000	0.430	0.37	
285	9/2/2004	11:54:34 PM		24.899	25.349	24.351	25.491	25.169		45.456	49.733	11.892	33.978	-1.212	-6.952		48.93	0.11	14.643	0.003		268.00	4.46667	48.6	11.7	39.7	2.738	0.016	0.016	0.000	0.404	0.34	
286	9/2/2004	11:55:34 PM		24.914	25.354	24.346	25.451	25.164		45.317	49.547	11.798	34.049	-1.212	-6.57		50.434	0.096	14.643	0.004		269.00	4.48333	48.4	12.0	39.7	2.736	0.014	0.014	0.000	0.353	0.30	
287	9/2/2004	11:56:34 PM		24.904	25.349	24.321	25.441	25.109		45.083	49.495	11.891	33.651	-1.215	-6.544		47.974	0.099	14.643	0.003		270.00	4.5	48.4	11.4	39.4	2.714	0.014	0.014	0.000	0.367	0.31	
288	9/2/2004	11:57:34 PM		24.894	25.349	24.312	25.442	24.984		45.497	49.688	11.899	33.974	-1.212	-6.868		50.755	0.106	14.643	0.004		271.00	4.51667	48.6	12.1	39.7	2.740	0.015	0.015	0.000	0.389	0.33	
289	9/2/2004	11:58:34 PM		24.884	25.339	24.302	25.427	25.039		45.122	49.306	11.982	33.53	-1.215	-6.793		51.579	0.111	14.643	0.003		272.00	4.53333	48.2	12.3	39.3	2.711	0.016	0.016	0.000	0.412	0.35	
290	9/2/2004	11:59:34 PM		24.875	25.33	24.297	25.427	25.04		45.226	49.425	11.824	33.9	-1.215	-6.83		48.721	0.106	14.643	0.003		273.00	4.55	48.3	11.6	39.6	2.728	0.015	0.015	0.000	0.391	0.33	
291	9/3/2004	12:00:34 AM		24.876	25.33	24.298	25.418	25.036		45.193	49.57	11.946	33.729	-1.212	-6.778		50.924	0.102	14.643	0.003		274.00	4.56667	48.4	12.1	39.5	2.721	0.015	0.015	0.000	0.377	0.32	
292	9/3/2004	12:01:34 AM		24.866	25.325	24.303	25.423	25.026		45.352	49.735	11.929	33.803	-1.212	-6.845		50.746	0.111	14.643	0.003		275.00	4.58333	48.6	12.1	39.6	2.729	0.016	0.016	0.000	0.409	0.35	
293	9/3/2004	12:02:34 AM		24.866	25.33	24.303	25.448	25.006		45.031	49.197	11.86	33.686	-1.212	-6.778		50.619	0.108	14.643	0.003		276.00	4.6	48.1	12.1	39.4	2.714	0.015	0.016	0.000	0.401	0.34	
294	9/3/2004	12:03:34 AM		24.861	25.325	24.293	25.403	24.991		45.027	49.427	11.866	33.579	-1.215	-6.755		50.965	0.105	14.643	0.003		277.00	4.61667	48.3	12.1	39.3	2.710	0.015	0.015	0.000	0.390	0.33	
295	9/3/2004	12:04:34 AM		24.865	25.325	24.287	25.407	24.975		45.45	50.053	11.941	33.967	-1.212	-6.304		48.579	0.102	14.643	0.003		278.00	4.63333	48.9	11.6	39.7	2.738	0.015	0.015	0.000	0.375	0.32	
296	9/3/2004	12:05:34 AM		24.85	25.33	24.287	25.412	24.96		45.161	49.425	11.802	33.772	-1.215	-6.764		50.434	0.118	14.643	0.003		279.00	4.65	48.3	12.0	39.5	2.721	0.017	0.017	0.000	0.437	0.37	
297	9/3/2004	12:06:34 AM		24.854	25.324	24.266	25.412	24.994		44.765	49.114	11.602	33.571	-1.212	-6.703		50.165	0.1	14.643	0.003		280.00	4.66667	48.0	11.9	39.2	2.700	0.014	0.015	0.000	0.373	0.32	
298	9/3/2004	12:07:34 AM		24.854	25.328	24.266	25.406	25.029		44.966	49.433	11.64	33.787	-1.212	-6.691		52.78	0.119	14.643	0.003		281.00	4.68333	48.3	12.6	39.4	2.715	0.017	0.017	0.000	0.442	0.38	
299	9/3/2004	12:08:34 AM		24.847	25.322	24.264	25.384	25.027		44.931	49.281	11.703	33.649	-1.212	-6.729		50.897	0.104	14.643	0.003		282.00	4.7	48.2	12.1	39.3	2.709	0.015	0.015	0.000	0.387	0.33	
300	9/3/2004	12:09:34 AM		24.835	25.31	24.253	25.347	24.99		45.083	49.493	11.77	33.645	-1.215	-6.616		50.357	0.121	14.643	0.003		283.00	4.71667	48.4	12.0	39.4	2.714	0.017	0.018	0.000	0.449	0.38	
301	9/3/2004	12:10:34 AM		24.831	25.321	24.258	25.338	24.991		44.863	49.431	11.742	33.592	-1.212	-6.428		49.612	0.108	14.643	0.003		284.00	4.73333	48.3	11.8	39.2	2.705	0.015	0.016	0.000	0.402	0.34	
302	9/3/2004	12:11:34 AM		24.825	25.3	24.242	25.307	24.91		45.255	49.603	11.76	33.943	-1.218	-6.781		50.098	0.119	14.643	0.003		285.00	4.75	48.5	11.9	39.6	2.730	0.017	0.017	0.000	0.440	0.37	
303	9/3/2004	12:12:34 AM		24.82	25.31	24.252	25.317	24.975		45.178	49.51	11.728	33.924	-1.215	-6.521		50.646	0.111	14.643	0.003		286.00	4.76667	48.4	12.1	39.6	2.727	0.016	0.016	0.000	0.410	0.35	
304	9/3/2004	12:13:34 AM		24.819	25.299	24.246	25.291	24.939		44.684	49.234	11.621	33.491	-1.212	-6.128		49.387	0.106	14.643	0.003		287.00	4.78333	48.1	11.8	39.1	2.695	0.015	0.016	0.000	0.397	0.34	
305	9/3/2004	12:14:34 AM		24.824	25.319	24.276	25.321	24.979		45.107	49.398	11.672	33.879	-1.209	-6.723		49.009	0.114	14.643	0.003		288.00	4.8	48.3	11.7	39.5	2.723	0.016	0.017	0.000	0.422	0.36	
306	9/3/2004	12:15:34 AM		24.823	25.308	24.261	25.325	24.918		45.17	49.4	11.799	33.887	-1.206	-6.83		53.02	0.113	14.643	0.004		289.00	4.81667	48.3	12.6	39.5	2.725	0.016	0.017	0.000	0.418	0.36	
307	9/3/2004	12:16:34 AM		24.803	25.288	24.22	25.335	24.938		45.419	49.858	11.824	34.047	-1.212	-6.654		52.622	0.113	14.643	0.003		290.00	4.83333	48.7	12.5	39.7	2.739	0.016	0.017	0.000	0.416	0.35	
308	9/3/2004	12:17:34 AM		24.813	25.288	24.235	25.36	24.938		45.441	50.046	11.917	33.9	-1.212	-6.535		51.036	0.102	14.643	0.003		291.00	4.85	48.9	12.2	39.7	2.735	0.015	0.015	0.000	0.376	0.32	
309	9/3/2004	12:18:34 AM		24.808	25.298	24.245	25.35	24.928		45.441	49.806	11.742	34.051	-1.215	-6.784		52.459	0.117	14.643	0.003		292.00	4.86667	48.7	12.5	39.7	2.740	0.017	0.017	0.000	0.431	0.37	
310	9/3/2004	12:19:34 AM		24.807	25.292	24.239	25.354	24.952		45.091	49.389	11.7	33.772	-1.209	-6.726		52.207	0.107	14.643	0.004		293.00	4.88333	48.3	12.4	39.4	2.719	0.015	0.016	0.000	0.397	0.34	
311	9/3/2004	12:20:34 AM		24.817	25.292	24.244	25.339	24.972		44.697	49.165	11.717	33.37	-1.212	-6.298		48.999	0.12	14.643	0.003		294.00	4.9	48.0	11.7	39.0	2.691	0.017	0.018	0.000	0.450	0.38	
312	9/3/2004	12:21:34 AM		24.796	25.276	24.223	25.323	24.961		44.637	49.078	11.573	33.53	-1.212	-6.405		51.618	0.12	14.643	0.003		295.00	4.91667	48.0	12.3	39.1	2.695	0.017	0.018	0.000	0.449	0.38	
313	9/3/2004	12:22:34 AM		24.796	25.286	24.229	25.309	24.961		45.267	49.704	11.779	33.785	-1.212	-6.853		52.709	0.108	14.643	0.003		296.00	4.93333	48.6	12.6	39.5	2.725	0.015	0.016	0.000	0.400	0.34	
314	9/3/2004	12:23:34 AM		24.791	25.281	24.244	25.283	24.901		44.788	49.02	11.757	33.428	-1.212	-6.567		53.133	0.125	14.643	0.003		297.00	4.95	47.9	12.7	39.1	2.696	0.018	0.018	0.000	0.467	0.40	
315	9/3/2004	12:24:34 AM		24.786	25.271	24.243	25.273	24.916		44.595	48.985	11.638	33.454	-1.215	-6.446		50.603	0.12	14.643	0.003		298.00	4.96667	47.9	12.1	39.0	2.691	0.017	0.018	0.000	0.450	0.38	
316	9/3/2004	12:25:34 AM		24.781	25.271	24.253	25.258	24.901		44.811	49.228	11.784	33.362	-1.209	-6.714		51.13	0.112	14.643	0.004		299.00	4.98333	48.1	12.2	39.1	2.695	0.016	0.016	0.000	0.419	0.36	
317	9/3/2004	12:26:34 AM		24.789	25.259	24.276	25.291	24.904		44.823	49.114	11.598	33.547	-1.209	-6.639		51.064	0.102	14.643	0.004		300.00	5	48.0	12.2	39.2	2.702	0.015	0.015	0.000	0.380	0.32	
318	9/3/2004	12:27:34 AM		24.798	25.277	24.31	25.295	24.893		44.581	48.786	11.697	33.292	-1.212	-6.706		52.933	0.117	14.643	0.003		301.00	5.01667	47.7	12.6	38.9	2.685	0.017	0.017	0.000	0.439	0.37	
319	9/3/2004	12:28:34 AM		24.798	25.267	24.31	25.295	24.913		44.734	49.056	11.698	33.356	-1.212	-6.318		48.36	0.123	14.643	0.003		302.00	5.03333	47.9	11.5	39.0	2.692	0.018	0.018	0.000	0.460	0.39	
320	9/3/2004	12:29:34 AM		24.808	25.267	24.335	25.32	24.888		44.925	49.275	11.623	33.733	-1.209	-6.492		50.861	0.114	14.643	0.003		303.00	5.05	48.1	12.1	39.3	2.712	0.016	0.017	0.000	0.423	0.36	
321	9/3/2004	12:30:34 AM		24.791	25.241	24.303	25.278	24.881		44.998	49.396	11.723	33.649	-1.215	-6.717		50.19	0.117	14.643	0.003		304.00	5.06667	48.3	12.0	39.3	2.711	0.017	0.017	0.000	0.434	0.37	
322	9/3/2004	12:31:34 AM		24.806	25.255	24.338	25.303	24.896		45.199	49.543	11.625	33.98	-1.212	-6.57		49.48	0.119	14.643	0.003		305.00	5.08333	48.4	11.8	39.6	2.730	0.017	0.017	0.000	0.438	0.37	
323	9/3/2004	12:32:34 AM		24.815	25.25	24.337	25.312	24.905		44.718	49.167	11.5	33.662	-1.212	-6.451		50.588	0.116	14.643	0.003		306.00	5.1	48.0	12.0	39.2	2.702	0.017	0.017	0.000	0.432	0.37	
324	9/3/2004	12:33:34 AM		24.809	25.238	24.331	25.276	24.894		44.558	49.157	11.399	33.54	-1.212	-6.425		48.957	0.121	14.643	0.003		307.00	5.11667	48.0	11.7	39.0	2.692	0.017	0.018	0.000	0.452	0.38	
325	9/3/2004	12:34:34 AM		24.831	25.256	24.353	25.298	24.836		44.489	48.654	11.474	33.469	-1.209	-6.639		51.21	0.126	14.643	0.003		308.00	5.13333	47.5	12.2	39.0	2.687	0.018	0.018	0.000	0.471	0.40	
326	9/3/2004	12:35:34 AM		24.82	25.25	24.352	25.252	24.825		44.718	49.17	11.542	33.504	-1.212	-6.475		49.608	0.126	14.643	0.004		309.00	5.15	48.0	11.8	39.1	2.697	0.018	0.018	0.000	0.470	0.40	
327	9/3/2004	12:36:34 AM		24.831	25.241	24.338	25.223	24.826		44.701	49.389	11.655	33.321	-1.218	-6.232		53.227	0.118	14.643	0.003		310.00	5.16667	48.3	12.7	39.0	2.690	0.017	0.017	0.000	0.441	0.38	
328	9/3/2004	12:37:34 AM		24.836	25.236	24.353	25.218	24.831		44.796	49.139	11.617	33.602	-1.212	-6.639		50.97	0.123	14.643	0.003		311.00	5.18333	48.0	12.1	39.2	2.703	0.018	0.018	0.000	0.458	0.39	
329	9/3/2004	12:38:34 AM		24.835	25.23	24.363	25.212	24.78		44.668	49.097	11.542	33.444	-1.209	-6.584		51.464	0.113	14.643	0.004		312.00	5.2	48.0	12.3	39.1	2.693	0.016	0.016	0.000	0.422	0.36	
330	9/3/2004	12:39:34 AM		24.835	25.224	24.357	25.167	24.78		44.562	49.062	11.412	33.551	-1.215	-6.318		49.069	0.123	14.643	0.003		313.00	5.21667	47.9	11.7	39.1	2.693	0.018	0.018	0.000	0.459	0.39	
331	9/3/2004	12:40:34 AM		24.84	25.219	24.372	25.131	24.755		44.541	49.018	11.408	33.541	-1.209	-6.307		47.476	0.117	14.643	0.003		314.00	5.23333	47.9	11.3	39.0	2.692	0.017	0.017	0.000	0.437	0.37	
332	9/3/2004	12:41:34 AM		24.839	25.209	24.371	25.126	24.829		44.848	49.416	11.69	33.551	-1.209	-6.582		51.643	0.124	14.643	0.004		315.00	5.25	48.3	12.3	39.2	2.703	0.018	0.018	0.000	0.461	0.39	
333	9/3/2004	12:42:34 AM		24.843	25.208	24.376	25.15	24.853		44.844	49.277	11.564	33.682	-1.212	-6.492		48.848	0.121	14.643	0.003		316.00	5.26667	48.2	11.6	39.3	2.707	0.017	0.018	0.000	0.449	0.38	
334	9/3/2004	12:43:34 AM		24.858	25.223	24.416	25.19	24.923		44.591	49.002	11.52	33.467	-1.209	-6.368		52.04	0.104	14.643	0.003		317.00	5.28333	47.9	12.4	39.0	2.691	0.015	0.015	0.000	0.388	0.33	
335	9/3/2004	12:44:34 AM		24.844	25.204	24.392	25.206	24.979		44.429	48.952	11.559	33.225	-1.215	-6.414		49.825	0.118	14.643	0.003		318.00	5.3	47.8	11.9	38.8	2.677	0.017	0.017	0.000	0.443	0.38	
336	9/3/2004	12:45:34 AM		24.865	25.214	24.402	25.272	25.045		44.469	48.844	11.353	33.499	-1.215	-6.518		48.855	0.122	14.643	0.003		319.00	5.31667	47.7	11.6	39.0	2.688	0.017	0.018	0.000	0.456	0.39	
337	9/3/2004	12:46:34 AM		24.871	25.216	24.414	25.318	24.976		44.606	49.126	11.521	33.452	-1.209	-6.489		46.02	0.134	14.643	0.004		320.00	5.33333	48.0	11.0	39.0	2.691	0.019	0.020	0.000	0.500	0.43	
338	9/3/2004	12:47:34 AM		24.877	25.207	24.39	25.294	24.967		44.131	48.593	11.269	33.265	-1.212	-6.249		50.553	0.128	14.643	0.003		321.00	5.35	47.5	12.0	38.7	2.668	0.018	0.019	0.000	0.482	0.41	
339	9/3/2004	12:48:34 AM		24.879	25.213	24.391	25.291	24.934		44.05	48.417	11.28	33.21	-1.151	-6.174		51.285	0.116	14.643	0.004		322.00	5.36667	47.3	12.2	38.6	2.663	0.017	0.017	0.000	0.437	0.37	
340	9/3/2004	12:49:34 AM		24.864	25.198	24.371	25.286	24.899		44.261	48.79	11.327	33.218	-1.212	-6.506		50.736	0.118	14.643	0.003		323.00	5.38333	47.7	12.1	38.7	2.671	0.017	0.017	0.000	0.444	0.38	
341	9/3/2004	12:50:34 AM		24.857	25.182	24.355	25.229	24.967		43.901	48.457	11.381	32.802	-1.215	-6.443		51.961	0.114	14.643	0.003		324.00	5.4	47.3	12.4	38.4	2.644	0.016	0.017	0.000	0.433	0.37	
342	9/3/2004	12:51:34 AM		24.873	25.203	24.37	25.27	24.948		43.888	48.587	11.454	32.796	-0.989	-5.948		47.369	0.114	14.643	0.004		325.00	5.41667	47.5	11.3	38.3	2.644	0.016	0.017	0.000	0.433	0.37	
343	9/3/2004	12:52:34 AM		24.858	25.203	24.355	25.23	24.968		43.986	48.43	11.366	33.032	-1.212	-6.472		48.642	0.12	14.643	0.004		326.00	5.43333	47.3	11.6	38.5	2.655	0.017	0.017	0.000	0.454	0.39	
344	9/3/2004	12:53:34 AM		24.857	25.197	24.345	25.234	24.987		44.371	48.867	11.413	33.28	-1.215	-6.463		50.805	0.124	14.643	0.003		327.00	5.45	47.7	12.1	38.8	2.677	0.018	0.018	0.000	0.466	0.40	
345	9/3/2004	12:54:34 AM		24.852	25.196	24.349	25.254	24.942		44.348	48.805	11.483	33.21	-1.212	-6.197		50.79	0.111	14.643	0.003		328.00	5.46667	47.7	12.1	38.8	2.674	0.016	0.016	0.000	0.417	0.36	
346	9/3/2004	12:55:34 AM		24.852	25.192	24.32	25.194	24.967		46.08	50.736	10.948	35.492	-1.166	-6.425		46.477	0.134	14.643	0.003		329.00	5.48333	49.6	11.1	40.8	2.812	0.019	0.020	0.000	0.479	0.41	
347	9/3/2004	12:56:34 AM		24.852	25.197	24.32	25.214	25.017		45.145	50.266	11.424	33.974	-0.81	-5.443		49.393	0.086	14.643	0.003		330.00	5.5	49.1	11.8	39.6	2.727	0.012	0.013	0.000	0.317	0.27	
348	9/3/2004	12:57:34 AM		24.87	25.2	24.332	25.237	25.07		44.786	50.096	11.491	33.649	-0.419	-4.494		50.634	0.117	14.643	0.003		331.00	5.51667	49.0	12.1	39.2	2.704	0.017	0.017	0.000	0.435	0.37	
349	9/3/2004	12:58:34 AM		24.857	25.197	24.329	25.244	25.047		45.551	50.457	11.402	34.491	-0.763	-5.266		48.942	0.126	14.643	0.003		332.00	5.53333	49.3	11.7	40.0	2.759	0.018	0.018	0.000	0.459	0.39	
350	9/3/2004	12:59:34 AM		24.841	25.181	24.309	25.223	24.991		45.363	50.417	11.381	34.285	-0.76	-5.411		50.454	0.125	14.643	0.003		333.00	5.55	49.3	12.0	39.8	2.746	0.018	0.018	0.000	0.458	0.39	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	9/3/2004	1:31:05 AM		25.221	25.16	25.009	25.212	24.92		46.501	51.363	12.775	34.117	-0.81	-5.33		50.371	0.141	14.643	0.003		364.52	6.07528	50.2	12.0	40.3	2.779	0.020	0.020	0.001	0.501	0.43	
352	9/3/2004	1:32:05 AM		25.221	25.15	25.009	25.217	24.91		46.379	51.418	12.703	33.945	-0.758	-5.428		48.396	0.117	14.643	0.003		365.52	6.09194	50.3	11.5	40.2	2.769	0.017	0.017	0.000	0.417	0.35	
353	9/3/2004	1:33:05 AM		25.396	25.151	25.025	25.203	24.931		23.049	51.959	12.783	10.336	23.477	-3.763		51.439	0.004	14.643	0.003		366.52	6.10861	50.8	12.3	16.7	1.151	0.001	0.001	0.000	0.034	0.03	
354	9/3/2004	1:34:05 AM		25.353	25.157	25.041	25.234	24.967		9.144	51.514	12.229	-2.909	37.535	11.148		51.082	0.003	14.643	0.003		367.52	6.12528	50.4	12.2	3.1	0.215	0.000	0.000	0.000	0.138	0.12	
355	9/3/2004	1:35:05 AM		25.308	25.137	25.036	25.224	24.947		8.706	51.333	11.983	-3.147	37.634	10.969		50.29	0.003	14.643	0.003		368.52	6.14194	50.2	12.0	2.8	0.192	0.000	0.000	0.000	0.154	0.13	
356	9/3/2004	1:36:05 AM		25.298	25.153	25.057	25.27	24.933		9.189	51.704	12.012	-2.655	37.637	11.57		50.786	0.003	14.643	0.006		369.52	6.15861	50.6	12.1	3.3	0.225	0.000	0.000	0.000	0.131	0.11	
357	9/3/2004	1:37:05 AM		25.269	25.148	25.057	25.246	24.929		0.44	51.746	11.865	-13.679	37.836	87.577		49.77	0.003	14.643	0.004		370.52	6.17528	50.6	11.9	-6.6	-0.456	0.000	0.000	0.000	-0.065	-0.06	
358	9/3/2004	1:38:05 AM		25.17	25.139	25.064	25.212	24.945		6.844	50.848	9.528	-2.646	39.006	25.062		51.12	0.003	14.643	0.003		371.52	6.19194	49.7	12.2	2.1	0.145	0.000	0.000	0.000	0.204	0.17	
359	9/3/2004	1:39:05 AM		25.144	25.128	25.062	25.19	24.929		11.261	51.176	9.75	1.515	34.797	0.27		52.62	0.12	14.643	0.003		372.52	6.20861	50.1	12.5	6.4	0.440	0.017	0.017	0.003	2.685	2.28	
360	9/3/2004	1:40:05 AM		25.363	25.122	25.067	25.185	24.913		24.541	51.325	10.587	13.942	21.468	0.322		49.716	0.313	14.643	0.003		373.52	6.22528	50.2	11.8	19.2	1.327	0.045	0.045	0.002	2.324	1.98	
361	9/3/2004	1:41:05 AM		25.338	25.127	25.071	25.199	24.867		43.436	51.866	12.812	30.938	2.867	0.469		48.898	0.212	14.643	0.003		374.52	6.24194	50.7	11.6	37.2	2.564	0.030	0.030	0.001	0.815	0.69	
362	9/3/2004	1:42:05 AM		25.418	25.127	25.061	25.224	24.887		44.102	51.879	13.745	30.567	2.146	0.533		50.736	0.184	14.643	0.003		375.52	6.25861	50.8	12.1	37.3	2.574	0.026	0.026	0.001	0.704	0.60	
363	9/3/2004	1:43:05 AM		25.392	25.131	25.045	25.219	24.957		46.188	51.541	13.485	33.058	-0.3	-4.37		50.84	0.281	14.643	0.003		376.52	6.27528	50.4	12.1	39.6	2.732	0.040	0.040	0.001	1.014	0.86	
364	9/3/2004	1:44:05 AM		25.376	25.136	25.06	25.243	24.891		48.782	51.957	13.79	35.353	-1.212	-3.916		49.58	0.308	14.643	0.003		377.52	6.29194	50.8	11.8	42.1	2.900	0.044	0.044	0.001	1.046	0.89	
365	9/3/2004	1:45:05 AM		25.376	25.136	25.065	25.193	24.946		48.776	52.049	13.926	35.262	-1.212	-5.734		50.375	0.195	14.643	0.003		378.52	6.30861	50.9	12.0	42.0	2.897	0.028	0.028	0.001	0.663	0.56	
366	9/3/2004	1:46:05 AM		25.406	25.145	25.064	25.197	24.92		49.06	51.997	14.068	35.412	-1.212	-6.532		47.307	0.175	14.643	0.003		379.52	6.32528	50.9	11.3	42.2	2.912	0.025	0.025	0.001	0.592	0.50	
367	9/3/2004	1:47:05 AM		25.405	25.139	25.063	25.182	24.945		49.177	52.063	14.054	35.546	-1.212	-6.726		50.2	0.171	14.643	0.003		380.52	6.34194	50.9	12.0	42.4	2.921	0.024	0.024	0.001	0.577	0.49	
368	9/3/2004	1:48:05 AM		25.409	25.144	25.073	25.221	24.929		49.222	52.148	14.131	35.49	-1.209	-6.631		51.664	0.171	14.643	0.003		381.52	6.35861	51.0	12.3	42.4	2.920	0.024	0.024	0.001	0.577	0.49	
369	9/3/2004	1:49:05 AM		25.444	25.143	25.062	25.215	24.973		48.411	51.818	14.135	34.743	-1.218	-4.225		49.989	0.209	14.643	0.003		382.52	6.37528	50.7	11.9	41.6	2.867	0.030	0.030	0.001	0.718	0.61	
370	9/3/2004	1:50:05 AM		25.379	25.144	25.038	25.216	24.934		48.631	51.273	13.807	35.371	-1.212	-5.029		51.086	0.27	14.643	0.003		383.52	6.39194	50.1	12.2	42.0	2.896	0.039	0.039	0.001	0.919	0.78	
371	9/3/2004	1:51:05 AM		25.309	25.143	25.032	25.21	24.933		49.996	51.406	13.767	36.769	-1.215	-6.423		51.193	0.164	14.643	0.003		384.52	6.40861	50.3	12.2	43.4	2.991	0.023	0.023	0.001	0.541	0.46	
372	9/3/2004	1:52:05 AM		25.308	25.142	25.051	25.205	24.928		47.138	48.937	15.026	32.434	-1.212	-6.463		53.304	0.14	14.643	0.003		385.52	6.42528	47.8	12.7	39.8	2.743	0.020	0.020	0.001	0.503	0.43	
373	9/3/2004	1:53:05 AM		25.274	25.133	25.027	25.19	24.918		46.796	48.502	13.829	33.495	-1.212	-6.7		49.349	0.153	14.643	0.003		386.52	6.44194	47.4	11.8	40.1	2.768	0.022	0.022	0.001	0.545	0.46	
374	9/3/2004	1:54:05 AM		25.295	25.154	25.038	25.237	24.905		47.495	49.342	13.658	34.306	-1.209	-6.79		50.953	0.154	14.643	0.003		387.52	6.45861	48.2	12.1	40.9	2.820	0.022	0.022	0.001	0.538	0.46	
375	9/3/2004	1:55:05 AM		25.294	25.134	24.983	25.231	24.889		47.196	49.197	13.293	34.277	-1.212	-6.856		51.351	0.151	14.643	0.003		388.52	6.47528	48.1	12.2	40.7	2.809	0.022	0.022	0.001	0.531	0.45	
376	9/3/2004	1:56:05 AM		25.304	25.133	24.917	25.215	24.928		46.717	48.6	13.087	34.183	-1.209	-6.876		49.702	0.151	14.643	0.004		389.52	6.49194	47.5	11.8	40.5	2.789	0.022	0.022	0.001	0.536	0.46	
377	9/3/2004	1:57:05 AM		25.293	25.137	24.886	25.195	24.918		46.563	48.6	12.947	34.117	-1.212	-6.833		50.911	0.152	14.643	0.004		390.52	6.50861	47.5	12.1	40.3	2.781	0.022	0.022	0.001	0.541	0.46	
378	9/3/2004	1:58:05 AM		25.283	25.137	24.866	25.19	24.923		46.557	48.523	12.969	34.119	-1.212	-6.871		52.346	0.149	14.643	0.003		391.52	6.52528	47.4	12.5	40.3	2.781	0.021	0.021	0.001	0.531	0.45	
379	9/3/2004	1:59:05 AM		25.258	25.137	24.841	25.195	24.918		46.754	48.881	13.017	34.197	-1.212	-6.882		52.034	0.149	14.643	0.003		392.52	6.54194	47.8	12.4	40.5	2.791	0.021	0.021	0.001	0.529	0.45	
380	9/3/2004	2:00:05 AM		25.242	25.137	24.81	25.189	24.867		46.713	48.882	13.145	34.019	-1.212	-6.842		49.049	0.149	14.643	0.003		393.52	6.55861	47.8	11.7	40.4	2.783	0.021	0.021	0.001	0.531	0.45	
381	9/3/2004	2:01:05 AM		25.202	25.121	24.755	25.133	24.867		46.692	48.937	12.955	34.156	-1.212	-6.862		48.229	0.148	14.643	0.003		394.52	6.57528	47.8	11.5	40.4	2.787	0.021	0.021	0.001	0.528	0.45	
382	9/3/2004	2:02:05 AM		25.202	25.131	24.755	25.168	24.857		46.595	48.931	12.957	34.142	-1.209	-6.81		48.024	0.147	14.643	0.003		395.52	6.59194	47.8	11.4	40.4	2.783	0.021	0.021	0.001	0.525	0.45	
383	9/3/2004	2:03:05 AM		25.201	25.13	24.739	25.188	24.871		46.789	49.078	12.911	34.331	-1.209	-6.79		50.438	0.147	14.643	0.003		396.52	6.60861	48.0	12.0	40.6	2.796	0.021	0.021	0.001	0.523	0.44	
384	9/3/2004	2:04:05 AM		25.196	25.15	24.734	25.193	24.831		46.414	48.699	12.98	33.848	-1.212	-6.781		50.329	0.147	14.643	0.003		397.52	6.62528	47.6	12.0	40.1	2.767	0.021	0.021	0.001	0.528	0.45	
385	9/3/2004	2:05:05 AM		25.186	25.145	24.689	25.213	24.901		46.835	49.207	12.875	34.347	-1.209	-6.795		49.647	0.149	14.643	0.003		398.52	6.64194	48.1	11.8	40.6	2.799	0.021	0.022	0.001	0.530	0.45	
386	9/3/2004	2:06:05 AM		25.14	25.134	24.658	25.216	24.8		46.155	48.645	12.716	33.836	-1.212	-6.755		50.694	0.148	14.643	0.004		399.52	6.65861	47.5	12.1	40.0	2.758	0.021	0.021	0.001	0.535	0.46	
387	9/3/2004	2:07:05 AM		25.119	25.133	24.652	25.211	24.854		46.153	48.641	12.667	33.848	-1.209	-6.804		52.409	0.148	14.643	0.003		400.52	6.67528	47.5	12.5	40.0	2.758	0.021	0.021	0.001	0.535	0.46	
388	9/3/2004	2:08:05 AM		25.088	25.118	24.621	25.18	24.848		46.117	48.682	12.553	34.043	-1.215	-6.703		52.991	0.144	14.643	0.003		401.52	6.69194	47.6	12.6	40.1	2.763	0.021	0.021	0.001	0.520	0.44	
389	9/3/2004	2:09:05 AM		25.073	25.128	24.611	25.195	24.878		45.96	48.616	12.528	33.861	-1.209	-6.717		50.219	0.142	14.643	0.003		402.52	6.70861	47.5	12.0	39.9	2.752	0.020	0.021	0.001	0.515	0.44	
390	9/3/2004	2:10:05 AM		25.073	25.127	24.606	25.2	24.843		46.006	48.654	12.511	33.9	-1.212	-6.79		49.13	0.146	14.643	0.004		403.52	6.72528	47.5	11.7	40.0	2.755	0.021	0.021	0.001	0.529	0.45	
391	9/3/2004	2:11:05 AM		25.077	25.141	24.604	25.213	24.806		46.01	48.786	12.534	33.898	-1.209	-6.801		49.284	0.148	14.643	0.003		404.52	6.74194	47.7	11.7	40.0	2.755	0.021	0.021	0.001	0.536	0.46	
392	9/3/2004	2:12:05 AM		25.057	25.137	24.58	25.194	24.827		46.783	49.01	12.684	34.376	-1.212	-6.437		49.457	0.188	14.643	0.003		405.52	6.75861	47.9	11.8	40.6	2.798	0.027	0.027	0.001	0.671	0.57	
393	9/3/2004	2:13:05 AM		25.082	25.137	24.555	25.169	24.797		46.426	48.925	12.654	34.123	-1.212	-5.012		49.952	0.077	14.643	0.003		406.52	6.77528	47.8	11.9	40.3	2.777	0.011	0.011	0.000	0.277	0.24	
394	9/3/2004	2:14:05 AM		25.051	25.125	24.538	25.153	24.826		46.908	49.282	12.562	34.7	-1.212	-6.333		48.047	0.163	14.643	0.003		407.52	6.79194	48.2	11.4	40.8	2.813	0.023	0.024	0.001	0.579	0.49	
395	9/3/2004	2:15:05 AM		25.041	25.13	24.508	25.137	24.821		46.489	48.693	12.295	34.569	-1.212	-6.726		44.27	0.154	14.643	0.003		408.52	6.80861	47.6	10.5	40.5	2.794	0.022	0.022	0.001	0.552	0.47	
396	9/3/2004	2:16:05 AM		25.016	25.13	24.503	25.153	24.766		46.74	48.83	12.392	34.647	-1.212	-6.804		52.081	0.156	14.643	0.003		409.52	6.82528	47.7	12.4	40.7	2.806	0.022	0.023	0.001	0.557	0.47	
397	9/3/2004	2:17:05 AM		24.995	25.129	24.487	25.141	24.839		47.719	49.058	12.417	35.685	-1.212	-6.408		49.898	0.125	14.643	0.003		410.52	6.84194	47.9	11.9	41.7	2.875	0.018	0.018	0.000	0.435	0.37	
398	9/3/2004	2:18:05 AM		24.933	25.128	24.471	25.145	24.828		46.151	48.295	12.217	34.372	-1.212	-6.151		50.348	0.197	14.643	0.003		411.52	6.85861	47.2	12.0	40.3	2.776	0.028	0.029	0.001	0.711	0.61	
399	9/3/2004	2:19:05 AM		24.923	25.132	24.475	25.189	24.828		46.153	48.117	12.287	34.429	-1.209	-5.33		48.404	0.075	14.643	0.003		412.52	6.87528	47.0	11.5	40.3	2.778	0.011	0.011	0.000	0.270	0.23	
400	9/3/2004	2:20:05 AM		24.897	25.126	24.444	25.179	24.822		47.982	48.624	12.562	35.816	-1.212	-6.119		46.904	0.163	14.643	0.003		413.52	6.89194	47.5	11.2	41.9	2.889	0.023	0.024	0.001	0.566	0.48	
401	9/3/2004	2:21:05 AM		24.857	25.126	24.444	25.174	24.832		47.6	48.461	12.434	35.638	-1.209	-6.417		52.248	0.19	14.643	0.003		414.52	6.90861	47.3	12.4	41.6	2.869	0.027	0.028	0.001	0.664	0.56	
402	9/3/2004	2:22:05 AM		24.847	25.116	24.419	25.159	24.802		47.88	48.716	12.44	35.913	-1.215	-6.738		51.053	0.157	14.643	0.003		415.52	6.92528	47.6	12.2	41.9	2.889	0.022	0.023	0.001	0.545	0.46	
403	9/3/2004	2:23:05 AM		24.832	25.121	24.419	25.194	24.762		47.671	48.73	12.404	35.714	-1.212	-6.784		51.462	0.155	14.643	0.003		416.52	6.94194	47.6	12.3	41.7	2.875	0.022	0.023	0.001	0.541	0.46	
404	9/3/2004	2:24:05 AM		24.876	25.116	24.399	25.173	24.811		47.31	48.707	12.425	35.283	-1.212	-6.7		50.89	0.151	14.643	0.003		417.52	6.95861	47.6	12.1	41.3	2.847	0.022	0.022	0.001	0.532	0.45	
405	9/3/2004	2:25:05 AM		24.921	25.11	24.398	25.167	24.781		47.345	48.881	12.511	35.248	-1.212	-6.59		50.621	0.154	14.643	0.003		418.52	6.97528	47.8	12.1	41.3	2.847	0.022	0.022	0.001	0.543	0.46	
406	9/3/2004	2:26:05 AM		24.932	25.111	24.394	25.194	24.772		46.414	49.062	12.516	34.195	-1.212	-4.679		50.444	0.115	14.643	0.003		419.52	6.99194	47.9	12.0	40.3	2.779	0.016	0.017	0.000	0.416	0.35	
407	9/3/2004	2:27:05 AM		24.911	25.101	24.359	25.188	24.816		46.999	48.517	12.355	35.106	-1.212	-6.657		47.34	0.159	14.643	0.003		420.52	7.00861	47.4	11.3	41.1	2.830	0.023	0.023	0.001	0.565	0.48	
408	9/3/2004	2:28:05 AM		24.913	25.117	24.37	25.199	24.823		47.279	48.803	12.446	35.225	-1.212	-6.781		47.724	0.149	14.643	0.003		421.52	7.02528	47.7	11.4	41.3	2.844	0.021	0.022	0.001	0.526	0.45	
409	9/3/2004	2:29:05 AM		24.877	25.106	24.359	25.179	24.832		47.161	48.794	12.432	35.047	-1.209	-6.726		51.055	0.155	14.643	0.004		422.52	7.04194	47.7	12.2	41.1	2.834	0.022	0.023	0.001	0.550	0.47	
410	9/3/2004	2:30:05 AM		24.851	25.101	24.354	25.168	24.816		47.076	48.743	12.296	35.154	-1.212	-6.778		46.172	0.156	14.643	0.003		423.52	7.05861	47.6	11.0	41.1	2.835	0.022	0.023	0.001	0.553	0.47	
411	9/3/2004	2:31:05 AM		24.826	25.091	24.339	25.138	24.806		47.099	48.747	12.385	35.154	-1.212	-6.816		49.883	0.153	14.643	0.003		424.52	7.07528	47.6	11.9	41.1	2.836	0.022	0.022	0.001	0.543	0.46	
412	9/3/2004	2:32:05 AM		24.831	25.101	24.344	25.158	24.836		46.847	48.399	12.315	35.006	-1.212	-6.608		49.52	0.167	14.643	0.003		425.52	7.09194	47.3	11.8	40.9	2.822	0.024	0.024	0.001	0.595	0.51	
413	9/3/2004	2:33:05 AM		24.816	25.101	24.339	25.143	24.846		46.617	48.226	12.295	34.745	-1.212	-6.668		49.522	0.159	14.643	0.003		426.52	7.10861	47.1	11.8	40.7	2.805	0.023	0.023	0.001	0.570	0.49	
414	9/3/2004	2:34:05 AM		24.811	25.105	24.328	25.157	24.836		46.874	48.169	12.17	35.172	-1.212	-6.527		51.988	0.172	14.643	0.003		427.52	7.12528	47.0	12.4	41.0	2.828	0.025	0.025	0.001	0.612	0.52	
415	9/3/2004	2:35:05 AM		24.767	25.096	24.299	25.139	24.792		45.865	48.531	12.285	33.951	-1.215	-5.113		47.05	0.23	14.643	0.003		428.52	7.14194	47.4	11.2	39.9	2.752	0.033	0.034	0.001	0.842	0.72	
416	9/3/2004	2:36:05 AM		24.772	25.107	24.325	25.164	24.793		46.252	48.39	12.225	34.47	-1.212	-5.243		49.583	0.146	14.643	0.003		429.52	7.15861	47.3	11.8	40.4	2.783	0.021	0.021	0.001	0.528	0.45	
417	9/3/2004	2:37:05 AM		24.748	25.103	24.295	25.16	24.798		47.329	48.506	12.19	35.582	-1.212	-6.529		50.915	0.17	14.643	0.003		430.52	7.17528	47.4	12.1	41.5	2.858	0.024	0.025	0.001	0.599	0.51	
418	9/3/2004	2:38:05 AM		24.763	25.098	24.28	25.13	24.773		46.75	48.415	12.287	34.782	-1.212	-6.486		48.754	0.157	14.643	0.003		431.52	7.19194	47.3	11.6	40.8	2.811	0.022	0.023	0.001	0.563	0.48	
419	9/3/2004	2:39:05 AM		24.772	25.072	24.26	25.099	24.738		46.848	48.272	12.154	35.174	-1.215	-6.729		51.8	0.154	14.643	0.003		432.52	7.20861	47.1	12.3	41.0	2.828	0.022	0.023	0.001	0.549	0.47	
420	9/3/2004	2:40:05 AM		24.803	25.093	24.29	25.115	24.778		47.02	48.566	12.217	35.256	-1.212	-6.697		50.171	0.158	14.643	0.003		433.52	7.22528	47.4	11.9	41.1	2.836	0.023	0.023	0.001	0.561	0.48	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
421	9/3/2004	2:41:05 AM		24.787	25.071	24.284	25.109	24.712		46.719	48.43	12.215	35.004	-1.209	-6.428		48.636	0.144	14.643	0.003		434.52	7.24194	47.3	11.6	40.9	2.817	0.021	0.021	0.001	0.515	0.44	
422	9/3/2004	2:42:05 AM		24.79	25.074	24.297	25.077	24.645		46.638	48.517	12.404	34.612	-1.215	-6.518		50.208	0.138	14.643	0.003		435.52	7.25861	47.4	12.0	40.6	2.801	0.020	0.020	0.000	0.496	0.42	
423	9/3/2004	2:43:05 AM		24.774	25.079	24.317	25.106	24.749		47.403	48.492	12.291	35.572	-1.215	-6.342		49.843	0.2	14.643	0.003		436.52	7.27528	47.4	11.9	41.5	2.860	0.029	0.029	0.001	0.704	0.60	
424	9/3/2004	2:44:05 AM		24.764	25.079	24.312	25.106	24.689		46.501	48.39	12.085	34.844	-1.212	-6.07		50.261	0.201	14.643	0.003		437.52	7.29194	47.3	12.0	40.7	2.804	0.029	0.029	0.001	0.721	0.61	
425	9/3/2004	2:45:05 AM		24.765	25.084	24.327	25.127	24.79		46.352	47.725	12.384	34.521	-1.212	-6.697		52.278	0.15	14.643	0.003		438.52	7.30861	46.6	12.5	40.4	2.788	0.021	0.022	0.001	0.541	0.46	
426	9/3/2004	2:46:05 AM		24.749	25.079	24.327	25.121	24.729		46.646	48.208	12.171	34.903	-1.209	-6.761		53.546	0.154	14.643	0.004		439.52	7.32528	47.1	12.8	40.8	2.811	0.022	0.022	0.001	0.551	0.47	
427	9/3/2004	2:47:05 AM		24.744	25.078	24.341	25.12	24.754		46.58	48.086	12.328	34.632	-1.212	-6.683		50.651	0.164	14.643	0.003		440.52	7.34194	47.0	12.1	40.6	2.800	0.023	0.024	0.001	0.589	0.50	
428	9/3/2004	2:48:05 AM		24.788	25.082	24.365	25.135	24.718		44.63	47.882	12.138	32.871	-1.209	-4.463		55.719	0.099	14.643	0.004		441.52	7.35861	46.8	13.3	38.8	2.672	0.014	0.014	0.000	0.372	0.32	
429	9/3/2004	2:49:05 AM		24.686	25.061	24.348	25.093	24.721		46.534	48.397	12.263	34.696	-1.212	-5.596		48.644	0.096	14.643	0.003		442.52	7.37528	47.3	11.6	40.6	2.800	0.014	0.014	0.000	0.345	0.29	
430	9/3/2004	2:50:05 AM		24.672	25.061	24.349	25.088	24.767		46.872	47.839	12.202	35.182	-1.212	-6.423		47.563	0.14	14.643	0.003		443.52	7.39194	46.7	11.3	41.0	2.829	0.020	0.020	0.000	0.498	0.42	
431	9/3/2004	2:51:05 AM		24.667	25.061	24.344	25.113	24.767		46.634	47.797	12.282	34.807	-1.212	-6.564		50.678	0.163	14.643	0.003		444.52	7.40861	46.7	12.1	40.7	2.808	0.023	0.024	0.001	0.584	0.50	
432	9/3/2004	2:52:05 AM		24.708	25.067	24.35	25.11	24.728		46.684	48.262	12.365	34.667	-1.212	-6.697		51.022	0.155	14.643	0.003		445.52	7.42528	47.1	12.2	40.7	2.804	0.022	0.023	0.001	0.556	0.47	
433	9/3/2004	2:53:05 AM		24.789	25.073	24.361	25.115	24.714		46.31	47.936	12.241	34.513	-1.212	-6.761		49.37	0.151	14.643	0.003		446.52	7.44194	46.8	11.8	40.4	2.786	0.022	0.022	0.001	0.545	0.46	
434	9/3/2004	2:54:05 AM		24.8	25.069	24.372	25.122	24.715		46.061	47.77	12.105	34.48	-1.209	-6.561		50.256	0.163	14.643	0.004		447.52	7.45861	46.6	12.0	40.3	2.777	0.023	0.024	0.001	0.590	0.50	
435	9/3/2004	2:55:05 AM		24.805	25.064	24.342	25.132	24.76		45.879	47.779	11.955	34.271	-1.209	-6.495		49.864	0.161	14.643	0.003		448.52	7.47528	46.7	11.9	40.1	2.763	0.023	0.023	0.001	0.586	0.50	
436	9/3/2004	2:56:05 AM		24.804	25.049	24.317	25.126	24.794		45.947	47.712	12.025	34.314	-1.218	-6.651		49.57	0.158	14.643	0.003		449.52	7.49194	46.6	11.8	40.1	2.767	0.023	0.023	0.001	0.575	0.49	
437	9/3/2004	2:57:05 AM		24.809	25.058	24.326	25.191	24.844		45.902	47.715	12.029	34.224	-1.212	-6.66		48.629	0.146	14.643	0.003		450.52	7.50861	46.6	11.6	40.1	2.762	0.021	0.021	0.001	0.532	0.45	
438	9/3/2004	2:58:05 AM		24.804	25.068	24.341	25.246	24.909		46.279	47.831	12.091	34.597	-1.212	-6.48		49.188	0.172	14.643	0.003		451.52	7.52528	46.7	11.7	40.4	2.788	0.025	0.025	0.001	0.620	0.53	
439	9/3/2004	2:59:05 AM		24.809	25.079	24.347	25.311	25.009		45.41	47.75	12.182	33.518	-1.212	-5.344		50.828	0.24	14.643	0.003		452.52	7.54194	46.6	12.1	39.5	2.721	0.034	0.035	0.001	0.887	0.75	
440	9/3/2004	3:00:05 AM		24.805	25.084	24.357	25.372	25.035		45.782	47.851	12.104	34.025	-1.212	-5.119		51.059	0.145	14.643	0.003		453.52	7.55861	46.7	12.2	39.9	2.751	0.021	0.021	0.001	0.530	0.45	
441	9/3/2004	3:01:05 AM		24.791	25.086	24.349	25.414	25.026		46.375	47.858	12.101	34.692	-1.206	-6.564		49.791	0.156	14.643	0.004		454.52	7.57528	46.7	11.9	40.5	2.795	0.022	0.023	0.001	0.561	0.48	
442	9/3/2004	3:02:05 AM		24.824	25.098	24.361	25.426	25.069		45.811	47.982	12.167	33.984	-1.212	-5.122		52.194	0.004	14.643	0.003		455.52	7.59194	46.9	12.4	39.9	2.751	0.001	0.001	0.000	0.015	0.01	
443	9/3/2004	3:03:05 AM		24.811	25.085	24.363	25.383	25.026		46.144	47.754	12.07	34.558	-1.212	-6.454		48.673	0.161	14.643	0.003		456.52	7.60861	46.6	11.6	40.4	2.782	0.023	0.023	0.001	0.582	0.49	
444	9/3/2004	3:04:05 AM		24.817	25.091	24.349	25.379	24.997		45.829	47.543	11.914	34.253	-1.212	-6.564		48.786	0.164	14.643	0.003		457.52	7.62528	46.4	11.6	40.0	2.761	0.023	0.024	0.001	0.597	0.51	
445	9/3/2004	3:05:05 AM		24.808	25.087	24.33	25.35	24.943		46.136	47.799	11.999	34.45	-1.212	-6.521		50.039	0.149	14.643	0.003		458.52	7.64194	46.7	11.9	40.3	2.778	0.021	0.022	0.001	0.540	0.46	
446	9/3/2004	3:06:05 AM		24.804	25.083	24.331	25.331	24.904		46.01	47.542	12.03	34.355	-1.209	-6.59		49.409	0.153	14.643	0.004		459.52	7.65861	46.4	11.8	40.2	2.770	0.022	0.022	0.001	0.556	0.47	
447	9/3/2004	3:07:05 AM		24.805	25.079	24.312	25.277	24.89		45.987	47.578	11.979	34.392	-1.212	-5.867		50.473	0.076	14.643	0.003		460.52	7.67528	46.5	12.0	40.2	2.771	0.011	0.011	0.000	0.276	0.23	
448	9/3/2004	3:08:05 AM		24.775	25.079	24.307	25.247	24.9		46.725	47.594	12.093	35.137	-1.212	-6.376		49.616	0.157	14.643	0.003		461.52	7.69194	46.5	11.8	40.9	2.822	0.022	0.023	0.001	0.560	0.48	
449	9/3/2004	3:09:05 AM		24.765	25.094	24.332	25.252	24.91		46.294	47.903	12.008	34.725	-1.209	-6.368		49.597	0.15	14.643	0.004		462.52	7.70861	46.8	11.8	40.5	2.793	0.021	0.022	0.001	0.540	0.46	
450	9/3/2004	3:10:05 AM		24.775	25.094	24.322	25.232	24.92		46.03	47.799	12.049	34.275	-1.209	-6.33		49.629	0.16	14.643	0.004		463.52	7.72528	46.7	11.8	40.2	2.768	0.023	0.023	0.001	0.582	0.49	
451	9/3/2004	3:11:05 AM		24.779	25.088	24.306	25.216	24.904		45.981	47.692	11.924	34.413	-1.215	-6.619		50.402	0.153	14.643	0.003		464.52	7.74194	46.6	12.0	40.2	2.771	0.022	0.022	0.001	0.556	0.47	
452	9/3/2004	3:12:05 AM		24.783	25.088	24.29	25.195	24.868		45.862	47.59	11.978	34.251	-1.215	-6.573		49.706	0.163	14.643	0.003		465.52	7.75861	46.5	11.8	40.1	2.762	0.023	0.024	0.001	0.594	0.51	
453	9/3/2004	3:13:05 AM		24.783	25.087	24.295	25.2	24.883		45.761	47.592	11.77	34.392	-1.212	-6.454		48.692	0.166	14.643	0.003		466.52	7.77528	46.5	11.6	40.1	2.763	0.024	0.024	0.001	0.605	0.51	
454	9/3/2004	3:14:05 AM		24.793	25.097	24.3	25.19	24.923		45.479	47.565	11.896	33.877	-1.212	-5.416		50.83	0.08	14.643	0.003		467.52	7.79194	46.4	12.1	39.7	2.736	0.011	0.012	0.000	0.294	0.25	
455	9/3/2004	3:15:05 AM		24.783	25.093	24.295	25.195	24.898		46.468	47.511	11.987	34.887	-1.209	-6.272		50.557	0.141	14.643	0.003		468.52	7.80861	46.4	12.0	40.7	2.805	0.020	0.021	0.001	0.506	0.43	
456	9/3/2004	3:16:05 AM		24.762	25.086	24.274	25.134	24.887		46.356	47.752	12.109	34.601	-1.212	-6.506		48.73	0.143	14.643	0.003		469.52	7.82528	46.6	11.6	40.5	2.791	0.020	0.021	0.001	0.516	0.44	
457	9/3/2004	3:17:05 AM		24.767	25.096	24.284	25.174	24.887		45.995	47.543	11.867	34.579	-1.215	-6.044		50.713	0.126	14.643	0.003		470.52	7.84194	46.4	12.1	40.3	2.778	0.018	0.018	0.000	0.457	0.39	
458	9/3/2004	3:18:05 AM		24.756	25.091	24.274	25.138	24.871		45.985	47.65	11.993	34.31	-1.212	-6.529		50.941	0.163	14.643	0.003		471.52	7.85861	46.5	12.1	40.1	2.768	0.023	0.024	0.001	0.593	0.50	
459	9/3/2004	3:19:05 AM		24.766	25.101	24.284	25.153	24.871		46.178	47.648	12.102	34.456	-1.212	-6.509		53.431	0.169	14.643	0.003		472.52	7.87528	46.5	12.7	40.3	2.780	0.024	0.025	0.001	0.612	0.52	
460	9/3/2004	3:20:05 AM		24.761	25.101	24.268	25.153	24.891		46.105	47.339	12.032	34.526	-1.215	-6.266		50.363	0.168	14.643	0.003		473.52	7.89194	46.2	12.0	40.3	2.780	0.024	0.025	0.001	0.609	0.52	
461	9/3/2004	3:21:05 AM		24.766	25.101	24.279	25.158	24.851		45.473	47.399	11.917	33.885	-1.212	-5.801		54.87	0.212	14.643	0.003		474.52	7.90861	46.3	13.1	39.7	2.736	0.030	0.031	0.001	0.781	0.66	
462	9/3/2004	3:22:05 AM		24.751	25.09	24.263	25.158	24.821		45.755	47.19	11.805	34.312	-1.212	-6.553		47.964	0.161	14.643	0.003		475.52	7.92528	46.1	11.4	40.0	2.760	0.023	0.024	0.001	0.588	0.50	
463	9/3/2004	3:23:05 AM		24.751	25.095	24.258	25.132	24.821		46.016	47.37	11.84	34.575	-1.209	-6.573		51.007	0.151	14.643	0.004		476.52	7.94194	46.2	12.1	40.3	2.778	0.022	0.022	0.001	0.548	0.47	
464	9/3/2004	3:24:05 AM		24.736	25.09	24.243	25.117	24.846		45.172	47.561	11.852	33.549	-1.212	-5.813		52.296	0.226	14.643	0.003		477.52	7.95861	46.4	12.5	39.4	2.714	0.032	0.033	0.001	0.840	0.71	
465	9/3/2004	3:25:05 AM		24.725	25.085	24.237	25.107	24.845		45.537	47.211	11.749	34.214	-1.215	-5.972		50.371	0.086	14.643	0.003		478.52	7.97528	46.1	12.0	39.9	2.749	0.012	0.013	0.000	0.315	0.27	
466	9/3/2004	3:26:05 AM		24.715	25.09	24.237	25.122	24.8		46.487	47.543	11.873	34.928	-1.212	-6.168		50.509	0.139	14.643	0.003		479.52	7.99194	46.4	12.0	40.7	2.807	0.020	0.020	0.000	0.499	0.43	
467	9/3/2004	3:27:05 AM		24.699	25.083	24.231	25.116	24.829		46.08	47.246	11.943	34.653	-1.212	-6.342		48.617	0.172	14.643	0.003		480.52	8.00861	46.1	11.6	40.4	2.783	0.025	0.025	0.001	0.623	0.53	
468	9/3/2004	3:28:05 AM		24.698	25.083	24.23	25.13	24.818		46.08	47.497	12.015	34.474	-1.212	-6.602		48.446	0.156	14.643	0.003		481.52	8.02528	46.4	11.5	40.3	2.777	0.022	0.023	0.001	0.567	0.48	
469	9/3/2004	3:29:05 AM		24.718	25.083	24.225	25.105	24.803		45.784	47.688	11.963	34.156	-1.212	-6.006		48.56	0.164	14.643	0.003		482.52	8.04194	46.6	11.6	40.0	2.756	0.023	0.024	0.001	0.600	0.51	
470	9/3/2004	3:30:05 AM		24.712	25.072	24.204	25.079	24.833		45.769	47.424	11.798	34.361	-1.212	-6.498		50.701	0.16	14.643	0.003		483.52	8.05861	46.3	12.1	40.1	2.762	0.023	0.023	0.001	0.585	0.50	
471	9/3/2004	3:31:05 AM		24.737	25.092	24.225	25.124	24.813		45.655	47.364	11.801	34.244	-1.212	-6.376		47.931	0.16	14.643	0.003		484.52	8.07528	46.2	11.4	39.9	2.754	0.023	0.023	0.001	0.586	0.50	
472	9/3/2004	3:32:05 AM		24.716	25.076	24.208	25.078	24.786		45.582	47.491	11.684	34.279	-1.212	-6.405		47.701	0.162	14.643	0.003		485.52	8.09194	46.4	11.4	39.9	2.753	0.023	0.024	0.001	0.594	0.51	
473	9/3/2004	3:32:53 AM		24.701	25.081	24.213	25.073	24.841		45.379	47.109	11.796	34.008	-1.212	-6.356		46.26	0.154	14.643	0.003		486.32	8.10528	46.0	11.0	39.7	2.737	0.022	0.023	0.001	0.568	0.48	
474	9/3/2004	3:33:53 AM		24.711	25.09	24.213	25.142	24.861		45.846	47.868	12.021	34.103	-1.209	-6.437		51.731	0.175	14.643	0.003		487.32	8.12194	46.7	12.3	40.0	2.756	0.025	0.026	0.001	0.641	0.55	
475	9/3/2004	3:34:53 AM		24.705	25.084	24.212	25.167	24.895		46.169	47.804	11.968	34.573	-1.215	-6.29		50.286	0.167	14.643	0.003		488.32	8.13861	46.7	12.0	40.4	2.783	0.024	0.024	0.001	0.606	0.52	
476	9/3/2004	3:35:53 AM		24.721	25.105	24.268	25.238	24.941		45.466	48.034	11.97	33.875	-1.209	-5.032		48.006	0.248	14.643	0.004		489.32	8.15528	46.9	11.4	39.7	2.735	0.036	0.036	0.001	0.914	0.78	
477	9/3/2004	3:36:53 AM		24.716	25.096	24.273	25.273	25.006		45.334	47.916	11.986	33.627	-1.212	-5.255		49.445	0.187	14.643	0.003		490.32	8.17194	46.8	11.8	39.5	2.722	0.027	0.027	0.001	0.692	0.59	
478	9/3/2004	3:37:53 AM		24.712	25.097	24.3	25.36	25.053		46.395	48.023	12.052	34.677	-1.209	-6.373		48.074	0.159	14.643	0.003		491.32	8.18861	46.9	11.5	40.5	2.795	0.023	0.023	0.001	0.573	0.49	
479	9/3/2004	3:38:53 AM		24.734	25.104	24.342	25.367	25.129		45.56	48.001	11.963	33.787	-1.212	-5.301		50.717	0.173	14.643	0.003		492.32	8.20528	46.9	12.1	39.7	2.735	0.025	0.025	0.001	0.636	0.54	
480	9/3/2004	3:39:53 AM		24.734	25.094	24.342	25.357	25.079		46.08	47.661	11.899	34.454	-1.212	-6.09		50.459	0.177	14.643	0.003		493.32	8.22194	46.5	12.0	40.3	2.776	0.025	0.026	0.001	0.641	0.55	
481	9/3/2004	3:40:53 AM		24.756	25.095	24.358	25.348	25.046		45.551	47.503	11.917	34.045	-1.209	-5.564		48.999	0.137	14.643	0.003		494.32	8.23861	46.4	11.7	39.8	2.744	0.020	0.020	0.001	0.502	0.43	
482	9/3/2004	3:41:53 AM		24.751	25.095	24.368	25.298	24.996		46.234	47.986	12.019	34.493	-1.215	-6.437		48.679	0.169	14.643	0.003		495.32	8.25528	46.9	11.6	40.4	2.783	0.024	0.025	0.001	0.610	0.52	
483	9/3/2004	3:42:53 AM		24.751	25.086	24.374	25.253	24.951		45.927	47.729	11.896	34.431	-1.212	-6.316		50.342	0.167	14.643	0.003		496.32	8.27194	46.6	12.0	40.2	2.770	0.024	0.024	0.001	0.606	0.52	
484	9/3/2004	3:43:53 AM		24.771	25.09	24.383	25.238	24.946		45.852	47.907	12.046	34.14	-1.212	-6.214		52.353	0.169	14.643	0.004		497.32	8.28861	46.8	12.5	40.0	2.758	0.024	0.025	0.001	0.616	0.52	
485	9/3/2004	3:44:53 AM		24.791	25.095	24.403	25.188	24.926		45.931	48.295	12.007	34.099	-1.209	-6.087		50.893	0.167	14.643	0.003		498.32	8.30528	47.2	12.1	40.0	2.759	0.024	0.024	0.001	0.608	0.52	
486	9/3/2004	3:45:53 AM		24.792	25.096	24.409	25.194	24.892		46.003	47.833	12.088	34.226	-1.212	-6.316		50.227	0.18	14.643	0.003		499.32	8.32194	46.7	12.0	40.1	2.766	0.026	0.026	0.001	0.653	0.56	
487	9/3/2004	3:46:53 AM		24.777	25.086	24.399	25.179	24.847		46.765	47.974	12.186	34.877	-1.212	-5.853		49.789	0.227	14.643	0.003		500.32	8.33861	46.8	11.9	40.8	2.814	0.032	0.033	0.001	0.810	0.69	
488	9/3/2004	3:47:53 AM		24.832	25.081	24.404	25.184	24.872		46.288	47.636	11.962	34.766	-1.212	-5.862		49.935	0.218	14.643	0.003		501.32	8.35528	46.5	11.9	40.5	2.794	0.031	0.032	0.001	0.783	0.67	
489	9/3/2004	3:48:53 AM		24.821	25.081	24.409	25.173	24.866		45.85	47.547	12.087	34.086	-1.212	-6.122		53.316	0.174	14.643	0.003		502.32	8.37194	46.4	12.7	40.0	2.756	0.025	0.025	0.001	0.634	0.54	
490	9/3/2004	3:49:53 AM		24.815	25.075	24.413	25.167	24.86		45.643	47.779	12.055	33.797	-1.215	-5.986		54.624	0.176	14.643	0.003		503.32	8.38861	46.7	13.0	39.7	2.739	0.025	0.026	0.001	0.645	0.55	

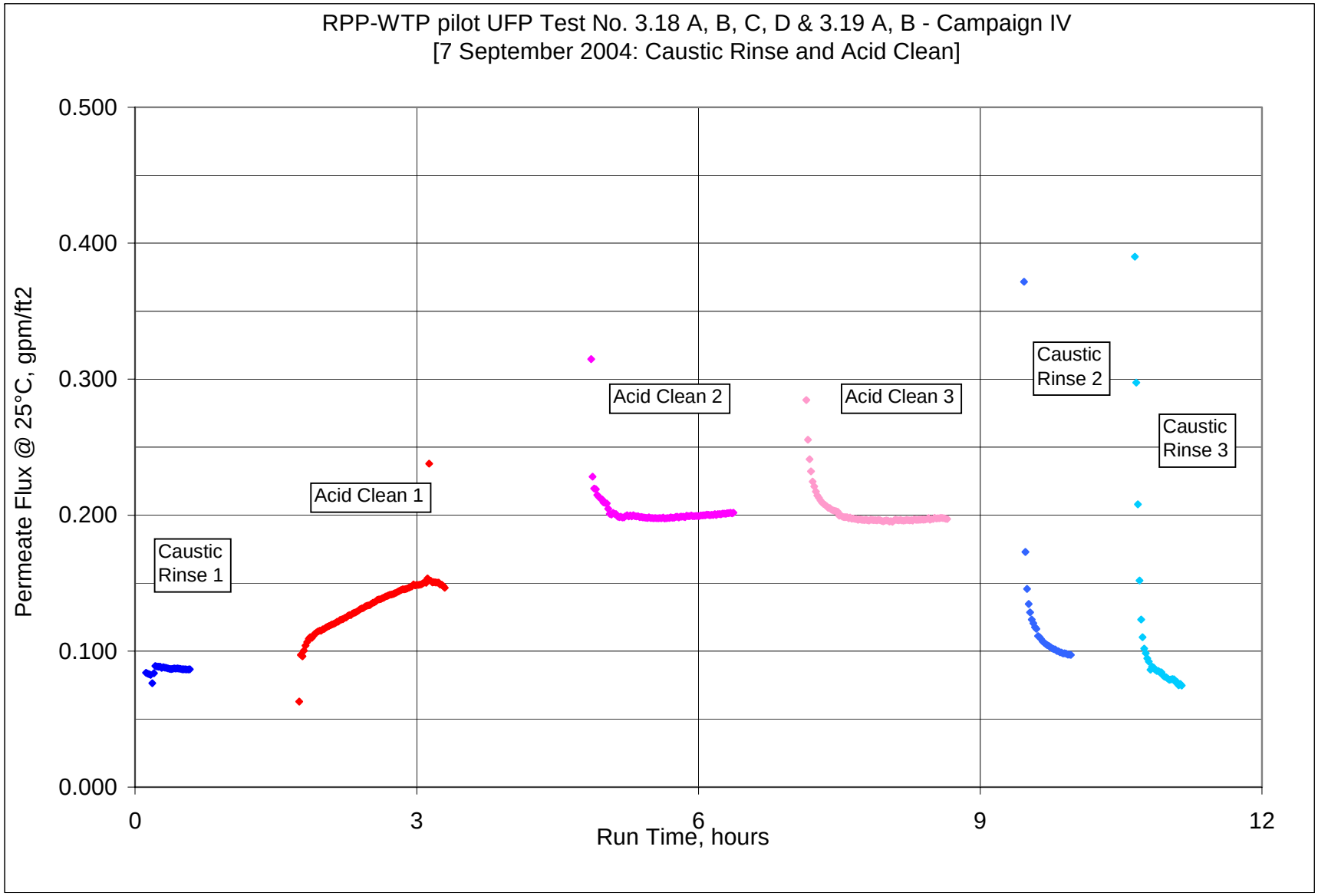
RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
491	9/3/2004	3:50:53 AM		24.835	25.085	24.428	25.132	24.81		45.844	47.756	11.954	34.136	-1.212	-6.379		50.651	0.174	14.643	0.003		504.32	8.40528	46.6	12.1	40.0	2.757	0.025	0.025	0.001	0.633	0.54	
492	9/3/2004	3:51:53 AM		24.85	25.09	24.438	25.132	24.83		45.657	47.472	12.011	33.941	-1.212	-6.316		49.291	0.17	14.643	0.003		505.32	8.42194	46.3	11.7	39.8	2.744	0.024	0.025	0.001	0.621	0.53	
493	9/3/2004	3:52:53 AM		24.824	25.063	24.416	25.095	24.834		45.464	47.37	11.923	33.861	-1.212	-6.064		51.354	0.137	14.643	0.003		506.32	8.43861	46.2	12.2	39.7	2.735	0.020	0.020	0.001	0.503	0.43	
494	9/3/2004	3:53:53 AM		24.874	25.098	24.481	25.136	24.824		44.747	47.582	12.113	32.958	-1.209	-4.39		49.416	0.157	14.643	0.003		507.32	8.45528	46.5	11.8	38.9	2.679	0.022	0.023	0.001	0.587	0.50	
495	9/3/2004	3:54:53 AM		24.843	25.083	24.466	25.11	24.843		46.018	47.731	12.205	34.146	-1.209	-5.263		50.162	0.176	14.643	0.003		508.32	8.47194	46.6	11.9	40.1	2.764	0.025	0.026	0.001	0.638	0.54	
496	9/3/2004	3:55:53 AM		24.838	25.077	24.445	25.089	24.833		46.101	47.706	11.971	34.421	-1.215	-6.185		49.013	0.18	14.643	0.003		509.32	8.48861	46.6	11.7	40.3	2.776	0.026	0.026	0.001	0.650	0.55	
497	9/3/2004	3:56:53 AM		24.868	25.072	24.455	25.084	24.848		45.342	47.387	11.973	33.668	-1.215	-5.558		51.885	0.173	14.643	0.003		510.32	8.50528	46.3	12.4	39.5	2.724	0.025	0.025	0.001	0.637	0.54	
498	9/3/2004	3:57:53 AM		24.871	25.071	24.474	25.093	24.866		45.755	47.65	12.026	34.027	-1.212	-6.188		50.152	0.18	14.643	0.003		511.32	8.52194	46.5	11.9	39.9	2.750	0.026	0.026	0.001	0.656	0.56	
499	9/3/2004	3:58:53 AM		24.861	25.076	24.484	25.133	24.921		46.043	47.712	11.928	34.4	-1.212	-6.07		52.916	0.219	14.643	0.003		512.32	8.53861	46.6	12.6	40.2	2.773	0.031	0.032	0.001	0.791	0.67	
500	9/3/2004	3:59:53 AM		24.867	25.081	24.505	25.194	24.962		46.194	47.522	11.957	34.653	-1.215	-5.775		51.612	0.216	14.643	0.003		513.32	8.55528	46.4	12.3	40.4	2.787	0.031	0.031	0.001	0.776	0.66	
501	9/3/2004	4:00:53 AM		24.872	25.091	24.52	25.239	25.002		46.254	47.679	12.002	34.599	-1.212	-6.029		48.481	0.174	14.643	0.003		514.32	8.57194	46.6	11.5	40.4	2.787	0.025	0.025	0.001	0.625	0.53	
502	9/3/2004	4:01:53 AM		24.891	25.081	24.514	25.293	25.066		45.993	47.524	11.975	34.347	-1.212	-6.252		51.842	0.179	14.643	0.003		515.32	8.58861	46.4	12.3	40.2	2.770	0.026	0.026	0.001	0.647	0.55	
503	9/3/2004	4:02:53 AM		24.927	25.096	24.54	25.374	25.112		45.788	47.634	12.097	34.029	-1.212	-6.307		50.048	0.173	14.643	0.003		516.32	8.60528	46.5	11.9	39.9	2.752	0.025	0.025	0.001	0.629	0.54	
504	9/3/2004	4:03:53 AM		24.928	25.092	24.535	25.425	25.137		45.558	47.493	12.002	33.863	-1.212	-6.356		52.718	0.176	14.643	0.003		517.32	8.62194	46.4	12.6	39.7	2.738	0.025	0.026	0.001	0.643	0.55	
505	9/3/2004	4:04:53 AM		24.939	25.103	24.542	25.436	25.119		45.524	47.851	11.994	33.807	-1.212	-5.928		49.789	0.144	14.643	0.003		518.32	8.63861	46.7	11.9	39.7	2.735	0.021	0.021	0.001	0.526	0.45	
506	9/3/2004	4:05:53 AM		24.915	25.09	24.528	25.397	25.095		45.62	47.329	11.988	33.953	-1.212	-6.006		50.513	0.172	14.643	0.003		519.32	8.65528	46.2	12.0	39.8	2.743	0.025	0.025	0.001	0.627	0.53	
507	9/3/2004	4:06:53 AM		24.916	25.101	24.539	25.394	25.101		45.135	47.147	11.949	33.569	-1.212	-5.214		50.594	0.219	14.643	0.003		520.32	8.67194	46.0	12.1	39.4	2.713	0.031	0.032	0.001	0.807	0.69	
508	9/3/2004	4:07:53 AM		24.901	25.096	24.544	25.364	25.066		45.929	47.777	11.958	34.253	-1.209	-5.992		50.801	0.195	14.643	0.003		521.32	8.68861	46.7	12.1	40.1	2.764	0.028	0.028	0.001	0.705	0.60	
509	9/3/2004	4:08:53 AM		24.928	25.092	24.54	25.325	25.043		45.781	47.615	12.008	34.162	-1.212	-5.995		47.632	0.185	14.643	0.003		522.32	8.70528	46.5	11.3	40.0	2.756	0.026	0.027	0.001	0.671	0.57	
510	9/3/2004	4:09:53 AM		24.934	25.098	24.547	25.301	25.029		46.072	47.812	12.092	34.261	-1.212	-6.232		51.965	0.179	14.643	0.003		523.32	8.72194	46.7	12.4	40.2	2.769	0.026	0.026	0.001	0.646	0.55	
511	9/3/2004	4:10:53 AM		24.915	25.094	24.547	25.287	25.02		46.362	47.681	12.34	34.431	-1.215	-5.934		50.45	0.166	14.643	0.003		524.32	8.73861	46.6	12.0	40.4	2.785	0.024	0.024	0.001	0.596	0.51	
512	9/3/2004	4:11:53 AM		24.926	25.095	24.534	25.268	25.011		45.902	47.342	12.062	34.082	-1.212	-5.928		51.808	0.146	14.643	0.003		525.32	8.75528	46.2	12.3	40.0	2.757	0.021	0.021	0.001	0.530	0.45	
513	9/3/2004	4:12:53 AM		24.931	25.09	24.524	25.233	24.971		45.726	47.48	12.079	33.928	-1.212	-6.194		50.692	0.166	14.643	0.003		526.32	8.77194	46.4	12.1	39.8	2.746	0.024	0.024	0.001	0.605	0.51	
514	9/3/2004	4:13:53 AM		24.94	25.09	24.513	25.222	24.98		45.473	47.426	12.011	33.756	-1.212	-6.243		50.363	0.174	14.643	0.003		527.32	8.78861	46.3	12.0	39.6	2.731	0.025	0.025	0.001	0.638	0.54	
515	9/3/2004	4:14:53 AM		24.94	25.095	24.508	25.207	24.975		45.392	47.348	11.969	33.777	-1.212	-6.145		50.621	0.181	14.643	0.003		528.32	8.80528	46.2	12.1	39.6	2.729	0.026	0.026	0.001	0.664	0.56	
516	9/3/2004	4:15:53 AM		24.93	25.089	24.497	25.166	24.94		45.769	47.837	12.039	33.896	-1.215	-6.217		50.888	0.165	14.643	0.003		529.32	8.82194	46.7	12.1	39.8	2.746	0.024	0.024	0.001	0.602	0.51	
517	9/3/2004	4:16:53 AM		24.939	25.093	24.517	25.181	24.934		45.753	47.391	12.045	34.095	-1.215	-5.613		50.578	0.104	14.643	0.003		530.32	8.83861	46.3	12.0	39.9	2.753	0.015	0.015	0.000	0.378	0.32	
518	9/3/2004	4:17:53 AM		24.924	25.103	24.527	25.191	24.934		46.089	47.713	12.148	34.166	-1.212	-5.885		47.712	0.206	14.643	0.003		531.32	8.85528	46.6	11.4	40.1	2.767	0.029	0.030	0.001	0.745	0.63	
519	9/3/2004	4:18:53 AM		24.903	25.092	24.52	25.159	24.933		46.134	47.686	12.085	34.4	-1.212	-5.674		47.597	0.227	14.643	0.003		532.32	8.87194	46.6	11.3	40.3	2.776	0.032	0.033	0.001	0.818	0.70	
520	9/3/2004	4:19:53 AM		24.946	25.101	24.534	25.153	24.861		45.966	47.748	12.229	34.037	-1.212	-6.029		48.746	0.192	14.643	0.003		533.32	8.88861	46.6	11.6	40.0	2.758	0.027	0.028	0.001	0.696	0.59	
521	9/3/2004	4:20:53 AM		24.936	25.1	24.508	25.158	24.891		45.651	47.256	11.896	34.115	-1.212	-6.029		48.554	0.174	14.643	0.003		534.32	8.90528	46.1	11.6	39.9	2.750	0.025	0.025	0.001	0.633	0.54	
522	9/3/2004	4:21:53 AM		24.931	25.1	24.513	25.168	24.886		45.864	47.271	11.962	34.154	-1.215	-5.87		51.155	0.223	14.643	0.003		535.32	8.92194	46.1	12.2	40.0	2.758	0.032	0.032	0.001	0.809	0.69	
523	9/3/2004	4:22:53 AM		24.931	25.101	24.514	25.188	24.871		45.763	47.399	11.917	34.13	-1.209	-6.038		50.281	0.187	14.643	0.003		536.32	8.93861	46.3	12.0	39.9	2.754	0.027	0.027	0.001	0.679	0.58	
524	9/3/2004	4:23:53 AM		24.911	25.09	24.503	25.158	24.856		46.024	47.721	12.014	34.314	-1.212	-5.914		47.196	0.216	14.643	0.003		537.32	8.95528	46.6	11.2	40.2	2.770	0.031	0.031	0.001	0.781	0.66	
525	9/3/2004	4:24:53 AM		24.936	25.096	24.504	25.163	24.821		45.806	47.671	12.078	34.015	-1.218	-5.87		49.985	0.188	14.643	0.003		538.32	8.97194	46.5	11.9	39.9	2.752	0.027	0.027	0.001	0.684	0.58	
526	9/3/2004	4:25:53 AM		24.936	25.091	24.514	25.153	24.831		45.655	47.248	12.011	34.006	-1.212	-6.006		53.871	0.174	14.643	0.003		539.32	8.98861	46.1	12.8	39.8	2.746	0.025	0.025	0.001	0.634	0.54	
527	9/3/2004	4:26:53 AM		24.936	25.091	24.509	25.128	24.856		45.62	47.872	12.226	33.694	-1.218	-5.142		50.559	0.166	14.643	0.003		540.32	9.00528	46.7	12.0	39.7	2.734	0.024	0.024	0.001	0.608	0.52	
528	9/3/2004	4:27:53 AM		24.906	25.07	24.488	25.097	24.806		45.444	47.047	11.948	33.857	-1.218	-5.83		50.236	0.19	14.643	0.003		541.32	9.02194	45.9	12.0	39.7	2.734	0.027	0.028	0.001	0.696	0.59	
529	9/3/2004	4:28:53 AM		24.916	25.086	24.494	25.148	24.791		45.576	47.327	11.882	34.019	-1.212	-6.096		50.594	0.165	14.643	0.003		542.32	9.03861	46.2	12.1	39.8	2.744	0.024	0.024	0.001	0.602	0.51	
530	9/3/2004	4:29:53 AM		24.915	25.075	24.488	25.112	24.82		45.081	46.979	11.782	33.569	-1.212	-5.743		51.018	0.201	14.643	0.003		543.32	9.05528	45.9	12.2	39.3	2.711	0.029	0.029	0.001	0.742	0.63	
531	9/3/2004	4:30:53 AM		24.924	25.088	24.491	25.141	24.794		45.626	47.538	11.922	33.974	-1.215	-6.217		51.804	0.181	14.643	0.003		544.32	9.07194	46.4	12.3	39.8	2.744	0.026	0.026	0.001	0.660	0.56	
532	9/3/2004	4:31:53 AM		24.918	25.088	24.501	25.105	24.833		45.437	47.221	11.863	33.881	-1.212	-5.948		46.907	0.207	14.643	0.003		545.32	9.08861	46.1	11.2	39.7	2.734	0.030	0.030	0.001	0.758	0.64	
533	9/3/2004	4:32:53 AM		24.902	25.071	24.484	25.114	24.872		45.066	47.203	11.926	33.481	-1.215	-5.211		50.357	0.237	14.643	0.003		546.32	9.10528	46.1	12.0	39.3	2.708	0.034	0.034	0.001	0.877	0.75	
534	9/3/2004	4:33:53 AM		24.901	25.076	24.499	25.178	24.936		45.736	47.721	11.857	34.234	-1.212	-5.893		50.321	0.217	14.643	0.003		547.32	9.12194	46.6	12.0	40.0	2.757	0.031	0.032	0.001	0.788	0.67	
535	9/3/2004	4:34:53 AM		24.936	25.09	24.503	25.253	24.981		45.327	47.536	12.062	33.551	-1.212	-5.289		49.975	0.159	14.643	0.003		548.32	9.13861	46.4	11.9	39.4	2.719	0.023	0.023	0.001	0.585	0.50	
536	9/3/2004	4:35:53 AM		24.93	25.084	24.488	25.322	25.065		45.344	47.248	11.646	33.992	-1.209	-6.159		50.63	0.185	14.643	0.004		549.32	9.15528	46.1	12.1	39.7	2.735	0.026	0.027	0.001	0.677	0.58	
537	9/3/2004	4:36:53 AM		24.916	25.096	24.474	25.398	25.096		45.952	47.234	11.796	34.542	-1.215	-5.778		50.567	0.219	14.643	0.003		550.32	9.17194	46.1	12.0	40.2	2.775	0.031	0.032	0.001	0.791	0.67	
538	9/3/2004	4:37:53 AM		24.903	25.092	24.48	25.41	25.067		45.715	47.205	11.943	34.006	-1.212	-5.836		50.258	0.177	14.643	0.003		551.32	9.18861	46.1	12.0	39.9	2.748	0.025	0.026	0.001	0.645	0.55	
539	9/3/2004	4:38:53 AM		24.904	25.088	24.476	25.356	25.059		45.462	47.36	11.794	33.965	-1.215	-6.081		48.7	0.179	14.643	0.003		552.32	9.20528	46.2	11.6	39.7	2.738	0.026	0.026	0.001	0.655	0.56	
540	9/3/2004	4:39:53 AM		24.92	25.1	24.493	25.332	25.035		45.332	47.341	11.93	33.74	-1.212	-6.078		52.682	0.175	14.643	0.003		553.32	9.22194	46.2	12.5	39.5	2.726	0.025	0.025	0.001	0.643	0.55	
541	9/3/2004	4:40:53 AM		24.901	25.085	24.473	25.293	25.026		45.081	47.395	11.917	33.456	-1.212	-5.937		51.189	0.174	14.643	0.003		554.32	9.23861	46.3	12.2	39.3	2.707	0.025	0.025	0.001	0.644	0.55	
542	9/3/2004	4:41:53 AM		24.907	25.096	24.485	25.289	24.992		44.989	47.341	11.909	33.36	-1.215	-6.009		48.402	0.19	14.643	0.003		555.32	9.25528	46.2	11.5	39.2	2.701	0.027	0.028	0.001	0.705	0.60	
543	9/3/2004	4:42:53 AM		24.908	25.103	24.491	25.27	25.003		45.336	47.503	12.028	33.471	-1.212	-6.197		52.323	0.184	14.643	0.003		556.32	9.27194	46.4	12.5	39.4	2.717	0.026	0.027	0.001	0.678	0.58	
544	9/3/2004	4:43:53 AM		24.908	25.092	24.48	25.245	24.953		43.407	47.107	11.684	31.88	-1.212	-3.821		51.379	0.171	14.643	0.003		557.32	9.28861	46.0	12.2	37.6	2.595	0.024	0.025	0.001	0.660	0.56	
545	9/3/2004	4:44:53 AM		24.883	25.087	24.455	25.22	24.953		45.108	47.416	11.817	33.52	-1.215	-5.333		46.796	0.233	14.643	0.003		558.32	9.30528	46.3	11.1	39.3	2.711	0.033	0.034	0.001	0.862	0.73	
546	9/3/2004	4:45:53 AM		24.889	25.098	24.457	25.221	24.894		44.714	46.91	11.727	33.276	-1.215	-5.893		49.261	0.194	14.643	0.003		559.32	9.32194	45.8	11.7	39.0	2.689	0.028	0.028	0.001	0.723	0.62	
547	9/3/2004	4:46:53 AM		24.888	25.093	24.461	25.215	24.918		45.091	47.143	11.913	33.499	-1.212	-5.954		50.473	0.198	14.643	0.003		560.32	9.33861	46.0	12.0	39.3	2.709	0.028	0.029	0.001	0.732	0.62	
548	9/3/2004	4:47:53 AM		24.873	25.082	24.445	25.185	24.883		45.777	47.312	11.859	34.173	-1.212	-5.888		49.414	0.134	14.643	0.003		561.32	9.35528	46.2	11.8	40.0	2.756	0.019	0.019	0.000	0.487	0.41	
549	9/3/2004	4:48:53 AM		24.868	25.082	24.45	25.185	24.863		45.414	47.408	11.923	33.719	-1.215	-5.778		50.884	0.167	14.643	0.003		562.32	9.37194	46.3	12.1	39.6	2.728	0.024	0.024	0.001	0.614	0.52	
550	9/3/2004	4:49:53 AM		24.883	25.088	24.456	25.175	24.858		45.284	47.389	11.989	33.586	-1.212	-5.639		53.852	0.178	14.643	0.003		563.32	9.38861	46.3	12.8	39.4	2.719	0.025	0.026	0.001	0.656	0.56	
551	9/3/2004	4:50:53 AM		24.878	25.082	24.455	25.164	24.853		45.47	47.654	11.986	33.729	-1.212	-6.05		51.059	0.187	14.643	0.003		564.32	9.40528	46.5	12.2	39.6	2.730	0.027	0.027	0.001	0.687	0.58	
552	9/3/2004	4:51:53 AM		24.887	25.081	24.465	25.184	24.822		44.423	47.205	12.224	32.504	-1.212	-5.041		50.173	0.187	14.643	0.003		565.32	9.42194	46.1	12.0	38.5	2.652	0.027	0.027	0.001	0.707	0.60	
553	9/3/2004	4:52:53 AM		24.866	25.071	24.444	25.138	24.861		44.348	47.066	12.031	32.599	-1.215	-5.023		52.997	0.182	14.643	0.003		566.32	9.43861	45.9	12.6	38.5	2.653	0.026	0.026	0.001	0.688	0.59	
554	9/3/2004	4:53:53 AM		24.878	25.088	24.476	25.15	24.903		44.95	47.385	12.148	33.009	-1.212	-5.067		51.214	0.138	14.643	0.003		567.32	9.45528	46.3	12.2	39.0	2.688	0.020	0.020	0.001	0.514	0.44	
555	9/3/2004	4:54:53 AM		24.87	25.085	24.468	25.137	24.925		44.798	47.317	12.243	32.845	-1.212	-4.98		49.779	0.185	14.643	0.003		568.32	9.47194	46.2	11.9	38.8	2.677	0.026	0.027	0.001	0.693	0.59	
556	9/3/2004	4:55:53 AM		24.885	25.069	24.462	25.131	24.875		44.641	47.395	12.112	32.793	-1.215	-4.841		51.078	0.155	14.643	0.003		569.32	9.48861	46.3	12.2	38.7	2.669	0.022	0.023	0.001	0.582	0.50	
557	9/3/2004	4:56:53 AM		24.89	25.069	24.472	25.126	24.84		44.465	47.244	12.222	32.5	-1.212	-5.075		51.399	0.183	14.643	0.003		570.32	9.50528	46.1	12.2	38.5	2.653	0.026	0.027	0.001	0.691	0.59	
558	9/3/2004	4:57:53 AM		24.895	25.064	24.462	25.116	24.835		44.324	47.478	12.144	32.385	-1.218	-5.116		49.409	0.173	14.643	0.003		571.32	9.52194	46.4	11.8	38.4	2.644	0.025	0.025	0.001	0.656	0.56	
559	9/3/2004	4:58:53 AM		24.904	25.068	24.477	25.146	24.824		44.29	47.111	12.1	32.59	-1.212	-5.104		48.465	0.171	14.643	0.003		572.32	9.53861	46.0	11.5	38.4	2.650	0.024	0.025	0.001	0.646	0.55	
560	9/3/2004	4:59:53 AM		24.913	25.078	24.491	25.155	24.848		44.313	47.526	12.134	32.416	-1.215	-5.096		50.673	0.171	14.643	0.003		573.32	9.55528	46.4	12.1	38.4	2.645	0.024	0.025	0.001	0.647	0.55	

RUN # WASH1 AND WASH 2; CAMPAIGN IV SLURRY WASHING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
561	9/3/2004	5:00:53 AM		24.902	25.066	24.49	25.124	24.817		44.726	47.478	12.173	32.835	-1.209	-4.572		50.77	0.127	14.643	0.003		574.32	9.57194	46.4	12.1	38.8	2.674	0.018	0.018	0.000	0.476	0.40	
562	9/3/2004	5:01:53 AM		24.896	25.056	24.494	25.088	24.821		44.541	47.553	12.195	32.5	-1.215	-4.72		50.229	0.164	14.643	0.003		575.32	9.58861	46.4	12.0	38.5	2.656	0.023	0.024	0.001	0.618	0.53	
563	9/3/2004	5:02:53 AM		24.916	25.06	24.508	25.077	24.796		44.332	47.532	12.206	32.26	-1.212	-4.639		49.875	0.17	14.643	0.003		576.32	9.60528	46.4	11.9	38.3	2.640	0.024	0.025	0.001	0.644	0.55	
564	9/3/2004	5:03:53 AM		24.92	25.059	24.513	25.042	24.81		44.707	47.563	12.05	32.902	-1.215	-5.107		48.634	0.173	14.643	0.003		577.32	9.62194	46.4	11.6	38.8	2.675	0.025	0.025	0.001	0.647	0.55	
565	9/3/2004	5:04:53 AM		24.93	25.064	24.528	25.062	24.8		44.539	47.661	12.265	32.465	-1.212	-5.07		50.59	0.172	14.643	0.004		578.32	9.63861	46.5	12.0	38.5	2.655	0.025	0.025	0.001	0.648	0.55	
566	9/3/2004	5:05:53 AM		24.919	25.048	24.486	25.045	24.789		44.255	47.431	12.128	32.377	-1.215	-5.041		48.946	0.169	14.643	0.003		579.32	9.65528	46.3	11.7	38.3	2.642	0.024	0.025	0.001	0.641	0.55	
567	9/3/2004	5:06:53 AM		24.923	25.058	24.506	25.07	24.813		44.199	47.657	12.175	32.205	-1.212	-4.847		51.013	0.164	14.643	0.003		580.32	9.67194	46.5	12.2	38.2	2.634	0.023	0.024	0.001	0.623	0.53	
568	9/3/2004	5:07:53 AM		24.928	25.058	24.521	25.065	24.803		44.077	47.387	12.199	32.135	-1.209	-5.046		50.496	0.18	14.643	0.003		581.32	9.68861	46.3	12.0	38.1	2.627	0.026	0.026	0.001	0.685	0.58	
569	9/3/2004	5:08:53 AM		24.903	25.047	24.51	25.034	24.768		44.834	47.47	12.138	32.923	-1.212	-4.65		49.566	0.2	14.643	0.003		582.32	9.70528	46.3	11.8	38.9	2.681	0.029	0.029	0.001	0.747	0.64	
570	9/3/2004	5:09:53 AM		24.897	25.046	24.515	25.033	24.792		44.498	47.252	12.089	32.699	-1.212	-4.861		48.513	0.182	14.643	0.003		583.32	9.72194	46.1	11.6	38.6	2.661	0.026	0.026	0.001	0.684	0.58	
571	9/3/2004	5:10:53 AM		24.917	25.046	24.52	25.053	24.792		44.724	47.625	12.3	32.66	-1.215	-4.781		50.127	0.181	14.643	0.004		584.32	9.73861	46.5	11.9	38.7	2.668	0.026	0.026	0.001	0.679	0.58	
572	9/3/2004	5:11:53 AM		24.927	25.041	24.515	25.018	24.822		44.533	47.625	12.207	32.428	-1.212	-4.986		48.784	0.156	14.643	0.003		585.32	9.75528	46.5	11.6	38.5	2.653	0.022	0.023	0.001	0.588	0.50	
573	9/3/2004	5:12:53 AM		24.916	25.02	24.493	24.987	24.796		44.442	47.257	12.138	32.596	-1.212	-5.041		50.432	0.159	14.643	0.003		586.32	9.77194	46.1	12.0	38.5	2.656	0.023	0.023	0.001	0.599	0.51	
574																																	
575	Wash 1																																
576		Averages		25.3	25.6	24.6	25.6	25.2		45.5	49.9	13.7	32.4	-0.7	-6.5		50.5	0.1	14.6	0.0				48.8	12.0	38.9	2.7	0.014	0.014	0.000	0.4	0.3	
577		Maximum		28.0	26.2	27.0	26.1	25.7		48.8	51.4	17.1	35.5	33.7	33.6		55.0	0.2	14.6	0.0				50.3	13.1	41.2	2.8	0.023	0.022	0.001	0.6	0.5	
578		Median		25.0	25.6	24.4	25.6	25.2		45.8	49.9	13.4	33.2	-1.2	-7.2		50.5	0.1	14.6	0.0				48.8	12.0	39.6	2.7	0.014	0.015	0.000	0.4	0.3	
579		Minimum		24.8	25.2	24.1	25.1	24.8		9.6	48.4	10.9	-3.3	-1.2	-8.2		44.8	0.0	14.6	0.0				47.3	10.7	3.1	0.2	0.000	0.000	0.000	0.0	0.0	
580		2 x Std Dev		1.402	0.570	1.302	0.523	0.456		8.384	1.222	3.220	8.451	7.853	9.606		3.290	0.037	0.000	0.001				1.222	0.784	8.293	0.572	0.005	0.005	0.000	0.125	0.106	
581		Number of Points Used*		324	324	324	324	324		324	324	324	324	324	324		324	324	324	324				324	324	324	324	324	324	324	324	324	
582		* Backpulse points in box are not included																															
583																																	
584																																	
585	Wash 2																																
586		Averages		24.9	25.1	24.5	25.2	24.9		46.0	48.0	12.2	34.1	-1.2	-6.0		50.2	0.2	14.6	0.0				46.9	12.0	40.1	2.8	0.024	0.024	0.001	0.6	0.5	
587		Maximum		25.4	25.2	25.1	25.4	25.1		50.0	52.1	15.0	36.8	-1.2	-3.8		55.7	0.3	14.6	0.0				51.0	13.3	43.4	3.0	0.039	0.039	0.001	0.9	0.8	
588		Median		24.9	25.1	24.5	25.2	24.9		46.0	47.7	12.1	34.2	-1.2	-6.2		50.3	0.2	14.6	0.0				46.6	12.0	40.1	2.8	0.024	0.024	0.001	0.6	0.5	
589		Minimum		24.7	25.0	24.2	25.0	24.6		43.4	46.9	11.6	31.9	-1.2	-6.9		44.3	0.0	14.6	0.0				45.8	10.5	37.6	2.6	0.001	0.001	0.000	0.0	0.0	
590		2 x Std Dev		0.317	0.048	0.367	0.174	0.190		1.920	1.723	0.977	1.599	0.004	1.304		3.269	0.062	0.000	0.001				1.723	0.779	1.706	0.118	0.009	0.009	0.000	0.230	0.196	
591		Number of Points Used*		208	208	208	208	208		208	208	208	208	208	208		208	208	208	208				208	208	208	208	208	208	208	208	208	
592		* Backpulse points in box are not included																															
593																																	
594																																	
595	Wash 1&2																																
596		Averages		25.1	25.4	24.5	25.5	25.1		45.7	49.2	13.1	33.1	-0.9	-6.3		50.4	0.1	14.6	0.0				48.0	12.0	39.4	2.7	0.018	0.018	0.000	0.5	0.4	
597		Maximum		28.0	26.2	27.0	26.1	25.7		50.0	52.1	17.1	36.8	33.7	33.6		55.7	0.3	14.6	0.0				51.0	13.3	43.4	3.0	0.039	0.039	0.001	0.9	0.8	
598		Median		24.9	25.3	24.4	25.4	25.0		45.9	49.4	12.4	33.6	-1.2	-6.7		50.4	0.1	14.6	0.0				48.3	12.0	39.7	2.7	0.016	0.016	0.000	0.4	0.3	
599		Minimum		24.7	25.0	24.1	25.0	24.6		9.6	46.9	10.9	-3.3	-1.2	-8.2		44.3	0.0	14.6	0.0				45.8	10.5	3.1	0.2	0.000	0.000	0.000	0.0	0.0	
600		2 x Std Dev		1.165	0.688	1.048	0.606	0.485		6.673	2.382	2.938	6.875	6.151	7.555		3.296	0.081	0.000	0.001				2.382	0.785	6.650	0.459	0.012	0.012	0.000	0.289	0.246	
601		Number of Points Used*		532	532	532	532	532		532	532	532	532	532	532		532	532	532	532				532	532	532	532	532	532	532	532	532	
602		* Backpulse points in box are not included																															

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING



RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>											
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 04/19/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface A	6.985	FT2							
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion	851	m3/m2/day/barg / gpm/ft2/barg							
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.1 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >	<< PERMIABILITY >>				
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16	Data - Per Minute																					Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	9/7/2004	9:20:45 AM		24.052	23.276	23.813	24.076	23.481		22.946	25.607	6.149	16.95	-1.209	-3.572		45.035	0.388	14.643	0.003		0	0	24.5	10.7	19.9	1.375	0.056	0.057	0.003	2.880	2.45	
18	9/7/2004	9:21:45 AM		24.055	23.284	23.837	24.095	23.489		22.917	25.568	6.024	17.053	-1.212	-3.532		46.022	0.392	14.643	0.003		1.00	0.01667	24.4	11.0	20.0	1.378	0.056	0.058	0.003	2.902	2.47	
19	9/7/2004	9:22:45 AM		24.062	23.301	23.879	24.147	23.526		5.836	25.551	6.047	-0.348	14.702	20.41		46.022	0.003	14.643	0.003		2.00	0.03333	24.4	11.0	2.7	0.189	0.000	0.000	0.000	0.162	0.14	
20	9/7/2004	9:23:45 AM		24.039	23.303	23.876	24.149	23.529		4.31	25.852	5.926	-1.741	16.639	20.055		46.162	0.003	14.643	0.003		3.00	0.05	24.7	11.0	1.3	0.089	0.000	0.000	0.000	0.345	0.29	
21	9/7/2004	9:24:45 AM		24.041	23.32	23.948	24.226	23.591		4.287	25.837	5.828	-1.754	16.642	66.479		46.454	0.003	14.643	0.004		4.00	0.06667	24.7	11.1	1.3	0.087	0.000	0.000	0.000	0.349	0.30	
22	9/7/2004	9:25:45 AM		24.054	23.318	23.931	24.204	23.658		18.599	25.375	5.283	13.312	1.541	0.319		48.692	0.533	14.643	0.003		5.00	0.08333	24.2	11.6	16.0	1.100	0.076	0.079	0.005	4.929	4.19	
23	9/7/2004	9:26:45 AM		24.136	23.325	23.953	24.231	23.635		18.584	25.52	5.269	13.162	1.625	0.475		45.857	0.516	14.643	0.003		6.00	0.1	24.4	10.9	15.9	1.094	0.074	0.076	0.005	4.794	4.08	
24	9/7/2004	9:27:45 AM		24.178	23.337	23.975	24.273	23.617		20.474	25.444	5.235	15.356	-0.416	-1.78		46.529	0.571	14.643	0.003		7.00	0.11667	24.3	11.1	17.9	1.235	0.082	0.084	0.005	4.697	4.00	
25	9/7/2004	9:28:45 AM		24.199	23.344	24.017	24.29	23.639		20.602	25.412	5.051	15.569	-0.517	-1.835		47.194	0.567	14.643	0.003		8.00	0.13333	24.3	11.2	18.1	1.247	0.081	0.083	0.005	4.615	3.93	
26	9/7/2004	9:29:45 AM		24.211	23.346	24.029	24.287	23.636		20.53	25.359	5.095	15.467	-0.538	-1.878		44.274	0.564	14.643	0.003		9.00	0.15	24.2	10.5	18.0	1.241	0.081	0.083	0.005	4.611	3.92	
27	9/7/2004	9:30:45 AM		24.244	23.368	24.071	24.309	23.679		20.814	25.58	5.112	15.854	-0.627	-1.898		44.333	0.562	14.643	0.003		10.00	0.16667	24.5	10.6	18.3	1.264	0.080	0.083	0.005	4.505	3.83	
28	9/7/2004	9:31:45 AM		24.267	23.381	24.099	24.327	23.701		21.247	25.545	5.041	16.37	-1.166	-2.274		49.397	0.52	14.643	0.003		11.00	0.18333	24.4	11.8	18.8	1.297	0.074	0.076	0.004	4.060	3.46	
29	9/7/2004	9:32:45 AM		24.294	23.398	24.136	24.364	23.733		21.39	26.382	5.015	16.441	-0.468	-1.809		47.951	0.571	14.643	0.003		12.00	0.2	25.3	11.4	18.9	1.304	0.082	0.084	0.004	4.428	3.77	
30	9/7/2004	9:33:45 AM		24.3	23.395	24.128	24.336	23.755		22.243	27.79	4.953	17.404	0.207	-1.384		44.599	0.607	14.643	0.003		13.00	0.21667	26.7	10.6	19.8	1.367	0.087	0.089	0.004	4.493	3.82	
31	9/7/2004	9:34:45 AM		24.333	23.407	24.175	24.343	23.768		22.284	27.819	4.908	17.472	0.209	-1.398		43.728	0.605	14.643	0.003		14.00	0.23333	26.7	10.4	19.9	1.371	0.087	0.089	0.004	4.460	3.80	
32	9/7/2004	9:35:45 AM		24.37	23.419	24.197	24.36	23.79		22.093	27.605	4.921	17.141	0.149	-1.413		45.991	0.605	14.643	0.003		15.00	0.25	26.5	11.0	19.6	1.353	0.087	0.089	0.005	4.517	3.84	
33	9/7/2004	9:36:45 AM		24.392	23.426	24.219	24.392	23.812		22.201	27.748	5.042	17.123	0.166	-1.41		47.125	0.605	14.643	0.003		16.00	0.26667	26.6	11.2	19.7	1.356	0.087	0.089	0.005	4.503	3.83	
34	9/7/2004	9:37:45 AM		24.425	23.449	24.237	24.415	23.824		22.129	27.622	4.786	17.511	0.14	-1.407		44.23	0.599	14.643	0.003		17.00	0.28333	26.5	10.5	19.8	1.367	0.086	0.088	0.004	4.421	3.76	
35	9/7/2004	9:38:45 AM		24.446	23.446	24.264	24.422	23.851		22.238	27.701	4.982	17.328	0.143	-1.43		48.05	0.603	14.643	0.003		18.00	0.3	26.6	11.4	19.8	1.364	0.086	0.088	0.004	4.455	3.79	
36	9/7/2004	9:39:45 AM		24.479	23.458	24.297	24.434	23.864		22.386	27.867	4.944	17.56	0.111	-1.444		47.232	0.602	14.643	0.003		19.00	0.31667	26.7	11.2	20.0	1.377	0.086	0.088	0.004	4.402	3.75	
37	9/7/2004	9:40:45 AM		24.5	23.47	24.313	24.456	23.885		22.22	27.709	5.09	17.236	0.099	-1.462		44.977	0.601	14.643	0.003		20.00	0.33333	26.6	10.7	19.7	1.360	0.086	0.088	0.004	4.447	3.78	
38	9/7/2004	9:41:45 AM		24.518	23.472	24.331	24.428	23.847		22.218	27.659	4.979	17.207	0.082	-1.47		46.502	0.599	14.643	0.003		21.00	0.35	26.5	11.1	19.7	1.359	0.086	0.087	0.004	4.433	3.77	
39	9/7/2004	9:42:45 AM		24.55	23.484	24.353	24.38	23.794		22.504	27.937	4.872	17.796	0.14	-1.473		43.776	0.597	14.643	0.003		22.00	0.36667	26.8	10.4	20.2	1.389	0.085	0.087	0.004	4.320	3.68	
40	9/7/2004	9:43:45 AM		24.566	23.485	24.368	24.34	23.76		22.276	27.73	4.93	17.324	0.114	-1.479		48.41	0.596	14.643	0.003		23.00	0.38333	26.6	11.5	19.8	1.365	0.085	0.087	0.004	4.387	3.73	
41	9/7/2004	9:44:45 AM		24.592	23.486	24.385	24.302	23.736		22.172	27.622	4.83	17.338	0.125	-1.456		46.975	0.597	14.643	0.003		24.00	0.4	26.5	11.2	19.8	1.362	0.085	0.087	0.004	4.402	3.75	
42	9/7/2004	9:45:45 AM		24.603	23.492	24.39	24.227	23.737		22.415	27.991	5.064	17.264	0.178	-1.427		45.703	0.6	14.643	0.003		25.00	0.41667	26.9	10.9	19.8	1.368	0.086	0.087	0.004	4.405	3.75	
43	9/7/2004	9:46:45 AM		24.633	23.487	24.415	24.197	23.727		22.444	28.059	4.94	17.533	0.207	-1.41		45.709	0.599	14.643	0.003		26.00	0.43333	26.9	10.9	20.0	1.378	0.086	0.087	0.004	4.362	3.71	
44	9/7/2004	9:47:45 AM		24.653	23.498	24.446	24.182	23.747		22.398	27.962	4.936	17.482	0.207	-1.416		43.429	0.6	14.643	0.003		27.00	0.45	26.8	10.3	19.9	1.375	0.086	0.087	0.004	4.376	3.72	
45	9/7/2004	9:48:45 AM		24.658	23.493	24.436	24.147	23.773		22.212	27.753	4.935	17.346	0.166	-1.456		46.423	0.599	14.643	0.003		28.00	0.46667	26.6	11.1	19.8	1.364	0.086	0.087	0.004	4.405	3.75	
46	9/7/2004	9:49:45 AM		24.689	23.508	24.472	24.203	23.778		22.435	27.931	4.971	17.377	0.149	-1.444		44.597	0.599	14.643	0.003		29.00	0.48333	26.8	10.6	19.9	1.372	0.086	0.087	0.004	4.373	3.72	
47	9/7/2004	9:50:45 AM		24.71	23.51	24.488	24.24	23.81		22.537	28.034	4.888	17.685	0.209	-1.442		43.016	0.597	14.643	0.003		30.00	0.5	26.9	10.2	20.1	1.387	0.085	0.087	0.004	4.312	3.67	
48	9/7/2004	9:51:45 AM		24.747	23.526	24.509	24.276	23.861		22.506	28.016	5.135	17.373	0.198	-1.416		47.513	0.597	14.643	0.003		31.00	0.51667	26.9	11.3	19.9	1.375	0.085	0.087	0.004	4.346	3.70	
49	9/7/2004	9:52:45 AM		24.754	23.533	24.516	24.303	23.893		22.5	28.007	4.918	17.58	0.166	-1.439		47.753	0.597	14.643	0.003		32.00	0.53333	26.9	11.4	20.0	1.382	0.085	0.087	0.004	4.324	3.68	
50	9/7/2004	9:53:45 AM		24.781	23.54	24.548	24.315	23.9		22.373	27.821	5.009	17.35	0.143	-1.468		46.268	0.596	14.643	0.003		33.00	0.55	26.7	11.0	19.9	1.369	0.085	0.086	0.004	4.351	3.70	
51	9/7/2004	9:54:45 AM		24.787	23.536	24.535	24.306	23.921		22.463	27.964	4.996	17.408	0.166	-1.453		45.407	0.596	14.643	0.003		34.00	0.56667	26.8	10.8	19.9	1.374	0.085	0.086	0.004	4.337	3.69	
52	9/7/2004	9:55:45 AM		24.798	23.542	24.555	24.352	23.932		22.63	28.165	4.877	17.775	0.204	-1.456		44.564	0.598	14.643	0.003		35.00	0.58333	27.0	10.6	20.2	1.393	0.086	0.087	0.004	4.291	3.65	
53	9/7/2004	11:00:40 AM		25.907	23.888	25.516	24.898	23.886		42.217	42.914	4.796	37.795	-1.209	-5.249		46.896	0.003	0.774	0.004		99.92	1.66528	41.8	11.2	40.0	2.758	0.111	0.109	0.003	2.730	2.32	
54	9/7/2004	11:01:40 AM		25.868	23.899	25.452	24.919	23.917		42.571	43.379	4.752	38.226	-1.209	-5.243		48.175	0.003	0.771	0.003		100.92	1.68194	42.3	11.5	40.4	2.785	0.110	0.109	0.003	2.698	2.30	
55	9/7/2004	11:02:40 AM		25.823	23.894	25.397	24.904	24.017		3.341	43.287	4.666	-1.3	35.083	20.555		46.738	0.003	-0.012	0.003		101.92	1.69861	42.2	11.1	1.0	0.070	-0.002	-0.002	-0.002	-1.665	-1.42	
56	9/7/2004	11:03:40 AM		25.815	23.916	25.369	24.931	23.999		3.297	43.24	4.652	-1.325	35.02	20.457		46.737	0.003	-0.012	0.004		102.92	1.71528	42.1	11.1	1.0	0.068	-0.002	-0.002	-0.002	-1.724	-1.47	
57	9/7/2004	11:04:40 AM		25.441	23.906	25.309	24.897	24.115		-0.886	43.48	4.541	-5.501	39.75	40.762		42.507	0.003	0.504	0.95		103.92	1.73194	42.4	10.1	-3.2	-0.220	0.072	0.072	-0.022	-22.399	-19.06	
58	9/7/2004	11:05:40 AM		25.678	23.913	25.256	24.934	24.147		32.204	42.927	4.531	27.995	5.452	0.487		44.725	1.008	0.443	0.003		104.92	1.74861	41.8	10.7	30.1	2.075	0.063	0.063	0.002	2.092	1.78	
59	9/7/2004	11:06:40 AM		25.689	23.935	25.233	24.965	24.108		42.878	43.395	4.547	38.768	-1.212	0.495		44.186	0.003	0.684	0.003		105.92	1.76528	42.3	10.5	40.8	2.815	0.098	0.097	0.002	2.383	2.03	
60	9/7/2004	11:07:40 AM		25.65	23.936	25.209	24.961	24.15		41.91	42.384	4.819	37.52	-1.212	0.504		47.125	0.003	0.676	0.004		106.92	1.78194	41.3	11.2	39.7	2.738	0.097	0.096	0.002	2.423	2.06	
61	9/7/2004	11:08:40 AM		25.622	23.943	25.181	24.998	24.187		42.146	42.628	4.762	37.867	-1.212	0.507		47.703	0.003	0.704	0.003		107.92	1.79861	41.5	11.4	40.0	2.758	0.101	0.100	0.003	2.507	2.13	
62	9/7/2004	11:09:40 AM		25.584	23.944	25.132	25.02	24.188		42.306	42.854	4.727	37.992	-1.209	0.507		45.578	0.003	0.73	0.003		108.92	1.81528	41.7	10.9	40.1	2.768	0.105	0.104	0.003	2.593	2.21	
63	9/7/2004	11:10:40 AM		25.566	23.966	25.099	25.042	24.175		42.138	42.802	4.782	37.715	-1.212	0.51		44.295	0.003	0.747	0.003		109.92	1.83194	41.7	10.6	39.9	2.753	0.107	0.107	0.003	2.671	2.27	
64	9/7/2004	11:11:40 AM		25.533	23.973	25.086	25.019	24.217		42.078	42.684	4.645	37.967	-1.212	0.513		44.914	0.003	0.763	0.004		110.92	1.84861	41.6	10.7	40.0	2.759	0.109	0.109	0.003	2.723	2.32	
65	9/7/2004	11:12:40 AM		25.488	23.959	25.042	25.02	24.213		42.206	42.879	4.748	37.815	-1.212	0.513		44.205	0.003	0.771	0.005		111.92	1.86528	41.8	10.5	40.0	2.759	0.110	0.110	0.003	2.756	2.34	
66	9/7/2004	11:13:40 AM		25.481	23.982	25.029	25.062	24.22		42.177	42.997	4.666	37.906	-1.215	0.513		45.482	0.003	0.767	0.005		112.92	1.88194	41.9	10.8	40.0	2.761	0.110	0.110	0.003	2.740	2.33	
67	9/7/2004	11:14:40 AM		25.448	23.994	24.991	25.069	24.237		42.503	43.128	4.585	38.49	-1.215	0.513		46.083	0.003	0.777	0.005		113.92	1.89861	42.0	11.0	40.5	2.792	0.111	0.111	0.003	2.748	2.34	
68	9/7/2004	11:15:40 AM		25.434	24.015	24.973	25.091	24.279		42.156	42.931	4.613	38.016	-1.209	0.521		49.507	0.003	0.787	0.004		114.92	1.91528	41.8	11.8	40.1	2.764	0.113	0.113	0.003	2.813	2.39	
69	9/7/2004	11:16:40 AM		25.401	24.007	24.939	25.047	24.28		42.104	42.846	4.678	37.91	-1.212	0.521		46.823	0.004	0.792	0.004		115.92	1.93194	41.7	11.2	40.0	2.758	0.113	0.114	0.003	2.839	2.42	
70	9/7/2004	11:17:40 AM		25.387	24.023	24.935	25.113	24.292		42.482	43.316	4.639	38.339	-1.212	0.521		45.042	0.003	0.798	0.005		116.92	1.94861	42.2	10.7	40.4	2.786	0.114	0.114	0.003	2.832	2.41	

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	9/7/2004	11:18:40 AM		25.389	24.045	24.947	25.15	24.309		42.065	42.865	4.652	37.84	-1.209	0.524		46.443	0.005	0.802	0.005		117.92	1.96528	41.7	11.1	40.0	2.755	0.115	0.115	0.003	2.878	2.45	
72	9/7/2004	11:19:40 AM		25.354	24.045	24.902	25.125	24.279		42.293	43.028	4.684	37.988	-1.209	0.527		47.004	0.003	0.801	0.005		118.92	1.98194	41.9	11.2	40.1	2.768	0.115	0.115	0.003	2.865	2.44	
73	9/7/2004	11:20:40 AM		25.34	24.061	24.908	25.166	24.314		42.328	43.028	4.61	38.261	-1.209	0.527		46.131	0.003	0.808	0.005		119.92	1.99861	41.9	11.0	40.3	2.778	0.116	0.116	0.003	2.878	2.45	
74	9/7/2004	11:21:40 AM		25.321	24.062	24.859	25.147	24.346		42.258	43.034	4.603	38.222	-1.212	0.527		45.471	0.003	0.81	0.006		120.92	2.01528	41.9	10.8	40.2	2.774	0.116	0.116	0.003	2.893	2.46	
75	9/7/2004	11:22:40 AM		25.297	24.063	24.841	25.179	24.327		42.187	42.972	4.709	37.977	-1.212	0.53		45.77	0.003	0.816	0.006		121.92	2.03194	41.8	10.9	40.1	2.764	0.117	0.117	0.003	2.928	2.49	
76	9/7/2004	11:23:40 AM		25.278	24.079	24.846	25.145	24.343		42.125	42.908	4.637	38.049	-1.215	0.53		49.201	0.003	0.82	0.005		122.92	2.04861	41.8	11.7	40.1	2.764	0.117	0.118	0.003	2.941	2.50	
77	9/7/2004	11:24:40 AM		25.27	24.081	24.833	25.182	24.375		42.167	42.788	4.584	38.195	-1.209	0.533		46.218	0.003	0.823	0.004		123.92	2.06528	41.7	11.0	40.2	2.770	0.118	0.118	0.003	2.946	2.51	
78	9/7/2004	11:25:40 AM		25.252	24.093	24.835	25.184	24.377		42.169	43.012	4.646	38.041	-1.212	0.533		44.994	0.003	0.828	0.006		124.92	2.08194	41.9	10.7	40.1	2.765	0.119	0.119	0.003	2.970	2.53	
79	9/7/2004	11:26:40 AM		25.249	24.11	24.832	25.181	24.384		42.156	43.053	4.7	37.883	-1.212	0.539		45.887	0.003	0.831	0.005		125.92	2.09861	41.9	10.9	40.0	2.759	0.119	0.120	0.003	2.987	2.54	
80	9/7/2004	11:27:40 AM		25.235	24.111	24.793	25.216	24.319		42.152	42.865	4.674	37.971	-1.212	0.539		46.498	0.003	0.833	0.004		126.92	2.11528	41.7	11.1	40.1	2.762	0.119	0.120	0.003	2.994	2.55	
81	9/7/2004	11:28:40 AM		25.222	24.123	24.785	25.178	24.291		42.416	43.111	4.682	38.259	-1.212	0.539		47.586	0.003	0.838	0.005		127.92	2.13194	42.0	11.3	40.3	2.781	0.120	0.121	0.003	2.992	2.55	
82	9/7/2004	11:29:40 AM		25.208	24.129	24.771	25.135	24.258		42.138	42.893	4.584	38.019	-1.212	0.544		47.184	0.003	0.843	0.006		128.92	2.14861	41.8	11.2	40.1	2.763	0.121	0.121	0.003	3.031	2.58	
83	9/7/2004	11:30:40 AM		25.214	24.136	24.773	25.146	24.199		41.947	42.697	4.567	37.94	-1.209	0.542		46.723	0.003	0.845	0.005		129.92	2.16528	41.6	11.1	39.9	2.754	0.121	0.122	0.003	3.048	2.59	
84	9/7/2004	11:31:40 AM		25.189	24.125	24.737	25.065	24.148		42.289	43.146	4.599	38.22	-1.212	0.544		46.058	0.003	0.852	0.006		130.92	2.18194	42.0	11.0	40.3	2.775	0.122	0.123	0.003	3.053	2.60	
85	9/7/2004	11:32:40 AM		25.179	24.13	24.727	25.025	24.158		42.293	43.15	4.658	38.174	-1.209	0.544		45.98	0.003	0.854	0.006		131.92	2.19861	42.0	11.0	40.2	2.774	0.122	0.123	0.003	3.062	2.61	
86	9/7/2004	11:33:40 AM		25.184	24.135	24.732	25.02	24.173		42.27	43.173	4.703	37.971	-1.209	0.55		43.315	0.003	0.857	0.004		132.92	2.21528	42.0	10.3	40.1	2.766	0.123	0.124	0.003	3.081	2.62	
87	9/7/2004	11:34:40 AM		25.154	24.126	24.688	24.981	24.199		42.165	43.043	4.659	38.043	-1.218	0.544		46.199	0.003	0.861	0.006		133.92	2.23194	41.9	11.0	40.1	2.765	0.123	0.124	0.003	3.101	2.64	
88	9/7/2004	11:35:40 AM		25.159	24.146	24.728	25.021	24.209		42.113	42.983	4.548	38.088	-1.212	0.553		44.579	0.003	0.865	0.005		134.92	2.24861	41.9	10.6	40.1	2.765	0.124	0.125	0.003	3.112	2.65	
89	9/7/2004	11:36:40 AM		25.145	24.142	24.718	24.991	24.24		42.021	42.997	4.725	37.684	-1.209	0.553		47.641	0.003	0.873	0.006		135.92	2.26528	41.9	11.3	39.9	2.748	0.125	0.126	0.003	3.161	2.69	
90	9/7/2004	11:37:40 AM		25.141	24.148	24.705	25.028	24.276		42.198	42.966	4.542	38.179	-1.212	0.553		44.927	0.003	0.876	0.005		136.92	2.28194	41.8	10.7	40.2	2.771	0.125	0.126	0.003	3.147	2.68	
91	9/7/2004	11:38:40 AM		25.147	24.164	24.72	25.043	24.317		42.082	42.906	4.579	38.021	-1.206	0.562		44.971	0.003	0.876	0.005		137.92	2.29861	41.8	10.7	40.1	2.761	0.125	0.126	0.003	3.156	2.69	
92	9/7/2004	11:39:40 AM		25.133	24.154	24.676	25.099	24.318		42.077	43.155	4.746	37.719	-1.212	0.559		46.934	0.003	0.883	0.004		138.92	2.31528	42.0	11.2	39.9	2.751	0.126	0.128	0.003	3.198	2.72	
93	9/7/2004	11:40:40 AM		25.118	24.164	24.666	25.109	24.308		41.972	42.802	4.587	37.902	-1.215	0.556		45.549	0.003	0.887	0.005		139.92	2.33194	41.7	10.8	39.9	2.754	0.127	0.128	0.003	3.210	2.73	
94	9/7/2004	11:41:40 AM		25.114	24.176	24.677	25.161	24.339		41.966	42.858	4.632	37.877	-1.209	0.562		45.204	0.003	0.89	0.004		140.92	2.34861	41.7	10.8	39.9	2.752	0.127	0.129	0.003	3.221	2.74	
95	9/7/2004	11:42:40 AM		25.106	24.172	24.659	25.117	24.375		42.03	42.831	4.644	37.891	-1.212	0.559		51.037	0.003	0.894	0.006		141.92	2.36528	41.7	12.2	40.0	2.755	0.128	0.129	0.003	3.234	2.75	
96	9/7/2004	11:43:40 AM		25.111	24.183	24.684	25.158	24.376		41.943	42.848	4.629	37.817	-1.212	0.565		43.84	0.003	0.9	0.005		142.92	2.38194	41.7	10.4	39.9	2.750	0.129	0.130	0.003	3.260	2.77	
97	9/7/2004	11:44:40 AM		25.108	24.194	24.676	25.149	24.417		41.744	42.676	4.604	37.592	-1.212	0.565		46.191	0.003	0.906	0.006		143.92	2.39861	41.6	11.0	39.7	2.735	0.130	0.131	0.003	3.300	2.81	
98	9/7/2004	11:45:40 AM		25.109	24.211	24.672	25.196	24.429		41.914	42.966	4.633	37.692	-1.209	0.568		43.846	0.003	0.909	0.005		144.92	2.41528	41.8	10.4	39.8	2.744	0.130	0.131	0.003	3.300	2.81	
99	9/7/2004	11:46:40 AM		25.105	24.216	24.653	25.211	24.464		41.681	42.514	4.54	37.653	-1.209	0.57		45.766	0.003	0.911	0.004		145.92	2.43194	41.4	10.9	39.7	2.735	0.130	0.132	0.003	3.320	2.83	
100	9/7/2004	11:47:40 AM		25.102	24.223	24.655	25.208	24.497		41.963	43.047	4.561	37.848	-1.212	0.57		45.572	0.003	0.918	0.006		146.92	2.44861	41.9	10.9	39.9	2.751	0.131	0.133	0.003	3.326	2.83	
101	9/7/2004	11:48:40 AM		25.102	24.249	24.676	25.244	24.497		42.073	43.051	4.712	37.834	-1.209	0.576		46.548	0.003	0.922	0.005		147.92	2.46528	41.9	11.1	40.0	2.755	0.132	0.133	0.003	3.334	2.84	
102	9/7/2004	11:49:40 AM		25.089	24.235	24.652	25.205	24.529		41.756	42.79	4.573	37.608	-1.215	0.576		43.023	0.003	0.924	0.006		148.92	2.48194	41.7	10.2	39.7	2.736	0.132	0.134	0.003	3.366	2.86	
103	9/7/2004	11:50:40 AM		25.084	24.246	24.653	25.236	24.529		42.212	43.327	4.628	38.117	-1.212	0.576		45.252	0.003	0.926	0.004		149.92	2.49861	42.2	10.8	40.2	2.769	0.133	0.134	0.003	3.333	2.84	
104	9/7/2004	11:51:40 AM		25.086	24.248	24.634	25.278	24.566		41.669	42.643	4.574	37.631	-1.215	0.579		44.781	0.003	0.931	0.005		150.92	2.51528	41.5	10.7	39.7	2.734	0.133	0.135	0.003	3.396	2.89	
105	9/7/2004	11:52:40 AM		25.088	24.265	24.641	25.32	24.533		41.999	43.041	4.645	37.811	-1.212	0.582		45.567	0.003	0.937	0.005		151.92	2.53194	41.9	10.9	39.9	2.751	0.134	0.136	0.003	3.396	2.89	
106	9/7/2004	11:53:40 AM		25.084	24.271	24.632	25.316	24.539		41.795	42.688	4.54	37.791	-1.215	0.579		44.756	0.003	0.939	0.005		152.92	2.54861	41.6	10.7	39.8	2.744	0.134	0.136	0.003	3.414	2.90	
107	9/7/2004	11:54:40 AM		25.08	24.282	24.628	25.322	24.53		41.93	43.01	4.632	37.787	-1.215	0.582		45.513	0.003	0.945	0.006		153.92	2.56528	41.9	10.8	39.9	2.748	0.135	0.137	0.003	3.430	2.92	
108	9/7/2004	11:55:40 AM		25.086	24.298	24.644	25.378	24.541		42.107	43.119	4.588	37.977	-1.212	0.585		47.086	0.003	0.953	0.006		154.92	2.58194	42.0	11.2	40.0	2.761	0.136	0.138	0.003	3.442	2.93	
109	9/7/2004	11:56:40 AM		25.098	24.315	24.667	25.405	24.618		41.98	43.072	4.632	37.772	-1.209	0.585		46.043	0.003	0.955	0.005		155.92	2.59861	41.9	11.0	39.9	2.749	0.137	0.138	0.003	3.461	2.95	
110	9/7/2004	11:57:40 AM		25.095	24.327	24.669	25.422	24.595		41.957	42.902	4.52	38.062	-1.209	0.588		46.143	0.003	0.957	0.006		156.92	2.61528	41.8	11.0	40.0	2.759	0.137	0.138	0.003	3.457	2.94	
111	9/7/2004	11:58:40 AM		25.086	24.318	24.644	25.418	24.536		41.698	42.734	4.588	37.583	-1.212	0.591		45.415	0.003	0.961	0.005		157.92	2.63194	41.6	10.8	39.6	2.733	0.138	0.139	0.004	3.506	2.98	
112	9/7/2004	11:59:40 AM		25.077	24.314	24.626	25.369	24.487		41.835	42.881	4.562	37.807	-1.209	0.588		45.751	0.003	0.962	0.005		158.92	2.64861	41.8	10.9	39.8	2.746	0.138	0.139	0.003	3.495	2.97	
113	9/7/2004	12:00:40 PM		25.067	24.314	24.626	25.349	24.422		41.829	43.024	4.574	37.762	-1.212	0.591		45.328	0.003	0.969	0.005		159.92	2.66528	41.9	10.8	39.8	2.744	0.139	0.140	0.004	3.523	3.00	
114	9/7/2004	12:01:40 PM		25.063	24.31	24.616	25.31	24.403		41.692	42.761	4.606	37.52	-1.209	0.594		44.478	0.003	0.971	0.004		160.92	2.68194	41.6	10.6	39.6	2.731	0.139	0.141	0.004	3.548	3.02	
115	9/7/2004	12:02:40 PM		25.047	24.299	24.601	25.259	24.372		41.843	43.032	4.637	37.622	-1.212	0.594		51.679	0.003	0.974	0.005		161.92	2.69861	41.9	12.3	39.7	2.739	0.139	0.141	0.004	3.549	3.02	
116	9/7/2004	12:03:40 PM		25.052	24.32	24.606	25.254	24.332		41.974	43.041	4.533	37.982	-1.215	0.594		45.401	0.003	0.977	0.005		162.92	2.71528	41.9	10.8	40.0	2.756	0.140	0.141	0.004	3.538	3.01	
117	9/7/2004	12:04:40 PM		25.062	24.32	24.601	25.254	24.317		41.783	42.848	4.554	37.791	-1.212	0.599		46.957	0.003	0.979	0.006		163.92	2.73194	41.7	11.2	39.8	2.743	0.140	0.142	0.004	3.563	3.03	
118	9/7/2004	12:05:40 PM		25.062	24.329	24.595	25.249	24.307		41.769	42.9	4.647	37.518	-1.212	0.596		46.637	0.003	0.981	0.007		164.92	2.74861	41.8	11.1	39.6	2.733	0.140	0.142	0.004	3.583	3.05	
119	9/7/2004	12:06:40 PM		25.062	24.33	24.606	25.254	24.347		41.657	42.777	4.578	37.508	-1.212	0.602		45.499	0.003	0.984	0.004		165.92	2.76528	41.7	10.8	39.6	2.729	0.141	0.142	0.004	3.599	3.06	
120	9/7/2004	12:07:40 PM		25.057	24.335	24.611	25.174	24.402		41.636	42.645	4.609	37.53	-1.212	0.599		47.52	0.003	0.988	0.004		166.92	2.78194	41.5	11.3	39.6	2.729	0.141	0.143	0.004	3.613	3.07	
121	9/7/2004	12:08:40 PM		25.064	24.341	24.622	25.206	24.439		41.584	42.647	4.613	37.438	-1.215	0.602		46.35	0.003	0.993	0.004		167.92	2.79861	41.5	11.0	39.5	2.724	0.142	0.144	0.004	3.637	3.09	
122	9/7/2004	12:09:40 PM		25.059	24.346	24.612	25.221	24.484		41.899	42.923	4.457	37.92	-1.212	0.605		49.76	0.003	0.997	0.006		168.92	2.81528	41.8	11.9	39.9	2.752	0.143	0.144	0.004	3.616	3.08	
123	9/7/2004	12:10:40 PM		25.054	24.352	24.603	25.226	24.504		41.827	42.856	4.52	37.836	-1.212	0.605		47.678	0.003	1.001	0.006		169.92	2.83194	41.7	11.4	39.8	2.746	0.143	0.145	0.004	3.638	3.10	
124	9/7/2004	12:11:40 PM		25.061	24.353	24.599	25.253	24.506		41.715	42.929	4.663	37.462	-1.212	0.611		47.142	0.003	1.004	0.004		170.92	2.84861	41.8	11.2	39.6	2.729	0.144	0.145	0.004	3.672	3.12	
125	9/7/2004	12:12:40 PM		25.047	24.359	24.59	25.253	24.477		41.806	42.979	4.522	37.748	-1.209	0.608		46.433	0.003	1.004	0.005		171.92	2.86528	41.9	11.1	39.8	2.742	0.144	0.145	0.004	3.656	3.11	
126	9/7/2004	12:13:40 PM		25.058	24.37	24.606	25.3	24.478		41.625	42.835	4.58	37.495	-1.209	0.611		44.9	0.003	1.006	0.005		172.92	2.88194	41.7	10.7	39.6	2.728	0.144	0.146	0.004	3.681	3.13	
127	9/7/2004	12:14:40 PM		25.044	24.362	24.592	25.336	24.549		41.928	43.132	4.467	37.99	-1.215	0.611		45.995	0.003	1.009	0.005		173.92	2.89861	42.0	11.0	40.0	2.755	0.144	0.146	0.004	3.657	3.11	
128	9/7/2004	12:15:40 PM		25.055	24.372	24.603	25.327	24.515		41.891	43.064	4.518	37.865	-1.212	0.611		45.384	0.003	1.013	0.005		174.92	2.91528	41.9	10.8	39.9	2.749	0.145	0.147	0.004	3.678	3.13	
129	9/7/2004	12:16:40 PM		25.045	24.372	24.593	25.317	24.58		41.787	43.043	4.623	37.62	-1.215	0.614		43.164	0.003	1.016	0.005		175.92	2.93194	41.9	10.3	39.7	2.737	0.145	0.147	0.004	3.706	3.15	
130	9/7/2004	12:17:40 PM		25.041	24.373	24.564	25.338	24.606		41.661	42.916	4.493	37.588	-1.215	0.611		45.924	0.003	1.019	0.005		176.92	2.94861	41.8	10.9	39.6	2.732	0.146	0.148	0.004	3.727	3.17	
131	9/7/2004	12:18:40 PM		25.036	24.373	24.569	25.318	24.651		42.2	43.519	4.809	37.764	-1.218	0.614		46.717	0.003	1.028	0.005		177.92	2.96528	42.4	11.1	40.0	2.757	0.147	0.149	0.004	3.726	3.17	
132	9/7/2004	12:19:40 PM		25.046	24.394	24.615	25.363	24.606		41.974	43.354	4.781	37.528	-1.212	0.62		48.675	0.003	1.025	0.004		178.92	2.98194	42.2	11.6	39.8	2.741	0.147	0.148	0.004	3.732	3.18	
133	9/7/2004	12:20:40 PM		25.062	24.409	24.635	25.404	24.612		42.098	43.3	4.836	37.705	-1.212	0.623		45.626	0.003	1.028	0.005		179.92	2.99861	42.2	10.9	39.9	2.751	0.147	0.149	0.004	3.727	3.17	
134	9/7/2004	12:21:40 PM		25.062	24.409	24.63	25.414	24.677		42.094	43.329	4.855	37.645	-1.215	0.617		47.891	0.003	1.028	0.004		180.92	3.01528	42.2	11.4	39.9	2.749	0.147	0.149	0.004	3.730	3.17	
135	9/7/2004	12:22:40 PM		25.094	24.426	24.662	25.461	24.689		41.968	43.117	4.687	37.801	-1.212	0.62		46.456	0.003	1.03	0.005		181.92	3.03194	42.0	11.1	39.9	2.750	0.147	0.149	0.004	3.733	3.18	
136	9/7/2004	12:23:40 PM		25.104	24.437	24.668	25.501	24.709		41.932	43.2	4.74	37.702	-1.212	0.625		46.187	0.003	1.032	0.004		182.92	3.04861	42.1	11.0	39.8	2.745	0.148	0.149	0.004	3.746	3.19	
137	9/7/2004	12:24:40 PM		25.11	24.442	24.668	25.527	24.715		42.306	43.548	4.81	37.844	-1.215	0.62		47.703	0.003	1.037	0.005		183.92	3.06528	42.4	11.4	40.1	2.763	0.148	0.150	0.004	3.739	3.18	
138	9/7/2004	12:25:40 PM		25.116	24.443	24.679	25.563	24.666		42.229	43.492	4.62	38.172	-1.212	0.628		48.145	0.003	1.042	0.006		184.92	3.08194	42.4	11.5	40.2	2.772	0.149	0.151	0.004	3.745	3.19	
139	9/7/2004	12:26:40 PM		25.133	24.46	24.706	25.555	24.638		42.337	43.53	4.639	38.107	-1.212	0.625		45.465	0.003	1.04	0.005		185.92	3.09861	42.4	10.8	40.2	2.773	0.149	0.150	0.004	3.733	3.18	
140	9/7/2004	12:27:40 PM		25.148	24.481	24.742	25.551	24.583		42.302	43.449	4.724	38.027	-1.206	0.565		44.746	0.003	1.064	0.005		186.92	3.11528	42.3	10.7	40.2	2.769	0.152	0.153	0.004	3.820	3.25	

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
141	9/7/2004	12:28:40 PM		25.155	24.482	24.733	25.507	24.61		41.993	43.466	4.64	38.033	-1.212	0.637		46.954	0.003	1.649	0.004		187.92	3.13194	42.3	11.2	40.0	2.759	0.236	0.238	0.006	5.945	5.06	
142	9/7/2004	12:29:40 PM		25.165	24.487	24.723	25.477	24.525		42.096	43.606	4.733	37.817	-1.212	0.631		46.81	0.003	1.052	0.004		188.92	3.14861	42.5	11.1	40.0	2.755	0.151	0.152	0.004	3.799	3.23	
143	9/7/2004	12:30:40 PM		25.16	24.477	24.728	25.427	24.455		41.912	43.198	4.677	37.863	-1.212	0.634		46.168	0.003	1.044	0.005		189.92	3.16528	42.1	11.0	39.9	2.750	0.149	0.151	0.004	3.776	3.21	
144	9/7/2004	12:31:40 PM		25.165	24.482	24.733	25.412	24.415		42.339	43.72	4.884	38.002	-1.215	0.628		44.773	0.003	1.045	0.005		190.92	3.18194	42.6	10.7	40.2	2.770	0.150	0.151	0.004	3.752	3.19	
145	9/7/2004	12:32:40 PM		25.169	24.482	24.753	25.381	24.349		42.092	43.459	4.758	37.941	-1.209	0.634		47.705	0.003	1.044	0.005		191.92	3.19861	42.3	11.4	40.0	2.759	0.149	0.151	0.004	3.761	3.20	
146	9/7/2004	12:33:40 PM		25.173	24.486	24.732	25.335	24.423		42.019	43.327	4.749	37.846	-1.212	0.634		44.994	0.003	1.042	0.007		192.92	3.21528	42.2	10.7	39.9	2.753	0.149	0.150	0.004	3.764	3.20	
147	9/7/2004	12:34:40 PM		25.178	24.48	24.731	25.325	24.443		42.073	43.434	4.726	37.91	-1.212	0.637		46.821	0.003	1.042	0.005		193.92	3.23194	42.3	11.2	40.0	2.757	0.149	0.150	0.004	3.759	3.20	
148	9/7/2004	12:35:40 PM		25.182	24.48	24.75	25.344	24.472		42.075	43.323	4.728	37.975	-1.212	0.64		47.009	0.003	1.034	0.005		194.92	3.24861	42.2	11.2	40.0	2.760	0.148	0.149	0.004	3.725	3.17	
149	9/7/2004	12:36:40 PM		25.192	24.5	24.765	25.384	24.532		42.536	43.986	4.818	38.265	-1.209	0.64		45.957	0.003	1.033	0.005		195.92	3.26528	42.9	10.9	40.4	2.785	0.148	0.149	0.004	3.685	3.14	
150	9/7/2004	12:37:40 PM		25.203	24.51	24.791	25.385	24.563		41.965	43.271	4.704	37.762	-1.209	0.64		48.033	0.003	1.026	0.006		196.92	3.28194	42.1	11.4	39.9	2.748	0.147	0.148	0.004	3.707	3.15	
151	9/7/2004	12:38:40 PM		25.209	24.517	24.803	25.421	24.569		42.065	43.294	4.636	38.033	-1.212	0.637		48.254	0.003	1.019	0.006		197.92	3.29861	42.2	11.5	40.0	2.761	0.146	0.147	0.004	3.663	3.12	
152	9/7/2004	2:07:06 PM		23.303	24.614	23.104	25.192	24.55		41.754	43.642	4.779	37.518	-1.212	-4.856		45.023	0.003	1.191	0.003		286.35	4.7725	42.5	10.7	39.6	2.733	0.171	0.180	0.005	4.539	3.86	
153	9/7/2004	2:08:06 PM		23.412	24.608	23.239	25.172	24.43		41.972	43.58	4.773	37.881	-1.209	-4.856		45.342	0.003	1.185	0.003		287.35	4.78917	42.5	10.8	39.9	2.753	0.170	0.178	0.004	4.466	3.80	
154	9/7/2004	2:09:06 PM		23.494	24.614	23.396	25.153	24.446		3.721	44.189	4.904	-1.241	35.477	20.26		44.939	0.003	-0.012	0.004		288.35	4.80583	43.1	10.7	1.2	0.085	-0.002	-0.002	-0.001	-1.450	-1.23	
155	9/7/2004	2:10:06 PM		23.499	24.624	23.531	25.148	24.461		3.472	44.004	4.795	-1.335	35.613	20.277		46.126	0.003	-0.01	0.003		289.35	4.8225	42.9	11.0	1.1	0.074	-0.001	-0.001	-0.001	-1.397	-1.19	
156	9/7/2004	2:11:06 PM		23.558	24.598	23.61	25.117	24.405		-3.424	44.952	4.677	-8.309	43.823	46.873		44.356	0.003	-0.012	1.75		290.35	4.83917	43.8	10.6	-5.9	-0.404	-0.002	-0.002	0.000	0.305	0.26	
157	9/7/2004	2:12:06 PM		23.834	24.609	23.721	25.097	24.405		38.581	43.385	4.816	34.524	-1.14	-1.251		47.382	0.032	2.121	0.003		291.35	4.85583	42.3	11.3	36.6	2.520	0.304	0.315	0.009	8.613	7.33	
158	9/7/2004	2:13:06 PM		24.015	24.624	23.837	25.093	24.436		41.225	43.978	4.801	37.161	-1.212	-1.277		46.131	0.003	1.543	0.003		292.35	4.8725	42.9	11.0	39.2	2.702	0.221	0.228	0.006	5.825	4.96	
159	9/7/2004	2:14:06 PM		24.132	24.621	23.939	25.17	24.488		41.657	44.28	4.646	37.702	-1.212	-1.184		45.081	0.003	1.488	0.003		293.35	4.88917	43.2	10.7	39.7	2.736	0.213	0.220	0.006	5.532	4.71	
160	9/7/2004	2:15:06 PM		24.25	24.629	24.032	25.172	24.551		42.768	45.265	4.488	38.995	-1.212	-1.173		46.94	0.003	1.489	0.003		294.35	4.90583	44.1	11.2	40.9	2.819	0.213	0.219	0.005	5.359	4.56	
161	9/7/2004	2:16:06 PM		24.357	24.636	24.144	25.194	24.547		42.864	45.518	4.585	38.96	-1.209	-1.176		44.785	0.003	1.464	0.003		295.35	4.9225	44.4	10.7	40.9	2.821	0.210	0.215	0.005	5.248	4.47	
162	9/7/2004	2:17:06 PM		24.462	24.631	24.235	25.239	24.637		42.772	45.281	4.564	38.905	-1.212	-1.178		44.637	0.003	1.459	0.004		296.35	4.93917	44.2	10.6	40.8	2.816	0.209	0.213	0.005	5.226	4.45	
163	9/7/2004	2:18:06 PM		24.553	24.636	24.32	25.25	24.703		42.727	45.25	4.586	38.778	-1.212	-1.173		45.515	0.003	1.454	0.003		297.35	4.95583	44.1	10.8	40.8	2.810	0.208	0.212	0.005	5.207	4.43	
164	9/7/2004	2:19:06 PM		24.644	24.632	24.401	25.276	24.729		43.1	45.574	4.615	39.164	-1.215	-1.176		45.317	0.003	1.453	0.005		298.35	4.9725	44.4	10.8	41.1	2.836	0.208	0.212	0.005	5.144	4.38	
165	9/7/2004	2:20:06 PM		24.744	24.658	24.522	25.332	24.744		42.862	45.331	4.606	38.952	-1.212	-1.167		44.969	0.003	1.443	0.005		299.35	4.98917	44.2	10.7	40.9	2.820	0.207	0.209	0.005	5.119	4.36	
166	9/7/2004	2:21:06 PM		24.824	24.653	24.592	25.382	24.789		42.857	45.231	4.514	39.063	-1.215	-1.167		44.672	0.003	1.443	0.004		300.35	5.00583	44.1	10.6	41.0	2.824	0.207	0.209	0.005	5.102	4.34	
167	9/7/2004	2:22:06 PM		24.905	24.674	24.653	25.397	24.85		43.314	45.698	4.598	39.451	-1.212	-1.164		45.09	0.004	1.443	0.005		301.35	5.0225	44.6	10.7	41.4	2.853	0.207	0.209	0.005	5.041	4.29	
168	9/7/2004	2:23:06 PM		24.966	24.669	24.714	25.423	24.856		42.677	45.196	4.757	38.632	-1.215	-1.176		47.943	0.003	1.418	0.004		302.35	5.03917	44.1	11.4	40.7	2.803	0.203	0.205	0.005	5.034	4.28	
169	9/7/2004	2:24:06 PM		25.031	24.674	24.769	25.448	24.901		42.032	44.307	4.757	38.039	-1.215	-1.184		48.734	0.003	1.395	0.005		303.35	5.05583	43.2	11.6	40.0	2.760	0.200	0.201	0.005	5.021	4.27	
170	9/7/2004	2:25:06 PM		25.087	24.685	24.815	25.479	24.946		41.895	44.125	4.622	37.979	-1.212	-1.176		46.064	0.003	1.393	0.004		304.35	5.0725	43.0	11.0	39.9	2.754	0.199	0.200	0.005	5.020	4.27	
171	9/7/2004	2:26:06 PM		25.153	24.702	24.877	25.536	24.968		42.133	44.456	4.678	38.111	-1.212	-1.072		45.968	0.003	1.403	0.005		305.35	5.08917	43.3	10.9	40.1	2.766	0.201	0.202	0.005	5.024	4.28	
172	9/7/2004	2:27:06 PM		25.215	24.728	24.933	25.542	24.87		41.945	44.206	4.651	38.019	-1.206	-1.069		45.682	0.003	1.401	0.005		306.35	5.10583	43.1	10.9	40.0	2.757	0.201	0.201	0.005	5.026	4.28	
173	9/7/2004	2:28:06 PM		25.246	24.714	24.949	25.473	24.721		42.204	44.626	4.627	38.287	-1.212	-1.072		45.949	0.003	1.401	0.004		307.35	5.1225	43.5	10.9	40.2	2.775	0.201	0.201	0.005	4.991	4.25	
174	9/7/2004	2:29:06 PM		25.291	24.724	24.999	25.428	24.691		41.74	44.129	4.696	37.715	-1.212	-1.072		45.724	0.003	1.389	0.004		308.35	5.13917	43.0	10.9	39.7	2.739	0.199	0.199	0.005	5.006	4.26	
175	9/7/2004	2:30:06 PM		25.33	24.729	25.049	25.407	24.765		41.918	44.148	4.735	37.826	-1.212	-1.072		46.658	0.003	1.389	0.004		309.35	5.15583	43.0	11.1	39.9	2.749	0.199	0.199	0.005	4.980	4.24	
176	9/7/2004	2:31:06 PM		25.365	24.728	25.083	25.412	24.62		41.937	44.266	4.754	37.801	-1.212	-1.066		46.591	0.003	1.393	0.005		310.35	5.1725	43.1	11.1	39.9	2.749	0.199	0.199	0.005	4.990	4.25	
177	9/7/2004	2:32:06 PM		25.395	24.723	25.098	25.372	24.595		41.663	44.056	4.763	37.622	-1.212	-1.069		46.235	0.003	1.388	0.005		311.35	5.18917	42.9	11.0	39.6	2.733	0.199	0.198	0.005	4.999	4.25	
178	9/7/2004	2:33:06 PM		25.435	24.734	25.134	25.332	24.455		42.011	44.255	4.733	37.922	-1.215	-1.069		46.635	0.003	1.391	0.007		312.35	5.20583	43.1	11.1	40.0	2.756	0.199	0.198	0.005	4.964	4.22	
179	9/7/2004	2:34:06 PM		25.47	24.738	25.173	25.302	24.449		42.156	44.558	4.806	37.994	-1.206	-1.063		46.429	0.004	1.398	0.004		313.35	5.2225	43.4	11.1	40.1	2.763	0.200	0.199	0.005	4.970	4.23	
180	9/7/2004	2:35:06 PM		25.499	24.728	25.153	25.256	24.484		42.078	44.547	4.707	37.949	-1.215	-1.063		45.657	0.003	1.403	0.004		314.35	5.23917	43.4	10.9	40.0	2.759	0.201	0.200	0.005	4.998	4.25	
181	9/7/2004	2:36:06 PM		25.524	24.737	25.187	25.3	24.593		42.156	44.518	4.802	37.988	-1.212	-1.063		45.82	0.003	1.398	0.006		315.35	5.25583	43.4	10.9	40.1	2.763	0.200	0.199	0.005	4.968	4.23	
182	9/7/2004	2:37:06 PM		25.553	24.741	25.226	25.355	24.713		42.231	44.519	4.662	38.351	-1.209	-1.057		46.057	0.003	1.404	0.004		316.35	5.2725	43.4	11.0	40.3	2.778	0.201	0.200	0.005	4.957	4.22	
183	9/7/2004	2:38:06 PM		25.578	24.746	25.241	25.39	24.748		42.08	44.529	4.676	38.088	-1.212	-1.057		45.231	0.003	1.4	0.004		317.35	5.28917	43.4	10.8	40.1	2.764	0.200	0.199	0.005	4.966	4.23	
184	9/7/2004	2:39:06 PM		25.598	24.752	25.267	25.431	24.758		42.044	44.458	4.614	38.09	-1.212	-1.057		44.247	0.003	1.407	0.005		318.35	5.30583	43.3	10.5	40.1	2.762	0.201	0.200	0.005	4.990	4.25	
185	9/7/2004	2:40:06 PM		25.629	24.758	25.298	25.441	24.814		42.264	44.506	4.713	38.187	-1.212	-1.057		45.446	0.003	1.404	0.005		319.35	5.3225	43.4	10.8	40.2	2.773	0.201	0.199	0.005	4.955	4.22	
186	9/7/2004	2:41:06 PM		25.644	24.768	25.323	25.471	24.874		42.131	44.593	4.64	38.096	-1.209	-1.051		46.114	0.003	1.403	0.006		320.35	5.33917	43.5	11.0	40.1	2.766	0.201	0.199	0.005	4.962	4.22	
187	9/7/2004	2:42:06 PM		25.669	24.773	25.323	25.526	24.894		42.156	44.641	4.621	38.127	-1.215	-1.057		45.934	0.003	1.404	0.006		321.35	5.35583	43.5	10.9	40.1	2.768	0.201	0.199	0.005	4.962	4.22	
188	9/7/2004	2:43:06 PM		25.695	24.778	25.343	25.567	24.92		42.156	44.326	4.62	38.324	-1.212	-1.051		45.555	0.003	1.401	0.005		322.35	5.3725	43.2	10.9	40.2	2.774	0.201	0.199	0.005	4.937	4.20	
189	9/7/2004	2:44:06 PM		25.715	24.798	25.373	25.577	24.945		42.291	44.651	4.682	38.244	-1.209	-1.051		45.755	0.003	1.403	0.004		323.35	5.38917	43.5	10.9	40.3	2.776	0.201	0.199	0.005	4.936	4.20	
190	9/7/2004	2:45:06 PM		25.731	24.8	25.37	25.593	24.971		41.804	44.148	4.693	37.762	-1.215	-1.051		46.087	0.003	1.4	0.004		324.35	5.40583	43.0	11.0	39.8	2.743	0.200	0.198	0.005	4.986	4.24	
191	9/7/2004	2:46:06 PM		25.747	24.815	25.39	25.629	25.012		41.97	44.021	4.574	38.176	-1.212	-1.048		46.748	0.003	1.4	0.005		325.35	5.4225	42.9	11.1	40.1	2.763	0.200	0.198	0.005	4.947	4.21	
192	9/7/2004	2:47:06 PM		25.757	24.811	25.406	25.59	24.942		42.189	44.492	4.701	38.183	-1.212	-1.048		46.379	0.003	1.399	0.005		326.35	5.43917	43.4	11.0	40.2	2.771	0.200	0.198	0.005	4.927	4.19	
193	9/7/2004	2:48:06 PM		25.764	24.812	25.407	25.591	24.943		42.133	44.591	4.75	37.922	-1.218	-1.051		45.893	0.003	1.398	0.004		327.35	5.45583	43.5	10.9	40.0	2.760	0.200	0.198	0.005	4.943	4.21	
194	9/7/2004	2:49:06 PM		25.779	24.828	25.438	25.582	24.964		41.993	44.446	4.718	37.852	-1.212	-1.046		46.064	0.003	1.403	0.005		328.35	5.4725	43.3	11.0	39.9	2.753	0.201	0.198	0.005	4.970	4.23	
195	9/7/2004	2:50:06 PM		25.795	24.834	25.444	25.602	24.995		42.032	44.288	4.696	37.924	-1.212	-1.046		45.238	0.003	1.4	0.005		329.35	5.48917	43.2	10.8	40.0	2.756	0.200	0.198	0.005	4.951	4.21	
196	9/7/2004	2:51:06 PM		25.807	24.841	25.446	25.604	24.977		42.173	44.612	4.704	38.193	-1.212	-1.046		46.245	0.003	1.4	0.004		330.35	5.50583	43.5	11.0	40.2	2.770	0.200	0.198	0.005	4.926	4.19	
197	9/7/2004	2:52:06 PM		25.817	24.846	25.451	25.574	24.877		41.957	44.253	4.603	38.123	-1.212	-1.043		44.526	0.003	1.399	0.006		331.35	5.5225	43.1	10.6	40.0	2.761	0.200	0.198	0.005	4.939	4.20	
198	9/7/2004	2:53:06 PM		25.827	24.846	25.456	25.554	24.802		41.984	44.261	4.631	38.066	-1.209	-1.04		46.579	0.003	1.4	0.004		332.35	5.53917	43.1	11.1	40.0	2.760	0.200	0.198	0.005	4.944	4.21	
199	9/7/2004	2:54:06 PM		25.832	24.851	25.461	25.489	24.782		42.171	44.693	4.693	38.043	-1.212	-1.04		46.835	0.003	1.399	0.005		333.35	5.55583	43.6	11.2	40.1	2.765	0.200	0.198	0.005	4.930	4.20	
200	9/7/2004	2:55:06 PM		25.847	24.856	25.486	25.469	24.717		42.057	44.409	4.75	38.019	-1.209	-1.037		46.112	0.003	1.4	0.005		334.35	5.5725	43.3	11.0	40.0	2.760	0.200	0.198	0.005	4.938	4.20	
201	9/7/2004	2:56:06 PM		25.837	24.846	25.471	25.414	24.642		42.173	44.51	4.63	38.298	-1.218	-1.043		45.828	0.003	1.401	0.004		335.35	5.58917	43.4	10.9	40.2	2.774	0.201	0.198	0.005	4.919	4.19	
202	9/7/2004	2:57:06 PM		25.85	24.854	25.499	25.413	24.73		42.096	44.4	4.642	38.17	-1.212	-1.037		46.569	0.003	1.401	0.005		336.35	5.60583	43.3	11.1	40.1	2.767	0.201	0.198	0.005	4.928	4.19	
203	9/7/2004	2:58:06 PM		25.868	24.867	25.512	25.451	24.808		42.252	44.68	4.679	38.277	-1.212	-1.034		46.164	0.003	1.405	0.005		337.35	5.6225	43.6	11.0	40.3	2.776	0.201	0.198	0.005	4.924	4.19	
204	9/7/2004	2:59:06 PM		25.878	24.867	25.512	25.45	24.848		42.554	44.919	4.796	38.452	-1.212	-1.034		46.956	0.003	1.4	0.004		338.35	5.63917	43.8	11.2	40.5	2.793	0.200	0.198	0.005	4.878	4.15	
205	9/7/2004	3:00:06 PM		25.882	24.871	25.506	25.439	24.877		42.357	44.641	4.653	38.474	-1.212	-1.037		46.016	0.003	1.401	0.004		339.35	5.65583	43.5	11.0	40.4	2.787	0.201	0.198	0.005	4.893	4.16	
206	9/7/2004	3:01:06 PM		25.887	24.876	25.511	25.46	24.882		42.227	44.49	4.751	38.187	-1.215	-1.034		46.289	0.003	1.402	0.005		340.35	5.6725	43.4	11.0	40.2	2.772	0.201	0.198	0.005	4.921	4.19	
207	9/7/2004	3:02:06 PM		25.893	24.882	25.502	25.495	24.928		42.044	44.357	4.66	38.142	-1.212	-1.034		46.74	0.003	1.402	0.005		341.35	5.68917	43.2	11.1	40.1	2.764	0.201	0.198	0.005	4.936	4.20	
208	9/7/2004	3:03:06 PM		25.883	24.887	25.467	25.555	24.958		41.926	43.992	4.678	38.043	-1.212	-1.031		46.243	0.003	1.404	0.004		342.35	5.70583	42.9	11.0	40.0	2.757	0.201	0.198	0.005	4.961	4.22	
209	9/7/2004	3:04:06 PM		25.868	24.902	25.457	25.556	24.913		41.941	44.127	4.687	38.021	-1.209	-1.025		46.153	0.003	1.401	0.004		343.35	5.7225	43.0	11.0	40.0	2.757	0.201	0.198	0.005	4.953	4.21	
210	9/7/2004	3:05:06 PM		25.835	24.899	25.404	25.582	24.945		41.947	44.378	4.671	37.902	-1.212	-1.031		46.46	0.003	1.399	0.005		344.35	5.73917	43.3	11.1	39.9	2.753	0.200	0.198	0.005	4.960	4.22	

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
211	9/7/2004	3:06:06 PM		25.805	24.919	25.374	25.608	24.965		42.221	44.62	4.657	38.269	-1.212	-1.025		46.108	0.003	1.403	0.003		345.35	5.75583	43.5	11.0	40.2	2.775	0.201	0.199	0.005	4.939	4.20	
212	9/7/2004	3:07:06 PM		25.775	24.919	25.329	25.612	25.005		42.31	44.527	4.645	38.472	-1.206	-1.022		45.782	0.003	1.402	0.004		346.35	5.7725	43.4	10.9	40.4	2.785	0.201	0.199	0.005	4.924	4.19	
213	9/7/2004	3:08:06 PM		25.736	24.925	25.29	25.644	24.946		42.206	44.597	4.787	38.049	-1.212	-1.025		45.936	0.003	1.396	0.006		347.35	5.78917	43.5	10.9	40.1	2.767	0.200	0.198	0.005	4.940	4.20	
214	9/7/2004	3:09:06 PM		25.702	24.921	25.26	25.604	24.962		42.185	44.531	4.643	38.226	-1.212	-1.022		44.948	0.003	1.4	0.005		348.35	5.80583	43.4	10.7	40.2	2.772	0.200	0.199	0.005	4.949	4.21	
215	9/7/2004	3:10:06 PM		25.678	24.927	25.252	25.631	24.928		41.88	44.129	4.61	37.961	-1.212	-1.022		46.193	0.003	1.399	0.005		349.35	5.8225	43.0	11.0	39.9	2.752	0.200	0.199	0.005	4.982	4.24	
216	9/7/2004	3:11:06 PM		25.649	24.933	25.207	25.611	24.979		42.127	44.508	4.696	38.008	-1.212	-1.022		45.811	0.003	1.398	0.004		350.35	5.83917	43.4	10.9	40.1	2.763	0.200	0.199	0.005	4.966	4.23	
217	9/7/2004	3:12:06 PM		25.623	24.932	25.192	25.641	24.998		42.185	44.489	4.712	38.187	-1.209	-1.019		46.06	0.003	1.395	0.004		351.35	5.85583	43.4	11.0	40.2	2.771	0.200	0.199	0.005	4.943	4.21	
218	9/7/2004	3:13:06 PM		25.598	24.942	25.162	25.631	25.013		42.134	44.529	4.673	38.107	-1.212	-1.019		46.06	0.003	1.4	0.005		352.35	5.8725	43.4	11.0	40.1	2.766	0.200	0.200	0.005	4.973	4.23	
219	9/7/2004	3:14:06 PM		25.579	24.948	25.133	25.622	25.004		41.692	43.922	4.579	37.848	-1.215	-1.017		46.654	0.003	1.397	0.005		353.35	5.88917	42.8	11.1	39.8	2.742	0.200	0.199	0.005	5.010	4.26	
220	9/7/2004	3:15:06 PM		25.56	24.959	25.139	25.633	25.03		42.165	44.496	4.701	38.17	-1.209	-1.019		45.59	0.003	1.397	0.003		354.35	5.90583	43.4	10.9	40.2	2.769	0.200	0.199	0.005	4.960	4.22	
221	9/7/2004	3:16:06 PM		25.535	24.959	25.114	25.653	25.03		41.874	44.011	4.638	38.014	-1.212	-1.014		46.116	0.003	1.4	0.003		355.35	5.9225	42.9	11.0	39.9	2.754	0.200	0.200	0.005	5.002	4.26	
222	9/7/2004	3:17:06 PM		25.516	24.965	25.099	25.673	25.066		42.285	44.608	4.694	38.213	-1.212	-1.011		46.153	0.003	1.396	0.004		356.35	5.93917	43.5	11.0	40.2	2.775	0.200	0.199	0.005	4.952	4.21	
223	9/7/2004	3:18:06 PM		25.501	24.975	25.084	25.673	25.046		42.198	44.558	4.685	38.133	-1.209	-1.008		45.567	0.003	1.395	0.004		357.35	5.95583	43.4	10.9	40.2	2.769	0.200	0.199	0.005	4.961	4.22	
224	9/7/2004	3:19:06 PM		25.486	24.98	25.05	25.669	25.041		42.152	44.686	4.77	37.973	-1.212	-1.014		45.912	0.003	1.395	0.003		358.35	5.9725	43.6	10.9	40.1	2.762	0.200	0.199	0.005	4.978	4.24	
225	9/7/2004	3:20:06 PM		25.461	24.975	25.045	25.674	25.081		42.187	44.576	4.688	38.199	-1.212	-1.011		45.571	0.003	1.395	0.005		359.35	5.98917	43.5	10.9	40.2	2.771	0.200	0.199	0.005	4.963	4.22	
226	9/7/2004	3:21:06 PM		25.452	24.981	25.035	25.675	25.047		42.283	44.707	4.765	38.111	-1.215	-1.011		46.345	0.003	1.393	0.004		360.35	6.00583	43.6	11.0	40.2	2.771	0.199	0.199	0.005	4.956	4.22	
227	9/7/2004	3:22:06 PM		25.443	24.997	25.031	25.685	25.093		42.2	44.572	4.68	38.15	-1.209	-1.011		46.425	0.003	1.396	0.003		361.35	6.0225	43.4	11.1	40.2	2.770	0.200	0.200	0.005	4.970	4.23	
228	9/7/2004	3:23:06 PM		25.438	25.007	25.027	25.711	25.098		41.791	44.185	4.62	37.741	-1.212	-1.008		44.871	0.003	1.396	0.004		362.35	6.03917	43.1	10.7	39.8	2.742	0.200	0.200	0.005	5.022	4.27	
229	9/7/2004	3:24:06 PM		25.418	25.002	24.992	25.681	25.108		41.87	44.164	4.566	38.025	-1.212	-1.008		45.753	0.003	1.396	0.004		363.35	6.05583	43.0	10.9	39.9	2.754	0.200	0.200	0.005	5.004	4.26	
230	9/7/2004	3:25:06 PM		25.41	25.004	24.973	25.687	25.089		42.005	44.212	4.616	38.15	-1.212	-1.008		45.901	0.003	1.396	0.003		364.35	6.0725	43.1	10.9	40.1	2.763	0.200	0.200	0.005	4.991	4.25	
231	9/7/2004	3:26:06 PM		25.396	25.015	24.979	25.688	25.066		42.339	44.738	4.73	38.263	-1.215	-1.011		45.749	0.003	1.399	0.003		365.35	6.08917	43.6	10.9	40.3	2.779	0.200	0.200	0.005	4.973	4.23	
232	9/7/2004	3:27:06 PM		25.387	25.026	24.99	25.714	25.056		42.171	44.465	4.634	38.304	-1.212	-1.005		45.736	0.003	1.399	0.004		366.35	6.10583	43.3	10.9	40.2	2.774	0.200	0.200	0.005	4.979	4.24	
233	9/7/2004	3:28:06 PM		25.367	25.021	24.97	25.719	25.066		42.09	44.303	4.641	38.215	-1.212	-1.002		46.266	0.003	1.395	0.003		367.35	6.1225	43.2	11.0	40.2	2.768	0.200	0.200	0.005	4.978	4.24	
234	9/7/2004	3:29:06 PM		25.362	25.016	24.95	25.709	25.061		42.243	44.682	4.73	38.179	-1.209	-1.002		45.864	0.003	1.397	0.004		368.35	6.13917	43.6	10.9	40.2	2.772	0.200	0.200	0.005	4.981	4.24	
235	9/7/2004	3:30:06 PM		25.364	25.043	24.947	25.731	25.078		42.264	44.659	4.694	38.259	-1.212	-1.002		45.924	0.003	1.396	0.005		369.35	6.15583	43.5	10.9	40.3	2.776	0.200	0.200	0.005	4.971	4.23	
236	9/7/2004	3:31:06 PM		25.359	25.043	24.947	25.756	25.123		42.04	44.214	4.685	38.006	-1.212	-0.996		45.849	0.003	1.4	0.003		370.35	6.1725	43.1	10.9	40.0	2.759	0.200	0.201	0.005	5.015	4.27	
237	9/7/2004	3:32:06 PM		25.344	25.043	24.933	25.747	25.139		42.291	44.637	4.748	38.271	-1.212	-0.999		45.914	0.003	1.395	0.003		371.35	6.18917	43.5	10.9	40.3	2.777	0.200	0.200	0.005	4.967	4.23	
238	9/7/2004	3:33:06 PM		25.334	25.043	24.933	25.697	25.159		42.011	44.518	4.645	37.941	-1.212	-0.996		45.793	0.003	1.4	0.004		372.35	6.20583	43.4	10.9	40.0	2.756	0.200	0.201	0.005	5.023	4.27	
239	9/7/2004	3:34:06 PM		25.324	25.048	24.922	25.687	25.124		41.968	44.394	4.662	38.025	-1.212	-0.999		45.644	0.003	1.399	0.003		373.35	6.2225	43.3	10.9	40.0	2.758	0.200	0.201	0.005	5.019	4.27	
240	9/7/2004	3:35:06 PM		25.319	25.048	24.912	25.657	24.989		42.187	44.604	4.704	38.14	-1.212	-0.996		45.738	0.003	1.398	0.004		374.35	6.23917	43.5	10.9	40.2	2.769	0.200	0.201	0.005	4.996	4.25	
241	9/7/2004	3:36:06 PM		25.305	25.039	24.873	25.592	24.87		42.03	44.094	4.61	38.174	-1.212	-0.996		46.074	0.003	1.4	0.003		375.35	6.25583	43.0	11.0	40.1	2.765	0.200	0.201	0.005	5.016	4.27	
242	9/7/2004	3:37:06 PM		25.309	25.043	24.882	25.587	24.819		42.073	44.469	4.608	38.057	-1.212	-0.993		45.751	0.003	1.4	0.004		376.35	6.2725	43.3	10.9	40.1	2.762	0.200	0.201	0.005	5.019	4.27	
243	9/7/2004	3:38:06 PM		25.299	25.053	24.877	25.541	24.758		41.984	44.373	4.707	37.963	-1.212	-0.999		45.866	0.003	1.399	0.003		377.35	6.28917	43.2	10.9	40.0	2.756	0.200	0.201	0.005	5.028	4.28	
244	9/7/2004	3:39:06 PM		25.287	25.041	24.875	25.474	24.772		41.984	44.498	4.642	38.002	-1.212	-0.991		45.861	0.003	1.402	0.004		378.35	6.30583	43.4	10.9	40.0	2.757	0.201	0.201	0.005	5.037	4.29	
245	9/7/2004	3:40:06 PM		25.28	25.044	24.879	25.442	24.81		41.963	44.121	4.685	38.047	-1.212	-0.991		45.263	0.003	1.402	0.005		379.35	6.3225	43.0	10.8	40.0	2.758	0.201	0.201	0.005	5.034	4.28	
246	9/7/2004	3:41:06 PM		25.269	25.038	24.847	25.416	24.799		41.93	44.336	4.604	37.988	-1.215	-0.996		45.757	0.003	1.403	0.004		380.35	6.33917	43.2	10.9	40.0	2.755	0.201	0.202	0.005	5.048	4.30	
247	9/7/2004	3:42:06 PM		25.274	25.043	24.847	25.466	24.799		41.93	44.085	4.606	38.09	-1.212	-0.993		45.793	0.003	1.4	0.003		381.35	6.35583	43.0	10.9	40.0	2.759	0.200	0.201	0.005	5.031	4.28	
248	9/7/2004	3:43:06 PM		25.273	25.048	24.841	25.456	24.828		42.192	44.554	4.682	38.244	-1.215	-0.991		45.54	0.003	1.403	0.004		382.35	6.3725	43.4	10.8	40.2	2.773	0.201	0.202	0.005	5.017	4.27	
249	9/7/2004	4:23:40 PM		23.633	24.859	23.364	25.136	24.529		42.828	45.285	4.638	38.977	-1.212	-4.463		46.518	0.003	1.485	0.003		422.92	7.04861	44.2	11.1	40.9	2.820	0.213	0.223	0.005	5.444	4.63	
250	9/7/2004	4:24:40 PM		23.756	24.862	23.593	25.039	24.548		42.942	45.607	4.733	38.938	-1.212	-4.463		45.426	0.003	1.485	0.003		423.92	7.06528	44.5	10.8	40.9	2.823	0.213	0.221	0.005	5.404	4.60	
251	9/7/2004	4:25:40 PM		23.894	24.845	23.771	25.012	24.601		5.199	45.768	4.576	0.612	34.895	20.549		45.186	0.003	-0.012	0.003		424.92	7.08194	44.6	10.8	2.9	0.200	-0.002	-0.002	-0.001	-0.612	-0.52	
252	9/7/2004	4:26:40 PM		23.893	24.859	23.956	25.091	24.594		3.515	45.913	4.667	-1.07	37.66	20.309		47.261	0.003	-0.013	0.003		425.92	7.09861	44.8	11.3	1.2	0.084	-0.002	-0.002	-0.002	-1.568	-1.33	
253	9/7/2004	4:27:40 PM		23.942	24.847	24.1	25.1	24.573		2.961	46.061	4.616	-1.563	38.389	1.224		44.664	0.003	-0.008	0.005		426.92	7.11528	44.9	10.6	0.7	0.048	-0.001	-0.001	-0.002	-1.681	-1.43	
254	9/7/2004	4:28:40 PM		24.347	24.836	24.224	25.059	24.507		27.357	44.765	4.774	24.505	11.011	-0.941		48.022	0.007	4.261	0.003		427.92	7.13194	43.6	11.4	25.9	1.788	0.610	0.624	0.024	24.046	20.46	
255	9/7/2004	4:29:40 PM		24.554	24.833	24.371	25.066	24.474		41.559	46.119	4.809	37.569	-1.212	-2.106		46.742	0.003	1.953	0.003		428.92	7.14861	45.0	11.1	39.6	2.728	0.280	0.285	0.007	7.194	6.12	
256	9/7/2004	4:30:40 PM		24.691	24.84	24.473	25.103	24.421		42.38	46.096	4.696	38.443	-1.209	-2.173		46.128	0.003	1.758	0.003		429.92	7.16528	45.0	11.0	40.4	2.786	0.252	0.255	0.006	6.321	5.38	
257	9/7/2004	4:31:40 PM		24.772	24.831	24.525	25.169	24.437		42.341	45.453	4.653	38.474	-1.212	-2.101		45.267	0.003	1.662	0.003		430.92	7.18194	44.3	10.8	40.4	2.786	0.238	0.241	0.006	5.968	5.08	
258	9/7/2004	4:32:40 PM		24.848	24.837	24.581	25.23	24.503		42.843	45.777	4.682	38.954	-1.212	-2.132		45.063	0.003	1.603	0.003		431.92	7.19861	44.7	10.7	40.9	2.820	0.229	0.232	0.006	5.678	4.83	
259	9/7/2004	4:33:40 PM		24.899	24.833	24.612	25.246	24.524		42.602	45.627	4.846	38.38	-1.209	-2.144		46.95	0.003	1.553	0.003		432.92	7.21528	44.5	11.2	40.5	2.792	0.222	0.225	0.006	5.551	4.72	
260	9/7/2004	4:34:40 PM		24.95	24.839	24.648	25.282	24.6		42.428	45.327	4.785	38.267	-1.212	-2.15		47.198	0.003	1.529	0.004		433.92	7.23194	44.2	11.2	40.3	2.782	0.219	0.221	0.005	5.479	4.66	
261	9/7/2004	4:35:40 PM		24.997	24.846	24.685	25.304	24.647		42.401	44.999	4.757	38.367	-1.212	-2.156		45.53	0.003	1.505	0.004		434.92	7.24861	43.9	10.8	40.4	2.784	0.215	0.217	0.005	5.383	4.58	
262	9/7/2004	4:36:40 PM		25.039	24.847	24.721	25.346	24.688		42.318	44.991	4.72	38.248	-1.212	-2.156		47.113	0.003	1.486	0.004		435.92	7.26528	43.9	11.2	40.3	2.777	0.213	0.214	0.005	5.323	4.53	
263	9/7/2004	4:37:40 PM		25.075	24.849	24.748	25.377	24.72		42.499	45.302	4.819	38.31	-1.212	-2.158		46.773	0.003	1.475	0.003		436.92	7.28194	44.2	11.1	40.4	2.786	0.211	0.213	0.005	5.264	4.48	
264	9/7/2004	4:38:40 PM		25.106	24.854	24.803	25.443	24.78		42.559	45.223	4.745	38.406	-1.212	-2.156		46.072	0.003	1.465	0.003		437.92	7.29861	44.1	11.0	40.5	2.791	0.210	0.211	0.005	5.210	4.43	
265	9/7/2004	4:39:40 PM		25.141	24.86	24.839	25.448	24.826		42.77	45.364	4.845	38.585	-1.212	-2.158		47.384	0.003	1.456	0.003		438.92	7.31528	44.2	11.3	40.7	2.805	0.208	0.209	0.005	5.148	4.38	
266	9/7/2004	4:40:40 PM		25.173	24.867	24.866	25.475	24.828		42.399	45.016	4.797	38.255	-1.212	-2.156		46.206	0.003	1.45	0.003		439.92	7.33194	43.9	11.0	40.3	2.780	0.208	0.208	0.005	5.167	4.40	
267	9/7/2004	4:41:40 PM		25.205	24.874	24.878	25.522	24.845		42.579	45.016	4.823	38.369	-1.212	-2.158		46.583	0.003	1.444	0.003		440.92	7.34861	43.9	11.1	40.5	2.791	0.207	0.207	0.005	5.125	4.36	
268	9/7/2004	4:42:40 PM		25.237	24.886	24.905	25.569	24.902		42.613	45.066	4.843	38.476	-1.212	-2.156		45.661	0.003	1.438	0.004		441.92	7.36528	43.9	10.9	40.5	2.795	0.206	0.206	0.005	5.091	4.33	
269	9/7/2004	4:43:40 PM		25.259	24.888	24.922	25.621	24.914		42.783	45.323	4.865	38.452	-1.212	-2.156		46.886	0.003	1.431	0.003		442.92	7.38194	44.2	11.2	40.6	2.800	0.205	0.205	0.005	5.055	4.30	
270	9/7/2004	4:44:40 PM		25.291	24.9	24.949	25.673	24.935		42.708	45.01	4.758	38.71	-1.206	-2.15		47.125	0.003	1.431	0.004		443.92	7.39861	43.9	11.2	40.7	2.807	0.205	0.205	0.005	5.040	4.29	
271	9/7/2004	4:45:40 PM		25.318	24.912	24.976	25.686	24.993		42.573	44.97	4.803	38.304	-1.209	-2.15		46.598	0.003	1.424	0.003		444.92	7.41528	43.8	11.1	40.4	2.788	0.204	0.204	0.005	5.045	4.29	
272	9/7/2004	4:46:40 PM		25.33	24.913	24.993	25.677	24.984		42.797	45.122	4.869	38.64	-1.212	-2.147		45.828	0.003	1.421	0.004		445.92	7.43194	44.0	10.9	40.7	2.807	0.203	0.203	0.005	4.997	4.25	
273	9/7/2004	4:47:40 PM		25.341	24.915	25.01	25.709	25.016		42.569	44.972	4.749	38.482	-1.212	-2.144		47.228	0.003	1.42	0.003		446.92	7.44861	43.8	11.2	40.5	2.794	0.203	0.203	0.005	5.015	4.27	
274	9/7/2004	4:48:40 PM		25.368	24.922	25.032	25.721	25.043		42.6	44.877	4.726	38.589	-1.215	-2.147		47.246	0.003	1.418	0.003		447.92	7.46528	43.8	11.3	40.6	2.799	0.203	0.203	0.005	4.996	4.25	
275	9/7/2004	4:49:40 PM		25.396	24.935	25.054	25.774	25.086		42.973	45.287	4.844	38.805	-1.206	-2.141		46.516	0.003	1.417	0.004		448.92	7.48194	44.2	11.1	40.9	2.819	0.203	0.203	0.005	4.954	4.22	
276	9/7/2004	4:50:40 PM		25.409	24.947	25.052	25.831	25.123		42.463	44.825	4.778	38.349	-1.212	-2.141		47.949	0.003	1.396	0.004		449.92	7.49861	43.7	11.4	40.4	2.786	0.200	0.200	0.005	4.939	4.20	
277	9/7/2004	4:51:40 PM		25.415	24.949	25.054	25.823	25.125		42.256	44.558	4.729	38.197	-1.215	-2.147		46.164	0.003	1.398	0.003		450.92	7.51528	43.4	11.0	40.2	2.773	0.200	0.200	0.005	4.968	4.23	
278	9/7/2004	4:52:40 PM		25.433	24.957	25.071	25.841	25.153		42.453	44.966	4.678	38.474	-1.209	-2.141		46.101	0.003	1.392	0.003		451.92	7.53194	43.8	11.0	40.5	2.790	0.199	0.199	0.005	4.915	4.18	
279	9/7/2004	4:53:40 PM		25.44	24.969	25.093	25.838	25.065		42.494	44.995	4.816	38.287	-1.209	-2.138		46.03	0.003	1.391	0.003		452.92	7.54861	43.9	11.0	40.4	2.785	0.199	0.199	0.005	4.918	4.18	
280	9/7/2004	4:54:40 PM		25.443	24.966	25.091	25.815	25.022		42.165	44.751	4.81	37.887	-1.215	-2.144		46.001	0.003	1.391	0.003		453.92	7.56528	43.6	11.0	40.0	2.760	0.199	0.199	0.005	4.963	4.22	

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
281	9/7/2004	4:55:40 PM		25.449	24.973	25.087	25.836	24.989		42.136	44.576	4.766	37.977	-1.212	-2.138		46.79	0.003	1.39	0.004		454.92	7.58194	43.5	11.1	40.1	2.762	0.199	0.199	0.005	4.956	4.22	
282	9/7/2004	4:56:40 PM		25.456	24.98	25.09	25.809	24.941		42.022	44.342	4.78	37.932	-1.212	-2.138		46.537	0.003	1.384	0.003		455.92	7.59861	43.2	11.1	40.0	2.756	0.198	0.198	0.005	4.944	4.21	
283	9/7/2004	4:57:40 PM		25.458	24.977	25.071	25.81	24.833		42.007	44.307	4.638	38.09	-1.212	-2.135		46.733	0.003	1.387	0.003		456.92	7.61528	43.2	11.1	40.0	2.761	0.199	0.198	0.005	4.948	4.21	
284	9/7/2004	4:58:40 PM		25.453	24.977	25.077	25.786	24.858		42.216	44.376	4.763	38.179	-1.212	-2.135		46.598	0.003	1.381	0.003		457.92	7.63194	43.3	11.1	40.2	2.771	0.198	0.197	0.005	4.908	4.18	
285	9/7/2004	4:59:40 PM		25.468	24.987	25.087	25.776	24.798		42.281	44.608	4.772	38.234	-1.209	-2.132		46.858	0.003	1.383	0.003		458.92	7.64861	43.5	11.2	40.3	2.776	0.198	0.198	0.005	4.906	4.18	
286	9/7/2004	5:00:40 PM		25.469	24.988	25.082	25.687	24.774		42.409	44.773	4.824	38.203	-1.212	-2.132		47.186	0.003	1.38	0.003		459.92	7.66528	43.6	11.2	40.3	2.779	0.198	0.197	0.005	4.890	4.16	
287	9/7/2004	5:01:40 PM		25.473	24.992	25.106	25.7	24.853		42.148	44.63	4.861	37.836	-1.212	-2.13		46.299	0.003	1.381	0.003		460.92	7.68194	43.5	11.0	40.0	2.757	0.198	0.197	0.005	4.929	4.19	
288	9/7/2004	5:02:40 PM		25.478	24.997	25.102	25.736	24.893		42.358	44.786	4.824	38.074	-1.212	-2.124		46.543	0.003	1.377	0.003		461.92	7.69861	43.7	11.1	40.2	2.773	0.197	0.197	0.005	4.888	4.16	
289	9/7/2004	5:03:40 PM		25.473	24.997	25.087	25.751	24.948		42.312	44.744	4.849	38.117	-1.212	-2.127		45.993	0.003	1.379	0.003		462.92	7.71528	43.6	11.0	40.2	2.773	0.197	0.197	0.005	4.897	4.17	
290	9/7/2004	5:04:40 PM		25.494	25.013	25.107	25.772	25.024		42.675	44.987	4.705	38.638	-1.209	-2.121		46.349	0.003	1.378	0.004		463.92	7.73194	43.9	11.0	40.7	2.803	0.197	0.197	0.005	4.838	4.12	
291	9/7/2004	5:05:40 PM		25.499	25.023	25.123	25.822	25.024		42.246	44.736	4.772	38.016	-1.209	-2.118		46.333	0.003	1.377	0.004		464.92	7.74861	43.6	11.0	40.1	2.767	0.197	0.196	0.005	4.895	4.17	
292	9/7/2004	5:06:40 PM		25.499	25.028	25.123	25.827	25.064		42.071	44.203	4.637	38.179	-1.212	-2.118		46.527	0.003	1.376	0.003		465.92	7.76528	43.1	11.1	40.1	2.766	0.197	0.196	0.005	4.893	4.16	
293	9/7/2004	5:07:40 PM		25.5	25.024	25.118	25.797	25.084		42.266	44.691	4.727	38.152	-1.212	-2.118		46.166	0.003	1.379	0.003		466.92	7.78194	43.6	11.0	40.2	2.772	0.197	0.197	0.005	4.894	4.16	
294	9/7/2004	5:08:40 PM		25.51	25.044	25.133	25.802	25.104		42.148	44.433	4.803	37.975	-1.215	-2.118		46.245	0.003	1.376	0.003		467.92	7.79861	43.3	11.0	40.1	2.762	0.197	0.196	0.005	4.899	4.17	
295	9/7/2004	5:09:40 PM		25.531	25.06	25.144	25.829	25.101		42.044	44.282	4.678	38.09	-1.212	-2.115		46.656	0.003	1.375	0.003		468.92	7.81528	43.2	11.1	40.1	2.762	0.197	0.196	0.005	4.893	4.16	
296	9/7/2004	5:10:40 PM		25.522	25.061	25.135	25.859	25.126		42.231	44.616	4.857	37.988	-1.209	-2.112		46.71	0.003	1.379	0.003		469.92	7.83194	43.5	11.1	40.1	2.765	0.197	0.197	0.005	4.903	4.17	
297	9/7/2004	5:11:40 PM		25.522	25.061	25.135	25.839	25.166		42.185	44.411	4.694	38.257	-1.212	-2.109		46.794	0.003	1.378	0.003		470.92	7.84861	43.3	11.1	40.2	2.773	0.197	0.197	0.005	4.886	4.16	
298	9/7/2004	5:12:40 PM		25.533	25.077	25.151	25.876	25.173		42.548	44.69	4.791	38.579	-1.212	-2.106		46.429	0.003	1.377	0.003		471.92	7.86528	43.6	11.1	40.6	2.797	0.197	0.196	0.005	4.839	4.12	
299	9/7/2004	5:13:40 PM		25.534	25.078	25.162	25.881	25.223		42.347	44.73	4.802	38.115	-1.215	-2.106		46.521	0.003	1.378	0.003		472.92	7.88194	43.6	11.1	40.2	2.774	0.197	0.196	0.005	4.881	4.15	
300	9/7/2004	5:14:40 PM		25.534	25.088	25.158	25.897	25.229		42.088	44.475	4.648	38.084	-1.212	-2.104		46.8	0.003	1.376	0.003		473.92	7.89861	43.3	11.1	40.1	2.764	0.197	0.196	0.005	4.893	4.16	
301	9/7/2004	5:15:40 PM		25.536	25.09	25.154	25.908	25.2		42.387	44.626	4.709	38.443	-1.212	-2.104		45.738	0.003	1.379	0.003		474.92	7.91528	43.5	10.9	40.4	2.786	0.197	0.197	0.005	4.864	4.14	
302	9/7/2004	5:16:40 PM		25.542	25.097	25.156	25.915	25.077		42.227	44.583	4.738	38.183	-1.209	-2.098		46.637	0.003	1.377	0.004		475.92	7.93194	43.5	11.1	40.2	2.772	0.197	0.196	0.005	4.882	4.15	
303	9/7/2004	5:17:40 PM		25.539	25.098	25.147	25.856	25.009		42.281	44.572	4.796	38.179	-1.212	-2.101		46.483	0.003	1.373	0.004		476.92	7.94861	43.4	11.1	40.2	2.774	0.197	0.196	0.005	4.866	4.14	
304	9/7/2004	5:18:40 PM		25.535	25.099	25.149	25.793	24.88		42.048	44.349	4.707	37.99	-1.212	-2.101		46.627	0.003	1.371	0.003		477.92	7.96528	43.2	11.1	40.0	2.759	0.196	0.195	0.005	4.884	4.16	
305	9/7/2004	5:19:40 PM		25.526	25.091	25.135	25.739	24.586		42.264	44.576	4.685	38.254	-1.212	-2.101		46.738	0.003	1.373	0.003		478.92	7.98194	43.5	11.1	40.3	2.776	0.197	0.196	0.005	4.864	4.14	
306	9/7/2004	5:20:40 PM		25.512	25.071	25.126	25.73	24.407		42.214	44.446	4.771	38.043	-1.212	-2.098		46.141	0.003	1.375	0.003		479.92	7.99861	43.3	11.0	40.1	2.767	0.197	0.196	0.005	4.888	4.16	
307	9/7/2004	5:21:40 PM		25.508	25.072	25.131	25.76	24.342		42.09	44.404	4.732	38.033	-1.212	-2.095		46.577	0.003	1.374	0.003		480.92	8.01528	43.3	11.1	40.1	2.762	0.197	0.196	0.005	4.892	4.16	
308	9/7/2004	5:22:40 PM		25.518	25.072	25.111	25.805	24.282		42.034	44.33	4.747	37.977	-1.212	-2.095		46.706	0.003	1.369	0.003		481.92	8.03194	43.2	11.1	40.0	2.758	0.196	0.195	0.005	4.884	4.16	
309	9/7/2004	5:23:40 PM		25.496	25.046	25.095	25.814	24.211		41.816	44.15	4.701	37.768	-1.212	-2.092		46.245	0.003	1.37	0.003		482.92	8.04861	43.0	11.0	39.8	2.744	0.196	0.196	0.005	4.916	4.18	
310	9/7/2004	5:24:40 PM		25.506	25.046	25.115	25.834	24.246		42.021	44.319	4.743	37.86	-1.212	-2.092		46.475	0.003	1.368	0.003		483.92	8.06528	43.2	11.1	39.9	2.754	0.196	0.195	0.005	4.888	4.16	
311	9/7/2004	5:25:40 PM		25.501	25.04	25.109	25.863	24.305		42.289	44.628	4.62	38.41	-1.209	-2.089		46.42	0.003	1.374	0.004		484.92	8.08194	43.5	11.1	40.3	2.782	0.197	0.196	0.005	4.860	4.14	
312	9/7/2004	5:26:40 PM		25.507	25.041	25.101	25.92	24.337		42.474	44.908	4.706	38.398	-1.215	-2.089		45.918	0.003	1.378	0.003		485.92	8.09861	43.8	10.9	40.4	2.788	0.197	0.197	0.005	4.865	4.14	
313	9/7/2004	5:27:40 PM		25.503	25.043	25.102	25.986	24.423		42.196	44.494	4.749	38.137	-1.209	-2.083		46.825	0.003	1.375	0.004		486.92	8.11528	43.4	11.2	40.2	2.769	0.197	0.196	0.005	4.887	4.16	
314	9/7/2004	5:28:40 PM		25.499	25.018	25.078	26.022	24.404		41.899	44.148	4.589	37.98	-1.215	-2.089		46.16	0.003	1.373	0.003		487.92	8.13194	43.0	11.0	39.9	2.754	0.197	0.196	0.005	4.911	4.18	
315	9/7/2004	5:29:40 PM		25.493	25.022	25.102	26.081	24.408		42.084	44.243	4.526	38.433	-1.212	-2.08		46.406	0.003	1.376	0.003		488.92	8.14861	43.1	11.1	40.3	2.776	0.197	0.196	0.005	4.879	4.15	
316	9/7/2004	5:30:40 PM		25.495	25.024	25.103	26.098	24.429		41.876	44.176	4.645	37.883	-1.212	-2.083		45.843	0.003	1.374	0.003		489.92	8.16528	43.1	10.9	39.9	2.750	0.197	0.196	0.005	4.918	4.19	
317	9/7/2004	5:31:40 PM		25.496	25.02	25.095	26.124	24.421		41.725	44.135	4.63	37.698	-1.212	-2.08		45.571	0.003	1.373	0.003		490.92	8.18194	43.0	10.9	39.7	2.738	0.197	0.196	0.005	4.937	4.20	
318	9/7/2004	5:32:40 PM		25.507	25.021	25.095	26.145	24.431		42.067	44.247	4.582	38.238	-1.212	-2.083		46.174	0.003	1.374	0.003		491.92	8.19861	43.1	11.0	40.2	2.768	0.197	0.196	0.005	4.886	4.16	
319	9/7/2004	5:33:40 PM		25.497	25.016	25.101	26.19	24.422		42.131	44.456	4.717	38.09	-1.212	-2.078		45.717	0.003	1.376	0.003		492.92	8.21528	43.3	10.9	40.1	2.765	0.197	0.196	0.005	4.897	4.17	
320	9/7/2004	5:34:40 PM		25.508	25.022	25.127	26.221	24.448		42.094	44.489	4.717	37.967	-1.212	-2.075		46.055	0.003	1.376	0.003		493.92	8.23194	43.4	11.0	40.0	2.760	0.197	0.196	0.005	4.904	4.17	
321	9/7/2004	5:35:40 PM		25.504	25.018	25.112	26.212	24.418		42.051	44.475	4.677	37.941	-1.212	-2.078		45.615	0.003	1.374	0.003		494.92	8.24861	43.3	10.9	40.0	2.758	0.197	0.196	0.005	4.903	4.17	
322	9/7/2004	5:36:40 PM		25.504	25.013	25.103	26.222	24.489		41.881	44.092	4.632	37.916	-1.212	-2.072		46.251	0.003	1.376	0.003		495.92	8.26528	43.0	11.0	39.9	2.751	0.197	0.196	0.005	4.923	4.19	
323	9/7/2004	5:37:40 PM		25.499	25.013	25.098	26.267	24.549		42.19	44.373	4.613	38.242	-1.212	-2.072		46.36	0.003	1.373	0.003		496.92	8.28194	43.2	11.0	40.2	2.773	0.197	0.196	0.005	4.874	4.15	
324	9/7/2004	5:38:40 PM		25.506	25.015	25.109	26.254	24.53		42.25	44.436	4.728	38.172	-1.212	-2.069		46.297	0.003	1.38	0.003		497.92	8.29861	43.3	11.0	40.2	2.772	0.198	0.197	0.005	4.898	4.17	
325	9/7/2004	5:39:40 PM		25.507	25.021	25.126	26.275	24.567		41.997	44.452	4.692	37.91	-1.212	-2.066		46.21	0.003	1.378	0.003		498.92	8.31528	43.3	11.0	40.0	2.755	0.197	0.197	0.005	4.920	4.19	
326	9/7/2004	5:40:40 PM		25.513	25.017	25.126	26.281	24.507		41.953	44.278	4.774	37.785	-1.212	-2.063		46.045	0.003	1.378	0.003		499.92	8.33194	43.2	11.0	39.9	2.749	0.197	0.197	0.005	4.931	4.20	
327	9/7/2004	5:41:40 PM		25.508	25.012	25.096	26.296	24.427		41.899	44.031	4.579	38.008	-1.215	-2.063		46.024	0.003	1.377	0.003		500.92	8.34861	42.9	11.0	40.0	2.755	0.197	0.197	0.005	4.921	4.19	
328	9/7/2004	5:42:40 PM		25.507	25.006	25.096	26.27	24.357		42.131	44.46	4.675	38.094	-1.212	-2.063		45.761	0.003	1.377	0.003		501.92	8.36528	43.3	10.9	40.1	2.766	0.197	0.197	0.005	4.901	4.17	
329	9/7/2004	5:43:40 PM		25.511	25.01	25.11	26.284	24.276		42.053	44.311	4.635	38.222	-1.212	-2.063		46.318	0.003	1.379	0.003		502.92	8.38194	43.2	11.0	40.1	2.767	0.197	0.197	0.005	4.904	4.17	
330	9/7/2004	5:44:40 PM		25.506	25.015	25.119	26.234	24.24		42.105	44.156	4.57	38.374	-1.209	-2.063		45.657	0.003	1.379	0.003		503.92	8.39861	43.0	10.9	40.2	2.774	0.197	0.197	0.005	4.890	4.16	
331	9/7/2004	5:45:40 PM		25.51	25.009	25.119	26.178	24.205		42.324	44.494	4.75	38.304	-1.212	-2.057		45.997	0.003	1.38	0.003		504.92	8.41528	43.4	11.0	40.3	2.780	0.198	0.197	0.005	4.884	4.16	
332	9/7/2004	5:46:40 PM		25.509	24.998	25.108	26.142	24.174		42.25	44.481	4.642	38.374	-1.212	-2.054		46.366	0.003	1.382	0.004		505.92	8.43194	43.4	11.0	40.3	2.779	0.198	0.197	0.005	4.893	4.16	
333	9/7/2004	5:47:40 PM		25.519	24.998	25.112	26.172	24.153		42.291	44.89	4.723	38.179	-1.206	-2.049		45.38	0.003	1.386	0.004		506.92	8.44861	43.8	10.8	40.2	2.774	0.198	0.198	0.005	4.916	4.18	
334	9/7/2004	5:48:40 PM		25.512	24.991	25.12	26.115	24.091		42.028	44.291	4.664	38.057	-1.209	-2.054		45.859	0.003	1.379	0.003		507.92	8.46528	43.2	10.9	40.0	2.761	0.197	0.197	0.005	4.914	4.18	
335	9/7/2004	5:49:40 PM		25.505	24.969	25.104	26.088	24.11		42.177	44.433	4.712	38.166	-1.212	-2.054		46.122	0.003	1.381	0.003		508.92	8.48194	43.3	11.0	40.2	2.770	0.198	0.197	0.005	4.907	4.18	
336	9/7/2004	5:50:40 PM		25.521	24.99	25.13	26.129	24.231		41.982	44.309	4.625	37.99	-1.212	-2.049		46.039	0.003	1.382	0.003		509.92	8.49861	43.2	11.0	40.0	2.757	0.198	0.197	0.005	4.930	4.20	
337	9/7/2004	5:51:40 PM		25.525	24.989	25.129	26.183	24.24		42.019	44.365	4.625	38.043	-1.209	-2.043		46.769	0.003	1.388	0.004		510.92	8.51528	43.2	11.1	40.0	2.760	0.199	0.198	0.005	4.946	4.21	
338	9/7/2004	5:52:40 PM		25.51	24.969	25.093	26.178	24.259		42.2	44.633	4.695	38.127	-1.215	-2.052		45.864	0.003	1.383	0.003		511.92	8.53194	43.5	10.9	40.2	2.769	0.198	0.197	0.005	4.917	4.18	
339	9/7/2004	5:53:40 PM		25.525	24.989	25.118	26.248	24.309		41.965	44.351	4.574	38.111	-1.212	-2.046		46.302	0.003	1.385	0.003		512.92	8.54861	43.2	11.0	40.0	2.760	0.198	0.198	0.005	4.936	4.20	
340	9/7/2004	5:54:40 PM		25.51	24.974	25.113	26.243	24.339		42.418	44.711	4.747	38.382	-1.212	-2.043		45.617	0.003	1.385	0.003		513.92	8.56528	43.6	10.9	40.4	2.785	0.198	0.198	0.005	4.892	4.16	
341	9/7/2004	5:55:40 PM		25.525	24.979	25.124	26.278	24.355		42.463	44.858	4.721	38.429	-1.212	-2.04		45.839	0.003	1.388	0.004		514.92	8.58194	43.7	10.9	40.4	2.789	0.199	0.198	0.005	4.896	4.17	
342	9/7/2004	5:56:40 PM		25.519	24.983	25.113	26.287	24.374		41.961	44.235	4.618	38.008	-1.209	-2.037		46.233	0.003	1.387	0.003		515.92	8.59861	43.1	11.0	40.0	2.757	0.199	0.198	0.005	4.950	4.21	
343	9/7/2004	5:57:40 PM		25.53	24.979	25.123	26.333	24.419		42.119	44.218	4.667	38.144	-1.212	-2.037		46.045	0.003	1.386	0.004		516.92	8.61528	43.1	11.0	40.1	2.767	0.198	0.198	0.005	4.927	4.19	
344	9/7/2004	5:58:40 PM		25.53	24.984	25.139	26.358	24.445		42.295	44.361	4.726	38.41	-1.209	-2.031		45.878	0.003	1.384	0.004		517.92	8.63194	43.2	10.9	40.4	2.782	0.198	0.197	0.005	4.891	4.16	
345	9/7/2004	5:59:40 PM		25.527	24.981	25.131	26.34	24.497		42.285	44.804	4.75	38.121	-1.212	-2.034		46.103	0.003	1.383	0.003		518.92	8.64861	43.7	11.0	40.2	2.772	0.198	0.197	0.005	4.907	4.18	
346	9/7/2004	6:42:39 PM		24.995	24.467	24.723	25.627	24.079		22.151	22.849	4.624	17.991	-1.209	-5.211		46.846	0.003	0.697	0.004		561.90	9.365	21.7	11.2	20.1	1.384	0.100	0.101	0.005	5.011	4.26	
347	9/7/2004	6:43:39 PM		24.932	24.439	24.654	25.604	24.016		22.025	22.679	4.589	17.823	-1.209	-5.211		46.596	0.003	0.702	0.003		562.90	9.38167	21.6	11.1	19.9	1.374	0.101	0.101	0.005	5.094	4.33	
348	9/7/2004	6:44:39 PM		24.89	24.432	24.608	25.602	23.934		4.996	23.099	4.614	0.368	12.817	-2.711		46.74	0.003	-0.013	0.003		563.90	9.39833	22.0	11.1	2.7	0.185	-0.002	-0.002	-0.001	-0.702	-0.60	
349	9/7/2004	6:45:39 PM		24.919	24.416	24.566	25.586	23.973		3.526	23.139	4.475	-0.941	14.583	20.28		45.776	0.003	-0.013	0.003		564.90	9.415	22.0	10.9	1.3	0.089	-0.002	-0.002	-0.001	-1.458	-1.24	
350	9/7/2004	6:46:39 PM		24.928	24.406	24.541	25.601	23.908		3.613	23.433	4.578	-0.988	14.662	51.51		46.197	0.003	-0.012	0.003		565.90	9.43167	22.3	11.0	1.3	0.090	-0.002	-0.002	-0.001	-1.326	-1.13	

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
351	9/7/2004	6:47:39 PM		24.841	24.383	24.499	25.568	23.885		7.553	23.159	4.586	3.147	10.304	0.417		47.034	1.205	-0.013	0.003		566.90	9.44833	22.0	11.2	5.4	0.369	-0.002	-0.002	0.000	-0.353	-0.30	
352	9/7/2004	6:48:39 PM		24.733	24.365	24.466	25.52	23.747		15.869	22.641	4.534	12.187	0.765	-4.029		48.419	0.004	2.557	0.004		567.90	9.465	21.5	11.5	14.0	0.967	0.366	0.372	0.026	26.492	22.54	
353	9/7/2004	6:49:39 PM		24.699	24.362	24.452	25.497	23.678		21.438	23.238	4.522	17.506	-1.206	-4.486		47.146	0.003	1.189	0.004		568.90	9.48167	22.1	11.2	19.5	1.343	0.170	0.173	0.009	8.878	7.56	
354	9/7/2004	6:50:39 PM		24.654	24.321	24.387	25.406	23.588		21.809	23.087	4.56	17.652	-1.209	-4.497		47.142	0.003	1.001	0.003		569.90	9.49833	22.0	11.2	19.7	1.360	0.143	0.146	0.007	7.390	6.29	
355	9/7/2004	6:51:39 PM		24.63	24.308	24.348	25.363	23.609		21.811	23.045	4.515	17.777	-1.212	-4.52		46.979	0.003	0.923	0.003		570.90	9.515	21.9	11.2	19.8	1.365	0.132	0.135	0.007	6.800	5.79	
356	9/7/2004	6:52:39 PM		24.607	24.284	24.319	25.359	23.621		22.054	23.16	4.563	17.861	-1.212	-4.52		47.175	0.003	0.881	0.003		571.90	9.53167	22.0	11.2	20.0	1.376	0.126	0.129	0.006	6.442	5.48	
357	9/7/2004	6:53:39 PM		24.582	24.275	24.295	25.36	23.661		21.826	22.813	4.552	17.73	-1.212	-4.523		46.74	0.003	0.844	0.003		572.90	9.54833	21.7	11.1	19.8	1.364	0.121	0.123	0.006	6.232	5.30	
358	9/7/2004	6:54:39 PM		24.556	24.243	24.278	25.333	23.685		22.417	23.236	4.332	18.715	-1.209	-4.517		46.26	0.003	0.824	0.003		573.90	9.565	22.1	11.0	20.6	1.418	0.118	0.120	0.006	5.854	4.98	
359	9/7/2004	6:55:39 PM		24.547	24.229	24.27	25.325	23.686		22.346	23.302	4.45	18.294	-1.212	-4.523		43.235	0.003	0.805	0.003		574.90	9.58167	22.2	10.3	20.3	1.401	0.115	0.118	0.006	5.790	4.93	
360	9/7/2004	6:56:39 PM		24.538	24.22	24.27	25.325	23.722		22.452	23.35	4.328	18.586	-1.212	-4.52		45.012	0.003	0.796	0.003		575.90	9.59833	22.2	10.7	20.5	1.415	0.114	0.116	0.006	5.669	4.82	
361	9/7/2004	6:57:39 PM		24.544	24.226	24.302	25.316	23.743		22.197	23.191	4.68	17.87	-1.212	-4.52		46.84	0.003	0.761	0.003		576.90	9.615	22.1	11.2	20.0	1.381	0.109	0.111	0.006	5.547	4.72	
362	9/7/2004	6:58:39 PM		24.544	24.216	24.312	25.311	23.754		22.417	23.12	4.586	18.294	-1.212	-4.52		46.552	0.003	0.755	0.003		577.90	9.63167	22.0	11.1	20.4	1.403	0.108	0.110	0.005	5.414	4.61	
363	9/7/2004	6:59:39 PM		24.53	24.202	24.302	25.302	23.759		22.137	22.946	4.476	18.038	-1.212	-4.52		46.934	0.003	0.745	0.003		578.90	9.64833	21.8	11.2	20.1	1.385	0.107	0.109	0.005	5.415	4.61	
364	9/7/2004	7:00:39 PM		24.53	24.197	24.302	25.347	23.784		22.344	23.035	4.423	18.42	-1.209	-4.512		46.835	0.003	0.734	0.003		579.90	9.665	21.9	11.2	20.4	1.405	0.105	0.107	0.005	5.258	4.47	
365	9/7/2004	7:01:39 PM		24.52	24.193	24.293	25.363	23.795		22.056	22.842	4.388	18.112	-1.212	-4.52		46.671	0.003	0.726	0.003		580.90	9.68167	21.7	11.1	20.1	1.385	0.104	0.106	0.005	5.279	4.49	
366	9/7/2004	7:02:39 PM		24.532	24.189	24.289	25.384	23.776		22.425	23.128	4.564	18.297	-1.212	-4.517		46.151	0.003	0.72	0.003		581.90	9.69833	22.0	11.0	20.4	1.404	0.103	0.105	0.005	5.165	4.40	
367	9/7/2004	7:03:39 PM		24.522	24.174	24.274	25.409	23.851		22.409	23.244	4.396	18.323	-1.212	-4.517		46.665	0.003	0.714	0.003		582.90	9.715	22.1	11.1	20.4	1.404	0.102	0.104	0.005	5.123	4.36	
368	9/7/2004	7:04:39 PM		24.513	24.165	24.256	25.436	23.838		22.375	23.039	4.28	18.666	-1.212	-4.512		46.291	0.003	0.71	0.003		583.90	9.73167	21.9	11.0	20.5	1.415	0.102	0.104	0.005	5.059	4.30	
369	9/7/2004	7:05:39 PM		24.518	24.17	24.271	25.441	23.858		22.421	23.12	4.462	18.292	-1.212	-4.509		46.241	0.003	0.704	0.003		584.90	9.74833	22.0	11.0	20.4	1.404	0.101	0.103	0.005	5.054	4.30	
370	9/7/2004	7:06:39 PM		24.514	24.166	24.267	25.412	23.909		22.502	23.228	4.49	18.356	-1.212	-4.486		46.548	0.003	0.698	0.003		585.90	9.765	22.1	11.1	20.4	1.409	0.100	0.102	0.005	4.994	4.25	
371	9/7/2004	7:07:39 PM		24.514	24.172	24.272	25.427	23.899		22.39	23.122	4.468	18.264	-1.212	-4.465		45.813	0.003	0.695	0.003		586.90	9.78167	22.0	10.9	20.3	1.401	0.099	0.102	0.005	4.997	4.25	
372	9/7/2004	7:08:39 PM		24.51	24.167	24.278	25.443	23.93		22.398	23.184	4.39	18.407	-1.215	-4.463		45.498	0.003	0.692	0.003		587.90	9.79833	22.1	10.8	20.4	1.407	0.099	0.101	0.005	4.956	4.22	
373	9/7/2004	7:09:39 PM		24.521	24.183	24.293	25.448	23.94		22.463	23.075	4.477	18.475	-1.212	-4.46		46.573	0.003	0.686	0.003		588.90	9.815	21.9	11.1	20.5	1.411	0.098	0.100	0.005	4.895	4.17	
374	9/7/2004	7:10:39 PM		24.51	24.172	24.293	25.443	23.935		22.664	23.365	4.505	18.578	-1.209	-4.46		46.106	0.003	0.685	0.003		589.90	9.83167	22.2	11.0	20.6	1.422	0.098	0.100	0.005	4.852	4.13	
375	9/7/2004	7:11:39 PM		24.501	24.163	24.273	25.413	23.95		22.504	23.182	4.498	18.387	-1.215	-4.46		46.343	0.003	0.678	0.003		590.90	9.84833	22.1	11.0	20.4	1.410	0.097	0.099	0.005	4.846	4.12	
376	9/7/2004	7:12:39 PM		24.508	24.175	24.28	25.435	23.947		22.481	23.18	4.51	18.338	-1.212	-4.457		46.16	0.003	0.677	0.003		591.90	9.865	22.1	11.0	20.4	1.407	0.097	0.099	0.005	4.846	4.12	
377	9/7/2004	7:13:39 PM		24.51	24.183	24.288	25.463	23.965		22.444	22.979	4.433	18.518	-1.212	-4.457		45.957	0.003	0.673	0.003		592.90	9.88167	21.9	10.9	20.5	1.412	0.096	0.098	0.005	4.800	4.08	
378	9/7/2004	7:14:39 PM		24.511	24.193	24.279	25.469	23.986		22.286	22.844	4.382	18.467	-1.209	-4.451		46.439	0.003	0.674	0.004		593.90	9.89833	21.7	11.1	20.4	1.405	0.096	0.098	0.005	4.833	4.11	
379	9/7/2004	7:15:39 PM		24.497	24.18	24.245	25.455	23.917		22.492	23.054	4.416	18.5	-1.215	-4.454		45.899	0.003	0.671	0.003		594.90	9.915	21.9	10.9	20.5	1.413	0.096	0.098	0.005	4.788	4.07	
380	9/7/2004	7:16:39 PM		24.497	24.179	24.254	25.429	23.841		22.703	23.383	4.611	18.377	-1.212	-4.451		46.091	0.003	0.666	0.003		595.90	9.93167	22.3	11.0	20.5	1.416	0.095	0.097	0.005	4.741	4.03	
381	9/7/2004	7:17:39 PM		24.503	24.18	24.266	25.426	23.783		22.386	22.963	4.427	18.44	-1.212	-4.451		45.465	0.003	0.666	0.003		596.90	9.94833	21.8	10.8	20.4	1.407	0.095	0.097	0.005	4.769	4.06	
382	9/7/2004	7:18:39 PM		24.499	24.177	24.262	25.347	23.704		22.726	23.303	4.441	18.781	-1.215	-4.451		46.208	0.003	0.665	0.003		597.90	9.965	22.2	11.0	20.8	1.431	0.095	0.097	0.005	4.684	3.99	
383	9/7/2004	7:53:29 PM	0	25.214	23.955	24.953	25.266	23.838	#	22.135	22.567	4.453	18.069	-1.215	-5.333		46.325	0.003	0.573	0.003		632.73	10.5456	21.4	11.0	20.1	1.386	0.082	0.082	0.004	4.086	3.48	
384	9/7/2004	7:54:29 PM	0	25.182	23.973	24.92	25.289	23.841	#	21.938	22.449	4.484	17.703	-1.212	-5.33		46.168	0.003	0.567	0.003		633.73	10.5622	21.3	11.0	19.8	1.367	0.081	0.081	0.004	4.105	3.49	
385	9/7/2004	7:55:29 PM	0	25.139	23.97	24.882	25.291	23.878	#	18.284	22.818	4.508	14.081	-1.212	-4.763		45.845	0.307	-0.013	0.003		634.73	10.5789	21.7	10.9	16.2	1.116	-0.002	-0.002	0.000	-0.115	-0.10	
386	9/7/2004	7:56:29 PM	0	25.145	23.981	24.843	25.312	23.914	#	3.383	22.731	4.515	-1.206	14.294	20.306		46.231	0.003	-0.013	0.003		635.73	10.5956	21.6	11.0	1.1	0.075	-0.002	-0.002	-0.002	-1.717	-1.46	
387	9/7/2004	7:57:29 PM	0	25.147	23.988	24.805	25.309	23.966	#	3.335	22.556	4.439	-1.101	14.274	48.362		46.131	0.003	-0.01	0.003		636.73	10.6122	21.4	11.0	1.1	0.077	-0.001	-0.001	-0.001	-1.289	-1.10	
388	9/7/2004	7:58:29 PM	0	25.069	23.99	24.767	25.316	23.988	#	7.929	22.417	4.39	3.806	9.199	0.388		46.836	1.205	14.643	0.003		637.73	10.6289	21.3	11.2	5.9	0.405	2.096	2.110	0.360	359.638	306.06	
389	9/7/2004	7:59:29 PM	0	25.011	24.002	24.749	25.378	23.955	#	14.804	22.277	4.467	11.192	1.475	-3.248		48.039	0.004	2.706	0.003		638.73	10.6456	21.2	11.4	13.0	0.896	0.387	0.390	0.030	30.016	25.54	
390	9/7/2004	8:00:29 PM	0	24.952	24.003	24.705	25.364	23.921	#	17.817	22.509	4.528	13.933	-1.215	-3.537		47.507	0.003	2.061	0.003		639.73	10.6622	21.4	11.3	15.9	1.095	0.295	0.298	0.019	18.742	15.95	
391	9/7/2004	8:01:29 PM	0	24.933	24.024	24.701	25.4	23.942	#	20.187	22.699	4.512	16.189	-1.212	-3.717		47.002	0.003	1.44	0.003		640.73	10.6789	21.6	11.2	18.2	1.254	0.206	0.208	0.011	11.431	9.73	
392	9/7/2004	8:02:29 PM	0	24.9	24.021	24.648	25.417	23.959	#	21.351	22.768	4.315	17.554	-1.212	-3.806		46.571	0.003	1.051	0.004		641.73	10.6956	21.6	11.1	19.5	1.341	0.150	0.152	0.008	7.812	6.65	
393	9/7/2004	8:03:29 PM	0	24.896	24.032	24.639	25.438	23.94	#	21.712	22.662	4.517	17.617	-1.212	-3.844		46.617	0.003	0.852	0.003		642.73	10.7122	21.5	11.1	19.7	1.356	0.122	0.123	0.006	6.266	5.33	
394	9/7/2004	8:04:29 PM	0	24.878	24.044	24.611	25.42	23.932	#	21.73	22.56	4.352	17.804	-1.212	-3.853		45.905	0.003	0.761	0.003		643.73	10.7289	21.4	10.9	19.8	1.363	0.109	0.110	0.006	5.572	4.74	
395	9/7/2004	8:05:29 PM	0	24.859	24.055	24.597	25.401	23.953	#	21.93	22.664	4.468	17.886	-1.209	-3.861		46.487	0.003	0.703	0.003		644.73	10.7456	21.5	11.1	19.9	1.373	0.101	0.102	0.005	5.113	4.35	
396	9/7/2004	8:06:29 PM	0	24.835	24.052	24.573	25.382	23.884	#	22.183	22.784	4.286	18.364	-1.209	-3.861		44.564	0.003	0.679	0.003		645.73	10.7622	21.7	10.6	20.3	1.398	0.097	0.098	0.005	4.853	4.13	
397	9/7/2004	8:07:29 PM	0	24.811	24.047	24.559	25.388	23.81	#	22.183	22.809	4.344	18.225	-1.209	-3.861		46.266	0.003	0.653	0.003		646.73	10.7789	21.7	11.0	20.2	1.393	0.093	0.095	0.005	4.685	3.99	
398	9/7/2004	8:08:29 PM	0	24.78	24.042	24.528	25.352	23.744	#	22.039	22.677	4.41	17.974	-1.212	-3.864		46.189	0.003	0.636	0.003		647.73	10.7956	21.6	11.0	20.0	1.379	0.091	0.092	0.005	4.612	3.93	
399	9/7/2004	8:09:29 PM	0	24.781	24.052	24.524	25.328	23.72	#	22.351	22.973	4.342	18.397	-1.212	-3.844		46.279	0.003	0.595	0.003		648.73	10.8122	21.8	11.0	20.4	1.405	0.085	0.086	0.004	4.237	3.61	
400	9/7/2004	8:10:29 PM	0	24.756	24.047	24.524	25.298	23.61	#	22.012	22.534	4.381	17.886	-1.209	-3.858		46.245	0.003	0.61	0.003		649.73	10.8289	21.4	11.0	19.9	1.375	0.087	0.089	0.004	4.437	3.78	
401	9/7/2004	8:11:29 PM	0	24.714	24.016	24.462	25.171	23.528	#	22.28	22.822	4.436	18.1	-1.215	-3.864		45.327	0.003	0.605	0.003		650.73	10.8456	21.7	10.8	20.2	1.392	0.087	0.088	0.004	4.356	3.71	
402	9/7/2004	8:12:29 PM	0	24.703	24.014	24.451	25.115	23.467	#	22.099	22.708	4.413	18.106	-1.209	-3.861		45.985	0.003	0.593	0.003		651.73	10.8622	21.6	11.0	20.1	1.386	0.085	0.086	0.004	4.289	3.65	
403	9/7/2004	8:13:29 PM	0	24.698	24.009	24.436	25.07	23.477	#	22.463	23.029	4.477	18.245	-1.212	-3.861		45.709	0.003	0.587	0.004		652.73	10.8789	21.9	10.9	20.4	1.403	0.084	0.085	0.004	4.195	3.57	
404	9/7/2004	8:14:29 PM	0	24.683	24.014	24.436	25.005	23.442	#	22.388	22.844	4.406	18.297	-1.209	-3.855		45.398	0.003	0.587	0.004		653.73	10.8956	21.7	10.8	20.3	1.403	0.084	0.085	0.004	4.197	3.57	
405	9/7/2004	8:15:29 PM	0	24.654	23.98	24.386	24.935	23.462	#	22.369	22.675	3.975	19.013	-1.209	-3.858		45.526	0.003	0.579	0.003		654.73	10.9122	21.5	10.8	20.7	1.427	0.083	0.084	0.004	4.076	3.47	
406	9/7/2004	8:16:29 PM	0	24.648	23.974	24.376	24.965	23.622	#	22.506	23.029	4.373	18.522	-1.212	-3.855		45.588	0.003	0.579	0.003		655.73	10.9289	21.9	10.9	20.5	1.414	0.083	0.084	0.004	4.113	3.50	
407	9/7/2004	8:17:29 PM	0	24.642	23.978	24.369	24.963	23.636	#	22.357	22.859	4.374	18.393	-1.209	-3.855		45.884	0.003	0.564	0.004		656.73	10.9456	21.7	10.9	20.4	1.405	0.081	0.082	0.004	4.034	3.43	
408	9/7/2004	8:18:29 PM	0	24.631	23.972	24.364	24.978	23.59	#	22.212	22.905	4.645	17.744	-1.212	-3.855		46.596	0.003	0.557	0.004		657.73	10.9622	21.8	11.1	20.0	1.377	0.080	0.081	0.004	4.064	3.46	
409	9/7/2004	8:19:29 PM	0	24.617	23.969	24.35	24.989	23.646	#	22.183	22.538	4.524	18.098	-1.212	-3.855		46.464	0.003	0.554	0.003		658.73	10.9789	21.4	11.1	20.1	1.389	0.079	0.081	0.004	4.011	3.41	
410	9/7/2004	8:20:29 PM	0	24.602	23.963	24.349	24.988	23.636	#	21.954	22.293	4.493	17.837	-1.212	-3.855		46.053	0.003	0.547	0.005		659.73	10.9956	21.2	11.0	19.9	1.372	0.078	0.080	0.004	4.009	3.41	
411	9/7/2004	8:21:29 PM	0	24.593	23.964	24.346	25.005	23.637	#	21.826	22.235	4.428	17.744	-1.212	-3.853		46.756	0.003	0.541	0.003		660.73	11.0122	21.1	11.1	19.8	1.364	0.077	0.079	0.004	3.988	3.39	
412	9/7/2004	8:22:29 PM	0	24.578	23.959	24.341	24.99	23.657	#	21.62	22.04	4.389	17.564	-1.212	-3.855		46.229	0.003	0.542	0.003		661.73	11.0289	20.9	11.0	19.6	1.351	0.078	0.079	0.004	4.035	3.43	
413	9/7/2004	8:23:29 PM	0	24.574	23.956	24.342	25.011	23.633	#	22.062	22.469	4.627	17.658	-1.209	-3.853		45.782	0.003	0.545	0.004		662.73	11.0456	21.3	10.9	19.9	1.369	0.078	0.079	0.004	4.002	3.41	
414	9/7/2004	8:24:29 PM	0	24.566	23.957	24.328	24.997	23.625	#	21.849	22.177	4.34	17.939	-1.209	-3.85		46.156	0.003	0.543	0.004		663.73	11.0622	21.1	11.0	19.9	1.372	0.078	0.079	0.004	3.982	3.39	
415	9/7/2004	8:25:29 PM	0	24.541	23.947	24.298	24.997	23.62	#	21.857	22.386	4.444	17.886	-1.209	-3.85		46.806	0.003	0.53	0.004		664.73	11.0789	21.3	11.1	19.9	1.370	0.076	0.077	0.004	3.895	3.31	
416	9/7/2004	8:26:29 PM	0	24.547	23.963	24.289	24.984	23.661	#	21.874	22.347	4.437	17.794	-1.209	-3.85		46.393	0.003	0.529	0.003		665.73	11.0956	21.2	11.1	19.8	1.367	0.076	0.077	0.004	3.896	3.32	
417	9/7/2004	8:27:29 PM	0	24.542	23.968	24.299	24.999	23.681	#	21.892	22.291	4.429	17.896	-1.209	-3.841		46.418	0.003	0.513	0.004		666.73	11.1122	21.2	11.1	19.9	1.372	0.073	0.075	0.004	3.766	3.20	
418	9/7/2004	8:28:29 PM	0	24.522	23.953	24.264	24.979	23.691	#	21.774	22.165	4.424	17.777	-1.209	-3.844		46.452	0.003	0.519	0.003		667.73	11.1289	21.0	11.1	19.8	1.363	0.074	0.076	0.004	3.836	3.26	
419	9/7/2004	8:29:29 PM	0	24.502	23.943	24.234	24.963	23.661	#	21.929	22.291	4.312	17.981	-1.215	-3.85		46.36	0.003	0.51	0.003		668.73	11.1456	21.2	11.0	20.0	1.376	0.073	0.075	0.004	3.739	3.18	

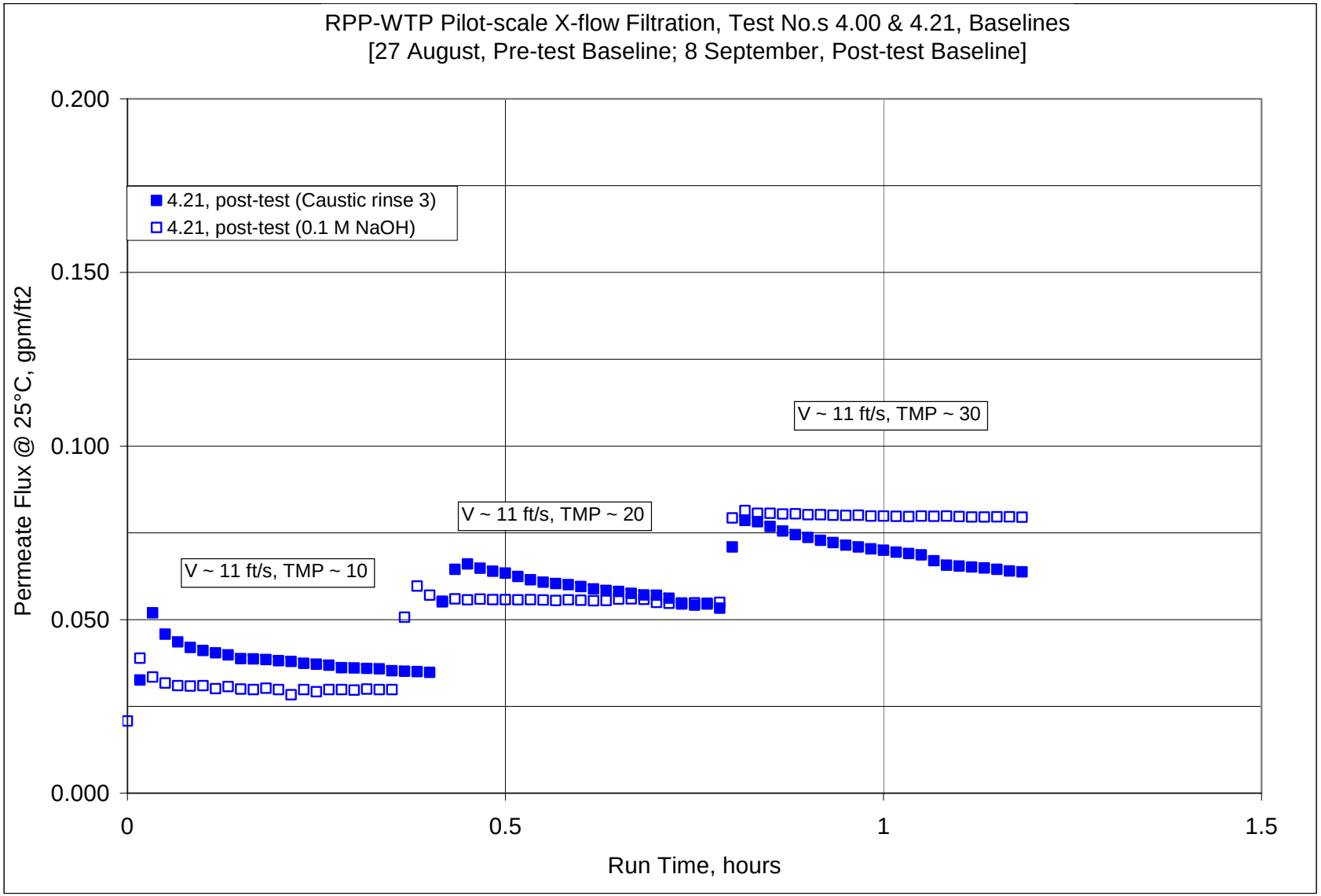
RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
425	Caustic Rinse 1																																
426																																	
427		Averages		24.5	23.5	24.3	24.3	23.8		22.0	27.4	5.0	17.1	0.0	-1.5		45.9	0.6	14.6	0.0				26.3	10.9	19.6	1.349	0.085	0.086	0.004	4.4	3.8	
428		Maximum		24.8	23.5	24.6	24.5	23.9		22.6	28.2	5.2	17.8	0.2	-1.4		49.4	0.6	14.6	0.0				27.0	11.8	20.2	1.393	0.087	0.089	0.005	4.7	4.0	
429		Median		24.5	23.5	24.3	24.3	23.8		22.2	27.8	5.0	17.3	0.1	-1.5		46.0	0.6	14.6	0.0				26.6	11.0	19.8	1.367	0.086	0.087	0.004	4.4	3.7	
430		Minimum		24.2	23.3	24.0	24.1	23.6		20.5	25.4	4.8	15.4	-1.2	-2.3		43.0	0.5	14.6	0.0				24.2	10.2	17.9	1.235	0.074	0.076	0.004	4.1	3.5	
431		2 x Std Dev		0.388	0.123	0.344	0.156	0.167		1.283	1.854	0.192	1.370	0.677	0.416		3.292	0.037	0.000	0.000				1.854	0.784	1.322	0.091	0.005	0.005	0.000	0.231	0.197	
432	Number of Points Used*			29	29	29	29	29		29	29	29	29	29	29		29	29	29	29				29	29	29	29	29	29	29	29	29	
433		* Backpulse points in box are not included																															
434																																	
435	Acid Clean 1																																
436																																	
437		Averages		25.2	24.2	24.7	25.2	24.4		41.9	43.0	4.6	37.8	-1.1	0.6		46.2	0.0	0.9	0.0				41.9	11.0	39.9	2.748	0.132	0.133	0.003	3.3	2.8	
438		Maximum		25.7	24.5	25.3	25.6	24.7		42.9	44.0	4.9	38.8	5.5	0.6		51.7	1.0	1.6	0.0				42.9	12.3	40.8	2.815	0.236	0.238	0.006	5.9	5.1	
439		Median		25.1	24.3	24.7	25.2	24.4		42.1	43.0	4.6	37.9	-1.2	0.6		46.1	0.0	0.9	0.0				41.9	11.0	40.0	2.755	0.134	0.135	0.003	3.4	2.9	
440		Minimum		25.0	23.9	24.6	24.9	24.1		32.2	42.4	4.5	28.0	-1.2	0.5		43.0	0.0	0.4	0.0				41.3	10.2	30.1	2.075	0.063	0.063	0.002	2.1	1.8	
441		2 x Std Dev		0.323	0.337	0.323	0.311	0.307		2.069	0.552	0.178	2.082	1.367	0.083		3.039	0.206	0.266	0.002				0.552	0.724	2.072	0.143	0.038	0.039	0.001	0.954	0.812	
442	Number of Points Used*			94	94	94	94	94		94	94	94	94	94	94		94	94	94	94				94	94	94	94	94	94	94	94	94	
443		* Backpulse points in box are not included																															
444																																	
445	Acid Clean 2																																
446																																	
447		Averages		25.4	24.9	25.0	25.5	24.9		42.1	44.5	4.7	38.1	-1.2	-1.1		45.9	0.0	1.4	0.0				43.4	10.9	40.1	2.8	0.2	0.2	0.0	5.0	4.3	
448		Maximum		25.9	25.1	25.5	25.8	25.2		43.3	45.7	4.8	39.5	-1.1	-1.0		48.7	0.0	2.1	0.0				44.6	11.6	41.4	2.9	0.3	0.3	0.0	8.6	7.3	
449		Median		25.5	24.9	25.1	25.5	24.9		42.1	44.5	4.7	38.1	-1.2	-1.0		45.9	0.0	1.4	0.0				43.4	10.9	40.1	2.8	0.2	0.2	0.0	5.0	4.2	
450		Minimum		23.8	24.6	23.7	25.1	24.4		38.6	43.4	4.5	34.5	-1.2	-1.3		44.2	0.0	1.4	0.0				42.3	10.5	36.6	2.5	0.2	0.2	0.0	4.9	4.2	
451		2 x Std Dev		0.872	0.275	0.774	0.309	0.362		0.961	0.746	0.130	1.012	0.016	0.125		1.327	0.006	0.156	0.002				0.746	0.316	0.981	0.068	0.022	0.026	0.001	0.789	0.671	
452	Number of Points Used*			92	92	92	92	92		92	92	92	92	92	92		92	92	92	92				92	92	92	92	92	92	92	92	92	
453		* Backpulse points in box are not included																															
454																																	
455	Acid Clean 3																																
456																																	
457		Averages		25.4	25.0	25.0	25.9	24.7		42.1	44.7	4.7	38.1	-1.1	-2.1		46.3	0.0	1.4	0.0				43.5	11.0	40.1	2.763	0.206	0.206	0.005	5.2	4.4	
458		Maximum		25.5	25.1	25.2	26.4	25.2		43.0	46.1	4.9	39.0	11.0	-0.9		48.0	0.0	4.3	0.0				45.0	11.4	40.9	2.820	0.610	0.624	0.024	24.0	20.5	
459		Median		25.5	25.0	25.1	25.8	24.6		42.2	44.6	4.7	38.2	-1.2	-2.1		46.3	0.0	1.4	0.0				43.5	11.0	40.2	2.773	0.198	0.197	0.005	4.9	4.2	
460		Minimum		24.3	24.8	24.2	25.1	24.1		27.4	44.0	4.5	24.5	-1.2	-2.2		45.1	0.0	1.4	0.0				42.9	10.7	25.9	1.788	0.196	0.195	0.005	4.8	4.1	
461		2 x Std Dev		0.465	0.147	0.370	0.642	0.659		3.133	0.849	0.157	2.883	2.535	0.253		1.053	0.001	0.615	0.001				0.848	0.251	3.005	0.207	0.088	0.091	0.004	4.000	3.404	
462	Number of Points Used*			92	92	92	92	92		92	92	92	92	92	92		92	92	92	92				92	92	92	92	92	92	92	92	92	
463		* Backpulse points in box are not included																															
464																																	
465	Acid Cleans																																
466																																	
467		Averages		25.3	24.7	24.9	25.5	24.6		42.0	44.1	4.7	38.0	-1.1	-0.8		46.2	0.0	1.3	0.0				42.9	11.0	40.0	2.759	0.180	0.180	0.005	4.5	3.9	
468		Maximum		25.9	25.1	25.5	26.4	25.2		43.3	46.1	4.9	39.5	11.0	0.6		51.7	1.0	4.3	0.0				45.0	12.3	41.4	2.853	0.610	0.624	0.024	24.0	20.5	
469		Median		25.4	24.8	25.0	25.5	24.6		42.1	44.3	4.7	38.0	-1.2	-1.0		46.1	0.0	1.4	0.0				43.2	11.0	40.1	2.763	0.198	0.197	0.005	4.9	4.2	
470		Minimum		23.8	23.9	23.7	24.9	24.1		27.4	42.4	4.5	24.5	-1.2	-2.2		43.0	0.0	0.4	0.0				41.3	10.2	25.9	1.788	0.063	0.063	0.002	2.1	1.8	
471		2 x Std Dev		0.631	0.701	0.596	0.684	0.600		2.242	1.639	0.171	2.155	1.664	2.206		2.044	0.120	0.621	0.002				1.639	0.487	2.193	0.151	0.089	0.090	0.003	2.952	2.512	
472	Number of Points Used*			278	278	278	278	278		278	278	278	278	278	278		278	278	278	278				278	278	278	278	278	278	278	278	278	
473		* Backpulse points in box are not included																															
474																																	
475	Caustic Rinse 2																																
476																																	
477		Averages		24.5	24.2	24.3	25.4	23.8		22.1	23.1	4.5	18.1	-1.1	-4.5		46.3	0.0	0.8	0.0				22.0	11.0	20.1	1.385	0.116	0.119	0.006	6.1	5.2	
478		Maximum		24.7	24.4	24.5	25.5	24.0		22.7	23.4	4.7	18.8	0.8	-4.0		48.4	0.0	2.6	0.0				22.3	11.5	20.8	1.431	0.366	0.372	0.026	26.5	22.5	
479		Median		24.5	24.2	24.3	25.4	23.8		22.4	23.1	4.5	18.3	-1.2	-4.5		46.3	0.0	0.7	0.0				22.0	11.0	20.4	1.405	0.102	0.104	0.005	5.1	4.4	
480		Minimum		24.5	24.2	24.2	25.3	23.6		15.9	22.6	4.3	12.2	-1.2	-4.5		43.2	0.0	0.7	0.0				21.5	10.3	14.0	0.967	0.095	0.097	0.005	4.7	4.0	
481		2 x Std Dev		0.117	0.115	0.101	0.114	0.229		2.344	0.340	0.174	2.241	0.699	0.173		1.678	0.000	0.676	0.001				0.340	0.400	2.288	0.158	0.097	0.098	0.008	7.648	6.509	
482	Number of Points Used*			31	31	31	31	31		31	31	31	31	31	31		31	31	31	31				31	31	31	31	31	31	31	31	31	
483		* Backpulse points in box are not included																															
484																																	
485	Caustic Rinse 3																																
486																																	
487		Averages		24.7	24.0	24.5	25.2	23.7		21.6	22.6	4.4	17.6	-1.1	-3.8		46.2	0.0	0.8	0.0				21.5	11.0	19.6	1.352	0.107	0.109	0.006	5.9	5.1	
488		Maximum		25.0	24.1	24.7	25.4	24.0		22.5	23.0	4.6	19.0	1.5	-3.2		48.0	0.0	2.7	0.0				21.9	11.4	20.7	1.427	0.387	0.390	0.030	30.0	25.5	
489		Median		24.7	24.0	24.4	25.0	23.7		22.0	22.7	4.4	17.9	-1.2	-3.9		46.3	0.0	0.6	0.0				21.5	11.0	19.9	1.373	0.084	0.085	0.004	4.2	3.6	
490		Minimum		24.5	23.9	24.2	24.9	23.4		14.8	22.0	4.0	11.2	-1.2	-3.9		44.6	0.0	0.5	0.0				20.9	10.6	13.0	0.896	0.073	0.075	0.004	3.7	3.2	
491		2 x Std Dev		0.285	0.073	0.285	0.378	0.318		3.003	0.540	0.232	2.878	0.949	0.241		1.282	0.000	0.946	0.001				0.540	0.305	2.935	0.202	0.135	0.136	0.011	10.522	8.954	
492	Number of Points Used*			31	31	31	31	31		31	31	31	31	31	31		31	31	31	31				31	31	31	31	31	31	31	31	31	
493		* Backpulse points in box are not included																															

RUN # 4.18 AND 4.19; ACID CLEANING AND CAUSTIC RINSING – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
495	Caustic Rinses 2 & 3																																
496																																	
497		Averages		24.6	24.1	24.4	25.3	23.8		21.9	22.8	4.4	17.8	-1.1	-4.1		46.3	0.0	0.8	0.0				21.7	11.0	19.8	1.368	0.112	0.114	0.006	6.0	5.1	
498		Maximum		25.0	24.4	24.7	25.5	24.0		22.7	23.4	4.7	19.0	1.5	-3.2		48.4	0.0	2.7	0.0				22.3	11.5	20.8	1.431	0.387	0.390	0.030	30.0	25.5	
499		Median		24.6	24.1	24.3	25.4	23.7		22.2	22.9	4.4	18.1	-1.2	-3.9		46.3	0.0	0.7	0.0				21.8	11.0	20.2	1.390	0.097	0.099	0.005	4.8	4.1	
500		Minimum		24.5	23.9	24.2	24.9	23.4		14.8	22.0	4.0	11.2	-1.2	-4.5		43.2	0.0	0.5	0.0				20.9	10.3	13.0	0.896	0.073	0.075	0.004	3.7	3.2	
501		2 x Std Dev		0.272	0.237	0.265	0.375	0.295		2.739	0.695	0.213	2.624	0.834	0.690		1.496	0.000	0.825	0.001				0.695	0.356	2.676	0.185	0.118	0.119	0.009	9.200	7.829	
502	Number of Points Used*			62	62	62	62	62		62	62	62	62	62	62		62	62	62	62				62	62	62	62	62	62	62	62	62	
503																																	
504	All																																
505																																	
506		Averages		25.1	24.5	24.8	25.4	24.4		37.1	39.2	4.7	33.0	-1.1	-1.5		46.2	0.1	2.2	0.0				38.1	11.0	35.0	2.414	0.161	0.162	0.005	4.8	4.1	
507		Maximum		25.9	25.1	25.5	26.4	25.2		43.3	46.1	5.2	39.5	11.0	0.6		51.7	1.0	14.6	0.0				45.0	12.3	41.4	2.853	0.610	0.624	0.030	30.0	25.5	
508		Median		25.2	24.5	24.8	25.4	24.5		42.0	43.7	4.7	38.0	-1.2	-1.2		46.2	0.0	1.4	0.0				42.6	11.0	40.0	2.758	0.197	0.196	0.005	4.9	4.2	
509		Minimum		23.8	23.3	23.7	24.1	23.4		14.8	22.0	4.0	11.2	-1.2	-4.5		43.0	0.0	0.4	0.0				20.9	10.2	13.0	0.896	0.063	0.063	0.002	2.1	1.8	
510		2 x Std Dev		0.858	0.968	0.738	0.900	0.932		17.506	17.240	0.312	17.710	1.618	3.123		2.099	0.332	7.287	0.002				17.240	0.500	####	1.214	0.113	0.113	0.005	4.699	3.999	
511	Number of Points Used*			369	369	369	369	369		369	369	369	369	369	369		369	369	369	369				369	369	369	369	369	369	369	369	369	

RUN # 4.21 A, B AND C; PRE-TEST BASELINE, CAUSTIC RINSE 3 SOLUTION AND 0.1 M NAOH



RUN # 4.21 A, B AND C; PRE-TEST BASELINE WITH CAUSTIC RINSE 3 SOLUTION

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
1				<<<<<<<<< Temperature Measurements >>>>						<<<<<<<<<<<<<< Pressure Measurements >>>>>>>>>>>>							<<<<<<<<< Flow Measurements >>>>>>					<<<<<<<<<<<<<<<<<<<<<< Calculated From Raw Data >>>>>>>>>>>>>>>>>>>>												
2	DATE	TIME		Filtrate	Cleaning	Slurry	Hi Amb.	Lo Amb.		BotTMP	Filter	Filter dP	TopTMP	Filtrate	Pulsepot		Slurry	Filtrate	Hi Filtate	Backpulse													
3				deg C	deg C	deg C	deg C	deg C		psid	psig	psid	psid	psig	psig		gpm	gpm	gpm	gpm													
4				T2	T3	T1	T4	T5		dP2	P1	dP1	dP3	P2	P3		Q1	Q2	Q3	Qbp													
5																																	
6	Zeros- 01/26/2004																																
7	8/23/2004	8:35:38 AM		22.554	22.604	22.002	22.782	22.204		-0.019	0.095	-0.012	0.003	-0.124	0.137		-0.075	0.003	14.643	0.004				Filter Surface Ar		6.985	FT2						
8	8/24/2004	8:10:33 AM		23.662	22.93	23.679	22.998	22.735		-0.021	0.122	-0.014	-0.001	-0.124	0.134		23.176	1.205	14.643	0.003				Conversion		851	m3/m2/day/barg / gpm/ft2/barg						
9	8/26/2004	9:14:11 AM		25.819	23.352	24.932	25.316	23.242		-0.008	0.126	-0.008	0.011	-0.106	0.091		48.335	0.043	14.643	0.003													
10	8/27/2004	7:53:29 AM		22.649	22.89	22.298	22.872	22.871		-0.017	0.14	-0.008	0.005	-0.161	0.111		-0.084	0.003	14.643	0.005				Note: Gauge Pressure P1 is approximately 1.4 psig									
11	8/30/2004	7:28:55 AM		22.511	22.848	22.397	22.669	22.914		-0.017	0.138	-0.009	0.003	-0.147	0.122		-0.082	0.003	14.643	0.006													
12																								Pressure P1is corrected for 31.25 inches of water tubing									
13																								VVVV				< Filtrate Flux >		<< PERMIABILITY >>			
14																													at 25C		x 1000		
15																						Time	Time	Press.	Vel.	TMP	TMP	gpm	gpm	gpm	gpm	meter	
16																						Min.	Hour	psig	ft/s	psi	bar	/ft2	ft2	ft2/psi	ft2/psi	day/bar	
17	Wednesday, 9/8/04																																
18	Baseline 4.21w1, spent rinse 3																																
19	9/8/2004	8:39:06 AM		23.316	22.624	23.634	23.018	22.56		12.367	13.246	4.435	8.064	-1.209	-4.402		45.847	0.26	-0.008	0.003		0.00	0	12.1	10.9	10.2	0.704	0.037	0.039	0.004	3.787	3.22	
20	9/8/2004	8:40:06 AM		23.438	22.64	23.731	23.024	22.496		12.309	13.204	4.462	7.927	-1.209	-4.405		46.055	0.26	-0.011	0.004		1.00	0.01667	12.1	11.0	10.1	0.698	0.037	0.039	0.004	3.813	3.25	
21	9/8/2004	8:41:06 AM		23.428	22.645	23.866	23.029	22.451		2.935	13.335	4.522	-1.354	5.047	20.488		45.972	0.003	-0.013	0.003		2.00	0.03333	12.2	10.9	0.8	0.055	0.000	0.000	0.001	0.561	0.48	
22	9/8/2004	8:42:06 AM		23.389	22.657	23.948	23.056	22.472		3.171	13.575	4.654	-1.364	5.038	37.368		46.251	0.003	-0.013	0.003		3.00	0.05	12.4	11.0	0.9	0.062	0.000	0.000	0.000	0.490	0.42	
23	9/8/2004	8:43:06 AM		23.43	22.667	24.059	23.072	22.483		6.715	13.393	4.55	2.453	1.278	0.44		46.366	0.497	-0.009	0.003		4.00	0.06667	12.3	11.0	4.6	0.316	0.071	0.073	0.016	15.940	13.57	
24	9/8/2004	8:44:06 AM		23.826	22.662	24.129	23.127	22.408		7.06	13.246	4.628	2.587	0.791	0.573		46.181	0.323	14.643	0.003		5.00	0.08333	12.1	11.0	4.8	0.333	0.046	0.047	0.010	9.826	8.36	
25	9/8/2004	8:45:06 AM		23.957	22.673	24.26	23.143	22.468		7.36	13.426	4.591	2.858	0.673	0.649		46.156	0.256	14.643	0.004		6.00	0.1	12.3	11.0	5.1	0.352	0.037	0.037	0.007	7.325	6.23	
26	9/8/2004	8:46:06 AM		24.118	22.679	24.321	23.164	22.465		7.163	13.175	4.361	3.059	0.67	0.718		46.162	0.223	14.643	0.003		7.00	0.11667	12.0	11.0	5.1	0.352	0.032	0.033	0.006	6.367	5.42	
27	9/8/2004	8:47:06 AM		24.145	22.68	24.433	23.22	22.526		11.564	13.53	4.575	7.241	-1.212	-3.769		46.402	0.357	14.643	0.003		8.00	0.13333	12.4	11.1	9.4	0.648	0.051	0.052	0.006	5.523	4.70	
28	9/8/2004	8:48:06 AM		24.255	22.691	24.478	23.276	22.497		11.935	13.432	4.436	7.832	-1.206	-4.064		46.518	0.315	14.643	0.004		9.00	0.15	12.3	11.1	9.9	0.681	0.045	0.046	0.005	4.631	3.94	
29	9/8/2004	8:49:06 AM		24.311	22.702	24.519	23.272	22.467		11.981	13.358	4.473	7.804	-1.209	-4.173		46.494	0.3	14.643	0.003		10.00	0.16667	12.2	11.1	9.9	0.682	0.043	0.044	0.004	4.401	3.75	
30	9/8/2004	8:50:06 AM		24.357	22.697	24.615	23.252	22.523		11.95	13.178	4.361	7.834	-1.212	-4.231		46.443	0.29	14.643	0.004		11.00	0.18333	12.1	11.1	9.9	0.682	0.042	0.042	0.004	4.243	3.61	
31	9/8/2004	8:51:06 AM		24.447	22.697	24.645	23.242	22.533		12.199	13.484	4.464	8.089	-1.215	-4.275		46.306	0.284	14.643	0.003		12.00	0.2	12.4	11.0	10.1	0.699	0.041	0.041	0.004	4.048	3.45	
32	9/8/2004	8:52:06 AM		24.493	22.703	24.696	23.218	22.534		12.201	13.434	4.648	7.861	-1.209	-4.295		46.26	0.28	14.643	0.003		13.00	0.21667	12.3	11.0	10.0	0.692	0.040	0.040	0.004	4.031	3.43	
33	9/8/2004	8:53:06 AM		24.538	22.703	24.746	23.238	22.554		12.095	13.188	4.473	7.902	-1.209	-4.318		46.381	0.276	14.643	0.003		14.00	0.23333	12.1	11.0	10.0	0.689	0.040	0.040	0.004	3.980	3.39	
34	9/8/2004	8:54:06 AM		24.588	22.698	24.791	23.278	22.569		12.138	13.31	4.555	7.781	-1.212	-4.275		46.42	0.269	14.643	0.003		15.00	0.25	12.2	11.1	10.0	0.687	0.039	0.039	0.004	3.890	3.31	
35	9/8/2004	8:55:06 AM		24.669	22.729	24.867	23.35	22.575		12.423	13.49	4.421	8.249	-1.209	-4.367		46.26	0.269	14.643	0.003		16.00	0.26667	12.4	11.0	10.3	0.713	0.039	0.039	0.004	3.740	3.18	
36	9/8/2004	8:56:06 AM		24.719	22.739	24.912	23.36	22.59		12.446	13.548	4.598	8.066	-1.209	-4.37		46.325	0.268	14.643	0.004		17.00	0.28333	12.4	11.0	10.3	0.707	0.038	0.038	0.004	3.750	3.19	
37	9/8/2004	8:57:06 AM		24.78	22.736	24.964	23.366	22.651		12.155	13.229	4.438	7.945	-1.209	-4.384		46.099	0.266	14.643	0.004		18.00	0.3	12.1	11.0	10.1	0.693	0.038	0.038	0.004	3.793	3.23	
38	9/8/2004	8:58:06 AM		24.806	22.741	24.999	23.342	22.602		12.317	13.378	4.622	7.959	-1.209	-4.39		46.145	0.265	14.643	0.003		19.00	0.31667	12.3	11.0	10.1	0.699	0.038	0.038	0.004	3.742	3.18	
39	9/8/2004	8:59:06 AM		24.852	22.752	25.005	23.387	22.592		12.389	13.401	4.53	8.157	-1.212	-4.41		46.508	0.261	14.643	0.003		20.00	0.33333	12.3	11.1	10.3	0.708	0.037	0.037	0.004	3.637	3.09	
40	9/8/2004	9:00:06 AM		24.902	22.748	25.076	23.373	22.678		12.516	13.549	4.681	8.095	-1.212	-4.422		46.356	0.26	14.643	0.003		21.00	0.35	12.4	11.0	10.3	0.711	0.037	0.037	0.004	3.604	3.07	
41	9/8/2004	9:01:06 AM		24.953	22.753	25.101	23.363	22.634		12.362	13.376	4.599	8.076	-1.209	-4.431		46.694	0.258	14.643	0.004		22.00	0.36667	12.3	11.1	10.2	0.705	0.037	0.037	0.004	3.604	3.07	
42	9/8/2004	9:02:06 AM		24.973	22.753	25.096	23.363	22.619		12.186	13.204	4.156	8.267	-1.209	-4.457		46.314	0.253	14.643	0.003		23.00	0.38333	12.1	11.0	10.2	0.705	0.036	0.036	0.004	3.532	3.01	
43	9/8/2004	9:03:06 AM		25.003	22.763	25.166	23.348	22.614		12.425	13.378	4.43	8.349	-1.209	-4.463		46.414	0.253	14.643	0.003		24.00	0.4	12.3	11.1	10.4	0.716	0.036	0.036	0.003	3.471	2.95	
44	9/8/2004	9:04:06 AM		25.059	22.775	25.188	23.335	22.635		12.151	13.035	4.405	8.015	-1.209	-4.468		46.089	0.252	14.643	0.003		25.00	0.41667	11.9	11.0	10.1	0.695	0.036	0.036	0.004	3.559	3.03	
45	9/8/2004	9:05:06 AM		25.084	22.775	25.183	23.365	22.635		12.224	13.163	4.374	8.039	-1.209	-4.468		46.258	0.251	14.643	0.004		26.00	0.43333	12.0	11.0	10.1	0.699	0.036	0.036	0.004	3.529	3.00	
46	9/8/2004	9:06:06 AM		25.105	22.785	25.273	23.421	22.691		12.404	13.306	4.452	8.349	-1.209	-4.48		46.081	0.248	14.643	0.004		27.00	0.45	12.2	11.0	10.4	0.715	0.036	0.035	0.003	3.395	2.89	
47	9/8/2004	9:07:06 AM		25.162	22.797	25.265	23.483	22.698		12.419	13.302	4.501	8.308	-1.209	-4.489		45.903	0.247	14.643	0.003		28.00	0.46667	12.2	10.9	10.4	0.715	0.035	0.035	0.003	3.387	2.88	
48	9/8/2004	9:08:06 AM		25.202	22.808	25.271	23.569	22.653		12.315	13.256	4.431	8.12	-1.209	-4.506		46.364	0.246	14.643	0.003		29.00	0.48333	12.1	11.0	10.2	0.704	0.035	0.035	0.003	3.421	2.91	
49	9/8/2004	9:09:06 AM		25.218	22.803	25.281	23.584	22.679		12.524	13.434	4.533	8.132	-1.209	-4.509		46.005	0.245	14.643	0.004		30.00	0.5	12.3	11.0	10.3	0.712	0.035	0.035	0.003	3.369	2.87	
50	9/8/2004	9:10:06 AM		25.249	22.804	25.312	23.56	22.725		18.248	20.523	3.944	14.471	-1.209	-3.543		42.53	0.388	14.643	0.003		31.00	0.51667	19.4	10.1	16.4	1.128	0.056	0.055	0.003	3.366	2.86	
51	9/8/2004	9:11:06 AM		25.314	22.809	25.367	23.565	22.75		21.085	24.231	4.316	17.09	-1.209	-2.985		45.603	0.455	14.643	0.003		32.00	0.53333	23.1	10.9	19.1	1.316	0.065	0.064	0.003	3.378	2.87	
52	9/8/2004	9:12:06 AM		25.369	22.82	25.383	23.566	22.68		22.27	25.585	4.27	18.2	-1.209	-2.881		45.44	0.466	14.643	0.003		33.00	0.55	24.5	10.8	20.2	1.395	0.067	0.066	0.003	3.262	2.78	
53	9/8/2004	9:13:06 AM		25.389	22.809	25.347	23.66	22.675		21.846	24.99	4.212	17.981	-1.212	-2.968		46.041	0.457	14.643	0.003		34.00	0.56667	23.9	11.0	19.9	1.373	0.065	0.065	0.003	3.254	2.77	
54	9/8/2004	9:14:06 AM		25.414	22.814	25.352	23.721	22.705		22.209	25.282	4.331	18.182	-1.212	-3.029		45.442	0.451	14.643	0.003		35.00	0.58333	24.2	10.8	20.2	1.392	0.065	0.064	0.003	3.166	2.69	
55	9/8/2004	9:15:06 AM		25.444	22.83	25.353	23.736	22.68		22.519	25.479	4.33	18.5	-1.206	-3.058		45.68	0.447	14.643	0.003		36.00	0.6	24.4	10.9	20.5	1.414	0.064	0.063	0.003	3.089	2.63	
56	9/8/2004	9:16:06 AM		25.449	22.84	25.338	23.842	22.72		22.801	25.837	4.49	18.625	-1.209	-3.118		45.674	0.44	14.643	0.003		37.00	0.61667	24.7	10.9	20.7	1.428	0.063	0.062	0.003	3.012	2.56	
57	9/8/2004	9:17:06 AM		25.439	22.835	25.308	23.882	22.705		22.415	25.155	4.422	18.231	-1.206	-3.182		46.239	0.433	14.643	0.003		38.00	0.63333	24.0	11.0	20.3	1.401	0.062	0.061	0.003	3.024	2.57	
58	9/8/2004	9:18:06 AM		25.456	22.852	25.304	23.934	22.762		22.541	25.33	4.379	18.455	-1.212	-3.222		45.715	0.428	14.643	0.003		39.00	0.65	24.2	10.9	20.5	1.413	0.061	0.061	0.003	2.964	2.52	
59	9/8/2004	9:19:06 AM		25.457	22.857	25.295	23.94	22.783		22.504	25.207	4.356	18.414	-1.209	-3.254		46.124	0.425	14.643	0.003		40.00	0.66667	24.1	11.0	20.5	1.411	0.061	0.060	0.003	2.949	2.51	
60	9/8/2004	9:20:06 AM		25.452	22.868	25.29	23.97	22.793		22.776	25.444	4.25	18.888	-1.209	-3.269		45.663	0.423	14.643	0.003		41.00	0.68333	24.3	10.9	20.8	1.436	0.061	0.060	0.003	2.883	2.45	
61	9/8/2004	9:21:06 AM		25.457	22.878	25.301	23.985	22.789		22.666	25.4	4.348	18.455	-1.209	-3.303		45.457	0.419	14.643	0.003		42.00	0.7	24.3	10.8	20.6	1.418	0.060	0.059	0.003	2.893	2.46	
62	9/8/2004	9:22:06 AM		25.452	22.873	25.286	23.95	22.829		22.772	25.384	4.245	18.781	-1.209	-3.338		45.328	0.414	14.643	0.003		43.00	0.71667	24.3	10.8	20.8	1.432	0.059	0.059	0.003	2.830	2.41	
63	9/8/2004	9:23:06 AM		25.454	22.89	25.297	23.906	22.86		22.794	25.317	4.301	18.789	-1.209	-3.373		45.791	0.411	14.643	0.004		44.00	0.73333	24.2	10.9	20.8	1.434	0.059	0.058	0.003	2.807	2.39	
64	9/8/2004	9:24:06 AM		25.449	22.895	25.293	23.897	22.846		22.798	25.394	4.316	18.682	-1.209	-3.39		45.839	0.409	14.643	0.003		45.00	0.75	24.3	10.9	20.7	1.430	0.059	0.058	0.003	2.800	2.38	
65	9/8/2004	9:25:06 AM		25.439	22.895	25.273	23.912	22.841		22.73	25.355	4.342	18.559	-1.212	-3.422		45.396	0.405	14.643	0.003		46.00	0.76667	24.2	10.8	20.6	1.423	0.058	0.058	0.003	2.787	2.37	
66	9/8/2004	9:26:06 AM		25.44	22.912	25.274	23.948	22.857		22.761	25.155	4.275	18.824	-1.209	-3.448		45.553	0.402	14.643	0.003		47.00	0.78333	24.0	10.8	20.8	1.434	0.058	0.057	0.003	2.747	2.34	
67	9/8/2004	9:27:06 AM		25.44	22.912	25.259	23.979	22.857		23.012	25.325	4.256	19.083	-1.212	-3.451		45.037	0.401	14.643	0.003		48.00	0.8	24.2	10.7	21.0	1.451	0.057	0.057	0.003	2.708	2.30	
68	9/8/2004	9:28:06 AM		25.435	22.917	25.264	24.024	22.852		22.863	25.261	4.263	18.908	-1.209	-3.494		46.105	0.395	14.643	0.003		49.00	0.81667	24.1	11.0	20.9	1.440	0.057	0.056	0.003	2.688	2.29	
69	9/8/2004	9:29:06 AM		25.441	22.922	25.239	24.044	22.863		22.767	25.031	4.501	18.582	-1.212	-3.578		46.788	0.385	14.643	0.003		50.00	0.83333	23.9	11.1	20.7	1.425	0.055	0.055	0.003	2.648	2.25	
70	9/8/2004	9:30:06 AM		25.432	22.933	25.25	24.065	22.873		22.5	24.691	4.408	18.338	-1.209	-3.61		46.412	0.381	14.643	0.003		51.00	0.85	23.6	11.1	20.4	1.408	0.055	0.054	0.003	2.653	2.26	

RUN # 4.21 A, B AND C; PRE-TEST BASELINE WITH CAUSTIC RINSE 3 SOLUTION – CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
71	9/8/2004	9:31:06 AM		25.432	22.944	25.251	24.116	22.889		22.763	24.988	4.464	18.654	-1.209	-3.598		45.949	0.383	14.643	0.003		52.00	0.86667	23.9	10.9	20.7	1.428	0.055	0.054	0.003	2.629	2.24	
72	9/8/2004	9:32:06 AM		25.444	22.955	25.267	24.127	22.96		22.494	24.644	4.489	18.276	-1.209	-3.653		46.569	0.375	14.643	0.003		53.00	0.88333	23.5	11.1	20.4	1.405	0.054	0.053	0.003	2.614	2.22	
73	9/8/2004	9:33:06 AM		25.439	22.955	25.278	24.088	22.981		31.173	34.735	5.948	25.551	-1.209	-2.633		55.118	0.499	14.643	0.003		54.00	0.9	33.6	13.1	28.4	1.955	0.071	0.071	0.002	2.499	2.13	
74	9/8/2004	9:34:06 AM		25.505	22.961	25.408	24.123	23.032		32.048	36.503	4.474	27.961	-0.873	-2.046		46.779	0.555	14.643	0.003		55.00	0.91667	35.4	11.1	30.0	2.069	0.079	0.079	0.003	2.618	2.23	
75	9/8/2004	9:35:06 AM		25.571	22.977	25.515	24.155	23.028		32.322	36.866	4.464	28.086	-0.873	-2.057		46.625	0.554	14.643	0.003		56.00	0.93333	35.7	11.1	30.2	2.082	0.079	0.078	0.003	2.588	2.20	
76	9/8/2004	9:36:06 AM		25.646	22.982	25.51	24.185	22.948		32.291	36.52	4.469	28.139	-1.088	-2.158		46.746	0.544	14.643	0.003		57.00	0.95	35.4	11.1	30.2	2.083	0.078	0.077	0.003	2.541	2.16	
77	9/8/2004	9:37:06 AM		25.677	22.988	25.495	24.236	23.014		32.073	36.205	4.349	28.069	-1.209	-2.245		46.227	0.535	14.643	0.003		58.00	0.96667	35.1	11.0	30.1	2.073	0.077	0.076	0.003	2.512	2.14	
78	9/8/2004	9:38:06 AM		25.702	23.009	25.486	24.286	22.939		32.245	36.236	4.345	28.119	-1.209	-2.323		45.96	0.527	14.643	0.003		59.00	0.98333	35.1	10.9	30.2	2.081	0.075	0.074	0.002	2.466	2.10	
79	9/8/2004	9:39:06 AM		25.702	23.004	25.461	24.302	22.934		32.287	36.404	4.401	28.051	-1.209	-2.387		45.486	0.521	14.643	0.003		60.00	1	35.3	10.8	30.2	2.080	0.075	0.074	0.002	2.441	2.08	
80	9/8/2004	9:40:06 AM		25.698	23.01	25.431	24.342	22.975		32.411	36.224	4.329	28.371	-1.212	-2.436		45.966	0.515	14.643	0.003		61.00	1.01667	35.1	10.9	30.4	2.095	0.074	0.073	0.002	2.397	2.04	
81	9/8/2004	9:41:06 AM		25.688	23.01	25.421	24.387	22.945		32.535	36.356	4.365	28.449	-1.212	-2.491		45.538	0.51	14.643	0.003		62.00	1.03333	35.2	10.8	30.5	2.102	0.073	0.072	0.002	2.366	2.01	
82	9/8/2004	9:42:06 AM		25.693	23.03	25.437	24.453	22.91		32.677	36.501	4.33	28.648	-1.206	-2.531		45.557	0.505	14.643	0.004		63.00	1.05	35.4	10.9	30.7	2.114	0.072	0.071	0.002	2.329	1.98	
83	9/8/2004	9:43:06 AM		25.685	23.042	25.413	24.45	22.982		32.728	36.503	4.373	28.65	-1.209	-2.575		46.105	0.501	14.643	0.003		64.00	1.06667	35.4	11.0	30.7	2.116	0.072	0.071	0.002	2.310	1.97	
84	9/8/2004	9:44:06 AM		25.675	23.042	25.404	24.45	23.022		32.954	36.727	4.411	28.736	-1.209	-2.609		45.824	0.497	14.643	0.003		65.00	1.08333	35.6	10.9	30.8	2.127	0.071	0.070	0.002	2.281	1.94	
85	9/8/2004	9:45:06 AM		25.672	23.053	25.39	24.451	23.009		32.753	36.479	4.19	28.861	-1.209	-2.638		45.688	0.494	14.643	0.003		66.00	1.1	35.4	10.9	30.8	2.124	0.071	0.070	0.002	2.271	1.93	
86	9/8/2004	9:46:06 AM		25.662	23.064	25.376	24.462	23.014		33.023	36.736	4.358	28.95	-1.212	-2.682		45.909	0.49	14.643	0.003		67.00	1.11667	35.6	10.9	31.0	2.136	0.070	0.069	0.002	2.240	1.91	
87	9/8/2004	9:47:06 AM		25.652	23.064	25.356	24.462	23.034		33.075	36.64	4.365	28.987	-1.209	-2.708		45.044	0.487	14.643	0.003		68.00	1.13333	35.5	10.7	31.0	2.139	0.070	0.069	0.002	2.224	1.89	
88	9/8/2004	9:48:06 AM		25.654	23.075	25.342	24.428	22.986		33	36.441	4.287	29.013	-1.209	-2.734		45.553	0.484	14.643	0.003		69.00	1.15	35.3	10.8	31.0	2.138	0.069	0.069	0.002	2.213	1.88	
89	9/8/2004	9:49:06 AM		25.655	23.092	25.348	24.465	22.987		32.56	35.867	4.591	28.264	-1.209	-2.841		46.777	0.472	14.643	0.003		70.00	1.16667	34.7	11.1	30.4	2.097	0.068	0.067	0.002	2.200	1.87	
90	9/8/2004	9:50:06 AM		25.625	23.087	25.323	24.485	23.097		32.426	35.685	4.457	28.182	-1.209	-2.927		46.817	0.463	14.643	0.003		71.00	1.18333	34.6	11.2	30.3	2.089	0.066	0.066	0.002	2.168	1.84	
91	9/8/2004	9:51:06 AM		25.62	23.097	25.314	24.465	23.033		32.475	35.857	4.576	27.969	-1.209	-2.948		47.013	0.461	14.643	0.003		72.00	1.2	34.7	11.2	30.2	2.084	0.066	0.065	0.002	2.165	1.84	
92	9/8/2004	9:52:06 AM		25.621	23.108	25.31	24.491	23.048		32.589	35.792	4.478	28.369	-1.209	-2.965		46.387	0.459	14.643	0.003		73.00	1.21667	34.7	11.0	30.5	2.101	0.066	0.065	0.002	2.137	1.82	
93	9/8/2004	9:53:06 AM		25.606	23.113	25.305	24.501	23.058		32.515	35.623	4.449	28.314	-1.209	-2.979		46.391	0.457	14.643	0.003		74.00	1.23333	34.5	11.0	30.4	2.097	0.065	0.065	0.002	2.133	1.82	
94	9/8/2004	9:54:06 AM		25.596	23.108	25.3	24.516	23.073		32.513	35.598	4.471	28.342	-1.209	-3.008		46.494	0.454	14.643	0.003		75.00	1.25	34.5	11.1	30.4	2.098	0.065	0.064	0.002	2.118	1.80	
95	9/8/2004	9:55:06 AM		25.593	23.135	25.306	24.513	23.09		32.72	35.948	4.523	28.283	-1.212	-3.034		45.874	0.451	14.643	0.003		76.00	1.26667	34.8	10.9	30.5	2.103	0.065	0.064	0.002	2.099	1.79	
96	9/8/2004	9:56:06 AM		25.583	23.13	25.296	24.508	23.055		32.465	35.554	4.361	28.439	-1.209	-3.055		46.12	0.449	14.643	0.003		77.00	1.28333	34.4	11.0	30.5	2.100	0.064	0.064	0.002	2.093	1.78	
97																																	
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101	A	Averages		24.8	22.7	25.0	23.4	22.6		12.3	13.3	4.5	8.1	-1.2	-4.4		46.3	0.3	14.6	0.0				12.2	11.0	10.2	0.702	0.038	0.038	0.004	3.7	3.1	
102		Maximum		25.2	22.8	25.3	23.6	22.7		12.5	13.5	4.7	8.3	-1.2	-4.2		46.7	0.3	14.6	0.0				12.4	11.1	10.4	0.716	0.042	0.042	0.004	4.2	3.6	
103		Median		24.9	22.8	25.0	23.4	22.6		12.3	13.3	4.5	8.1	-1.2	-4.4		46.3	0.3	14.6	0.0				12.2	11.0	10.2	0.705	0.037	0.037	0.004	3.6	3.1	
104		Minimum		24.4	22.7	24.6	23.2	22.5		12.0	13.0	4.2	7.8	-1.2	-4.5		45.9	0.2	14.6	0.0				11.9	10.9	9.9	0.682	0.035	0.035	0.003	3.4	2.9	
105		2 x Std Dev		0.515	0.070	0.429	0.191	0.105		0.303	0.272	0.235	0.328	0.003	0.165		0.363	0.026	0.000	0.001				0.272	0.087	0.288	0.020	0.004	0.004	0.000	0.486	0.414	
106		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
107		* Backpulse points in box are not included																															
108																																	
109																																	
110	B	Averages		25.4	22.9	25.3	23.9	22.8		22.6	25.2	4.3	18.6	-1.2	-3.3		45.8	0.4	14.6	0.0				24.1	10.9	20.6	1.420	0.059	0.059	0.003	2.9	2.4	
111		Maximum		25.5	23.0	25.4	24.1	23.0		23.0	25.8	4.5	19.1	-1.2	-3.0		46.8	0.5	14.6	0.0				24.7	11.1	21.0	1.451	0.065	0.065	0.003	3.3	2.8	
112		Median		25.4	22.9	25.3	23.9	22.8		22.7	25.3	4.3	18.6	-1.2	-3.4		45.8	0.4	14.6	0.0				24.2	10.9	20.7	1.424	0.059	0.059	0.003	2.8	2.4	
113		Minimum		25.4	22.8	25.2	23.7	22.7		21.8	24.6	4.2	18.0	-1.2	-3.7		45.0	0.4	14.6	0.0				23.5	10.7	19.9	1.373	0.054	0.053	0.003	2.6	2.2	
114		2 x Std Dev		0.031	0.084	0.067	0.240	0.152		0.510	0.530	0.174	0.541	0.004	0.392		0.862	0.047	0.000	0.000				0.530	0.205	0.514	0.035	0.007	0.007	0.000	0.361	0.307	
115		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
116		* Backpulse points in box are not included																															
117																																	
118																																	
119	C	Averages		25.7	23.1	25.4	24.4	23.0		32.6	36.2	4.4	28.5	-1.2	-2.7		46.0	0.5	14.6	0.0				35.0	11.0	30.5	2.105	0.070	0.069	0.002	2.3	1.9	
120		Maximum		25.7	23.1	25.5	24.5	23.1		33.1	36.7	4.6	29.0	-1.2	-2.2		47.0	0.5	14.6	0.0				35.6	11.2	31.0	2.139	0.077	0.076	0.003	2.5	2.1	
121		Median		25.7	23.1	25.4	24.5	23.0		32.5	36.2	4.4	28.4	-1.2	-2.7		46.0	0.5	14.6	0.0				35.1	10.9	30.5	2.100	0.070	0.069	0.002	2.2	1.9	
122		Minimum		25.6	23.0	25.3	24.2	22.9		32.1	35.6	4.2	28.0	-1.2	-3.1		45.0	0.4	14.6	0.0				34.4	10.7	30.1	2.073	0.064	0.064	0.002	2.1	1.8	
123		2 x Std Dev		0.076	0.088	0.127	0.157	0.103		0.524	0.770	0.189	0.634	0.003	0.496		0.984	0.053	0.000	0.000				0.770	0.234	0.562	0.039	0.008	0.007	0.000	0.248	0.211	
124		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
125		* Backpulse points in box are not included																															
126																												Calc	0.006				
127																										Avg St Dv (all pts)			0.006				
128																										Max St Dv (all pts)			0.007				
129																										Min St Dv (all pts)			0.004				

RUN # 4.21 A, B AND C; PRE-TEST BASELINE WITH 0.1 M NAOH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
133	Wednesday, 9/8/04																																
134	Baseline 4.21w2, 1/10 M																																
135	9/8/2004	12:26:56 PM		24.8	23.459	24.889	24.169	23.163		12.302	13.49	4.456	8.146	-1.212	-4.772		46.178	0.197	14.643	0.003		0.00	0	12.4	11.0	10.2	0.705	0.028	0.028	0.003	2.767	2.35	
136	9/8/2004	12:27:56 PM		24.821	23.465	24.914	24.14	23.149		12.178	13.395	4.416	8.031	-1.212	-4.763		46.174	0.198	14.643	0.003		1.00	0.01667	12.3	11.0	10.1	0.697	0.028	0.028	0.003	2.812	2.39	
137	9/8/2004	12:28:56 PM		24.837	23.471	24.91	24.176	23.119		12.126	13.36	4.443	7.961	-1.212	-4.772		46.183	0.195	14.643	0.004		2.00	0.03333	12.2	11.0	10.0	0.692	0.028	0.028	0.003	2.787	2.37	
138	9/8/2004	12:29:56 PM		24.857	23.476	24.906	24.186	23.09		12.174	13.435	4.41	8.046	-1.206	-4.737		45.966	0.193	14.643	0.004		3.00	0.05	12.3	10.9	10.1	0.697	0.028	0.028	0.003	2.740	2.33	
139	9/8/2004	12:30:56 PM		24.857	23.471	24.885	24.181	23.084		12.267	13.546	4.616	7.927	-1.212	-4.783		45.987	0.193	14.643	0.003		4.00	0.06667	12.4	11.0	10.1	0.696	0.028	0.028	0.003	2.745	2.34	
140	9/8/2004	12:31:56 PM		24.887	23.492	24.946	24.237	23.11		12.105	13.414	4.346	7.968	-1.206	-4.778		46.099	0.195	14.643	0.003		5.00	0.08333	12.3	11.0	10.0	0.692	0.028	0.028	0.003	2.786	2.37	
141	9/8/2004	12:32:56 PM		24.888	23.487	24.941	24.242	23.156		12.12	13.385	4.387	8.013	-1.209	-4.757		46.018	0.198	14.643	0.003		6.00	0.1	12.3	11.0	10.1	0.694	0.028	0.028	0.003	2.821	2.40	
142	9/8/2004	12:33:56 PM		24.904	23.498	24.952	24.308	23.201		12.205	13.544	4.48	7.97	-1.206	-4.691		46.227	0.193	14.643	0.004		7.00	0.11667	12.4	11.0	10.1	0.695	0.028	0.028	0.003	2.743	2.33	
143	9/8/2004	12:34:56 PM		24.914	23.498	24.938	24.394	23.217		12.014	13.285	4.372	7.978	-1.212	-4.795		46.11	0.192	14.643	0.003		8.00	0.13333	12.2	11.0	10.0	0.689	0.027	0.028	0.003	2.755	2.34	
144	9/8/2004	12:35:56 PM		24.921	23.505	24.929	24.415	23.233		12.178	13.453	4.494	7.998	-1.212	-4.781		46.116	0.193	14.643	0.003		9.00	0.15	12.3	11.0	10.1	0.696	0.028	0.028	0.003	2.744	2.34	
145	9/8/2004	12:36:56 PM		24.981	23.495	24.935	24.411	23.254		3.312	13.52	4.472	-1.025	4.807	23.371		46.297	0.003	14.643	0.003		10.00	0.16667	12.4	11.0	1.1	0.079	0.000	0.000	0.000	0.376	0.32	
146	9/8/2004	12:37:56 PM		24.938	23.512	24.961	24.478	23.235		2.513	13.437	4.4	-1.737	5.562	20.676		45.761	0.003	14.643	0.003		11.00	0.18333	12.3	10.9	0.4	0.027	0.000	0.000	0.001	1.108	0.94	
147	9/8/2004	12:38:56 PM		24.793	23.517	24.957	24.483	23.241		7.398	13.453	4.434	3.215	0.487	0.336		46.032	0.297	14.643	0.004		12.00	0.2	12.3	11.0	5.3	0.366	0.043	0.043	0.008	8.023	6.83	
148	9/8/2004	12:39:56 PM		24.925	23.529	24.953	24.5	23.267		7.564	13.493	4.373	3.44	0.331	0.374		46.35	0.196	14.643	0.003		13.00	0.21667	12.4	11.0	5.5	0.379	0.028	0.028	0.005	5.107	4.35	
149	9/8/2004	12:40:56 PM		24.945	23.529	24.938	24.51	23.273		7.545	13.42	4.451	3.309	0.331	0.42		45.855	0.17	14.643	0.003		14.00	0.23333	12.3	10.9	5.4	0.374	0.024	0.024	0.004	4.492	3.82	
150	9/8/2004	12:41:56 PM		24.966	23.536	24.955	24.527	23.289		7.433	13.339	4.399	3.352	0.334	0.466		46.181	0.155	14.643	0.003		15.00	0.25	12.2	11.0	5.4	0.372	0.022	0.022	0.004	4.120	3.51	
151	9/8/2004	12:42:56 PM		24.988	23.543	24.982	24.554	23.341		7.431	13.399	4.347	3.354	0.369	0.501		46.06	0.145	14.643	0.003		16.00	0.26667	12.3	11.0	5.4	0.372	0.021	0.021	0.004	3.852	3.28	
152	9/8/2004	12:43:56 PM		24.794	23.543	24.957	24.529	23.352		11.357	13.461	4.414	7.254	-1.212	-4.139		46.151	0.271	14.643	0.003		17.00	0.28333	12.3	11.0	9.3	0.642	0.039	0.039	0.004	4.174	3.55	
153	9/8/2004	12:44:56 PM		24.946	23.555	24.954	24.601	23.379		11.786	13.567	4.411	7.695	-1.209	-4.578		46.101	0.233	14.643	0.003		18.00	0.3	12.4	11.0	9.7	0.672	0.033	0.033	0.003	3.429	2.92	
154	9/8/2004	12:45:56 PM		24.951	23.545	24.924	24.566	23.369		11.848	13.48	4.508	7.709	-1.212	-4.61		46.026	0.221	14.643	0.003		19.00	0.31667	12.4	11.0	9.8	0.674	0.032	0.032	0.003	3.243	2.76	
155	9/8/2004	12:46:56 PM		24.977	23.567	24.951	24.648	23.38		11.969	13.615	4.458	7.81	-1.212	-4.665		45.999	0.216	14.643	0.003		20.00	0.33333	12.5	11.0	9.9	0.682	0.031	0.031	0.003	3.131	2.66	
156	9/8/2004	12:47:56 PM		24.984	23.583	24.992	24.694	23.412		12.08	13.706	4.462	7.912	-1.212	-4.676		46.235	0.215	14.643	0.004		21.00	0.35	12.6	11.0	10.0	0.689	0.031	0.031	0.003	3.080	2.62	
157	9/8/2004	12:48:56 PM		24.98	23.574	24.973	24.731	23.438		11.95	13.476	4.364	7.894	-1.212	-4.665		46.172	0.216	14.643	0.003		22.00	0.36667	12.4	11.0	9.9	0.684	0.031	0.031	0.003	3.119	2.65	
158	9/8/2004	12:49:56 PM		24.982	23.586	24.945	24.697	23.44		11.896	13.424	4.222	8.078	-1.215	-4.702		46.535	0.21	14.643	0.003		23.00	0.38333	12.3	11.1	10.0	0.689	0.030	0.030	0.003	3.015	2.57	
159	9/8/2004	12:50:56 PM		24.999	23.603	24.967	24.754	23.457		11.971	13.422	4.444	7.842	-1.209	-4.668		46.143	0.214	14.643	0.003		24.00	0.4	12.3	11.0	9.9	0.683	0.031	0.031	0.003	3.096	2.63	
160	9/8/2004	12:51:56 PM		25.005	23.62	24.963	24.721	23.428		12.076	13.519	4.457	7.953	-1.212	-4.555		46.118	0.209	14.643	0.003		25.00	0.41667	12.4	11.0	10.0	0.690	0.030	0.030	0.003	2.991	2.55	
161	9/8/2004	12:52:56 PM		25.006	23.621	24.99	24.747	23.48		11.998	13.434	4.329	7.974	-1.209	-4.7		46.06	0.208	14.643	0.004		26.00	0.43333	12.3	11.0	10.0	0.688	0.030	0.030	0.003	2.983	2.54	
162	9/8/2004	12:53:56 PM		25.019	23.639	25.017	24.72	23.522		12.19	13.573	4.458	8.103	-1.203	-4.691		46.141	0.211	14.643	0.004		27.00	0.45	12.4	11.0	10.1	0.700	0.030	0.030	0.003	2.976	2.53	
163	9/8/2004	12:54:56 PM		25	23.634	24.973	24.715	23.508		12.199	13.607	4.48	7.984	-1.212	-4.65		46.139	0.208	14.643	0.003		28.00	0.46667	12.5	11.0	10.1	0.696	0.030	0.030	0.003	2.953	2.51	
164	9/8/2004	12:55:56 PM		25.017	23.641	24.965	24.732	23.535		12.209	13.582	4.563	7.957	-1.212	-4.711		46.199	0.198	14.643	0.003		29.00	0.48333	12.5	11.0	10.1	0.695	0.028	0.028	0.003	2.814	2.39	
165	9/8/2004	12:56:56 PM		25.023	23.653	24.961	24.784	23.546		12.112	13.482	4.373	8.072	-1.212	-4.697		46.062	0.208	14.643	0.003		30.00	0.5	12.4	11.0	10.1	0.696	0.030	0.030	0.003	2.954	2.51	
166	9/8/2004	12:57:56 PM		25.019	23.653	24.972	24.774	23.517		12.178	13.536	4.444	8.035	-1.212	-4.682		46.256	0.204	14.643	0.003		31.00	0.51667	12.4	11.0	10.1	0.697	0.029	0.029	0.003	2.892	2.46	
167	9/8/2004	12:58:56 PM		25.024	23.664	24.988	24.81	23.508		12.078	13.451	4.337	8.074	-1.215	-4.72		46.571	0.208	14.643	0.003		32.00	0.53333	12.3	11.1	10.1	0.695	0.030	0.030	0.003	2.956	2.52	
168	9/8/2004	12:59:56 PM		25.024	23.669	24.973	24.87	23.382		12.251	13.611	4.42	8.177	-1.212	-4.633		46.091	0.208	14.643	0.003		33.00	0.55	12.5	11.0	10.2	0.704	0.030	0.030	0.003	2.918	2.48	
169	9/8/2004	1:00:56 PM		25.028	23.668	24.956	24.864	23.286		12.168	13.495	4.37	8.13	-1.212	-4.717		46.179	0.207	14.643	0.003		34.00	0.56667	12.4	11.0	10.1	0.700	0.030	0.030	0.003	2.924	2.49	
170	9/8/2004	1:01:56 PM		25.033	23.673	24.956	24.824	23.256		12.165	13.522	4.487	7.996	-1.212	-4.711		46.372	0.209	14.643	0.003		35.00	0.58333	12.4	11.0	10.1	0.695	0.030	0.030	0.003	2.972	2.53	
171	9/8/2004	1:02:56 PM		25.021	23.671	24.954	24.817	23.269		12.232	13.486	4.501	8.103	-1.209	-4.714		46.112	0.208	14.643	0.003		36.00	0.6	12.4	11.0	10.2	0.701	0.030	0.030	0.003	2.933	2.50	
172	9/8/2004	1:03:56 PM		25.024	23.669	24.982	24.825	23.282		12.338	13.642	4.483	8.169	-1.206	-4.697		46.203	0.208	14.643	0.004		37.00	0.61667	12.5	11.0	10.3	0.707	0.030	0.030	0.003	2.906	2.47	
173	9/8/2004	1:04:56 PM		25.078	23.677	25.026	24.808	23.351		23.259	26.018	4.629	18.832	-1.209	-3.72		50.953	0.354	14.643	0.003		38.00	0.63333	24.9	12.1	21.0	1.451	0.051	0.051	0.002	2.406	2.05	
174	9/8/2004	1:05:56 PM		25.137	23.677	25.106	24.778	23.305		23.039	25.831	4.528	18.814	-1.209	-3.306		46.7	0.418	14.643	0.003		39.00	0.65	24.7	11.1	20.9	1.443	0.060	0.060	0.003	2.851	2.43	
175	9/8/2004	1:06:56 PM		25.175	23.68	25.084	24.796	23.258		22.463	25.027	4.543	18.286	-1.209	-3.468		46.671	0.399	14.643	0.003		40.00	0.66667	23.9	11.1	20.4	1.405	0.057	0.057	0.003	2.797	2.38	
176	9/8/2004	1:07:56 PM		25.205	23.695	25.069	24.901	23.348		22.28	24.685	4.53	18.18	-1.209	-3.5		46.443	0.387	14.643	0.003		41.00	0.68333	23.6	11.1	20.2	1.395	0.055	0.055	0.003	2.733	2.33	
177	9/8/2004	1:08:56 PM		25.215	23.7	25.033	24.976	23.368		22.406	25.068	4.664	17.884	-1.212	-3.526		46.295	0.391	14.643	0.003		42.00	0.7	23.9	11.0	20.1	1.389	0.056	0.056	0.003	2.776	2.36	
178	9/8/2004	1:09:56 PM		25.216	23.721	25.025	25.058	23.44		22.458	24.834	4.518	18.299	-1.212	-3.537		46.397	0.389	14.643	0.003		43.00	0.71667	23.7	11.1	20.4	1.405	0.056	0.056	0.003	2.731	2.32	
179	9/8/2004	1:10:56 PM		25.191	23.711	24.98	25.038	23.42		22.599	25.077	4.432	18.516	-1.212	-3.506		46.569	0.39	14.643	0.003		44.00	0.73333	24.0	11.1	20.6	1.417	0.056	0.056	0.003	2.718	2.31	
180	9/8/2004	1:11:56 PM		25.183	23.718	24.961	25.039	23.466		22.51	25.071	4.448	18.247	-1.212	-3.54		46.053	0.389	14.643	0.003		45.00	0.75	23.9	11.0	20.4	1.405	0.056	0.056	0.003	2.736	2.33	
181	9/8/2004	1:12:56 PM		25.183	23.733	24.967	25.095	23.552		22.27	24.745	4.334	18.34	-1.206	-3.532		45.87	0.389	14.643	0.004		46.00	0.76667	23.6	10.9	20.3	1.400	0.056	0.056	0.003	2.745	2.34	
182	9/8/2004	1:13:56 PM		25.159	23.739	24.922	25.156	23.532		22.533	24.896	4.477	18.492	-1.209	-3.543		46.018	0.388	14.643	0.003		47.00	0.78333	23.8	11.0	20.5	1.414	0.056	0.056	0.003	2.714	2.31	
183	9/8/2004	1:14:56 PM		25.15	23.73	24.893	25.121	23.578		22.458	24.99	4.401	18.52	-1.209	-3.543		46.698	0.388	14.643	0.003		48.00	0.8	23.9	11.1	20.5	1.413	0.056	0.056	0.003	2.719	2.31	
184	9/8/2004	1:15:56 PM		25.135	23.735	24.868	25.157	23.574		22.606	25.093	4.584	18.235	-1.209	-3.555		45.782	0.387	14.643	0.003		49.00	0.81667	24.0	10.9	20.4	1.408	0.055	0.056	0.003	2.723	2.32	
185	9/8/2004	1:16:56 PM		25.127	23.747	24.855	25.198	23.605		22.568	25.013	4.494	18.399	-1.212	-3.572		46.128	0.386	14.643	0.003		50.00	0.83333	23.9	11.0	20.5	1.412	0.055	0.055	0.003	2.709	2.31	
186	9/8/2004	1:17:56 PM		25.107	23.752	24.83	25.209	23.591		22.384	24.928	4.43	18.26	-1.212	-3.572		46.183	0.387	14.643	0.003		51.00	0.85	23.8	11.0	20.3	1.401	0.055	0.056	0.003	2.739	2.33	
187	9/8/2004	1:18:56 PM		25.088	23.753	24.801	25.255	23.596		22.539	25.089	4.426	18.491	-1.212	-3.569		45.995	0.386	14.643	0.003		52.00	0.86667	24.0	11.0	20.5	1.414	0.055	0.056	0.003	2.709	2.31	
188	9/8/2004	1:19:56 PM		25.084	23.774	24.797	25.266	23.638		22.388	24.849	4.396	18.223	-1.209	-3.584		45.839	0.385	14.643	0.003		53.00	0.88333	23.7	10.9	20.3	1.400	0.055	0.055	0.003	2.730	2.32	
189	9/8/2004	1:20:56 PM		25.076	23.781	24.774	25.292	23.669		22.427	24.967	4.486	18.301	-1.215	-3.578		46.252	0.385	14.643	0.003		54.00	0.9	23.8	11.0	20.4	1.404	0.055	0.055	0.003	2.724	2.32	
190	9/8/2004	1:21:56 PM		25.061	23.781	24.769	25.288	23.685		22.601	25.031	4.337	18.608	-1.212	-3.561		45.722	0.388	14.643	0.003		55.00	0.91667	23.9	10.9	20.6	1.421	0.056	0.056	0.003	2.714	2.31	
191	9/8/2004	1:22:56 PM		25.047	23.792	24.76	25.309	23.671		22.355	24.87	4.389	18.239	-1.212	-3.558		45.674	0.388	14.643	0.003		56.00	0.93333	23.7	10.9	20.3	1.399	0.056	0.056	0.003	2.755	2.34	
192	9/8/2004	1:23:56 PM		25.033	23.793	24.746	25.285	23.712		22.819	25.381	4.498	18.59	-1.209	-3.558		45.64	0.387	14.643	0.004		57.00	0.95	24.3	10.9	20.7	1.428	0.055	0.056	0.003	2.695	2.29	
193	9/8/2004	1:24:56 PM		25.029	23.81	24.742	25.261	23.658		22.299	24.656	4.556	18.085	-1.212	-3.621		46.446	0.381	14.643	0.003		58.00	0.96667	23.5	11.1	20.2	1.392	0.055	0.055	0.003	2.721	2.32	
194	9/8/2004	1:25:56 PM		25.006	23.802	24.719	25.223	23.69		22.402	24.867	4.56	18.108	-1.212	-3.627		46.366	0.379	14.643	0.003		59.00	0.98333	23.7	11.0	20.3	1.397	0.054	0.055	0.003	2.700	2.30	
195	9/8/2004	1:26:56 PM		25.018	23.843	24.756	25.244	23.712		22.058	24.397	4.39	18.073	-1.209	-3.639		46.385	0.378	14.643	0.003		60.00	1	23.3	11.0	20.1	1.383	0.054	0.054	0.003	2.716	2.31	
196	9/8/2004	1:27:56 PM		24.994	23.824	24.732	25.226	23.723		22.265	24.517	4.375	18.294	-1.209	-3.615		46.368	0.38	14.643	0.003		61.00	1.01667	23.4	11.0	20.3	1.398	0.054	0.055	0.003	2.703	2.30	
197	9/8/2004	1:28:56 PM		24.99	23.841	24.733	25.197	23.724		22.425	24.861	4.428	18.389	-1.212	-3.624		46.452	0.379	14.643	0.003		62.00	1.03333	23.7	11.1	20.4	1.407	0.054	0.055	0.003	2.679	2.28	
198	9/8/2004	1:29:56 PM		24.981	23.841	24.734	25.198	23.76		22.182	24.54	4.316	18.262	-1.212	-3.613		46.106	0.381	14.643	0.003		63.00	1.05	23.4	11.0	20.2	1.394	0.055	0.055	0.003	2.718	2.31	
199	9/8/2004	1:30:56 PM		24.987	23.863	24.765	25.184	23.811		33.145	37.531	5.022	28.459	-1.088	-2.135		49.958	0.55	14.643	0.003		64.00	1.06667	36.4	11.9	30.8	2.124	0.079	0.079	0.003	2.573	2.19	
200	9/8/2004	1:31:56 PM		25.044	23.874	24.947	25.23	23.883		32.473	37.204	4.691	28.219	-0.763	-1.898		48.218	0.568	14.643	0.003		65.00	1.08333	36.1	11.5	30.3	2.092	0.081	0.081	0.003	2.684	2.28	
201	9/8/2004	1:32:56 PM		25.119	23.875	25.013	25.316	23.828		32.056	36.601	4.374	28.201	-0.81	-1.947		46.201	0.563	14.643	0.003		66.00	1.1	35.5	11.0	30.1	2.077	0.081	0.081	0.003	2.674	2.28	
202	9/8/2004	1:33:56 PM		25.19	23.88	25.063	25.362	23.744		32.127	36.816	4.487	27.96	-0.807	-1.947		46.087	0.564	14.643	0.003		67.00	1.11667	35.7	11.0	30.0	2.071	0.081	0.081	0.003	2.683	2.28	

RUN # 4.21 A, B AND C; PRE-TEST BASELINE WITH 0.1 M NAOH - CONT.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	A
203	9/8/2004	1:34:56 PM		25.235	23.88	25.099	25.412	23.664		32.361	37.146	4.468	28.188	-0.807	-1.956		46.174	0.563	14.643	0.003		68.00	1.13333	36.0	11.0	30.3	2.087	0.081	0.080	0.003	2.655	2.26	
204	9/8/2004	1:35:56 PM		25.284	23.875	25.108	25.411	23.648		32.214	37.105	4.465	27.977	-0.813	-1.959		46.064	0.564	14.643	0.003		69.00	1.15	36.0	11.0	30.1	2.075	0.081	0.081	0.003	2.675	2.28	
205	9/8/2004	1:36:56 PM		25.348	23.889	25.187	25.47	23.526		31.92	36.762	4.363	27.788	-0.804	-1.95		46.354	0.563	14.643	0.004		70.00	1.16667	35.6	11.0	29.9	2.058	0.081	0.080	0.003	2.686	2.29	
206	9/8/2004	1:37:56 PM		25.372	23.882	25.19	25.429	23.475		31.988	36.715	4.374	27.903	-0.807	-1.959		45.755	0.563	14.643	0.003		71.00	1.18333	35.6	10.9	29.9	2.065	0.081	0.080	0.003	2.677	2.28	
207	9/8/2004	1:38:56 PM		25.436	23.907	25.25	25.443	23.424		32.129	37.175	4.474	27.702	-0.804	-1.959		45.987	0.563	14.643	0.004		72.00	1.2	36.0	11.0	29.9	2.063	0.081	0.080	0.003	2.675	2.28	
208	9/8/2004	1:39:56 PM		25.45	23.895	25.268	25.412	23.498		32.17	37.028	4.409	27.95	-0.824	-1.956		46.402	0.563	14.643	0.003		73.00	1.21667	35.9	11.1	30.1	2.073	0.081	0.080	0.003	2.661	2.26	
209	9/8/2004	1:40:56 PM		25.49	23.906	25.304	25.427	23.559		32.148	37.057	4.384	27.975	-0.81	-1.956		45.765	0.564	14.643	0.004		74.00	1.23333	35.9	10.9	30.1	2.073	0.081	0.080	0.003	2.663	2.27	
210	9/8/2004	1:41:56 PM		25.536	23.922	25.355	25.428	23.565		31.959	36.682	4.255	28.065	-0.804	-1.95		46.214	0.563	14.643	0.004		75.00	1.25	35.6	11.0	30.0	2.069	0.081	0.080	0.003	2.659	2.26	
211	9/8/2004	1:42:56 PM		25.555	23.906	25.354	25.382	23.544		32.303	37.316	4.293	28.272	-0.807	-1.965		45.893	0.563	14.643	0.003		76.00	1.26667	36.2	10.9	30.3	2.088	0.081	0.080	0.003	2.635	2.24	
212	9/8/2004	1:43:56 PM		25.58	23.911	25.384	25.382	23.624		32.096	36.932	4.401	27.924	-0.833	-1.959		46.049	0.563	14.643	0.003		77.00	1.28333	35.8	11.0	30.0	2.069	0.081	0.080	0.003	2.657	2.26	
213	9/8/2004	1:44:56 PM		25.621	23.927	25.415	25.403	23.68		32.077	36.847	4.3	28.125	-0.85	-1.956		45.682	0.563	14.643	0.003		78.00	1.3	35.7	10.9	30.1	2.075	0.081	0.080	0.003	2.647	2.25	
214	9/8/2004	1:45:56 PM		25.646	23.932	25.43	25.428	23.76		32.488	37.082	4.366	28.533	-0.81	-1.965		45.889	0.564	14.643	0.003		79.00	1.31667	36.0	10.9	30.5	2.104	0.081	0.080	0.003	2.615	2.23	
215	9/8/2004	1:46:56 PM		25.661	23.932	25.44	25.438	23.77		32.224	37.142	4.416	28.022	-0.81	-1.959		45.895	0.564	14.643	0.003		80.00	1.33333	36.0	10.9	30.1	2.077	0.081	0.080	0.003	2.648	2.25	
216	9/8/2004	1:47:56 PM		25.668	23.934	25.432	25.46	23.797		31.982	36.541	4.301	28.153	-0.81	-1.962		46.028	0.564	14.643	0.003		81.00	1.35	35.4	11.0	30.1	2.073	0.081	0.080	0.003	2.653	2.26	
217	9/8/2004	1:48:56 PM		25.709	23.959	25.478	25.491	23.828		32.199	36.831	4.294	28.342	-0.804	-1.95		45.97	0.564	14.643	0.004		82.00	1.36667	35.7	10.9	30.3	2.087	0.081	0.080	0.003	2.632	2.24	
218	9/8/2004	1:49:56 PM		25.73	23.956	25.479	25.517	23.839		32.1	36.783	4.33	28.121	-0.807	-1.956		45.651	0.563	14.643	0.004		83.00	1.38333	35.7	10.9	30.1	2.076	0.081	0.080	0.003	2.641	2.25	
219	9/8/2004	1:50:56 PM		25.746	23.962	25.485	25.504	23.865		32.098	36.775	4.284	28.131	-0.81	-1.968		46.089	0.563	14.643	0.004		84.00	1.4	35.6	11.0	30.1	2.076	0.081	0.080	0.003	2.640	2.25	
220	9/8/2004	1:51:56 PM		25.756	23.967	25.51	25.544	23.895		32.434	37.38	4.37	28.275	-0.81	-1.953		46.016	0.564	14.643	0.004		85.00	1.41667	36.3	11.0	30.4	2.093	0.081	0.080	0.003	2.622	2.23	
221	9/8/2004	1:52:56 PM		25.768	23.968	25.522	25.56	23.907		32.233	37.096	4.402	28.116	-0.807	-1.959		45.899	0.564	14.643	0.003		86.00	1.43333	36.0	10.9	30.2	2.080	0.081	0.080	0.003	2.637	2.24	
222	9/8/2004	1:53:56 PM		25.793	23.984	25.557	25.631	23.902		32.573	37.351	4.407	28.455	-0.804	-1.95		46.083	0.564	14.643	0.003		87.00	1.45	36.2	11.0	30.5	2.104	0.081	0.079	0.003	2.605	2.22	
223																																	
224																																	
225																																	
226																																	
227																																	
228																																	
229	A	Averages		25.0	23.6	25.0	24.7	23.4		12.1	13.5	4.4	8.0	-1.2	-4.7		46.2	0.2	14.6	0.0				12.4	11.0	10.0	0.692	0.030	0.030	0.003	3.0	2.6	
230		Maximum		25.0	23.7	25.0	24.9	23.5		12.3	13.7	4.6	8.2	-1.2	-4.6		46.6	0.2	14.6	0.0				12.6	11.1	10.3	0.707	0.033	0.033	0.003	3.4	2.9	
231		Median		25.0	23.6	25.0	24.7	23.4		12.1	13.5	4.5	8.0	-1.2	-4.7		46.1	0.2	14.6	0.0				12.4	11.0	10.1	0.695	0.030	0.030	0.003	3.0	2.5	
232		Minimum		24.9	23.5	24.9	24.6	23.3		11.8	13.4	4.2	7.7	-1.2	-4.7		46.0	0.2	14.6	0.0				12.3	11.0	9.7	0.672	0.028	0.028	0.003	2.8	2.4	
233		2 x Std Dev		0.050	0.083	0.039	0.157	0.181		0.286	0.154	0.152	0.273	0.005	0.091		0.296	0.014	0.000	0.001				0.154	0.070	0.265	0.018	0.002	0.002	0.000	0.271	0.230	
234		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
235		* Backpulse points in box are not included																															
236																																	
237																																	
238	B	Averages		25.1	23.8	24.8	25.2	23.6		22.4	24.9	4.4	18.3	-1.2	-3.6		46.1	0.4	14.6	0.0				23.8	11.0	20.4	1.405	0.055	0.055	0.003	2.7	2.3	
239		Maximum		25.2	23.8	25.0	25.3	23.8		22.8	25.4	4.6	18.6	-1.2	-3.5		46.7	0.4	14.6	0.0				24.3	11.1	20.7	1.428	0.056	0.056	0.003	2.8	2.3	
240		Median		25.1	23.8	24.8	25.2	23.6		22.4	24.9	4.4	18.3	-1.2	-3.6		46.1	0.4	14.6	0.0				23.8	11.0	20.4	1.405	0.055	0.056	0.003	2.7	2.3	
241		Minimum		25.0	23.7	24.7	25.0	23.4		22.1	24.4	4.3	18.1	-1.2	-3.6		45.6	0.4	14.6	0.0				23.3	10.9	20.1	1.383	0.054	0.054	0.003	2.7	2.3	
242		2 x Std Dev		0.135	0.083	0.170	0.157	0.176		0.337	0.453	0.148	0.316	0.004	0.071		0.606	0.008	0.000	0.001				0.453	0.144	0.301	0.021	0.001	0.001	0.000	0.034	0.029	
243		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
244		* Backpulse points in box are not included																															
245																																	
246																																	
247	C	Averages		25.6	23.9	25.4	25.5	23.7		32.2	37.0	4.4	28.1	-0.8	-2.0		46.0	0.6	14.6	0.0				35.9	11.0	30.1	2.078	0.081	0.080	0.003	2.6	2.3	
248		Maximum		25.8	24.0	25.6	25.6	23.9		32.6	37.4	4.5	28.5	-0.8	-2.0		46.4	0.6	14.6	0.0				36.3	11.1	30.5	2.104	0.081	0.081	0.003	2.7	2.3	
249		Median		25.6	23.9	25.4	25.4	23.7		32.2	37.0	4.4	28.1	-0.8	-2.0		46.0	0.6	14.6	0.0				35.9	11.0	30.1	2.076	0.081	0.080	0.003	2.7	2.3	
250		Minimum		25.2	23.9	25.1	25.4	23.4		31.9	36.5	4.3	27.7	-0.9	-2.0		45.7	0.6	14.6	0.0				35.4	10.9	29.9	2.058	0.081	0.079	0.003	2.6	2.2	
251		2 x Std Dev		0.331	0.064	0.270	0.126	0.307		0.345	0.463	0.127	0.408	0.022	0.010		0.392	0.001	0.000	0.001				0.463	0.093	0.349	0.024	0.000	0.001	0.000	0.042	0.035	
252		Number of Points Used*		20	20	20	20	20		20	20	20	20	20	20		20	20	20	20				20	20	20	20	20	20	20	20	20	
253		* Backpulse points in box are not included																															
254																												Calc	0.001				
255																											Avg St Dv (all pts)		0.001				
256																											Max St Dv (all pts)		0.002				
257																											Min St Dv (all pts)		0.001				

Section H3: Pilot Cesium Ion Exchange Process (UFP) Raw Data

The CIX was only operated for four cycles, Cycles 1 and 2 during Campaign II and Cycles 3 and 4 during Campaign III. Because each cycle data file is more than 6000 lines long, with data taken ever 60 seconds, the full data stream would occupy more than 75 pages per cycle. The full set is not published here, but is available upon request. However, since for most of the testing periods of each stage the data are similar, therefore, an abridged data set are given in the follow manner:

For each cycle the data for all six cycle steps have been condensed to fit onto 9 pages in equal time intervals to fit on the following number of pages.

LAW Treatment	Data pages 1 to 4 of a given cycle

For the Regeneration Process

0.1 M NaOH Displacement	Data page 5 of a given cycle
DI Water Pre-Elution Rinse	Data page 6 of a given cycle
0.5 M HNO_3 Eluent	Data page 7 of a given cycle
DI Water Post-Elution Rinse	Data page 8 of a given cycle
0.25 M NaOH Regeneration	Data page 9 of a given cycle

Notes on data:

1. The raw differential pressures were periodically adjusted by adding or subtracting an offset so that the corrected differential pressures would be zero when flow was zero. Those correction are shown in columns 27 to 32 of the tables.
2. The flowmeter reading was corrected using flow checks with a graduated cylinder and stopwatch.

The short headings for used in SIPP-CIX tables are described below

Column Heading		Description
Date		Day data point was taken
Time		Time data point was taken
P1		Gage pressure at the top of IX Column 1
P2		Gage pressure at the top of IX Column 2
P3		Pump Discharge Pressure
DP1		Pressure drop across resin bed in IX Column 1
DP2		Pressure drop across resin bed in IX Column 2
DP3		Redundant pressure drop across resin bed in IX Col. 1
DP4		Redundant pressure drop across resin bed in IX Col. 2
DP5		Pressure drop across bottom half of bed for Col. 1
DP6		Pressure drop across bottom half of bed for Col. 1
DP7		Pressure drop across bottom Flow Distributer for Col. 1
DP8		Pressure drop across bottom Flow Distributer for Co. 2
DP9		Pressure drop across top Flow Distributer for Col. 1
DP10		Pressure drop across top Flow Distributer for Col. 2
DP11		Pressure drop across filters
Flow Meter		Measured chemical supply flows to IX Columns
flow cor.		Period correction to flow meter after checking accuracy
Cond1		Conductivity probe for Lead Column
pH		pH probe
T1		Temperature of at top of Column 1
T2		Temperature of at top of Column 2
T3		Temperature of at bottom of Column 1
T4		Temperature of at bottom of Column 2
T5		Temperature of chemical supply flows to both columns
elapsed time		Hours of testing
DP1 cor.		DP1 correction for zero drift
DP2 cor.		DP2 correction for zero drift
DP3 cor.		DP3 correction for zero drift
DP4 cor.		DP4 correction for zero drift
DP5 cor.		DP5 correction for zero drift
DP6 cor.		DP6 correction for zero drift
Resin H1		Measured resin height in Column 1
Resin H2		Measured resin height in Column 2
Differential BV		Inlet Flow as a function of Bed Volumes
Cummulative BV		Total volume of flow thru the IX Columns in BV
Cummulative BV		Total volume of flow thru the IX Columns in BV

Table H3-1-1. CIX Campaign II, Cycle 1, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	4/26/2004	19:50:10.84	-0.05	-0.29	1.24	0.08	-0.03	-0.13	-0.04	0.04	-0.20	-0.08	0.02	-0.22	0.11	-0.03	0.14	0.04	83.58	11.37	20.53	22.86	22.53	22.64	15.05	0.00							6.20	6.20	0.00	0.00
2	4/26/2004	19:54:38.3	-0.05	-0.29	1.24	0.08	-0.03	-0.13	-0.03	0.04	-0.20	-0.08	0.02	-0.23	0.11	-0.04	0.14	0.04	83.58	11.37	20.66	22.74	22.57	22.61	14.93	0.07									0.00	0.00
3	4/26/2004	19:58:58.3	2.60	1.47	3.98	0.58	0.60	0.39	0.58	0.26	0.07	0.17	0.25	0.26	0.37	-5.59	0.14	0.04	83.58	11.37	20.78	22.38	22.62	22.65	14.89	0.15									0.00	0.10
4	4/26/2004	20:03:18.3	1.84	1.51	3.78	0.11	0.15	-0.11	0.13	0.07	-0.14	-0.06	0.06	1.11	0.09	2.66	6.99	6.60	83.58	11.38	20.83	22.67	22.83	22.70	14.78	0.22									0.02	0.27
5	4/26/2004	20:07:38.3	1.82	1.51	3.80	-0.03	0.15	-0.25	0.12	0.07	-0.14	-0.06	0.06	0.93	0.08	2.42	6.98	6.59	83.58	11.38	20.62	22.62	22.78	22.65	14.57	0.29									0.02	0.48
6	4/26/2004	20:11:58.3	1.75	1.51	3.67	-0.19	0.15	-0.41	0.13	0.07	-0.13	-0.06	0.05	-0.77	0.08	1.54	7.00	6.61	83.58	11.38	20.74	22.58	22.74	22.61	14.52	0.36									0.02	0.68
7	4/26/2004	20:16:18.3	1.73	1.32	3.67	-0.44	0.13	-0.61	0.13	0.04	-0.16	-0.04	0.08	-0.87	0.08	1.28	6.98	6.58	83.58	11.38	20.73	22.57	22.64	22.60	14.43	0.44									0.02	0.88
8	4/26/2004	20:20:38.3	1.40	1.16	3.30	-0.61	0.15	-0.82	0.14	-0.04	-0.14	-0.06	0.06	-1.00	0.08	1.10	7.01	6.62	83.58	11.38	20.72	22.64	22.63	22.67	14.42	0.51									0.02	1.09
9	4/26/2004	20:24:58.3	1.99	1.74	3.91	-0.83	0.04	-1.05	0.04	-0.12	-0.20	-0.21	-0.05	-1.17	-0.02	0.96	6.88	6.48	83.58	11.38	20.80	22.56	22.55	22.59	14.34	0.58									0.02	1.29
10	4/26/2004	20:29:18.3	1.95	1.74	3.89	-0.90	0.13	-1.09	0.12	-0.11	-0.14	-0.26	0.05	-1.17	0.05	0.86	7.00	6.60	83.58	11.39	20.84	22.60	22.52	22.55	14.14	0.65									0.02	1.50
11	4/26/2004	20:33:38.3	1.95	1.73	3.91	-1.00	0.13	-1.19	0.12	-0.14	-0.13	-0.39	0.06	-1.25	0.05	0.82	7.28	6.90	83.58	11.37	20.92	22.60	22.52	22.63	14.14	0.72									0.02	1.70
12	4/26/2004	20:42:38.3	1.95	1.73	3.91	-1.21	0.11	-1.43	0.09	-0.16	-0.13	-0.73	0.06	-1.38	-0.02	0.70	7.28	6.90	83.58	11.39	20.90	22.58	22.26	22.61	13.96	0.87									0.05	2.15
13	4/26/2004	20:55:38.3	1.99	1.73	3.91	-1.49	-0.06	-1.70	-0.06	-0.20	-0.18	-1.15	0.02	-1.52	-0.16	0.60	7.36	6.97	83.58	11.37	20.90	22.26	21.85	22.45	13.71	1.09									0.05	2.79
14	4/26/2004	21:08:38.3	2.01	1.73	3.93	-1.71	-0.30	-1.90	-0.29	-0.18	-0.20	-1.50	-0.02	-1.61	-0.32	0.55	7.36	6.97	87.75	11.33	20.89	22.09	21.60	22.44	13.86	1.31									0.05	3.43
15	4/26/2004	21:21:38.3	2.03	1.73	3.93	-1.84	-0.56	-2.04	-0.60	-0.14	-0.30	-1.77	-0.15	-1.69	-0.50	0.52	7.21	6.82	104.19	11.23	20.94	22.05	21.49	22.48	13.99	1.52									0.05	4.07
16	4/26/2004	21:34:38.3	2.08	1.74	3.98	0.02	-0.81	0.06	-0.80	0.10	-0.34	0.02	-0.35	-0.54	-0.63	0.49	7.29	6.90	136.84	11.17	21.29	21.93	21.44	22.28	13.70	1.74									0.05	4.70
17	4/26/2004	21:47:38.3	2.12	1.80	4.00	-0.03	-0.39	0.00	-0.15	0.11	-0.14	-0.12	-0.05	-0.57	0.38	0.10	7.30	6.91	169.48	11.10	21.74	21.89	21.41	22.16	13.58	1.96									0.05	5.35
18	4/26/2004	22:00:38.3	2.19	1.85	4.07	-0.09	-0.65	-0.09	-0.39	0.07	-0.20	-0.21	-0.30	-0.60	0.30	0.10	7.30	6.92	214.40	11.05	21.77	21.84	21.35	22.11	13.45	2.17									0.05	5.99
19	4/26/2004	22:13:38.3	2.25	1.91	4.13	-0.13	-0.87	-0.10	-0.56	0.06	-0.25	-0.32	-0.59	-0.57	0.18	0.10	7.30	6.92	255.14	11.01	21.96	21.87	21.31	21.90	13.40	2.39									0.05	6.63
20	4/26/2004	22:26:38.3	2.32	1.96	4.22	-0.16	-1.04	-0.15	-0.69	0.05	-0.31	-0.36	-0.87	-0.60	0.08	0.10	7.31	6.93	296.13	10.98	21.72	21.79	21.31	21.82	13.40	2.61									0.05	7.27
21	4/26/2004	22:39:38.3	2.38	2.02	4.26	-0.17	-1.17	-0.17	-0.87	0.07	-0.35	-0.42	-1.13	-0.61	0.02	0.10	7.24	6.86	320.67	10.94	22.11	21.78	21.29	21.65	12.98	2.82									0.05	7.91
22	4/26/2004	22:52:38.3	2.45	2.09	4.31	-0.17	-1.27	-0.20	-0.95	0.14	-0.38	-0.43	-1.30	-0.63	0.19	0.10	7.30	6.91	336.87	10.92	21.95	21.70	21.29	21.57	12.98	3.04									0.05	8.55
23	4/26/2004	23:05:38.3	2.49	2.13	4.33	-0.19	-1.35	-0.21	-1.04	0.14	-0.38	-0.48	-1.46	-0.63	0.05	0.10	7.29	6.90	344.97	10.91	22.10	21.69	21.20	21.56	12.89	3.26									0.05	9.19
24	4/26/2004	23:18:38.3	1.82	1.45	3.78	-0.20	-2.02	-0.17	-1.71	0.17	-0.68	-0.50	-1.57	-0.56	-0.02	0.09	7.34	6.95	349.15	10.93	21.86	21.61	21.20	21.56	12.81	3.47									0.05	9.83
25	4/26/2004	23:31:38.3	2.54	2.17	4.44	-0.16	-1.46	-0.15	-1.17	0.20	-0.34	-0.48	-1.67	-0.60	0.15	0.10	7.28	6.89	353.32	10.89	21.83	21.66	21.17	21.44	12.77	3.69									0.05	10.47
26	4/26/2004	23:44:38.3	2.56	2.20	4.48	-0.16	-1.48	-0.14	-1.17	0.21	-0.31	-0.51	-1.74	-0.60	0.11	0.10	7.32	6.93	353.32	10.89	21.62	21.61	21.12	21.48	12.73	3.91									0.05	11.11
27	4/26/2004	23:57:38.3	2.58	2.22	4.46	-0.16	-1.52	-0.15	-1.23	0.21	-0.30	-0.48	-1.77	-0.60	0.13	0.10	7.30	6.91	357.00	10.88	21.83	21.66	21.17	21.52	12.77	4.12									0.05	11.75
28	4/27/2004	00:10:38.3	2.60	2.24	4.51	-0.16	-1.54	-0.17	-1.25	0.23	-0.27	-0.52	-1.84	-0.60	0.11	0.09	7.31	6.93	353.32	10.88	21.62	21.61	21.12	21.48	12.81	4.34							5.70	5.85	0.05	12.39
29	4/27/2004	00:23:38.3	2.60	2.24	4.48	-0.13	-1.58	-0.14	-1.27	0.23	-0.24	-0.50	-1.84	-0.60	0.08	0.09	7.28	6.89	357.25	10.88	21.67	21.50	21.17	21.36	12.69	4.56									0.05	13.03
30	4/27/2004	00:36:38.3	2.61	2.24	4.49	-0.14	-1.58	-0.14	-1.29	0.23	-0.22	-0.52	-1.90	-0.61	0.08	0.10	7.28	6.90	357.49	10.87	21.62	21.53	21.20	21.40	12.65	4.77									0.05	13.67
31	4/27/2004	00:49:38.34	2.63	2.26	4.48	-0.16	-1.58	-0.15	-1.31	0.25	-0.20	-0.52	-1.91	-0.62	0.08	0.09	7.28	6.90	353.32	10.87	21.79	21.62	21.21	21.41	12.74	4.99									0.05	14.31
32	4/27/2004	01:02:38.3	2.61	2.24	4.55	-0.16	-1.60	-0.15	-1.29	0.23	-0.20	-0.54	-1.94	-0.62	0.04	0.10	7.28	6.89	353.32	10.88	21.67	21.50	21.17	21.36	12.61	5.21									0.05	14.95
33	4/27/2004	01:15:38.3	2.61	2.26	4.53	-0.16	-1.61	-0.17	-1.31	0.25	-0.24	-0.56	-1.94	-0.63	0.05	0.09	7.24	6.85	353.32	10.88	21.75	21.50	21.09	21.28	11.47	5.42									0.05	15.59
34	4/27/2004	01:28:38.3	2.63	2.26	4.55	-0.16	-1.61	-0.15	-1.31	0.25	-0.18	-0.53	-1.94	-0.63	0.05	0.09	7.32	6.93	353.32	10.88	21.67	21.50	21.09	21.28	11.47	5.64									0.05	16.23
35	4/27/2004	01:41:38.3	2.63	2.26	4.55	-0.16	-1.64	-0.17	-1.34	0.23	-0.17	-0.54	-1.97	-0.63	0.04	0.10	7.28	6.90	353.32	10.88	21.84	21.51	21.18	21.29	11.72	5.86									0.05	16.87
36	4/27/2004	01:54:38.3	2.63	2.26	4.51	-0.16	-1.64	-0.17	-1.34	0.25	-0.18	-0.54	-1.97	-0.62	0.05	0.10	7.26	6.88	353.32	10.88	21.59	21.50	21.09	21.28	11.47	6.07									0.05	17.51
37	4/27/2004	02:07:38.3	2.61	2.26	4.57	-0.17	-1.65	-0.17	-1.34	0.25	-0.17	-0.56	-1.97	-0.63	0.04	0.09	7.28	6.89	353.32	10.87	21.75	21.50	21.09	21.28	11.47	6.29									0.05	18.15
38	4/27/2004	02:20:38.3	2.63	2.26	4.55	-0.16	-1.64	-0.16	-1.34	0.25	-0.18	-0.56	-1.97	-0.62	0.05	0.10	7.33	6.95	353.32	10.88	21.62	21.45	21.12	21.24	11.42	6.51									0.05	18.79
39	4/27/2004	02:33:38.3	2.63	2.26	4.55	-0.16	-1.65	-0.17	-1.37	0.23	-0.18	-0.56	-1.96	-0.63	0.04	0.09	7.30	6.91	353.32	10.88	21.62	21.45	21.04	21.16	11.42	6.72									0.05	19.43
40	4/27/2004	02:46:38.3	2.63	2.26	4.53	-0.17	-1.65	-0.17	-1.37	0.23	-0.17	-0.56	-1.97	-0.63	0.02	0.09	7.25	6.86	353.32	10.88	21.50	21.40	21.08	21.19	11.29	6.94									0.05	20.07
41	4/27/2004	02:59:38.3	2.63	2.26	4.51	-0.17	-1.66	-0.17	-1.37	0.23	-0.18	-0.54	-1.97	-0.63	0.02	0.10	7.30	6.91	353.32	10.88	21.41	21.40	21.08	21.19	11.21	7.16									0.05	20.71
42	4/27/2004	03:12:38.3	2.63	2.26	4.51	-0.16	-1.67	-0.17	-1.37	0.25	-0.17	-0.54	-1.97	-0.62	0.02	0.10	7.28	6.90	353.32	10.88	21.53	21.36	21.03	21.15	11.25	7.37									0.05	21.35
43	4/27/2004	03:25:38.3	2.65	2.26	4.53	-0.16	-1.67	-0.17	-1.38	0.23	-0.18	-0.54	-1.97	-0.63	0.02	0.09	7.30	6.92	353.32	10.88	21.37	21.44	21.11	21.15	11.33	7.59									0.05	21.99
44	4/27/2004	03:38:38.3	2.63	2.26	4.49	-0.16	-1.67	-0.17	-1.38	0.23	-0.17	-0.54	-1.97	-0.63	0.02	0.10	7.29	6.90	353.32	10.88	21.49	21.39	21.15	21.18	11.28	7.81									0.05	22.63
45	4/27/2004	03:51:38.3	2.63	2.26	4.49	-0.16	-1.65	-0.17	-1.39	0.23	-0.17	-0.54	-1.97	-0.63	0.02	0.09	7.31	6.93	353.32	10.88	21.32	21.39	21.15	21.18	11.12	8.02									0.05	23.27
46	4/27/2004	04:04:38.3	2.65	2.26	4.53	-0.16	-1.69	-0.17	-1.37	0.23	-0.17	-0.52	-1.97	-0.62	0.03	0.09	7.34	6.95	353.32	10.88	21.36	21.35	21.18	21.14	11.32	8.24									0.05	23.91
47	4/27/2004	04:17:38.3	2.65	2.26	4.53	-0.16	-1.64	-0.17	-1.39	0.25	-0.14	-0.53	-1.97	-0.63	0.03	0.09	7.30	6.92	353.32	10.88	21.36	21.27	21.10	21.14	11.24	8.46									0.05	24.55
48	4/27/2004	04:30:38.3	2.65	2.26	4.46	-0.17	-1.65	-0.17	-1.41	0.25	-0.17	-0.54	-1.97	-0.63	0.02	0.09	7.28	6.89	353.32	10.88	21.36	21.35	21.02	21.06	11.15	8.67							5.70	5.80	0.05	25.19
49	4/27/2004	04:43:38.3	2.63	2.28	4.46	-0.17	-1.64	-0.17	-1.41	0.23	-0.16	-0.53	-1.97	-0.63	0.02	0.09	7.34	6.96	353.32	10.88	21.36	21.27	21.02	21.06	11.24	8.89									0.05	25.83
50	4/27/2004	04:56:38.3	2.65	2.26	4.46	-0.17	-1.65	-0.17	-1.41	0.25	-0.14	-0.53	-1.97	-0.63	0.02	0.09	7.31	6.93	353.32	10.88	21.40	21.31	21.07	21.10	11.28	9.11									0.05	26.47
51	4/27/2004	05:09:38.3	2.65	2.26	4.46	-0.16	-1.65	-0.17	-1.41	0.23	-0.14	-0.54	-1.97	-0.63	0.02	0.09	7.32	6.93	353.32	10.88	21.32	21.23	20.99	21.02	10.95	9.32									0.05	27.11
52	4/27/2004	05:22:38.3	2.65	2.28	4.46	-0.16	-1.65	-0.17	-1.41	0.23	-0.14	-0.53	-1.97	-0.65	0.02	0.09	7.30	6.92	353.32	10.88	21.28	21.27	21.02	21.06	11.15	9.54									0.05	27.75
53	4/27/2004	05:35:38.3	2.65	2.26	4.49	-0.16	-1.65	-0.17	-1.41	0.23	-0.14	-0.53	-1.97	-0.63	0.02	0.09	7.30	6.92	353.32	10.88	21.28	21.27	21.02	21.06	11.15	9.76									0.05	28.39
54	4/27/2004	05:48:38.3	2.67	2.28	4.46	-0.16	-1.65	-0.17	-1.41	0.23	-0.14	-0.53	-1.97	-0.65	0.03	0.09	7.31	6.93	353.32	10.88	21.32	21.23	20.99	21.02	11.12	9.97									0.05	29.03
55	4/27/2004	06:01:38.3	2.67	2.28	4.46	-0.18	-1.65	-0.17	-1.41	0.22	-0.14	-0.53	-1.99	-0.66	0.02	0.09	7.30	6.91	353.32	10.88	21.24	21.23	20.99	20.94	11.12	10.19									0.05	29.67
56	4/27/2004	06:14:38.3	2.67	2.28	4.46	-0.17	-1.65	-0.17	-1.41	0.23	-0.14	-0.53	-1.99	-0.67	0.02	0.09	7.28	6.90	353.32	10.89	21.32	21.23	20.99	21.02	11.04	10.41									0.05	30.31
57	4/27/2004	06:27:38.3	2.67	2.28	4.49	-0.17	-1.65	-0.17	-1.41	0.22	-0.14	-0.53	-1.97	-0.66	0.02	0.09	7.28	6.90	353.32	10.88	21.28	21.19	20.94	20.97	11.07	10.62									0.05	30.95
58	4/27/2004	06:40:38.3	2.67	2.28	4.48	-0.16	-1.65	-0.17	-1.41	0.21	-0.14	-0.53	-1.97	-0.67	0.03	0.09	7.30	6.92	353.32	10.88	21.23	21.22	20.98	21.01	11.03	10.84									0.05	31.59
59	4/27/2004	06:53:38.3	2.67	2.28	4.49	-0.16	-1.65	-0.17	-1.41	0.26	-0.13	-0.53	-1.97	-0.66	0.05	0.09	7.28	6.90	353.32	10.88	21.31	21.22	20.98	20.93	10.94	11.06									0.05	32.23
60	4/27/2004	07:06:38.3	2.67	2.28	4.44	-0.16	-1.65	-0.17	-1.41	0.26	-0.13	-0.52	-1.96	-0.66	-0.06	0.10	7.32	6.94	353.32	10.89	21.31	21.14	20.90	20.93	10.78	11.27									0.05	32.87
61	4/27/2004	07:19:38.34	2.67	2.28	4.48	-0.17	-1.65	-0.17	-1.41	0.23	-0.14	-0.53	-2.01	-0.67	-0.06	0.09	7.28	6.90	353.32	10.88	21.27	21.18	20.93	20.88	10.82	11.49									0.05	33.51
62	4/27/2004	07:32:38.3	2.69	2.28	4.46	-0.16	-1.65	-0.17	-1.41	0.25	-0.14	-0.53	-1.96	-0.67	-0.06	0.09	7.33	6.95	353.07	10.88	21.31	21.14	20.90	20.93	10.70	11.71									0.05	34.15
63	4/27/2004	07:45:38.3	1.00	0.57	2.82	0.47	20.03	0.33	20.26	0.23	20.15	0.06	-20.24	-0.12	0.15	0.10	7.32	6.94	353.32	10.87	21.39	21.22	20.98	20.77	11.43	11.92									0.05	34.79
64	4/27/2004	07:58:38.3	2.67	2.26	4.53	0.49	0.22	0.31	0.40	0.22	0.03	0.06	0.19	-0.12	0.16	0.09	7.32	6.94	353.32	10.87	21.64	21.22	20.98	20.85	11.52	12.14									0.05	35.40
65	4/27/2004	08:06:24.3	2.23	1.98	3.50	-0.13	-0.39	-0.31	-0.21	-0.09	-0.28	-0.15	-0.04	-0.41	-0.16	-0.07	0.14	0.04	353.32	10.88	21.48	21.14	20.90	20.85	11.27	12.27	0.00	0.00	0.00	0.02	0.01	0.00			0.00	35.74
66	4/27/2004	08:14:24.3	2.67	2.26	4.57	0.48	0.24	0.29	0.42	0.22	0.03	0.06	0.19	-0.12	0.18	0.09	7.29	6.90	353.32	10.86	21.81	21.15	20.99	20.86	11.36	12.40	0.46	0.43	0.44	0.51	0.21	0.25			0.05	36.04
67	4/27/2004	08:27:24.3	2.69	2.26	4.55	0.49	0.26	0.30	0.42	0.22	0.03	0.06	0.19	-0.12	0.16	0.10	7.28	6.90	353.32	10.87	21.11	21.18	21.01	20.96	11.47	12.62	0.47	0.45	0.45	0.51	0.21	0.25			0.05	36.68
68	4/27/2004	08:40:24.3	2.67	2.26	4.55	0.48	0.24	0.31	0.42	0.23	0.03	0.06	0.19	-0.12	0.18	0.10	7.31	6.93	353.32	10.87	20.69	21.08	20.91	20.95	11.29	12.84	0.46	0.43	0.46	0.51	0.22	0.25			0.05	37.32
69	4/27/2004	08:53:24.3	2.67	2.24	4.55	0.48	0.24	0.31	0.42	0.23	0.03	0.06	0.19	-0.13	0.16	0.10	7.32	6.93	350.62	10.87	21.22	21.21	20.97	20.92	11.34	13.05	0.46	0.43	0.46	0.51	0.22	0.25			0.05	37.96
70	4/27/2004	09:06:24.3	2.69	2.26	4.55	0.48	0.24	0.31	0.42	0.23	0.02	0.06	0.18	-0.12	0.16	0.09	7.29	6.90	353.32	10.87	21.82	21.24	21.00	20.95	11.54	13.27	0.46	0.43	0.46	0.51	0.22	0.24			0.05	38.60
71	4/27/2004	09:19:24.3	2.67	2.26	4.53	0.48	0.22	0.33	0.42	0.25	0.03	0.06	0.18	-0.12	0.18	0.10	7.32	6.94	349.15	10.87	22.16	21.18	20.94	20.89	11.39	13.49	0.46	0.41	0.48	0.51	0.24	0.25			0.05	39.24
72	4/27/2004	09:32:24.3	2.67	2.26	4.51	0.48	0.22	0.33	0.42	0.25	0.03	0.06	0.18	-0.12	0.18	0.09	7.29	6.90	349.15	10.87	22.47	21.25	21.00	20.95	11.62	13.70	0.46	0.41	0.48	0.51	0.24	0.25			0.05	39.88
73	4/27/2004	09:45:24.3	2.67	2.26	4.53	0.48	0.21	0.33	0.42	0.23	0.03	0.07	0.16	-0.11	0.19	0.10	7.28	6.90	349.15	10.87	22.81	21.35	20.94	20.98	11.65	13.92	0.46	0.40	0.48	0.51	0.22	0.25			0.05	40.52
74	4/27/2004	09:58:24.3	2.65	2.26	4.53	0.48	0.21	0.34	0.42	0.23	0.03	0.08	0.17	-0.10	0.19	0.09	7.30	6.92	349.15	10.87	22.69	21.40	20.99	21.02	11.77	14.14	0.46	0.40	0.49	0.51	0.22	0.25			0.05	41.16
75	4/27/2004	10:11:24.3	2.65	2.26	4.53	0.46	0.21	0.34	0.42	0.23	-0.01	0.08	0.16	-0.08	0.19	0.10	7.31	6.93	349.15	10.86	22.90	21.36	21.03	20.99	11.49	14.35	0.44	0.40	0.49	0.51	0.22	0.21			0.05	41.80
76	4/27/2004	10:24:24.3	2.65	2.26	4.53	0.46	0.21	0.35	0.44	0.23	0.01	0.06	0.17	-0.08	0.19	0.10	7.32	6.93	349.15	10.86	22.95	21.49	21.16	21.11	11.54	14.57	0.44	0.40	0.50	0.53	0.22	0.23			0.05	42.44
77	4/27/2004	10:37:24.3	2.63	2.26	4.57	0.46	0.21	0.31	0.42	0.23	0.01	0.06	0.17	-0.08	0.19	0.10	7.29	6.90	349.15	10.86	22.98	21.44	21.12	21.07	11.66	14.79	0.44	0.40	0.46	0.51	0.22	0.23			0.05	43.08
78	4/27/2004	10:50:24.3	2.63	2.26	4.53	0.46	0.21	0.33	0.42	0.25	-0.01	0.06	0.17	-0.08	0.19	0.10	7.28	6.89	349.15	10.86	23.12	21.66	21.25	21.12	11.71	15.00	0.44	0.40	0.48	0.51	0.24	0.21			0.05	43.72
79	4/27/2004	11:03:24.3	2.63	2.26	4.53	0.46	0.21	0.33	0.46	0.21	0.03	0.04	0.18	-0.10	0.15	0.10	7.31	6.93	349.15	10.86	23.12	21.66	21.33	21.20	11.55	15.22	0.44	0.40	0.48	0.55	0.20	0.25			0.05	44.36
80	4/27/2004	11:16:24.3	2.63	2.26	4.59	0.48	0.22	0.34	0.42	0.21	0.03	0.06	0.17	-0.08	0.15	0.10	7.30	6.91	349.15	10.86	23.37	21.67	21.42	21.30	11.64	15.44	0.46	0.41	0.49	0.51	0.20	0.25			0.05	45.00

Table H3-1-2. CIX Campaign II, Cycle 1, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
81	4/27/2004	11:29:24.3	2.63	2.26	4.53	0.48	0.22	0.33	0.42	0.21	0.03	0.06	0.18	-0.12	0.15	0.10	7.28	6.89	349.15	10.86	23.37	21.67	21.34	21.30	11.64	15.65	0.46	0.41	0.48	0.51	0.20	0.25			0.05	45.64
82	4/27/2004	11:42:24.3	2.63	2.26	4.55	0.48	0.24	0.33	0.42	0.21	0.03	0.06	0.18	-0.12	0.15	0.10	7.34	6.95	349.15	10.86	23.37	21.75	21.42	21.38	11.56	15.87	0.46	0.43	0.48	0.51	0.20	0.25			0.05	46.28
83	4/27/2004	11:55:24.3	2.61	2.26	4.55	0.48	0.24	0.34	0.42	0.21	0.03	0.06	0.18	-0.12	0.15	0.10	7.32	6.93	349.15	10.85	23.54	21.76	21.43	21.47	11.57	16.09	0.46	0.43	0.49	0.51	0.20	0.25			0.05	46.92
84	4/27/2004	12:08:24.3	2.60	2.26	4.55	0.48	0.24	0.33	0.42	0.21	0.03	0.06	0.18	-0.12	0.15	0.10	7.30	6.92	349.15	10.86	23.67	21.81	21.56	21.43	11.70	16.30	0.46	0.43	0.48	0.51	0.20	0.25			0.05	47.56
85	4/27/2004	12:21:24.3	2.61	2.26	4.53	0.49	0.24	0.33	0.42	0.21	0.03	0.06	0.19	-0.13	0.15	0.10	7.33	6.95	349.15	10.85	23.59	21.81	21.48	21.43	11.70	16.52	0.47	0.43	0.48	0.51	0.20	0.25			0.05	48.20
86	4/27/2004	12:34:24.3	2.61	2.26	4.53	0.49	0.24	0.34	0.42	0.22	0.03	0.06	0.18	-0.12	0.15	0.10	7.28	6.90	349.15	10.86	23.76	21.90	21.65	21.60	11.79	16.74	0.47	0.43	0.49	0.51	0.21	0.25			0.05	48.84
87	4/27/2004	12:47:24.3	2.60	2.24	4.55	0.48	0.24	0.34	0.44	0.23	0.03	0.07	0.19	-0.12	0.15	0.12	7.31	6.93	349.15	10.86	23.85	21.91	21.58	21.62	11.64	16.95	0.46	0.43	0.49	0.53	0.22	0.25			0.05	49.48
88	4/27/2004	13:00:24.3	2.60	2.24	4.53	0.51	0.24	0.34	0.42	0.23	0.03	0.08	0.19	-0.12	0.15	0.12	7.30	6.91	349.15	10.86	23.88	21.94	21.62	21.65	11.76	17.17	0.49	0.43	0.49	0.51	0.22	0.25			0.05	50.12
89	4/27/2004	13:13:24.3	2.60	2.24	4.55	0.49	0.24	0.33	0.42	0.23	0.03	0.08	0.19	-0.12	0.15	0.12	7.32	6.94	349.15	10.86	23.93	21.99	21.66	21.70	11.72	17.39	0.47	0.43	0.48	0.51	0.22	0.25			0.05	50.76
90	4/27/2004	13:26:24.3	2.58	2.24	4.53	0.48	0.24	0.33	0.42	0.23	0.03	0.09	0.19	-0.12	0.15	0.09	7.28	6.89	349.15	10.85	24.10	22.00	21.67	21.79	11.82	17.60	0.46	0.43	0.48	0.51	0.22	0.25			0.05	51.40
91	4/27/2004	13:39:24.34	2.60	2.24	4.53	0.48	0.24	0.30	0.42	0.23	0.03	0.08	0.19	-0.12	0.15	0.08	7.32	6.94	349.15	10.85	24.05	22.03	21.71	21.74	11.69	17.82	0.46	0.43	0.45	0.51	0.22	0.25			0.05	52.04
92	4/27/2004	13:52:24.3	2.58	2.24	4.53	0.49	0.24	0.30	0.42	0.23	0.03	0.08	0.18	-0.11	0.15	0.09	7.31	6.93	349.15	10.86	24.10	22.08	21.75	21.79	11.73	18.04	0.47	0.43	0.45	0.51	0.22	0.25			0.05	52.68
93	4/27/2004	14:05:24.3	2.58	2.24	4.53	0.48	0.24	0.30	0.42	0.25	0.03	0.09	0.19	-0.12	0.15	0.09	7.28	6.90	349.15	10.86	24.27	22.09	21.77	21.80	11.74	18.25	0.46	0.43	0.45	0.51	0.24	0.25			0.05	53.32
94	4/27/2004	14:18:24.3	2.58	2.24	4.51	0.49	0.24	0.31	0.42	0.23	0.03	0.09	0.19	-0.11	0.15	0.10	7.30	6.92	349.15	10.84	24.23	22.13	21.80	21.91	11.70	18.47	0.47	0.43	0.46	0.51	0.22	0.25			0.05	53.96
95	4/27/2004	14:31:24.3	2.56	2.24	4.51	0.48	0.24	0.31	0.42	0.21	0.03	0.09	0.19	-0.12	0.15	0.09	7.29	6.90	349.15	10.85	24.23	22.21	21.80	21.91	11.62	18.69	0.46	0.43	0.46	0.51	0.20	0.25			0.05	54.60
96	4/27/2004	14:44:24.3	2.56	2.22	4.51	0.48	0.21	0.31	0.42	0.20	-0.01	0.08	0.18	-0.11	0.15	0.10	7.28	6.90	349.15	10.83	24.32	22.22	21.89	22.01	11.63	18.90	0.46	0.40	0.46	0.51	0.19	0.21			0.05	55.24
97	4/27/2004	14:57:24.3	2.56	2.22	4.48	0.48	0.21	0.33	0.42	0.21	-0.01	0.08	0.19	-0.10	0.15	0.09	7.32	6.93	349.15	10.84	24.15	22.21	21.88	21.91	11.78	19.12	0.46	0.40	0.48	0.51	0.20	0.21			0.05	55.88
98	4/27/2004	15:10:24.3	2.56	2.22	4.49	0.48	0.22	0.33	0.42	0.22	0.01	0.06	0.19	-0.10	0.15	0.10	7.28	6.90	349.15	10.84	24.19	22.25	21.85	21.96	11.91	19.34	0.46	0.41	0.48	0.51	0.21	0.23			0.05	56.52
99	4/27/2004	15:23:24.3	2.54	2.22	4.51	0.48	0.22	0.33	0.39	0.22	-0.01	0.06	0.19	-0.10	0.15	0.09	7.28	6.90	349.15	10.83	24.31	22.29	21.88	21.99	11.70	19.55	0.46	0.41	0.48	0.48	0.21	0.21			0.05	57.16
100	4/27/2004	15:36:24.3	2.54	2.22	4.49	0.48	0.24	0.33	0.39	0.23	-0.01	0.06	0.16	-0.08	0.15	0.10	7.32	6.93	349.15	10.82	24.15	22.29	21.96	21.99	11.70	19.77	0.46	0.43	0.48	0.48	0.22	0.21			0.05	57.80
101	4/27/2004	15:49:24.3	2.54	2.20	4.51	0.48	0.22	0.33	0.39	0.22	-0.01	0.06	0.16	-0.10	0.15	0.09	7.29	6.90	353.32	10.83	24.15	22.29	21.96	22.07	11.62	19.99	0.46	0.41	0.48	0.48	0.21	0.21			0.05	58.44
102	4/27/2004	16:02:24.3	2.56	2.20	4.49	0.48	0.23	0.33	0.39	0.22	-0.01	0.04	0.16	-0.08	0.15	0.10	7.33	6.95	349.15	10.82	23.94	22.32	22.00	22.03	11.57	20.20	0.46	0.42	0.48	0.48	0.21	0.21			0.05	59.08
103	4/27/2004	16:15:24.3	2.54	2.20	4.51	0.48	0.23	0.34	0.39	0.22	-0.01	0.06	0.16	-0.10	0.15	0.10	7.28	6.89	349.15	10.83	24.19	22.33	21.93	22.12	11.66	20.42	0.46	0.42	0.49	0.48	0.21	0.21			0.05	59.72
104	4/27/2004	16:28:24.3	2.54	2.20	4.49	0.48	0.23	0.33	0.40	0.23	-0.01	0.07	0.16	-0.10	0.15	0.09	7.30	6.91	353.07	10.82	24.23	22.29	21.96	22.15	11.70	20.64	0.46	0.42	0.48	0.49	0.22	0.21			0.05	60.36
105	4/27/2004	16:41:24.3	2.52	2.20	4.53	0.48	0.23	0.34	0.39	0.22	-0.01	0.06	0.16	-0.08	0.15	0.10	7.28	6.90	349.15	10.81	24.19	22.33	21.93	22.12	11.66	20.85	0.46	0.42	0.49	0.48	0.21	0.21			0.05	61.00
106	4/27/2004	16:54:24.3	2.52	2.20	4.46	0.48	0.24	0.33	0.39	0.22	-0.01	0.06	0.16	-0.08	0.15	0.09	7.28	6.90	348.90	10.82	24.27	22.25	21.93	22.12	11.66	21.07	0.46	0.43	0.48	0.48	0.21	0.21			0.05	61.64
107	4/27/2004	17:07:24.3	2.52	2.20	4.51	0.48	0.24	0.34	0.39	0.23	-0.01	0.07	0.16	-0.10	0.15	0.10	7.31	6.93	349.15	10.83	24.15	22.29	21.96	22.15	11.70	21.29	0.46	0.43	0.49	0.48	0.22	0.21			0.05	62.28
108	4/27/2004	17:20:24.3	2.54	2.20	4.48	0.48	0.24	0.34	0.39	0.22	-0.01	0.06	0.16	-0.10	0.15	0.10	7.28	6.90	352.34	10.82	24.11	22.25	21.93	22.12	11.58	21.50	0.46	0.43	0.49	0.48	0.21	0.21			0.05	62.92
109	4/27/2004	17:33:24.3	2.52	2.18	4.49	0.48	0.21	0.33	0.39	0.22	-0.01	0.06	0.16	-0.10	0.15	0.10	7.24	6.86	349.15	10.83	24.35	22.33	22.01	22.20	11.74	21.72	0.46	0.40	0.48	0.48	0.21	0.21			0.05	63.56
110	4/27/2004	17:46:24.3	2.52	2.22	4.55	0.48	0.24	0.34	0.39	0.25	-0.01	0.06	0.16	-0.10	0.15	0.10	7.32	6.93	349.15	10.81	24.10	22.32	21.92	22.11	11.49	21.94	0.46	0.43	0.49	0.48	0.24	0.21			0.05	64.20
111	4/27/2004	17:59:24.3	2.54	2.20	4.53	0.48	0.24	0.33	0.39	0.23	-0.01	0.04	0.16	-0.10	0.15	0.10	7.28	6.89	349.15	10.83	24.10	22.32	21.92	22.11	11.49	22.15	0.46	0.43	0.48	0.48	0.22	0.21			0.05	64.84
112	4/27/2004	18:12:24.3	2.54	2.20	4.51	0.48	0.21	0.33	0.39	0.21	-0.01	0.06	0.18	-0.11	0.15	0.09	7.22	6.84	353.32	10.80	23.88	22.18	22.02	22.13	11.43	22.37	0.46	0.40	0.48	0.48	0.20	0.21			0.05	65.49
113	4/27/2004	18:25:24.3	2.54	2.20	4.49	0.48	0.24	0.34	0.39	0.23	0.01	0.06	0.19	-0.08	0.15	0.10	7.26	6.88	353.32	10.81	23.85	22.23	21.99	22.18	11.56	22.59	0.46	0.43	0.49	0.48	0.22	0.23			0.05	66.13
114	4/27/2004	18:38:24.3	2.56	2.22	4.53	0.48	0.24	0.34	0.42	0.23	-0.01	0.04	0.16	-0.08	0.15	0.10	7.32	6.94	353.32	10.81	23.76	22.14	21.89	22.09	11.30	22.80	0.46	0.43	0.49	0.51	0.22	0.21			0.05	66.77
115	4/27/2004	18:51:24.3	2.56	2.22	4.49	0.48	0.24	0.34	0.42	0.22	-0.01	0.06	0.19	-0.08	0.15	0.09	7.32	6.93	349.15	10.81	23.60	22.22	21.89	22.17	11.30	23.02	0.46	0.43	0.49	0.51	0.21	0.21			0.05	67.41
116	4/27/2004	19:04:24.3	2.56	2.22	4.49	0.48	0.24	0.34	0.42	0.21	0.01	0.06	0.19	-0.10	0.15	0.09	7.28	6.90	351.60	10.82	23.59	22.21	21.96	22.16	11.37	23.24	0.46	0.43	0.49	0.51	0.20	0.23			0.05	68.05
117	4/27/2004	19:17:24.3	2.56	2.22	4.51	0.48	0.24	0.34	0.42	0.21	-0.01	0.08	0.18	-0.10	0.15	0.09	7.28	6.90	353.32	10.81	23.62	22.16	21.92	22.11	11.33	23.45	0.46	0.43	0.49	0.51	0.20	0.21			0.05	68.69
118	4/27/2004	19:30:24.3	2.58	2.22	4.49	0.48	0.24	0.33	0.42	0.21	0.03	0.08	0.19	-0.11	0.15	0.09	7.30	6.91	353.32	10.80	23.41	22.12	21.87	22.07	11.28	23.67	0.46	0.43	0.48	0.51	0.20	0.25			0.05	69.33
119	4/27/2004	19:43:24.3	2.58	2.22	4.49	0.48	0.28	0.33	0.42	0.21	0.03	0.08	0.18	-0.12	0.15	0.09	7.28	6.90	353.32	10.81	23.24	22.03	21.78	21.97	11.11	23.89	0.46	0.47	0.48	0.51	0.20	0.25			0.05	69.97
120	4/27/2004	19:56:24.3	2.58	2.22	4.46	0.48	0.28	0.34	0.42	0.25	0.03	0.09	0.18	-0.12	0.15	0.09	7.33	6.95	353.32	10.80	23.32	22.11	21.78	22.05	11.27	24.10	0.46	0.47	0.49	0.51	0.24	0.25			0.05	70.61
121	4/27/2004	20:09:24.34	2.58	2.24	4.49	0.48	0.27	0.34	0.41	0.25	0.03	0.08	0.19	-0.12	0.15	0.08	7.28	6.90	353.07	10.81	23.15	22.02	21.77	21.96	11.26	24.32	0.46	0.46	0.49	0.50	0.24	0.25			0.05	71.25
122	4/27/2004	20:22:24.3	2.60	2.24	4.48	0.48	0.28	0.36	0.42	0.25	0.03	0.08	0.19	-0.12	0.15	0.08	7.28	6.90	353.32	10.80	22.90	22.01	21.76	21.95	11.08	24.54	0.46	0.47	0.51	0.51	0.24	0.25			0.05	71.89
123	4/27/2004	20:35:24.3	2.60	2.24	4.48	0.52	0.28	0.36	0.42	0.23	0.03	0.08	0.19	-0.12	0.15	0.08	7.28	6.89	353.07	10.81	23.01	21.96	21.71	21.91	11.28	24.75	0.50	0.47	0.51	0.51	0.22	0.25			0.05	72.53
124	4/27/2004	20:48:24.3	2.61	2.24	4.49	0.52	0.27	0.36	0.42	0.23	0.03	0.08	0.18	-0.12	0.15	0.08	7.29	6.90	353.32	10.81	22.89	21.99	21.75	21.94	11.32	24.97	0.50	0.46	0.51	0.51	0.22	0.25			0.05	73.17
125	4/27/2004	21:01:24.3	2.61	2.24	4.48	0.52	0.27	0.35	0.42	0.25	0.03	0.08	0.19	-0.12	0.15	0.10	7.22	6.83	353.32	10.81	22.80	21.82	21.66	21.85	10.98	25.19	0.50	0.46	0.50	0.51	0.24	0.25			0.05	73.81
126	4/27/2004	21:14:24.3	2.61	2.26	4.51	0.52	0.28	0.36	0.42	0.25	0.03	0.08	0.19	-0.13	0.15	0.12	7.30	6.92	353.07	10.80	22.72	21.82	21.66	21.85	11.14	25.40	0.50	0.47	0.51	0.51	0.24	0.25			0.05	74.45
127	4/27/2004	21:27:24.3	2.63	2.26	4.51	0.52	0.28	0.36	0.42	0.22	0.03	0.08	0.18	-0.12	0.15	0.10	7.30	6.91	353.32	10.80	22.51	21.86	21.61	21.73	11.10	25.62	0.50	0.47	0.51	0.51	0.21	0.25			0.05	75.09
128	4/27/2004	21:40:24.3	2.63	2.24	4.48	0.52	0.27	0.36	0.42	0.21	0.03	0.06	0.19	-0.12	0.13	0.10	7.28	6.90	353.32	10.82	22.58	21.77	21.60	21.71	11.09	25.84	0.50	0.46	0.51	0.51	0.20	0.25			0.05	75.73
129	4/27/2004	21:53:24.3	2.63	2.26	4.49	0.52	0.27	0.36	0.41	0.21	0.03	0.06	0.19	-0.10	0.11	0.10	7.28	6.90	353.32	10.81	22.30	21.64	21.48	21.67	10.96	26.05	0.50	0.46	0.51	0.50	0.20	0.25			0.05	76.37
130	4/27/2004	22:06:24.3	2.65	2.26	4.48	0.52	0.28	0.36	0.41	0.21	0.03	0.07	0.18	-0.11	0.15	0.12	7.28	6.89	353.32	10.81	22.37	21.71	21.55	21.58	11.03	26.27	0.50	0.47	0.51	0.50	0.20	0.25			0.05	77.01
131	4/27/2004	22:19:24.3	2.65	2.26	4.48	0.52	0.28	0.36	0.44	0.21	0.03	0.06	0.18	-0.10	0.15	0.10	7.32	6.94	353.32	10.81	22.20	21.63	21.47	21.58	10.87	26.49	0.50	0.47	0.51	0.53	0.20	0.25			0.05	77.65
132	4/27/2004	22:32:24.3	2.67	2.28	4.48	0.52	0.28	0.36	0.44	0.25	0.03	0.06	0.18	-0.10	0.15	0.09	7.26	6.87	353.32	10.81	22.07	21.50	21.41	21.52	10.81	26.70	0.50	0.47	0.51	0.53	0.24	0.25			0.05	78.29
133	4/27/2004	22:45:24.3	2.65	2.28	4.48	0.52	0.28	0.33	0.42	0.23	0.03	0.06	0.18	-0.08	0.15	0.10	7.29	6.90	353.32	10.82	21.99	21.58	21.41	21.52	10.73	26.92	0.50	0.47	0.48	0.51	0.22	0.25			0.05	78.93
134	4/27/2004	22:58:24.3	2.67	2.28	4.48	0.52	0.28	0.40	0.44	0.25	0.03	0.06	0.18	-0.10	0.15	0.10	7.32	6.94	353.32	10.81	21.98	21.57	21.32	21.43	10.80	27.14	0.50	0.47	0.55	0.53	0.24	0.25			0.05	79.57
135	4/27/2004	23:11:24.3	2.69	2.26	4.49	0.52	0.28	0.39	0.42	0.25	0.03	0.04	0.18	-0.08	0.15	0.10	7.28	6.90	353.32	10.82	21.85	21.44	21.27	21.39	10.75	27.35	0.50	0.47	0.54	0.51	0.24	0.25			0.05	80.21
136	4/27/2004	23:24:24.3	2.69	2.28	4.48	0.55	0.28	0.39	0.42	0.23	0.03	0.08	0.18	-0.08	0.15	0.09	7.32	6.93	353.32	10.81	21.81	21.48	21.23	21.34	10.79	27.57	0.53	0.47	0.54	0.51	0.22	0.25			0.05	80.85
137	4/27/2004	23:37:24.3	2.69	2.28	4.48	0.54	0.28	0.40	0.42	0.23	0.03	0.08	0.17	-0.08	0.15	0.10	7.33	6.95	353.32	10.81	21.72	21.39	21.22	21.33	10.62	27.79	0.52	0.47	0.55	0.51	0.22	0.25			0.05	81.49
138	4/27/2004	23:50:24.3	2.69	2.28	4.49	0.55	0.28	0.40	0.42	0.25	0.02	0.08	0.17	-0.10	0.15	0.10	7.30	6.91	353.32	10.81	21.72	21.39	21.22	21.25	10.70	28.00	0.53	0.47	0.55	0.51	0.24	0.24			0.05	82.13
139	4/28/2004	00:03:24.3	2.69	2.28	4.49	0.55	0.28	0.40	0.42	0.23	0.05	0.08	0.17	-0.08	0.15	0.09	7.32	6.94	353.32	10.82	21.64	21.30	21.14	21.25	10.70	28.22	0.53	0.47	0.55	0.51	0.22	0.27			0.05	82.77
140	4/28/2004	00:16:24.3	2.69	2.28	4.49	0.54	0.28	0.40	0.42	0.25	0.04	0.08	0.17	-0.10	0.14	0.10	7.28	6.89	353.32	10.80	21.55	21.21	21.13	21.16	10.61	28.44	0.52	0.47	0.55	0.51	0.24	0.26			0.05	83.41
141	4/28/2004	00:29:24.3	2.71	2.28	4.46	0.55	0.27	0.36	0.42	0.23	0.04	0.08	0.16	-0.08	0.13	0.10	7.28	6.90	353.32	10.80	21.55	21.29	21.13	21.08	10.69	28.65	0.53	0.46	0.51	0.51	0.22	0.26			0.05	84.05
142	4/28/2004	00:42:24.3	2.71	2.28	4.46	0.54	0.24	0.36	0.42	0.23	0.03	0.08	0.16	-0.10	0.11	0.10	7.28	6.90	353.32	10.80	21.50	21.25	21.08	21.12	10.56	28.87	0.52	0.43	0.51	0.51	0.22	0.25			0.05	84.69
143	4/28/2004	00:55:24.3	2.71	2.28	4.46	0.54	0.28	0.39	0.42	0.25	0.05	0.08	0.17	-0.10	0.13	0.09	7.32	6.94	353.32	10.80	21.41	21.24	21.07	21.11	10.63	29.09	0.52	0.47	0.54	0.51	0.24	0.27			0.05	85.33
144	4/28/2004	01:08:24.3	2.71	2.28	4.46	0.54	0.27	0.38	0.42	0.25	0.05	0.08	0.16	-0.08	0.11	0.09	7.32	6.93	353.32	10.81	21.46	21.28	21.12	21.15	10.51	29.30	0.52	0.46	0.53	0.51	0.24	0.27			0.05	85.97
145	4/28/2004	01:21:24.3	2.72	2.28	4.48	0.54	0.28	0.40	0.42	0.23	0.05	0.08	0.18	-0.08	0.13	0.09	7.33	6.95	353.32	10.80	21.33	21.16	21.07	21.11	10.63	29.52	0.52	0.47	0.55	0.51	0.22	0.27			0.05	86.61
146	4/28/2004	01:34:24.3	2.71	2.29	4.46	0.54	0.27	0.39	0.42	0.25	0.03	0.06	0.16	-0.10	0.11	0.09	7.29	6.90	353.32	10.81	21.28	21.19	21.03	21.06	10.59	29.74	0.52	0.46	0.54	0.51	0.24	0.25			0.05	87.25
147	4/28/2004	01:47:24.3	2.72	2.29	4.48	0.54	0.30	0.40	0.42	0.25	0.03	0.06	0.16	-0.10	0.11	0.10	7.30	6.91	353.32	10.82	21.19	21.10	21.02	21.05	10.58	29.95	0.52	0.49	0.55	0.51	0.24	0.25			0.05	87.89
148	4/28/2004	02:00:24.3	2.72	2.28	4.48	0.54	0.30	0.36	0.42	0.23	0.04	0.06	0.16	-0.11	0.11	0.09	7.28	6.89	353.32	10.80	21.08	21.15	20.98	21.02	10.38	30.17	0.52	0.49	0.51	0.51	0.22	0.26	5.60	5.80	0.05	88.53
149	4/28/2004	02:13:24.3	2.72	2.29	4.48	0.55	0.32	0.36	0.42	0.27	0.04	0.07	0.19	-0.11	0.11	0.09	7.33	6.95	353.32	10.81	21.08	21.15	21.06	21.02	10.54	30.39	0.53	0.51	0.51	0.51	0.26	0.26			0.05	89.17
150	4/28/2004	02:26:24.3	2.72	2.29	4.46	0.54	0.30	0.36	0.41	0.27	0.03	0.06	0.19	-0.11	0.11	0.09	7.28	6.89	353.32	10.82	21.03	21.10	20.94	20.97	10.49	30.60	0.52	0.49	0.51	0.50	0.26	0.25			0.05	89.81
151	4/28/2004	02:39:24.34	2.72	2.29	4.49	0.54	0.30	0.38	0.42	0.27	0.03	0.07	0.18	-0.08	0.11	0.09	7.29	6.90	353.07	10.81	20.95	21.02	20.94	20.89	10.49	30.82	0.52	0.49	0.53	0.51	0.26	0.25			0.05	90.45
152	4/28/2004	02:52:24.3	2.72	2.29	4.48	0.54	0.32	0.41	0.42	0.27	0.03	0.07	0.19	-0.06	0.13	0.09	7.34	6.95	353.32	10.81	20.91	20.98	20.89	20.85	10.45	31.04	0.52	0.51	0.56	0.51	0.26	0.25			0.05	91.09
153	4/28/2004	03:05:24.3	2.74	2.29	4.46	0.55	0.30	0.40	0.41	0.27	0.04	0.06	0.19	-0.08	0.11	0.09	7.30	6.92	353.32	10.80	20.82	20.97	20.88	20.84	10.36	31.25	0.53	0.49	0.55	0.50	0.26	0.26			0.05	91.74
154	4/28/2004	03:18:24.3	2.74	2.29	4.46	0.54	0.30	0.41	0.40	0.27	0.04	0.06	0.19	-0.08	0.11	0.09	7.32	6.93	353.32	10.80	20.65	20.88	20.87	20.83	10.35	31.47	0.52	0.49	0.56	0.49	0.26	0.26			0.05	92.38
155	4/28/2004	03:31:24.3	2.74	2.29	4.46	0.58	0.29	0.40	0.42	0.23	0.03	0.04	0.19	-0.08	0.15	0.09	7.25	6.86	353.32	10.80	20.40	20.79	20.78	20.74	10.17	31.69	0.56	0.48	0.55	0.51	0.22	0.25			0.05	93.02
156	4/28/2004	03:44:24.3	2.76	2.29	4.48	0.58	0.30	0.40	0.42	0.25	0.03	0.06	0.19	-0.08	0.15	0.08	7.32	6.93	353.32	10.80	20.43	20.82	20.74	20.69	10.29	31.90	0.56	0.49	0.55	0.51	0.24	0.25			0.05	93.66
157	4/28/2004	03:57:24.3	2.76	2.29	4.44	0.58	0.29	0.40	0.42	0.25	0.03	0.06	0.18	-0.08	0.15	0.08	7.30	6.92	353.32	10.80	20.47	20.78	20.69	20.73	10.25	32.12	0.56	0.48	0.55	0.51	0.24	0.25			0.05	94.30
158	4/28/2004	04:10:24.3	2.78	2.29	4.44	0.58	0.30	0.40	0.42	0.25	0.03	0.06	0.19	-0.10	0.15	0.13	7.30	6.91	353.32	10.81	20.38	20.69	20.69	20.64	10.16	32.34	0.56	0.49	0.55	0.51	0.24	0.25			0.05	94.94
159	4/28/2004	04:23:24.3	2.78	2.29	4.44	0.58	0.32	0.40	0.44	0.25	0.03	0.08	0.19	-0.10	0.15	0.13	7.31	6.93	353.32	10.81	20.33	20.73	20.64	20.59	9.95	32.55	0.56	0.51	0.55	0.53	0.24	0.25			0.05	95.58
160	4/28/2004	04:36:24.3	2.78	2.31	4.46	0.58	0.32	0.40	0.42	0.25	0.03	0.08	0.18	-0.10	0.14	0.12	7.28	6.90	353.32	10.81	20.16	20.64	20.55	20.50	10.02	32.77	0.56	0.51	0.55	0.51	0.24	0.25			0.05	96.22

Table H3-1-3. CIX Campaign II, Cycle 1, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero.

The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow meter	flow cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-ed	DP1 cor. inch	DP2 cor. inch	DP3 cor. inch	DP4 cor. inch	DP5 cor. inch	DP6 cor. inch	Resin H1	Resin H2	differ-ential	cumul-lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
161	4/28/2004	04:49:24.3	2.78	2.29	4.46	0.59	0.28	0.40	0.42	0.23	0.02	0.08	0.19	-0.10	0.15	0.12	7.28	6.89	353.32	10.81	20.12	20.59	20.59	20.46	10.05	32.99	0.57	0.47	0.55	0.51	0.22	0.24			0.05	96.86
162	4/28/2004	05:02:24.3	2.78	2.29	4.48	0.58	0.29	0.41	0.42	0.25	0.02	0.09	0.18	-0.10	0.14	0.12	7.32	6.93	353.32	10.81	20.03	20.50	20.42	20.37	9.96	33.20	0.56	0.48	0.56	0.51	0.24	0.24			0.05	97.50
163	4/28/2004	05:15:24.3	2.80	2.31	4.42	0.58	0.30	0.40	0.42	0.27	0.02	0.08	0.18	-0.10	0.15	0.13	7.30	6.92	353.32	10.81	20.11	20.50	20.50	20.45	9.88	33.42	0.56	0.49	0.55	0.51	0.26	0.24			0.05	98.14
164	4/28/2004	05:28:24.3	2.80	2.31	4.44	0.57	0.30	0.41	0.42	0.27	0.02	0.08	0.18	-0.12	0.15	0.12	7.31	6.93	353.32	10.81	19.94	20.41	20.41	20.36	9.71	33.64	0.55	0.49	0.56	0.51	0.26	0.24			0.05	98.78
165	4/28/2004	05:41:24.3	2.80	2.31	4.46	0.58	0.30	0.44	0.42	0.25	0.04	0.09	0.18	-0.12	0.15	0.12	7.29	6.90	353.32	10.81	20.05	20.37	20.36	20.31	9.91	33.85	0.56	0.49	0.59	0.51	0.24	0.26			0.05	99.42
166	4/28/2004	05:54:24.3	2.82	2.31	4.44	0.58	0.32	0.44	0.42	0.25	0.03	0.08	0.17	-0.12	0.15	0.10	7.30	6.92	353.32	10.80	19.96	20.36	20.35	20.22	9.82	34.07	0.56	0.51	0.59	0.51	0.24	0.25			0.05	100.06
167	4/28/2004	06:07:24.3	2.82	2.33	4.42	0.58	0.30	0.44	0.42	0.25	0.04	0.09	0.17	-0.12	0.15	0.12	7.31	6.93	353.32	10.80	19.92	20.39	20.31	20.26	9.77	34.29	0.56	0.49	0.59	0.51	0.24	0.26			0.05	100.70
168	4/28/2004	06:20:24.3	2.83	2.33	4.38	0.58	0.30	0.44	0.42	0.23	0.03	0.09	0.17	-0.10	0.15	0.12	7.28	6.89	353.32	10.80	19.87	20.26	20.25	20.13	9.64	34.50	0.56	0.49	0.59	0.51	0.22	0.25			0.05	101.34
169	4/28/2004	06:33:24.3	2.83	2.31	4.40	0.61	0.29	0.44	0.42	0.25	0.03	0.08	0.17	-0.10	0.14	0.10	7.28	6.89	353.32	10.80	19.87	20.26	20.25	20.13	9.72	34.72	0.59	0.48	0.59	0.51	0.24	0.25			0.05	101.98
170	4/28/2004	06:46:24.3	2.83	2.33	4.38	0.61	0.29	0.44	0.46	0.25	0.03	0.09	0.17	-0.08	0.13	0.10	7.29	6.90	353.32	10.81	19.90	20.21	20.21	20.08	9.67	34.94	0.59	0.48	0.59	0.55	0.24	0.25			0.05	102.62
171	4/28/2004	06:59:24.3	2.71	2.20	4.31	0.55	0.27	0.40	0.42	0.25	0.02	0.08	0.16	-0.10	0.11	0.10	7.18	6.80	353.32	10.81	19.94	20.17	20.17	20.04	9.63	35.15	0.53	0.46	0.55	0.51	0.24	0.24			0.05	103.27
172	4/28/2004	07:12:24.3	2.85	2.33	4.40	0.58	0.28	0.44	0.46	0.25	0.03	0.09	0.16	-0.08	0.11	0.10	7.28	6.90	353.32	10.82	19.81	20.12	20.04	19.91	9.58	35.37	0.56	0.47	0.59	0.55	0.24	0.25			0.05	103.91
173	4/28/2004	07:25:24.3	2.85	2.33	4.46	0.58	0.28	0.44	0.46	0.25	0.03	0.10	0.16	-0.08	0.15	0.10	7.28	6.90	353.32	10.80	19.89	20.12	20.04	19.99	9.58	35.59	0.56	0.47	0.59	0.55	0.24	0.25			0.05	104.55
174	4/28/2004	07:38:24.3	2.85	2.35	4.42	0.58	0.32	0.44	0.46	0.25	0.03	0.09	0.17	-0.10	0.15	0.10	7.30	6.91	353.32	10.80	19.97	20.12	20.12	19.91	9.50	35.80	0.56	0.51	0.59	0.55	0.24	0.25			0.05	105.19
175	4/28/2004	07:51:24.3	2.85	2.35	4.46	0.60	0.33	0.44	0.46	0.25	0.03	0.09	0.16	-0.08	0.15	0.09	7.32	6.94	353.32	10.81	19.86	20.09	20.00	19.87	9.63	36.02	0.58	0.52	0.59	0.55	0.24	0.25			0.05	105.83
176	4/28/2004	08:04:24.3	2.85	2.35	4.40	0.60	0.28	0.44	0.46	0.23	0.03	0.08	0.17	-0.10	0.15	0.10	7.28	6.89	353.32	10.80	19.83	20.14	20.06	19.85	9.68	36.24	0.58	0.47	0.59	0.55	0.22	0.25			0.05	106.47
177	4/28/2004	08:17:24.3	2.87	2.35	4.42	0.61	0.28	0.44	0.46	0.23	0.03	0.08	0.16	-0.08	0.15	0.10	7.33	6.95	349.15	10.80	19.96	20.12	20.03	19.82	9.65	36.45	0.59	0.47	0.59	0.55	0.22	0.25			0.05	107.11
178	4/28/2004	08:30:24.3	2.85	2.35	4.44	0.61	0.28	0.44	0.45	0.23	0.03	0.08	0.16	-0.08	0.11	0.10	7.28	6.89	349.15	10.80	20.06	20.13	20.05	19.84	9.59	36.67	0.59	0.47	0.59	0.54	0.22	0.25			0.05	107.75
179	4/28/2004	08:43:24.3	2.85	2.35	4.38	0.58	0.29	0.44	0.42	0.25	0.03	0.09	0.16	-0.10	0.11	0.12	7.32	6.94	349.15	10.82	20.40	20.15	20.07	19.78	9.77	36.89	0.56	0.48	0.59	0.51	0.24	0.25			0.05	108.39
180	4/28/2004	08:56:24.3	2.85	2.35	4.42	0.58	0.28	0.42	0.42	0.25	0.04	0.08	0.17	-0.12	0.11	0.12	7.30	6.91	349.15	10.81	20.63	20.21	20.05	19.84	9.75	37.10	0.56	0.47	0.57	0.51	0.24	0.26			0.05	109.03
181	4/28/2004	09:09:24.34	2.83	2.35	4.44	0.58	0.29	0.44	0.42	0.25	-0.01	0.08	0.16	-0.12	0.11	0.10	7.31	6.93	349.15	10.81	20.89	20.31	20.15	19.86	9.77	37.32	0.56	0.48	0.59	0.51	0.24	0.21			0.05	109.67
182	4/28/2004	09:22:24.3	2.83	2.35	4.40	0.58	0.30	0.40	0.42	0.26	-0.01	0.09	0.17	-0.12	0.13	0.12	7.30	6.91	349.39	10.80	21.27	20.45	20.20	19.99	9.91	37.54	0.56	0.49	0.55	0.51	0.25	0.21			0.05	110.31
183	4/28/2004	09:35:24.3	2.83	2.35	4.42	0.58	0.30	0.40	0.42	0.25	0.01	0.08	0.18	-0.12	0.15	0.12	7.30	6.92	349.15	10.81	21.53	20.47	20.30	19.93	10.01	37.75	0.56	0.49	0.55	0.51	0.24	0.23			0.05	110.95
184	4/28/2004	09:48:24.3	2.83	2.35	4.42	0.58	0.32	0.42	0.42	0.23	0.03	0.08	0.18	-0.11	0.15	0.13	7.33	6.95	349.15	10.80	21.74	20.52	20.28	19.99	9.90	37.97	0.56	0.51	0.57	0.51	0.22	0.25			0.05	111.59
185	4/28/2004	10:01:24.3	2.82	2.35	4.40	0.58	0.32	0.44	0.42	0.25	0.03	0.06	0.19	-0.10	0.15	0.09	7.30	6.92	349.15	10.80	22.05	20.59	20.42	20.05	10.22	38.19	0.56	0.51	0.59	0.51	0.24	0.25			0.05	112.23
186	4/28/2004	10:14:24.3	2.83	2.37	4.40	0.57	0.32	0.44	0.42	0.25	0.03	0.06	0.19	-0.08	0.14	0.09	7.29	6.90	349.15	10.80	22.27	20.73	20.49	20.12	10.28	38.40	0.55	0.51	0.59	0.51	0.24	0.25			0.05	112.87
187	4/28/2004	10:27:24.3	2.82	2.37	4.44	0.55	0.30	0.44	0.44	0.27	0.03	0.06	0.19	-0.10	0.11	0.10	7.28	6.90	349.39	10.80	22.62	20.84	20.59	20.22	11.20	38.62	0.53	0.49	0.59	0.53	0.26	0.25			0.05	113.51
188	4/28/2004	10:40:24.3	2.80	2.35	4.40	0.55	0.32	0.41	0.42	0.25	0.05	0.07	0.19	-0.12	0.11	0.09	7.31	6.93	349.15	10.81	22.88	20.94	20.69	20.32	11.31	38.84	0.53	0.51	0.56	0.51	0.24	0.27			0.05	114.15
189	4/28/2004	10:53:24.3	2.82	2.39	4.44	0.57	0.28	0.40	0.41	0.25	0.04	0.07	0.19	-0.12	0.11	0.10	7.28	6.90	349.15	10.81	23.01	20.99	20.67	20.30	11.28	39.05	0.55	0.47	0.55	0.50	0.24	0.26			0.05	114.79
190	4/28/2004	11:06:24.3	2.82	2.39	4.42	0.58	0.29	0.42	0.42	0.25	0.07	0.07	0.16	-0.10	0.11	0.09	7.30	6.92	349.15	10.80	23.07	21.05	20.80	20.43	11.26	39.27	0.56	0.48	0.57	0.51	0.24	0.29			0.05	115.43
191	4/28/2004	11:19:24.3	2.80	2.39	4.46	0.59	0.29	0.44	0.42	0.23	0.03	0.09	0.17	-0.10	0.11	0.10	7.29	6.90	349.15	10.80	23.29	21.19	20.86	20.57	11.32	39.49	0.57	0.48	0.59	0.51	0.22	0.25			0.05	116.07
192	4/28/2004	11:32:24.3	2.80	2.39	4.44	0.59	0.28	0.44	0.42	0.25	0.03	0.08	0.17	-0.08	0.11	0.09	7.28	6.90	349.15	10.81	23.21	21.27	20.94	20.57	11.23	39.70	0.57	0.47	0.59	0.51	0.24	0.25			0.05	116.71
193	4/28/2004	11:45:24.3	2.80	2.39	4.46	0.58	0.32	0.47	0.44	0.25	0.04	0.06	0.18	-0.08	0.11	0.10	7.30	6.92	349.15	10.80	23.41	21.31	20.99	20.78	11.12	39.92	0.56	0.51	0.62	0.53	0.24	0.26			0.05	117.35
194	4/28/2004	11:58:24.3	2.80	2.40	4.42	0.58	0.30	0.42	0.42	0.25	0.03	0.06	0.17	-0.10	0.08	0.10	7.28	6.90	349.15	10.80	23.63	21.45	21.12	20.91	11.26	40.14	0.56	0.49	0.57	0.51	0.24	0.25			0.05	117.99
195	4/28/2004	12:11:24.3	2.78	2.40	4.46	0.58	0.32	0.42	0.42	0.21	0.02	0.06	0.18	-0.12	0.10	0.10	7.33	6.95	349.15	10.80	23.67	21.48	21.24	20.95	11.29	40.35	0.56	0.51	0.57	0.51	0.20	0.24			0.05	118.63
196	4/28/2004	12:24:24.3	2.78	2.39	4.44	0.58	0.30	0.44	0.42	0.21	0.03	0.08	0.18	-0.12	0.11	0.12	7.35	6.97	349.15	10.78	23.88	21.62	21.30	21.09	11.27	40.57	0.56	0.49	0.59	0.51	0.20	0.25			0.05	119.28
197	4/28/2004	12:37:24.3	2.76	2.39	4.44	0.58	0.30	0.44	0.42	0.21	0.03	0.07	0.18	-0.12	0.11	0.12	7.28	6.90	349.15	10.80	24.01	21.59	21.26	21.05	11.15	40.79	0.56	0.49	0.59	0.51	0.20	0.25			0.05	119.92
198	4/28/2004	12:50:24.3	2.76	2.40	4.42	0.61	0.32	0.42	0.42	0.25	0.02	0.08	0.18	-0.12	0.11	0.12	7.32	6.94	349.15	10.80	24.05	21.63	21.31	21.26	11.28	41.00	0.59	0.51	0.57	0.51	0.24	0.24			0.05	120.56
199	4/28/2004	13:03:24.3	2.76	2.39	4.48	0.61	0.32	0.44	0.42	0.25	0.03	0.08	0.19	-0.12	0.11	0.12	7.28	6.90	349.15	10.79	24.27	21.77	21.44	21.32	11.42	41.22	0.59	0.51	0.59	0.51	0.24	0.25			0.05	121.20
200	4/28/2004	13:16:24.3	2.74	2.39	4.48	0.61	0.30	0.42	0.42	0.25	0.03	0.08	0.19	-0.13	0.11	0.09	7.29	6.90	349.15	10.79	24.32	21.82	21.41	21.36	11.38	41.44	0.59	0.49	0.57	0.51	0.24	0.25			0.05	121.84
201	4/28/2004	13:29:24.3	2.74	2.40	4.44	0.58	0.32	0.44	0.42	0.23	0.03	0.08	0.19	-0.12	0.11	0.09	7.30	6.92	349.15	10.79	24.44	21.86	21.46	21.49	11.27	41.65	0.56	0.51	0.59	0.51	0.22	0.25			0.05	122.48
202	4/28/2004	13:42:24.3	2.74	2.39	4.46	0.55	0.32	0.40	0.42	0.25	0.03	0.08	0.19	-0.12	0.11	0.09	7.30	6.92	349.15	10.79	25.09	21.87	21.55	21.58	11.44	41.87	0.53	0.51	0.55	0.51	0.24	0.25			0.05	123.12
203	4/28/2004	13:55:24.3	2.71	2.35	4.42	0.58	0.28	0.40	0.42	0.22	0.03	0.09	0.19	-0.12	0.13	0.10	7.33	6.95	349.15	10.77	24.90	21.92	21.59	21.55	11.41	42.09	0.56	0.47	0.55	0.51	0.21	0.25			0.05	123.76
204	4/28/2004	14:08:24.3	2.71	2.35	4.42	0.58	0.28	0.40	0.42	0.23	0.03	0.09	0.19	-0.12	0.14	0.10	7.31	6.93	349.15	10.78	24.82	22.00	21.59	21.63	11.57	42.30	0.56	0.47	0.55	0.51	0.22	0.25			0.05	124.40
205	4/28/2004	14:21:24.3	2.71	2.37	4.42	0.59	0.28	0.40	0.39	0.23	-0.01	0.07	0.19	-0.11	0.14	0.10	7.31	6.93	349.15	10.78	25.04	22.14	21.73	21.76	11.55	42.52	0.57	0.47	0.55	0.48	0.22	0.21			0.05	125.04
206	4/28/2004	14:34:24.3	2.69	2.35	4.40	0.58	0.28	0.40	0.39	0.23	-0.01	0.06	0.16	-0.11	0.15	0.09	7.30	6.92	349.15	10.78	24.87	22.05	21.72	21.75	11.45	42.74	0.56	0.47	0.55	0.48	0.22	0.21			0.05	125.68
207	4/28/2004	14:47:24.3	2.69	2.35	4.42	0.58	0.28	0.40	0.39	0.23	0.01	0.07	0.16	-0.13	0.13	0.10	7.31	6.93	349.15	10.79	24.88	22.14	21.73	21.76	11.38	42.95	0.56	0.47	0.55	0.48	0.22	0.23			0.05	126.32
208	4/28/2004	15:00:24.3	2.69	2.37	4.40	0.58	0.28	0.41	0.39	0.25	0.01	0.07	0.16	-0.12	0.11	0.10	7.31	6.93	349.15	10.78	24.88	22.14	21.73	21.92	11.38	43.17	0.56	0.47	0.56	0.48	0.24	0.23	5.60	5.80	0.05	126.96
209	4/28/2004	15:13:24.3	2.69	2.35	4.42	0.58	0.28	0.44	0.39	0.25	0.02	0.08	0.16	-0.12	0.11	0.10	7.28	6.90	349.15	10.78	24.91	22.17	21.77	21.88	11.09	43.39	0.56	0.47	0.59	0.48	0.24	0.24			0.05	127.60
210	4/28/2004	15:16:24.3	2.69	2.35	4.48	0.58	0.28	0.44	0.39	0.25	0.01	0.08	0.16	-0.12	0.13	0.10	7.36	6.97	349.15	10.77	24.91	22.25	21.85	21.96	11.50	43.44	0.56	0.47	0.59	0.48	0.24	0.23			0.01	127.70
211	4/28/2004	15:27:34.34	2.69	2.37	4.48	0.58	0.28	0.44	0.39	0.23	0.01	0.08	0.16	-0.12	0.11	0.10	7.28	6.89	349.15	10.77	25.08	22.26	21.86	22.05	11.59	43.62	0.56	0.47	0.59	0.48	0.22	0.23			0.05	128.25
212	4/28/2004	15:40:34.3	2.69	2.35	4.49	0.58	0.28	0.40	0.39	0.25	0.02	0.08	0.16	-0.12	0.11	0.10	7.29	6.90	349.15	10.78	25.08	22.26	21.86	22.05	11.43	43.84	0.56	0.47	0.55	0.48	0.24	0.24			0.05	128.89
213	4/28/2004	15:53:34.3	2.69	2.37	4.49	0.58	0.27	0.40	0.39	0.23	0.03	0.09	0.16	-0.12	0.11	0.10	7.31	6.93	349.15	10.77	24.95	22.21	21.88	22.07	11.45	44.06	0.56	0.46	0.55	0.48	0.22	0.25			0.05	129.53
214	4/28/2004	16:06:34.3	2.69	2.37	4.49	0.58	0.28	0.41	0.40	0.23	0.03	0.08	0.16	-0.13	0.11	0.10	7.27	6.88	349.15	10.77	25.08	22.34	22.02	22.13	12.25	44.27	0.56	0.47	0.56	0.49	0.22	0.25			0.05	130.17
215	4/28/2004	16:19:34.3	2.69	2.37	4.49	0.54	0.28	0.42	0.39	0.23	0.02	0.08	0.16	-0.12	0.11	0.10	7.30	6.92	349.15	10.77	25.00	22.34	21.94	22.13	12.16	44.49	0.52	0.47	0.57	0.48	0.22	0.24			0.05	130.81
216	4/28/2004	16:32:34.3	2.71	2.37	4.49	0.54	0.28	0.42	0.39	0.25	0.02	0.08	0.16	-0.12	0.13	0.10	7.29	6.90	349.15	10.77	25.18	22.44	22.11	22.22	12.34	44.71	0.52	0.47	0.57	0.48	0.24	0.24			0.05	131.45
217	4/28/2004	16:45:34.3	2.71	2.37	4.51	0.55	0.28	0.44	0.39	0.25	0.02	0.08	0.16	-0.12	0.11	0.10	7.29	6.90	349.15	10.77	24.97	22.39	21.98	22.18	12.05	44.92	0.53	0.47	0.59	0.48	0.24	0.24			0.05	132.09
218	4/28/2004	16:58:34.3	2.71	2.39	4.49	0.54	0.27	0.44	0.39	0.23	0.02	0.08	0.16	-0.13	0.11	0.12	7.28	6.90	349.15	10.77	25.09	22.44	22.11	22.22	12.09	45.14	0.52	0.46	0.59	0.48	0.22	0.24			0.05	132.73
219	4/28/2004	17:11:34.3	2.71	2.37	4.49	0.54	0.28	0.44	0.39	0.23	-0.01	0.08	0.16	-0.12	0.11	0.12	7.33	6.95	349.15	10.75	24.76	22.34	22.02	22.21	11.92	45.36	0.52	0.47	0.59	0.48	0.22	0.21			0.05	133.38
220	4/28/2004	17:24:34.3	2.71	2.39	4.48	0.55	0.28	0.42	0.39	0.23	-0.01	0.09	0.16	-0.12	0.11	0.10	7.31	6.93	349.15	10.74	24.91	22.33	22.01	22.20	11.99	45.57	0.53	0.47	0.57	0.48	0.22	0.21			0.05	134.02
221	4/28/2004	17:37:34.3	2.72	2.39	4.48	0.55	0.28	0.44	0.39	0.25	-0.01	0.08	0.16	-0.12	0.11	0.10	7.28	6.90	349.15	10.75	24.59	22.33	22.01	22.36	11.99	45.79	0.53	0.47	0.59	0.48	0.24	0.21			0.05	134.66
222	4/28/2004	17:50:34.3	2.72	2.39	4.48	0.59	0.28	0.44	0.39	0.25	0.01	0.08	0.16	-0.12	0.11	0.10	7.28	6.90	353.32	10.77	24.50	22.32	22.00	22.35	11.98	46.01	0.57	0.47	0.59	0.48	0.24	0.23			0.05	135.30
223	4/28/2004	18:03:34.3	2.72	2.39	4.51	0.60	0.28	0.44	0.39	0.25	-0.01	0.08	0.16	-0.12	0.11	0.10	7.31	6.93	349.15	10.75	24.37	22.19	21.87	22.22	11.77	46.22	0.58	0.47	0.59	0.48	0.24	0.21			0.05	135.94
224	4/28/2004	18:16:34.3	2.72	2.39	4.49	0.61	0.28	0.45	0.39	0.23	-0.01	0.08	0.16	-0.12	0.11	0.10	7.30	6.91	349.15	10.76	24.28	22.18	21.94	22.29	11.76	46.44	0.59	0.47	0.60	0.48	0.22	0.21			0.05	136.58
225	4/28/2004	18:29:34.3	2.72	2.40	4.51	0.61	0.28	0.45	0.39	0.23	-0.01	0.08	0.16	-0.13	0.11	0.10	7.29	6.90	353.32	10.77	24.20	22.18	21.94	22.21	11.84	46.66	0.59	0.47	0.60	0.48	0.22	0.21			0.05	137.22
226	4/28/2004	18:42:34.3	2.74	2.40	4.48	0.61	0.28	0.46	0.39	0.23	-0.01	0.08	0.16	-0.13	0.10	0.09	7.28	6.90	353.07	10.75	24.27	22.17	21.85	22.20	11.66	46.87	0.59	0.47	0.61	0.48	0.22	0.21			0.05	137.86
227	4/28/2004	18:55:34.3	2.74	2.40	4.48	0.58	0.28	0.41	0.39	0.25	-0.01	0.08	0.16	-0.12	0.11	0.10	7.30	6.91	349.15	10.77	23.98	22.13	21.88	22.15	11.78	47.09	0.56	0.47	0.56	0.48	0.24	0.21			0.05	138.50
228	4/28/2004	19:08:34.3	2.74	2.40	4.49	0.58	0.28	0.42	0.39	0.25	-0.01	0.07	0.16	-0.14	0.13	0.09	7.29	6.90	349.15	10.77	24.10	22.16	21.84	22.19	11.65	47.31	0.56	0.47	0.57	0.48	0.24	0.21			0.05	139.14
229	4/28/2004	19:21:34.3	2.74	2.40	4.53	0.58	0.28	0.44	0.39	0.25	-0.01	0.07	0.16	-0.10	0.14	0.09	7.28	6.90	353.07	10.75	23.93	22.07	21.82	22.10	11.72	47.52	0.56	0.47	0.59	0.48	0.24	0.21			0.05	139.78
230	4/28/2004	19:34:34.3	2.78	2.40	4.51	0.58	0.27	0.44	0.40	0.23	0.01	0.10	0.16	-0.11	0.13	0.10	7.33	6.95	349.15	10.77	23.72	22.02	21.78	22.13	11.76	47.74	0.56	0.46	0.59	0.49	0.22	0.23			0.05	140.42
231	4/28/2004	19:47:34.3	2.76	2.40	4.49	0.58	0.28	0.44	0.42	0.22	0.01	0.09	0.18	-0.11	0.11	0.09	7.28	6.89	353.32	10.77	23.79	22.01	21.77	22.12	11.75	47.96	0.56	0.47	0.59	0.51	0.21	0.23			0.05	141.06
232	4/28/2004	20:00:34.3	2.76	2.40	4.49	0.58	0.28	0.42	0.42	0.22	0.03	0.08	0.18	-0.12	0.13	0.09	7.28	6.90	349.15	10.75	23.54	22.00	21.76	22.03	11.74	48.17	0.56	0.47	0.57	0.51	0.21	0.25	5.60	5.80	0.05	141.70
233	4/28/2004	20:13:34.3	2.78	2.42	4.48	0.58	0.32	0.44	0.42	0.23	0.03	0.09	0.19	-0.12	0.11	0.09	7.30	6.91	349.15	10.74	23.37	21.91	21.67	22.02	11.64	48.39	0.56	0.51	0.59	0.51	0.22	0.25			0.05	142.34
234	4/28/2004	20:26:34.3	2.78	2.40	4.48	0.59	0.32	0.40	0.42	0.23	0.03	0.09	0.19	-0.12	0.11	0.08	7.30	6.92	353.32	10.77	23.44	21.90	21.74	21.93	11.55	48.61	0.57	0.51	0.55	0.51	0.22	0.25			0.05	142.98
235	4/28/2004	20:39:34.3	2.82	2.42	4.48	0.58	0.32	0.44	0.42	0.25	0.03	0.09	0.19	-0.12	0.11	0.09	7.28	6.90	353.32	10.77	23.27	21.89	21.64	21.92	11.38	48.82	0.56	0.51	0.59	0.51	0.24	0.25			0.05	143.62
236	4/28/2004	20:52:34.3	2.80	2.42	4.49	0.61	0.30	0.44	0.41	0.25	0.03	0.08	0.19	-0.13	0.11	0.08	7.32	6.93	353.32	10.77	23.10	21.80	21.55	21.75	11.45	49.04	0.59	0.49	0.59	0.50	0.24	0.25			0.05	144.26
237	4/28/2004	21:05:34.3	2.82	2.42	4.49	0.61	0.30	0.44	0.42	0.25	0.03	0.09	0.18	-0.12	0.11	0.08	7.28	6.90	349.15	10.77	23.05	21.75	21.59	21.78	11.32	49.26	0.59	0.49	0.59	0.51	0.24	0.25			0.05	144.90
238	4/28/2004	21:18:34.3	2.82	2.44	4.51	0.61	0.32	0.45	0.42	0.23	0.03	0.09	0.18	-0.13	0.11	0.08	7.32	6.93	349.15	10.77	22.96	21.66	21.50	21.69	11.31	49.47	0.59	0.51	0.60	0.51	0.22	0.25			0.05	145.55
239	4/28/2004	21:31:34.3	2.83	2.42	4.51	0.61	0.30	0.46	0.42	0.25	0.03	0.08	0.19	-0.12	0.11	0.12	7.32	6.93	353.32	10.76	22.75	21.70	21.45	21.64	11.26	49.69	0.59	0.49	0.61	0.51	0.24	0.25			0.05	146.19
240	4/28/2004	21:44:34.3	2.83	2.44	4.51	0.61	0.32	0.46	0.42	0.23	0.03	0.08	0.19	-0.12	0.09	0.12	7.30	6.92	353.32	10.76	22.87	21.65	21.41	21.60	11.30	49.91	0.59	0.51	0.61	0.51	0.22	0.25			0.05	146.83

Table H3-1-4. CIX Campaign II, Cycle 1, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow			T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ- ential	cumul- lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		ºC	ºC	ºC	ºC	ºC	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
241	4/28/2004	21:57:34.3	2.83	2.44	4.51	0.61	0.30	0.45	0.42	0.21	0.03	0.07	0.19	-0.12	0.08	0.10	7.28	6.90	353.07	10.77	22.74	21.61	21.36	21.55	11.41	50.12	0.59	0.49	0.60	0.51	0.20	0.25			0.05	147.47
242	4/28/2004	22:10:34.3	2.85	2.44	4.51	0.61	0.32	0.44	0.40	0.21	0.03	0.07	0.19	-0.12	0.08	0.12	7.28	6.89	353.32	10.77	22.66	21.61	21.36	21.55	11.41	50.34	0.59	0.51	0.59	0.49	0.20	0.25			0.05	148.11
243	4/28/2004	22:23:34.3	2.85	2.44	4.48	0.61	0.32	0.42	0.41	0.21	0.03	0.08	0.18	-0.12	0.08	0.10	7.30	6.91	349.15	10.78	22.70	21.56	21.32	21.51	11.37	50.56	0.59	0.51	0.57	0.50	0.20	0.25			0.05	148.75
244	4/28/2004	22:36:34.3	2.87	2.44	4.49	0.61	0.30	0.44	0.41	0.21	0.03	0.08	0.19	-0.10	0.08	0.12	7.30	6.92	349.15	10.76	22.49	21.52	21.27	21.46	11.40	50.77	0.59	0.49	0.59	0.50	0.20	0.25			0.05	149.39
245	4/28/2004	22:49:34.3	2.85	2.46	4.48	0.61	0.30	0.42	0.40	0.25	0.03	0.07	0.19	-0.08	0.09	0.10	7.30	6.91	353.32	10.78	22.61	21.47	21.39	21.50	11.36	50.99	0.59	0.49	0.57	0.49	0.24	0.25			0.05	150.03
246	4/28/2004	23:02:34.3	2.87	2.46	4.51	0.61	0.30	0.44	0.39	0.25	0.03	0.07	0.18	-0.08	0.11	0.10	7.31	6.93	349.15	10.77	22.32	21.34	21.26	21.37	11.07	51.21	0.59	0.49	0.59	0.48	0.24	0.25			0.05	150.67
247	4/28/2004	23:15:34.3	2.87	2.46	4.49	0.61	0.32	0.44	0.41	0.25	0.03	0.04	0.19	-0.10	0.11	0.10	7.31	6.93	349.15	10.77	22.19	21.38	21.21	21.33	11.10	51.42	0.59	0.51	0.59	0.50	0.24	0.25			0.05	151.31
248	4/28/2004	23:28:34.3	2.87	2.46	4.44	0.61	0.30	0.44	0.42	0.25	0.03	0.06	0.18	-0.08	0.11	0.10	7.30	6.91	353.32	10.77	22.31	21.41	21.25	21.28	11.22	51.64	0.59	0.49	0.59	0.51	0.24	0.25			0.05	151.95
249	4/28/2004	23:41:34.3	2.83	2.42	4.44	0.55	0.28	0.44	0.39	0.23	0.01	0.04	0.16	-0.11	0.11	0.10	7.14	6.75	349.15	10.77	22.18	21.29	21.12	21.24	11.09	51.86	0.53	0.47	0.59	0.48	0.22	0.23			0.05	152.59
250	4/28/2004	23:54:34.3	2.89	2.46	4.51	0.60	0.30	0.46	0.42	0.23	0.03	0.06	0.18	-0.08	0.11	0.10	7.30	6.92	349.15	10.78	22.18	21.37	21.20	21.24	11.26	52.07	0.58	0.49	0.61	0.51	0.22	0.25			0.05	153.23
251	4/29/2004	00:07:34.3	2.89	2.46	4.48	0.61	0.30	0.47	0.42	0.23	0.03	0.08	0.18	-0.10	0.11	0.10	7.34	6.95	349.15	10.78	21.98	21.32	21.16	21.27	11.13	52.29	0.59	0.49	0.62	0.51	0.22	0.25			0.05	153.87
252	4/29/2004	00:20:34.3	2.89	2.48	4.49	0.61	0.28	0.46	0.42	0.25	0.02	0.09	0.17	-0.10	0.11	0.10	7.28	6.89	352.83	10.76	21.97	21.23	21.07	21.10	11.04	52.51	0.59	0.47	0.61	0.51	0.24	0.24			0.05	154.51
253	4/29/2004	00:33:34.3	2.91	2.48	4.49	0.65	0.29	0.46	0.42	0.25	0.03	0.08	0.18	-0.08	0.11	0.10	7.30	6.92	349.39	10.78	21.84	21.27	21.10	21.14	11.07	52.72	0.63	0.48	0.61	0.51	0.24	0.25			0.05	155.15
254	4/29/2004	00:46:34.3	2.93	2.48	4.49	0.65	0.29	0.46	0.42	0.23	0.02	0.08	0.18	-0.08	0.11	0.10	7.31	6.93	353.32	10.76	21.88	21.22	21.06	21.09	10.94	52.94	0.63	0.48	0.61	0.51	0.22	0.24			0.05	155.79
255	4/29/2004	00:59:34.3	2.91	2.48	4.51	0.65	0.29	0.47	0.42	0.25	0.02	0.08	0.17	-0.11	0.11	0.09	7.29	6.90	353.32	10.76	21.83	21.18	21.01	21.05	11.06	53.16	0.63	0.48	0.62	0.51	0.24	0.24			0.05	156.44
256	4/29/2004	01:12:34.3	2.93	2.48	4.49	0.65	0.28	0.47	0.42	0.25	0.04	0.08	0.17	-0.11	0.11	0.10	7.28	6.90	353.32	10.78	21.79	21.13	21.05	21.08	10.93	53.37	0.63	0.47	0.62	0.51	0.24	0.26			0.05	157.08
257	4/29/2004	01:25:34.3	2.93	2.48	4.51	0.64	0.28	0.47	0.42	0.23	0.04	0.08	0.16	-0.12	0.11	0.09	7.31	6.93	353.32	10.77	21.63	21.13	20.97	21.00	10.85	53.59	0.62	0.47	0.62	0.51	0.22	0.26			0.05	157.71
258	4/29/2004	01:38:34.3	2.93	2.48	4.51	0.65	0.32	0.46	0.42	0.25	0.05	0.08	0.17	-0.11	0.11	0.09	7.34	6.96	353.32	10.77	21.58	21.09	20.92	20.95	10.97	53.81	0.63	0.51	0.61	0.51	0.24	0.27			0.05	158.36
259	4/29/2004	01:51:34.3	2.95	2.50	4.51	0.65	0.29	0.47	0.42	0.25	0.05	0.08	0.17	-0.12	0.11	0.09	7.31	6.93	353.32	10.77	21.49	21.00	20.91	20.86	10.88	54.02	0.63	0.48	0.62	0.51	0.24	0.27			0.05	159.00
260	4/29/2004	02:04:34.3	2.95	2.48	4.48	0.65	0.28	0.47	0.42	0.25	0.03	0.07	0.17	-0.12	0.11	0.10	7.30	6.91	349.15	10.78	21.49	21.00	20.91	20.95	10.96	54.24	0.63	0.47	0.62	0.51	0.24	0.25			0.05	159.64
261	4/29/2004	02:17:34.3	2.95	2.48	4.51	0.65	0.32	0.47	0.42	0.23	0.03	0.08	0.17	-0.13	0.13	0.09	7.31	6.93	349.15	10.77	21.41	21.00	20.91	20.86	10.88	54.46	0.63	0.51	0.62	0.51	0.22	0.25			0.05	160.28
262	4/29/2004	02:30:34.3	2.95	2.50	4.49	0.65	0.33	0.47	0.41	0.28	0.03	0.07	0.19	-0.12	0.11	0.10	7.32	6.93	353.32	10.78	21.24	20.91	20.74	20.77	10.79	54.67	0.63	0.52	0.62	0.50	0.27	0.25			0.05	160.92
263	4/29/2004	02:43:34.3	2.95	2.48	4.49	0.65	0.32	0.50	0.40	0.27	0.03	0.07	0.19	-0.10	0.11	0.09	7.28	6.89	349.15	10.78	21.28	20.86	20.78	20.73	10.58	54.89	0.63	0.51	0.65	0.49	0.26	0.25			0.05	161.55
264	4/29/2004	02:56:34.3	2.96	2.48	4.49	0.65	0.30	0.50	0.39	0.26	0.03	0.07	0.18	-0.08	0.11	0.09	7.28	6.89	349.15	10.77	21.19	20.86	20.78	20.81	10.66	55.11	0.63	0.49	0.65	0.48	0.25	0.25			0.05	162.19
265	4/29/2004	03:09:34.3	2.96	2.50	4.49	0.61	0.30	0.50	0.39	0.27	0.03	0.07	0.18	-0.10	0.11	0.10	7.28	6.90	349.15	10.77	21.19	20.86	20.78	20.73	10.74	55.32	0.59	0.49	0.65	0.48	0.26	0.25			0.05	162.83
266	4/29/2004	03:22:34.3	2.96	2.50	4.53	0.63	0.32	0.50	0.40	0.27	0.03	0.06	0.18	-0.10	0.11	0.09	7.30	6.91	349.15	10.77	21.15	20.82	20.73	20.68	10.53	55.54	0.61	0.51	0.65	0.49	0.26	0.25			0.05	163.47
267	4/29/2004	03:35:34.3	2.96	2.50	4.48	0.63	0.30	0.50	0.40	0.27	0.03	0.07	0.19	-0.08	0.10	0.09	7.28	6.90	353.32	10.77	21.15	20.82	20.73	20.68	10.69	55.76	0.61	0.49	0.65	0.49	0.26	0.25			0.05	164.11
268	4/29/2004	03:48:34.3	2.96	2.50	4.51	0.64	0.32	0.50	0.42	0.27	0.03	0.06	0.19	-0.08	0.11	0.09	7.28	6.89	353.07	10.77	21.15	20.82	20.73	20.60	10.61	55.97	0.62	0.51	0.65	0.51	0.26	0.25			0.05	164.75
269	4/29/2004	04:01:34.3	2.96	2.50	4.53	0.65	0.32	0.50	0.42	0.26	0.03	0.07	0.19	-0.08	0.10	0.09	7.31	6.93	349.15	10.78	21.15	20.82	20.57	20.60	10.69	56.19	0.63	0.51	0.65	0.51	0.25	0.25			0.05	165.39
270	4/29/2004	04:14:34.3	2.96	2.50	4.49	0.65	0.32	0.50	0.42	0.26	0.03	0.06	0.18	-0.08	0.14	0.09	7.30	6.92	349.15	10.77	21.15	20.74	20.65	20.60	10.69	56.41	0.63	0.51	0.65	0.51	0.25	0.25			0.05	166.04
271	4/29/2004	04:27:34.3	2.98	2.51	4.51	0.68	0.32	0.50	0.42	0.26	0.03	0.06	0.19	-0.08	0.14	0.09	7.30	6.92	349.39	10.77	21.14	20.73	20.64	20.51	10.60	56.62	0.66	0.51	0.65	0.51	0.25	0.25			0.05	166.68
272	4/29/2004	04:40:34.3	2.98	2.50	4.53	0.65	0.32	0.47	0.42	0.25	0.03	0.06	0.19	-0.11	0.13	0.09	7.28	6.90	349.15	10.77	21.14	20.65	20.56	20.51	10.60	56.84	0.63	0.51	0.62	0.51	0.24	0.25			0.05	167.32
273	4/29/2004	04:53:34.3	2.96	2.50	4.55	0.65	0.32	0.50	0.42	0.25	0.03	0.06	0.19	-0.10	0.14	0.09	7.31	6.93	349.15	10.78	21.06	20.65	20.56	20.51	10.52	57.06	0.63	0.51	0.65	0.51	0.24	0.25			0.05	167.96
274	4/29/2004	05:06:34.3	2.98	2.51	4.53	0.64	0.32	0.50	0.42	0.23	0.03	0.06	0.19	-0.10	0.13	0.09	7.32	6.93	353.32	10.78	21.09	20.68	20.52	20.47	10.48	57.27	0.62	0.51	0.65	0.51	0.22	0.25			0.05	168.60
275	4/29/2004	05:19:34.3	3.00	2.50	4.49	0.65	0.32	0.50	0.42	0.23	0.03	0.06	0.19	-0.10	0.11	0.09	7.28	6.90	349.39	10.78	21.01	20.68	20.60	20.47	10.64	57.49	0.63	0.51	0.65	0.51	0.22	0.25			0.05	169.24
276	4/29/2004	05:32:34.3	2.98	2.51	4.49	0.65	0.32	0.50	0.42	0.25	0.03	0.06	0.18	-0.10	0.11	0.09	7.28	6.89	349.15	10.79	20.97	20.64	20.55	20.42	10.59	57.71	0.63	0.51	0.65	0.51	0.24	0.25			0.05	169.88
277	4/29/2004	05:45:34.3	3.00	2.51	4.51	0.68	0.30	0.50	0.42	0.25	0.03	0.04	0.19	-0.11	0.13	0.10	7.30	6.92	349.39	10.79	21.00	20.59	20.51	20.46	10.47	57.92	0.66	0.49	0.65	0.51	0.24	0.25			0.05	170.52
278	4/29/2004	05:58:34.3	2.98	2.50	4.53	0.66	0.32	0.50	0.42	0.23	0.02	0.06	0.18	-0.11	0.11	0.09	7.28	6.90	349.15	10.77	20.92	20.59	20.51	20.38	10.38	58.14	0.64	0.51	0.65	0.51	0.22	0.24			0.05	171.16
279	4/29/2004	06:11:34.3	3.00	2.51	4.51	0.66	0.30	0.50	0.42	0.25	0.03	0.06	0.19	-0.11	0.11	0.09	7.32	6.94	349.15	10.78	20.96	20.55	20.38	20.33	10.34	58.36	0.64	0.49	0.65	0.51	0.24	0.25			0.05	171.80
280	4/29/2004	06:24:34.3	3.02	2.53	4.53	0.66	0.32	0.50	0.42	0.25	0.02	0.06	0.19	-0.12	0.11	0.09	7.32	6.93	349.15	10.78	20.83	20.58	20.42	20.29	10.29	58.57	0.64	0.51	0.65	0.51	0.24	0.24			0.05	172.44
281	4/29/2004	06:37:34.3	3.02	2.51	4.49	0.68	0.30	0.51	0.42	0.25	0.03	0.09	0.18	-0.12	0.11	0.09	7.29	6.90	349.15	10.77	20.87	20.46	20.45	20.32	10.25	58.79	0.66	0.49	0.66	0.51	0.24	0.25			0.05	173.08
282	4/29/2004	06:50:34.3	3.02	2.53	4.51	0.69	0.32	0.50	0.42	0.25	0.02	0.07	0.19	-0.12	0.11	0.09	7.29	6.90	349.15	10.78	20.95	20.54	20.37	20.32	10.25	59.01	0.67	0.51	0.65	0.51	0.24	0.24			0.05	173.72
283	4/29/2004	07:03:34.3	3.02	2.53	4.49	0.69	0.30	0.50	0.42	0.25	0.02	0.08	0.19	-0.12	0.11	0.13	7.30	6.92	349.15	10.78	20.86	20.45	20.36	20.23	10.32	59.22	0.67	0.49	0.65	0.51	0.24	0.24			0.05	174.36
284	4/29/2004	07:16:34.3	3.02	2.53	4.53	0.68	0.32	0.50	0.42	0.25	0.02	0.08	0.19	-0.12	0.11	0.13	7.31	6.93	349.15	10.77	20.82	20.40	20.32	20.27	10.11	59.44	0.66	0.51	0.65	0.51	0.24	0.24			0.05	175.00
285	4/29/2004	07:29:34.3	3.04	2.53	4.53	0.68	0.32	0.50	0.42	0.23	-0.01	0.08	0.19	-0.12	0.11	0.13	7.32	6.94	349.15	10.77	20.82	20.48	20.32	20.27	10.27	59.66	0.66	0.51	0.65	0.51	0.22	0.21			0.05	175.64
286	4/29/2004	07:42:34.3	3.04	2.53	4.51	0.68	0.32	0.51	0.42	0.25	0.01	0.08	0.18	-0.12	0.11	0.13	7.34	6.95	349.15	10.78	20.95	20.46	20.37	20.24	10.25	59.87	0.66	0.51	0.66	0.51	0.24	0.23			0.05	176.28
287	4/29/2004	07:55:34.3	3.04	2.55	4.51	0.68	0.32	0.50	0.42	0.23	0.01	0.09	0.19	-0.12	0.11	0.13	7.28	6.89	349.15	10.78	21.12	20.55	20.38	20.25	10.34	60.09	0.66	0.51	0.65	0.51	0.22	0.23			0.05	176.92
288	4/29/2004	08:06:04.3	3.04	2.55	4.51	0.69	0.32	0.50	0.42	0.23	0.03	0.08	0.19	-0.12	0.11	0.10	7.38	7.00	349.15	10.77	21.18	20.52	20.36	20.15	10.31	60.27	0.67	0.51	0.65	0.51	0.22	0.25			0.05	177.44
289	4/29/2004	08:19:04.3	3.04	2.55	4.55	0.68	0.32	0.50	0.42	0.25	0.01	0.06	0.18	-0.13	0.11	0.09	7.28	6.90	349.15	10.78	21.44	20.54	20.29	20.25	10.41	60.48	0.66	0.51	0.65	0.51	0.24	0.23			0.05	178.08
290	4/29/2004	08:32:04.3	3.04	2.57	4.53	0.69	0.32	0.50	0.42	0.25	0.03	0.06	0.19	-0.12	0.11	0.09	7.29	6.90	349.15	10.78	21.74	20.60	20.44	20.23	10.56	60.70	0.67	0.51	0.65	0.51	0.24	0.25			0.05	178.72
291	4/29/2004	08:45:04.3	3.04	2.55	4.55	0.68	0.32	0.51	0.42	0.25	0.03	0.06	0.19	-0.12	0.11	0.09	7.30	6.91	349.15	10.78	22.08	20.62	20.38	20.25	10.58	60.92	0.66	0.51	0.66	0.51	0.24	0.25			0.05	179.36
292	4/29/2004	08:58:04.3	3.02	2.55	4.53	0.65	0.32	0.50	0.42	0.23	0.03	0.06	0.19	-0.11	0.09	0.09	7.28	6.90	349.15	10.77	22.30	20.68	20.51	20.30	10.72	61.13	0.63	0.51	0.65	0.51	0.22	0.25			0.05	180.00
293	4/29/2004	09:11:04.3	3.02	2.57	4.55	0.65	0.30	0.52	0.39	0.26	0.03	0.07	0.19	-0.10	0.09	0.10	7.32	6.93	349.15	10.77	22.48	20.86	20.61	20.41	10.74	61.35	0.63	0.49	0.67	0.48	0.25	0.25			0.05	180.64
294	4/29/2004	09:24:04.3	3.02	2.57	4.55	0.65	0.32	0.50	0.39	0.27	0.03	0.07	0.19	-0.12	0.08	0.09	7.29	6.90	349.15	10.78	22.78	20.84	20.59	20.38	10.80	61.57	0.63	0.51	0.65	0.48	0.26	0.25			0.05	181.28
295	4/29/2004	09:37:04.3	3.02	2.57	4.51	0.68	0.28	0.50	0.40	0.23	0.03	0.08	0.16	-0.12	0.11	0.10	7.29	6.90	349.15	10.78	22.66	20.96	20.72	20.43	10.84	61.78	0.66	0.47	0.65	0.49	0.22	0.25			0.05	181.92
296	4/29/2004	09:50:04.3	3.02	2.57	4.55	0.65	0.28	0.46	0.39	0.25	0.03	0.07	0.16	-0.12	0.10	0.10	7.28	6.90	349.15	10.78	22.96	20.94	20.69	20.48	10.73	62.00	0.63	0.47	0.61	0.48	0.24	0.25			0.05	182.56
297	4/29/2004	10:03:04.3	3.02	2.59	4.53	0.65	0.29	0.49	0.42	0.23	0.04	0.08	0.17	-0.12	0.11	0.09	7.32	6.94	349.15	10.78	23.13	21.03	20.78	20.49	10.75	62.22	0.63	0.48	0.64	0.51	0.22	0.26			0.30	183.20
298	4/29/2004	10:21:06.8	3.00	2.59	4.66	0.63	0.30	0.50	0.42	0.25	0.02	0.08	0.18	-0.11	0.11	0.10	7.33	6.95	349.15	10.78	23.51	21.24	20.92	20.71	11.05	62.52	0.61	0.49	0.65	0.51	0.24	0.24			0.05	184.10
299	4/29/2004	10:34:06.8	3.00	2.59	4.70	0.61	0.29	0.50	0.42	0.25	0.03	0.06	0.18	-0.11	0.11	0.10	7.24	6.85	349.15	10.78	23.55	21.29	20.96	20.76	10.93	62.73	0.59	0.48	0.65	0.51	0.24	0.25			0.05	184.74
300	4/29/2004	10:47:06.8	3.04	2.62	4.70	0.65	0.32	0.49	0.42	0.23	0.03	0.06	0.17	-0.08	0.11	0.10	7.29	6.90	349.15	10.78	23.72	21.30	21.06	20.85	11.02	62.95	0.63	0.51	0.64	0.51	0.22	0.25			0.05	185.38
301	4/29/2004	11:00:06.8	3.09	2.70	4.71	0.65	0.30	0.49	0.40	0.21	0.03	0.06	0.17	-0.08	0.08	0.10	7.26	6.87	349.15	10.77	23.82	21.47	21.07	20.94	10.95	63.17	0.63	0.49	0.64	0.49	0.20	0.25	5.60	5.80	0.05	186.02
302	4/29/2004	11:13:06.8	3.09	2.70	4.75	0.65	0.32	0.51	0.41	0.21	0.03	0.07	0.19	-0.12	0.08	0.10	7.31	6.93	349.15	10.77	23.82	21.47	21.15	20.94	10.87	63.38	0.63	0.51	0.66	0.50	0.20	0.25			0.05	186.66
303	4/29/2004	11:26:06.8	3.09	2.70	4.77	0.63	0.32	0.47	0.41	0.23	0.03	0.07	0.18	-0.12	0.08	0.12	7.34	6.95	349.15	10.76	24.00	21.49	21.25	21.04	11.14	63.60	0.61	0.51	0.62	0.50	0.22	0.25			0.05	187.30
304	4/29/2004	11:39:06.8	3.09	2.72	4.75	0.64	0.30	0.47	0.40	0.23	0.03	0.07	0.18	-0.12	0.08	0.12	7.29	6.90	349.15	10.77	24.17	21.67	21.34	21.21	11.15	63.82	0.62	0.49	0.62	0.49	0.22	0.25			0.05	187.94
305	4/29/2004	11:52:06.8	3.09	2.72	4.79	0.65	0.30	0.50	0.42	0.25	0.03	0.08	0.18	-0.12	0.08	0.12	7.29	6.90	349.15	10.77	24.17	21.67	21.34	21.29	11.31	64.03	0.63	0.49	0.65	0.51	0.24	0.25			0.05	188.58
306	4/29/2004	12:05:06.8	2.93	2.55	4.60	0.66	0.32	0.51	0.42	0.25	0.03	0.08	0.19	-0.12	0.08	0.09	7.34	6.95	349.15	10.76	24.42	21.84	21.43	21.38	11.32	64.25	0.64	0.51	0.66	0.51	0.24	0.25			0.05	189.22

Table H3-1-5. CIX Campaign II, Cycle 1, 0.1 M NaOH Displacement

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																											
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																						
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow-	Flow									differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	Cor.	Cond1	pH	T1	T2	T3	T4	T5	elapsed	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	hours	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933			
1	4/29/2004	12:16:26.34	2.05	2.35	3.54	-0.09	-0.20	-0.26	-0.09	-0.02	-0.20	0.10	0.01	-0.07	-0.12	0.12	2.47	2.17	349.15	10.77	24.02	21.92	21.51	21.47	11.49	64.44	0.00	189.29
2	4/29/2004	12:17:06.34	2.41	2.35	4.11	0.60	-0.20	0.47	-0.09	0.25	-0.20	0.08	0.01	-0.12	-0.12	-0.58	7.80	7.42	349.15	10.77	24.02	21.92	21.51	21.47	11.57	64.45	0.01	189.32
3	4/29/2004	12:17:46.34	2.63	2.35	4.33	0.55	-0.20	0.42	-0.09	0.21	-0.20	0.07	0.01	-0.12	-0.12	-0.86	6.75	6.36	349.15	10.77	23.86	21.92	21.59	21.47	11.49	64.46	0.01	189.35
4	4/29/2004	12:18:26.34	2.63	2.37	4.35	0.58	-0.20	0.44	-0.09	0.22	-0.20	0.08	0.01	-0.12	-0.12	-2.11	7.20	6.82	349.15	10.77	23.78	21.92	21.43	21.38	11.24	64.47	0.01	189.38
5	4/29/2004	12:19:06.34	2.65	2.35	4.22	0.58	-0.20	0.45	-0.09	0.23	-0.20	0.09	0.01	-0.12	-0.12	-2.45	7.32	6.93	349.15	10.77	23.70	21.92	21.43	21.38	11.24	64.48	0.01	189.41
6	4/29/2004	12:19:46.34	2.63	2.33	4.07	0.58	-0.20	0.42	-0.09	0.22	-0.20	0.08	0.01	-0.07	-0.12	-2.65	7.19	6.80	349.15	10.77	23.90	21.97	21.48	21.43	11.04	64.49	0.01	189.45
7	4/29/2004	12:20:26.34	2.65	2.35	4.05	0.58	-0.20	0.41	-0.08	0.25	-0.20	0.09	0.01	0.04	-0.12	-2.71	7.30	6.91	349.15	10.77	24.23	21.97	21.40	21.43	10.88	64.50	0.01	189.48
8	4/29/2004	12:21:06.34	2.65	2.35	4.02	0.58	-0.20	0.44	-0.08	0.23	-0.20	0.09	0.01	0.13	-0.12	-2.78	7.30	6.92	349.15	10.77	24.47	21.88	21.40	21.43	10.88	64.52	0.01	189.51
9	4/29/2004	12:21:46.34	2.65	2.35	4.00	0.58	-0.20	0.44	-0.09	0.23	-0.20	0.09	0.02	0.21	-0.12	-2.80	7.30	6.92	349.15	10.77	24.63	21.97	21.48	21.43	10.96	64.53	0.01	189.54
10	4/29/2004	12:22:26.34	2.67	2.35	4.02	0.58	-0.20	0.45	-0.09	0.23	-0.20	0.09	0.01	0.32	-0.12	-2.83	7.32	6.94	349.15	10.77	24.91	22.01	21.52	21.48	11.09	64.54	0.01	189.58
11	4/29/2004	12:23:06.34	2.67	2.35	4.02	0.58	-0.21	0.42	-0.08	0.23	-0.20	0.10	0.02	0.40	-0.12	-2.85	7.29	6.90	349.15	10.76	24.99	22.01	21.44	21.48	11.09	64.55	0.01	189.61
12	4/29/2004	12:23:46.34	2.67	2.35	4.00	0.58	-0.20	0.42	-0.09	0.23	-0.20	0.09	0.00	0.46	-0.12	-2.85	7.32	6.93	349.15	10.77	24.99	22.01	21.44	21.56	11.01	64.56	0.01	189.64
13	4/29/2004	12:24:26.34	2.67	2.35	4.00	0.58	-0.20	0.40	-0.08	0.22	-0.20	0.09	0.01	0.52	-0.12	-2.85	7.26	6.88	349.15	10.78	24.99	21.93	21.44	21.40	11.01	64.57	0.01	189.68
14	4/29/2004	12:25:06.34	2.69	2.35	4.02	0.58	-0.20	0.42	-0.09	0.23	-0.20	0.09	0.01	0.57	-0.12	-2.87	7.32	6.94	349.15	10.78	24.99	21.93	21.44	21.40	11.01	64.58	0.01	189.71
15	4/29/2004	12:25:46.34	2.69	2.35	4.04	0.59	-0.20	0.41	-0.09	0.23	-0.20	0.10	0.02	0.62	-0.12	-2.87	7.28	6.90	349.39	10.78	25.12	22.06	21.49	21.52	11.14	64.59	0.01	189.74
16	4/29/2004	12:26:26.34	2.69	2.37	4.00	0.59	-0.20	0.40	-0.09	0.23	-0.20	0.09	0.01	0.68	-0.12	-2.88	7.26	6.87	349.15	10.77	25.04	22.06	21.49	21.52	11.14	64.60	0.01	189.77
17	4/29/2004	12:27:36.34	2.69	2.37	4.02	0.58	-0.20	0.41	-0.09	0.23	-0.20	0.10	0.01	0.76	-0.12	-2.88	7.34	6.96	349.15	10.77	24.96	22.06	21.49	21.52	10.97	64.62	0.02	189.83
18	4/29/2004	12:28:56.34	2.71	2.39	4.02	0.58	-0.20	0.40	-0.09	0.23	-0.20	0.09	0.01	0.86	-0.12	-2.88	7.30	6.92	349.15	10.77	25.28	22.06	21.41	21.52	11.14	64.65	0.02	189.90
19	4/29/2004	12:30:16.34	2.71	2.39	4.04	0.58	-0.20	0.40	-0.08	0.25	-0.20	0.10	0.02	0.96	-0.12	-2.88	7.29	6.90	349.15	10.77	25.60	22.06	21.49	21.52	11.14	64.67	0.02	189.96
20	4/29/2004	12:31:36.34	2.72	2.39	4.02	0.58	-0.20	0.40	-0.08	0.23	-0.20	0.09	0.01	1.07	-0.12	-2.88	7.26	6.87	349.15	10.77	25.36	22.06	21.41	21.52	11.06	64.69	0.02	190.03
21	4/29/2004	12:32:56.34	2.72	2.39	4.04	0.59	-0.20	0.40	-0.09	0.23	-0.20	0.09	0.02	1.17	-0.12	-2.88	7.29	6.90	349.39	10.77	25.36	22.06	21.49	21.60	11.14	64.71	0.02	190.09
22	4/29/2004	12:34:16.34	2.72	2.40	4.07	0.58	-0.20	0.40	-0.09	0.23	-0.20	0.10	0.02	1.26	-0.12	-2.88	7.28	6.90	349.15	10.77	25.20	22.14	21.49	21.52	11.14	64.74	0.02	190.16
23	4/29/2004	12:35:36.34	2.72	2.40	4.04	0.58	-0.20	0.41	-0.09	0.22	-0.20	0.10	0.02	1.36	-0.12	-2.88	7.32	6.94	349.15	10.77	25.12	21.98	21.41	21.52	11.06	64.76	0.02	190.23
24	4/29/2004	12:36:56.34	2.72	2.40	4.07	0.58	-0.20	0.40	-0.08	0.25	-0.24	0.10	0.02	1.46	-0.12	-2.89	7.29	6.90	349.15	10.77	25.12	22.06	21.49	21.52	11.06	64.78	0.02	190.29
25	4/29/2004	12:38:16.34	2.74	2.42	4.09	0.58	-0.19	0.40	-0.09	0.20	-0.24	0.09	0.02	1.56	-0.13	-2.89	7.28	6.89	349.15	10.77	25.12	22.06	21.41	21.52	10.97	64.80	0.02	190.36
26	4/29/2004	12:39:36.34	2.74	2.42	4.09	0.58	-0.20	0.41	-0.09	0.22	-0.20	0.10	0.02	1.66	-0.12	-2.88	7.25	6.86	349.15	10.78	25.20	22.14	21.49	21.60	11.06	64.82	0.02	190.42
27	4/29/2004	12:40:56.34	2.76	2.42	4.09	0.58	-0.20	0.41	-0.09	0.23	-0.20	0.09	0.02	1.75	-0.12	-2.88	7.33	6.95	349.15	10.77	25.20	22.14	21.57	21.60	11.06	64.85	0.02	190.49
28	4/29/2004	12:42:16.34	2.76	2.42	4.09	0.58	-0.20	0.41	-0.09	0.21	-0.20	0.10	0.02	1.84	-0.12	-2.88	7.28	6.90	349.15	10.79	25.28	22.14	21.49	21.60	11.06	64.87	0.02	190.55
29	4/29/2004	12:43:36.34	2.76	2.40	4.07	0.61	-0.20	0.45	-0.09	0.21	-0.20	0.09	0.02	1.91	-0.12	-2.88	7.32	6.94	349.15	10.77	25.24	22.18	21.54	21.57	11.10	64.89	0.02	190.62
30	4/29/2004	12:44:56.34	2.76	2.37	4.11	0.65	-0.20	0.50	-0.09	0.21	-0.20	0.09	0.02	1.94	-0.12	-2.88	7.30	6.91	349.15	10.78	25.32	22.18	21.46	21.57	11.10	64.91	0.02	190.69
31	4/29/2004	12:46:16.34	2.76	2.35	4.11	0.75	-0.23	0.60	-0.09	0.21	-0.20	0.09	0.02	1.96	-0.12	-2.88	7.31	6.93	349.15	10.77	25.24	22.18	21.46	21.57	11.10	64.94	0.02	190.75
32	4/29/2004	12:47:36.34	2.78	2.35	4.11	0.86	-0.23	0.71	-0.09	0.21	-0.24	0.09	0.02	1.94	-0.12	-2.88	7.28	6.90	349.15	10.77	25.37	22.31	21.50	21.61	11.07	64.96	0.02	190.82
33	4/29/2004	12:48:56.34	2.78	2.35	4.13	0.98	-0.23	0.80	-0.08	0.20	-0.20	0.09	0.02	1.91	-0.12	-2.88	7.33	6.95	349.15	10.78	25.29	22.31	21.42	21.53	10.98	64.98	0.02	190.88
34	4/29/2004	12:50:16.34	2.80	2.35	4.15	1.13	-0.23	0.94	-0.09	0.21	-0.20	0.07	0.02	1.88	-0.12	-2.88	7.30	6.91	349.15	10.76	25.37	22.39	21.50	21.61	10.98	65.00	0.02	190.95
35	4/29/2004	12:51:36.34	2.80	2.37	4.15	1.23	-0.23	1.06	-0.08	0.21	-0.24	0.06	0.02	1.88	-0.12	-2.88	7.32	6.93	349.15	10.77	25.50	22.52	21.55	21.66	11.11	65.02	0.02	191.01
36	4/29/2004	12:52:56.34	2.78	2.35	4.16	1.35	-0.23	1.18	-0.09	0.21	-0.24	0.06	0.02	1.86	-0.12	-2.89	7.28	6.90	349.15	10.78	25.42	22.52	21.63	21.66	11.20	65.05	0.02	191.08
37	4/29/2004	12:54:16.34	2.82	2.39	4.13	1.46	-0.23	1.25	-0.08	0.21	-0.24	0.04	0.02	1.82	-0.12	-2.89	7.30	6.92	349.15	10.78	25.42	22.60	21.63	21.66	11.28	65.07	0.02	191.15
38	4/29/2004	12:55:36.34	2.80	2.42	4.15	1.56	-0.23	1.39	-0.08	0.21	-0.24	0.07	0.01	1.80	-0.12	-2.88	7.31	6.93	349.15	10.77	25.42	22.60	21.63	21.66	11.20	65.09	0.02	191.21
39	4/29/2004	12:56:56.34	2.82	2.46	4.16	1.67	-0.22	1.50	-0.08	0.21	-0.24	0.07	0.02	1.80	-0.12	-2.88	7.29	6.90	349.15	10.77	25.34	22.60	21.63	21.66	11.20	65.11	0.02	191.28
40	4/29/2004	12:58:16.34	2.82	2.48	4.16	1.77	-0.22	1.61	-0.10	0.21	-0.24	0.06	-0.02	1.79	-0.12	-2.88	7.30	6.91	349.15	10.78	25.37	22.55	21.66	21.69	11.23	65.14	0.02	191.34
41	4/29/2004	12:59:36.34	2.83	2.50	4.16	1.85	-0.21	1.68	-0.12	0.21	-0.24	0.07	0.02	1.79	-0.12	-2.88	7.34	6.95	349.15	10.77	25.45	22.63	21.66	21.69	11.31	65.16	0.02	191.41
42	4/29/2004	13:00:56.34	2.83	2.53	4.20	1.93	-0.22	1.79	-0.12	0.21	-0.24	0.07	0.02	1.78	-0.12	-2.88	7.28	6.90	349.15	10.77	25.45	22.55	21.58	21.69	11.23	65.18	0.02	191.47
43	4/29/2004	13:02:16.34	2.83	2.53	4.18	2.01	-0.21	1.85	-0.12	0.21	-0.24	0.07	-0.02	1.78	-0.12	-2.88	7.27	6.88	349.15	10.76	25.45	22.63	21.66	21.69	11.23	65.20	0.02	191.54
44	4/29/2004	13:03:36.34	2.83	2.55	4.18	2.08	-0.21	1.95	-0.10	0.21	-0.24	0.07	-0.02	1.77	-0.12	-2.88	7.32	6.93	349.15	10.77	25.69	22.63	21.58	21.78	11.23	65.22	0.02	191.60
45	4/29/2004	13:04:56.34	2.85	2.55	4.18	2.21	-0.21	2.06	-0.12	0.22	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.36	6.98	349.15	10.76	25.88	22.51	21.46	21.65	11.10	65.25	0.02	191.67
46	4/29/2004	13:06:16.34	2.85	2.57	4.22	2.31	-0.20	2.12	-0.10	0.23	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.31	6.93	349.15	10.77	26.09	22.55	21.58	21.78	11.15	65.27	0.02	191.74
47	4/29/2004	13:07:36.34	2.87	2.57	4.20	2.41	-0.21	2.23	-0.12	0.23	-0.24	0.07	-0.02	1.78	-0.13	-2.88	7.28	6.90	349.15	10.77	26.09	22.55	21.58	21.69	11.07	65.29	0.02	191.80
48	4/29/2004	13:08:56.34	2.87	2.57	4.20	2.51	-0.21	2.34	-0.10	0.27	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.32	6.93	349.15	10.77	26.09	22.55	21.58	21.69	10.98	65.31	0.02	191.87
49	4/29/2004	13:10:16.34	2.89	2.59	4.20	2.63	-0.22	2.46	-0.12	0.34	-0.24	0.08	-0.02	1.78	-0.12	-2.89	7.34	6.96	349.15	10.77	26.22	22.52	21.55	21.74	11.03	65.34	0.02	191.93
50	4/29/2004	13:11:36.34	2.89	2.59	4.27	2.70	-0.21	2.57	-0.10	0.42	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.28	6.90	349.15	10.77	26.26	22.56	21.59	21.79	11.16	65.36	0.02	192.00
51	4/29/2004	13:12:56.34	2.89	2.59	4.24	2.81	-0.21	2.67	-0.10	0.52	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.24	6.85	349.15	10.77	26.22	22.52	21.55	21.74	11.11	65.38	0.02	192.06
52	4/29/2004	13:14:16.34	2.89	2.59	4.24	2.91	-0.21	2.73	-0.07	0.59	-0.24	0.08	-0.02	1.78	-0.12	-2.88	7.31	6.93	349.15	10.78	26.18	22.56	21.59	21.79	11.16	65.40	0.02	192.13
53	4/29/2004	13:15:35.34	2.80	2.61	4.05	2.73	-0.21	2.56	-0.10	0.55	-0.24	-0.07	-0.02	1.69	-0.12	-2.95	0.18	0.07	349.15	10.78	25.43	22.61	21.88	21.83	11.21	65.42	0.00	192.19
54	4/29/2004	13:16:15.34	2.80	2.61	4.00	2.72	-0.21	2.56	-0.09	0.54	-0.24	-0.07	-0.02	1.69	-0.12	-2.95	0.14	0.04	349.39	10.77	25.83	22.61	21.72	21.75	11.29	65.43	0.00	192.19
55	4/29/2004	13:16:55.34	2.87	2.61	4.18	2.91	-0.21	2.73	-0.09	0.64	-0.24	0.08	-0.02	1.77	-0.12	-2.89	3.02	2.69	349.15	10.77	26.98	22.56	21.27	21.79	11.24	65.45	0.00	192.19
56	4/29/2004	13:18:25.34	2.91	2.62	4.24	3.02	-0.21	2.84	-0.09	0.71	-0.24	0.18	-0.02	1.78	-0.12	-2.94	6.88	6.49	349.15	10.77	26.07	22.61	21.72	21.83	11.62	65.47	0.02	192.26
57	4/29/2004	13:20:25.34	2.93	2.62	4.26	3.08	-0.21	2.90	-0.09	0.76	-0.24	0.29	-0.02	1.80	-0.12	-2.94	7.23	6.84	349.15	10.77	25.86	22.48	21.67	21.71	11.41	65.50	0.02	192.36
58	4/29/2004	13:22:25.34	2.93	2.64	4.29	3.11	-0.21	2.93	-0.09	0.79	-0.24	0.43	-0.02	1.80	-0.12	-2.91	7.36	6.98	349.15	10.77	25.62	22.48	21.67	21.79	11.16	65.54	0.02	192.46
59	4/29/2004	13:24:25.34	2.95	2.66	4.31	3.12	-0.20	2.95	-0.09	0.82	-0.24	0.56	-0.02	1.80	-0.13	-2.93	7.27	6.88	349.15	10.77	25.42	22.52	21.71	21.74	10.95	65.57	0.02	192.56
60	4/29/2004	13:26:25.34	2.58	2.66	3.74	2.81	-0.21	2.63	-0.09	0.69	-0.24	0.39	-0.02	1.68	-0.12	-3.02	2.49	2.18	349.15	10.75	25.26	22.52	21.79	21.82	11.11	65.60	0.01	192.65

Table H3-1-6. CIX Campaign II, Cycle 1, DI Water Pre-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																		
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																													
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow-	Flow							elaps-	DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	Cor.	Cond1	pH	T1	T2	T3	T4	T5	ed	inch	inch	inch	inch	inch	inch	H1	H2	ential	tive
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	hours	water	water	water	water	water	water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
1	4/29/2004	14:13:25.34	2.10	2.83	3.17	2.85	-0.20	2.67	-0.08	0.69	-0.24	0.39	-0.02	1.67	-0.16	-3.01	0.14	0.04	349.15	10.75	24.81	22.47	21.98	22.02	12.05	66.39									0.00	192.67
2	4/29/2004	14:14:55.34	2.96	2.81	4.27	3.01	-0.20	2.88	-0.09	0.81	-0.24	0.71	-0.02	1.88	-0.16	-2.93	7.52	7.14	349.15	10.74	24.69	22.44	21.87	21.98	11.93	66.41									0.03	192.70
3	4/29/2004	14:16:25.34	2.96	2.83	4.33	3.02	-0.20	2.88	-0.08	0.81	-0.24	0.82	-0.02	1.88	-0.16	-2.93	7.26	6.87	349.15	10.75	24.29	22.52	21.95	21.98	12.01	66.44							5.90		0.02	192.78
4	4/29/2004	14:17:55.34	2.98	2.81	4.37	3.01	-0.20	2.87	-0.08	0.81	-0.24	0.93	-0.02	1.88	-0.16	-2.93	7.58	7.20	349.15	10.75	24.21	22.60	22.11	22.06	11.60	66.46									0.03	192.85
5	4/29/2004	14:19:25.34	3.00	2.81	4.35	3.02	-0.20	2.87	-0.08	0.81	-0.24	1.03	-0.02	1.88	-0.16	-2.93	7.17	6.78	349.15	10.75	24.21	22.52	22.03	21.98	11.20	66.49									0.02	192.92
6	4/29/2004	14:20:55.34	2.98	2.81	4.37	3.02	-0.20	2.87	-0.09	0.81	-0.24	1.13	-0.02	1.88	-0.16	-2.93	6.89	6.49	349.15	10.74	24.37	22.52	21.95	21.98	11.11	66.51									0.02	193.00
7	4/29/2004	14:22:25.34	3.00	2.81	4.33	3.04	-0.20	2.89	-0.09	0.82	-0.24	1.25	-0.02	1.89	-0.16	-2.91	7.00	6.60	349.15	10.76	24.69	22.52	21.87	22.06	11.03	66.54									0.02	193.07
8	4/29/2004	14:23:55.34	2.96	2.83	4.35	3.02	-0.20	2.87	-0.09	0.81	-0.24	1.34	-0.02	1.88	-0.16	-2.93	7.50	7.12	353.07	10.80	24.85	22.52	21.79	22.06	11.03	66.56									0.03	193.15
9	4/29/2004	14:25:25.34	2.96	2.83	4.27	3.03	-0.20	2.87	-0.09	0.81	-0.24	1.40	-0.02	1.89	-0.16	-2.93	7.66	7.29	369.52	10.84	25.01	22.52	21.63	21.98	10.95	66.59									0.03	193.22
10	4/29/2004	14:26:55.34	2.95	2.83	4.29	3.04	-0.20	2.88	-0.09	0.82	-0.24	1.46	-0.02	1.89	-0.16	-2.91	7.32	6.93	385.96	10.92	25.09	22.60	21.47	22.06	11.03	66.61									0.02	193.29
11	4/29/2004	14:28:25.34	2.91	2.84	4.24	3.06	-0.20	2.90	-0.09	0.81	-0.24	1.48	-0.02	1.89	-0.16	-2.91	7.38	7.00	390.13	11.03	25.13	22.55	21.34	22.02	10.98	66.64									0.02	193.37
12	4/29/2004	14:29:55.34	2.80	2.86	4.11	3.07	-0.20	2.90	-0.08	0.81	-0.24	1.51	-0.02	1.89	-0.16	-2.93	7.06	6.67	361.42	11.16	24.97	22.55	21.26	22.02	10.90	66.66									0.02	193.44
13	4/29/2004	14:31:25.34	2.69	2.86	4.02	3.08	-0.20	2.90	-0.08	0.81	-0.24	1.53	-0.02	1.86	-0.16	-2.93	7.26	6.87	316.50	11.28	24.97	22.55	21.10	22.02	10.98	66.69									0.02	193.52
14	4/29/2004	14:32:55.34	2.60	2.86	3.91	3.08	-0.20	2.90	-0.08	0.82	-0.24	1.52	-0.02	1.85	-0.16	-2.93	7.34	6.95	268.15	11.35	24.97	22.55	21.02	22.02	10.82	66.71									0.02	193.59
15	4/29/2004	14:34:25.34	2.52	2.88	3.89	3.11	-0.20	2.92	-0.08	0.81	-0.24	1.53	-0.02	1.84	-0.16	-2.93	7.20	6.81	234.77	11.38	24.97	22.55	20.94	22.02	10.98	66.74									0.02	193.66
16	4/29/2004	14:35:55.34	2.47	2.88	3.78	3.12	-0.20	2.94	-0.09	0.82	-0.24	1.53	-0.02	1.84	-0.16	-2.93	7.26	6.87	206.30	11.40	24.97	22.55	21.02	22.02	10.82	66.76									0.02	193.74
17	4/29/2004	14:37:25.34	2.19	2.88	3.50	3.12	-0.20	2.98	-0.09	0.81	-0.24	1.53	-0.02	1.84	-0.16	-2.93	7.29	6.90	189.36	11.44	24.84	22.51	20.89	22.05	10.86	66.79									0.02	193.81
18	4/29/2004	14:38:55.34	2.17	2.88	3.48	3.14	-0.20	2.98	-0.09	0.81	-0.24	1.53	-0.02	1.84	-0.14	-2.93	7.21	6.82	169.48	11.47	24.97	22.63	21.02	22.10	10.98	66.81									0.02	193.89
19	4/29/2004	14:40:25.34	2.17	2.88	3.48	3.14	-0.20	3.00	-0.09	0.82	-0.24	1.53	-0.02	1.84	-0.16	-2.93	7.36	6.98	153.04	11.48	24.97	22.55	21.10	22.02	10.98	66.84									0.02	193.96
20	4/29/2004	14:41:55.34	2.14	2.86	3.47	3.15	-0.20	2.99	-0.09	0.82	-0.24	1.55	-0.02	1.82	-0.16	-2.94	7.51	7.13	140.77	11.50	25.01	22.60	21.06	22.06	11.11	66.86									0.03	194.04
21	4/29/2004	14:43:25.34	2.16	2.88	3.47	3.15	-0.20	3.00	-0.09	0.81	-0.24	1.53	-0.02	1.82	-0.16	-2.94	7.40	7.01	132.42	11.50	25.06	22.56	21.19	22.11	10.83	66.89									0.02	194.11
22	4/29/2004	14:44:40.34	1.82	2.86	3.19	20.01	-0.20	20.00	-0.08	20.28	-0.24	-20.23	-0.02	-0.10	-0.16	-2.93	8.14	7.78	124.32	11.50	25.62	22.56	21.83	22.11	10.83	66.91									0.01	194.17
23	4/29/2004	14:45:25.34	1.42	2.86	2.75	-20.23	-0.20	-20.22	-0.09	0.71	-0.24	1.14	-0.02	20.15	-0.16	-2.94	6.97	6.58	124.32	11.50	24.82	22.56	21.19	22.11	10.91	66.92									0.01	194.21
24	4/29/2004	14:46:10.34	1.27	2.88	2.62	0.25	-0.20	0.05	-0.09	0.10	-0.24	1.28	-0.02	0.20	-0.16	-2.94	7.68	7.31	120.39	11.46	24.55	22.61	21.32	22.15	11.04	66.93									0.01	194.25
25	4/29/2004	14:46:55.34	1.13	2.88	2.36	0.07	-0.20	-0.15	-0.08	0.04	-0.24	0.28	-0.02	0.25	-0.16	0.59	6.74	6.34	124.57	11.43	24.50	22.64	21.43	22.11	11.08	66.95									0.01	194.28
26	4/29/2004	14:47:40.34	1.16	2.88	2.55	0.29	-0.21	0.09	-0.09	0.11	-0.24	0.12	-0.02	0.28	-0.16	0.05	7.83	7.46	129.23	11.43	24.87	22.61	21.32	22.15	10.88	66.96									0.01	194.32
27	4/29/2004	14:48:25.34	0.76	2.88	1.94	0.02	-0.21	-0.19	-0.09	0.00	-0.24	-0.46	-0.02	0.19	-0.16	-0.04	3.77	3.41	136.84	11.43	24.71	22.61	21.48	22.07	10.96	66.97									0.01	194.36
28	4/29/2004	14:49:10.34	0.63	2.88	1.83	0.00	-0.20	-0.20	-0.09	0.00	-0.24	-0.52	-0.02	0.19	-0.16	-0.04	0.14	0.04	136.84	11.42	24.79	22.61	21.56	22.07	11.21	66.98	-0.05	-0.01	-0.02	0.00	0.03	-0.02	6.00	5.80	0.00	194.36
29	4/29/2004	14:49:55.34	0.52	2.88	1.70	0.00	-0.20	-0.19	-0.09	0.00	-0.24	-0.56	-0.02	0.19	-0.16	-0.04	0.14	0.04	136.59	11.42	24.87	22.61	21.56	22.15	11.21	67.00	-0.05	-0.01	-0.01	0.00	0.03	-0.02			0.00	194.36
30	4/29/2004	14:50:40.34	0.41	2.88	1.61	0.00	-0.20	-0.19	-0.08	0.00	-0.24	-0.62	-0.02	0.19	-0.16	-0.06	0.14	0.04	136.59	11.42	24.87	22.61	21.64	22.15	11.29	67.01	-0.05	-0.01	-0.01	0.01	0.03	-0.02			0.00	194.36
31	4/29/2004	14:51:25.34	0.87	2.88	2.25	0.31	-0.20	0.12	-0.09	0.14	-0.24	-0.54	-0.02	0.32	-0.16	0.04	9.25	8.95	136.84	11.43	25.11	22.61	21.32	22.15	11.29	67.02	0.26	-0.01	0.30	0.00	0.17	-0.02			0.02	194.38
32	4/29/2004	14:52:10.34	1.29	2.90	2.69	0.25	-0.20	0.06	-0.09	0.09	-0.24	-0.59	-0.02	0.28	-0.16	0.01	6.95	6.55	136.59	11.47	24.95	22.61	21.24	22.15	11.21	67.03	0.20	-0.01	0.24	0.00	0.12	-0.02			0.02	194.42
33	4/29/2004	14:53:40.34	2.12	2.90	3.50	0.25	-0.20	0.06	-0.09	0.11	-0.24	-0.62	-0.02	0.31	-0.16	0.02	7.24	6.86	120.39	11.52	25.11	22.61	21.24	22.07	11.12	67.06	0.20	-0.01	0.24	0.00	0.14	-0.02			0.02	194.49
34	4/29/2004	14:55:10.34	2.14	2.92	3.47	0.25	-0.20	0.06	-0.09	0.10	-0.23	-0.62	-0.02	0.32	-0.16	0.02	7.30	6.91	108.12	11.52	25.51	22.69	21.32	22.15	11.12	67.08	0.20	-0.01	0.24	0.00	0.13	-0.01			0.02	194.56
35	4/29/2004	14:56:40.34	2.12	2.92	3.48	0.24	-0.20	0.06	-0.08	0.10	-0.24	-0.63	-0.02	0.32	-0.16	0.02	7.27	6.88	99.78	11.52	25.75	22.61	21.24	22.07	10.47	67.11	0.19	-0.01	0.24	0.01	0.13	-0.02			0.02	194.64
36	4/29/2004	14:58:10.34	2.10	2.92	3.52	0.25	-0.20	0.06	-0.09	0.10	-0.24	-0.63	-0.02	0.32	-0.16	0.02	7.06	6.67	91.68	11.54	26.02	22.64	21.27	22.19	10.91	67.13	0.20	-0.01	0.24	0.00	0.13	-0.02			0.02	194.71
37	4/29/2004	14:59:40.34	2.12	2.94	3.48	0.25	-0.20	0.07	-0.08	0.10	-0.24	-0.62	-0.02	0.31	-0.16	0.02	7.36	6.97	87.75	11.55	26.10	22.64	21.27	22.11	11.00	67.16	0.20	-0.01	0.25	0.01	0.13	-0.02			0.02	194.78
38	4/29/2004	15:01:10.34	2.12	2.94	3.47	0.25	-0.21	0.06	-0.09	0.09	-0.24	-0.62	-0.02	0.32	-0.16	0.02	7.26	6.88	83.58	11.55	26.34	22.64	21.35	22.11	11.00	67.18	0.20	-0.02	0.24	0.00	0.12	-0.02			0.02	194.86
39	4/29/2004	15:02:40.34	2.12	2.94	3.45	0.25	-0.20	0.07	-0.09	0.10	-0.24	-0.62	-0.03	0.32	-0.16	0.03	7.32	6.94	83.58	11.55	26.42	22.64	21.27	22.11	10.91	67.21	0.20	-0.01	0.25	0.00	0.13	-0.02			0.02	194.93
40	4/29/2004	15:04:10.34	2.10	2.94	3.45	0.25	-0.20	0.06	-0.09	0.07	-0.20	-0.63	-0.02	0.32	-0.14	0.03	7.06	6.67	79.41	11.55	26.50	22.64	21.43	22.11	11.08	67.23	0.20	-0.01	0.24	0.00	0.10	0.02			0.02	195.00
41	4/29/2004	15:05:40.34	2.10	2.94	3.45	0.25	-0.21	0.07	-0.09	0.10	-0.23	-0.62	-0.02	0.32	-0.16	0.02	7.32	6.94	79.41	11.55	26.82	22.64	21.27	22.11	10.91	67.26	0.20	-0.02	0.25	0.00	0.13	-0.01			0.02	195.08
42	4/29/2004	15:07:10.34	2.10	2.95	3.47	0.25	-0.21	0.06	-0.08	0.10	-0.22	-0.63	-0.02	0.32	-0.16	0.02	7.13	6.74	75.48	11.54	26.87	22.77	21.32	22.15	10.96	67.28	0.20	-0.02	0.24	0.01	0.13	0.00			0.02	195.15
43	4/29/2004	15:08:40.34	1.57	2.95	2.66	-0.07	-0.21	-0.25	-0.08	-0.04	-0.23	-0.76	-0.02	0.17	-0.16	-0.08	0.14	0.04	75.23	11.55	24.95	22.69	21.80	22.15	11.37	67.31	-0.12	-0.02	-0.07	0.01	-0.01	-0.01			0.00	195.19
44	4/29/2004	15:10:10.34	1.02	2.95	2.07	0.02	-0.21	-0.16	-0.09	0.00	-0.22	-0.73	-0.02	0.24	-0.16	-0.04	0.14	0.04	71.31	11.55	24.55	22.69	21.96	22.15	11.53	67.33	-0.03	-0.02	0.02	0.00	0.03	0.00			0.00	195.19
45	4/29/2004	15:10:29.84	1.15	2.95	2.42	0.29	-0.20	0.12	-0.09	0.12	-0.24	-0.59	-0.03	0.36	-0.16	0.04	0.14	0.04	71.31	11.55	25.35	22.69	21.56	22.15	11.45	67.34	0.24	-0.01	0.30	0.00	0.15	-0.02			0.00	195.19
46	4/29/2004	15:10:44.84	1.42	2.95	2.88	0.44	-0.20	0.27	-0.09	0.20	-0.23	-0.52	-0.03	0.44	-0.16	0.14	5.88	5.47	71.31	11.55	26.55	22.69	21.07	22.15	11.62	67.34	0.39	-0.01	0.45	0.00	0.23	-0.01			0.00	195.20
47	4/29/2004	15:10:59.84	1.70	2.97	3.14	0.38	-0.20	0.23	-0.08	0.17	-0.24	-0.52	-0.02	0.42	-0.14	0.12	11.95	11.89	71.31	11.55	26.55	22.61	21.24	22.15	11.37	67.35	0.33	-0.01	0.41	0.01	0.20	-0.02			0.01	195.21
48	4/29/2004	15:11:14.84	1.90	2.95	3.23	0.30	-0.21	0.11	-0.09	0.12	-0.22	-0.61	-0.03	0.36	-0.16	0.03	9.29	8.99	71.31	11.55	26.07	22.69	21.40	22.23	11.29	67.35	0.25	-0.02	0.29	0.00	0.15	0.00			0.01	195.23
49	4/29/2004	15:11:29.84	2.03	2.97	3.39	0.25	-0.21	0.07	-0.09	0.10	-0.23	-0.62	-0.03	0.32	-0.16	0.02	7.49	7.11	71.31	11.55	26.27	22.73	21.44	22.20	11.42	67.36	0.20	-0.02	0.25	0.00	0.13	-0.01			0.00	195.24
50	4/29/2004	15:11:44.84	2.08	2.97	3.43	0.25	-0.20	0.06	-0.09	0.10	-0.24	-0.62	-0.02	0.32	-0.16	0.02	7.19	6.80	71.31	11.55	26.63	22.69	21.16	22.07	11.29	67.36	0.20	-0.01	0.24	0.00	0.13	-0.02			0.00	195.26
51	4/29/2004	15:11:59.84	2.08	2.95	3.37	0.15	-0.20	-0.04	-0.09	0.06	-0.22	-0.64	-0.02	0.27	-0.16	-0.03	5.78	5.37	71.31	11.56	25.75	22.69	21.64	22.15	11.45	67.36	0.10	-0.01	0.14	0.00	0.09	0.00			0.00	195.27
52	4/29/2004	15:12:14.84	2.06	2.95	3.30	0.08	-0.20	-0.14	-0.09	0.00	-0.24	-0.70	-0.02	0.25	-0.16	-0.04	3.79	3.42	71.06	11.55	24.38	22.69	22.04	22.07	11.29	67.37	0.03	-0.01	0.04	0.00	0.03	-0.02			0.00	195.28
53	4/29/2004	15:12:29.84	2.06	2.97	3.30	0.08	-0.20	-0.11	-0.09	0.03	-0.24	-0.69	-0.02	0.26	-0.14	-0.04	2.46	2.16	71.31	11.55	25.03	22.69	21.88	22.15	11.45	67.37	0.03	-0.01	0.07	0.00	0.06	-0.02			0.00	195.28
54	4/29/2004	15:12:44.84	2.06	2.97	3.30	0.08	-0.20	-0.13	-0.08	0.01	-0.24	-0.69	-0.03	0.25	-0.14	-0.04	0.14	0.04	71.31	11.55	25.11	22.61	21.80	22.15	11.37	67.38	0.03	-0.01	0.05	0.01	0.04	-0.02			0.00	195.28
55	4/29/2004	15:12:59.84	2.08	2.97	3.30	0.08	-0.20	-0.11	-0.09	0.00	-0.24	-0.69	-0.03	0.25	-0.16	-0.04	0.14	0.04	71.31	11.56	25.07	22.65	21.52	22.20	11.42	67.38	0.03	-0.01	0.07	0.00	0.03	-0.02			0.00	195.28

Table H3-1-7. CIX Campaign II, Cycle 1, 0.5 M Nitric Acid Eluent

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow-	Flow								elaps-	DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	Cor.	Cond1	pH	T1	T2	T3	T4	T5	ed	inch	inch	inch	inch	inch	inch	H1	H2	ential	tive
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	hours	water	water	water	water	water	water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
1	5/3/2004	08:42:24.85	0.02	0.24	1.21	0.14	-0.16	-0.11	-0.08	0.04	-0.24	-0.30	-0.02	0.25	0.42	-0.09	0.14	0.04	55.11	11.54	20.47	20.46	20.37	20.48	18.79	72.67	0.23	0.03	0.17	0.01	0.02	-0.02			0.00	195.36
2	5/3/2004	08:45:54.85	1.00	0.22	2.24	0.21	-0.17	-0.04	-0.08	0.04	-0.24	-0.25	-0.02	0.28	0.42	-0.04	2.32	2.03	62.96	11.53	20.82	20.41	20.48	20.35	18.58	72.73	0.30	0.02	0.24	0.01	0.02	-0.02			0.00	195.41
3	5/3/2004	08:53:24.85	1.99	0.22	3.23	0.21	-0.16	-0.03	-0.09	0.04	-0.24	-0.28	0.00	0.28	0.42	0.10	2.37	2.07	67.38	11.47	21.05	20.47	20.47	20.34	18.73	72.85	0.30	0.03	0.25	0.00	0.02	-0.02			0.01	195.52
4	5/3/2004	09:03:54.85	1.97	0.20	3.30	0.20	-0.16	-0.04	-0.09	0.05	-0.23	-0.29	-0.02	0.26	0.42	0.15	2.43	2.13	67.38	11.51	67.22	20.47	1.13	20.33	18.80	73.03	0.29	0.03	0.24	0.00	0.03	-0.01			0.01	195.67
5	5/3/2004	09:14:24.85	1.97	0.22	3.34	0.21	-0.16	-0.04	-0.08	0.05	-0.24	-0.29	-0.02	0.25	0.42	0.14	2.37	2.08	59.03	11.54	14.38	20.53	19.07	20.39	19.19	73.20	0.30	0.03	0.24	0.01	0.03	-0.02			0.01	195.83
6	5/3/2004	09:24:54.85	1.95	0.20	3.26	0.18	-0.16	-0.04	-0.09	0.05	-0.24	-0.28	-0.02	0.24	0.42	0.12	1.94	1.68	55.11	11.55	25.16	20.57	19.20	20.36	19.31	73.38	0.27	0.03	0.24	0.00	0.03	-0.02			0.01	195.99
7	5/3/2004	09:35:24.85	1.95	0.18	3.34	0.16	-0.16	-0.04	-0.09	0.06	-0.24	-0.28	-0.02	0.22	0.40	0.10	2.51	2.21	50.93	11.55	34.39	20.58	19.76	20.36	19.32	73.55	0.25	0.03	0.24	0.00	0.04	-0.02			0.01	196.16
8	5/3/2004	09:45:54.85	1.95	0.18	3.28	0.15	-0.16	-0.04	-0.07	0.06	-0.24	-0.26	-0.02	0.22	0.38	0.09	2.52	2.22	46.76	11.56	36.23	20.68	19.55	20.31	19.27	73.73	0.24	0.03	0.24	0.02	0.04	-0.02			0.01	196.32
9	5/3/2004	09:56:24.85	1.95	0.18	3.30	0.11	-0.16	-0.07	-0.07	0.05	-0.24	-0.28	0.00	0.22	0.38	0.08	2.52	2.22	46.76	11.56	37.91	20.70	19.41	20.33	19.45	73.90	0.20	0.03	0.22	0.02	0.03	-0.02			0.01	196.49
10	5/3/2004	10:06:54.85	1.93	0.20	3.28	0.11	-0.16	-0.11	-0.06	0.05	-0.23	-0.28	-0.02	0.19	0.40	0.07	2.52	2.22	42.83	11.55	37.99	20.71	19.18	20.34	19.54	74.08	0.20	0.03	0.17	0.04	0.03	-0.01			0.01	196.65
11	5/3/2004	10:17:24.85	1.93	0.18	3.32	0.11	-0.16	-0.13	-0.10	0.04	-0.22	-0.29	-0.02	0.19	0.40	0.07	2.50	2.20	42.83	11.49	38.60	20.69	18.99	20.31	19.67	74.25	0.20	0.03	0.15	-0.01	0.02	0.00			0.01	196.82
12	5/3/2004	10:27:54.85	1.93	0.18	3.28	0.11	-0.16	-0.14	-0.09	0.05	-0.23	-0.28	-0.02	0.19	0.40	0.08	2.55	2.24	38.66	11.42	40.45	20.74	18.96	20.37	19.65	74.43	0.20	0.03	0.14	0.00	0.03	-0.01			0.01	196.98
13	5/3/2004	10:38:24.85	1.93	0.20	3.30	0.11	-0.16	-0.14	-0.09	0.04	-0.22	-0.29	-0.02	0.19	0.40	0.07	2.55	2.24	38.66	11.40	41.65	20.85	18.98	20.39	19.75	74.60	0.20	0.03	0.14	0.00	0.02	0.00			0.01	197.15
14	5/3/2004	10:48:54.85	1.95	0.20	3.26	0.08	-0.20	-0.17	-0.10	0.00	-0.20	-0.28	-0.02	0.19	0.40	0.07	2.52	2.21	38.66	11.36	42.13	20.94	18.91	20.32	19.76	74.78	0.17	-0.01	0.11	-0.01	-0.02	0.02			0.01	197.32
15	5/3/2004	10:59:24.85	1.93	0.22	3.34	0.09	-0.20	-0.17	-0.08	0.01	-0.22	-0.29	0.00	0.19	0.38	0.04	2.52	2.22	38.66	11.32	43.12	21.07	18.57	20.46	19.82	74.95	0.18	-0.01	0.11	0.01	-0.01	0.00			0.01	197.48
16	5/3/2004	11:09:54.85	1.93	0.24	3.30	0.08	-0.19	-0.17	-0.08	0.00	-0.20	-0.29	0.01	0.16	0.38	0.04	2.49	2.19	38.66	11.27	35.95	21.20	17.23	20.50	20.02	75.13	0.17	0.01	0.11	0.01	-0.02	0.02			0.01	197.65
17	5/3/2004	11:20:24.85	1.93	0.26	3.30	0.08	-0.20	-0.17	-0.08	0.01	-0.22	-0.29	0.02	0.17	0.38	0.04	2.52	2.21	38.66	11.22	35.09	21.29	14.89	20.51	20.03	75.30	0.17	-0.01	0.11	0.01	-0.01	0.00			0.01	197.81
18	5/3/2004	11:30:54.85	1.93	0.28	3.30	0.04	-0.20	-0.17	-0.08	0.04	-0.20	-0.30	-0.03	0.19	0.38	0.05	2.50	2.20	42.59	11.16	37.42	21.26	13.55	20.56	20.16	75.48	0.13	-0.01	0.11	0.01	0.02	0.02			0.01	197.98
19	5/3/2004	11:41:24.85	1.93	0.31	3.28	0.03	-0.20	-0.17	-0.09	0.04	-0.22	-0.31	-0.03	0.19	0.40	0.05	2.51	2.21	42.83	11.14	39.46	21.34	12.73	20.64	20.08	75.65	0.12	-0.01	0.11	0.00	0.02	0.00			0.01	198.15
20	5/3/2004	11:51:54.85	1.92	0.33	3.30	0.04	-0.20	-0.17	-0.09	0.04	-0.23	-0.31	-0.03	0.19	0.41	0.05	2.31	2.02	42.83	11.10	41.43	21.43	12.01	20.65	20.17	75.83	0.13	-0.01	0.11	0.00	0.02	-0.01			0.01	198.31
21	5/3/2004	12:02:24.85	1.92	0.37	3.34	0.03	-0.20	-0.21	-0.08	0.05	-0.23	-0.35	-0.03	0.17	0.36	0.07	2.52	2.21	47.01	11.09	43.27	21.55	11.48	20.78	20.30	76.00	0.12	-0.01	0.07	0.01	0.03	-0.01			0.01	198.48
22	5/3/2004	12:12:54.85	1.93	0.39	3.30	0.03	-0.20	-0.21	-0.12	0.06	-0.23	-0.35	-0.02	0.14	0.38	0.05	2.49	2.19	46.76	11.09	44.60	21.56	11.09	20.79	20.39	76.18	0.12	-0.01	0.07	-0.03	0.04	-0.01			0.01	198.64
23	5/3/2004	12:23:24.85	1.93	0.44	3.30	0.03	-0.20	-0.21	-0.12	0.04	-0.22	-0.35	0.00	0.14	0.38	0.07	2.49	2.19	50.93	11.04	45.23	21.65	11.25	20.87	20.31	76.35	0.12	-0.01	0.07	-0.03	0.02	0.00			0.01	198.81
24	5/3/2004	12:33:54.85	1.92	0.46	3.36	0.02	-0.19	-0.21	-0.12	0.04	-0.23	-0.36	-0.02	0.15	0.38	0.05	2.52	2.22	50.93	10.74	44.04	21.78	13.19	21.01	20.37	76.53	0.11	0.01	0.07	-0.03	0.02	-0.01			0.01	198.97
25	5/3/2004	12:44:24.85	2.01	0.50	3.41	0.00	-0.20	-0.21	-0.12	0.04	-0.20	-0.36	-0.02	0.13	0.42	0.07	2.53	2.23	50.69	8.44	40.13	21.70	16.69	20.93	20.45	76.70	0.09	-0.01	0.07	-0.03	0.02	0.02			0.01	199.14
26	5/3/2004	12:54:54.85	1.92	0.51	3.34	0.00	-0.19	-0.21	-0.12	0.04	-0.22	-0.36	-0.02	0.14	0.42	0.07	2.54	2.23	54.86	1.83	175.79	21.79	-103.01	21.02	20.86	76.88	0.09	0.01	0.07	-0.03	0.02	0.00			0.01	199.31
27	5/3/2004	13:05:24.85	1.92	0.57	3.30	0.00	-0.19	-0.22	-0.12	0.04	-0.20	-0.36	0.00	0.15	0.36	0.07	2.51	2.21	59.03	1.39	96.23	21.84	-21.10	21.14	20.58	77.05	0.09	0.01	0.06	-0.03	0.02	0.02			0.01	199.47
28	5/3/2004	13:15:54.85	1.92	0.62	3.34	0.02	-0.19	-0.21	-0.10	0.04	-0.20	-0.36	-0.02	0.15	0.36	0.08	2.53	2.23	67.13	1.18	72.63	21.92	-1.44	21.14	20.58	77.23	0.11	0.01	0.07	-0.01	0.02	0.02			0.01	199.64
29	5/3/2004	13:26:24.85	1.90	0.64	3.30	0.00	-0.19	-0.21	-0.09	0.04	-0.20	-0.35	0.01	0.15	0.36	0.05	2.58	2.27	79.41	1.05	63.00	21.93	8.34	21.15	20.43	77.40	0.09	0.01	0.07	0.00	0.02	0.02			0.01	199.80
30	5/3/2004	13:36:54.85	1.90	0.70	3.39	0.00	-0.20	-0.21	-0.08	0.04	-0.20	-0.35	-0.02	0.15	0.37	0.05	2.52	2.22	87.50	0.99	50.58	21.98	19.47	21.20	20.56	77.58	0.09	-0.01	0.07	0.01	0.02	0.02			0.01	199.97
31	5/3/2004	13:47:24.85	1.90	0.75	3.39	-0.02	-0.19	-0.21	-0.08	0.04	-0.20	-0.35	0.01	0.15	0.40	0.07	2.53	2.23	95.85	0.95	49.16	22.10	21.86	21.25	20.53	77.75	0.07	0.01	0.07	0.01	0.02	0.02			0.01	200.13
32	5/3/2004	13:57:54.85	1.90	0.77	3.36	-0.02	-0.16	-0.22	-0.08	0.04	-0.20	-0.34	0.00	0.15	0.41	0.07	2.52	2.21	103.95	0.90	47.19	22.07	24.88	21.37	20.49	77.93	0.07	0.03	0.06	0.01	0.02	0.02			0.01	200.30
33	5/3/2004	14:08:24.85	1.88	0.83	3.34	-0.02	-0.16	-0.25	-0.08	0.04	-0.20	-0.34	-0.02	0.15	0.35	0.08	2.55	2.24	116.22	0.85	43.92	22.15	27.12	21.45	20.65	78.10	0.07	0.03	0.03	0.01	0.02	0.02			0.01	200.47
34	5/3/2004	14:18:54.85	1.88	0.84	3.34	-0.03	-0.21	-0.25	-0.08	0.00	-0.20	-0.32	0.01	0.15	0.35	0.04	2.52	2.21	124.32	0.79	47.70	22.11	27.80	21.42	20.54	78.28	0.06	-0.02	0.03	0.01	-0.02	0.02			0.01	200.63
35	5/3/2004	14:29:24.85	1.88	0.90	3.39	-0.03	-0.20	-0.25	-0.09	0.01	-0.20	-0.32	0.01	0.15	0.35	0.04	2.55	2.25	153.04	0.63	51.13	22.23	29.51	21.45	20.49	78.45	0.06	-0.01	0.03	0.00	-0.01	0.02			0.01	200.80
36	5/3/2004	14:39:54.85	1.73	0.94	3.21	-0.02	-0.20	-0.25	-0.08	0.01	-0.24	-0.32	0.02	0.15	0.36	0.04	2.45	2.15	124.32	0.59	52.76	22.24	30.71	21.55	20.50	78.63	0.07	-0.01	0.03	0.01	-0.01	-0.02			0.01	200.97
37	5/3/2004	14:50:24.85	1.86	0.99	3.37	-0.02	-0.20	-0.25	-0.10	0.00	-0.24	-0.35	0.02	0.15	0.37	0.05	2.53	2.23	144.94	0.50	54.80	22.21	31.47	21.59	20.47	78.80	0.07	-0.01	0.03	-0.01	-0.02	-0.02			0.01	201.13
38	5/3/2004	15:00:54.85	1.86	1.05	3.41	-0.02	-0.20	-0.24	-0.10	0.01	-0.24	-0.35	-0.02	0.15	0.36	0.04	2.51	2.21	169.48	0.48	54.49	22.37	32.42	21.67	20.55	78.98	0.07	-0.01	0.05	-0.01	-0.01	-0.02			0.01	201.30
39	5/3/2004	15:11:24.85	1.86	1.08	3.39	-0.02	-0.20	-0.25	-0.09	0.00	-0.24	-0.35	-0.02	0.11	0.38	0.05	2.51	2.21	177.58	0.43	53.54	22.33	33.81	21.64	20.43	79.15	0.07	-0.01	0.03	0.00	-0.02	-0.02			0.01	201.46
40	5/3/2004	15:21:54.85	1.86	1.12	3.41	-0.02	-0.20	-0.25	-0.08	0.01	-0.24	-0.35	-0.02	0.13	0.30	0.05	2.52	2.21	185.93	0.43	53.26	22.37	35.27	21.75	20.47	79.33	0.07	-0.01	0.03	0.01	-0.01	-0.02			0.01	201.63
41	5/3/2004	15:32:24.85	1.88	1.16	3.34	-0.02	-0.20	-0.25	-0.09	0.03	-0.24	-0.35	0.00	0.11	0.32	0.05	2.52	2.21	194.03	0.42	53.20	22.38	35.99	21.76	20.48	79.50	0.07	-0.01	0.03	0.00	0.01	-0.02			0.01	201.79
42	5/3/2004	15:42:54.85	1.88	1.21	3.30	-0.02	-0.20	-0.25	-0.08	0.01	-0.24	-0.35	-0.02	0.13	0.32	0.04	2.49	2.19	202.13	0.42	53.08	22.33	36.57	21.80	20.43	79.68	0.07	-0.01	0.03	0.01	-0.01	-0.02			0.01	201.96
43	5/3/2004	15:53:24.85	1.84	1.25	3.37	-0.02	-0.19	-0.24	-0.09	0.03	-0.24	-0.35	-0.02	0.11	0.32	0.05	2.50	2.20	206.30	0.40	53.38	22.41	36.97	21.88	20.35	79.85	0.07	0.01	0.05	0.00	0.01	-0.02			0.01	202.12
44	5/3/2004	16:03:54.85	1.86	1.28	3.34	-0.02	-0.20	-0.24	-0.08	0.03	-0.23	-0.35	-0.02	0.13	0.32	0.05	2.53	2.23	206.30	0.40	53.61	22.41	37.05	21.96	20.51	80.03	0.07	-0.01	0.05	0.01	0.01	-0.01			0.01	202.29
45	5/3/2004	16:14:24.85	1.88	1.34	3.34	-0.02	-0.19	-0.25	-0.08	0.03	-0.24	-0.35	-0.02	0.11	0.36	0.05	2.50	2.20	210.47	0.38	53.80	22.37	36.92	21.83	20.31	80.20	0.07	0.01	0.03	0.01	0.01	-0.02			0.01	202.46
46	5/3/2004	16:24:54.85	1.86	1.40	3.34	-0.02	-0.20	-0.24	-0.08	0.04	-0.24	-0.35	-0.02	0.11	0.30	0.05	2.55	2.25	210.23	0.39	53.86	22.26	36.82	21.81	20.20	80.38	0.07	-0.01	0.05	0.01	0.02	-0.02			0.01	202.62
47	5/3/2004	16:35:24.85	1.88	1.41	3.36	-0.02	-0.20	-0.24	-0.08	0.03	-0.24	-0.35	-0.02	0.11	0.30	0.05	2.55	2.24	210.23	0.38	54.50	22.38	36.70	22.01	20.32	80.55	0.07	-0.01	0.05	0.01	0.01	-0.02			0.01	202.79
48	5/3/2004	16:45:54.85	1.88	1.43	3.37	-0.02	-0.20	-0.24	-0.08	0.03	-0.23	-0.35	0.00	0.11	0.29	0.04	2.57	2.26	210.47	0.40	42.82	22.38	29.26	21.92	20.48	80.73	0.07	-0.01	0.05	0.01	0.01	-0.01			0.01	202.95
49	5/3/2004	16:56:24.85	1.88	1.47	3.41	-0.02	-0.19	-0.24	-0.09	0.04	-0.23	-0.35	-0.02	0.11	0.32	0.04	2.51	2.21	214.40	0.40	35.45	22.38	25.26	22.01	20.72	80.90	0.07	0.01	0.05	0.00	0.02	-0.01			0.01	203.12
50	5/3/2004	17:06:54.85	1.90	1.49	3.36	-0.02	-0.20	-0.24	-0.08	0.03	-0.24	-0.35	-0.02	0.11	0.32	0.05	2.47	2.17	214.40	0.41	34.34	22.38	24.70	22.01	20.64	81.08	0.07	-0.01	0.05	0.01	0.01	-0.02			0.01	203.29
51	5/3/2004	17:17:24.85	1.88	1.52	3.34	-0.03	-0.20	-0.25	-0.09	0.03	-0.23	-0.35	-0.02	0.11	0.32	0.04	2.52	2.22	218.57	0.41	34.50	22.30	24.46	22.01	20.56	81.25	0.06	-0.01	0.03	0.00	0.01	-0.01			0.01	203.45
52	5/3/2004	17:27:54.85	1.90	1.56	3.37	-0.03	-0.20	-0.25	-0.08	0.03	-0.24	-0.35	-0.02	0.11	0.32	0.04	2.52	2.21	230.84	0.41	35.67	22.21	24.05	21.91	20.47	81.43	0.06	-0.01	0.03	0.01	0.01	-0.02			0.01	203.62
53	5/3/2004	17:38:24.85	1.90	1.58	3.39	-0.03	-0.20	-0.26	-0.09	0.01	-0.24	-0.36	-0.02	0.15	0.32	0.04	2.51	2.21	255.39	0.40	37.06	22.25	23.70	22.04	20.59	81.60	0.06	-0.01	0.02	0.00	-0.01	-0.02			0.01	203.78
54	5/3/2004	17:48:54.85	1.90	1.60	3.43	-0.03	-0.20	-0.27	-0.09	0.01	-0.24	-0.35	-0.02	0.15	0.38	0.04	2.56	2.25	255.14	0.41	38.19	22.29	23.41	21.99	20.47	81.78	0.06	-0.01	0.01	0.00	-0.01	-0.02			0.01	203.95
55	5/3/2004	17:59:24.85	1.90	1.62	3.39	-0.05	-0.20	-0.27	-0.09	0.01	-0.24	-0.35	-0.02	0.15	0.40	0.04	2.52	2.21	234.77	0.40	38.85	22.16	23.36	22.03	20.42	81.95	0.05	-0.01	0.01	0.00	-0.01	-0.02			0.01	204.11
56	5/3/2004	18:09:54.85	1.90	1.63	3.34	-0.06	-0.20	-0.27	-0.08	0.01	-0.24	-0.35	0.02	0.15	0.42	0.04	2.51	2.21	226.67	0.40	39.52	22.20	23.32	22.06	20.46	82.13	0.03	-0.01	0.01	0.01	-0.01	-0.02			0.01	204.28
57	5/3/2004	18:20:24.85	1.92	1.65	3.32	-0.05	-0.20	-0.27	-0.08	0.01	-0.24	-0.34	0.02	0.15	0.32	0.04	2.54	2.23	226.67	0.40	39.85	22.14	23.42	22.01	20.32	82.30	0.05	-0.01	0.01	0.01	-0.01	-0.02			0.01	204.45
58	5/3/2004	18:30:54.85	1.92	1.67	3.41	-0.06	-0.19	-0.27	-0.06	0.01	-0.24	-0.32	0.02	0.15	0.32	0.04	2.49	2.18	222.50	0.41	40.36	22.17	23.46	22.04	20.44	82.48	0.03	0.01	0.01	0.04	-0.01	-0.02			0.01	204.61
59	5/3/2004	18:41:24.85	1.93	1.67	3.37	-0.06	-0.20	-0.27	-0.06	0.00	-0.20	-0.32	0.02	0.13	0.32	0.04	2.52	2.21	222.74	0.42	40.77	22.04	23.72	21.98	20.22	82.65	0.03	-0.01	0.01	0.04	-0.02	0.02			0.01	204.78
60	5/3/2004	18:51:54.85	1.93	1.69	3.32	-0.06	-0.20	-0.27	-0.07	0.04	-0.20	-0.32	0.02	0.13	0.32	0.03	2.53	2.23	226.67	0.41	41.60	22.00	23.77	21.95	20.26	82.83	0.03	-0.01	0.01	0.02	0.02	0.02			0.01	204.94
61	5/3/2004	19:02:24.85	1.93	1.69	3.37	-0.06	-0.16	-0.27	-0.07	0.04	-0.20	-0.32	0.02	0.13	0.32	0.04	2.52	2.22	230.84	0.41	42.12	21.98	23.75	21.93	20.08	83.00	0.03	0.03	0.01	0.02	0.02	0.02			0.01	205.11
62	5/3/2004	19:12:54.85	1.93	1.71	3.36	-0.06	-0.16	-0.24	-0.07	0.04	-0.20	-0.32	0.02	0.11	0.33	0.03	2.49	2.18	234.77	0.41	42.25	21.95	24.03	21.89	20.21	83.18	0.03	0.03	0.05	0.02	0.02	0.02			0.01	205.27
63	5/3/2004	19:23:24.85	1.93	1.69	3.36	-0.06	-0.16	-0.25	-0.06	0.04	-0.20	-0.32	0.02	0.11	0.35	0.03	2.51	2.21	234.77	0.41	42.07	21.92	24.01	21.87	20.18	83.35	0.03	0.03	0.03	0.04	0.02	0.02			0.01	205.44
64	5/3/2004	19:33:54.85	1.95	1.71	3.30	-0.02	-0.16	-0.25	-0.07	0.04	-0.20	-0.34	0.02	0.11	0.36	0.03	2.49	2.19	230.84	0.41	41.76	21.84	24.09	21.87	20.10	83.53	0.07	0.03	0.03	0.02	0.02	0.02			0.01	205.60
65	5/3/2004	19:44:24.85	1.93	1.69	3.34	-0.02	-0.16	-0.26	-0.08	0.04	-0.20	-0.34	0.02	0.13	0.36	0.03	2.55	2.24	226.67	0.42	41.23	21.79	24.20	21.82	20.13	83.70	0.07	0.03	0.02	0.01	0.02	0.02			0.01	205.77
66	5/3/2004	19:54:54.85	1.95	1.69	3.32	-0.02	-0.16	-0.27	-0.08	0.04	-0.20	-0.34	0.02	0.13	0.36	0.02	2.47	2.17	218.57	0.41	40.96	21.75	24.00	21.86	20.09	83.88	0.07	0.03	0.01	0.01	0.02	0.02			0.01	205.94
67	5/3/2004	20:05:24.85	1.93	1.69	3.39	-0.02	-0.16	-0.27	-0.08	0.04	-0.20	-0.34	0.01	0.11	0.36	0.02	2.52	2.21	218.57	0.41	40.75	21.78	23.70	21.81	20.04	84.05	0.07	0.03	0.01	0.01	0.02	0.02			0.01	206.10
68	5/3/2004	20:15:54.85	1.95	1.69	3.37	-0.02	-0.17	-0.27	-0.08	0.04	-0.20	-0.35	0.02	0.13	0.36	0.05	2.55	2.24	222.50	0.42	40.48	21.66	23.91	21.77	20.00	84.23	0.07	0.02	0.01	0.01	0.02	0.02			0.01	206.27
69	5/3/2004	20:26:24.85	1.97	1.67	3.39	-0.02	-0.17	-0.28	-0.08	0.04	-0.20	-0.34	0.02	0.13	0.36	0.05	2.49	2.19	230.84	0.42	39.76	21.72	23.73	21.75	19.98	84.40	0.07	0.02	0.00	0.01	0.02	0.02			0.01	206.43
70	5/3/2004	20:36:54.85	1.97	1.67	3.36	-0.02	-0.17	-0.27	-0.09	0.04	-0.20	-0.34	0.01	0.11	0.35	0.05	2.50	2.20	230.84	0.42	39.13	21.56	23.65	21.67	19.90	84.58	0.07	0.02	0.01	0.00	0.02	0.02			0.01	206.60
71	5/3/2004	20:47:24.85	1.97	1.65	3.36	-0.02	-0.19	-0.27	-0.08	0.04	-0.20	-0.35	0.01	0.11	0.36	0.05	2.49	2.19	230.84	0.42	38.22	21.60	23.68	21.79	19.94	84.75	0.07	0.01	0.01	0.01	0.02	0.02			0.01	206.76
72	5/3/2004	20:57:54.85	1.99	1.63	3.36	-0.02	-0.19	-0.27	-0.08	0.04	-0.20	-0.35	0.01	0.10	0.36	0.04	2.52	2.22	230.84	0.43	37.35	21.51	23.59	21.61	19.76	84.93	0.07	0.01	0.01	0.01	0.02	0.02			0.01	206.93
73	5/3/2004	21:08:24.85	1.99	1.63	3.36	-0.02	-0.19	-0.27	-0.09	0.04	-0.20	-0.36	0.00	0.09	0.35	0.04	2.53	2.23	230.84	0.43	36.61	21.55	23.64	21.66	19.89	85.10	0.07	0.01	0.01	0.00	0.02	0.02			0.01	207.10
74	5/3/2004	21:18:54.85	2.01	1.62	3.32	-0.02	-0.20	-0.28	-0.08	0.05	-0.20	-0.35	0.01	0.13	0.36	0.04	2.49	2.19	230.84	0.43	35.97	21.46	23.71	21.57	19.80	85.28	0.07	-0.01	0.00	0.01	0.03	0.02			0.01	207.26
75	5/3/2004	21:29:24.85	2.01	1.58	3.32	-0.03	-0.20	-0.27	-0.09	0.06	-0.20	-0.35	-0.02	0.13	0.36	0.04	2.49	2.18	234.77	0.43	35.37	21.50	23.58	21.60	19.75	85.45	0.06	-0.01	0.01	0.00	0.04	0.02			0.01	207.43
76	5/3/2004	21:39:54.85	2.01	1.58	3.34	-0.03	-0.19	-0.27	-0.10	0.05	-0.20	-0.35	-0.02	0.13	0.36	0.04	2.54	2.23	234.77	0.43	34.78	21.38	23.79	21.57	19.72	85.63	0.06	0.01	0.01	-0.01	0.03	0.02			0.01	207.59
77	5/3/2004	21:50:24.85	1.99	1.56	3.36	-0.05	-0.19	-0.25	-0.08	0.05	-0.20	-0.35	-0.02	0.11	0.38	0.04	2.52	2.21	238.94	0.43	34.74	21.41	23.66	21.60	19.59	85.80	0.05	0.01	0.03	0.01	0.03	0.02			0.01	207.76
78	5/3/2004	22:00:54.85	2.01	1.52	3.37	-0.05	-0.19	-0.24	-0.10	0.05	-0.20	-0.37	-0.02	0.11	0.40	0.03	2.55	2.24	243.12	0.43	34.38	21.29	23.62	21.56	19.71	85.98	0.05	0.01	0.05	-0.01	0.03	0.02			0.01	207.93
79	5/3/2004	22:11:24.85	2.01	1.51	3.36	-0.06	-0.19	-0.25	-0.08	0.05	-0.20	-0.35	-0.02	0.11	0.38	0.04	2.56	2.25	247.04	0.43	34.18	21.32	23.81	21.51	19.74	86.15	0.03	0.01	0.03	0.01	0.03	0.02			0.01	208.09
80	5/3/2004	22:21:54.85	2.01	1.49	3.30	-0.06	-0.19	-0.24	-0.08	0.04	-0.20	-0.32	-0.02	0.11	0.40	0.03	2.52	2.21	250.97	0.43	34.02	21.24	23.73	21.43	19.66	86.33	0.03	0.01	0.05	0.01	0.02	0.02			0.01	208.26

Table H3-1-8. CIX Campaign II, Cycle 1, DI Water Post-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow-	Flow								elaps-	DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	Cor.	Cond1	pH	T1	T2	T3	T4	T5	ed	inch	inch	inch	inch	inch	inch	H1	H2	ential	tive
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	hours	water	water	water	water	water	water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
1	5/3/2004	22:42:54.85	2.03	1.45	3.25	-0.08	-0.19	-0.28	-0.08	0.03	-0.22	-0.36	-0.02	0.09	0.38	0.01	0.14	0.04	251.21	0.43	32.20	21.16	23.49	21.35	19.58	86.68	-0.19	0.01	-0.21	0.04	-0.05	0.02			0.00	208.56
2	5/3/2004	22:44:54.85	2.01	1.45	3.34	-0.01	-0.19	-0.25	-0.08	0.05	-0.23	-0.31	0.00	0.13	0.38	0.04	3.30	2.96	250.97	0.43	34.10	21.16	23.97	21.35	19.58	86.71	-0.12	0.01	-0.18	0.04	-0.02	0.01			0.01	208.57
3	5/3/2004	22:46:54.85	2.03	1.43	3.34	-0.01	-0.20	-0.24	-0.09	0.05	-0.22	-0.31	-0.02	0.11	0.40	-0.15	3.28	2.94	251.21	0.43	33.56	21.25	23.90	21.44	19.84	86.75	-0.12	-0.01	-0.17	0.03	-0.02	0.02			0.01	208.61
4	5/3/2004	22:48:54.85	2.05	1.43	3.36	-0.03	-0.19	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.13	0.38	-0.18	3.29	2.94	251.21	0.42	33.24	21.17	23.82	21.36	19.75	86.78	-0.14	0.01	-0.18	0.04	-0.03	0.01			0.01	208.65
5	5/3/2004	22:50:54.85	2.03	1.43	3.37	-0.03	-0.19	-0.24	-0.08	0.05	-0.22	-0.31	-0.02	0.13	0.40	-0.19	3.25	2.91	251.21	0.42	32.76	21.25	23.66	21.44	19.75	86.81	-0.14	0.01	-0.17	0.04	-0.02	0.02			0.01	208.70
6	5/3/2004	22:52:54.85	2.01	1.43	3.36	-0.01	-0.20	-0.25	-0.08	0.04	-0.22	-0.32	0.00	0.14	0.40	-0.19	3.36	3.01	255.39	0.42	31.89	21.17	23.66	21.36	19.59	86.85	-0.12	-0.01	-0.18	0.04	-0.03	0.02			0.01	208.74
7	5/3/2004	22:54:54.85	2.05	1.43	3.36	0.00	-0.19	-0.24	-0.09	0.04	-0.23	-0.32	-0.02	0.15	0.38	-0.20	3.33	2.99	255.14	0.43	31.02	21.17	23.82	21.36	19.59	86.88	-0.11	0.01	-0.17	0.03	-0.03	0.01			0.01	208.78
8	5/3/2004	22:56:54.85	2.03	1.43	3.30	-0.05	-0.20	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.15	0.40	-0.20	3.07	2.74	255.39	0.43	30.07	21.17	23.90	21.28	19.59	86.91	-0.16	-0.01	-0.18	0.04	-0.03	0.01			0.01	208.82
9	5/3/2004	22:58:54.85	2.03	1.41	3.36	-0.05	-0.19	-0.25	-0.08	0.04	-0.22	-0.32	-0.02	0.15	0.38	-0.19	2.89	2.56	255.39	0.42	29.27	21.17	24.06	21.36	19.59	86.95	-0.16	0.01	-0.18	0.04	-0.03	0.02			0.01	208.86
10	5/3/2004	23:00:54.85	2.05	1.41	3.32	-0.01	-0.19	-0.25	-0.09	0.04	-0.23	-0.32	-0.02	0.17	0.40	-0.19	3.18	2.84	255.14	0.42	28.35	21.13	24.10	21.32	19.47	86.98	-0.12	0.01	-0.18	0.03	-0.03	0.01			0.01	208.91
11	5/3/2004	23:02:54.85	2.03	1.41	3.34	-0.02	-0.19	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.15	0.40	-0.22	1.28	1.07	255.14	0.42	27.87	21.13	24.26	21.32	19.55	87.01	-0.13	0.01	-0.18	0.04	-0.03	0.01			0.00	208.95
12	5/3/2004	23:04:54.85	2.05	1.40	3.30	-0.02	-0.19	-0.25	-0.08	0.04	-0.23	-0.32	0.00	0.19	0.38	-0.20	2.89	2.56	255.14	0.42	26.99	21.13	24.34	21.32	19.63	87.05	-0.13	0.01	-0.18	0.04	-0.03	0.01			0.01	208.99
13	5/3/2004	23:06:54.85	2.05	1.41	3.32	0.00	-0.20	-0.25	-0.08	0.05	-0.22	-0.31	0.00	0.19	0.40	-0.19	3.17	2.83	255.14	0.42	26.24	21.17	24.55	21.36	19.59	87.08	-0.11	-0.01	-0.18	0.04	-0.02	0.02			0.01	209.02
14	5/3/2004	23:08:54.85	2.05	1.41	3.32	-0.02	-0.20	-0.25	-0.09	0.04	-0.23	-0.32	-0.02	0.19	0.40	-0.20	3.41	3.06	255.14	0.43	25.60	21.17	24.55	21.36	19.59	87.11	-0.13	-0.01	-0.18	0.03	-0.03	0.01			0.01	209.07
15	5/3/2004	23:10:54.85	2.03	1.40	3.36	-0.01	-0.19	-0.25	-0.08	0.04	-0.23	-0.31	0.00	0.19	0.40	-0.19	3.16	2.82	255.39	0.42	25.16	21.14	24.67	21.33	19.64	87.15	-0.12	0.01	-0.18	0.04	-0.03	0.01			0.01	209.11
16	5/3/2004	23:12:54.85	2.03	1.40	3.28	-0.02	-0.19	-0.24	-0.08	0.04	-0.23	-0.32	-0.02	0.19	0.40	-0.22	3.64	3.28	255.14	0.43	24.80	21.17	24.71	21.28	19.75	87.18	-0.13	0.01	-0.17	0.04	-0.03	0.01			0.01	209.15
17	5/3/2004	23:14:54.85	2.03	1.40	3.37	-0.01	-0.20	-0.25	-0.09	0.04	-0.23	-0.31	-0.02	0.19	0.40	-0.19	3.36	3.01	255.14	0.41	24.36	21.14	24.75	21.33	19.64	87.21	-0.12	-0.01	-0.18	0.03	-0.03	0.01			0.01	209.19
18	5/3/2004	23:16:54.85	2.05	1.38	3.36	-0.02	-0.19	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.19	0.40	-0.20	3.30	2.95	259.31	0.42	24.04	21.22	24.75	21.33	19.64	87.25	-0.13	0.01	-0.18	0.04	-0.03	0.01			0.01	209.23
19	5/3/2004	23:18:54.85	2.05	1.40	3.30	-0.02	-0.20	-0.24	-0.08	0.04	-0.23	-0.32	-0.02	0.21	0.40	-0.20	3.28	2.94	259.31	0.42	23.72	21.14	24.75	21.25	19.64	87.28	-0.13	-0.01	-0.17	0.04	-0.03	0.01			0.01	209.27
20	5/3/2004	23:20:54.85	2.05	1.38	3.32	-0.01	-0.19	-0.24	-0.08	0.04	-0.23	-0.31	-0.02	0.22	0.40	-0.20	3.19	2.85	259.31	0.42	23.37	21.18	24.80	21.29	19.68	87.31	-0.12	0.01	-0.17	0.04	-0.03	0.01			0.01	209.32
21	5/3/2004	23:22:54.85	2.05	1.38	3.34	-0.01	-0.19	-0.24	-0.08	0.04	-0.23	-0.32	-0.02	0.22	0.41	-0.19	3.51	3.15	259.31	0.42	23.04	21.10	24.96	21.29	19.68	87.35	-0.12	0.01	-0.17	0.04	-0.03	0.01			0.01	209.36
22	5/3/2004	23:24:54.85	2.05	1.36	3.32	-0.02	-0.19	-0.25	-0.08	0.04	-0.24	-0.31	-0.02	0.22	0.42	-0.20	3.05	2.72	259.31	0.42	22.88	21.10	24.96	21.29	19.60	87.38	-0.13	0.01	-0.18	0.04	-0.03	0.00			0.01	209.40
23	5/3/2004	23:26:54.85	2.05	1.38	3.32	-0.01	-0.19	-0.24	-0.08	0.04	-0.23	-0.31	-0.02	0.24	0.40	-0.20	3.90	3.53	259.31	0.41	22.72	21.10	24.96	21.29	19.60	87.41	-0.12	0.01	-0.17	0.04	-0.03	0.01			0.01	209.44
24	5/3/2004	23:28:54.85	2.05	1.36	3.32	-0.02	-0.19	-0.24	-0.08	0.04	-0.24	-0.32	-0.02	0.25	0.38	-0.20	3.45	3.10	259.31	0.42	22.64	21.10	24.96	21.21	19.60	87.45	-0.13	0.01	-0.17	0.04	-0.03	0.00			0.01	209.48
25	5/3/2004	23:30:54.85	2.05	1.36	3.32	-0.01	-0.19	-0.25	-0.08	0.05	-0.23	-0.31	-0.02	0.26	0.40	-0.19	3.64	3.28	259.31	0.43	22.56	21.10	24.96	21.29	19.68	87.48	-0.12	0.01	-0.18	0.04	-0.02	0.01			0.01	209.53
26	5/3/2004	23:32:54.85	2.05	1.34	3.30	-0.02	-0.19	-0.24	-0.08	0.04	-0.24	-0.32	-0.02	0.25	0.40	-0.20	2.99	2.66	259.31	0.41	22.48	21.10	24.88	21.29	19.60	87.51	-0.13	0.01	-0.17	0.04	-0.03	0.00			0.01	209.57
27	5/3/2004	23:34:54.85	2.05	1.34	3.32	-0.02	-0.19	-0.24	-0.08	0.04	-0.24	-0.31	-0.02	0.26	0.40	-0.19	1.76	1.51	259.31	0.41	22.40	21.10	24.96	21.29	19.68	87.55	-0.13	0.01	-0.17	0.04	-0.03	0.00			0.01	209.61
28	5/3/2004	23:36:54.85	2.05	1.34	3.30	-0.02	-0.20	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.25	0.38	-0.19	3.58	3.22	259.31	0.40	22.24	21.02	24.88	21.21	19.60	87.58	-0.13	-0.01	-0.18	0.04	-0.03	0.01			0.01	209.65
29	5/3/2004	23:38:54.85	2.06	1.34	3.28	-0.02	-0.20	-0.25	-0.08	0.05	-0.23	-0.32	0.00	0.25	0.38	-0.20	2.87	2.54	259.31	0.42	22.00	21.10	25.04	21.29	19.52	87.61	-0.13	-0.01	-0.18	0.04	-0.02	0.01			0.01	209.69
30	5/3/2004	23:40:54.85	2.06	1.34	3.37	-0.02	-0.20	-0.25	-0.08	0.04	-0.24	-0.31	-0.02	0.26	0.38	-0.19	2.92	2.59	259.31	0.42	21.95	21.06	24.99	21.17	19.48	87.65	-0.13	-0.01	-0.18	0.04	-0.03	0.00			0.01	209.74
31	5/3/2004	23:42:54.85	2.05	1.34	3.28	-0.06	-0.19	-0.27	-0.08	0.01	-0.24	-0.35	0.00	0.25	0.40	-0.22	3.16	2.82	259.31	0.42	22.00	21.10	25.04	21.21	19.52	87.68	-0.17	0.01	-0.20	0.04	-0.06	0.00			0.01	209.78
32	5/3/2004	23:44:54.85	1.92	1.32	3.21	-0.02	-0.20	-0.24	-0.08	0.04	-0.23	-0.34	-0.02	0.25	0.38	-0.20	3.19	2.85	259.31	0.42	22.03	21.06	25.07	21.25	19.56	87.71	-0.13	-0.01	-0.17	0.04	-0.03	0.01			0.01	209.82
33	5/3/2004	23:46:54.85	2.05	1.32	3.34	0.00	-0.20	-0.24	-0.08	0.04	-0.24	-0.31	-0.02	0.27	0.38	-0.20	3.37	3.02	259.31	0.42	21.91	21.01	24.95	21.20	19.43	87.75	-0.11	-0.01	-0.17	0.04	-0.03	0.00			0.01	209.86
34	5/3/2004	23:48:54.85	2.05	1.32	3.28	-0.05	-0.19	-0.27	-0.08	0.01	-0.24	-0.35	-0.02	0.26	0.38	-0.22	3.83	3.46	263.49	0.43	21.91	21.01	24.95	21.20	19.43	87.78	-0.16	0.01	-0.20	0.04	-0.06	0.00			0.01	209.90
35	5/3/2004	23:50:54.85	2.05	1.32	3.34	-0.02	-0.19	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.25	0.38	-0.20	3.61	3.25	263.49	0.41	21.86	21.05	24.98	21.16	19.39	87.81	-0.13	0.01	-0.18	0.04	-0.03	0.01			0.01	209.94
36	5/3/2004	23:52:54.85	2.06	1.32	3.37	0.00	-0.19	-0.24	-0.08	0.04	-0.24	-0.32	0.00	0.26	0.38	-0.20	3.19	2.85	263.49	0.41	21.82	21.08	25.02	21.27	19.66	87.85	-0.11	0.01	-0.17	0.04	-0.03	0.00			0.01	209.99
37	5/3/2004	23:54:54.85	2.06	1.30	3.32	0.02	-0.20	-0.25	-0.08	0.04	-0.23	-0.32	-0.02	0.26	0.38	-0.20	3.29	2.94	263.49	0.40	21.77	21.04	24.97	21.15	19.46	87.88	-0.09	-0.01	-0.18	0.04	-0.03	0.01			0.01	210.03
38	5/3/2004	23:56:54.85	2.06	1.30	3.32	0.02	-0.19	-0.25	-0.08	0.05	-0.24	-0.32	-0.02	0.26	0.38	-0.20	2.84	2.51	263.49	0.41	21.69	21.04	24.97	21.15	19.46	87.91	-0.09	0.01	-0.18	0.04	-0.02	0.00			0.01	210.07
39	5/3/2004	23:58:54.85	2.05	1.30	3.32	0.02	-0.19	-0.24	-0.08	0.04	-0.20	-0.32	-0.02	0.26	0.38	-0.20	2.98	2.65	263.49	0.41	21.61	21.04	25.05	21.23	19.46	87.95	-0.09	0.01	-0.17	0.04	-0.03	0.04			0.01	210.11
40	5/4/2004	00:00:54.85	2.05	1.30	3.28	0.02	-0.20	-0.22	-0.08	0.04	-0.24	-0.32	-0.02	0.25	0.38	-0.19	2.87	2.54	263.49	0.41	21.57	21.07	25.01	21.18	19.57	87.98	-0.09	-0.01	-0.15	0.04	-0.03	0.00			0.01	210.15
41	5/4/2004	00:02:54.85	2.05	1.28	3.34	0.02	-0.20	-0.22	-0.08	0.04	-0.24	-0.32	-0.02	0.26	0.40	-0.20	3.33	2.99	263.49	0.41	21.32	20.99	25.09	21.18	19.57	88.01	-0.09	-0.01	-0.15	0.04	-0.03	0.00			0.01	210.20
42	5/4/2004	00:04:54.85	2.06	1.28	3.34	0.02	-0.19	-0.21	-0.08	0.05	-0.24	-0.32	-0.02	0.28	0.38	-0.19	3.71	3.34	263.49	0.42	21.36	21.03	25.20	21.14	19.53	88.05	-0.09	0.01	-0.14	0.04	-0.02	0.00			0.01	210.24
43	5/4/2004	00:06:54.85	2.05	1.28	3.30	0.03	-0.19	-0.20	-0.08	0.05	-0.23	-0.32	-0.02	0.26	0.38	-0.20	3.32	2.97	263.49	0.41	21.36	20.95	25.12	21.14	19.45	88.08	-0.08	0.01	-0.13	0.04	-0.02	0.01			0.01	210.28
44	5/4/2004	00:08:54.85	2.06	1.28	3.28	0.03	-0.19	-0.20	-0.08	0.05	-0.24	-0.32	0.00	0.25	0.38	-0.20	2.98	2.65	263.49	0.40	21.39	20.98	25.16	21.17	19.48	88.11	-0.08	0.01	-0.13	0.04	-0.02	0.00			0.01	210.32
45	5/4/2004	00:10:54.85	2.06	1.27	3.34	0.05	-0.20	-0.19	-0.08	0.05	-0.22	-0.31	-0.02	0.26	0.38	-0.20	4.25	3.87	263.49	0.41	21.03	20.94	25.19	21.13	19.44	88.15	-0.06	-0.01	-0.12	0.04	-0.02	0.02			0.01	210.36
46	5/4/2004	00:12:54.85	2.06	1.27	3.34	0.07	-0.19	-0.17	-0.09	0.05	-0.20	-0.31	-0.02	0.28	0.40	-0.19	3.49	3.14	263.24	0.41	21.03	20.94	25.11	21.13	19.44	88.18	-0.05	0.01	-0.10	0.03	-0.02	0.04			0.01	210.41
47	5/4/2004	00:14:54.85	2.06	1.27	3.28	0.04	-0.19	-0.17	-0.08	0.05	-0.20	-0.32	-0.02	0.26	0.40	-0.20	3.32	2.97	263.49	0.40	21.11	21.02	25.11	21.13	19.36	88.21	-0.07	0.01	-0.10	0.04	-0.02	0.04			0.01	210.45
48	5/4/2004	00:16:54.85	2.06	1.27	3.30	0.05	-0.19	-0.19	-0.09	0.04	-0.20	-0.32	-0.02	0.26	0.40	-0.20	4.12	3.74	263.49	0.42	21.27	21.02	25.19	21.21	19.44	88.25	-0.06	0.01	-0.12	0.03	-0.03	0.04			0.01	210.49
49	5/4/2004	00:18:54.85	2.06	1.25	3.34	0.07	-0.20	-0.17	-0.08	0.04	-0.19	-0.32	-0.02	0.26	0.38	-0.19	3.27	2.93	263.49	0.41	21.51	20.94	25.11	21.13	19.44	88.28	-0.05	-0.01	-0.10	0.04	-0.03	0.05			0.01	210.54
50	5/4/2004	00:20:54.85	2.06	1.27	3.34	0.08	-0.20	-0.17	-0.08	0.04	-0.20	-0.32	-0.02	0.28	0.40	-0.19	3.79	3.42	263.49	0.41	21.67	20.94	25.11	21.13	19.36	88.31	-0.03	-0.01	-0.10	0.04	-0.03	0.04			0.01	210.58
51	5/4/2004	00:22:54.85	2.06	1.25	3.26	0.08	-0.20	-0.17	-0.08	0.04	-0.20	-0.31	-0.02	0.26	0.38	-0.20	3.65	3.29	263.24	0.41	21.63	20.89	25.07	21.08	19.31	88.35	-0.03	-0.01	-0.10	0.04	-0.03	0.04			0.01	210.62
52	5/4/2004	00:24:54.85	2.05	1.25	3.28	0.08	-0.19	-0.17	-0.08	0.04	-0.20	-0.32	-0.02	0.26	0.40	-0.20	3.16	2.82	263.49	0.41	21.67	20.94	25.11	21.13	19.36	88.38	-0.03	0.01	-0.10	0.04	-0.03	0.04			0.01	210.67
53	5/4/2004	00:26:54.85	2.06	1.25	3.30	0.09	-0.19	-0.17	-0.08	0.04	-0.20	-0.32	0.00	0.26	0.38	-0.20	3.90	3.53	267.41	0.40	21.63	20.97	25.07	21.08	19.39	88.41	-0.02	0.01	-0.10	0.04	-0.03	0.04			0.01	210.71
54	5/4/2004	00:28:54.85	2.06	1.23	3.30	0.10	-0.19	-0.17	-0.08	0.04	-0.20	-0.32	-0.02	0.25	0.38	-0.20	3.53	3.18	263.49	0.41	21.38	20.89	25.07	21.08	19.39	88.45	-0.01	0.01	-0.10	0.04	-0.03	0.04			0.01	210.75
55	5/4/2004	00:30:54.85	2.06	1.23	3.36	0.09	-0.19	-0.17	-0.08	0.03	-0.20	-0.34	-0.02	0.25	0.38	-0.20	3.30	2.96	267.41	0.41	21.22	20.89	25.23	21.08	19.39	88.48	-0.02	0.01	-0.10	0.04	-0.05	0.04			0.01	210.79
56	5/4/2004	00:32:54.85	2.06	1.23	3.34	0.11	-0.19	-0.14	-0.08	0.04	-0.20	-0.32	-0.02	0.27	0.40	-0.19	3.10	2.77	267.41	0.40	21.30	20.89	25.23	21.08	19.23	88.51	0.00	0.01	-0.07	0.04	-0.03	0.04			0.01	210.84
57	5/4/2004	00:34:54.85	2.08	1.23	3.30	0.11	-0.19	-0.15	-0.08	0.04	-0.20	-0.34	-0.02	0.25	0.40	-0.20	2.57	2.26	267.66	0.40	21.22	20.89	25.15	21.08	19.23	88.55	0.00	0.01	-0.08	0.04	-0.03	0.04			0.01	210.88
58	5/4/2004	00:36:54.85	2.06	1.23	3.36	0.11	-0.19	-0.14	-0.08	0.04	-0.19	-0.32	0.00	0.26	0.40	-0.20	3.68	3.32	267.41	0.40	21.22	20.97	25.15	21.08	19.31	88.58	0.00	0.01	-0.07	0.04	-0.03	0.05			0.01	210.92
59	5/4/2004	00:38:54.85	2.06	1.21	3.26	0.11	-0.19	-0.14	-0.08	0.04	-0.20	-0.34	-0.02	0.26	0.40	-0.20	4.00	3.62	267.41	0.41	21.18	20.85	25.18	21.12	19.27	88.61	0.00	0.01	-0.07	0.04	-0.03	0.04			0.01	210.97
60	5/4/2004	00:40:54.85	2.08	1.21	3.34	0.11	-0.19	-0.11	-0.08	0.04	-0.20	-0.32	-0.02	0.26	0.38	-0.19	3.00	2.67	267.41	0.41	21.10	20.85	25.10	21.04	19.27	88.65	0.00	0.01	-0.04	0.04	-0.03	0.04			0.01	211.01
61	5/4/2004	00:42:54.85	2.06	1.21	3.30	0.11	-0.19	-0.11	-0.08	0.03	-0.20	-0.32	-0.02	0.26	0.38	-0.20	4.22	3.84	267.41	0.41	21.02	20.85	25.10	21.04	19.35	88.68	0.00	0.01	-0.04	0.04	-0.05	0.04			0.01	211.05
62	5/4/2004	00:44:54.85	2.08	1.19	3.32	0.11	-0.20	-0.10	-0.09	0.04	-0.20	-0.32	-0.02	0.26	0.38	-0.20	3.60	3.24	267.41	0.41	21.10	20.85	25.10	21.04	19.35	88.71	0.00	-0.01	-0.03	0.03	-0.03	0.04			0.01	211.09
63	5/4/2004	00:46:54.85	2.06	1.19	3.28	0.14	-0.19	-0.09	-0.08	0.04	-0.20	-0.32	0.02	0.26	0.38	-0.20	2.37	2.08	267.41	0.41	21.10	20.85	25.18	21.12	19.35	88.75	0.03	0.01	-0.02	0.04	-0.03	0.04			0.01	211.14
64	5/4/2004	00:48:54.85	2.06	1.19	3.32	0.15	-0.19	-0.07	-0.08	0.07	-0.20	-0.32	0.02	0.26	0.40	-0.19	3.43	3.08	267.41	0.40	20.94	20.85	25.18	21.04	19.35	88.78	0.04	0.01	0.01	0.04	0.00	0.04			0.01	211.17
65	5/4/2004	00:50:54.85	2.06	1.19	3.36	0.15	-0.19	-0.07	-0.09	0.05	-0.20	-0.32	0.03	0.25	0.40	-0.19	3.90	3.53	267.41	0.41	20.97	20.80	25.14	21.07	19.30	88.81	0.04	0.01	0.01	0.03	-0.02	0.04			0.01	211.21
66	5/4/2004	00:52:54.85	2.06	1.19	3.34	0.16	-0.19	-0.07	-0.08	0.07	-0.20	-0.32	0.02	0.25	0.40	-0.19	2.71	2.40	267.66	0.41	20.89	20.80	25.14	20.99	19.38	88.85	0.05	0.01	0.01	0.04	0.00	0.04			0.01	211.26
67	5/4/2004	00:54:54.85	2.08	1.17	3.36	0.19	-0.19	-0.07	-0.08	0.11	-0.20	-0.32	0.02	0.27	0.40	-0.19	3.36	3.01	267.41	0.41	20.89	20.80	25.14	21.07	19.38	88.88	0.08	0.01	0.01	0.04	0.04	0.04			0.01	211.30
68	5/4/2004	00:56:54.85	2.06	1.17	3.32	0.19	-0.19	-0.07	-0.08	0.11	-0.20	-0.32	0.02	0.25	0.38	-0.19	3.87	3.50	267.41	0.40	20.89	20.88	25.30	21.07	19.38	88.91	0.08	0.01	0.01	0.04	0.04	0.04			0.01	211.34
69	5/4/2004	00:58:54.85	2.08	1.16	3.32	0.18	-0.19	-0.07	-0.08	0.11	-0.20	-0.32	0.02	0.26	0.40	-0.20	3.55	3.19	267.41	0.40	20.77	20.84	25.25	21.03	19.09	88.95	0.07	0.01	0.01	0.04	0.04	0.04			0.01	211.38
70	5/4/2004	01:00:54.85	2.03	1.17	3.19	0.11	-0.20	-0.16	-0.08	0.04	-0.20	-0.39	0.02	0.20	0.38	-0.24	0.79	0.62	267.41	0.41	20.85	20.76	25.25	20.95	19.26	88.98	0.00	-0.01	-0.09	0.04	-0.03	0.04			0.00	211.42

Table H3-1-9. CIX Campaign II, Cycle 1, 0.25M NaOH Regenerant

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero.

The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow-meter	Flow Cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-ed	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	Resin H1	Resin H2	differ-ential	cumul-tive
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	hours	water	water	water	water	water	water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
1	5/4/2004	08:12:27.35	1.27	-0.33	2.18	0.11	-0.19	-0.07	-0.08	0.05	-0.23	-0.35	-0.02	0.25	0.40	-0.20	0.15	0.04	296.13	0.43	19.55	18.89	24.45	19.09	17.47	94.17	0.00	0.01	0.01	0.04	-0.02	0.01			0.00	211.42
2	5/4/2004	08:14:27.35	1.26	-0.33	2.18	0.11	-0.19	-0.08	-0.08	0.04	-0.24	-0.35	-0.02	0.26	0.40	-0.20	0.14	0.04	296.13	0.43	19.59	18.93	24.48	19.12	17.35	94.20	0.06	0.01	0.09	0.04	-0.03	0.00			0.00	211.43
3	5/4/2004	08:16:27.35	1.42	-0.35	2.42	0.11	-0.20	-0.07	-0.08	0.04	-0.23	-0.35	-0.02	0.26	0.41	-0.20	0.14	0.04	296.13	0.43	16.87	18.89	23.72	19.00	17.38	94.24	0.06	-0.01	0.11	0.04	-0.03	0.01			0.00	211.43
4	5/4/2004	08:18:27.35	1.81	-0.37	2.90	0.11	-0.19	-0.09	-0.08	0.05	-0.24	-0.35	-0.02	0.24	0.40	-0.25	0.14	0.04	296.13	0.43	18.62	18.93	24.00	19.04	17.43	94.27	0.06	0.01	0.08	0.04	-0.02	0.00			0.00	211.45
5	5/4/2004	08:20:27.35	2.38	-0.37	3.83	0.58	-0.19	0.36	-0.08	0.38	-0.23	0.09	-0.02	0.79	0.40	0.54	13.25	13.34	312.33	0.43	-51.72	18.85	41.82	19.04	18.40	94.30	0.53	0.01	0.53	0.04	0.31	0.01			0.05	211.50
6	5/4/2004	08:22:27.35	2.21	-0.39	3.30	0.25	-0.19	0.03	-0.08	0.15	-0.24	-0.21	0.00	0.28	0.40	-0.03	7.39	7.01	320.67	0.41	-58.06	18.89	47.15	19.00	18.28	94.34	0.20	0.01	0.20	0.04	0.08	0.00			0.02	211.64
7	5/4/2004	08:24:27.35	2.23	-0.40	3.32	0.25	-0.19	0.03	-0.08	0.15	-0.20	-0.21	0.00	0.28	0.40	-0.03	7.33	6.95	320.67	0.39	-48.82	18.86	48.28	19.05	18.25	94.37	0.20	0.01	0.20	0.04	0.08	0.04			0.02	211.74
8	5/4/2004	08:26:27.35	2.23	-0.40	3.32	0.25	-0.19	0.03	-0.08	0.15	-0.24	-0.21	-0.02	0.27	0.38	-0.03	7.39	7.01	320.92	0.39	-47.94	18.90	47.86	19.01	18.29	94.40	0.20	0.01	0.20	0.04	0.08	0.00			0.02	211.84
9	5/4/2004	08:28:27.35	2.23	-0.42	3.32	0.25	-0.19	0.03	-0.08	0.15	-0.24	-0.19	-0.02	0.25	0.40	-0.03	7.29	6.90	324.85	0.40	-48.35	18.95	48.52	18.98	18.33	94.44	0.20	0.01	0.20	0.04	0.08	0.00			0.02	211.93
10	5/4/2004	08:30:27.35	2.23	-0.42	3.32	0.25	-0.20	0.03	-0.08	0.15	-0.24	-0.18	0.00	0.25	0.40	-0.04	7.28	6.90	324.85	0.39	-45.26	18.91	47.79	19.02	18.30	94.47	0.20	-0.01	0.20	0.04	0.08	0.00			0.02	212.03
11	5/4/2004	08:32:27.35	2.23	-0.42	3.36	0.25	-0.19	0.03	-0.08	0.15	-0.24	-0.17	-0.02	0.26	0.36	-0.03	7.25	6.86	320.67	0.40	-36.85	19.04	44.73	19.07	18.34	94.50	0.20	0.01	0.20	0.04	0.08	0.00			0.02	212.13
12	5/4/2004	08:34:27.35	2.30	-0.44	3.43	0.25	-0.19	0.03	-0.09	0.16	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.28	6.90	308.40	0.43	-26.41	18.92	40.56	19.03	18.23	94.54	0.20	0.01	0.20	0.03	0.09	0.00			0.02	212.23
13	5/4/2004	08:36:27.35	2.30	-0.44	3.39	0.25	-0.20	0.03	-0.08	0.17	-0.24	-0.14	0.00	0.25	0.35	-0.03	7.33	6.95	308.40	0.49	-15.82	18.92	36.87	19.03	18.23	94.57	0.20	-0.01	0.20	0.04	0.10	0.00			0.02	212.33
14	5/4/2004	08:38:27.35	2.32	-0.48	3.43	0.25	-0.20	0.05	-0.08	0.17	-0.23	-0.13	0.00	0.26	0.36	-0.03	7.30	6.91	259.31	0.62	-7.68	19.05	33.91	19.16	18.35	94.60	0.20	-0.01	0.22	0.04	0.10	0.01			0.02	212.43
15	5/4/2004	08:40:27.35	2.30	-0.46	3.43	0.25	-0.19	0.05	-0.08	0.17	-0.23	-0.14	0.00	0.26	0.35	-0.03	7.28	6.90	206.05	0.77	-2.48	18.97	31.77	19.08	18.27	94.64	0.20	0.01	0.22	0.04	0.10	0.01			0.02	212.52
16	5/4/2004	08:42:27.35	2.32	-0.46	3.45	0.25	-0.19	0.03	-0.08	0.18	-0.23	-0.13	-0.02	0.25	0.36	-0.03	7.23	6.84	161.38	0.95	0.44	18.97	30.43	18.99	18.35	94.67	0.20	0.01	0.20	0.04	0.11	0.01			0.02	212.62
17	5/4/2004	08:44:27.35	2.21	-0.48	3.32	0.25	-0.19	0.06	-0.09	0.17	-0.24	-0.13	-0.02	0.25	0.36	-0.03	7.30	6.92	124.57	1.13	2.31	19.01	29.67	19.12	18.40	94.70	0.20	0.01	0.23	0.03	0.10	0.00			0.02	212.72
18	5/4/2004	08:46:27.35	2.25	-0.48	3.34	0.25	-0.19	0.06	-0.08	0.17	-0.24	-0.13	-0.02	0.25	0.36	-0.03	7.28	6.90	99.78	1.32	3.89	19.01	28.96	19.04	18.32	94.74	0.20	0.01	0.23	0.04	0.10	0.00			0.02	212.82
19	5/4/2004	08:48:27.35	2.25	-0.48	3.32	0.25	-0.20	0.06	-0.08	0.17	-0.24	-0.12	-0.02	0.26	0.36	-0.03	7.32	6.94	79.65	1.54	5.09	19.06	28.44	19.08	18.44	94.77	0.20	-0.01	0.23	0.04	0.10	0.00	4.35		0.02	212.92
20	5/4/2004	08:50:27.35	2.25	-0.48	3.34	0.25	-0.19	0.07	-0.08	0.17	-0.24	-0.12	0.00	0.26	0.36	-0.03	7.32	6.94	63.21	1.75	6.00	19.06	28.05	19.17	18.44	94.80	0.20	0.01	0.24	0.04	0.10	0.00			0.02	213.02
21	5/4/2004	08:52:27.35	2.27	-0.48	3.34	0.29	-0.19	0.09	-0.08	0.17	-0.23	-0.12	0.00	0.26	0.36	-0.03	7.40	7.01	55.11	1.94	6.71	19.10	27.85	19.13	18.49	94.84	0.24	0.01	0.26	0.04	0.10	0.01			0.02	213.12
22	5/4/2004	08:54:27.35	2.23	-0.48	3.36	0.27	-0.19	0.07	-0.08	0.17	-0.24	-0.12	-0.02	0.25	0.36	-0.03	7.38	7.00	46.76	2.08	7.45	19.02	27.37	19.05	18.49	94.87	0.22	0.01	0.24	0.04	0.10	0.00			0.02	213.21
23	5/4/2004	08:56:27.35	2.16	-0.48	3.26	0.27	-0.19	0.06	-0.09	0.18	-0.24	-0.12	-0.02	0.26	0.36	-0.03	7.30	6.92	42.83	2.17	8.02	19.10	27.21	19.13	18.49	94.90	0.22	0.01	0.23	0.03	0.11	0.00			0.02	213.31
24	5/4/2004	08:58:27.35	2.16	-0.48	3.26	0.27	-0.19	0.03	-0.09	0.18	-0.24	-0.14	-0.02	0.25	0.35	-0.03	7.28	6.90	38.66	2.29	8.52	19.10	27.05	19.13	18.49	94.94	0.22	0.01	0.20	0.03	0.11	0.00			0.02	213.41
25	5/4/2004	09:00:27.35	2.14	-0.50	3.28	0.27	-0.20	0.06	-0.08	0.17	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.30	6.91	34.98	2.35	8.97	19.15	27.02	19.17	18.53	94.97	0.22	-0.01	0.23	0.04	0.10	0.00			0.02	213.51
26	5/4/2004	09:02:27.35	2.16	-0.50	3.26	0.29	-0.19	0.03	-0.08	0.17	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.22	6.83	34.49	2.41	9.46	19.15	26.86	19.17	18.53	95.00	0.24	0.01	0.20	0.04	0.10	0.00			0.02	213.61
27	5/4/2004	09:04:27.35	2.16	-0.48	3.25	0.29	-0.19	0.03	-0.09	0.17	-0.23	-0.14	-0.02	0.26	0.36	-0.03	7.32	6.93	30.32	2.48	9.71	19.15	26.78	19.17	18.53	95.04	0.24	0.01	0.20	0.03	0.10	0.01			0.02	213.71
28	5/4/2004	09:06:27.35	2.16	-0.50	3.26	0.29	-0.19	0.05	-0.08	0.16	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.34	6.95	30.56	2.52	10.08	19.19	26.66	19.14	18.50	95.07	0.24	0.01	0.22	0.04	0.09	0.00			0.02	213.80
29	5/4/2004	09:08:27.35	2.16	-0.50	3.28	0.29	-0.19	0.03	-0.08	0.16	-0.24	-0.15	0.00	0.26	0.35	-0.03	7.29	6.90	30.32	2.57	10.58	19.11	26.50	19.14	18.50	95.10	0.24	0.01	0.20	0.04	0.09	0.00			0.02	213.90
30	5/4/2004	09:10:27.35	2.16	-0.50	3.26	0.29	-0.19	0.05	-0.09	0.20	-0.24	-0.15	-0.02	0.25	0.35	-0.03	7.28	6.90	26.39	2.63	10.79	19.15	26.31	19.10	18.46	95.14	0.24	0.01	0.22	0.03	0.13	0.00			0.02	214.00
31	5/4/2004	09:12:27.35	2.17	-0.50	3.26	0.29	-0.19	0.03	-0.09	0.16	-0.23	-0.15	-0.02	0.26	0.36	-0.03	7.22	6.84	26.39	2.67	11.11	19.15	26.31	19.18	18.46	95.17	0.24	0.01	0.20	0.03	0.09	0.01			0.02	214.10
32	5/4/2004	09:14:27.35	2.16	-0.50	3.30	0.29	-0.19	0.05	-0.08	0.18	-0.24	-0.14	-0.02	0.25	0.36	-0.03	7.30	6.91	26.39	2.72	11.11	19.15	26.31	19.18	18.46	95.20	0.24	0.01	0.22	0.04	0.11	0.00			0.02	214.20
33	5/4/2004	09:16:27.35	2.16	-0.50	3.28	0.29	-0.17	0.05	-0.09	0.17	-0.23	-0.14	-0.02	0.26	0.35	-0.03	7.30	6.92	26.39	2.79	11.32	19.28	26.43	19.23	18.59	95.24	0.24	0.02	0.22	0.03	0.10	0.01			0.02	214.30
34	5/4/2004	09:18:27.35	2.16	-0.50	3.32	0.29	-0.19	0.06	-0.09	0.17	-0.24	-0.14	-0.02	0.26	0.36	-0.03	7.30	6.92	22.22	2.87	11.32	19.28	26.35	19.23	18.59	95.27	0.24	0.01	0.23	0.03	0.10	0.00			0.02	214.39
35	5/4/2004	09:20:27.35	2.16	-0.51	3.26	0.29	-0.19	0.03	-0.08	0.17	-0.23	-0.14	-0.02	0.25	0.35	-0.03	7.29	6.90	22.22	2.98	11.40	19.20	26.35	19.23	18.59	95.30	0.24	0.01	0.20	0.04	0.10	0.01			0.02	214.49
36	5/4/2004	09:22:27.35	2.17	-0.51	3.30	0.29	-0.17	0.05	-0.08	0.17	-0.23	-0.14	-0.02	0.25	0.36	-0.03	7.31	6.93	22.22	3.12	11.40	19.28	26.35	19.23	18.59	95.34	0.24	0.02	0.22	0.04	0.10	0.01			0.02	214.59
37	5/4/2004	09:24:27.35	2.17	-0.51	3.30	0.27	-0.20	0.03	-0.08	0.16	-0.24	-0.14	-0.02	0.26	0.36	-0.04	7.28	6.90	22.22	3.25	11.40	19.28	26.35	19.15	18.59	95.37	0.22	-0.01	0.20	0.04	0.09	0.00			0.02	214.69
38	5/4/2004	09:26:27.35	2.17	-0.51	3.32	0.29	-0.17	0.03	-0.08	0.15	-0.24	-0.14	-0.02	0.25	0.36	-0.03	7.20	6.82	18.29	3.84	11.53	19.33	26.48	19.27	18.63	95.40	0.24	0.02	0.20	0.04	0.08	0.00			0.02	214.79
39	5/4/2004	09:28:27.35	2.19	-0.51	3.28	0.27	-0.16	0.03	-0.08	0.15	-0.24	-0.15	-0.02	0.26	0.35	-0.03	7.32	6.93	18.04	4.92	11.32	19.28	26.43	19.23	18.59	95.44	0.22	0.03	0.20	0.04	0.08	0.00			0.02	214.89
40	5/4/2004	09:30:27.35	2.17	-0.51	3.30	0.26	-0.19	0.03	-0.09	0.15	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.21	6.82	18.29	5.69	11.40	19.36	26.51	19.23	18.75	95.47	0.21	0.01	0.20	0.03	0.08	0.00			0.02	214.99
41	5/4/2004	09:32:27.35	2.19	-0.51	3.28	0.27	-0.16	0.03	-0.08	0.15	-0.24	-0.14	-0.02	0.25	0.36	-0.03	7.37	6.99	18.04	5.98	11.12	19.33	26.72	19.27	18.79	95.50	0.22	0.03	0.20	0.04	0.08	0.00			0.02	215.08
42	5/4/2004	09:34:27.35	2.19	-0.53	3.32	0.29	-0.17	0.03	-0.08	0.15	-0.24	-0.15	-0.02	0.26	0.36	-0.03	7.38	6.99	18.29	6.14	10.88	19.33	26.80	19.19	18.71	95.54	0.24	0.02	0.20	0.04	0.08	0.00			0.02	215.18
43	5/4/2004	09:36:27.35	2.17	-0.51	3.34	0.27	-0.17	0.03	-0.09	0.15	-0.24	-0.15	-0.02	0.26	0.35	-0.03	7.39	7.01	18.29	6.30	11.00	19.29	26.76	19.24	18.76	95.57	0.22	0.02	0.20	0.03	0.08	0.00			0.02	215.28
44	5/4/2004	09:38:27.35	2.17	-0.53	3.32	0.27	-0.16	0.03	-0.09	0.15	-0.24	-0.14	-0.02	0.26	0.36	-0.03	7.34	6.95	18.04	6.42	10.97	19.33	26.88	19.28	18.80	95.60	0.22	0.03	0.20	0.03	0.08	0.00			0.02	215.38
45	5/4/2004	09:40:27.35	2.19	-0.51	3.32	0.27	-0.17	0.03	-0.08	0.15	-0.24	-0.15	-0.05	0.26	0.36	-0.03	7.35	6.97	18.29	6.55	11.01	19.38	26.77	19.25	18.77	95.64	0.22	0.02	0.20	0.04	0.08	0.00			0.02	215.48
46	5/4/2004	09:42:27.35	2.19	-0.51	3.30	0.26	-0.16	0.03	-0.09	0.15	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.28	6.90	18.29	6.66	10.98	19.34	26.89	19.29	18.73	95.67	0.21	0.03	0.20	0.03	0.08	0.00			0.02	215.58
47	5/4/2004	09:44:27.35	2.19	-0.53	3.32	0.26	-0.17	0.03	-0.08	0.14	-0.24	-0.15	-0.02	0.25	0.36	-0.03	7.28	6.90	18.04	6.81	10.86	19.39	27.02	19.26	18.69	95.70	0.21	0.02	0.20	0.04	0.07	0.00			0.02	215.68
48	5/4/2004	09:46:27.35	2.17	-0.51	3.32	0.26	-0.17	0.03	-0.09	0.15	-0.24	-0.15	-0.05	0.25	0.36	-0.03	7.26	6.88	18.04	6.96	10.66	19.43	27.14	19.30	18.74	95.74	0.21	0.02	0.20	0.03	0.08	0.00			0.02	215.77
49	5/4/2004	09:48:27.35	2.14	-0.51	3.26	0.27	-0.16	0.03	-0.08	0.15	-0.23	-0.14	-0.02	0.25	0.35	-0.03	7.28	6.90	18.04	7.10	10.62	19.48	27.27	19.35	18.70	95.77	0.22	0.03	0.20	0.04	0.08	0.01			0.02	215.87
50	5/4/2004	09:50:27.35	2.14	-0.51	3.28	0.26	-0.16	0.03	-0.08	0.15	-0.24	-0.14	-0.03	0.26	0.32	-0.04	7.29	6.90	18.04	7.47	10.62	19.48	27.27	19.35	18.78	95.80	0.21	0.03	0.20	0.04	0.08	0.00			0.02	215.97
51	5/4/2004	09:52:27.35	2.14	-0.51	3.26	0.27	-0.20	0.03	-0.08	0.15	-0.23	-0.14	-0.04	0.26	0.36	-0.04	7.28	6.89	18.29	8.49	10.54	19.48	27.27	19.35	18.78	95.84	0.22	-0.01	0.20	0.04	0.08	0.01			0.02	216.07
52	5/4/2004	09:54:27.35	2.14	-0.51	3.25	0.27	-0.19	0.03	-0.08	0.15	-0.24	-0.15	-0.04	0.25	0.32	-0.03	7.30	6.91	18.04	9.30	11.00	19.44	26.99	19.31	18.75	95.87	0.22	0.01	0.20	0.04	0.08	0.00			0.02	216.17
53	5/4/2004	09:56:27.35	2.12	-0.53	3.28	0.27	-0.16	0.03	-0.09	0.15	-0.23	-0.14	-0.04	0.26	0.32	-0.03	7.28	6.90	18.04	9.67	11.24	19.44	26.99	19.39	18.83	95.90	0.22	0.03	0.20	0.03	0.08	0.01			0.02	216.27
54	5/4/2004	09:58:27.35	2.12	-0.51	3.23	0.29	-0.19	0.03	-0.08	0.15	-0.24	-0.15	-0.04	0.26	0.32	-0.03	7.28	6.90	18.29	9.96	11.37	19.57	26.96	19.35	18.87	95.94	0.24	0.01	0.20	0.04	0.08	0.00			0.02	216.36
55	5/4/2004	10:00:27.35	2.10	-0.51	3.25	0.29	-0.19	0.03	-0.08	0.15	-0.24	-0.15	-0.05	0.25	0.32	-0.03	7.30	6.92	18.29	10.23	8.12	19.44	28.35	19.31	18.75	95.97	0.24	0.01	0.20	0.04	0.08	0.00	5.40		0.02	216.46
56	5/4/2004	10:02:27.35	2.08	-0.51	3.21	0.29	-0.19	0.05	-0.08	0.16	-0.24	-0.15	-0.04	0.26	0.32	-0.03	7.28	6.90	22.22	10.52	13.25	19.57	25.52	19.44	18.87	96.00	0.24	0.01	0.22	0.04	0.09	0.00			0.02	216.56
57	5/4/2004	10:04:27.35	2.08	-0.51	3.19	0.29	-0.19	0.06	-0.09	0.16	-0.24	-0.15	-0.04	0.25	0.32	-0.03	7.41	7.03	22.22	10.92	10.71	19.49	27.51	19.44	18.87	96.04	0.24	0.01	0.23	0.03	0.09	0.00			0.03	216.66
58	5/4/2004	10:06:27.35	2.06	-0.51	3.17	0.25	-0.20	0.06	-0.08	0.16	-0.24	-0.15	-0.04	0.25	0.32	-0.04	7.30	6.92	22.22	11.21	11.58	19.53	26.92	19.40	18.84	96.07	0.20	-0.01	0.23	0.04	0.09	0.00			0.02	216.76
59	5/4/2004	10:08:27.35	2.03	-0.51	3.21	0.25	-0.19	0.06	-0.08	0.16	-0.24	-0.15	-0.04	0.26	0.32	-0.03	7.28	6.90	22.22	11.35	11.95	19.58	26.73	19.45	18.88	96.10	0.20	0.01	0.23	0.04	0.09	0.00			0.02	216.86
60	5/4/2004	10:10:27.35	2.03	-0.53	3.17	0.25	-0.20	0.06	-0.09	0.16	-0.23	-0.15	-0.03	0.26	0.32	-0.03	7.27	6.88	22.22	11.44	11.91	19.62	26.77	19.41	18.93	96.14	0.20	-0.01	0.23	0.03	0.09	0.01			0.02	216.96
61	5/4/2004	10:12:27.35	2.01	-0.53	3.17	0.25	-0.19	0.06	-0.10	0.17	-0.24	-0.15	-0.03	0.22	0.32	-0.03	7.32	6.94	22.22	11.49	11.47	19.59	26.97	19.45	18.89	96.17	0.20	0.01	0.23	0.02	0.10	0.00			0.02	217.05
62	5/4/2004	10:14:27.35	1.99	-0.55	3.15	0.25	-0.19	0.07	-0.12	0.17	-0.23	-0.14	-0.03	0.25	0.32	-0.03	7.34	6.95	26.39	11.52	11.68	19.63	26.78	19.50	18.94	96.20	0.20	0.01	0.24	0.00	0.10	0.01			0.02	217.15
63	5/4/2004	10:16:27.35	1.97	-0.55	3.14	0.25	-0.19	0.07	-0.12	0.17	-0.24	-0.15	-0.03	0.21	0.32	-0.03	7.28	6.90	26.39	11.56	11.07	19.68	27.06	19.46	18.98	96.24	0.20	0.01	0.24	0.00	0.10	0.00			0.02	217.25
64	5/4/2004	10:18:27.35	1.97	-0.55	3.14	0.25	-0.19	0.06	-0.12	0.17	-0.23	-0.15	-0.03	0.22	0.32	-0.03	7.27	6.88	26.39	11.58	10.74	19.68	27.30	19.46	19.06	96.27	0.20	0.01	0.23	0.00	0.10	0.01			0.02	217.35
65	5/4/2004	10:20:27.35	1.97	-0.53	3.14	0.25	-0.20	0.07	-0.12	0.17	-0.24	-0.14	-0.03	0.21	0.32	-0.03	7.38	7.00	26.39	11.58	10.92	19.77	27.23	19.55	19.07	96.30	0.20	-0.01	0.24	0.00	0.10	0.00			0.02	217.45
66	5/4/2004	10:22:27.35	1.48	-0.53	2.47	-0.08	-0.19	-0.27	-0.12	-0.04	-0.24	-0.25	-0.03	0.09	0.32	-0.13	0.15	0.04	26.39	11.59	12.47	19.77	26.35	19.55	19.07	96.34	-0.13	0.01	-0.10	0.00	-0.11	0.00			0.00	217.54
67	5/4/2004	10:24:27.35	0.39	-0.53	1.41	-0.02	-0.20	-0.21	-0.12	0.04	-0.23	-0.25	-0.03	0.13	0.32	-0.11	0.14	0.04	26.39	11.58	12.43	19.81	26.16	19.60	19.28	96.37	-0.07	-0.01	-0.04	0.00	-0.03	0.01			0.00	217.54
68	5/4/2004	10:26:27.35	-0.09	-0.53	0.93	0.04	-0.20	-0.17	-0.12	0.07	-0.24	-0.25	-0.02	0.13	0.32	-0.11	0.14	0.04	26.39	11.58	12.11	19.81	26.08	19.52	19.28	96.40	-0.01	-0.01	0.00	0.00	0.00	0.00			0.00	217.54
69	5/4/2004	10:28:27.35	-0.31	-0.53	0.75	0.04	-0.20	-0.17	-0.12	0.07	-0.24	-0.25	-0.02	0.15	0.32	-0.09	0.14	0.04	26.39	11.53	11.71	19.74	26.33	19.53	19.21	96.44	-0.01	-0.01	0.00	0.00	0.00	0.00			0.00	217.54
70	5/4/2004	10:30:27.35	-0.36	-0.53	0.69	0.05	-0.20	-0.17	-0.13	0.07	-0.23	-0.24	-0.02	0.16	0.32	-0.07	0.14	0.04	26.39	11.36	9.82	19.90	26.65	19.61	19.21	96.47	0.00	-0.01	0.00	-0.01	0.00	0.01			0.00	217.54

Table H3-2-1. CIX Campaign II, Cycle 2, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow								DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/4/2004	10:32:14.85	-0.34	-0.51	0.69	0.05	-0.19	-0.17	-0.12	0.07	-0.27	-0.25	-0.02	0.15	0.32	-0.07	0.14	0.04	26.39	11.21	9.54	19.87	26.85	19.65	19.17	0.00							5.80	5.80	0.00	0.00
2	5/4/2004	10:40:07.85	0.70	0.42	0.53	0.07	-0.20	-0.17	-0.12	0.04	-0.27	-0.21	-0.03	0.16	0.36	-0.07	0.14	0.04	26.39	11.34	10.01	20.00	26.67	19.63	19.31	0.13									0.00	0.00
3	5/4/2004	10:48:07.85	2.08	2.35	4.44	0.14	0.45	-0.11	0.49	0.15	0.02	-0.14	0.20	-0.01	-0.39	2.46	7.18	6.80	30.56	11.46	8.33	20.69	29.11	19.67	19.36	0.26									0.02	0.32
4	5/4/2004	10:56:07.85	2.27	2.50	4.55	-0.23	0.45	-0.49	0.50	0.10	0.03	-0.18	0.18	-0.26	-0.29	1.34	7.32	6.93	30.32	11.52	7.56	20.83	29.40	19.81	19.49	0.40									0.02	0.72
5	5/4/2004	11:04:07.85	2.05	2.28	4.35	-0.59	0.45	-0.82	0.50	0.04	0.03	-0.21	0.18	-0.51	-0.29	1.04	7.22	6.83	30.32	11.34	3.03	20.84	32.11	19.90	19.42	0.53									0.02	1.11
6	5/4/2004	11:12:07.85	2.05	2.28	4.37	-0.94	0.50	-1.12	0.53	-0.06	0.07	-0.34	0.18	-0.66	-0.29	0.86	7.36	6.98	34.49	11.10	7.88	20.82	29.22	19.88	19.48	0.66									0.02	1.51
7	5/4/2004	11:20:07.85	2.05	2.29	4.40	-1.17	0.51	-1.36	0.56	-0.12	0.05	-0.51	0.19	-0.81	-0.33	0.74	7.30	6.92	81.86	11.30	8.55	20.83	28.20	19.81	19.41	0.80							5.80	5.80	0.02	1.90
8	5/4/2004	11:28:07.85	2.10	2.35	4.42	-1.38	0.51	-1.59	0.56	-0.18	0.07	-0.76	0.19	-0.90	-0.35	0.68	7.31	6.93	149.11	11.21	10.53	21.00	26.77	19.90	19.58	0.93									0.02	2.29
9	5/4/2004	11:36:07.85	2.17	2.40	4.53	-1.51	0.52	-1.74	0.52	-0.21	0.07	-0.96	0.19	-1.00	-0.35	0.60	7.29	6.90	210.47	11.14	11.81	20.97	26.27	19.95	19.47	1.06									0.02	2.69
10	5/4/2004	11:44:07.85	2.23	2.46	4.55	-1.65	0.52	-1.84	0.53	-0.06	0.07	-1.13	0.20	-1.06	-0.36	0.59	7.32	6.94	255.14	11.09	13.21	20.98	26.04	19.88	19.40	1.20									0.02	3.08
11	5/4/2004	11:52:07.85	2.28	2.53	4.64	-1.74	0.49	-1.93	0.52	0.00	0.07	-1.29	0.23	-1.10	-0.35	0.54	7.28	6.90	291.96	11.04	14.85	20.99	25.73	19.97	19.65	1.33									0.02	3.48
12	5/4/2004	12:00:07.85	2.34	2.57	4.70	-1.78	0.48	-2.01	0.52	0.00	0.07	-1.44	0.22	-1.17	-0.35	0.53	7.26	6.88	316.50	10.99	15.82	21.07	25.49	20.38	19.57	1.46							5.70	5.80	0.02	3.87
13	5/4/2004	12:08:07.85	2.38	2.62	4.75	-1.80	0.49	-2.04	0.52	0.01	0.07	-1.56	0.19	-1.21	-0.35	0.51	7.29	6.90	332.95	10.97	16.64	21.15	25.33	20.46	19.57	1.60									0.02	4.26
14	5/4/2004	12:16:07.85	2.39	2.66	4.75	-1.85	0.49	-2.08	0.52	0.04	0.04	-1.69	0.19	-1.21	-0.35	0.51	7.28	6.90	341.05	10.95	17.34	21.21	25.06	20.59	19.71	1.73									0.02	4.66
15	5/4/2004	12:24:07.85	2.43	2.73	4.84	-1.91	0.49	-2.08	0.53	0.07	0.03	-1.79	0.19	-1.22	-0.35	0.49	7.32	6.93	344.97	10.93	18.05	21.19	24.72	20.65	19.69	1.86									0.02	5.05
16	5/4/2004	12:32:07.85	2.45	2.75	4.88	-1.91	0.48	-2.13	0.52	0.07	0.03	-1.86	0.19	-1.23	-0.36	0.48	7.32	6.94	349.15	10.92	18.46	21.20	24.49	20.74	19.70	2.00									0.02	5.44
17	5/4/2004	12:40:07.85	2.45	2.77	4.88	-1.95	0.48	-2.18	0.52	0.15	0.03	-1.97	0.19	-1.25	-0.35	0.47	7.28	6.90	349.15	10.92	18.96	21.29	24.26	20.83	19.71	2.13									0.02	5.84
18	5/4/2004	12:48:07.85	2.47	2.77	4.94	-1.99	0.49	-2.20	0.50	0.14	0.03	-2.00	0.19	-1.27	-0.39	0.47	7.32	6.94	349.15	10.90	19.52	21.29	24.02	20.83	19.71	2.26									0.02	6.23
19	5/4/2004	12:56:07.85	2.47	2.79	4.92	-1.99	0.49	-2.21	0.50	0.21	0.03	-2.02	0.19	-1.30	-0.39	0.45	7.28	6.89	349.15	10.90	19.89	21.33	23.82	20.88	19.75	2.40									0.02	6.63
20	5/4/2004	13:04:07.85	2.49	2.79	4.92	-2.02	0.49	-2.20	0.49	0.21	0.03	-2.07	0.19	-1.31	-0.39	0.45	7.32	6.93	349.39	10.89	20.31	21.34	23.67	20.97	19.77	2.53									0.02	7.02
21	5/4/2004	13:12:07.85	2.38	2.59	4.75	-1.72	0.48	-1.43	0.49	0.28	0.03	-0.68	0.18	-0.87	-0.39	0.45	7.22	6.83	353.32	10.89	21.16	21.47	23.64	21.10	19.97	2.66									0.02	7.41
22	5/4/2004	13:23:37.85	2.47	2.75	4.92	0.25	0.49	0.34	0.50	0.31	0.03	0.04	0.19	-0.43	-0.39	0.43	7.32	6.94	349.15	10.89	21.41	21.48	23.33	21.03	19.90	2.85	0.54	0.49	0.71	0.56	0.31	0.23			0.05	7.87
23	5/4/2004	13:39:37.85	2.49	2.75	4.92	0.29	0.49	0.34	0.50	0.31	0.03	0.02	0.19	-0.43	-0.39	0.43	7.29	6.90	353.32	10.88	22.27	21.38	22.98	21.17	19.88	3.12	0.58	0.49	0.71	0.56	0.31	0.23			0.05	8.65
24	5/4/2004	13:55:37.85	2.49	2.75	4.90	0.25	0.49	0.33	0.49	0.31	0.04	-0.02	0.18	-0.43	-0.39	0.43	7.32	6.93	353.32	10.87	22.84	21.54	22.66	21.25	19.88	3.39	0.54	0.49	0.70	0.55	0.31	0.24			0.05	9.44
25	5/4/2004	14:11:37.85	2.47	2.62	4.77	0.25	0.49	0.30	0.50	0.31	0.05	-0.04	0.19	-0.46	-0.40	0.40	7.32	6.94	353.32	10.87	23.26	21.48	22.28	21.27	19.90	3.65	0.54	0.49	0.67	0.56	0.31	0.25			0.05	10.23
26	5/4/2004	14:27:37.85	2.49	2.62	4.77	0.25	0.46	0.30	0.50	0.27	0.07	-0.04	0.19	-0.12	-0.39	0.40	7.33	6.95	349.15	10.86	23.79	21.53	22.01	21.40	19.95	3.92	0.54	0.46	0.67	0.56	0.27	0.27			0.05	11.02
27	5/4/2004	14:43:37.85	2.49	2.62	4.73	0.25	0.45	0.28	0.46	0.27	0.03	-0.06	0.16	-0.13	-0.41	0.40	7.28	6.89	349.15	10.86	24.04	21.54	21.94	21.41	20.04	4.19	0.54	0.45	0.65	0.52	0.27	0.23			0.05	11.80
28	5/4/2004	14:59:37.85	2.47	2.62	4.75	0.25	0.46	0.27	0.49	0.30	0.02	-0.09	0.16	-0.13	-0.44	0.38	7.32	6.94	349.15	10.86	24.28	21.62	21.86	21.49	20.12	4.45	0.54	0.46	0.64	0.55	0.30	0.22			0.05	12.59
29	5/4/2004	15:15:37.85	2.49	2.61	4.75	0.22	0.45	0.27	0.49	0.30	0.03	-0.08	0.16	-0.16	-0.45	0.37	7.30	6.91	349.15	10.86	24.36	21.62	21.78	21.49	20.20	4.72	0.51	0.45	0.64	0.55	0.30	0.23			0.05	13.38
30	5/4/2004	15:31:37.85	2.47	2.61	4.75	0.25	0.48	0.27	0.49	0.31	0.03	-0.08	0.16	-0.16	-0.44	0.36	7.28	6.90	349.15	10.81	24.37	21.55	21.71	21.50	20.21	4.99	0.54	0.48	0.64	0.55	0.31	0.23			0.05	14.17
31	5/4/2004	15:47:37.85	2.45	2.42	4.53	0.25	0.48	0.27	0.49	0.31	0.03	-0.10	0.16	-0.16	-0.46	0.36	7.28	6.90	349.15	10.83	24.37	21.63	21.71	21.66	20.21	5.25	0.54	0.48	0.64	0.55	0.31	0.23			0.05	14.95
32	5/4/2004	16:03:37.85	2.47	2.42	4.53	0.24	0.46	0.27	0.49	0.32	0.03	-0.10	0.16	-0.16	-0.45	0.36	7.30	6.92	349.15	10.83	24.48	21.73	21.81	21.68	20.16	5.52	0.53	0.46	0.64	0.55	0.32	0.23			0.05	15.74
33	5/4/2004	16:19:37.85	2.45	2.42	4.57	0.25	0.48	0.27	0.49	0.32	0.03	-0.12	0.16	-0.16	-0.46	0.34	7.32	6.93	353.32	10.84	24.40	21.65	21.73	21.60	20.16	5.79	0.54	0.48	0.64	0.55	0.32	0.23			0.05	16.53
34	5/4/2004	16:35:37.85	2.45	2.40	4.55	0.25	0.48	0.27	0.49	0.32	0.03	-0.12	0.16	-0.16	-0.46	0.34	7.29	6.90	353.32	10.83	24.36	21.62	21.86	21.65	20.28	6.05	0.54	0.48	0.64	0.55	0.32	0.23			0.05	17.32
35	5/4/2004	16:51:37.85	2.45	2.42	4.57	0.22	0.48	0.27	0.50	0.31	0.04	-0.12	0.16	-0.16	-0.46	0.32	7.29	6.90	349.15	10.83	24.32	21.65	21.81	21.60	20.00	6.32	0.51	0.48	0.64	0.56	0.31	0.24			0.05	18.10
36	5/4/2004	17:07:37.85	2.45	2.40	4.51	0.24	0.48	0.27	0.49	0.31	0.03	-0.13	0.16	-0.16	-0.46	0.34	7.28	6.89	353.07	10.81	24.30	21.64	21.80	21.67	20.14	6.59	0.53	0.48	0.64	0.55	0.31	0.23			0.05	18.89
37	5/4/2004	17:23:37.85	2.45	2.42	4.53	0.25	0.49	0.27	0.51	0.31	0.03	-0.12	0.16	-0.16	-0.46	0.32	7.33	6.95	353.32	10.82	24.34	21.76	21.92	21.71	20.18	6.85	0.54	0.49	0.64	0.57	0.31	0.23			0.05	19.68
38	5/4/2004	17:39:37.85	2.47	2.40	4.49	0.24	0.48	0.25	0.50	0.31	0.03	-0.12	0.16	-0.16	-0.46	0.31	7.31	6.93	353.32	10.82	24.10	21.60	21.92	21.71	20.10	7.12	0.53	0.48	0.62	0.56	0.31	0.23			0.05	20.47
39	5/4/2004	17:55:37.85	2.45	2.40	4.49	0.24	0.49	0.27	0.50	0.31	0.03	-0.12	0.16	-0.16	-0.46	0.31	7.30	6.92	353.32	10.82	23.97	21.55	21.87	21.66	20.05	7.39	0.53	0.49	0.64	0.56	0.31	0.23			0.05	21.25
40	5/4/2004	18:11:37.85	2.47	2.42	4.51	0.24	0.49	0.25	0.49	0.31	0.03	-0.12	0.16	-0.16	-0.49	0.30	7.29	6.90	353.32	10.82	23.89	21.63	21.87	21.66	19.97	7.65	0.53	0.49	0.62	0.55	0.31	0.23			0.05	22.04
41	5/4/2004	18:27:37.85	2.47	2.40	4.49	0.21	0.48	0.23	0.49	0.28	0.03	-0.12	0.16	-0.17	-0.50	0.30	7.28	6.89	353.32	10.81	23.85	21.50	21.82	21.61	19.85	7.92	0.50	0.48	0.60	0.55	0.28	0.23			0.05	22.83
42	5/4/2004	18:43:37.85	2.47	2.42	4.49	0.22	0.49	0.23	0.50	0.30	0.03	-0.12	0.16	-0.12	-0.50	0.30	7.34	6.95	353.32	10.80	23.87	21.53	21.85	21.64	19.95	8.19	0.51	0.49	0.60	0.56	0.30	0.23			0.05	23.62
43	5/4/2004	18:59:37.85	2.49	2.42	4.48	0.21	0.48	0.23	0.50	0.27	0.02	-0.12	0.16	-0.14	-0.50	0.31	7.29	6.90	353.32	10.81	23.73	21.55	21.79	21.58	19.73	8.45	0.50	0.48	0.60	0.56	0.27	0.22			0.05	24.41
44	5/4/2004	19:15:37.85	2.49	2.42	4.49	0.21	0.49	0.24	0.50	0.28	0.03	-0.08	0.16	-0.16	-0.45	0.30	7.30	6.92	353.32	10.79	23.53	21.51	21.74	21.62	19.77	8.72	0.50	0.49	0.61	0.56	0.28	0.23			0.05	25.20
45	5/4/2004	19:31:37.85	2.49	2.42	4.49	0.22	0.49	0.24	0.51	0.30	0.03	-0.08	0.16	-0.16	-0.46	0.30	7.34	6.96	353.07	10.80	23.36	21.49	21.73	21.60	19.84	8.99	0.51	0.49	0.61	0.57	0.30	0.23			0.05	25.98
46	5/4/2004	19:47:37.85	2.50	2.42	4.48	0.21	0.48	0.22	0.52	0.28	0.03	-0.09	0.19	-0.16	-0.45	0.31	7.32	6.93	353.32	10.80	23.18	21.48	21.72	21.59	19.82	9.25	0.50	0.48	0.59	0.58	0.28	0.23			0.05	26.77
47	5/4/2004	20:03:37.85	2.50	2.42	4.53	0.21	0.49	0.22	0.52	0.31	0.05	-0.09	0.19	-0.16	-0.46	0.30	7.28	6.89	353.32	10.80	23.00	21.38	21.70	21.49	19.64	9.52	0.50	0.49	0.59	0.58	0.31	0.25			0.05	27.56
48	5/4/2004	20:19:37.85	2.50	2.42	4.46	0.21	0.51	0.27	0.53	0.31	0.05	-0.09	0.19	-0.16	-0.46	0.30	7.34	6.95	353.32	10.79	22.85	21.40	21.63	21.50	19.57	9.79	0.50	0.51	0.64	0.59	0.31	0.25			0.05	28.35
49	5/4/2004	20:35:37.85	2.50	2.42	4.49	0.21	0.51	0.25	0.53	0.31	0.04	-0.10	0.18	-0.16	-0.45	0.30	7.32	6.93	353.32	10.79	22.66	21.36	21.60	21.47	19.62	10.05	0.50	0.51	0.62	0.59	0.31	0.24			0.05	29.14
50	5/4/2004	20:51:37.85	2.52	2.42	4.48	0.25	0.51	0.24	0.52	0.31	0.04	-0.12	0.19	-0.16	-0.49	0.29	7.30	6.91	353.32	10.79	22.46	21.33	21.56	21.35	19.50	10.32	0.54	0.51	0.61	0.58	0.31	0.24			0.05	29.92
51	5/4/2004	21:07:37.85	2.52	2.42	4.49	0.24	0.50	0.23	0.51	0.31	0.04	-0.12	0.18	-0.17	-0.49	0.31	7.30	6.91	353.32	10.79	22.37	21.23	21.47	21.34	19.49	10.59	0.53	0.50	0.60	0.57	0.31	0.24			0.05	30.71
52	5/4/2004	21:23:37.85	2.54	2.42	4.49	0.25	0.51	0.24	0.52	0.32	0.03	-0.12	0.19	-0.16	-0.50	0.32	7.34	6.96	353.32	10.78	22.28	21.22	21.46	21.25	19.48	10.85	0.54	0.51	0.61	0.58	0.32	0.23			0.05	31.50
53	5/4/2004	21:39:37.85	2.54	2.42	4.44	0.22	0.51	0.23	0.52	0.32	0.03	-0.12	0.19	-0.18	-0.50	0.31	7.30	6.91	353.32	10.78	22.06	21.09	21.33	21.20	19.35	11.12	0.51	0.51	0.60	0.58	0.32	0.23			0.05	32.29
54	5/4/2004	21:55:37.85	2.54	2.44	4.46	0.25	0.52	0.23	0.52	0.31	0.03	-0.12	0.19	-0.14	-0.50	0.31	7.32	6.94	353.32	10.78	22.02	21.12	21.28	21.15	19.46	11.39	0.54	0.52	0.60	0.58	0.31	0.23			0.05	33.08
55	5/4/2004	22:11:37.85	2.56	2.42	4.48	0.22	0.50	0.23	0.51	0.33	0.03	-0.13	0.18	-0.16	-0.51	0.30	7.29	6.90	353.32	10.77	22.02	21.12	21.28	21.07	19.22	11.65	0.51	0.50	0.60	0.57	0.33	0.23			0.05	33.86
56	5/4/2004	22:27:37.85	2.56	2.44	4.48	0.21	0.50	0.23	0.52	0.33	0.03	-0.13	0.19	-0.16	-0.50	0.30	7.29	6.90	353.32	10.77	21.93	21.11	21.19	21.06	19.29	11.92	0.50	0.50	0.60	0.58	0.33	0.23			0.05	34.65
57	5/4/2004	22:43:37.85	2.56	2.42	4.46	0.21	0.50	0.27	0.53	0.31	0.03	-0.14	0.19	-0.16	-0.50	0.29	7.28	6.90	353.32	10.77	21.85	21.11	21.11	21.06	19.29	12.19	0.50	0.50	0.64	0.59	0.31	0.23			0.05	35.44
58	5/4/2004	22:59:37.85	2.56	2.42	4.46	0.22	0.51	0.27	0.53	0.31	0.03	-0.12	0.19	-0.16	-0.50	0.27	7.32	6.94	353.32	10.76	21.72	21.07	21.06	21.01	19.24	12.45	0.51	0.51	0.64	0.59	0.31	0.23			0.05	36.23
59	5/4/2004	23:15:37.85	2.56	2.44	4.48	0.21	0.51	0.27	0.53	0.31	0.03	-0.12	0.18	-0.16	-0.51	0.29	7.28	6.90	349.15	10.75	21.72	21.07	21.06	20.93	19.24	12.72	0.50	0.51	0.64	0.59	0.31	0.23			0.05	37.01
60	5/4/2004	23:31:37.85	2.58	2.44	4.46	0.25	0.51	0.27	0.53	0.31	0.03	-0.12	0.18	-0.16	-0.52	0.27	7.30	6.92	353.32	10.75	21.68	21.02	21.02	20.97	19.28	12.99	0.54	0.51	0.64	0.59	0.31	0.23			0.05	37.80
61	5/4/2004	23:47:37.85	2.58	2.44	4.48	0.25	0.50	0.27	0.53	0.31	0.03	-0.12	0.18	-0.16	-0.52	0.27	7.28	6.90	353.32	10.74	21.55	20.98	20.89	20.92	19.15	13.25	0.54	0.50	0.64	0.59	0.31	0.23			0.05	38.59
62	5/5/2004	00:03:37.85	2.58	2.44	4.48	0.26	0.51	0.27	0.52	0.32	0.03	-0.12	0.19	-0.16	-0.52	0.27	7.29	6.90	349.15	10.74	21.47	20.98	20.89	20.84	19.32	13.52	0.55	0.51	0.64	0.58	0.32	0.23			0.05	39.38
63	5/5/2004	00:19:37.85	2.58	2.42	4.49	0.25	0.50	0.27	0.52	0.31	0.03	-0.12	0.18	-0.14	-0.52	0.26	7.25	6.86	349.39	10.74	21.38	20.89	20.80	20.83	19.22	13.79	0.54	0.50	0.64	0.58	0.31	0.23			0.05	40.17
64	5/5/2004	00:35:37.85	2.58	2.42	4.48	0.25	0.50	0.27	0.53	0.32	0.03	-0.12	0.18	-0.16	-0.52	0.27	7.28	6.89	353.32	10.74	21.33	20.92	20.84	20.79	19.18	14.05	0.54	0.50	0.64	0.59	0.32	0.23			0.05	40.96
65	5/5/2004	00:51:37.85	2.58	2.44	4.44	0.26	0.50	0.27	0.53	0.31	0.03	-0.12	0.18	-0.16	-0.52	0.27	7.30	6.91	353.32	10.74	21.24	20.91	20.75	20.78	19.17	14.32	0.55	0.50	0.64	0.59	0.31	0.23			0.05	41.74
66	5/5/2004	01:07:37.85	2.60	2.44	4.44	0.25	0.52	0.27	0.53	0.32	0.07	-0.12	0.18	-0.16	-0.52	0.26	7.32	6.93	349.39	10.74	21.20	20.79	20.70	20.73	19.12	14.59	0.54	0.52	0.64	0.59	0.32	0.27			0.05	42.53
67	5/5/2004	01:23:37.85	2.60	2.44	4.46	0.25	0.51	0.27	0.55	0.31	0.07	-0.12	0.18	-0.16	-0.52	0.27	7.32	6.94	349.15	10.74	21.35	20.86	20.69	20.72	19.03	14.85	0.54	0.51	0.64	0.61	0.31	0.27			0.05	43.32
68	5/5/2004	01:39:37.85	2.60	2.44	4.44	0.25	0.51	0.27	0.52	0.33	0.07	-0.12	0.17	-0.16	-0.52	0.27	7.29	6.90	349.15	10.73	21.30	20.81	20.73	20.68	19.07	15.12	0.54	0.51	0.64	0.58	0.33	0.27			0.05	44.11
69	5/5/2004	01:55:37.85	2.61	2.44	4.46	0.25	0.54	0.27	0.53	0.34	0.07	-0.12	0.20	-0.16	-0.52	0.27	7.30	6.91	353.32	10.74	21.02	20.77	20.68	20.71	18.94	15.39	0.54	0.54	0.64	0.59	0.34	0.27			0.05	44.89
70	5/5/2004	02:11:37.85	2.61	2.44	4.46	0.25	0.54	0.30	0.52	0.34	0.07	-0.12	0.22	-0.12	-0.52	0.26	7.29	6.90	349.15	10.73	20.85	20.76	20.67	20.70	19.01	15.65	0.54	0.54	0.67	0.58	0.34	0.27			0.05	45.68

Table H3-2-2. CIX Campaign II, Cycle 2, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow	Cond1	pH	T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ- ential BV	cumul- lative BV
	units		psig	psig	psig	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	meter L/hr	cor. L/hr	mS/cm		ºC	ºC	ºC	ºC	ºC	ed	inch water	inch water	inch water	inch water	inch water	inch water	inches	inches		
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)										
70	5/5/2004	02:11:37.85	2.61	2.44	4.46	0.25	0.54	0.30	0.52	0.34	0.07	-0.12	0.22	-0.12	-0.52	0.26	7.29	6.90	349.15	10.73	20.85	20.76	20.67	20.70	19.01	15.65	0.54	0.54	0.67	0.58	0.34	0.27			0.05	45.68
71	5/5/2004	02:27:37.85	2.63	2.44	4.48	0.25	0.55	0.30	0.53	0.34	0.07	-0.12	0.22	-0.12	-0.54	0.26	7.32	6.94	353.32	10.74	20.68	20.75	20.58	20.61	18.92	15.92	0.54	0.55	0.67	0.59	0.34	0.27			0.05	46.47
72	5/5/2004	02:43:37.85	2.63	2.46	4.46	0.25	0.55	0.27	0.52	0.34	0.07	-0.13	0.20	-0.13	-0.56	0.26	7.28	6.89	353.32	10.74	20.67	20.66	20.49	20.52	18.83	16.19	0.54	0.55	0.64	0.58	0.34	0.27			0.05	47.26
73	5/5/2004	02:59:37.85	2.63	2.44	4.44	0.29	0.55	0.27	0.53	0.34	0.07	-0.12	0.19	-0.13	-0.54	0.26	7.28	6.90	353.32	10.73	20.50	20.57	20.40	20.43	18.66	16.45	0.58	0.55	0.64	0.59	0.34	0.27			0.05	48.05
74	5/5/2004	03:15:37.85	2.63	2.44	4.46	0.25	0.55	0.28	0.57	0.34	0.07	-0.12	0.20	-0.13	-0.52	0.25	7.32	6.93	353.32	10.73	20.41	20.57	20.40	20.51	18.74	16.72	0.54	0.55	0.65	0.63	0.34	0.27			0.05	48.83
75	5/5/2004	03:31:37.85	2.65	2.46	4.44	0.29	0.55	0.27	0.56	0.34	0.05	-0.13	0.19	-0.14	-0.52	0.29	7.31	6.93	349.15	10.73	20.24	20.56	20.39	20.42	18.81	16.99	0.58	0.55	0.64	0.62	0.34	0.25			0.05	49.62
76	5/5/2004	03:47:37.85	2.65	2.46	4.46	0.27	0.55	0.27	0.56	0.34	0.05	-0.09	0.19	-0.12	-0.52	0.27	7.31	6.93	349.15	10.73	20.32	20.56	20.31	20.42	18.81	17.25	0.56	0.55	0.64	0.62	0.34	0.25			0.05	50.41
77	5/5/2004	04:03:37.85	2.65	2.44	4.48	0.27	0.56	0.27	0.56	0.34	0.05	-0.08	0.19	-0.13	-0.52	0.27	7.29	6.90	353.32	10.73	20.20	20.51	20.27	20.30	18.61	17.52	0.56	0.56	0.64	0.62	0.34	0.25			0.05	51.20
78	5/5/2004	04:19:37.85	2.67	2.46	4.46	0.27	0.55	0.27	0.56	0.34	0.04	-0.08	0.19	-0.13	-0.54	0.27	7.30	6.91	349.39	10.73	20.23	20.47	20.22	20.33	18.64	17.79	0.56	0.55	0.64	0.62	0.34	0.24			0.05	51.98
79	5/5/2004	04:35:37.85	2.67	2.46	4.48	0.27	0.55	0.27	0.56	0.33	0.05	-0.08	0.19	-0.13	-0.56	0.27	7.28	6.89	349.15	10.73	20.35	20.50	20.18	20.29	18.68	18.05	0.56	0.55	0.64	0.62	0.33	0.25			0.05	52.77
80	5/5/2004	04:51:37.85	2.67	2.46	4.48	0.29	0.55	0.27	0.56	0.37	0.03	-0.08	0.18	-0.13	-0.56	0.26	7.28	6.89	353.32	10.73	20.22	20.46	20.13	20.24	18.63	18.32	0.58	0.55	0.64	0.62	0.37	0.23			0.05	53.56
81	5/5/2004	05:07:37.85	2.67	2.46	4.44	0.29	0.54	0.27	0.56	0.37	0.03	-0.09	0.18	-0.13	-0.56	0.26	7.28	6.90	349.15	10.73	20.26	20.41	20.09	20.12	18.51	18.59	0.58	0.54	0.64	0.62	0.37	0.23			0.05	54.35
82	5/5/2004	05:23:37.85	2.67	2.46	4.44	0.27	0.55	0.27	0.56	0.38	0.03	-0.08	0.19	-0.12	-0.56	0.26	7.32	6.93	349.15	10.73	20.10	20.33	19.92	20.12	18.51	18.85	0.56	0.55	0.64	0.62	0.38	0.23			0.05	55.13
83	5/5/2004	05:39:37.85	2.67	2.46	4.48	0.29	0.55	0.29	0.56	0.36	0.07	-0.08	0.19	-0.12	-0.56	0.25	7.30	6.92	349.39	10.73	20.10	20.41	20.00	20.20	18.67	19.12	0.58	0.55	0.66	0.62	0.36	0.27			0.05	55.92
84	5/5/2004	05:55:37.85	2.69	2.46	4.48	0.29	0.55	0.29	0.56	0.34	0.07	-0.09	0.18	-0.13	-0.56	0.25	7.29	6.90	349.15	10.73	20.13	20.29	19.96	20.15	18.62	19.39	0.58	0.55	0.66	0.62	0.34	0.27			0.05	56.71
85	5/5/2004	06:11:37.85	2.69	2.48	4.48	0.29	0.55	0.28	0.57	0.34	0.07	-0.08	0.18	-0.16	-0.56	0.25	7.28	6.89	349.15	10.72	19.96	20.20	19.87	20.14	18.53	19.65	0.58	0.55	0.65	0.63	0.34	0.27			0.05	57.50
86	5/5/2004	06:27:37.85	2.69	2.46	4.49	0.29	0.55	0.28	0.56	0.34	0.07	-0.08	0.18	-0.18	-0.56	0.24	7.29	6.90	349.39	10.73	19.83	20.14	19.82	20.01	18.32	19.92	0.58	0.55	0.65	0.62	0.34	0.27			0.05	58.28
87	5/5/2004	06:43:37.85	2.36	2.24	4.26	-0.39	1.96	-0.39	1.90	-0.04	1.46	-1.70	-2.44	-1.64	-1.05	0.24	7.78	7.41	353.32	10.73	19.78	20.10	19.77	19.96	18.35	20.19	-0.10	1.96	-0.02	1.96	-0.04	1.66			0.05	59.07
88	5/5/2004	06:59:37.85	2.69	2.46	4.42	0.27	0.54	0.27	0.60	0.34	0.07	-0.08	0.18	-0.16	-0.56	0.25	7.30	6.92	353.32	10.71	19.78	20.18	19.85	19.96	18.43	20.45	0.56	0.54	0.64	0.66	0.34	0.27			0.05	59.86
89	5/5/2004	07:15:37.85	2.69	2.46	4.44	0.32	0.55	0.28	0.60	0.34	0.07	-0.08	0.17	-0.16	-0.56	0.24	7.33	6.95	349.15	10.72	19.86	20.18	19.77	19.96	18.35	20.72	0.61	0.55	0.65	0.66	0.34	0.27			0.05	60.65
90	5/5/2004	07:31:37.85	2.71	2.46	4.42	0.31	0.55	0.27	0.60	0.34	0.05	-0.08	0.20	-0.16	-0.56	0.24	7.30	6.92	349.39	10.72	19.86	20.10	19.77	19.88	18.27	20.99	0.60	0.55	0.64	0.66	0.34	0.25			0.05	61.44
91	5/5/2004	07:47:37.85	2.71	2.46	4.40	0.31	0.54	0.27	0.60	0.34	0.04	-0.09	0.19	-0.16	-0.57	0.23	7.28	6.89	349.15	10.72	19.86	20.10	19.69	19.88	18.35	21.25	0.60	0.54	0.64	0.66	0.34	0.24			0.05	62.23
92	5/5/2004	08:03:37.85	2.72	2.48	4.46	0.32	0.55	0.27	0.60	0.33	0.05	-0.09	0.20	-0.16	-0.57	0.23	7.30	6.92	349.15	10.71	19.84	20.23	19.74	19.94	18.41	21.52	0.61	0.55	0.64	0.66	0.33	0.25			0.05	63.01
93	5/5/2004	08:19:37.85	2.71	2.50	4.48	0.27	0.54	0.27	0.60	0.33	0.05	-0.09	0.20	-0.14	-0.60	0.23	7.30	6.91	349.15	10.71	20.09	20.24	19.67	19.78	18.25	21.79	0.56	0.54	0.64	0.66	0.33	0.25			0.05	63.80
94	5/5/2004	08:35:37.85	2.71	2.48	4.46	0.27	0.52	0.27	0.60	0.33	0.05	-0.09	0.18	-0.16	-0.59	0.24	7.28	6.89	349.15	10.72	20.51	20.26	19.61	19.80	18.27	22.05	0.56	0.52	0.64	0.66	0.33	0.25			0.05	64.59
95	5/5/2004	08:51:37.85	2.72	2.50	4.48	0.29	0.54	0.28	0.56	0.34	0.05	-0.09	0.19	-0.16	-0.57	0.24	7.32	6.94	349.15	10.71	20.85	20.44	19.71	19.90	18.45	22.32	0.58	0.54	0.65	0.62	0.34	0.25			0.05	65.38
96	5/5/2004	09:07:37.85	2.71	2.50	4.46	0.27	0.55	0.25	0.56	0.34	0.05	-0.09	0.18	-0.16	-0.56	0.24	7.31	6.93	349.15	10.71	21.36	20.54	19.81	19.92	18.55	22.59	0.56	0.55	0.62	0.62	0.34	0.25			0.05	66.16
97	5/5/2004	09:23:37.85	2.71	2.51	4.49	0.27	0.55	0.24	0.56	0.31	0.03	-0.08	0.18	-0.16	-0.59	0.21	7.30	6.91	349.15	10.72	21.54	20.48	19.75	19.94	18.57	22.85	0.56	0.55	0.61	0.62	0.31	0.23			0.05	66.95
98	5/5/2004	09:39:37.85	2.69	2.50	4.49	0.27	0.55	0.25	0.57	0.32	0.03	-0.12	0.18	-0.16	-0.57	0.24	7.24	6.85	349.39	10.72	22.00	20.70	19.89	20.09	18.88	23.12	0.56	0.55	0.62	0.63	0.32	0.23			0.05	67.74
99	5/5/2004	09:55:37.85	2.69	2.51	4.51	0.25	0.55	0.25	0.58	0.34	0.03	-0.12	0.18	-0.16	-0.56	0.24	7.30	6.91	345.22	10.71	22.39	20.77	19.88	20.15	18.87	23.39	0.54	0.55	0.62	0.64	0.34	0.23			0.05	68.53
100	5/5/2004	10:11:37.85	2.67	2.50	4.46	0.25	0.55	0.23	0.53	0.34	0.05	-0.12	0.18	-0.19	-0.60	0.25	7.32	6.94	349.15	10.71	22.62	20.84	19.94	20.22	18.93	23.65	0.54	0.55	0.60	0.59	0.34	0.25			0.05	69.32
101	5/5/2004	10:27:37.85	2.65	2.50	4.49	0.25	0.55	0.23	0.56	0.31	0.07	-0.12	0.19	-0.19	-0.59	0.21	7.28	6.90	344.97	10.71	22.80	20.94	20.13	20.48	19.03	23.92	0.54	0.55	0.60	0.62	0.31	0.27			0.05	70.10
102	5/5/2004	10:43:37.85	2.65	2.51	4.51	0.25	0.51	0.25	0.56	0.32	0.07	-0.12	0.19	-0.18	-0.60	0.23	7.28	6.89	344.97	10.71	23.06	21.04	20.15	20.50	19.22	24.19	0.54	0.51	0.62	0.62	0.32	0.27			0.05	70.89
103	5/5/2004	10:59:37.85	2.63	2.51	4.46	0.24	0.52	0.27	0.57	0.31	0.03	-0.10	0.18	-0.16	-0.60	0.23	7.33	6.95	345.22	10.72	23.16	21.06	20.25	20.60	19.16	24.45	0.53	0.52	0.64	0.63	0.31	0.23			0.05	71.68
104	5/5/2004	11:15:37.85	2.63	2.51	4.53	0.25	0.52	0.24	0.58	0.31	0.03	-0.13	0.18	-0.16	-0.63	0.24	7.30	6.91	345.22	10.71	23.39	21.21	20.48	20.75	19.22	24.72	0.54	0.52	0.61	0.64	0.31	0.23			0.05	72.47
105	5/5/2004	11:31:37.85	2.63	2.51	4.49	0.25	0.52	0.23	0.56	0.28	0.02	-0.13	0.18	-0.21	-0.63	0.24	7.23	6.84	344.97	10.70	23.48	21.22	20.57	20.76	19.32	24.99	0.54	0.52	0.60	0.62	0.28	0.22			0.05	73.25
106	5/5/2004	11:47:37.85	2.63	2.53	4.49	0.27	0.51	0.23	0.56	0.31	0.03	-0.12	0.18	-0.19	-0.63	0.25	7.33	6.95	349.15	10.70	23.65	21.31	20.74	21.02	19.57	25.25	0.56	0.51	0.60	0.62	0.31	0.23			0.05	74.04
107	5/5/2004	12:03:37.85	2.63	2.53	4.51	0.26	0.52	0.23	0.56	0.31	0.03	-0.12	0.18	-0.18	-0.62	0.25	7.32	6.94	349.15	10.68	23.58	21.40	20.83	21.11	19.58	25.52	0.55	0.52	0.60	0.62	0.31	0.23			0.05	74.83
108	5/5/2004	12:19:37.85	2.61	2.53	4.53	0.27	0.54	0.23	0.58	0.31	0.04	-0.12	0.19	-0.17	-0.62	0.25	7.32	6.93	349.15	10.69	23.76	21.33	21.01	21.12	19.51	25.79	0.56	0.54	0.60	0.64	0.31	0.24			0.05	75.62
109	5/5/2004	12:35:37.85	2.61	2.53	4.51	0.22	0.49	0.23	0.58	0.32	0.03	-0.12	0.18	-0.16	-0.62	0.25	7.28	6.89	349.15	10.69	23.97	21.47	21.14	21.26	19.57	26.05	0.51	0.49	0.60	0.64	0.32	0.23			0.05	76.40
110	5/5/2004	12:51:37.85	2.61	2.53	4.55	0.25	0.50	0.20	0.60	0.31	0.05	-0.10	0.19	-0.16	-0.61	0.24	7.28	6.90	349.15	10.68	24.27	21.61	21.28	21.32	19.71	26.32	0.54	0.50	0.57	0.66	0.31	0.25			0.05	77.19
111	5/5/2004	13:07:37.85	2.61	2.53	4.53	0.25	0.51	0.19	0.60	0.31	0.03	-0.09	0.18	-0.16	-0.60	0.23	7.32	6.93	349.15	10.68	24.24	21.57	21.41	21.36	19.67	26.59	0.54	0.51	0.56	0.66	0.31	0.23			0.05	77.98
112	5/5/2004	13:23:37.85	2.58	2.51	4.53	0.26	0.52	0.20	0.56	0.32	0.03	-0.12	0.16	-0.19	-0.63	0.23	7.38	7.00	349.15	10.68	24.33	21.67	21.42	21.45	19.76	26.85	0.55	0.52	0.57	0.62	0.32	0.23			0.05	78.77
113	5/5/2004	13:39:37.85	2.58	2.51	4.53	0.25	0.52	0.19	0.56	0.31	0.03	-0.12	0.16	-0.22	-0.63	0.24	7.29	6.90	349.15	10.68	24.53	21.71	21.55	21.50	19.89	27.12	0.54	0.52	0.56	0.62	0.31	0.23			0.05	79.56
114	5/5/2004	13:55:37.85	2.58	2.51	4.53	0.25	0.51	0.20	0.56	0.31	0.03	-0.12	0.16	-0.23	-0.63	0.24	7.28	6.90	349.15	10.68	24.53	21.71	21.63	21.58	20.05	27.39	0.54	0.51	0.57	0.62	0.31	0.23			0.05	80.35
115	5/5/2004	14:11:37.85	2.58	2.51	4.53	0.26	0.54	0.23	0.56	0.32	0.03	-0.12	0.16	-0.22	-0.63	0.24	7.30	6.92	349.39	10.68	24.63	21.72	21.64	21.67	20.06	27.65	0.55	0.54	0.60	0.62	0.32	0.23			0.05	81.14
116	5/5/2004	14:27:37.85	2.56	2.51	4.55	0.27	0.54	0.23	0.56	0.33	0.04	-0.12	0.16	-0.21	-0.62	0.23	7.31	6.93	349.15	10.68	24.60	21.78	21.78	21.65	19.96	27.92	0.56	0.54	0.60	0.62	0.33	0.24			0.05	81.93
117	5/5/2004	14:43:37.85	2.56	2.51	4.53	0.25	0.55	0.23	0.57	0.34	0.05	-0.12	0.16	-0.19	-0.63	0.23	7.31	6.93	349.15	10.67	24.57	21.83	21.82	21.78	20.09	28.19	0.54	0.55	0.60	0.63	0.34	0.25			0.05	82.72
118	5/5/2004	14:59:37.85	2.54	2.51	4.57	0.25	0.54	0.19	0.57	0.33	0.05	-0.12	0.16	-0.23	-0.63	0.23	7.30	6.92	349.15	10.68	24.44	21.78	21.86	21.81	20.12	28.45	0.54	0.54	0.56	0.63	0.33	0.25			0.05	83.50
119	5/5/2004	15:15:37.85	2.56	2.51	4.53	0.25	0.55	0.19	0.57	0.34	0.05	-0.12	0.14	-0.19	-0.63	0.23	7.32	6.94	349.15	10.67	24.63	21.89	22.04	21.92	20.07	28.72	0.54	0.55	0.56	0.63	0.34	0.25			0.05	84.29
120	5/5/2004	15:31:37.85	2.54	2.50	4.57	0.25	0.55	0.20	0.58	0.31	0.05	-0.12	0.16	-0.18	-0.63	0.24	7.28	6.90	349.15	10.66	24.47	21.80	22.04	21.83	19.90	28.99	0.54	0.55	0.57	0.64	0.31	0.25			0.05	85.08
121	5/5/2004	15:47:37.85	2.56	2.50	4.59	0.25	0.55	0.19	0.60	0.31	0.07	-0.10	0.16	-0.19	-0.63	0.23	7.32	6.94	349.15	10.67	24.37	21.87	22.03	21.82	20.05	29.25	0.54	0.55	0.56	0.66	0.31	0.27			0.05	85.86
122	5/5/2004	16:03:37.85	2.56	2.51	4.59	0.25	0.57	0.20	0.61	0.31	0.07	-0.10	0.16	-0.19	-0.63	0.24	7.34	6.95	349.15	10.66	24.54	21.95	22.27	21.98	20.05	29.52	0.54	0.57	0.57	0.67	0.31	0.27			0.05	86.65
123	5/5/2004	16:19:37.85	2.54	2.51	4.57	0.25	0.56	0.19	0.61	0.31	0.07	-0.10	0.16	-0.19	-0.62	0.23	7.30	6.92	349.15	10.66	24.55	21.97	22.20	21.92	19.99	29.79	0.54	0.56	0.56	0.67	0.31	0.27			0.05	87.44
124	5/5/2004	16:35:37.85	2.52	2.50	4.57	0.25	0.59	0.19	0.62	0.31	0.07	-0.10	0.16	-0.19	-0.63	0.24	7.34	6.95	349.15	10.66	24.39	21.97	22.28	22.00	19.90	30.05	0.54	0.59	0.56	0.68	0.31	0.27			0.05	88.23
125	5/5/2004	16:51:37.85	2.54	2.50	4.57	0.25	0.54	0.19	0.58	0.31	0.07	-0.10	0.16	-0.19	-0.62	0.24	7.28	6.89	349.15	10.67	24.18	21.92	22.24	22.03	19.86	30.32	0.54	0.54	0.56	0.64	0.31	0.27			0.05	89.02
126	5/5/2004	17:07:37.85	2.54	2.50	4.53	0.25	0.55	0.19	0.58	0.31	0.07	-0.10	0.16	-0.18	-0.62	0.23	7.28	6.90	349.15	10.66	24.01	21.91	22.23	22.02	19.85	30.59	0.54	0.55	0.56	0.64	0.31	0.27			0.05	89.80
127	5/5/2004	17:23:37.85	2.54	2.51	4.55	0.24	0.55	0.19	0.58	0.31	0.07	-0.09	0.16	-0.18	-0.63	0.23	7.31	6.93	349.15	10.66	24.12	21.94	22.26	22.05	19.96	30.85	0.53	0.55	0.56	0.64	0.31	0.27			0.05	90.59
128	5/5/2004	17:39:37.85	2.54	2.50	4.57	0.25	0.55	0.19	0.60	0.31	0.07	-0.09	0.16	-0.19	-0.63	0.23	7.28	6.89	349.15	10.66	24.09	21.99	22.31	22.02	20.01	31.12	0.54	0.55	0.56	0.66	0.31	0.27			0.05	91.38
129	5/5/2004	17:55:37.85	2.54	2.51	4.57	0.25	0.55	0.19	0.60	0.31	0.07	-0.10	0.16	-0.19	-0.62	0.23	7.28	6.90	349.15	10.66	23.84	21.98	22.29	22.01	19.91	31.39	0.54	0.55	0.56	0.66	0.31	0.27			0.05	92.17
130	5/5/2004	18:11:37.85	2.56	2.51	4.57	0.25	0.56	0.19	0.60	0.31	0.07	-0.09	0.17	-0.19	-0.63	0.23	7.29	6.90	349.15	10.66	23.66	21.88	22.28	21.99	19.82	31.65	0.54	0.56	0.56	0.66	0.31	0.27			0.05	92.96

Table H3-2-3. CIX Campaign II, Cycle 2, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow	Cond1	pH	T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ- ential	cumul- lative
	units		psig	psig	psig	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	inch water	meter L/hr	cor. L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch water	inch water	inch water	inch water	inch water	inch water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)										
131	5/5/2004	18:27:37.85	2.58	2.51	4.59	0.25	0.55	0.18	0.57	0.34	0.05	-0.12	0.16	-0.19	-0.66	0.24	7.28	6.90	349.15	10.66	23.70	21.92	22.24	21.95	19.86	31.92	0.54	0.55	0.55	0.63	0.34	0.25			0.05	93.74
132	5/5/2004	18:43:37.85	2.58	2.53	4.59	0.24	0.55	0.17	0.58	0.34	0.05	-0.12	0.16	-0.19	-0.66	0.24	7.28	6.89	349.15	10.66	23.70	22.00	22.32	22.03	19.78	32.19	0.53	0.55	0.54	0.64	0.34	0.25			0.05	94.53
133	5/5/2004	18:59:37.85	2.56	2.51	4.55	0.24	0.55	0.19	0.60	0.33	0.07	-0.12	0.16	-0.19	-0.66	0.23	7.30	6.91	349.15	10.66	23.36	21.83	22.23	21.94	19.76	32.45	0.53	0.55	0.56	0.66	0.33	0.27			0.05	95.32
134	5/5/2004	19:15:37.85	2.58	2.51	4.57	0.24	0.55	0.20	0.60	0.32	0.05	-0.12	0.16	-0.18	-0.66	0.23	7.28	6.89	349.15	10.66	23.48	21.86	22.18	21.89	19.80	32.72	0.53	0.55	0.57	0.66	0.32	0.25			0.05	96.11
135	5/5/2004	19:31:37.85	2.58	2.53	4.55	0.26	0.55	0.20	0.60	0.31	0.03	-0.12	0.16	-0.19	-0.66	0.23	7.30	6.92	349.15	10.66	23.31	21.85	22.17	21.96	19.79	32.99	0.55	0.55	0.57	0.66	0.31	0.23			0.05	96.89
136	5/5/2004	19:47:37.85	2.60	2.53	4.55	0.25	0.56	0.20	0.60	0.31	0.04	-0.12	0.16	-0.18	-0.66	0.21	7.28	6.89	349.15	10.66	23.10	21.80	22.20	21.91	19.74	33.25	0.54	0.56	0.57	0.66	0.31	0.24			0.05	97.68
137	5/5/2004	20:03:37.85	2.60	2.51	4.57	0.29	0.55	0.20	0.58	0.31	0.04	-0.12	0.16	-0.19	-0.66	0.21	7.32	6.94	349.15	10.66	23.08	21.78	22.10	21.81	19.72	33.52	0.58	0.55	0.57	0.64	0.31	0.24			0.05	98.47
138	5/5/2004	20:19:37.85	2.60	2.53	4.57	0.27	0.56	0.20	0.58	0.31	0.04	-0.12	0.16	-0.19	-0.67	0.21	7.33	6.95	349.15	10.66	22.94	21.72	22.04	21.83	19.58	33.79	0.56	0.56	0.57	0.64	0.31	0.24			0.05	99.26
139	5/5/2004	20:35:37.85	2.61	2.53	4.62	0.25	0.56	0.19	0.58	0.31	0.03	-0.12	0.16	-0.18	-0.66	0.21	7.28	6.90	349.15	10.66	22.85	21.71	22.03	21.82	19.57	34.05	0.54	0.56	0.56	0.64	0.31	0.23			0.05	100.04
140	5/5/2004	20:51:37.85	2.63	2.55	4.55	0.25	0.57	0.19	0.60	0.31	0.03	-0.12	0.16	-0.16	-0.66	0.21	7.34	6.95	349.39	10.66	22.80	21.75	22.07	21.78	19.52	34.32	0.54	0.57	0.56	0.66	0.31	0.23			0.05	100.83
141	5/5/2004	21:07:37.85	2.41	2.31	4.37	0.27	0.57	0.20	0.60	0.31	0.03	-0.12	0.16	-0.16	-0.63	0.20	7.36	6.98	349.15	10.66	22.63	21.74	21.97	21.77	19.51	34.59	0.56	0.57	0.57	0.66	0.31	0.23			0.05	101.62
142	5/5/2004	21:23:37.85	2.43	2.33	4.35	0.25	0.56	0.19	0.60	0.32	0.03	-0.12	0.19	-0.17	-0.62	0.20	7.31	6.93	349.15	10.66	22.43	21.69	22.01	21.72	19.47	34.85	0.54	0.56	0.56	0.66	0.32	0.23			0.05	102.41
143	5/5/2004	21:39:37.85	2.43	2.33	4.38	0.25	0.55	0.19	0.60	0.31	0.03	-0.08	0.19	-0.18	-0.62	0.20	7.28	6.90	349.15	10.66	22.49	21.76	22.00	21.71	19.54	35.12	0.54	0.55	0.56	0.66	0.31	0.23			0.05	103.20
144	5/5/2004	21:55:37.85	2.43	2.33	4.35	0.25	0.55	0.20	0.62	0.31	0.07	-0.08	0.19	-0.18	-0.63	0.20	7.28	6.90	349.15	10.65	22.44	21.62	21.86	21.65	19.48	35.39	0.54	0.55	0.57	0.68	0.31	0.27			0.05	103.98
145	5/5/2004	22:11:37.85	2.45	2.35	4.38	0.25	0.61	0.19	0.62	0.34	0.07	-0.09	0.19	-0.18	-0.63	0.19	7.30	6.92	349.15	10.66	22.31	21.66	21.82	21.69	19.51	35.65	0.54	0.61	0.56	0.68	0.34	0.27			0.05	104.77
146	5/5/2004	22:27:37.85	2.45	2.35	4.38	0.25	0.61	0.23	0.62	0.34	0.05	-0.09	0.19	-0.19	-0.63	0.20	7.31	6.93	349.15	10.65	22.19	21.61	21.77	21.64	19.47	35.92	0.54	0.61	0.60	0.68	0.34	0.25			0.05	105.56
147	5/5/2004	22:43:37.85	2.45	2.35	4.38	0.25	0.62	0.23	0.62	0.33	0.07	-0.10	0.19	-0.19	-0.65	0.19	7.30	6.92	349.39	10.66	22.14	21.65	21.81	21.60	19.42	36.19	0.54	0.62	0.60	0.68	0.33	0.27			0.05	106.35
148	5/5/2004	22:59:37.85	2.47	2.35	4.37	0.29	0.62	0.23	0.62	0.31	0.04	-0.12	0.19	-0.19	-0.66	0.19	7.28	6.89	349.15	10.66	22.13	21.56	21.63	21.50	19.33	36.45	0.58	0.62	0.60	0.68	0.31	0.24			0.05	107.14
149	5/5/2004	23:15:37.85	2.47	2.37	4.38	0.27	0.57	0.23	0.60	0.31	0.04	-0.12	0.19	-0.19	-0.66	0.18	7.28	6.89	349.15	10.66	22.21	21.56	21.63	21.42	19.41	36.72	0.56	0.57	0.60	0.66	0.31	0.24			0.05	107.92
150	5/5/2004	23:31:37.85	2.49	2.35	4.37	0.27	0.61	0.23	0.60	0.31	0.03	-0.12	0.19	-0.19	-0.66	0.18	7.27	6.88	349.15	10.66	22.13	21.56	21.63	21.50	19.33	36.99	0.56	0.61	0.60	0.66	0.31	0.23			0.05	108.71
151	5/5/2004	23:47:37.85	2.49	2.37	4.35	0.27	0.63	0.23	0.61	0.31	0.05	-0.12	0.19	-0.19	-0.66	0.18	7.32	6.94	349.39	10.66	21.92	21.51	21.59	21.38	19.29	37.25	0.56	0.63	0.60	0.67	0.31	0.25			0.05	109.50
152	5/6/2004	00:03:37.85	2.49	2.35	4.40	0.27	0.61	0.23	0.62	0.31	0.03	-0.12	0.19	-0.18	-0.66	0.18	7.29	6.90	349.39	10.66	22.09	21.51	21.59	21.46	19.29	37.52	0.56	0.61	0.60	0.68	0.31	0.23			0.05	110.29
153	5/6/2004	00:19:37.85	2.49	2.35	4.35	0.26	0.61	0.23	0.62	0.32	0.03	-0.12	0.18	-0.19	-0.67	0.20	7.28	6.90	349.15	10.65	22.07	21.50	21.50	21.37	19.28	37.79	0.55	0.61	0.60	0.68	0.32	0.23			0.05	111.07
154	5/6/2004	00:35:37.85	2.49	2.37	4.38	0.27	0.63	0.23	0.62	0.31	0.03	-0.12	0.19	-0.19	-0.66	0.20	7.28	6.90	349.15	10.66	21.99	21.50	21.42	21.37	19.28	38.05	0.56	0.63	0.60	0.68	0.31	0.23			0.05	111.86
155	5/6/2004	00:51:37.85	2.50	2.37	4.37	0.27	0.62	0.24	0.61	0.31	0.04	-0.12	0.19	-0.19	-0.70	0.21	7.32	6.93	349.15	10.65	21.91	21.50	21.50	21.37	19.28	38.32	0.56	0.62	0.61	0.67	0.31	0.24			0.05	112.65
156	5/6/2004	01:07:37.85	2.50	2.37	4.35	0.26	0.63	0.23	0.60	0.31	0.03	-0.12	0.18	-0.18	-0.70	0.20	7.28	6.90	349.15	10.66	22.07	21.50	21.42	21.37	19.19	38.59	0.55	0.63	0.60	0.66	0.31	0.23			0.05	113.44
157	5/6/2004	01:23:37.85	2.50	2.37	4.37	0.25	0.62	0.23	0.60	0.32	0.03	-0.12	0.18	-0.19	-0.70	0.20	7.28	6.90	349.15	10.66	21.95	21.46	21.37	21.32	19.23	38.85	0.54	0.62	0.60	0.66	0.32	0.23			0.05	114.23
158	5/6/2004	01:39:37.85	2.50	2.37	4.38	0.26	0.62	0.23	0.62	0.31	0.03	-0.12	0.19	-0.18	-0.70	0.20	7.28	6.90	349.15	10.65	21.82	21.49	21.41	21.28	19.18	39.12	0.55	0.62	0.60	0.68	0.31	0.23			0.05	115.01
159	5/6/2004	01:55:37.85	2.50	2.39	4.38	0.25	0.62	0.23	0.62	0.31	0.03	-0.12	0.19	-0.16	-0.70	0.21	7.30	6.92	349.15	10.66	21.95	21.46	21.37	21.24	19.23	39.39	0.54	0.62	0.60	0.68	0.31	0.23			0.05	115.80
160	5/6/2004	02:11:37.85	2.50	2.37	4.38	0.26	0.65	0.23	0.63	0.31	0.03	-0.12	0.18	-0.14	-0.70	0.20	7.32	6.94	349.15	10.65	21.90	21.41	21.25	21.28	19.10	39.65	0.55	0.65	0.60	0.69	0.31	0.23			0.05	116.59
161	5/6/2004	02:27:37.85	2.52	2.37	4.38	0.26	0.65	0.23	0.62	0.31	0.03	-0.12	0.19	-0.14	-0.68	0.20	7.34	6.96	349.15	10.65	21.70	21.45	21.28	21.31	19.22	39.92	0.55	0.65	0.60	0.68	0.31	0.23			0.05	117.38
162	5/6/2004	02:43:37.85	2.52	2.37	4.40	0.26	0.62	0.23	0.61	0.32	0.02	-0.12	0.18	-0.16	-0.66	0.19	7.31	6.93	349.15	10.66	21.78	21.36	21.28	21.23	19.22	40.19	0.55	0.62	0.60	0.67	0.32	0.22			0.05	118.17
163	5/6/2004	02:59:37.85	2.52	2.39	4.38	0.25	0.62	0.23	0.61	0.31	0.03	-0.13	0.18	-0.16	-0.66	0.19	7.28	6.89	349.15	10.66	21.78	21.45	21.28	21.23	19.30	40.45	0.54	0.62	0.60	0.67	0.31	0.23			0.05	118.95
164	5/6/2004	03:15:37.85	2.52	2.39	4.38	0.25	0.63	0.23	0.65	0.34	0.03	-0.13	0.18	-0.14	-0.66	0.19	7.29	6.90	349.39	10.65	21.62	21.36	21.28	21.23	19.22	40.72	0.54	0.63	0.60	0.71	0.34	0.23			0.05	119.74
165	5/6/2004	03:31:37.85	2.52	2.39	4.37	0.25	0.65	0.23	0.66	0.34	0.03	-0.13	0.18	-0.13	-0.67	0.19	7.28	6.90	349.39	10.65	21.70	21.36	21.28	21.23	19.22	40.99	0.54	0.65	0.60	0.72	0.34	0.23			0.05	120.53
166	5/6/2004	03:47:37.85	2.54	2.39	4.37	0.25	0.65	0.23	0.66	0.34	0.03	-0.13	0.18	-0.12	-0.66	0.19	7.34	6.95	349.39	10.66	21.69	21.43	21.27	21.22	19.13	41.25	0.54	0.65	0.60	0.72	0.34	0.23			0.05	121.32
167	5/6/2004	04:03:37.85	2.52	2.39	4.35	0.25	0.65	0.25	0.67	0.33	0.03	-0.13	0.18	-0.19	-0.67	0.19	7.28	6.90	349.15	10.65	21.53	21.35	21.19	21.22	19.05	41.52	0.54	0.65	0.62	0.73	0.33	0.23			0.05	122.10
168	5/6/2004	04:19:37.85	2.39	2.24	4.24	0.21	0.61	0.20	0.62	0.31	0.03	-0.15	0.16	-0.19	-0.68	0.19	7.30	6.91	349.15	10.64	21.89	21.32	21.15	21.19	19.17	41.79	0.50	0.61	0.57	0.68	0.31	0.23			0.05	122.89
169	5/6/2004	04:35:37.85	2.54	2.40	4.37	0.25	0.62	0.25	0.63	0.34	0.03	-0.14	0.17	-0.19	-0.68	0.19	7.28	6.90	349.15	10.65	21.61	21.27	21.11	21.14	19.13	42.05	0.54	0.62	0.62	0.69	0.34	0.23			0.05	123.68
170	5/6/2004	04:51:37.85	2.54	2.40	4.42	0.25	0.63	0.27	0.65	0.34	0.03	-0.13	0.19	-0.18	-0.68	0.18	7.31	6.93	349.15	10.66	21.53	21.35	21.19	21.14	19.13	42.32	0.54	0.63	0.64	0.71	0.34	0.23			0.05	124.47
171	5/6/2004	05:07:37.85	2.56	2.40	4.38	0.25	0.65	0.27	0.66	0.34	0.03	-0.13	0.19	-0.19	-0.68	0.18	7.34	6.95	349.15	10.65	21.61	21.35	21.11	21.14	19.13	42.59	0.54	0.65	0.64	0.72	0.34	0.23			0.05	125.26
172	5/6/2004	05:23:37.85	2.56	2.42	4.38	0.25	0.65	0.25	0.67	0.33	0.03	-0.13	0.18	-0.19	-0.68	0.19	7.32	6.93	349.15	10.65	21.32	21.23	21.06	21.10	19.08	42.85	0.54	0.65	0.62	0.73	0.33	0.23			0.05	126.05
173	5/6/2004	05:39:37.85	2.56	2.42	4.38	0.24	0.63	0.24	0.66	0.32	0.03	-0.14	0.18	-0.19	-0.70	0.18	7.28	6.89	349.15	10.65	21.48	21.31	21.14	21.10	19.24	43.12	0.53	0.63	0.61	0.72	0.32	0.23			0.05	126.83
174	5/6/2004	05:55:37.85	2.56	2.42	4.38	0.25	0.65	0.23	0.67	0.32	0.03	-0.10	0.18	-0.18	-0.70	0.18	7.28	6.89	349.39	10.64	21.35	21.26	21.10	21.13	19.04	43.39	0.54	0.65	0.60	0.73	0.32	0.23			0.05	127.62
175	5/6/2004	06:11:37.85	2.58	2.42	4.38	0.29	0.63	0.23	0.65	0.31	0.03	-0.10	0.18	-0.18	-0.70	0.18	7.30	6.91	349.15	10.64	21.56	21.31	21.14	21.10	19.08	43.65	0.58	0.63	0.60	0.71	0.31	0.23			0.05	128.41
176	5/6/2004	06:27:37.85	2.56	2.44	4.40	0.29	0.65	0.24	0.66	0.32	0.03	-0.10	0.18	-0.19	-0.70	0.18	7.32	6.93	349.39	10.65	21.35	21.26	21.02	21.05	19.04	43.92	0.58	0.65	0.61	0.72	0.32	0.23			0.05	129.20
177	5/6/2004	06:43:37.85	2.58	2.44	4.38	0.29	0.65	0.23	0.66	0.31	0.03	-0.12	0.18	-0.19	-0.71	0.18	7.29	6.90	349.15	10.64	21.52	21.26	21.02	21.05	19.04	44.19	0.58	0.65	0.60	0.72	0.31	0.23			0.05	129.99
178	5/6/2004	06:59:37.85	2.58	2.42	4.42	0.29	0.65	0.23	0.66	0.31	0.03	-0.14	0.18	-0.19	-0.70	0.16	7.29	6.90	349.15	10.64	21.35	21.26	21.10	21.05	19.12	44.45	0.58	0.65	0.60	0.72	0.31	0.23			0.05	130.77
179	5/6/2004	07:15:37.85	2.60	2.44	4.38	0.27	0.65	0.24	0.67	0.31	0.03	-0.10	0.18	-0.18	-0.70	0.16	7.31	6.93	349.15	10.65	21.56	21.23	21.06	21.10	19.08	44.72	0.56	0.65	0.61	0.73	0.31	0.23			0.05	131.56
180	5/6/2004	07:31:37.85	2.60	2.44	4.38	0.29	0.65	0.25	0.69	0.32	0.03	-0.10	0.18	-0.18	-0.70	0.18	7.34	6.95	349.15	10.65	21.35	21.26	21.02	20.97	19.04	44.99	0.58	0.65	0.62	0.75	0.32	0.23			0.05	132.35
181	5/6/2004	07:47:37.85	2.61	2.46	4.42	0.27	0.65	0.23	0.66	0.32	0.03	-0.10	0.19	-0.19	-0.70	0.16	7.31	6.93	349.15	10.65	21.65	21.32	20.99	21.11	19.09	45.25	0.56	0.65	0.60	0.72	0.32	0.23			0.05	133.14
182	5/6/2004	08:03:37.85	2.60	2.46	4.37	0.25	0.65	0.23	0.66	0.31	0.03	-0.12	0.18	-0.19	-0.70	0.16	7.31	6.93	349.15	10.65	21.62	21.28	21.04	21.07	19.06	45.52	0.54	0.65	0.60	0.72	0.31	0.23			0.05	133.93
183	5/6/2004	08:19:37.85	2.60	2.46	4.37	0.25	0.65	0.23	0.66	0.32	0.03	-0.15	0.18	-0.19	-0.70	0.18	7.28	6.89	349.15	10.64	21.79	21.29	20.97	21.00	19.15	45.79	0.54	0.65	0.60	0.72	0.32	0.23			0.05	134.71
184	5/6/2004	08:35:37.85	2.61	2.46	4.38	0.25	0.65	0.20	0.66	0.31	0.03	-0.14	0.18	-0.18	-0.70	0.18	7.30	6.92	349.15	10.65	21.96	21.39	21.06	21.01	19.08	46.05	0.54	0.65	0.57	0.72	0.31	0.23			0.05	135.50
185	5/6/2004	08:51:37.85	2.61	2.46	4.40	0.25	0.65	0.19	0.67	0.31	0.03	-0.14	0.17	-0.18	-0.70	0.16	7.28	6.90	349.15	10.65	22.18	21.52	21.12	21.15	19.30	46.32	0.54	0.65	0.56	0.73	0.31	0.23			0.05	136.29
186	5/6/2004	09:07:37.85	2.60	2.48	4.37	0.25	0.65	0.20	0.68	0.33	0.03	-0.13	0.18	-0.19	-0.70	0.18	7.28	6.90	349.15	10.65	22.22	21.49	21.08	21.11	19.26	46.59	0.54	0.65	0.57	0.74	0.33	0.23			0.05	137.08
187	5/6/2004	09:23:37.85	2.60	2.48	4.40	0.25	0.65	0.22	0.66	0.31	0.03	-0.13	0.18	-0.19	-0.73	0.18	7.28	6.90	349.15	10.64	22.36	21.54	21.14	21.17	19.32	46.85	0.54	0.65	0.59	0.72	0.31	0.23			0.05	137.86
188	5/6/2004	09:39:37.85	2.60	2.48	4.42	0.26	0.65	0.23	0.65	0.32	0.03	-0.12	0.19	-0.22	-0.72	0.19	7.34	6.95	349.15	10.63	22.53	21.55	21.15	21.18	19.25	47.12	0.55	0.65	0.60	0.71	0.32	0.23			0.05	138.65
189	5/6/2004	09:55:37.85	2.63	2.53	4.33	0.31	0.51	0.23	0.52	0.34	0.03	-0.12	0.19	0.49	0.63	0.18	7.28	6.90	349.15	10.64	22.70	21.65	21.24	21.27	19.34	47.39	0.64	0.56	0.60	0.58	0.34	0.23			0.05	139.28
190	5/6/2004	10:11:37.85	2.63	2.55	4.37	0.32	0.51	0.25	0.52	0.34	0.03	-0.12	0.19	0.52	0.63	0.18	7.32	6.93	349.15	10.63	22.92	21.78	21.30	21.41	19.48	47.65	0.65	0.56	0.62	0.58	0.34	0.23			0.05	140.06

Table H3-2-4. CIX Campaign II, Cycle 2, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																				
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																															
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		ºC	ºC	ºC	ºC	ºC	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
191	5/6/2004	10:27:37.85	2.61	2.53	4.29	0.31	0.51	0.25	0.52	0.34	0.03	-0.12	0.18	0.52	0.65	0.18	7.28	6.89	349.15	10.63	22.96	21.75	21.34	21.37	19.44	47.92	0.64	0.56	0.62	0.58	0.34	0.23			0.05	140.85
192	5/6/2004	10:43:37.85	2.61	2.55	4.33	0.31	0.51	0.27	0.56	0.34	0.05	-0.10	0.19	0.53	0.65	0.14	7.32	6.94	349.15	10.63	23.14	21.76	21.35	21.38	19.45	48.19	0.64	0.56	0.64	0.62	0.34	0.25			0.05	141.64
193	5/6/2004	10:59:37.85	2.61	2.55	4.38	0.29	0.52	0.23	0.56	0.34	0.07	-0.09	0.18	0.53	0.67	0.15	7.30	6.92	349.15	10.64	23.48	21.86	21.46	21.49	19.64	48.45	0.62	0.57	0.60	0.62	0.34	0.27			0.05	142.44
194	5/6/2004	11:15:37.85	2.61	2.55	4.38	0.27	0.51	0.23	0.56	0.32	0.07	-0.09	0.19	0.53	0.65	0.15	7.28	6.89	349.15	10.62	23.53	21.91	21.58	21.53	19.52	48.72	0.60	0.56	0.60	0.62	0.32	0.27			0.05	143.23
195	5/6/2004	11:31:37.85	2.61	2.57	4.38	0.27	0.50	0.23	0.60	0.33	0.03	-0.12	0.19	0.53	0.69	0.15	7.32	6.93	349.15	10.64	23.82	21.96	21.64	21.59	19.74	48.99	0.60	0.55	0.60	0.66	0.33	0.23			0.05	144.02
196	5/6/2004	11:47:37.85	2.61	2.57	4.42	0.27	0.50	0.24	0.56	0.34	0.04	-0.12	0.16	0.49	0.69	0.15	7.28	6.90	349.15	10.63	23.79	22.01	21.77	21.72	19.79	49.25	0.60	0.55	0.61	0.62	0.34	0.24			0.05	144.80
197	5/6/2004	12:03:37.85	2.63	2.57	4.40	0.29	0.50	0.25	0.56	0.34	0.05	-0.12	0.16	0.46	0.68	0.16	7.28	6.89	349.15	10.62	23.83	22.06	21.73	21.76	19.75	49.52	0.62	0.55	0.62	0.62	0.34	0.25			0.05	145.59
198	5/6/2004	12:19:37.85	2.61	2.59	4.38	0.29	0.51	0.27	0.56	0.34	0.04	-0.12	0.16	0.47	0.67	0.16	7.34	6.95	349.15	10.62	23.88	22.10	21.86	21.89	19.88	49.79	0.62	0.56	0.64	0.62	0.34	0.24			0.05	146.38
199	5/6/2004	12:35:37.85	2.63	2.59	4.42	0.29	0.51	0.25	0.56	0.34	0.04	-0.12	0.16	0.47	0.65	0.16	7.28	6.90	349.15	10.62	23.97	22.11	21.87	21.98	19.97	50.05	0.62	0.56	0.62	0.62	0.34	0.24			0.05	147.17
200	5/6/2004	12:51:37.85	2.61	2.57	4.42	0.27	0.52	0.27	0.57	0.34	0.07	-0.12	0.16	0.46	0.65	0.18	7.29	6.90	349.15	10.62	24.14	22.13	21.96	21.99	19.98	50.32	0.60	0.57	0.64	0.63	0.34	0.27			0.05	147.96
201	5/6/2004	13:07:37.85	2.61	2.59	4.42	0.26	0.51	0.23	0.56	0.34	0.07	-0.10	0.16	0.46	0.65	0.18	7.26	6.87	349.15	10.62	24.33	22.31	22.07	22.02	20.17	50.59	0.59	0.56	0.60	0.62	0.34	0.27			0.05	148.75
202	5/6/2004	13:23:37.85	2.61	2.59	4.44	0.27	0.51	0.24	0.56	0.34	0.07	-0.09	0.16	0.46	0.65	0.18	7.30	6.91	349.15	10.62	24.47	22.37	22.20	22.16	20.47	50.85	0.60	0.56	0.61	0.62	0.34	0.27			0.05	149.54
203	5/6/2004	13:39:37.85	2.61	2.59	4.44	0.29	0.51	0.23	0.56	0.31	0.07	-0.09	0.16	0.46	0.65	0.18	7.28	6.89	349.15	10.62	24.55	22.37	22.20	22.08	20.23	51.12	0.62	0.56	0.60	0.62	0.31	0.27			0.05	150.33
204	5/6/2004	13:55:37.85	2.61	2.59	4.46	0.27	0.51	0.23	0.56	0.32	0.05	-0.09	0.16	0.46	0.65	0.19	7.28	6.89	349.15	10.62	24.72	22.38	22.30	22.25	20.32	51.39	0.60	0.56	0.60	0.62	0.32	0.25			0.05	151.12
205	5/6/2004	14:11:37.85	2.60	2.59	4.44	0.27	0.54	0.27	0.58	0.32	0.07	-0.08	0.16	0.46	0.67	0.19	7.30	6.92	349.15	10.62	24.69	22.43	22.34	22.30	20.45	51.65	0.60	0.59	0.64	0.64	0.32	0.27			0.05	151.90
206	5/6/2004	14:27:37.85	2.61	2.61	4.44	0.32	0.52	0.27	0.58	0.34	0.07	-0.08	0.17	0.46	0.65	0.19	7.34	6.96	349.15	10.61	24.44	22.51	22.50	22.30	20.53	51.92	0.65	0.57	0.64	0.64	0.34	0.27			0.05	152.69
207	5/6/2004	14:43:37.85	2.60	2.61	4.46	0.30	0.54	0.27	0.57	0.32	0.07	-0.08	0.16	0.46	0.65	0.19	7.28	6.90	349.15	10.61	24.57	22.47	22.55	22.42	20.41	52.19	0.63	0.59	0.64	0.63	0.32	0.27			0.05	153.48
208	5/6/2004	14:59:37.85	2.61	2.61	4.44	0.31	0.54	0.27	0.56	0.34	0.05	-0.09	0.16	0.46	0.67	0.19	7.34	6.96	349.15	10.62	24.28	22.43	22.50	22.38	20.45	52.45	0.64	0.59	0.64	0.62	0.34	0.25			0.05	154.27
209	5/6/2004	15:15:37.85	2.61	2.61	4.46	0.31	0.54	0.27	0.56	0.34	0.07	-0.08	0.16	0.46	0.68	0.20	7.31	6.93	349.15	10.62	24.25	22.47	22.55	22.42	20.25	52.72	0.64	0.59	0.64	0.62	0.34	0.27			0.05	155.06
210	5/6/2004	15:31:37.85	2.60	2.61	4.44	0.31	0.55	0.27	0.56	0.34	0.07	-0.09	0.16	0.46	0.69	0.19	7.30	6.92	349.15	10.60	24.42	22.57	22.64	22.60	20.34	52.99	0.64	0.60	0.64	0.62	0.34	0.27			0.05	155.84
211	5/6/2004	15:47:37.85	2.60	2.61	4.49	0.31	0.55	0.27	0.57	0.34	0.07	-0.12	0.16	0.42	0.69	0.19	7.36	6.97	349.15	10.61	24.25	22.55	22.63	22.42	20.17	53.25	0.64	0.60	0.64	0.63	0.34	0.27			0.05	156.63
212	5/6/2004	16:03:37.85	2.60	2.61	4.46	0.30	0.55	0.27	0.56	0.34	0.03	-0.12	0.16	0.42	0.63	0.19	7.28	6.90	349.15	10.61	24.22	22.60	22.76	22.55	20.38	53.52	0.63	0.60	0.64	0.62	0.34	0.23			0.05	157.42
213	5/6/2004	16:19:37.85	2.61	2.62	4.46	0.31	0.55	0.27	0.56	0.33	0.03	-0.12	0.16	0.42	0.65	0.19	7.28	6.89	349.15	10.61	24.18	22.65	22.80	22.60	20.43	53.79	0.64	0.60	0.64	0.62	0.33	0.23			0.05	158.21
214	5/6/2004	16:35:37.85	2.61	2.61	4.49	0.26	0.55	0.27	0.56	0.33	0.03	-0.12	0.16	0.42	0.64	0.16	7.26	6.88	349.15	10.60	24.22	22.68	22.84	22.55	20.38	54.05	0.59	0.60	0.64	0.62	0.33	0.23			0.05	158.99
215	5/6/2004	16:51:37.85	2.61	2.62	4.46	0.29	0.55	0.27	0.56	0.34	0.03	-0.12	0.16	0.42	0.65	0.16	7.28	6.90	349.15	10.61	24.18	22.65	22.80	22.60	20.34	54.32	0.62	0.60	0.64	0.62	0.34	0.23			0.05	159.78
216	5/6/2004	17:07:37.85	2.61	2.62	4.48	0.29	0.55	0.27	0.58	0.34	0.03	-0.12	0.16	0.42	0.65	0.15	7.28	6.90	349.39	10.61	24.06	22.76	22.92	22.71	20.46	54.59	0.62	0.60	0.64	0.64	0.34	0.23			0.05	160.57
217	5/6/2004	17:23:37.85	2.63	2.62	4.51	0.27	0.56	0.27	0.60	0.34	0.03	-0.13	0.16	0.42	0.65	0.18	7.30	6.91	349.15	10.61	23.93	22.63	22.87	22.66	20.41	54.85	0.60	0.61	0.64	0.66	0.34	0.23			0.05	161.36
218	5/6/2004	17:39:37.85	1.82	1.85	3.74	-0.46	0.65	-0.49	0.65	-0.06	0.14	-0.51	-0.65	0.09	0.46	0.18	7.55	7.17	349.15	10.61	24.00	22.62	22.86	22.65	20.40	55.12	-0.13	0.70	-0.12	0.71	-0.06	0.34			0.05	162.15
219	5/6/2004	17:55:37.85	2.61	2.62	4.48	0.31	0.55	0.27	0.56	0.33	0.03	-0.12	0.17	0.43	0.65	0.19	7.28	6.89	349.15	10.61	23.63	22.58	22.81	22.60	20.35	55.39	0.64	0.60	0.64	0.62	0.33	0.23			0.05	162.93
220	5/6/2004	18:11:37.85	2.63	2.62	4.48	0.31	0.56	0.27	0.60	0.31	0.03	-0.13	0.18	0.46	0.67	0.19	7.34	6.95	349.15	10.62	23.46	22.64	22.80	22.59	20.34	55.65	0.64	0.61	0.64	0.66	0.31	0.23			0.05	163.72
221	5/6/2004	18:27:37.85	2.63	2.64	4.48	0.31	0.56	0.27	0.58	0.32	0.07	-0.08	0.18	0.46	0.67	0.18	7.32	6.93	349.15	10.61	23.49	22.68	22.84	22.63	20.46	55.92	0.64	0.61	0.64	0.64	0.32	0.27			0.05	164.51
222	5/6/2004	18:43:37.85	2.63	2.62	4.49	0.29	0.56	0.27	0.58	0.31	0.07	-0.08	0.18	0.46	0.65	0.18	7.31	6.93	349.15	10.61	23.24	22.59	22.82	22.61	20.28	56.19	0.62	0.61	0.64	0.64	0.31	0.27			0.05	165.30
223	5/6/2004	18:59:37.85	2.63	2.62	4.49	0.29	0.55	0.25	0.57	0.31	0.07	-0.09	0.17	0.46	0.65	0.18	7.29	6.90	349.15	10.60	23.15	22.65	22.81	22.60	20.19	56.45	0.62	0.60	0.62	0.63	0.31	0.27			0.05	166.09
224	5/6/2004	19:15:37.85	2.65	2.62	4.49	0.29	0.56	0.24	0.62	0.31	0.07	-0.08	0.17	0.46	0.65	0.18	7.29	6.90	349.15	10.60	23.06	22.56	22.80	22.59	20.10	56.72	0.62	0.61	0.61	0.68	0.31	0.27			0.05	166.87
225	5/6/2004	19:31:37.85	2.65	2.62	4.48	0.29	0.55	0.25	0.61	0.31	0.07	-0.09	0.16	0.44	0.65	0.18	7.28	6.90	349.15	10.60	23.01	22.52	22.83	22.55	20.21	56.99	0.62	0.60	0.62	0.67	0.31	0.27			0.05	167.66
226	5/6/2004	19:47:37.85	2.67	2.64	4.51	0.27	0.55	0.24	0.61	0.34	0.07	-0.08	0.16	0.42	0.65	0.18	7.28	6.90	349.15	10.61	22.76	22.42	22.74	22.53	20.20	57.25	0.60	0.60	0.61	0.67	0.34	0.27			0.05	168.45
227	5/6/2004	20:03:37.85	2.67	2.64	4.48	0.27	0.56	0.24	0.61	0.34	0.07	-0.09	0.16	0.42	0.67	0.18	7.30	6.92	353.32	10.60	22.79	22.46	22.70	22.57	20.08	57.52	0.60	0.61	0.61	0.67	0.34	0.27			0.05	169.24
228	5/6/2004	20:19:37.85	2.67	2.64	4.49	0.27	0.55	0.23	0.61	0.34	0.07	-0.10	0.16	0.42	0.65	0.16	7.26	6.88	353.32	10.61	22.57	22.32	22.64	22.51	19.94	57.79	0.60	0.60	0.60	0.67	0.34	0.27			0.05	170.03
229	5/6/2004	20:35:37.85	2.69	2.64	4.51	0.29	0.61	0.27	0.62	0.34	0.07	-0.09	0.16	0.42	0.67	0.18	7.32	6.94	353.32	10.61	22.40	22.31	22.63	22.42	19.93	58.05	0.62	0.66	0.64	0.68	0.34	0.27			0.05	170.81
230	5/6/2004	20:51:37.85	2.69	2.64	4.48	0.31	0.57	0.27	0.61	0.34	0.07	-0.10	0.16	0.42	0.67	0.16	7.29	6.90	353.32	10.61	22.31	22.30	22.62	22.41	19.91	58.32	0.64	0.62	0.64	0.67	0.34	0.27			0.05	171.60
231	5/6/2004	21:07:37.85	2.69	2.64	4.48	0.27	0.56	0.27	0.61	0.34	0.07	-0.12	0.16	0.41	0.67	0.16	7.31	6.93	353.32	10.61	22.22	22.21	22.53	22.24	19.74	58.59	0.60	0.61	0.64	0.67	0.34	0.27			0.05	172.39
232	5/6/2004	21:23:37.85	2.71	2.66	4.51	0.31	0.56	0.27	0.60	0.34	0.07	-0.12	0.16	0.40	0.65	0.15	7.30	6.91	353.32	10.62	22.25	22.16	22.48	22.27	19.78	58.85	0.64	0.61	0.64	0.66	0.34	0.27			0.05	173.18
233	5/6/2004	21:39:37.85	2.71	2.66	4.51	0.31	0.56	0.27	0.61	0.34	0.07	-0.12	0.16	0.42	0.65	0.16	7.29	6.90	353.07	10.61	22.24	22.07	22.39	22.26	19.60	59.12	0.64	0.61	0.64	0.67	0.34	0.27			0.05	173.96
234	5/6/2004	21:55:37.85	2.72	2.68	4.51	0.31	0.61	0.27	0.61	0.34	0.07	-0.12	0.16	0.43	0.69	0.15	7.32	6.93	349.15	10.61	22.20	22.02	22.34	22.13	19.56	59.39	0.64	0.66	0.64	0.67	0.34	0.27			0.05	174.75
235	5/6/2004	22:11:37.85	2.72	2.66	4.48	0.27	0.57	0.25	0.60	0.34	0.07	-0.12	0.16	0.42	0.69	0.15	7.28	6.89	349.15	10.62	22.15	21.98	22.30	22.09	19.51	59.65	0.60	0.62	0.62	0.66	0.34	0.27			0.05	175.54
236	5/6/2004	22:27:37.85	2.72	2.68	4.48	0.27	0.61	0.25	0.61	0.34	0.05	-0.12	0.19	0.42	0.69	0.15	7.29	6.90	349.15	10.62	21.94	21.93	22.25	21.96	19.39	59.92	0.60	0.66	0.62	0.67	0.34	0.25			0.05	176.33
237	5/6/2004	22:43:37.85	2.74	2.66	4.48	0.29	0.55	0.24	0.62	0.34	0.05	-0.08	0.19	0.42	0.65	0.15	7.28	6.89	353.32	10.62	21.98	21.97	22.12	22.00	19.42	60.19	0.62	0.60	0.61	0.68	0.34	0.25			0.05	177.12
238	5/6/2004	22:59:37.85	2.74	2.66	4.51	0.27	0.59	0.23	0.63	0.34	0.09	-0.08	0.19	0.42	0.67	0.15	7.28	6.90	349.15	10.61	21.81	21.80	22.11	21.90	19.33	60.45	0.60	0.64	0.60	0.69	0.34	0.29			0.05	177.90
239	5/6/2004	23:15:37.85	2.74	2.68	4.48	0.27	0.63	0.23	0.63	0.38	0.09	-0.09	0.18	0.42	0.65	0.15	7.30	6.91	352.83	10.62	21.84	21.75	21.99	21.86	19.28	60.72	0.60	0.68	0.60	0.69	0.38	0.29			0.05	178.69
240	5/6/2004	23:31:37.85	2.76	2.68	4.51	0.29	0.65	0.27	0.63	0.38	0.09	-0.08	0.18	0.42	0.65	0.15	7.32	6.94	349.15	10.61	21.79	21.78	22.02	21.81	19.24	60.99	0.62	0.70	0.64	0.69	0.38	0.29			0.05	179.48
241	5/6/2004	23:47:37.85	2.76	2.68	4.49	0.29	0.65	0.27	0.63	0.38	0.08	-0.09	0.19	0.41	0.65	0.15	7.29	6.90	349.15	10.62	21.88	21.78	21.94	21.73	19.24	61.25	0.62	0.70	0.64	0.69	0.38	0.28			0.05	180.27
242	5/7/2004	00:03:37.85	2.76	2.68	4.46	0.31	0.63	0.27	0.63	0.36	0.07	-0.09	0.19	0.38	0.67	0.15	7.23	6.84	349.15	10.62	21.95	21.69	21.85	21.72	19.15	61.52	0.64	0.68	0.64	0.69	0.36	0.27			0.05	181.05
243	5/7/2004	00:19:37.85	2.76	2.68	4.46	0.31	0.65	0.27	0.62	0.37	0.07	-0.10	0.18	0.38	0.65	0.15	7.30	6.91	349.15	10.61	21.90	21.65	21.81	21.68	19.10	61.79	0.64	0.70	0.64	0.68	0.37	0.27			0.05	181.84
244	5/7/2004	00:35:37.85	2.78	2.68	4.53	0.31	0.63	0.27	0.62	0.36	0.07	-0.12	0.18	0.40	0.65	0.14	7.27	6.88	349.39	10.61	21.77	21.60	21.84	21.63	19.05	62.05	0.64	0.68	0.64	0.68	0.36	0.27			0.05	182.63
245	5/7/2004	00:51:37.85	2.76	2.68	4.49	0.31	0.63	0.27	0.62	0.34	0.07	-0.12	0.19	0.40	0.67	0.14	7.30	6.91	349.15	10.62	21.73	21.56	21.79	21.59	19.17	62.32	0.64	0.68	0.64	0.68	0.34	0.27			0.05	183.42
246	5/7/2004	01:07:37.85	2.78	2.68	4.49	0.32	0.62	0.27	0.63	0.36	0.07	-0.12	0.19	0.40	0.65	0.14	7.28	6.89	349.15	10.62	21.81	21.56	21.71	21.50	19.09	62.59	0.65	0.67	0.64	0.69	0.36	0.27			0.05	184.21
247	5/7/2004	01:23:37.85	2.76	2.68	4.53	0.32	0.63	0.27	0.63	0.34	0.07	-0.12	0.18	0.38	0.65	0.14	7.28	6.90	349.15	10.62	21.89	21.56	21.71	21.50	19.09	62.85	0.65	0.68	0.64	0.69	0.34	0.27			0.05	184.99
248	5/7/2004	01:39:37.85	2.78	2.68	4.49	0.31	0.65	0.27	0.65	0.34	0.07	-0.12	0.18	0.38	0.65	0.15	7.31	6.93	349.15	10.62	21.92	21.51	21.75	21.54	18.96	63.12	0.64	0.70	0.64	0.71	0.34	0.27			0.05	185.78
249	5/7/2004	01:55:37.85	2.76	2.68	4.49	0.32	0.65	0.27	0.62	0.36	0.07	-0.12	0.18	0.36	0.64	0.14	7.32	6.93	349.15	10.62	21.72	21.47	21.62	21.49	18.92	63.39	0.65	0.70	0.64	0.68	0.36	0.27			0.05	186.57
250	5/7/2004	02:11:37.85	2.78	2.68	4.51	0.31	0.63	0.27	0.62	0.34	0.07	-0.12	0.19	0.36	0.64	0.18	7.30	6.92	349.15	10.62	21.59	21.42	21.58	21.37	18.95	63.65	0.64	0.68	0.64	0.68	0.34	0.27			0.05	187.36
251	5/7/2004	02:27:37.85	2.78	2.68	4.48	0.31	0.65	0.27	0.62	0.34	0.07	-0.12	0.19	0.35	0.65	0.18	7.34	6.95	349.15	10.62	21.79	21.37	21.53	21.40	18.83	63.92	0.64	0.70	0.64	0.68	0.34	0.27			0.05	188.15
252	5/7/2004	02:43:37.85	2.80	2.68	4.51	0.31	0.63	0.24	0.63	0.34	0.07	-0.12	0.18	0.37	0.64	0.18	7.26	6.88	349.15	10.62	21.66	21.33	21.49	21.36	18.86	64.19	0.64	0.68	0.61	0.69	0.34	0.27			0.05	188.94
253	5/7/2004	02:59:37.85	2.78	2.68	4.53	0.32	0.65	0.27	0.65	0.34	0.07	-0.13	0.18	0.38	0.65	0.18	7.38	7.00	349.15	10.62	21.46	21.28	21.44	21.23	18.82	64.45	0.65	0.70	0.64	0.71	0.34	0.27			0.05	189.73
254	5/7/2004	03:15:37.85	2.76	2.68	4.49	0.31	0.65	0.27	0.63	0.34	0.07	-0.12	0.19	0.40	0.62	0.18	7.32	6.93	349.15	10.61	21.74	21.25	21.49	21.28	18.78	64.72	0.64	0.70	0.64	0.69	0.34	0.27			0.05	190.51
255	5/7/2004	03:31:37.85	2.65	2.42	4.18	-0.20	0.04	-0.27	0.06	0.04	-0.20	-0.25	0.02	0.25	0.43	0.02	2.41	2.11	349.15	10.61	21.58	21.17	21.41	21.20	18.62	64.99	0.13	0.09	0.10	0.12	0.04	0.00			0.02	191.30

Table H3-2-5. CIX Campaign II, Cycle 2, 0.1 M NaOH Displacement

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																					
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																																
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		ºC	ºC	ºC	ºC	ºC	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/7/2004	10:41:25.35	0.65	-0.61	1.08	-0.30	-0.06	-0.38	-0.06	0.01	-0.20	-0.29	0.02	0.32	0.46	-0.01	0.14	0.04	349.15	10.65	23.18	21.97	21.80	21.67	19.98	72.15	-0.01	-0.06	-0.01	0.01	0.01	0.00			0.00	191.40
2	5/7/2004	10:41:35.35	0.65	-0.59	1.08	-0.29	-0.05	-0.38	-0.04	-0.01	-0.20	-0.29	0.02	0.32	0.46	-0.01	0.14	0.04	349.15	10.65	23.10	21.97	21.72	21.67	19.82	72.15	0.00	-0.05	-0.01	0.02	-0.01	0.00	5.40	5.70	0.00	191.40
3	5/7/2004	10:42:35.35	0.65	-0.61	1.08	-0.30	-0.05	-0.38	-0.06	-0.01	-0.20	-0.28	0.02	0.32	0.42	0.01	0.14	0.04	349.15	10.65	23.18	22.05	21.80	21.67	19.98	72.17	-0.01	-0.05	-0.01	0.01	-0.01	0.00			0.00	191.40
4	5/7/2004	10:43:35.35	0.65	-0.61	1.06	-0.29	-0.05	-0.37	-0.06	-0.01	-0.22	-0.29	0.02	0.32	0.42	0.01	0.14	0.04	349.15	10.65	23.18	22.05	21.72	21.67	19.82	72.19	0.00	-0.05	0.00	0.01	-0.01	-0.02			0.00	191.40
5	5/7/2004	10:44:35.35	0.65	-0.61	1.06	-0.29	-0.05	-0.37	-0.06	0.01	-0.20	-0.29	0.02	0.32	0.42	-0.01	0.14	0.04	349.15	10.64	23.10	22.05	21.72	21.67	19.90	72.20	0.00	-0.05	0.00	0.01	0.01	0.00			0.00	191.40
6	5/7/2004	10:45:35.35	0.65	-0.39	1.28	-0.29	-0.10	-0.38	-0.06	-0.01	-0.24	-0.29	0.02	0.32	0.42	0.01	0.14	0.04	349.15	10.64	23.10	21.97	21.72	21.67	19.90	72.22									0.00	191.40
7	5/7/2004	10:46:35.35	0.67	10.35	12.02	-0.30	0.13	-0.38	0.17	0.00	-0.09	-0.29	-0.27	0.32	0.14	0.07	3.46	3.10	349.15	10.64	23.15	22.33	21.85	21.72	19.95	72.24									0.02	191.40
8	5/7/2004	10:47:35.35	0.67	1.82	3.69	-0.29	0.68	-0.38	0.72	0.00	0.16	-0.28	0.18	0.32	0.73	-2.16	9.01	8.70	349.15	10.67	23.10	22.45	21.80	21.43	19.90	72.25									0.06	191.42
9	5/7/2004	10:48:35.35	0.67	2.37	4.04	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.29	0.19	0.32	0.69	-2.74	7.27	6.88	349.15	10.65	23.18	22.85	21.80	21.43	19.90	72.27									0.05	191.49
10	5/7/2004	10:49:35.35	0.67	2.39	3.91	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.28	0.18	0.32	0.69	-2.80	7.32	6.93	349.15	10.64	23.18	22.69	21.72	21.51	19.82	72.29									0.05	191.53
11	5/7/2004	10:50:35.35	0.69	2.39	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.28	0.19	0.32	0.79	-2.80	7.36	6.98	349.15	10.65	23.18	22.53	21.80	21.43	19.66	72.30									0.05	191.58
12	5/7/2004	10:51:35.35	0.69	2.39	3.93	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.29	0.19	0.32	0.85	-2.80	7.31	6.93	349.15	10.65	23.10	22.45	21.80	21.43	19.66	72.32									0.05	191.63
13	5/7/2004	10:52:35.35	0.69	2.39	3.93	-0.30	0.55	-0.38	0.60	0.00	0.07	-0.28	0.18	0.32	0.96	-2.80	7.31	6.93	344.97	10.65	23.23	22.49	21.93	21.48	19.79	72.34									0.05	191.68
14	5/7/2004	10:53:35.35	0.69	2.40	3.91	-0.29	0.51	-0.38	0.60	0.00	0.05	-0.31	0.19	0.32	1.03	-2.82	7.33	6.95	344.97	10.65	23.23	22.41	21.85	21.48	19.71	72.35									0.05	191.73
15	5/7/2004	10:54:35.35	0.69	2.40	3.93	-0.29	0.51	-0.37	0.58	0.00	0.09	-0.28	0.19	0.32	1.06	-2.82	7.27	6.88	344.97	10.65	23.23	22.33	21.77	21.48	19.63	72.37									0.05	191.78
16	5/7/2004	10:55:35.35	0.69	2.40	3.94	-0.29	0.49	-0.38	0.60	0.00	0.04	-0.29	0.19	0.32	1.13	-2.82	7.28	6.89	344.97	10.65	23.23	22.25	21.85	21.40	19.63	72.39									0.05	191.83
17	5/7/2004	10:56:35.35	0.69	2.40	3.93	-0.29	0.51	-0.37	0.60	0.01	0.07	-0.28	0.19	0.32	1.19	-2.82	7.28	6.90	345.22	10.65	23.35	22.30	21.89	21.52	19.75	72.40									0.05	191.88
18	5/7/2004	10:57:35.35	0.69	2.40	3.94	-0.30	0.51	-0.38	0.60	0.00	0.07	-0.31	0.19	0.32	1.27	-2.82	7.28	6.89	345.22	10.65	23.40	22.26	21.94	21.49	19.72	72.42									0.05	191.93
19	5/7/2004	10:58:35.35	0.69	2.40	3.93	-0.29	0.49	-0.38	0.60	0.00	0.05	-0.28	0.19	0.32	1.34	-2.82	7.29	6.90	344.97	10.65	23.40	22.26	21.94	21.49	19.64	72.44							5.40	5.65	0.05	191.98
20	5/7/2004	10:59:35.35	0.69	2.40	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.31	0.19	0.32	1.42	-2.82	7.35	6.97	344.97	10.65	23.40	22.26	21.86	21.41	19.64	72.45									0.05	192.03
21	5/7/2004	11:00:35.35	0.69	2.40	3.93	-0.29	0.50	-0.38	0.60	0.00	0.05	-0.30	0.16	0.32	1.50	-2.82	7.28	6.89	344.97	10.64	23.45	22.23	21.90	21.45	19.60	72.47									0.05	192.08
22	5/7/2004	11:01:35.35	0.69	2.42	3.91	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.31	0.16	0.32	1.57	-2.82	7.28	6.90	344.97	10.65	23.45	22.15	21.90	21.53	19.60	72.49									0.05	192.13
23	5/7/2004	11:02:35.35	0.70	2.42	3.94	-0.29	0.50	-0.38	0.60	0.01	0.07	-0.30	0.18	0.33	1.65	-2.83	7.28	6.90	344.97	10.65	23.45	22.15	21.82	21.45	19.60	72.50									0.05	192.17
24	5/7/2004	11:03:35.35	0.70	2.42	3.94	-0.29	0.51	-0.38	0.60	0.00	0.05	-0.30	0.16	0.32	1.71	-2.82	7.28	6.90	345.22	10.65	23.45	22.15	21.90	21.45	19.60	72.52									0.05	192.22
25	5/7/2004	11:04:35.35	0.70	2.42	3.94	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.29	0.19	0.32	1.77	-2.83	7.30	6.91	344.97	10.65	23.45	22.15	21.90	21.45	19.60	72.54									0.05	192.27
26	5/7/2004	11:05:35.35	0.72	2.42	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.29	0.16	0.32	1.84	-2.82	7.33	6.95	344.97	10.65	23.45	22.15	21.82	21.45	19.60	72.55									0.05	192.32
27	5/7/2004	11:06:35.35	0.70	2.42	3.94	-0.30	0.51	-0.38	0.57	0.00	0.07	-0.30	0.16	0.32	1.94	-2.82	7.33	6.95	345.22	10.65	23.45	22.15	21.82	21.45	19.60	72.57									0.05	192.37
28	5/7/2004	11:07:35.35	0.72	2.44	3.94	-0.29	0.51	-0.38	0.56	0.01	0.07	-0.29	0.16	0.32	2.01	-2.83	7.29	6.90	344.97	10.65	23.49	22.19	21.95	21.50	19.65	72.59									0.05	192.42
29	5/7/2004	11:08:35.35	0.72	2.44	3.96	-0.29	0.52	-0.37	0.56	0.00	0.07	-0.30	0.16	0.32	2.07	-2.82	7.33	6.95	344.97	10.65	23.49	22.11	21.95	21.42	19.65	72.60									0.05	192.47
30	5/7/2004	11:09:35.35	0.72	2.44	3.96	-0.30	0.51	-0.37	0.56	0.00	0.07	-0.29	0.16	0.32	2.14	-2.82	7.28	6.90	345.22	10.65	23.49	22.11	21.87	21.50	19.65	72.62									0.05	192.52
31	5/7/2004	11:10:35.35	0.72	2.44	3.94	-0.29	0.50	-0.37	0.56	0.00	0.07	-0.30	0.16	0.32	2.21	-2.83	7.30	6.91	344.97	10.65	23.49	22.11	21.95	21.42	19.57	72.64							5.40	5.65	0.05	192.57
32	5/7/2004	11:11:35.35	0.72	2.44	3.96	-0.29	0.52	-0.37	0.56	0.01	0.07	-0.29	0.16	0.32	2.29	-2.82	7.34	6.95	345.22	10.66	23.49	22.11	21.87	21.42	19.65	72.65									0.05	192.62
33	5/7/2004	11:12:35.35	0.74	2.46	3.96	-0.29	0.54	-0.38	0.56	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.28	6.89	344.97	10.64	23.49	22.11	21.95	21.42	19.65	72.67									0.05	192.67
34	5/7/2004	11:13:35.35	0.74	2.46	3.96	-0.29	0.61	-0.37	0.62	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.29	6.90	344.97	10.64	23.54	22.16	22.00	21.46	19.70	72.69									0.05	192.72
35	5/7/2004	11:14:35.35	0.74	2.44	3.98	-0.29	0.67	-0.37	0.69	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	345.22	10.65	23.49	22.11	21.87	21.42	19.57	72.70									0.05	192.77
36	5/7/2004	11:15:35.35	0.74	2.46	3.98	-0.29	0.72	-0.38	0.79	0.01	0.07	-0.28	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.16	21.92	21.46	19.61	72.72									0.05	192.82
37	5/7/2004	11:16:35.35	0.74	2.46	4.00	-0.29	0.82	-0.38	0.83	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.29	6.90	345.22	10.65	23.46	22.16	21.92	21.46	19.70	72.74									0.05	192.86
38	5/7/2004	11:17:35.35	0.74	2.48	3.98	-0.29	0.89	-0.37	0.89	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.32	6.94	344.97	10.65	23.54	22.16	22.00	21.55	19.78	72.75									0.05	192.91
39	5/7/2004	11:18:35.35	0.76	2.48	3.98	-0.29	0.94	-0.37	0.96	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.16	22.00	21.55	19.78	72.77									0.05	192.96
40	5/7/2004	11:19:35.35	0.76	2.48	3.98	-0.29	1.02	-0.37	1.03	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.30	6.91	345.22	10.65	23.54	22.16	21.92	21.46	19.70	72.79									0.05	193.01
41	5/7/2004	11:20:35.35	0.76	2.48	3.98	-0.29	1.09	-0.37	1.10	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.08	22.00	21.46	19.61	72.80							5.40	5.65	0.05	193.06
42	5/7/2004	11:21:35.35	0.76	2.48	4.02	-0.29	1.16	-0.37	1.16	0.00	0.07	-0.29	0.16	0.32	2.38	-2.83	7.28	6.90	344.97	10.65	23.46	22.16	22.00	21.46	19.70	72.82									0.05	193.11
43	5/7/2004	11:22:35.35	0.76	2.48	4.00	-0.29	1.23	-0.38	1.23	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.31	6.93	344.97	10.65	23.46	22.08	21.92	21.46	19.61	72.84									0.05	193.16
44	5/7/2004	11:23:35.35	0.76	2.50	4.02	-0.29	1.29	-0.37	1.31	0.00	0.05	-0.29	0.17	0.32	2.37	-2.82	7.28	6.90	345.22	10.65	23.58	22.21	22.04	21.59	19.74	72.85									0.05	193.21
45	5/7/2004	11:24:35.35	0.76	2.51	4.02	-0.30	1.35	-0.36	1.41	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.28	6.90	345.22	10.65	23.50	22.13	22.04	21.51	19.66	72.87									0.05	193.26
46	5/7/2004	11:25:35.35	0.76	2.50	4.02	-0.30	1.43	-0.37	1.47	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.32	6.93	344.97	10.65	23.63	22.17	22.09	21.56	19.79	72.89									0.05	193.31
47	5/7/2004	11:26:35.35	0.78	2.50	4.02	-0.29	1.53	-0.37	1.54	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.31	6.93	344.97	10.65	23.63	22.17	22.09	21.56	19.79	72.90									0.05	193.36
48	5/7/2004	11:27:35.35	0.78	2.51	4.04	-0.30	1.59	-0.36	1.63	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.33	6.95	344.97	10.65	23.63	22.17	22.01	21.56	19.71	72.92									0.05	193.41
49	5/7/2004	11:28:35.35	0.78	2.53	4.04	-0.29	1.62	-0.37	1.70	0.01	0.07	-0.28	0.16	0.32	2.36	-2.82	7.28	6.90	345.22	10.65	23.75	22.30	22.05	21.52	19.83	72.94									0.05	193.46
50	5/7/2004	11:29:35.35	0.78	2.53	4.04	-0.29	1.72	-0.36	1.75	0.00	0.07	-0.29	0.16	0.30	2.37	-2.83	7.26	6.88	345.22	10.65	23.63	22.17	22.01	21.56	19.71	72.95									0.05	193.50
51	5/7/2004	11:30:35.35	0.78	2.53	4.04	-0.29	1.77	-0.36	1.81	0.00	0.07	-0.29	0.16	0.32	2.36	-2.82	7.27	6.88	344.97	10.65	23.63	22.17	22.01	21.48	19.71	72.97							5.40	5.65	0.05	193.55
52	5/7/2004	11:31:35.35	0.78	2.53	4.05	-0.29	1.87	-0.36	1.87	0.00	0.07	-0.28	0.16	0.30	2.34	-2.82	7.28	6.89	344.97	10.65	23.67	22.22	22.05	21.60	19.75	72.99									0.05	193.60
53	5/7/2004	11:32:35.35	0.78	2.55	4.07	-0.30	1.94	-0.36	1.95	0.00	0.05	-0.29	0.16	0.28	2.34	-2.82	7.26	6.87	345.22	10.65	23.67	22.22	22.05	21.52	19.75	73.00									0.05	193.65
54	5/7/2004	11:33:35.35	0.80	2.55	4.05	-0.30	1.99	-0.36	2.01	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.89	344.97	10.65	23.67	22.22	21.97	21.52	19.75	73.02									0.05	193.70
55	5/7/2004	11:34:35.35	0.78	2.55	4.07	-0.29	2.06	-0.36	2.08	0.01	0.07	-0.28	0.16	0.28	2.36	-2.82	7.28	6.89	344.97	10.66	23.59	22.22	22.05	21.52	19.75	73.04									0.05	193.75
56	5/7/2004	11:35:35.35	0.80	2.57	4.07	-0.29	2.16	-0.36	2.14	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	345.22	10.65	23.59	22.22	22.05	21.60	19.75	73.05									0.05	193.80
57	5/7/2004	11:36:35.35	0.80	2.57	4.09	-0.29	2.21	-0.35	2.25	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	344.97	10.65	23.67	22.14	21.97	21.52	19.67	73.07									0.05	193.85
58	5/7/2004	11:37:35.35	0.81	2.57	4.07	-0.29	2.28	-0.35	2.31	0.01	0.10	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	345.22	10.65	23.64	22.18	22.10	21.65	19.80	73.09									0.05	193.90
59	5/7/2004	11:38:35.35	0.81	2.57	4.09	-0.29	2.37	-0.35	2.38	0.01	0.15	-0.29	0.16	0.28	2.34	-2.83	7.34	6.95	345.22	10.65	23.64	22.26	22.02	21.57	19.80	73.10									0.05	193.95
60	5/7/2004	11:39:35.35	0.81	2.57	4.09	-0.30	2.45	-0.35	2.49	0.00	0.20	-0.29	0.16	0.28	2.34	-2.82	7.29	6.90	344.97	10.65	23.72	22.26	22.10	21.65	19.88	73.12									0.05	194.00
61	5/7/2004	11:40:35.35	0.81	2.61	4.11	-0.30	2.51	-0.35	2.55	0.01	0.26	-0.29	0.16	0.28	2.34	-2.80	7.28	6.90	344.97	10.65	23.64	22.18	22.10	21.49	19.72	73.14							5.40	5.65	0.05	194.04
62	5/7/2004	11:41:35.35	0.81	2.59	4.09	-0.30	2.58	-0.35	2.62	0.00	0.31	-0.28	0.16	0.28	2.34	-2.82	7.32	6.94	344.97	10.65	23.64	22.26	22.10	21.65	19.88	73.15									0.05	194.09
63	5/7/2004	11:42:35.35	0.83	2.59	4.11	-0.29	2.66	-0.35	2.69	0.00	0.40	-0.29	0.16	0.28	2.34	-2.82	7.28	6.89	345.22	10.65	23.64	22.18	22.02	21.57	19.80	73.17									0.05	194.14
64	5/7/2004	11:43:35.35	0.83	2.61	4.13	-0.30	2.71	-0.35	2.73	0.00	0.43	-0.29	0.19	0.28	2.34	-2.80	7.28	6.89	345.22	10.65	23.64	22.18	22.02	21.57	19.72	73.19									0.05	194.19
65	5/7/2004	11:44:35.35	0.81	2.61	4.13	-0.29	2.77	-0.36	2.79	0.00	0.47	-0.28	0.25	0.28	2.34	-2.82	7.34	6.95	345.22	10.65	23.64	22.18	22.10	21.57	19.80	73.20									0.05	194.24
66	5/7/2004	11:45:35.35	0.83	2.61	4.13	-0.29	2.78	-0.35	2.82	0.01	0.53	-0.29	0.28	0.28	2.34	-2.82	7.28	6.89	344.97	10.65	23.64	22.18	22.10	21.57	19.72	73.22									0.05	194.29
67	5/7/2004	11:46:35.35	0.83	2.62	4.15	-0.30	2.81	-0.35	2.87	0.00	0.57	-0.29	0.33	0.28	2.34	-2.80	7.32	6.93	344.97	10.65	23.64	22.18	22.10	21.57	19.72	73.24									0.05	194.34
68	5/7/2004	11:47:35.35	0.83	2.57	4.02	-0.29	2.72	-0.35	2.77	0.00	0.51	-0.28	0.33	0.28	2.31	-2.87	5.37	4.96	344.97	10.66	23.64	22.18	22.02	21.57	19.72	73.25									0.04	194.39
69	5/7/2004	11:48:35.35	0.83	2.50	3.91	-0.29	2.58	-0.35	2.60	0.00	0.45	-0.29	0.20	0.28	2.27	-2.88	0.14	0.04	345.22	10.65	23.64	22.26	22.10	21.65	19.80	73.27	0.01	0.00	0.04	0.00	0.00	-0.01			0.04	194.42

Table H3-2-6. CIX Campaign II, Cycle 2, DI Water Pre-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/7/2004	10:48:35.35	0.67	2.37	4.04	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.29	0.19	0.32	0.69	-2.74	7.27	6.88	349.15	10.65	23.18	22.85	21.80	21.43	19.90	72.27									0.05	191.50
2	5/7/2004	10:49:35.35	0.67	2.39	3.91	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.28	0.18	0.32	0.69	-2.80	7.32	6.93	349.15	10.64	23.18	22.69	21.72	21.51	19.82	72.29									0.05	191.55
3	5/7/2004	10:50:35.35	0.69	2.39	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.28	0.19	0.32	0.79	-2.80	7.36	6.98	349.15	10.65	23.18	22.53	21.80	21.43	19.66	72.30									0.05	191.60
4	5/7/2004	10:51:35.35	0.69	2.39	3.93	-0.29	0.51	-0.38	0.60	0.00	0.09	-0.29	0.19	0.32	0.85	-2.80	7.31	6.93	349.15	10.65	23.10	22.45	21.80	21.43	19.66	72.32									0.05	191.65
5	5/7/2004	10:52:35.35	0.69	2.39	3.93	-0.30	0.55	-0.38	0.60	0.00	0.07	-0.28	0.18	0.32	0.96	-2.80	7.31	6.93	344.97	10.65	23.23	22.49	21.93	21.48	19.79	72.34									0.05	191.70
6	5/7/2004	10:53:35.35	0.69	2.40	3.91	-0.29	0.51	-0.38	0.60	0.00	0.05	-0.31	0.19	0.32	1.03	-2.82	7.33	6.95	344.97	10.65	23.23	22.41	21.85	21.48	19.71	72.35									0.05	191.75
7	5/7/2004	10:54:35.35	0.69	2.40	3.93	-0.29	0.51	-0.37	0.58	0.00	0.09	-0.28	0.19	0.32	1.06	-2.82	7.27	6.88	344.97	10.65	23.23	22.33	21.77	21.48	19.63	72.37									0.05	191.80
8	5/7/2004	10:55:35.35	0.69	2.40	3.94	-0.29	0.49	-0.38	0.60	0.00	0.04	-0.29	0.19	0.32	1.13	-2.82	7.28	6.89	344.97	10.65	23.23	22.25	21.85	21.40	19.63	72.39									0.05	191.85
9	5/7/2004	10:56:35.35	0.69	2.40	3.93	-0.29	0.51	-0.37	0.60	0.01	0.07	-0.28	0.19	0.32	1.19	-2.82	7.28	6.90	345.22	10.65	23.35	22.30	21.89	21.52	19.75	72.40									0.05	191.89
10	5/7/2004	10:57:35.35	0.69	2.40	3.94	-0.30	0.51	-0.38	0.60	0.00	0.07	-0.31	0.19	0.32	1.27	-2.82	7.28	6.89	345.22	10.65	23.40	22.26	21.94	21.49	19.72	72.42									0.05	191.94
11	5/7/2004	10:58:35.35	0.69	2.40	3.93	-0.29	0.49	-0.38	0.60	0.00	0.05	-0.28	0.19	0.32	1.34	-2.82	7.29	6.90	344.97	10.65	23.40	22.26	21.94	21.49	19.64	72.44							5.40	5.65	0.05	191.99
12	5/7/2004	10:59:35.35	0.69	2.40	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.31	0.19	0.32	1.42	-2.82	7.35	6.97	344.97	10.65	23.40	22.26	21.86	21.41	19.64	72.45									0.05	192.04
13	5/7/2004	11:00:35.35	0.69	2.40	3.93	-0.29	0.50	-0.38	0.60	0.00	0.05	-0.30	0.16	0.32	1.50	-2.82	7.28	6.89	344.97	10.64	23.45	22.23	21.90	21.45	19.60	72.47									0.05	192.09
14	5/7/2004	11:01:35.35	0.69	2.42	3.91	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.31	0.16	0.32	1.57	-2.82	7.28	6.90	344.97	10.65	23.45	22.15	21.90	21.53	19.60	72.49									0.05	192.14
15	5/7/2004	11:02:35.35	0.70	2.42	3.94	-0.29	0.50	-0.38	0.60	0.01	0.07	-0.30	0.18	0.33	1.65	-2.83	7.28	6.90	344.97	10.65	23.45	22.15	21.82	21.45	19.60	72.50									0.05	192.19
16	5/7/2004	11:03:35.35	0.70	2.42	3.94	-0.29	0.51	-0.38	0.60	0.00	0.05	-0.30	0.16	0.32	1.71	-2.82	7.28	6.90	345.22	10.65	23.45	22.15	21.90	21.45	19.60	72.52									0.05	192.24
17	5/7/2004	11:04:35.35	0.70	2.42	3.94	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.29	0.19	0.32	1.77	-2.83	7.30	6.91	344.97	10.65	23.45	22.15	21.90	21.45	19.60	72.54									0.05	192.29
18	5/7/2004	11:05:35.35	0.72	2.42	3.93	-0.29	0.51	-0.38	0.60	0.00	0.07	-0.29	0.16	0.32	1.84	-2.82	7.33	6.95	344.97	10.65	23.45	22.15	21.82	21.45	19.60	72.55									0.05	192.34
19	5/7/2004	11:06:35.35	0.70	2.42	3.94	-0.30	0.51	-0.38	0.57	0.00	0.07	-0.30	0.16	0.32	1.94	-2.82	7.33	6.95	345.22	10.65	23.45	22.15	21.82	21.45	19.60	72.57									0.05	192.39
20	5/7/2004	11:07:35.35	0.72	2.44	3.94	-0.29	0.51	-0.38	0.56	0.01	0.07	-0.29	0.16	0.32	2.01	-2.83	7.29	6.90	344.97	10.65	23.49	22.19	21.95	21.50	19.65	72.59									0.05	192.44
21	5/7/2004	11:08:35.35	0.72	2.44	3.96	-0.29	0.52	-0.37	0.56	0.00	0.07	-0.30	0.16	0.32	2.07	-2.83	7.33	6.95	344.97	10.65	23.49	22.11	21.95	21.42	19.65	72.60									0.05	192.49
22	5/7/2004	11:09:35.35	0.72	2.44	3.96	-0.30	0.51	-0.37	0.56	0.00	0.07	-0.29	0.16	0.32	2.14	-2.82	7.28	6.90	345.22	10.65	23.49	22.11	21.87	21.50	19.65	72.62									0.05	192.53
23	5/7/2004	11:10:35.35	0.72	2.44	3.94	-0.29	0.50	-0.37	0.56	0.00	0.07	-0.30	0.16	0.32	2.21	-2.83	7.30	6.91	344.97	10.65	23.49	22.11	21.95	21.42	19.57	72.64							5.40	5.65	0.05	192.58
24	5/7/2004	11:11:35.35	0.72	2.44	3.96	-0.29	0.52	-0.37	0.56	0.01	0.07	-0.29	0.16	0.32	2.29	-2.82	7.34	6.95	345.22	10.66	23.49	22.11	21.87	21.42	19.65	72.65									0.05	192.63
25	5/7/2004	11:12:35.35	0.74	2.46	3.96	-0.29	0.54	-0.38	0.56	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.28	6.89	344.97	10.64	23.49	22.11	21.95	21.42	19.65	72.67									0.05	192.68
26	5/7/2004	11:13:35.35	0.74	2.46	3.96	-0.29	0.61	-0.37	0.62	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.29	6.90	344.97	10.64	23.54	22.16	22.00	21.46	19.70	72.69									0.05	192.73
27	5/7/2004	11:14:35.35	0.74	2.44	3.98	-0.29	0.67	-0.37	0.69	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	345.22	10.65	23.49	22.11	21.87	21.42	19.57	72.70									0.05	192.78
28	5/7/2004	11:15:35.35	0.74	2.46	3.98	-0.29	0.72	-0.38	0.79	0.01	0.07	-0.28	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.16	21.92	21.46	19.61	72.72									0.05	192.83
29	5/7/2004	11:16:35.35	0.74	2.46	4.00	-0.29	0.82	-0.38	0.83	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.29	6.90	345.22	10.65	23.46	22.16	21.92	21.46	19.70	72.74									0.05	192.88
30	5/7/2004	11:17:35.35	0.74	2.48	3.98	-0.29	0.89	-0.37	0.89	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.32	6.94	344.97	10.65	23.54	22.16	22.00	21.55	19.78	72.75									0.05	192.93
31	5/7/2004	11:18:35.35	0.76	2.48	3.98	-0.29	0.94	-0.37	0.96	0.01	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.16	22.00	21.55	19.78	72.77									0.05	192.98
32	5/7/2004	11:19:35.35	0.76	2.48	3.98	-0.29	1.02	-0.37	1.03	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.30	6.91	345.22	10.65	23.54	22.16	21.92	21.46	19.70	72.79									0.05	193.03
33	5/7/2004	11:20:35.35	0.76	2.48	3.98	-0.29	1.09	-0.37	1.10	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.28	6.90	344.97	10.65	23.54	22.08	22.00	21.46	19.61	72.80							5.40	5.65	0.05	193.08
34	5/7/2004	11:21:35.35	0.76	2.48	4.02	-0.29	1.16	-0.37	1.16	0.00	0.07	-0.29	0.16	0.32	2.38	-2.83	7.28	6.90	344.97	10.65	23.46	22.16	22.00	21.46	19.70	72.82									0.05	193.13
35	5/7/2004	11:22:35.35	0.76	2.48	4.00	-0.29	1.23	-0.38	1.23	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.31	6.93	344.97	10.65	23.46	22.08	21.92	21.46	19.61	72.84									0.05	193.17
36	5/7/2004	11:23:35.35	0.76	2.50	4.02	-0.29	1.29	-0.37	1.31	0.00	0.05	-0.29	0.17	0.32	2.37	-2.82	7.28	6.90	345.22	10.65	23.58	22.21	22.04	21.59	19.74	72.85									0.05	193.22
37	5/7/2004	11:24:35.35	0.76	2.51	4.02	-0.30	1.35	-0.36	1.41	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.28	6.90	345.22	10.65	23.50	22.13	22.04	21.51	19.66	72.87									0.05	193.27
38	5/7/2004	11:25:35.35	0.76	2.50	4.02	-0.30	1.43	-0.37	1.47	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.32	6.93	344.97	10.65	23.63	22.17	22.09	21.56	19.79	72.89									0.05	193.32
39	5/7/2004	11:26:35.35	0.78	2.50	4.02	-0.29	1.53	-0.37	1.54	0.00	0.07	-0.29	0.16	0.32	2.38	-2.82	7.31	6.93	344.97	10.65	23.63	22.17	22.09	21.56	19.79	72.90									0.05	193.37
40	5/7/2004	11:27:35.35	0.78	2.51	4.04	-0.30	1.59	-0.36	1.63	0.00	0.07	-0.29	0.16	0.32	2.34	-2.82	7.33	6.95	344.97	10.65	23.63	22.17	22.01	21.56	19.71	72.92									0.05	193.42
41	5/7/2004	11:28:35.35	0.78	2.53	4.04	-0.29	1.62	-0.37	1.70	0.01	0.07	-0.28	0.16	0.32	2.36	-2.82	7.28	6.90	345.22	10.65	23.75	22.30	22.05	21.52	19.83	72.94									0.05	193.47
42	5/7/2004	11:29:35.35	0.78	2.53	4.04	-0.29	1.72	-0.36	1.75	0.00	0.07	-0.29	0.16	0.30	2.37	-2.83	7.26	6.88	345.22	10.65	23.63	22.17	22.01	21.56	19.71	72.95									0.05	193.52
43	5/7/2004	11:30:35.35	0.78	2.53	4.04	-0.29	1.77	-0.36	1.81	0.00	0.07	-0.29	0.16	0.32	2.36	-2.82	7.27	6.88	344.97	10.65	23.63	22.17	22.01	21.48	19.71	72.97							5.40	5.65	0.05	193.57
44	5/7/2004	11:31:35.35	0.78	2.53	4.05	-0.29	1.87	-0.36	1.87	0.00	0.07	-0.28	0.16	0.30	2.34	-2.82	7.28	6.89	344.97	10.65	23.67	22.22	22.05	21.60	19.75	72.99									0.05	193.62
45	5/7/2004	11:32:35.35	0.78	2.55	4.07	-0.30	1.94	-0.36	1.95	0.00	0.05	-0.29	0.16	0.28	2.34	-2.82	7.26	6.87	345.22	10.65	23.67	22.22	22.05	21.52	19.75	73.00									0.05	193.67
46	5/7/2004	11:33:35.35	0.80	2.55	4.05	-0.30	1.99	-0.36	2.01	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.89	344.97	10.65	23.67	22.22	21.97	21.52	19.75	73.02									0.05	193.72
47	5/7/2004	11:34:35.35	0.78	2.55	4.07	-0.29	2.06	-0.36	2.08	0.01	0.07	-0.28	0.16	0.28	2.36	-2.82	7.28	6.89	344.97	10.66	23.59	22.22	22.05	21.52	19.75	73.04									0.05	193.76
48	5/7/2004	11:35:35.35	0.80	2.57	4.07	-0.29	2.16	-0.36	2.14	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	345.22	10.65	23.59	22.22	22.05	21.60	19.75	73.05									0.05	193.81
49	5/7/2004	11:36:35.35	0.80	2.57	4.09	-0.29	2.21	-0.35	2.25	0.00	0.07	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	344.97	10.65	23.67	22.14	21.97	21.52	19.67	73.07									0.05	193.86
50	5/7/2004	11:37:35.35	0.81	2.57	4.07	-0.29	2.28	-0.35	2.31	0.01	0.10	-0.29	0.16	0.28	2.34	-2.82	7.28	6.90	345.22	10.65	23.64	22.18	22.10	21.65	19.80	73.09									0.05	193.91
51	5/7/2004	11:38:35.35	0.81	2.57	4.09	-0.29	2.37	-0.35	2.38	0.01	0.15	-0.29	0.16	0.28	2.34	-2.83	7.34	6.95	345.22	10.65	23.64	22.26	22.02	21.57	19.80	73.10									0.05	193.96
52	5/7/2004	11:39:35.35	0.81	2.57	4.09	-0.30	2.45	-0.35	2.49	0.00	0.20	-0.29	0.16	0.28	2.34	-2.82	7.29	6.90	344.97	10.65	23.72	22.26	22.10	21.65	19.88	73.12									0.05	194.01
53	5/7/2004	11:40:35.35	0.81	2.61	4.11	-0.30	2.51	-0.35	2.55	0.01	0.26	-0.29	0.16	0.28	2.34	-2.80	7.28	6.90	344.97	10.65	23.64	22.18	22.10	21.49	19.72	73.14							5.40	5.65	0.05	194.06
54	5/7/2004	11:41:35.35	0.81	2.59	4.09	-0.30	2.58	-0.35	2.62	0.00	0.31	-0.28	0.16	0.28	2.34	-2.82	7.32	6.94	344.97	10.65	23.64	22.26	22.10	21.65	19.88	73.15									0.05	194.11
55	5/7/2004	11:42:35.35	0.83	2.59	4.11	-0.29	2.66	-0.35	2.69	0.00	0.40	-0.29	0.16	0.28	2.34	-2.82	7.28	6.89	345.22	10.65	23.64	22.18	22.02	21.57	19.80	73.17									0.05	194.16
56	5/7/2004	11:43:35.35	0.83	2.61	4.13	-0.30	2.71	-0.35	2.73	0.00	0.43	-0.29	0.19	0.28	2.34	-2.80	7.28	6.89	345.22	10.65	23.64	22.18	22.02	21.57	19.72	73.19									0.05	194.21
57	5/7/2004	11:44:35.35	0.81	2.61	4.13	-0.29	2.77	-0.36	2.79	0.00	0.47	-0.28	0.25	0.28	2.34	-2.82	7.34	6.95	345.22	10.65	23.64	22.18	22.10	21.57	19.80	73.20									0.05	194.26
58	5/7/2004	11:45:35.35	0.83	2.61	4.13	-0.29	2.78	-0.35	2.82	0.01	0.53	-0.29	0.28	0.28	2.34	-2.82	7.28	6.89	344.97	10.65	23.64	22.18	22.10	21.57	19.72	73.22									0.05	194.31
59	5/7/2004	11:46:35.35	0.83	2.62	4.15	-0.30	2.81	-0.35	2.87	0.00	0.57	-0.29	0.33	0.28	2.34	-2.80	7.32	6.93	344.97	10.65	23.64	22.18	22.10	21.57	19.72	73.24									0.05	194.35
60	5/7/2004	11:47:35.35	0.83	2.57	4.02	-0.29	2.72	-0.35	2.77	0.00	0.51	-0.28	0.33	0.28	2.31	-2.87	5.37	4.96	344.97	10.66	23.64	22.18	22.02	21.57	19.72	73.25									0.04	194.40
61	5/7/2004	11:48:35.35	0.83	2.50	3.91	-0.29	2.58	-0.35	2.60	0.00	0.45	-0.29	0.20	0.28	2.27	-2.88	0.14	0.04	345.22	10.65	23.64	22.26	22.10	21.65	19.80	73.27	0.01	0.00	0.04	0.00	0.00	-0.01			0.00	194.44
62	5/7/2004	11:49:35.35	0.83	2.42	3.85	-0.29	2.58	-0.33	2.60	0.01	0.43	-0.29	0.20	0.28	2.28	-2.88	0.14	0.04	345.22	10.65	23.64	22.26	22.10	21.65	19.88	73.29	0.01	-0.36	0.05	-0.35	0.01	-0.20			0.00	194.44
63	5/7/2004	11:50:35.35	0.83	2.29	3.70	-0.29	2.58	-0.35	2.61	0.00	0.45	-0.29	0.20	0.28	2.28	-2.88	0.14	0.04	345.22	10.65	23.64	22.26	22.10	21.89	19.96	73.30	0.01	-0.36	0.04	-0.34	0.00	-0.19			0.00	194.44
64	5/7/2004	11:51:35.35	0.85	2.35	3.76	-0.29	2.58	-0.35	2.61	0.00	0.45	-0.29	0.24	0.28	2.27	-2.87	1.15	0.95	344.97	10.65	23.64	22.26	22.10	21.73	19.80	73.32	0.01	-0.36	0.04	-0.34	0.00	-0.19			0.01	194.44
65	5/7/2004	11:52:35.35	0.85	2.61	3.70	-0.29	2.76	-0.35	2.78	0.01	0.58	-0.29	0.17	0.28	2.31	-2.66	0.14	0.04	344.97	10.65	23.64	22.26	22.10	21.65	19.88	73.34	0.01	-0.17	0.04	-0.17	0.01	-0.05			0.00	194.45
66	5/7/2004	11:53:35.35	0.85	2.48	3.93	-0.28	2.60	-0.35	2.63	0.00	0.43	-0.29	0.30	0.28	2.27	-2.94	0.14	0.04	344.97	10.65	23.56	22.34	22.10	21.65	19.96	73.35	0.02	-0.33	0.04	-0.32	0.00	-0.20			0.00	194.45
67	5/7/2004	11:54:35.35	0.85	3.85	9.14	-0.29	5.31	-0.35	5.33	0.00	1.76	-0.29	4.02	0.28	5.05	0.54	7.58	7.21	344.97	10.65	23.56	22.34	22.10	21.65	19.64	73.37	0.01	2.38	0.04	2.38	0.00	1.13			0.05	194.45
68	5/7/2004	11:55:35.35	0.85	1.91	3.28	-0.28	2.49	-0.35	2.52	0.01	0.41	-0.29	0.86	0.28	2.27	-3.04	4.87	4.47	349.15	10.66	23.64	21.86	22.10	21.73	19.48	73.39	0.02	-0.44	0.04	-0.43	0.01	-0.22			0.03	194.50
69	5/7/2004	11:56:35.35	0.85	1.19	2.58	-0.28	2.51	-0.35	2.56	0.01	0.43	-0.29	0.83	0.28	2.27	-3.05	0.14	0.04	349.15	10.66	23.56	21.94	22.10	21.73	19.64	73.40	0.02	-0.42	0.04	-0.39	0.01	-0.20			0.00	194.53
70	5/7/2004	11:57:35.35	0.85	1.34	2.88	-0.28	2.94	-0.35	2.99	0.00	0.63	-0.29	1.02	0.28	2.45	-2.82	4.57	4.18	353.32	10.66	23.56	21.94	22.10	21.73	19.64	73.42	0.02	0.01	0.04	0.04	0.00	0.00			0.03	194.53
71	5/7/2004	11:58:35.35	0.87	2.40	3.93	-0.28	2.84	-0.35	2.89	0.01	0.57	-0.29	1.10	0.28	2.38	-2.88	7.12	6.73	353.32	10.67	23.56	21.94	22.10	21.65	19.72	73.44	0.02	-0.09	0.04	-0.06	0.01	-0.06			0.05	194.56
72	5/7/2004	11:59:35.35	0.87	2.42	3.91	-0.28	2.88	-0.35	2.89	0.00	0.59	-0.29	1.16	0.30	2.42	-2.87	7.34	6.96	353.32	10.68	23.64	22.10	22.18	21.73	19.80	73.45	0.02	-0.05	0.04	-0.06	0.00	-0.04			0.05	194.61
73	5/7/2004	12:00:35.35	0.87	2.42	3.91	-0.28	2.88	-0.35	2.90	0.00	0.59	-0.29	1.20	0.28	2.42	-2.87	7.18	6.79	357.49	10.68	23.53	22.07	22.15	21.61	19.68	73.47	0.02	-0.05	0.04	-0.05	0.00	-0.04	5.40	6.15	0.05	194.66
74	5/7/2004	12:01:35.35	0.87	2.40	3.89	-0.28	2.87	-0.35	2.89	0.01	0.57	-0.28	1.28	0.28	2.42	-2.87	7.04	6.65	357.49	10.69	23.61	22.15	22.23	21.69	19.76	73.49	0.02	-0.06	0.04	-0.06	0.01	-0.06			0.05	194.71
75	5/7/2004	12:02:35.35	0.87	2.42	3.91	-0.31	2.88	-0.35	2.92	0.00	0.59	-0.29	1.34	0.28	2.44	-2.88	7.24	6.86	361.66	10.71	23.61	22.15	22.23	21.69	19.76	73.50	-0.01	-0.05	0.04	-0.04	0.00	-0.04			0.05	194.75
76	5/7/2004	12:03:35.35	0.87	2.40	3.91	-0.28	2.88	-0.35	2.89	0.01	0.59	-0.29	1.39	0.28	2.43	-2.88	7.04	6.64	365.59	10.70	23.53	22.07	22.15	21.61	19.68	73.52	0.02	-0.05	0.04	-0.06	0.01	-0.04			0.05	194.80
77	5/7/2004	12:04:35.35	0.89	2.40	3.93	-0.28	2.88	-0.35	2.92	0.00	0.59	-0.29	1.46	0.28	2.44	-2.87	7.02	6.62	365.35	10.72	23.53	22.15	22.23	21.61	19.60	73.54	0.02	-0.05	0.04	-0.04	0.00	-0.04			0.05	194.85
78	5/7/2004	12:05:35.35	0.87	2.40	3.93	-0.27	2.88	-0.35	2.90	0.00	0.58	-0.29	1.54	0.28	2.44	-2.87	6.94	6.54	369.52	10.72	23.53	22.07	22.23	21.53	19.60	73.55	0.04	-0.05	0.04	-0.05	0.00	-0.05			0.05	194.90
79	5/7/2004	12:06:35.35	0.89	2.40	3.91	-0.27	2.88	-0.35	2.93	0.00	0.61	-0.29	1.57	0.28	2.44	-2.87	7.49	7.11	369.52	10.72	23.53	21.99	22.23	21.37	19.68	73.57	0.04	-0.05	0.04	-0.02	0.00	-0.03			0.05	194.94
80	5/7/2004	12:07:35.35	0.89	2.35	3.83	-0.27	2.88	-0.35	2.90	0.00	0.61	-0.29	1.59	0.28	2.44	-2.87	7.16	6.77	373.69	10.78	23.61	22.07	22.23	21.13	19.60	73.59	0.04	-0.05	0.04	-0.05	0.00	-0.03			0.05	194.99

Table H3-2-7. CIX Campaign II, Cycle 2, 0.5 M Nitric Acid Eluent

dding or subtracting an offset so that the corrected differential pressure
be zero when the flow was zero
flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow meter	flow cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-ed	DP1 cor. inch	DP2 cor. inch	DP3 cor. inch	DP4 cor. inch	DP5 cor. inch	DP6 cor. inch	Resin H1	Resin H2	differ-ential	cumul-lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/10/2004	08:08:26.35	1.33	-0.09	0.25	-0.29	2.89	-0.35	2.93	0.00	0.47	-0.25	1.67	0.15	2.21	-2.80	0.14	0.04	59.03	11.42	22.32	23.04	21.83	22.10	9.84	80.60	0.01	0.01	0.04	-0.02	0.00	0.00			0.00	191.60
2	5/10/2004	08:29:16.35	1.26	0.24	1.65	-0.29	2.88	-0.35	2.96	0.00	0.47	-0.25	1.65	0.15	2.21	-2.87	1.68	1.43	153.28	11.22	22.79	23.19	21.89	22.09	9.99	80.95	0.01	2.69	0.04	2.78	0.00	0.67			0.01	191.67
3	5/10/2004	08:50:16.35	1.22	2.00	3.39	-0.30	2.88	-0.38	2.93	0.03	0.46	-0.25	1.65	0.15	2.11	-2.63	1.68	1.43	153.04	11.22	23.23	-17.64	21.93	22.28	10.03	81.30	0.00	2.69	0.00	2.75	0.03	0.66			0.01	191.90
4	5/10/2004	09:11:16.35	1.18	1.34	2.80	-0.27	0.11	-0.37	0.14	0.00	0.37	-0.29	1.73	0.19	0.05	-2.65	1.21	1.00	149.11	11.22	23.69	41.12	22.06	22.26	9.84	81.65	0.04	-0.08	0.01	-0.04	0.00	0.57			0.01	192.09
5	5/10/2004	09:32:16.35	1.20	1.74	3.19	-0.27	0.04	-0.35	0.07	0.00	-0.22	-0.29	0.23	0.15	0.02	-0.03	1.29	1.08	148.87	11.21	23.80	38.41	22.26	22.37	10.20	82.00	0.04	-0.16	0.04	-0.11	0.00	-0.02			0.01	192.26
6	5/10/2004	09:53:16.35	1.22	1.93	3.36	-0.29	0.02	-0.35	0.04	0.01	-0.20	-0.25	0.24	0.15	0.00	-0.04	0.77	0.60	95.85	11.34	23.95	59.37	22.33	22.44	10.03	82.35	0.01	-0.17	0.04	-0.14	0.01	0.00			0.00	192.41
7	5/10/2004	10:09:41.35	1.24	0.99	2.46	-0.29	0.05	-0.38	0.08	0.00	-0.20	-0.25	0.25	0.15	0.03	-0.04	1.19	0.99	116.22	11.29	24.01	48.36	22.47	22.58	10.41	82.62	0.01	-0.14	0.00	-0.10	0.00	0.00			0.01	192.50
8	5/10/2004	10:30:41.35	1.26	1.91	3.41	-0.29	0.06	-0.36	0.08	-0.04	-0.19	-0.25	0.27	0.15	0.04	-0.03	1.22	1.02	79.41	11.35	24.23	64.65	22.69	22.72	10.39	82.97	0.01	-0.13	0.02	-0.10	-0.04	0.01	5.50	6.00	0.01	192.66
9	5/10/2004	10:51:41.35	1.27	1.89	3.32	-0.29	0.02	-0.35	0.03	-0.01	-0.19	-0.25	0.27	0.15	0.02	-0.03	0.94	0.75	54.86	11.40	24.32	62.61	22.78	22.73	10.41	83.32	0.01	-0.17	0.04	-0.15	-0.01	0.01			0.01	192.82
10	5/10/2004	11:12:41.35	1.31	1.87	3.37	-0.29	0.05	-0.35	0.04	0.00	-0.23	-0.25	0.27	0.11	-0.01	-0.03	1.34	1.12	50.93	11.42	24.38	60.16	22.92	22.79	10.55	83.67	0.01	-0.14	0.04	-0.14	0.00	-0.03			0.01	192.98
11	5/10/2004	11:33:41.35	1.35	1.87	3.30	-0.29	0.01	-0.35	0.04	0.00	-0.22	-0.29	0.28	0.09	-0.01	-0.06	1.26	1.05	46.76	11.42	24.52	57.62	22.98	22.85	10.61	84.02	0.01	-0.18	0.04	-0.14	0.00	-0.02			0.01	193.13
12	5/10/2004	11:54:41.35	1.40	1.84	3.30	-0.31	0.00	-0.38	0.06	0.00	-0.22	-0.28	0.25	0.08	-0.01	-0.06	1.33	1.11	42.83	11.40	24.66	36.18	23.12	22.83	11.00	84.37	-0.01	-0.19	0.00	-0.12	0.00	-0.02			0.01	193.29
13	5/10/2004	12:15:41.35	1.46	1.84	3.36	-0.30	0.00	-0.38	0.04	0.00	-0.22	-0.29	0.25	0.09	-0.01	-0.06	1.25	1.04	42.83	11.40	24.75	34.77	23.13	22.92	11.01	84.72	0.00	-0.19	0.00	-0.14	0.00	-0.02			0.01	193.44
14	5/10/2004	12:36:41.35	1.49	1.85	3.32	-0.30	0.00	-0.37	0.04	0.01	-0.22	-0.29	0.25	0.08	-0.01	-0.04	1.28	1.07	42.59	11.32	24.89	35.14	23.35	22.98	11.07	85.07	0.00	-0.19	0.01	-0.14	0.01	-0.02			0.01	193.60
15	5/10/2004	12:57:41.35	1.55	1.87	3.34	-0.30	0.00	-0.38	0.02	0.00	-0.22	-0.29	0.23	0.04	-0.02	-0.04	1.25	1.04	42.83	11.28	25.03	36.31	23.49	23.21	11.21	85.42	0.00	-0.19	0.00	-0.16	0.00	-0.02			0.01	193.75
16	5/10/2004	13:18:41.35	1.64	1.84	3.34	-0.30	0.00	-0.37	0.01	0.00	-0.22	-0.28	0.25	0.00	-0.01	-0.04	1.28	1.06	42.83	11.24	25.03	37.57	23.57	23.21	11.13	85.77	0.00	-0.19	0.01	-0.17	0.00	-0.02			0.01	193.90
17	5/10/2004	13:39:41.35	1.71	1.87	3.34	-0.28	-0.01	-0.35	0.02	0.01	-0.20	-0.26	0.25	-0.02	-0.03	-0.03	1.28	1.07	46.76	11.19	25.08	38.32	23.70	23.33	11.26	86.12	0.02	-0.20	0.04	-0.16	0.01	0.00			0.01	194.06
18	5/10/2004	14:00:41.35	1.79	1.87	3.37	-0.29	-0.01	-0.37	0.02	0.00	-0.20	-0.25	0.23	-0.02	-0.05	-0.04	1.22	1.01	42.83	11.15	25.09	38.88	23.80	23.43	11.27	86.47	0.01	-0.20	0.01	-0.16	0.00	0.00	5.50	5.35	0.01	194.21
19	5/10/2004	14:21:41.35	1.86	1.87	3.36	-0.29	-0.01	-0.38	0.01	-0.04	-0.24	-0.25	0.23	-0.05	-0.05	-0.03	1.25	1.04	42.59	11.10	25.09	39.36	23.88	23.59	11.36	86.82	0.01	-0.20	0.00	-0.17	-0.04	-0.04			0.01	194.37
20	5/10/2004	14:42:41.35	1.92	1.87	3.30	-0.29	-0.01	-0.38	0.02	-0.02	-0.24	-0.29	0.22	-0.08	-0.05	-0.03	1.18	0.98	42.83	11.05	25.01	39.90	23.96	23.75	11.36	87.17	0.01	-0.20	0.00	-0.16	-0.02	-0.04			0.01	194.52
21	5/10/2004	15:03:41.35	1.99	1.85	3.39	-0.30	-0.01	-0.38	0.01	-0.02	-0.22	-0.29	0.23	-0.12	-0.05	-0.02	1.29	1.08	46.76	11.01	25.14	40.65	24.08	23.87	11.40	87.52	0.00	-0.20	0.00	-0.17	-0.02	-0.02			0.01	194.68
22	5/10/2004	15:24:41.35	2.06	1.87	3.30	-0.29	-0.01	-0.38	0.02	-0.02	-0.23	-0.29	0.22	-0.16	-0.03	-0.02	1.28	1.07	46.76	10.97	25.11	41.48	24.05	24.00	11.37	87.87	0.01	-0.20	0.00	-0.16	-0.02	-0.03			0.01	194.84
23	5/10/2004	15:45:41.35	2.14	1.85	3.39	-0.30	-0.01	-0.38	0.01	-0.04	-0.22	-0.29	0.20	-0.16	-0.05	-0.03	1.23	1.02	50.93	10.93	25.15	42.47	24.18	24.13	11.42	88.22	0.00	-0.20	0.00	-0.17	-0.04	-0.02			0.01	194.99
24	5/10/2004	16:06:41.35	2.19	1.85	3.36	-0.30	-0.01	-0.38	0.02	-0.02	-0.22	-0.29	0.20	-0.16	-0.05	-0.02	1.22	1.01	50.93	10.90	24.91	43.64	24.26	24.29	11.42	88.57	0.00	-0.20	0.00	-0.16	-0.02	-0.02			0.01	195.15
25	5/10/2004	16:27:41.35	2.25	1.85	3.39	-0.29	-0.01	-0.38	0.02	-0.04	-0.22	-0.29	0.20	-0.18	-0.05	-0.02	1.25	1.04	50.93	10.87	24.95	44.60	24.29	24.40	11.37	88.92	0.01	-0.20	0.00	-0.16	-0.04	-0.02			0.01	195.30
26	5/10/2004	16:48:41.35	2.30	1.84	3.34	-0.30	-0.01	-0.38	0.01	-0.02	-0.22	-0.29	0.19	-0.22	-0.06	-0.03	1.28	1.07	54.86	10.86	24.85	45.53	24.28	24.55	11.27	89.27	0.00	-0.20	0.00	-0.17	-0.02	-0.02			0.01	195.46
27	5/10/2004	17:09:41.35	2.34	1.85	3.28	-0.30	-0.03	-0.38	-0.01	-0.04	-0.22	-0.29	0.20	-0.23	-0.06	-0.03	1.22	1.02	55.11	10.74	24.76	46.29	24.34	24.70	11.42	89.62	0.00	-0.22	0.00	-0.19	-0.04	-0.02			0.01	195.61
28	5/10/2004	17:30:41.35	2.38	1.82	3.34	-0.30	-0.03	-0.38	0.01	-0.02	-0.23	-0.29	0.19	-0.23	-0.06	-0.03	1.24	1.03	55.11	10.31	24.66	47.05	24.33	24.84	11.41	89.97	0.00	-0.22	0.00	-0.17	-0.02	-0.03	5.50	4.55	0.01	195.77
29	5/10/2004	17:51:41.35	2.41	1.82	3.36	-0.30	-0.04	-0.38	-0.01	-0.02	-0.23	-0.29	0.19	-0.22	-0.07	-0.03	1.28	1.06	59.03	2.05	24.46	47.32	24.28	24.88	11.28	90.32	0.00	-0.23	0.00	-0.19	-0.02	-0.03			0.01	195.92
30	5/10/2004	18:12:41.35	2.43	1.84	3.26	-0.30	-0.04	-0.38	-0.02	-0.02	-0.23	-0.25	0.19	-0.26	-0.07	-0.03	1.28	1.06	63.21	1.44	24.38	47.55	24.36	25.04	11.36	90.67	0.00	-0.23	0.00	-0.20	-0.02	-0.03			0.01	196.08
31	5/10/2004	18:33:41.35	2.47	1.84	3.36	-0.29	-0.05	-0.37	-0.02	-0.01	-0.24	-0.25	0.19	-0.24	-0.07	-0.03	1.28	1.07	71.31	1.24	24.28	47.77	24.27	25.02	11.27	91.02	0.01	-0.24	0.01	-0.20	-0.01	-0.04			0.01	196.24
32	5/10/2004	18:54:41.35	2.49	1.84	3.32	-0.30	-0.05	-0.36	-0.02	0.00	-0.24	-0.25	0.20	-0.26	-0.07	-0.03	1.25	1.04	79.41	1.17	24.16	48.27	24.22	24.98	11.30	91.37	0.00	-0.24	0.02	-0.20	0.00	-0.04			0.01	196.39
33	5/10/2004	19:15:41.35	2.50	1.84	3.37	-0.28	-0.05	-0.36	-0.03	0.00	-0.20	-0.26	0.22	-0.27	-0.08	-0.03	1.25	1.04	83.58	1.13	24.14	48.80	24.21	24.88	11.13	91.72	0.02	-0.24	0.02	-0.21	0.00	0.00			0.01	196.55
34	5/10/2004	19:36:41.35	2.50	1.84	3.36	-0.30	-0.05	-0.37	-0.04	0.01	-0.20	-0.25	0.22	-0.27	-0.05	-0.03	1.22	1.01	83.58	1.15	24.05	49.48	24.12	24.87	11.03	92.07	0.00	-0.24	0.01	-0.22	0.01	0.00			0.01	196.70
35	5/10/2004	19:57:41.35	2.50	1.84	3.34	-0.29	-0.05	-0.38	-0.04	0.00	-0.22	-0.26	0.22	-0.29	-0.05	-0.04	1.21	1.00	87.75	1.13	23.91	50.43	24.14	24.73	10.89	92.42	0.01	-0.24	0.00	-0.22	0.00	-0.02			0.01	196.86
36	5/10/2004	20:18:41.35	2.50	1.85	3.32	-0.29	-0.05	-0.38	-0.06	0.00	-0.20	-0.26	0.23	-0.29	-0.06	-0.04	1.22	1.01	87.75	0.83	23.93	54.45	24.08	24.59	10.83	92.77	0.01	-0.24	0.00	-0.24	0.00	0.00			0.01	197.01
37	5/10/2004	20:39:41.35	2.50	1.87	3.34	-0.30	-0.05	-0.37	-0.06	0.00	-0.20	-0.28	0.23	-0.29	-0.06	-0.04	1.25	1.04	181.75	0.55	23.76	57.43	23.99	24.50	10.73	93.12	0.00	-0.24	0.01	-0.24	0.00	0.00			0.01	197.17
38	5/10/2004	21:00:41.35	2.49	1.87	3.36	-0.29	-0.05	-0.38	-0.02	0.00	-0.20	-0.29	0.23	-0.29	-0.07	-0.06	1.25	1.04	218.33	0.49	23.59	58.03	23.97	24.41	10.72	93.47	0.01	-0.24	0.00	-0.20	0.00	0.00	5.50	4.40	0.01	197.32
39	5/10/2004	21:21:41.35	2.49	1.87	3.37	-0.29	-0.05	-0.37	-0.02	0.00	-0.22	-0.28	0.23	-0.29	-0.07	-0.04	1.29	1.08	230.60	0.46	23.53	58.58	23.92	24.43	10.58	93.82	0.01	-0.24	0.01	-0.20	0.00	-0.02			0.01	197.48
40	5/10/2004	21:42:41.35	2.47	1.85	3.41	-0.30	-0.05	-0.37	-0.02	0.00	-0.22	-0.29	0.23	-0.29	-0.08	-0.04	1.20	0.99	234.77	0.43	23.36	59.64	23.82	24.34	10.48	94.17	0.00	-0.24	0.01	-0.20	0.00	-0.02			0.01	197.64
41	5/10/2004	22:03:41.35	2.43	1.87	3.32	-0.29	-0.05	-0.38	-0.02	0.00	-0.22	-0.29	0.23	-0.29	-0.07	-0.06	1.27	1.06	238.94	0.42	23.34	59.63	23.81	24.24	10.31	94.52	0.01	-0.24	0.00	-0.20	0.00	-0.02			0.01	197.79
42	5/10/2004	22:24:41.35	2.41	1.87	3.41	-0.31	-0.06	-0.36	-0.02	0.01	-0.23	-0.29	0.23	-0.29	-0.07	-0.06	1.23	1.02	238.94	0.41	23.33	59.08	23.72	24.15	10.38	94.87	-0.01	-0.25	0.02	-0.20	0.01	-0.03			0.01	197.95
43	5/10/2004	22:45:41.35	2.38	1.89	3.37	-0.30	-0.05	-0.35	-0.02	0.00	-0.22	-0.29	0.23	-0.29	-0.08	-0.04	1.27	1.06	238.94	0.39	23.40	58.69	23.71	24.14	10.37	95.22	0.00	-0.24	0.04	-0.20	0.00	-0.02			0.01	198.10
44	5/10/2004	23:06:41.35	2.34	1.87	3.32	-0.29	-0.05	-0.35	-0.02	0.00	-0.22	-0.29	0.27	-0.28	-0.08	-0.06	1.28	1.07	242.87	0.38	23.35	57.96	23.58	24.09	10.24	95.57	0.01	-0.24	0.04	-0.20	0.00	-0.02			0.01	198.26
45	5/10/2004	23:27:41.35	2.30	1.87	3.36	-0.30	-0.03	-0.35	-0.03	0.00	-0.23	-0.29	0.27	-0.23	-0.08	-0.06	1.24	1.03	242.87	0.37	23.31	56.69	23.53	23.97	10.19	95.92	0.00	-0.22	0.04	-0.21	0.00	-0.03			0.01	198.42
46	5/10/2004	23:48:41.35	2.27	1.87	3.36	-0.29	-0.01	-0.35	-0.03	0.00	-0.23	-0.25	0.25	-0.23	-0.06	-0.07	1.28	1.06	247.04	0.37	23.39	55.62	23.53	23.97	10.35	96.27	0.01	-0.20	0.04	-0.21	0.00	-0.03			0.01	198.57
47	5/11/2004	00:09:41.35	2.23	1.89	3.34	-0.29	-0.01	-0.35	-0.03	0.00	-0.23	-0.25	0.25	-0.23	-0.06	-0.06	1.27	1.06	250.97	0.37	23.31	55.47	23.45	23.97	10.27	96.62	0.01	-0.20	0.04	-0.21	0.00	-0.03			0.01	198.73
48	5/11/2004	00:30:41.35	2.19	1.89	3.36	-0.29	-0.03	-0.35	-0.04	0.00	-0.24	-0.25	0.25	-0.22	-0.06	-0.06	1.23	1.02	250.97	0.37	23.31	55.62	23.45	23.89	10.19	96.97	0.01	-0.22	0.04	-0.22	0.00	-0.04	5.50	4.40	0.01	198.88
49	5/11/2004	00:51:41.35	2.16	1.85	3.34	-0.29	-0.03	-0.35	-0.04	0.00	-0.24	-0.25	0.27	-0.22	-0.05	-0.06	1.25	1.04	255.14	0.37	23.31	55.85	23.37	23.81	10.11	97.32	0.01	-0.22	0.04	-0.22	0.00	-0.04			0.01	199.04
50	5/11/2004	01:12:41.35	2.14	1.85	3.30	-0.30	-0.03	-0.35	-0.06	0.00	-0.20	-0.25	0.25	-0.18	-0.06	-0.04	1.25	1.04	255.14	0.35	23.19	56.97	23.34	23.77	10.15	97.67	0.00	-0.22	0.04	-0.24	0.00	0.00			0.01	199.19
51	5/11/2004	01:33:41.35	2.10	1.87	3.37	-0.29	-0.04	-0.35	-0.04	0.00	-0.20	-0.25	0.25	-0.19	-0.05	-0.03	1.28	1.06	259.31	0.37	23.19	57.58	23.26	23.69	10.15	98.02	0.01	-0.23	0.04	-0.22	0.00	0.00			0.01	199.35
52	5/11/2004	01:54:41.35	2.05	1.85	3.37	-0.29	-0.03	-0.35	-0.06	-0.01	-0.22	-0.25	0.25	-0.19	-0.06	-0.03	1.22	1.02	259.31	0.36	23.27	57.96	23.26	23.61	10.07	98.37	0.01	-0.22	0.04	-0.24	-0.01	-0.02			0.01	199.50
53	5/11/2004	02:15:41.35	2.01	1.85	3.30	-0.30	-0.04	-0.35	-0.02	-0.02	-0.22	-0.25	0.25	-0.16	-0.06	-0.03	1.25	1.04	259.31	0.37	23.35	58.11	23.26	23.61	10.15	98.72	0.00	-0.23	0.04	-0.20	-0.02	-0.02			0.01	199.66
54	5/11/2004	02:36:41.35	1.97	1.85	3.30	-0.30	-0.04	-0.33	-0.02	-0.02	-0.20	-0.25	0.25	-0.16	-0.06	-0.03	1.22	1.02	263.49	0.36	23.39	57.53	23.21	23.57	10.11	99.07	0.00	-0.23	0.05	-0.20	-0.02	0.00			0.01	199.81
55	5/11/2004	02:57:41.35	1.95	1.84	3.36	-0.30	-0.04	-0.35	-0.03	-0.02	-0.22	-0.25	0.25	-0.16	-0.06	-0.03	1.27	1.06	263.49	0.36	23.34	57.26	23.17	23.52	10.06	99.42	0.00	-0.23	0.04	-0.21	-0.02	-0.02			0.01	199.97
56	5/11/2004	03:18:41.35	1.90	1.84	3.30	-0.29	-0.04	-0.36	-0.02	-0.02	-0.22	-0.25	0.25	-0.16	-0.06	-0.03	1.28	1.07	267.41	0.35	23.23	56.77	23.05	23.41	10.03	99.77	0.01	-0.23	0.02	-0.20	-0.02	-0.02			0.01	200.12
57	5/11/2004	03:39:41.35	1.88	1.84	3.36	-0.29	-0.04	-0.35	-0.02	-0.02	-0.22	-0.25	0.25	-0.16	-0.06	-0.03	1.23	1.02	267.41	0.35	23.23	57.08	23.13	23.41	10.19	100.12	0.01	-0.23	0.04	-0.20	-0.02	-0.02			0.01	200.28
58	5/11/2004	04:00:41.35	1.82	1.82	3.32	-0.30	-0.04	-0.36	-0.02	-0.04	-0.22	-0.25	0.27	-0.16	-0.06	-0.03	1.28	1.06	271.34	0.35	23.47	57.31	23.13	23.41	10.19	100.47	0.00	-0.23	0.02	-0.20	-0.04	-0.02	5.50	4.40	0.01	200.43
59	5/11/2004	04:21:41.35	1.81	1.82	3.28	-0.29	-0.05	-0.36	-0.02	-0.04	-0.22	-0.25	0.25	-0.16	-0.07	-0.04	1.11	0.91	271.59	0.34	23.39	57.38	23.05	23.25	10.03	100.82	0.01	-0.24	0.02	-0.20	-0.04	-0.02			0.01	200.59
60	5/11/2004	04:42:41.35	1.79	1.84	3.28	-0.29	-0.01	-0.37	-0.02	-0.01	-0.20	-0.25	0.25	-0.16	-0.06	-0.03	1.59	1.35	275.51	0.35	23.34	57.49	23.01	23.28	10.14	101.17	0.01	-0.20	0.01	-0.20	-0.01	0.00			0.01	200.74
61	5/11/2004	05:03:41.35	1.75	1.80	3.32	-0.29	-0.05	-0.37	-0.03	0.00	-0.23	-0.25	0.27	-0.14	-0.06	-0.03	1.25	1.04	275.51	0.34	23.25	57.79	23.00	23.19	9.97	101.52	0.01	-0.24	0.01	-0.21	0.00	-0.03			0.01	200.90
62	5/11/2004	05:24:41.35	1.71	1.80	3.28	-0.29	-0.04	-0.37	-0.04	0.01	-0.23	-0.25	0.27	-0.12	-0.06	-0.04	1.23	1.02	279.69	0.35	23.32	58.08	22.98	23.18	9.95	101.87	0.01	-0.23	0.01	-0.22	0.01	-0.03			0.01	201.06
63	5/11/2004	05:45:41.35	1.68	1.82	3.30	-0.30	-0.05	-0.38	-0.03	0.00	-0.22	-0.25	0.25	-0.13	-0.06	-0.03	1.30	1.09	279.69	0.35	23.32	58.46	22.90	23.18	9.79	102.22	0.00	-0.24	0.00	-0.21	0.00	-0.02			0.01	201.21
64	5/11/2004	06:06:41.35	1.66	1.80	3.30	-0.29	-0.05	-0.35	-0.03	0.00	-0.22	-0.25	0.25	-0.12	-0.06	-0.03	1.29	1.08	283.86	0.35	23.32	58.31	22.98	23.18	9.95	102.57	0.01	-0.24	0.04	-0.21	0.00	-0.02			0.01	201.36
65	5/11/2004	06:27:41.35	1.62	1.80	3.32	-0.30	-0.04	-0.35	-0.03	0.01	-0.22	-0.26	0.25	-0.13	-0.06	-0.03	1.19	0.99	283.61	0.35	23.19	57.04	22.86	23.05	9.91	102.92	0.00	-0.23	0.04	-0.21	0.01	-0.02			0.01	201.51
66	5/11/2004	06:48:41.35	1.59	1.84	3.25	-0.29	-0.05	-0.36	-0.04	0.00	-0.22	-0.25	0.27	-0.10	-0.06	-0.03	1.24	1.03	283.86	0.34	23.30	55.99	22.80	23.15	9.93	103.27	0.01	-0.24	0.02	-0.22	0.00	-0.02			0.01	201.67
67	5/11/2004	07:09:41.35	1.57	1.80	3.28	-0.25	-0.04	-0.35	-0.04	0.01	-0.23	-0.25	0.25	-0.10	-0.06	-0.04	1.36	1.14	287.79	0.35	23.14	55.15	22.80	23.07	9.93	103.62	0.05	-0.23	0.04	-0.22	0.01	-0.03			0.01	201.82
68	5/11/2004	07:30:41.35	1.53	1.80	3.32	-0.27	-0.05	-0.35	-0.06	0.00	-0.23	-0.25	0.25	-0.08	-0.06	-0.03	1.22	1.01	287.79	0.35	23.17	54.88	22.75	23.03	9.97	103.97	0.04	-0.24	0.04	-0.24	0.00	-0.03	5.50	4.40	0.01	201.98
69	5/11/2004	07:51:41.35	1.49	1.82	3.30	-0.27	-0.05	-0.35	-0.04	0.00	-0.22	-0.25	0.25	-0.10	-0.06	-0.03	1.38	1.16	295.89	0.35	23.42	54.81	22.77	22.88	9.90	104.32	0.04	-0.24	0.04	-0.22	0.00	-0.02			0.01	202.13
70	5/11/2004	08:12:41.35	1.46	1.82	3.34	-0.29	-0.05	-0.35	-0.04	0.01	-0.22	-0.26	0.27	-0.08	-0.07	-0.03	1.29	1.08	291.96	0.35	23.41	55.34	22.83	22.95	9.97	104.67	0.01	-0.24	0.04	-0.22	0.01	-0.02			0.01	202.28
71	5/11/2004	08:33:41.35	1.44	1.84	3.28	-0.29	-0.04	-0.35	-0.03	0.01	-0.22	-0.25	0.25	-0.10	-0.06	-0.04	1.25	1.04	287.79	0.35	23.68	55.28	22.86	22.97	10.40	105.02	0.01	-0.23	0.04	-0.21	0.01	-0.02			0.01	202.44
72	5/11/2004	08:54:41.35	1.42	1.85	3.30	-0.29	0.00	-0.38	-0.03	-0.01	-0.22	-0.25	0.27	-0.10	-0.06	-0.03	1.04	0.85	303.98	0.35	23.69	55.22	22.87	22.98	10.49	105.37	0.01	-0.19	0.00	-0.21	-0.01	-0.02			0.01	202.60
73	5/11/2004	09:15:41.35	1.42	1.85	3.28	-0.30	0.00	-0.37	-0.03	-0.04	-0.22	-0.25	0.25	-0.08	-0.06	-0.03	1.24	1.03	320.67	0.36	23.62	55.69	22.96	22.91	10.59	105.72	0.00	-0.19	0.01	-0.21	-0.04	-0.02			0.01	202.75
74	5/11/2004	09:36:41.35	1.40	2.31	3.74	-0.29	0.00	-0.35	-0.02	-0.04	-0.20	-0.25	0.27	-0.07	-0.05	-0.03	1.23	1.02	328.77	0.35	23.87	55.93	23.05	23.09	10.76	106.07	0.01	-0.19	0.04	-0.20	-0.04	0.00			0.01	202.90
75	5/11/2004	09:57:41.35	1.40	2.35	3.81	-0.30	0.01	-0.35	-0.06	-0.01	-0.20	-0.25	0.27	-0.07	-0.05	-0.03	1.22	1.02	328.77	0.36	24.09	56.44	23.11	23.06	10.91	106.42	0.00	-0.18	0.04	-0.24	-0.01	0.00			0.01	203.06
76	5/11/2004	10:18:41.35	1.42	2.37	3.80	-0.29	0.01	-0.35	-0.06	0.00	-0.24	-0.25	0.27	-0.08	-0.06	-0.03	1.25	1.04	328.53	0.36	23.94	56.92	23.21	23.08	10.84	106.77	0.01	-0.18	0.04	-0.24	0.00	-0.04			0.01	203.21
77	5/11/2004	10:39:41.35	1.40	2.37	3.80	-0.29	0.02	-0.35	-0.06	0.01	-0.23	-0.29	0.28	-0.10	-0.06	-0.07	1.27	1.06	328.53	0.34	24.03	56.85	23.14	23.09	10.85	107.12	0.01	-0.17	0.04	-0.24	0.01	-0.03			0.01	203.37
78	5/11/2004	11:00:41.35	1.44	2.39	3.81	-0.30	0.02	-0.35	-0.04	0.01	-0.23	-0.29	0.29	-0.10	-0.10	-0.07	1.25	1.04	328.77	0.35	24.08	57.20	23.26	23.14	10.98	107.47	0.00	-0.17	0.04	-0.22	0.01	-0.03	5.50	4.40	0.01	203.52
79	5/11/2004	11:21:41.35	1.46	2.37	3.85	-0.30	-0.01	-0.35	-0.03	0.00	-0.22	-0.29	0.29	-0.12	-0.08	-0.07	1.25	1.04	328.53	0.36	24.09	57.67	23.36	23.15	10.99	107.82	0.00	-0.20	0.04	-0.21	0.00	-0.02			0.01	203.67
80	5/11/2004	11:42:41.35	1.48	2.37	3.85	-0.30	-0.01	-0.37	-0.02	0.00	-0.22	-0.29	0.25	-0.13	-0.08	-0.07	1.32	1.11	328.53	0.35	24.35	57.68	23.37	23.24	11.09	108.17	0.00	-0.20	0.01	-0.20	0.00	-0.02			0.01	203.83
81	5/11/2004	12:03:41.35	1.49	2.37	3.83	-0.29	-0.01	-0.38	-0.03	-0.02	-0.20	-0.29	0.27	-0.12	-0.08	-0.07	1.24	1.03	324.60	0.33	24.36	58.84	23.46	23.25	11.10	108.52	0.01	-0.20	0.00	-0.21	-0.02	0.00			0.01	203.98
82	5/11/2004	12:24:41.35	1.53	2.33	3.81	-0.29	-0.01	-0.38	-0.02	0.00	-0.20	-0.29	0.27	-0.12	-0.08	-0.06	1.26	1.05	332.70	0.33	24.49	59.19	23.51	23.22	11.15	108.87	0.01	-0.20	0.00	-0.20	0.00	0.00			0.01	204.13
83	5/11/2004	12:45:41.35	1.55	2.26	3.72	-0.29	-0.01	-0.38	-0.02	0.00	-0.20	-0.29	0.27	-0.13	-0.08	-0.06	1.24	1.03	336.87	0.33	24.55	59.70	23.65	23.28	11.29	109.22	0.01	-0.20	0.00	-0.20	0.00	0.00			0.01	204.29
84	5/11/2004	13:06:41.35	1.59	2.17	3.65	-0.29	-0.01	-0.38	-0.02	0.00	-0.20	-0.29	0.27	-0.16	-0.07	-0.06	1.28	1.06	336.87	0.33	24.59	60.13	23.70	23.33	11.25	109.57	0.01	-0.20	0.00	-0.20	0.00	0.00			0.01	204.44
85	5/11/2004	13:27:41.35	1.64	2.09	3.52	-0.29	-0.01	-0.37	-0.06	0.00	-0.20	-0.29	0.28	-0.16	-0.07	-0.06	1.28	1.07	336.87	0.33	24.56	60.25	23.74	23.37	11.22	109.92	0.01	-0.20	0.01	-0.24	0.00	0.00			0.01	204.60
86	5/11/2004	13:48:41.35	1.68	2.02	3.54	-0.29	-0.01	-0.37	-0.06	0.00	-0.20	-0.28	0.28	-0.19	-0.06	-0.06	1.31	1.09	336.87	0.32	24.43	59.98	23.78	23.41	11.25	110.27	0.01	-0.20	0.01	-0.24	0.00	0.00			0.01	204.75
87	5/11/2004	14:09:41.35	1.73	1.96	3.37	-0.29	-0.01	-0.37	-0.06	0.00	-0.20	-0.28	0.28	-0.19	-0.06	-0.06	1.22	1.01	341.05	0.32	24.38	59.93	23.89	23.52	11.21	110.62	0.01	-0.20	0.01	-0.24	0.00	0.00			0.01	204.91

Table H3-2-8. CIX Campaign II, Cycle 2, DI Water Post-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																					
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																																
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/11/2004	14:17:41.35	1.75	1.93	3.41	-0.29	-0.01	-0.37	-0.04	0.01	-0.20	-0.26	0.28	-0.19	-0.06	-0.06	1.22	1.01	341.05	0.32	24.47	60.08	23.81	23.52	11.29	110.75	0.01	-0.20	0.01	-0.22	0.01	0.00			0.01	211.00
2	5/11/2004	14:19:41.35	1.73	1.91	3.36	-0.28	-0.01	-0.37	-0.06	0.00	-0.20	-0.26	0.27	-0.19	-0.07	-0.07	0.14	0.04	341.05	0.32	24.38	60.08	23.89	23.52	11.29	110.79	0.02	-0.20	0.01	-0.24	0.00	0.00			0.00	211.01
3	5/11/2004	14:21:41.35	1.75	1.82	3.26	-0.28	-0.03	-0.37	-0.08	0.00	-0.22	-0.26	0.25	-0.18	-0.08	-0.07	0.15	0.04	340.80	0.31	24.34	59.96	23.84	23.55	11.32	110.82	0.02	-0.22	0.01	-0.26	0.00	-0.02			0.00	211.02
4	5/11/2004	14:23:41.35	1.75	1.52	2.95	-0.29	-0.04	-0.37	-0.08	0.00	-0.22	-0.26	0.25	-0.19	-0.08	-0.06	0.14	0.04	341.05	0.33	24.26	59.74	23.84	23.55	11.32	110.85	0.01	-0.23	0.01	-0.26	0.00	-0.02			0.00	211.02
5	5/11/2004	14:25:41.35	1.75	1.93	3.47	-0.29	0.02	-0.37	-0.02	0.01	-0.20	-0.26	0.29	-0.19	-0.03	-0.03	3.41	3.06	341.05	0.31	24.26	59.74	23.84	23.47	11.16	110.89	0.01	-0.17	0.01	-0.20	0.01	0.00			0.02	211.04
6	5/11/2004	14:27:41.35	1.75	1.95	3.43	-0.29	0.02	-0.37	-0.02	0.00	-0.20	-0.28	0.29	-0.19	-0.02	-0.24	3.55	3.20	340.80	0.31	24.34	60.12	23.92	23.55	11.40	110.92	0.01	-0.17	0.01	-0.20	0.00	0.00			0.02	211.08
7	5/11/2004	14:29:41.35	1.75	1.95	3.41	-0.30	0.02	-0.37	-0.02	0.00	-0.20	-0.25	0.29	-0.18	-0.03	-0.25	3.39	3.04	340.80	0.32	24.34	59.28	23.84	23.55	11.24	110.95	0.00	-0.17	0.01	-0.20	0.00	0.00			0.02	211.13
8	5/11/2004	14:31:41.35	1.75	1.93	3.41	-0.29	0.02	-0.37	-0.02	0.01	-0.20	-0.25	0.29	-0.19	-0.02	-0.25	3.20	2.86	340.80	0.31	24.34	57.52	23.84	23.47	11.08	110.99	0.01	-0.17	0.01	-0.20	0.01	0.00			0.02	211.17
9	5/11/2004	14:33:41.35	1.73	1.96	3.41	-0.29	0.01	-0.37	-0.04	0.01	-0.20	-0.28	0.29	-0.18	-0.02	-0.25	2.83	2.51	341.05	0.32	24.34	56.68	23.92	23.55	11.08	111.02	0.01	-0.18	0.01	-0.22	0.01	0.00			0.02	211.21
10	5/11/2004	14:35:41.35	1.73	1.95	3.41	-0.29	0.02	-0.37	-0.01	0.00	-0.19	-0.26	0.29	-0.19	0.00	-0.24	3.58	3.22	341.05	0.32	24.29	56.02	23.88	23.51	10.95	111.05	0.01	-0.17	0.01	-0.19	0.00	0.01			0.02	211.25
11	5/11/2004	14:37:41.35	1.75	1.93	3.39	-0.29	-0.01	-0.37	-0.06	0.00	-0.20	-0.26	0.29	-0.19	-0.01	-0.25	4.32	3.93	341.05	0.32	24.21	54.80	23.88	23.51	10.95	111.09	0.01	-0.20	0.01	-0.24	0.00	0.00			0.03	211.29
12	5/11/2004	14:39:41.35	1.77	2.09	3.61	-0.28	0.02	-0.37	-0.02	0.01	-0.20	-0.28	0.29	-0.18	0.02	-0.24	3.74	3.38	341.05	0.32	24.21	52.11	23.96	23.59	11.03	111.12	0.02	-0.17	0.01	-0.20	0.01	0.00			0.02	211.34
13	5/11/2004	14:41:41.35	1.77	2.11	3.65	-0.29	0.06	-0.37	0.02	0.00	-0.18	-0.25	0.29	-0.19	0.02	-0.24	4.93	4.53	341.05	0.31	24.04	49.62	23.86	23.49	10.85	111.15	0.01	-0.13	0.01	-0.16	0.00	0.02			0.03	211.39
14	5/11/2004	14:43:41.35	1.79	2.09	3.58	-0.29	0.02	-0.37	-0.01	0.00	-0.19	-0.26	0.29	-0.19	0.02	-0.25	4.82	4.43	341.05	0.32	24.04	47.22	23.86	23.49	10.85	111.19	0.01	-0.17	0.01	-0.19	0.00	0.01			0.03	211.45
15	5/11/2004	14:45:41.35	1.79	2.11	3.58	-0.29	0.02	-0.38	-0.02	0.00	-0.19	-0.28	0.29	-0.21	0.03	-0.24	3.63	3.27	341.05	0.32	24.04	44.89	23.86	23.49	10.69	111.22	0.01	-0.17	0.00	-0.20	0.00	0.01			0.02	211.51
16	5/11/2004	14:47:41.35	1.79	2.11	3.59	-0.29	0.05	-0.37	0.02	0.00	-0.18	-0.26	0.29	-0.21	0.04	-0.24	3.93	3.55	341.05	0.32	24.12	42.94	23.86	23.49	10.77	111.25	0.01	-0.14	0.01	-0.16	0.00	0.02			0.03	211.56
17	5/11/2004	14:49:41.35	1.79	2.11	3.61	-0.29	0.02	-0.38	-0.01	0.01	-0.19	-0.26	0.29	-0.21	0.05	-0.25	4.01	3.64	341.05	0.32	24.20	41.22	23.86	23.58	10.77	111.29	0.01	-0.17	0.00	-0.19	0.01	0.01			0.03	211.61
18	5/11/2004	14:51:41.35	1.79	2.09	3.56	-0.29	0.02	-0.38	-0.02	0.01	-0.19	-0.28	0.29	-0.21	0.07	-0.25	4.04	3.67	340.80	0.32	24.20	39.82	23.94	23.58	10.77	111.32	0.01	-0.17	0.00	-0.20	0.01	0.01			0.03	211.66
19	5/11/2004	14:53:41.35	1.81	2.13	3.56	-0.29	0.04	-0.37	-0.01	0.00	-0.19	-0.26	0.29	-0.22	0.07	-0.25	4.19	3.81	341.05	0.32	24.20	38.56	23.86	23.58	10.77	111.35	0.01	-0.16	0.01	-0.19	0.00	0.01			0.03	211.71
20	5/11/2004	14:55:41.35	1.79	2.11	3.58	-0.29	0.04	-0.38	-0.02	0.00	-0.19	-0.26	0.29	-0.22	0.08	-0.24	3.80	3.43	340.80	0.32	24.20	37.69	23.94	23.58	10.77	111.39	0.01	-0.16	0.00	-0.20	0.00	0.01			0.02	211.76
21	5/11/2004	14:57:41.35	1.81	2.11	3.58	-0.29	0.02	-0.37	-0.01	0.00	-0.19	-0.28	0.29	-0.22	0.08	-0.24	3.70	3.34	341.05	0.32	24.12	36.99	23.94	23.58	10.85	111.42	0.01	-0.17	0.01	-0.19	0.00	0.01			0.02	211.81
22	5/11/2004	14:59:41.35	1.81	2.09	3.59	-0.29	0.04	-0.38	0.01	0.00	-0.18	-0.28	0.29	-0.23	0.08	-0.24	3.68	3.32	341.05	0.32	23.99	36.55	23.90	23.53	10.72	111.45	0.01	-0.16	0.00	-0.17	0.00	0.02			0.02	211.85
23	5/11/2004	15:01:41.35	1.81	2.09	3.54	-0.29	0.01	-0.38	-0.04	0.00	-0.20	-0.26	0.29	-0.23	0.09	-0.25	4.33	3.95	341.05	0.31	23.99	36.23	23.90	23.53	10.81	111.49	0.01	-0.18	0.00	-0.22	0.00	0.00			0.03	211.90
24	5/11/2004	15:03:41.35	1.81	2.09	3.56	-0.29	0.01	-0.37	-0.03	0.00	-0.20	-0.28	0.29	-0.22	0.09	-0.26	4.13	3.75	341.05	0.31	23.99	37.96	23.98	23.61	10.81	111.52	0.01	-0.18	0.01	-0.21	0.00	0.00			0.03	211.95
25	5/11/2004	15:05:41.35	1.82	2.09	3.63	-0.29	0.05	-0.38	0.02	0.00	-0.18	-0.26	0.29	-0.23	0.10	-0.24	4.02	3.64	341.05	0.30	24.03	37.13	23.93	23.56	10.76	111.55	0.01	-0.14	0.00	-0.16	0.00	0.02			0.03	212.00
26	5/11/2004	15:07:41.35	1.82	2.09	3.63	-0.29	0.02	-0.38	0.02	0.00	-0.20	-0.26	0.29	-0.23	0.09	-0.25	3.91	3.54	340.80	0.30	24.07	36.07	23.98	23.61	10.72	111.59	0.01	-0.17	0.00	-0.16	0.00	0.00			0.03	212.05
27	5/11/2004	15:09:41.35	1.82	2.11	3.56	-0.29	0.02	-0.38	-0.02	0.00	-0.19	-0.26	0.29	-0.23	0.11	-0.25	4.21	3.83	340.80	0.31	24.15	34.81	23.98	23.61	10.81	111.62	0.01	-0.17	0.00	-0.20	0.00	0.01			0.03	212.10
28	5/11/2004	15:11:41.35	1.82	2.09	3.59	-0.30	0.04	-0.38	0.04	0.01	-0.18	-0.28	0.29	-0.23	0.11	-0.24	3.43	3.08	341.05	0.31	24.07	33.55	23.90	23.61	10.81	111.65	0.00	-0.16	0.00	-0.14	0.01	0.02			0.02	212.16
29	5/11/2004	15:13:41.35	1.82	2.07	3.54	-0.29	0.00	-0.37	-0.02	0.00	-0.20	-0.26	0.28	-0.23	0.09	-0.26	3.12	2.78	341.05	0.31	24.07	32.83	23.90	23.61	10.81	111.69	0.01	-0.19	0.01	-0.20	0.00	0.00			0.02	212.21
30	5/11/2004	15:15:41.35	1.82	2.07	3.58	-0.29	0.02	-0.37	0.02	0.00	-0.20	-0.28	0.29	-0.23	0.11	-0.25	3.84	3.47	340.80	0.31	23.99	32.28	23.90	23.61	10.81	111.72	0.01	-0.17	0.01	-0.16	0.00	0.00			0.02	212.27
31	5/11/2004	15:17:41.35	1.82	2.07	3.59	-0.29	0.04	-0.38	-0.01	0.00	-0.19	-0.28	0.29	-0.23	0.11	-0.25	4.58	4.19	341.05	0.31	23.95	31.84	23.85	23.56	10.68	111.75	0.01	-0.16	0.00	-0.19	0.00	0.01			0.03	212.32
32	5/11/2004	15:19:41.35	1.82	2.09	3.58	-0.29	0.06	-0.38	0.04	0.01	-0.19	-0.28	0.29	-0.22	0.13	-0.24	3.36	3.01	341.05	0.31	23.95	31.68	23.85	23.56	10.68	111.79	0.01	-0.13	0.00	-0.14	0.01	0.01			0.02	212.37
33	5/11/2004	15:21:41.35	1.84	2.09	3.59	-0.29	0.07	-0.38	0.04	0.00	-0.19	-0.28	0.29	-0.23	0.14	-0.24	3.81	3.44	340.80	0.31	23.99	31.33	23.90	23.69	10.72	111.82	0.01	-0.12	0.00	-0.14	0.00	0.01			0.02	212.42
34	5/11/2004	15:23:41.35	1.84	2.07	3.52	-0.29	0.05	-0.38	0.04	0.00	-0.20	-0.28	0.29	-0.23	0.11	-0.25	3.92	3.55	340.80	0.31	23.95	30.96	23.85	23.64	10.59	111.85	0.01	-0.14	0.00	-0.14	0.00	0.00			0.03	212.47
35	5/11/2004	15:25:41.35	1.84	2.09	3.59	-0.29	0.08	-0.38	0.04	0.00	-0.19	-0.26	0.29	-0.23	0.14	-0.24	3.62	3.26	340.80	0.31	23.95	30.57	23.85	23.64	10.76	111.89	0.01	-0.11	0.00	-0.14	0.00	0.01			0.02	212.53
36	5/11/2004	15:27:41.35	1.84	2.09	3.58	-0.29	0.07	-0.37	0.04	0.00	-0.20	-0.29	0.29	-0.23	0.11	-0.24	2.26	1.97	341.05	0.31	24.03	30.49	23.85	23.64	10.68	111.92	0.01	-0.12	0.01	-0.14	0.00	0.00			0.01	212.58
37	5/11/2004	15:29:41.35	1.84	2.07	3.56	-0.30	0.08	-0.38	0.04	0.00	-0.20	-0.28	0.29	-0.22	0.11	-0.25	2.75	2.44	341.05	0.32	24.06	30.36	23.89	23.68	10.71	111.95	0.00	-0.11	0.00	-0.14	0.00	0.00			0.02	212.63
38	5/11/2004	15:31:41.35	1.82	2.09	3.56	-0.29	0.08	-0.38	0.06	0.01	-0.20	-0.28	0.30	-0.23	0.11	-0.24	2.82	2.50	340.80	0.31	24.11	30.17	23.85	23.64	10.59	111.99	0.01	-0.11	0.00	-0.12	0.01	0.00			0.02	212.67
39	5/11/2004	15:33:41.35	1.82	2.11	3.59	-0.29	0.10	-0.38	0.09	0.00	-0.19	-0.29	0.30	-0.24	0.13	-0.24	3.47	3.11	341.05	0.31	23.98	29.88	23.89	23.68	10.55	112.02	0.01	-0.09	0.00	-0.09	0.00	0.01			0.02	212.72
40	5/11/2004	15:35:41.35	1.84	2.09	3.58	-0.30	0.10	-0.37	0.09	0.00	-0.19	-0.29	0.29	-0.24	0.11	-0.24	3.63	3.27	341.05	0.31	23.98	29.65	23.89	23.68	10.55	112.05	0.00	-0.09	0.01	-0.09	0.00	0.01			0.02	212.77
41	5/11/2004	15:37:41.35	1.84	2.09	3.63	-0.29	0.12	-0.38	0.12	0.01	-0.18	-0.28	0.30	-0.26	0.15	-0.24	3.59	3.23	341.05	0.31	23.90	29.41	23.89	23.76	10.55	112.09	0.01	-0.07	0.00	-0.06	0.01	0.02			0.02	212.82
42	5/11/2004	15:39:41.35	1.84	1.91	3.39	-0.29	0.13	-0.38	0.12	0.00	-0.18	-0.29	0.30	-0.26	0.14	-0.24	4.93	4.53	341.05	0.31	23.90	28.93	23.89	23.68	10.55	112.12	0.01	-0.06	0.00	-0.06	0.00	0.02			0.03	212.86
43	5/11/2004	15:41:41.35	1.84	1.87	3.39	-0.29	0.13	-0.37	0.12	0.00	-0.18	-0.26	0.30	-0.26	0.14	-0.24	4.30	3.92	341.05	0.31	23.82	28.93	23.89	23.68	10.55	112.15	0.01	-0.06	0.01	-0.06	0.00	0.02			0.03	212.92
44	5/11/2004	15:43:41.35	1.84	1.89	3.39	-0.30	0.15	-0.38	0.12	0.00	-0.18	-0.29	0.30	-0.26	0.14	-0.25	4.10	3.72	341.05	0.31	23.90	28.85	23.89	23.76	10.63	112.19	0.00	-0.05	0.00	-0.06	0.00	0.02			0.03	212.98
45	5/11/2004	15:45:41.35	1.84	1.89	3.36	-0.30	0.16	-0.38	0.14	0.00	-0.17	-0.29	0.30	-0.26	0.15	-0.24	4.29	3.90	340.80	0.31	23.85	28.64	23.84	23.71	10.50	112.22	0.00	-0.03	0.00	-0.04	0.00	0.03			0.03	213.03
46	5/11/2004	15:47:41.35	1.84	1.89	3.39	-0.29	0.16	-0.38	0.14	0.00	-0.18	-0.28	0.30	-0.26	0.15	-0.24	3.95	3.58	340.80	0.31	23.90	28.69	23.89	23.76	10.55	112.25	0.01	-0.03	0.00	-0.04	0.00	0.02			0.03	213.08
47	5/11/2004	15:49:41.35	1.84	1.89	3.41	-0.29	0.12	-0.38	0.12	0.00	-0.20	-0.28	0.29	-0.26	0.11	-0.25	4.39	4.00	340.80	0.31	23.98	28.61	23.89	23.76	10.47	112.29	0.01	-0.07	0.00	-0.06	0.00	0.00			0.03	213.12
48	5/11/2004	15:51:41.35	1.84	1.89	3.39	-0.29	0.17	-0.38	0.15	0.01	-0.18	-0.28	0.30	-0.26	0.14	-0.24	3.82	3.45	340.80	0.31	23.98	28.53	23.89	23.76	10.63	112.32	0.01	-0.02	0.00	-0.03	0.01	0.02			0.02	213.17
49	5/11/2004	15:53:41.35	1.84	1.89	3.39	-0.29	0.16	-0.38	0.14	0.00	-0.19	-0.28	0.29	-0.26	0.13	-0.24	3.29	2.94	340.80	0.31	23.98	28.45	23.89	23.84	10.63	112.35	0.01	-0.03	0.00	-0.04	0.00	0.01			0.02	213.22
50	5/11/2004	15:55:41.35	1.86	1.87	3.41	-0.29	0.18	-0.38	0.15	0.00	-0.19	-0.29	0.29	-0.26	0.13	-0.24	1.66	1.42	341.05	0.31	23.98	28.37	23.89	23.84	10.55	112.39	0.01	-0.01	0.00	-0.03	0.00	0.01			0.01	213.28
51	5/11/2004	15:57:41.35	1.86	1.89	3.41	-0.29	0.19	-0.38	0.19	0.00	-0.18	-0.29	0.29	-0.26	0.14	-0.24	3.78	3.41	341.05	0.31	23.90	28.21	23.89	23.84	10.55	112.42	0.01	0.00	0.00	0.01	0.00	0.02			0.02	213.31
52	5/11/2004	15:59:41.35	1.86	1.89	3.36	-0.29	0.19	-0.37	0.18	0.00	-0.19	-0.29	0.29	-0.26	0.11	-0.24	3.74	3.37	340.80	0.31	23.85	28.01	23.92	23.79	10.58	112.45	0.01	0.00	0.01	0.00	0.00	0.01			0.02	213.36
53	5/11/2004	16:01:41.35	1.86	1.89	3.41	-0.30	0.19	-0.38	0.18	0.00	-0.18	-0.28	0.29	-0.27	0.13	-0.24	4.21	3.83	341.05	0.31	23.77	27.77	23.84	23.79	10.50	112.49	0.00	0.00	0.00	0.00	0.00	0.02			0.03	213.41
54	5/11/2004	16:03:41.35	1.86	1.87	3.26	-0.30	0.13	-0.38	0.12	0.00	-0.20	-0.29	0.28	-0.26	0.08	-0.29	5.12	4.72	341.05	0.31	23.85	27.77	23.84	23.79	10.58	112.52	0.00	-0.06	0.00	-0.06	0.00	0.00			0.03	213.46
55	5/11/2004	16:05:41.35	1.86	1.91	3.43	-0.30	0.22	-0.38	0.19	0.00	-0.14	-0.29	0.30	-0.26	0.14	-0.24	3.78	3.41	341.05	0.31	23.93	27.61	23.92	23.95	10.58	112.55	0.00	0.03	0.00	0.01	0.00	0.06			0.02	213.51
56	5/11/2004	16:07:41.35	1.86	1.91	3.36	-0.30	0.19	-0.38	0.18	0.00	-0.17	-0.29	0.29	-0.26	0.11	-0.25	5.76	5.35	341.05	0.31	23.85	27.53	23.84	23.79	10.58	112.59	0.00	0.00	0.00	0.00	0.00	0.03			0.04	213.56
57	5/11/2004	16:09:41.35	1.86	1.91	3.36	-0.30	0.21	-0.38	0.19	0.00	-0.14	-0.29	0.29	-0.26	0.11	-0.25	2.64	2.33	341.05	0.31	23.93	27.53	23.84	23.87	10.66	112.62	0.00	0.02	0.00	0.01	0.00	0.06			0.02	213.61
58	5/11/2004	16:11:41.35	1.86	1.89	3.36	-0.29	0.22	-0.38	0.20	0.00	-0.14	-0.29	0.30	-0.26	0.13	-0.25	2.83	2.51	340.80	0.31	23.98	27.57	23.89	23.84	10.63	112.65	0.01	0.03	0.00	0.02	0.00	0.06			0.02	213.66
59	5/11/2004	16:13:41.35	1.86	1.85	3.32	-0.29	0.16	-0.38	0.14	0.00	-0.19	-0.28	0.27	-0.26	0.07	-0.29	5.33	4.92	340.80	0.31	23.98	27.41	23.89	23.92	10.71	112.69	0.01	-0.03	0.00	-0.04	0.00	0.01			0.04	213.71
60	5/11/2004	16:15:41.35	1.86	1.91	3.36	-0.29	0.19	-0.38	0.19	0.00	-0.14	-0.29	0.29	-0.26	0.10	-0.26	4.31	3.92	340.80	0.31	23.93	27.29	23.84	23.87	10.66	112.72	0.01	0.00	0.00	0.01	0.00	0.06			0.03	213.76
61	5/11/2004	16:17:41.35	1.86	1.89	3.39	-0.29	0.19	-0.38	0.19	0.00	-0.16	-0.29	0.29	-0.26	0.09	-0.26	5.29	4.89	341.05	0.31	23.85	27.29	23.84	23.87	10.75	112.75	0.01	0.00	0.00	0.01	0.00	0.05			0.03	213.81
62	5/11/2004	16:19:41.35	1.86	1.89	3.37	-0.29	0.22	-0.38	0.22	0.00	-0.14	-0.29	0.30	-0.27	0.13	-0.25	2.71	2.40	341.05	0.31	23.85	27.29	23.76	23.79	10.66	112.79	0.01	0.03	0.00	0.04	0.00	0.06			0.02	213.87
63	5/11/2004	16:21:41.35	1.86	1.89	3.37	-0.29	0.22	-0.38	0.22	0.00	-0.14	-0.29	0.31	-0.26	0.11	-0.25	3.62	3.26	341.05	0.31	23.93	27.21	23.92	23.95	10.75	112.82	0.01	0.03	0.00	0.04	0.00	0.06			0.02	213.92
64	5/11/2004	16:23:41.35	1.86	1.89	3.39	-0.30	0.22	-0.38	0.20	0.00	-0.14	-0.29	0.30	-0.26	0.10	-0.25	2.58	2.28	341.05	0.31	23.93	27.05	23.92	23.95	10.66	112.85	0.00	0.03	0.00	0.02	0.00	0.06			0.02	213.99
65	5/11/2004	16:25:41.35	1.86	1.91	3.37	-0.29	0.21	-0.38	0.19	0.00	-0.13	-0.29	0.31	-0.26	0.10	-0.25	3.17	2.83	341.05	0.31	24.01	26.81	23.92	23.95	10.75	112.89	0.01	0.02	0.00	0.01	0.00	0.07	5.50	4.35	0.02	214.03
66	5/11/2004	16:27:41.35	1.86	1.89	3.36	-0.29	0.24	-0.38	0.23	0.00	-0.14	-0.29	0.35	-0.26	0.14	-0.24	3.83	3.46	341.05	0.31	24.01	26.57	23.84	23.95	10.66	112.92	0.01	0.05	0.00	0.05	0.00	0.06			0.02	214.08
67	5/11/2004	16:29:41.35	1.86	1.89	3.43	-0.29	0.24	-0.38	0.23	0.00	-0.13	-0.29	0.36	-0.27	0.13	-0.24	2.31	2.02	341.05	0.31	24.01	26.41	23.84	23.95	10.66	112.95	0.01	0.05	0.00	0.05	0.00	0.07			0.01	214.13
68	5/11/2004	16:31:41.35	1.86	1.91	3.36	-0.29	0.24	-0.38	0.24	0.00	-0.13	-0.29	0.36	-0.26	0.13	-0.24	3.57	3.21	341.05	0.31	24.01	26.17	23.84	23.95	10.58	112.99	0.01	0.05	0.00	0.06	0.00	0.07			0.02	214.18
69	5/11/2004	16:33:41.35	1.86	1.91	3.39	-0.30	0.24	-0.38	0.23	0.01	-0.14	-0.29	0.38	-0.26	0.13	-0.24	4.03	3.65	341.05	0.31	23.93	26.09	23.84	24.03	10.58	113.02	0.00	0.05	0.00	0.05	0.01	0.06			0.03	214.23
70	5/11/2004	16:35:41.35	1.88	1.91	3.43	-0.29	0.26	-0.38	0.24	0.01	-0.14	-0.29	0.39	-0.27	0.13	-0.24	3.82	3.46	340.80	0.32	23.93	25.93	23.84	23.95	10.50	113.05	0.01	0.07	0.00	0.06	0.01	0.06			0.02	214.28
71	5/11/2004	16:37:41.35	1.88	1.89	3.43	-0.29	0.21	-0.38	0.19	0.00	-0.14	-0.29	0.39	-0.26	0.10	-0.26	4.33	3.95	340.80	0.31	23.85	26.01	23.84	23.95	10.50	113.09	0.01	0.02	0.00	0.01	0.00	0.06			0.03	214.33
72	5/11/2004	16:39:09.85	1.88	1.84	3.25	-0.29	0.10	-0.38	0.06	0.00	-0.24	-0.29	0.29	-0.26	0.02	-0.30	1.12	0.92	340.80	0.32	23.81	26.12	23.87	23.90	10.45	113.11	0.01	-0.09	0.00	-0.12	0.00	-0.04			0.00	214.37

Table H3-2-9. CIX Campaign II, Cycle 2, 0.25M NaOH Regenerant

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	5/12/2004	08:28:50.85	1.13	1.21	2.62	-0.29	0.13	-0.36	0.06	-0.02	-0.19	-0.25	0.33	-0.12	0.04	-0.26	0.14	0.04	341.05	0.34	24.26	22.72	22.96	22.83	10.83	118.94	0.01	0.05	-0.02	0.01	-0.02	0.01	5.40	4.35	0.00	214.40
2	5/12/2004	08:29:22.35	1.15	1.05	2.46	-0.29	0.13	-0.35	0.08	-0.02	-0.20	-0.25	0.33	-0.12	0.05	-0.28	0.14	0.04	341.05	0.34	24.26	23.05	22.96	22.83	10.67	118.95	0.01	0.05	0.00	0.03	-0.02	0.00			0.00	214.40
3	5/12/2004	08:29:42.35	1.13	0.94	2.35	-0.29	0.12	-0.35	0.08	-0.04	-0.20	-0.25	0.33	-0.13	0.05	-0.29	0.14	0.04	341.05	0.33	24.26	23.21	22.88	22.83	10.67	118.96	0.01	0.04	0.00	0.03	-0.04	0.00			0.00	214.40
4	5/12/2004	08:30:02.35	1.13	0.92	2.35	-0.29	0.23	-0.36	0.15	-0.02	-0.14	-0.25	0.41	-0.13	0.11	-0.24	0.14	0.04	341.05	0.34	24.26	23.37	22.96	22.83	10.67	118.96	0.01	0.15	-0.02	0.10	-0.02	0.06			0.00	214.40
5	5/12/2004	08:31:12.35	1.13	1.73	3.21	-0.29	0.29	-0.35	0.25	-0.02	-0.11	-0.25	0.45	-0.13	0.16	-0.18	7.14	6.75	341.05	0.34	24.26	23.21	22.88	22.99	10.42	118.98	0.01	0.21	0.00	0.20	-0.02	0.09			0.05	214.40
6	5/12/2004	08:33:12.35	1.15	1.93	3.43	-0.29	0.32	-0.36	0.25	-0.04	-0.11	-0.25	0.46	-0.12	0.16	-0.08	7.26	6.88	341.05	0.35	24.34	16.66	22.96	23.07	10.34	119.01	0.01	0.24	-0.02	0.20	-0.04	0.09			0.05	214.50
7	5/12/2004	08:35:12.35	1.13	1.93	3.45	-0.29	0.32	-0.35	0.24	-0.02	-0.11	-0.25	0.49	-0.12	0.18	-0.08	7.30	6.91	341.05	0.34	24.37	8.44	22.91	23.03	10.38	119.05	0.01	0.24	0.00	0.19	-0.02	0.09			0.05	214.60
8	5/12/2004	08:37:12.35	1.15	1.93	3.43	-0.29	0.30	-0.36	0.24	-0.04	-0.11	-0.26	0.49	-0.12	0.16	-0.08	7.29	6.90	341.05	0.35	24.37	8.69	22.91	23.03	10.29	119.08	0.01	0.22	-0.02	0.19	-0.04	0.09			0.05	214.70
9	5/12/2004	08:39:12.35	1.15	1.93	3.43	-0.29	0.30	-0.35	0.25	-0.02	-0.09	-0.25	0.49	-0.13	0.16	-0.09	7.32	6.94	328.77	0.37	24.42	12.43	23.04	23.15	10.42	119.11	0.01	0.22	0.00	0.20	-0.02	0.11			0.05	214.80
10	5/12/2004	08:41:12.35	1.15	1.93	3.41	-0.29	0.29	-0.36	0.24	-0.02	-0.11	-0.25	0.50	-0.13	0.15	-0.08	7.28	6.90	283.61	0.50	24.50	16.09	22.96	23.15	10.42	119.15	0.01	0.21	-0.02	0.19	-0.02	0.09			0.05	214.90
11	5/12/2004	08:43:12.35	1.13	1.91	3.39	-0.29	0.30	-0.35	0.23	-0.02	-0.11	-0.25	0.50	-0.12	0.15	-0.09	7.33	6.95	218.33	0.64	24.50	17.55	23.04	23.07	10.26	119.18	0.01	0.22	0.00	0.18	-0.02	0.09			0.05	215.00
12	5/12/2004	08:45:12.35	1.13	1.91	3.39	-0.29	0.29	-0.36	0.24	-0.04	-0.11	-0.25	0.50	-0.12	0.15	-0.08	7.29	6.90	169.48	0.79	24.58	18.61	23.04	23.07	10.26	119.21	0.01	0.21	-0.02	0.19	-0.04	0.09	5.40	4.35	0.05	215.09
13	5/12/2004	08:47:12.35	1.13	1.89	3.41	-0.29	0.30	-0.35	0.22	-0.04	-0.11	-0.25	0.50	-0.12	0.14	-0.12	7.29	6.90	128.49	0.99	24.50	19.26	22.96	23.07	10.18	119.25	0.01	0.22	0.00	0.17	-0.04	0.09			0.05	215.19
14	5/12/2004	08:49:12.35	1.13	1.87	3.39	-0.29	0.29	-0.35	0.23	-0.02	-0.11	-0.25	0.50	-0.12	0.15	-0.08	7.26	6.88	95.85	1.22	24.58	19.58	23.04	23.07	10.34	119.28	0.01	0.21	0.00	0.18	-0.02	0.09			0.05	215.29
15	5/12/2004	08:51:12.35	1.15	1.89	3.39	-0.29	0.29	-0.35	0.22	-0.04	-0.11	-0.25	0.50	-0.12	0.15	-0.08	7.32	6.94	75.48	1.41	24.63	19.79	23.01	23.04	10.39	119.31	0.01	0.21	0.00	0.17	-0.04	0.09			0.05	215.39
16	5/12/2004	08:53:12.35	1.13	1.87	3.37	-0.30	0.29	-0.35	0.22	-0.02	-0.11	-0.25	0.50	-0.12	0.14	-0.09	7.27	6.88	59.03	1.61	24.58	19.90	22.96	22.99	10.34	119.35	0.00	0.21	0.00	0.17	-0.02	0.09			0.05	215.49
17	5/12/2004	08:55:12.35	1.13	1.89	3.37	-0.29	0.29	-0.35	0.23	-0.01	-0.11	-0.25	0.50	-0.12	0.14	-0.07	7.30	6.92	50.93	1.75	24.63	20.11	23.01	23.04	10.31	119.38	0.01	0.21	0.00	0.18	-0.01	0.09			0.05	215.59
18	5/12/2004	08:57:12.35	1.13	1.87	3.41	-0.29	0.29	-0.36	0.22	-0.02	-0.11	-0.25	0.50	-0.12	0.14	-0.11	7.28	6.90	46.76	1.96	24.59	20.24	23.05	23.08	10.35	119.41	0.01	0.21	-0.02	0.17	-0.02	0.09			0.05	215.68
19	5/12/2004	08:59:12.35	1.13	1.89	3.41	-0.29	0.29	-0.35	0.22	-0.02	-0.11	-0.25	0.50	-0.12	0.14	-0.12	7.30	6.91	38.66	2.07	24.59	20.32	23.05	23.08	10.35	119.45	0.01	0.21	0.00	0.17	-0.02	0.09			0.05	215.78
20	5/12/2004	09:01:12.35	1.13	1.87	3.39	-0.29	0.28	-0.35	0.22	-0.02	-0.11	-0.25	0.50	-0.13	0.14	-0.11	7.28	6.90	38.66	2.13	24.59	20.48	22.97	23.08	10.35	119.48	0.01	0.20	0.00	0.17	-0.02	0.09			0.05	215.88
21	5/12/2004	09:03:12.35	1.13	1.89	3.36	-0.29	0.29	-0.35	0.22	-0.01	-0.11	-0.25	0.50	-0.12	0.13	-0.13	7.28	6.89	34.73	2.28	24.55	20.59	23.01	23.04	10.47	119.51	0.01	0.21	0.00	0.17	-0.01	0.09			0.05	215.98
22	5/12/2004	09:05:12.35	1.13	1.89	3.39	-0.29	0.28	-0.35	0.22	-0.02	-0.12	-0.25	0.50	-0.13	0.13	-0.11	7.28	6.90	30.56	2.31	24.59	20.80	23.05	23.16	10.52	119.55	0.01	0.20	0.00	0.17	-0.02	0.08			0.05	216.08
23	5/12/2004	09:07:12.35	1.13	1.89	3.39	-0.30	0.28	-0.36	0.22	-0.01	-0.11	-0.25	0.50	-0.12	0.13	-0.12	7.34	6.96	30.56	2.43	24.55	20.76	23.01	23.12	10.39	119.58	0.00	0.20	-0.02	0.17	-0.01	0.09			0.05	216.18
24	5/12/2004	09:09:12.35	1.13	1.91	3.37	-0.29	0.29	-0.35	0.22	-0.01	-0.11	-0.25	0.50	-0.12	0.48	-0.13	7.25	6.86	30.56	2.51	24.67	21.12	23.05	23.24	10.43	119.61	0.01	0.21	0.00	0.17	-0.01	0.09			0.05	216.28
25	5/12/2004	09:11:12.35	1.13	1.89	3.39	-0.30	0.29	-0.35	0.22	-0.02	-0.13	-0.25	0.49	-0.13	0.47	-0.12	7.30	6.92	26.39	2.53	24.59	21.12	23.05	23.24	10.35	119.65	0.00	0.21	0.00	0.17	-0.02	0.07			0.05	216.37
26	5/12/2004	09:13:12.35	1.13	1.91	3.37	-0.29	0.29	-0.35	0.22	-0.01	-0.13	-0.25	0.50	-0.12	0.46	-0.12	7.28	6.89	26.39	2.58	24.67	21.20	23.05	23.33	10.52	119.68	0.01	0.21	0.00	0.17	-0.01	0.07			0.05	216.47
27	5/12/2004	09:15:12.35	1.13	1.91	3.39	-0.29	0.28	-0.35	0.22	-0.02	-0.13	-0.25	0.50	-0.13	0.47	-0.12	7.30	6.91	26.39	2.62	24.67	21.29	23.05	23.33	10.43	119.71	0.01	0.20	0.00	0.17	-0.02	0.07	5.40	4.60	0.05	216.57
28	5/12/2004	09:17:12.35	1.13	1.91	3.41	-0.29	0.29	-0.37	0.19	-0.01	-0.13	-0.25	0.50	-0.13	0.46	-0.11	7.28	6.90	26.39	2.67	24.67	21.37	23.05	23.49	10.35	119.75	0.01	0.21	-0.03	0.14	-0.01	0.07			0.05	216.67
29	5/12/2004	09:19:12.35	1.13	1.91	3.41	-0.29	0.29	-0.37	0.19	-0.01	-0.14	-0.25	0.49	-0.12	0.44	-0.12	7.28	6.90	26.39	2.70	24.59	21.29	22.97	23.41	10.27	119.78	0.01	0.21	-0.03	0.14	-0.01	0.06			0.05	216.77
30	5/12/2004	09:21:12.35	1.15	1.91	3.41	-0.29	0.29	-0.37	0.24	-0.01	-0.14	-0.25	0.49	-0.12	0.43	-0.12	7.29	6.90	22.22	2.74	24.55	21.40	23.01	23.52	10.39	119.81	0.01	0.21	-0.03	0.19	-0.01	0.06			0.05	216.87
31	5/12/2004	09:23:12.35	1.13	1.91	3.39	-0.29	0.29	-0.35	0.20	-0.02	-0.14	-0.25	0.50	-0.13	0.49	-0.11	7.34	6.95	22.22	2.78	24.63	21.40	23.01	23.60	10.31	119.85	0.01	0.21	0.00	0.15	-0.02	0.06			0.05	216.96
32	5/12/2004	09:25:12.35	1.13	1.93	3.41	-0.29	0.29	-0.35	0.20	-0.01	-0.14	-0.25	0.50	-0.13	0.49	-0.12	7.34	6.96	22.22	2.52	24.63	21.40	23.01	23.60	10.39	119.88	0.01	0.21	0.00	0.15	-0.01	0.06			0.05	217.06
33	5/12/2004	09:27:12.35	1.13	1.91	3.45	-0.29	0.29	-0.36	0.20	-0.01	-0.14	-0.26	0.50	-0.13	0.48	-0.12	7.30	6.91	22.22	2.82	24.63	21.40	23.01	23.68	10.39	119.91	0.01	0.21	-0.02	0.15	-0.01	0.06			0.05	217.16
34	5/12/2004	09:29:12.35	1.13	1.93	3.43	-0.29	0.28	-0.37	0.23	-0.02	-0.14	-0.25	0.50	-0.16	0.48	-0.12	7.27	6.88	22.22	3.31	24.67	21.45	23.05	23.89	10.52	119.95	0.01	0.20	-0.03	0.18	-0.02	0.06			0.05	217.26
35	5/12/2004	09:31:12.35	1.13	1.95	3.47	-0.28	0.29	-0.35	0.22	-0.01	-0.14	-0.25	0.50	-0.12	0.49	-0.11	7.30	6.91	22.46	2.79	24.67	21.37	23.05	23.89	10.60	119.98	0.02	0.21	0.00	0.17	-0.01	0.06			0.05	217.36
36	5/12/2004	09:33:12.35	1.15	1.95	3.45	-0.29	0.29	-0.35	0.22	-0.02	-0.14	-0.25	0.50	-0.12	0.49	-0.12	7.28	6.90	22.22	2.88	24.67	21.29	23.05	23.97	10.60	120.01	0.01	0.21	0.00	0.17	-0.02	0.06			0.05	217.46
37	5/12/2004	09:35:12.35	1.13	1.98	3.50	-0.29	0.28	-0.35	0.22	-0.01	-0.14	-0.25	0.50	-0.13	0.48	-0.12	7.28	6.89	22.22	2.79	24.67	21.29	23.05	23.97	10.60	120.05	0.01	0.20	0.00	0.17	-0.01	0.06			0.05	217.55
38	5/12/2004	09:37:12.35	1.15	2.00	3.45	-0.28	0.29	-0.35	0.23	-0.01	-0.14	-0.25	0.50	-0.12	0.49	-0.12	7.36	6.98	22.22	2.89	24.63	21.24	23.01	24.00	10.47	120.08	0.02	0.21	0.00	0.18	-0.01	0.06			0.05	217.65
39	5/12/2004	09:39:12.35	1.13	2.00	3.48	-0.29	0.29	-0.35	0.23	-0.04	-0.13	-0.25	0.50	-0.12	0.49	-0.11	7.30	6.92	22.22	3.52	24.67	21.29	23.05	24.13	10.52	120.11	0.01	0.21	0.00	0.18	-0.04	0.07			0.05	217.75
40	5/12/2004	09:41:12.35	1.13	2.02	3.48	-0.28	0.29	-0.35	0.22	0.00	-0.13	-0.25	0.50	-0.12	0.49	-0.12	7.32	6.94	18.04	3.00	24.67	21.20	23.05	24.13	10.60	120.15	0.02	0.21	0.00	0.17	0.00	0.07			0.05	217.85
41	5/12/2004	09:43:12.35	1.13	2.02	3.47	-0.29	0.29	-0.35	0.22	-0.01	-0.14	-0.25	0.50	-0.12	0.48	-0.12	7.27	6.88	18.29	3.61	24.67	21.29	23.05	24.21	10.60	120.18	0.01	0.21	0.00	0.17	-0.01	0.06			0.05	217.95
42	5/12/2004	09:45:12.35	1.13	2.02	3.54	-0.29	0.29	-0.35	0.23	-0.02	-0.13	-0.25	0.50	-0.12	0.49	-0.12	7.28	6.90	18.29	2.98	24.71	21.32	23.01	24.24	10.55	120.21	0.01	0.21	0.00	0.18	-0.02	0.07	5.40	5.10	0.05	218.05
43	5/12/2004	09:47:12.35	1.13	2.02	3.48	-0.29	0.29	-0.35	0.22	-0.01	-0.12	-0.25	0.50	-0.12	0.49	-0.11	7.33	6.95	18.29	3.05	24.75	21.37	23.05	24.29	10.60	120.25	0.01	0.21	0.00	0.17	-0.01	0.08			0.05	218.15
44	5/12/2004	09:49:12.35	1.13	2.04	3.50	-0.29	0.29	-0.35	0.24	-0.02	-0.12	-0.25	0.50	-0.12	0.48	-0.12	7.28	6.89	18.29	2.83	24.67	21.29	23.05	24.29	10.52	120.28	0.01	0.21	0.00	0.19	-0.02	0.08			0.05	218.24
45	5/12/2004	09:51:12.35	1.13	2.04	3.50	-0.28	0.30	-0.35	0.23	0.00	-0.12	-0.25	0.50	-0.12	0.49	-0.12	7.33	6.95	18.29	2.68	24.72	21.33	23.10	24.41	10.48	120.31	0.02	0.22	0.00	0.18	0.00	0.08			0.05	218.34
46	5/12/2004	09:53:12.35	1.13	2.06	3.56	-0.29	0.29	-0.35	0.23	-0.01	-0.12	-0.25	0.50	-0.12	0.49	-0.12	7.26	6.88	18.29	3.12	24.64	21.49	23.10	24.41	10.48	120.35	0.01	0.21	0.00	0.18	-0.01	0.08			0.05	218.44
47	5/12/2004	09:55:12.35	1.13	2.06	3.54	-0.29	0.29	-0.35	0.23	-0.01	-0.13	-0.25	0.50	-0.12	0.48	-0.12	7.24	6.86	18.29	3.05	24.72	21.49	23.10	24.49	10.56	120.38	0.01	0.21	0.00	0.18	-0.01	0.07			0.05	218.54
48	5/12/2004	09:57:12.35	1.13	2.06	3.54	-0.29	0.30	-0.35	0.24	0.00	-0.12	-0.25	0.50	-0.12	0.48	-0.12	7.26	6.88	18.29	3.22	24.68	21.62	23.06	24.54	10.53	120.41	0.01	0.22	0.00	0.19	0.00	0.08			0.05	218.64
49	5/12/2004	09:59:12.35	1.13	2.07	3.54	-0.29	0.30	-0.35	0.23	-0.01	-0.12	-0.25	0.50	-0.12	0.49	-0.11	7.29	6.90	18.29	3.39	24.72	21.49	23.02	24.57	10.48	120.45	0.01	0.22	0.00	0.18	-0.01	0.08			0.05	218.74
50	5/12/2004	10:01:12.35	1.13	2.06	3.54	-0.29	0.30	-0.35	0.24	0.00	-0.11	-0.25	0.50	-0.13	0.49	-0.12	7.34	6.95	18.29	3.37	24.84	21.62	23.06	24.62	10.53	120.48	0.01	0.22	0.00	0.19	0.00	0.09			0.05	218.83
51	5/12/2004	10:03:12.35	1.11	2.07	3.56	-0.28	0.30	-0.35	0.24	-0.01	-0.12	-0.25	0.50	-0.12	0.48	-0.12	7.32	6.93	14.12	3.73	24.84	21.70	23.06	24.70	10.53	120.51	0.02	0.22	0.00	0.19	-0.01	0.08			0.05	218.93
52	5/12/2004	10:05:12.35	1.11	2.11	3.58	-0.29	0.32	-0.35	0.24	0.00	-0.11	-0.25	0.50	-0.12	0.48	-0.12	7.29	6.90	14.12	5.47	24.84	21.70	23.06	24.70	10.53	120.55	0.01	0.24	0.00	0.19	0.00	0.09			0.05	219.03
53	5/12/2004	10:07:12.35	1.11	2.07	3.56	-0.29	0.32	-0.35	0.24	-0.01	-0.11	-0.25	0.49	-0.13	0.48	-0.11	7.29	6.90	14.12	5.70	24.81	21.67	23.11	24.75	10.58	120.58	0.01	0.24	0.00	0.19	-0.01	0.09			0.05	219.13
54	5/12/2004	10:09:12.35	1.13	2.09	3.56	-0.29	0.32	-0.35	0.24	-0.01	-0.11	-0.25	0.50	-0.12	0.46	-0.12	7.28	6.89	14.12	6.74	24.85	21.71	23.16	24.71	10.54	120.61	0.01	0.24	0.00	0.19	-0.01	0.09			0.05	219.23
55	5/12/2004	10:11:12.35	1.13	2.11	3.56	-0.28	0.30	-0.35	0.24	0.00	-0.12	-0.25	0.50	-0.12	0.49	-0.11	7.32	6.93	14.12	6.71	24.90	21.92	23.20	24.84	10.67	120.65	0.02	0.22	0.00	0.19	0.00	0.08			0.05	219.33
56	5/12/2004	10:13:12.35	1.13	2.11	3.63	-0.29	0.32	-0.35	0.24	0.00	-0.11	-0.25	0.50	-0.12	0.47	-0.12	7.28	6.90	14.12	6.47	24.82	21.84	23.12	24.84	10.59	120.68	0.01	0.24	0.00	0.19	0.00	0.09			0.05	219.43
57	5/12/2004	10:15:12.35	1.11	2.09	3.59	-0.28	0.32	-0.35	0.24	0.00	-0.12	-0.25	0.50	-0.13	0.46	-0.13	7.32	6.94	14.12	6.74	24.79	21.80	23.17	24.80	10.47	120.71	0.02	0.24	0.00	0.19	0.00	0.08	5.40	5.60	0.05	219.52
58	5/12/2004	10:17:12.35	1.13	2.11	3.63	-0.28	0.33	-0.35	0.25	-0.01	-0.11	-0.29	0.50	-0.11	0.47	-0.09	7.26	6.88	14.12	7.38	24.87	21.80	23.09	24.80	10.63	120.75	0.02	0.25	0.00	0.20	-0.01	0.09			0.05	219.62
59	5/12/2004	10:19:12.35	1.11	2.07	3.58	-0.29	0.33	-0.37	0.25	-0.01	-0.12	-0.25	0.50	-0.13	0.47	-0.11	7.38	6.99	14.12	8.14	24.91	21.85	23.13	24.93	10.60	120.78	0.01	0.25	-0.03	0.20	-0.01	0.08			0.05	219.72
60	5/12/2004	10:21:12.35	1.11	2.07	3.56	-0.28	0.32	-0.35	0.25	0.00	-0.11	-0.28	0.50	-0.12	0.46	-0.11	7.34	6.95	18.29	9.88	24.91	21.77	23.13	24.85	10.60	120.81	0.02	0.24	0.00	0.20	0.00	0.09			0.05	219.82
61	5/12/2004	10:23:12.35	1.11	1.89	3.39	-0.29	0.32	-0.37	0.26	0.00	-0.12	-0.29	0.50	-0.12	0.46	-0.12	7.35	6.97	18.29	9.87	24.92	21.78	23.15	24.94	10.69	120.85	0.01	0.24	-0.03	0.21	0.00	0.08			0.05	219.92
62	5/12/2004	10:25:12.35	1.11	1.87	3.36	-0.29	0.29	-0.35	0.26	0.00	-0.11	-0.29	0.50	-0.12	0.46	-0.12	7.35	6.97	18.04	10.15	24.92	21.78	23.15	24.94	10.61	120.88	0.01	0.21	0.00	0.21	0.00	0.09			0.05	220.02
63	5/12/2004	10:27:12.35	1.13	1.87	3.37	-0.27	0.29	-0.35	0.26	0.00	-0.12	-0.28	0.49	-0.16	0.46	-0.13	7.31	6.93	18.29	10.24	24.97	22.31	23.19	24.99	10.66	120.91	0.04	0.21	0.00	0.21	0.00	0.08			0.05	220.12
64	5/12/2004	10:29:12.35	1.13	1.89	3.37	-0.29	0.29	-0.35	0.25	0.00	-0.11	-0.29	0.50	-0.12	0.46	-0.12	7.28	6.90	18.29	11.28	25.02	21.95	23.16	24.95	10.71	120.95	0.01	0.21	0.00	0.20	0.00	0.09	5.40	5.80	0.05	220.22
65	5/12/2004	10:31:12.35	1.13	1.85	3.30	-0.28	0.08	-0.35	0.06	0.00	-0.20	-0.29	0.40	-0.12	0.36	-0.14	0.14	0.04	22.22	11.53	24.98	22.56	23.20	25.00	10.75	120.98	0.02	0.00	0.00	0.01	0.00	0.00			0.00	220.31
66	5/12/2004	10:33:12.35	1.13	1.80	3.23	-0.27	0.10	-0.35	0.06	0.01	-0.20	-0.29	0.41	-0.12	0.42	-0.15	0.14	0.04	22.46	10.94	24.98	21.68	23.12	24.84	10.59	121.01	0.04	0.02	0.00	0.01	0.01	0.00			0.00	220.32
67	5/12/2004	10:35:12.35	1.13	1.82	3.23	-0.29	0.10	-0.35	0.06	0.01	-0.20	-0.29	0.42	-0.16	0.42	-0.15	0.14	0.04	22.46	10.96	24.95	21.80	23.17	24.81	10.80	121.05	0.01	0.02	0.00	0.01	0.01	0.00			0.00	220.32
68	5/12/2004	10:37:12.35	1.11	1.82	3.23	-0.28	0.10	-0.35	0.06	0.01	-0.20	-0.29	0.41	-0.13	0.42	-0.14	0.14	0.04	22.22	11.52	24.99	21.85	23.13	24.77	10.68	121.08	0.02	0.02	0.00	0.01	0.01	0.00			0.00	220.32
69	5/12/2004	10:39:12.35	1.11	1.80	3.25	-0.27	0.10	-0.35	0.06	0.00	-0.20	-0.29	0.45	-0.16	0.42	-0.14	0.14	0.04	22.46	10.56	25.03	21.89	23.09	24.64	10.64	121.11	0.04	0.02	0.00	0.01	0.00	0.00			0.00	220.32
70	5/12/2004	10:41:12.35	1.13	1.82	3.23	-0.27	0.08	-0.35	0.07	0.00	-0.20	-0.29	0.45	-0.16	0.42	-0.17	0.14	0.04	22.22	10.49	25.07	21.93	23.22	24.61	10.68	121.15	0.04	0.00	0.00	0.02	0.00	0.00			0.00	220.32
71	5/12/2004	10:43:12.35	1.13	1.82	3.23	-0.27	0.10	-0.35	0.04	0.00	-0.20	-0.29	0.40	-0.16	0.42	-0.14	0.14	0.04	18.29	10.74	25.07	21.93	23.13	24.61	10.68	121.18	0.04	0.02	0.00	-0.01	0.00	0.00			0.00	220.32
72	5/12/2004	10:45:12.35	1.15	1.80	3.23	-0.31	0.08	-0.35	0.06	0.01	-0.22	-0.29	0.40	-0.16	0.42	-0.14	0.14	0.04	18.29	10.37	25.12	21.98	23.26	24.66	10.73	121.21	-0.01	0.00	0.00	0.01	0.01	-0.02			0.00	220.32
73	5/12/2004	10:47:12.35	1.15	1.80	3.23	-0.30	0.10	-0.35	0.06	0.01	-0.20	-0.29	0.41	-0.16	0.42	-0.17	0.14	0.04	18.29	10.66	25.07	21.93	23.13	24.53	10.76	121.25	0.00	0.02	0.00	0.01	0.01	0.00			0.00	220.32
74	5/12/2004	10:49:12.35	1.13	1.82	3.23	-0.30	0.08	-0.35	0.06	0.00	-0.20	-0.29	0.41	-0.16	0.42	-0.14	0.14	0.04	18.29	11.00	25.20	22.62	23.18	24.50	10.73	121.28	0.00	0.00	0.00	0.01	0.00	0.00			0.00	220.32
75	5/12/2004	10:51:12.35	1.15	1.82	3.23	-0.30	0.10	-0.35	0.08	0.01	-0.20	-0.29	0.40	-0.16	0.41	-0.18	0.14	0.04	18.29	10.62	25.20	22.70	23.18	24.50	10.73	121.31	0.00	0.02	0.00	0.03	0.01	0.00			0.00	220.32
76	5/12/2004	10:53:12.35	1.15	1.82	3.23	-0.30	0.10	-0.35	0.07	0.00	-0.20	-0.29	0.41	-0.16	0.42	-0.14	0.14	0.04	18.29	10.80	25.20	22.70	23.26	24.42	10.73	121.35	0.00	0.02	0.00	0.02	0.00	0.00			0.00	220.32
77	5/12/2004	10:55:12.35	1.15	1.82	3.23	-0.29	0.10	-0.35	0.06	0.01	-0.22	-0.29	0.41	-0.16	0.41	-0.15	0.14	0.04	18.29	11.35	25.12	22.70	23.26	24.34	10.73	121.38	0.01	0.02	0.00	0.01	0.01	-0.02			0.00	220.32
78	5/12/2004	10:57:12.35	1.15	1.82	3.23	-0.29	0.08	-0.35	0.06	0.01	-0.20	-0.28	0.41	-0.16	0.42	-0.15	0.14	0.04	18.29	10.40	25.20	22.78	23.26	24.34	10.73	121.41	0.01	0.00	0.00	0.01	0.01	0.00			0.00	220.32
79	5/12/2004	10:59:12.35	1.15	1.82	3.21	-0.30	0.08	-0.35	0.08	0.00	-0.20	-0.29	0.41	-0.16	0.42	-0.15	0.14	0.04	18.29	10.74	25.20	22.78	23.26	24.26	10.73	121.45	0.00	0.00	0.00	0.03	0.00	0.00				220.32

Table H3-3-1. CIX Campaign II, Cycle 3, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					**The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.**																														
						DP1	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**DP7**	**DP8**	**DP9**	**DP10**	**DP11**	**Flow**	**flow**									**DP1**	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**Resin**	**Resin**	**differ-**	**cumul-**
	DATE	**TIME**	**P1**	**P2**	**P3**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**meter**	**cor.**	**Cond1**	**pH**	**T1**	**T2**	**T3**	**T4**	**T5**	**elaps-**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**H1**	**H2**	**ential**	**lative**
	units		**psig**	**psig**	**psig**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**L/hr**	**L/hr**	**mS/cm**		**°C**	**°C**	**°C**	**°C**	**°C**	**ed**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inches**	**inches**	**BV**	**BV**
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	**(hours)**	**water**	**water**	**water**	**water**	**water**	**water**				
1	6/21/2004	16:37:37.34	0.47	-0.20	1.35	0.25	0.22	0.00	0.12	0.07	-0.19	0.76	0.62	1.57	1.47	1.69	0.14	0.03	196.45	11.41	22.30	22.53	22.61	22.40		0.00							6.00	6.50	0.00	0.00
2	6/21/2004	16:43:44.84	1.38	1.05	3.63	0.42	0.35	0.13	0.29	0.15	-0.11	0.80	0.69	1.50	0.93	1.84	7.22	6.83	79.55	11.17	21.53	22.40	22.80	22.67		0.10									0.02	0.15
3	6/21/2004	16:56:04.84	2.03	1.73	4.27	-0.11	0.33	-0.38	0.24	0.12	-0.11	0.82	0.69	1.36	0.59	1.80	7.29	6.90	48.89	12.04	21.73	23.08	22.84	22.71		0.30									0.05	0.75
4	6/21/2004	17:09:04.84	2.03	1.73	4.26	-0.69	0.32	-0.96	0.23	-0.02	-0.11	0.69	0.69	1.02	0.57	1.75	7.36	6.97	48.89	12.18	21.84	23.20	22.87	22.74		0.52									0.05	1.39
5	6/21/2004	17:22:04.84	2.01	1.76	4.22	-1.07	0.32	-1.36	0.25	-0.16	-0.11	0.36	0.66	0.82	0.59	1.73	7.42	7.04	49.41	12.12	21.84	23.20	22.87	22.74		0.74									0.05	2.04
6	6/21/2004	17:35:04.84	1.82	1.58	4.04	-1.46	0.19	-1.75	0.11	-0.29	-0.13	-0.08	0.56	0.62	0.38	1.70	7.50	7.12	57.73	12.03	21.71	22.67	22.51	22.70		0.95									0.05	2.70
7	6/21/2004	17:48:04.84	2.01	1.73	4.24	-1.55	0.01	-1.80	-0.09	-0.23	-0.17	-0.36	0.60	0.52	0.29	1.67	7.50	7.12	53.57	9.80	21.73	22.36	22.27	22.55		1.17									0.05	3.36
8	6/21/2004	18:01:04.84	2.05	1.71	4.26	-1.68	-0.30	-1.93	-0.39	-0.27	-0.24	-0.59	0.53	0.41	0.08	1.65	7.50	7.12	62.40	9.90	21.85	22.24	22.32	22.67		1.39									0.05	4.02
9	6/21/2004	18:14:04.84	2.06	1.71	4.29	-1.78	-0.60	-2.03	-0.69	-0.27	-0.30	-0.82	0.36	0.32	-0.22	1.63	7.52	7.14	79.55	9.59	21.84	22.23	22.31	22.74		1.60									0.05	4.68
10	6/21/2004	18:27:04.84	2.19	1.84	4.42	-1.82	-0.91	-2.08	-1.00	-0.23	-0.38	-0.92	0.16	0.22	-0.46	1.58	7.50	7.12	101.37	12.11	21.68	22.15	22.31	22.66		1.82									0.05	5.34
11	6/21/2004	18:40:04.84	2.27	1.89	4.46	-1.88	-1.17	-2.13	-1.23	-0.23	-0.42	-1.02	-0.11	0.19	-0.72	1.56	7.49	7.11	126.83	10.93	21.85	22.24	22.40	22.51		2.04									0.05	6.00
12	6/21/2004	18:53:04.84	2.34	1.96	4.51	-1.89	-1.38	-2.14	-1.48	-0.23	-0.41	-1.08	-0.38	0.20	-0.85	1.54	7.49	7.11	152.80	9.90	21.81	22.28	22.44	22.31		2.25									0.05	6.65
13	6/21/2004	19:06:04.84	2.39	2.00	4.59	-1.95	-1.54	-2.19	-1.60	-0.23	-0.41	-1.09	-0.62	0.19	-0.94	1.51	7.50	7.12	170.47	10.59	21.85	22.32	22.48	22.27		2.47									0.05	7.32
14	6/21/2004	19:19:04.84	2.47	2.07	4.68	-1.95	-1.67	-2.21	-1.75	-0.23	-0.41	-1.13	-0.80	0.15	-1.01	1.48	7.49	7.11	178.78	11.52	21.85	22.32	22.56	22.19		2.69									0.05	7.97
15	6/21/2004	19:32:04.84	2.56	2.17	4.75	-1.99	-1.78	-2.24	-1.85	-0.23	-0.41	-1.15	-1.02	0.15	-1.04	1.47	7.54	7.16	187.62	11.62	21.97	22.36	22.52	22.15		2.90									0.05	8.63
16	6/21/2004	19:45:04.84	2.72	2.46	4.40	-0.78	-0.45	-0.63	-0.26	-0.10	-0.24	-0.02	-0.04	-0.12	-0.16	0.15	7.88	7.51	191.77	9.99	21.97	23.57	22.60	22.23		3.12									0.05	9.29
17	6/21/2004	19:58:04.84	3.22	2.88	5.41	0.44	0.11	0.41	0.28	0.31	-0.06	0.06	0.07	-0.43	0.13	0.13	7.53	7.15	196.45	9.06	21.76	22.39	22.55	22.18		3.34	0.54	0.31	0.64	0.40	0.37	0.16			0.05	9.70
18	6/21/2004	20:11:04.84	3.24	2.92	5.32	0.41	0.00	0.39	0.14	0.27	-0.13	0.03	-0.02	-0.10	-0.02	0.13	7.51	7.13	196.45	9.01	21.81	22.44	22.60	22.23		3.55	0.51	0.20	0.62	0.26	0.33	0.09			0.05	10.36
19	6/21/2004	20:24:04.84	3.26	2.94	5.34	0.38	-0.06	0.34	0.12	0.27	-0.13	0.02	-0.10	-0.11	-0.02	0.12	7.50	7.12	200.60	9.47	21.73	22.44	22.52	22.23		3.77	0.48	0.14	0.57	0.24	0.33	0.09			0.05	11.02
20	6/21/2004	20:37:04.84	3.29	2.97	5.38	0.37	-0.09	0.33	0.06	0.26	-0.14	0.01	-0.16	-0.11	-0.06	0.13	7.46	7.08	200.60	9.24	21.85	22.40	22.56	22.27		3.99	0.47	0.11	0.56	0.18	0.32	0.08			0.05	11.68
21	6/21/2004	20:50:04.84	3.29	2.99	5.41	0.35	-0.12	0.30	0.02	0.26	-0.16	-0.01	-0.21	-0.12	-0.08	0.13	7.42	7.03	200.60	9.74	21.77	22.49	22.56	22.27		4.20	0.45	0.08	0.53	0.14	0.32	0.07			0.05	12.34
22	6/21/2004	21:03:04.84	3.31	2.99	5.41	0.36	-0.15	0.29	0.01	0.26	-0.16	-0.01	-0.27	-0.16	-0.11	0.13	7.50	7.12	200.60	9.30	21.85	22.40	22.56	22.27		4.42	0.46	0.05	0.52	0.13	0.32	0.07			0.05	13.00
23	6/21/2004	21:16:04.84	3.33	3.01	5.39	0.35	-0.17	0.30	-0.02	0.26	-0.17	-0.02	-0.29	-0.12	-0.12	0.13	7.47	7.09	200.60	9.27	22.06	22.45	22.61	22.32		4.64	0.45	0.03	0.53	0.10	0.32	0.05			0.05	13.66
24	6/21/2004	21:29:04.84	3.31	3.01	5.39	0.35	-0.19	0.30	-0.01	0.26	-0.16	-0.01	-0.35	-0.12	-0.12	0.13	7.50	7.12	200.60	10.20	21.93	22.40	22.56	22.27		4.85	0.45	0.02	0.53	0.11	0.32	0.07			0.05	14.32
25	6/21/2004	21:42:04.84	3.33	3.01	5.43	0.35	-0.19	0.30	-0.06	0.27	-0.16	-0.02	-0.37	-0.12	-0.12	0.13	7.53	7.15	200.60	9.17	22.06	22.45	22.53	22.32		5.07	0.45	0.02	0.53	0.07	0.33	0.07			0.05	14.98
26	6/21/2004	21:55:04.84	3.33	3.01	5.47	0.35	-0.20	0.30	-0.06	0.27	-0.14	-0.02	-0.38	-0.12	-0.12	0.13	7.53	7.15	200.60	9.76	21.98	22.45	22.53	22.32		5.29	0.45	0.00	0.53	0.07	0.33	0.08			0.05	15.63
27	6/21/2004	22:08:04.84	3.33	3.01	5.49	0.35	-0.20	0.30	-0.07	0.27	-0.13	-0.02	-0.41	-0.12	-0.12	0.13	7.52	7.14	200.60	9.01	22.02	22.42	22.49	22.28		5.50	0.45	0.00	0.53	0.05	0.33	0.09			0.05	16.29
28	6/21/2004	22:21:04.84	3.33	3.01	5.43	0.33	-0.20	0.29	-0.08	0.26	-0.12	-0.02	-0.42	-0.12	-0.12	0.13	7.52	7.14	200.60	9.01	21.99	22.46	22.54	22.33		5.72	0.43	0.00	0.52	0.04	0.32	0.10			0.05	16.95
29	6/21/2004	22:34:04.84	3.35	3.03	5.43	0.35	-0.20	0.29	-0.08	0.27	-0.12	-0.01	-0.43	-0.12	-0.12	0.13	7.51	7.13	200.60	9.82	22.07	22.46	22.54	22.33		5.94	0.45	0.00	0.52	0.04	0.33	0.10			0.05	17.61
30	6/21/2004	22:47:04.84	3.37	3.03	5.43	0.35	-0.20	0.30	-0.08	0.27	-0.11	-0.02	-0.43	-0.12	-0.12	0.13	7.54	7.16	200.60	9.23	22.14	22.45	22.53	22.32		6.15	0.45	0.00	0.53	0.04	0.33	0.11			0.05	18.27
31	6/21/2004	23:00:04.84	3.35	3.05	5.47	0.32	-0.19	0.30	-0.09	0.26	-0.11	-0.02	-0.46	-0.12	-0.14	0.13	7.50	7.12	200.60	11.15	22.02	22.42	22.49	22.28		6.37	0.42	0.02	0.53	0.03	0.32	0.11			0.05	18.93
32	6/21/2004	23:13:04.84	3.37	3.05	5.41	0.32	-0.20	0.29	-0.09	0.26	-0.11	-0.02	-0.46	-0.12	-0.14	0.13	7.52	7.14	200.60	9.02	22.15	22.54	22.54	22.33		6.59	0.42	0.00	0.52	0.03	0.32	0.11			0.05	19.59
33	6/21/2004	23:26:04.84	3.35	3.05	5.43	0.33	-0.21	0.29	-0.08	0.26	-0.11	-0.02	-0.46	-0.13	-0.14	0.13	7.50	7.12	201.12	9.96	22.02	22.58	22.57	22.36		6.80	0.43	-0.01	0.52	0.04	0.32	0.11			0.05	20.25
34	6/21/2004	23:39:04.84	3.37	3.05	5.47	0.31	-0.21	0.29	-0.09	0.27	-0.11	-0.02	-0.46	-0.12	-0.14	0.13	7.51	7.13	200.60	9.34	22.15	22.54	22.54	22.33		7.02	0.41	-0.01	0.52	0.03	0.33	0.11			0.05	20.91
35	6/21/2004	23:52:04.84	3.37	3.05	5.45	0.31	-0.21	0.28	-0.09	0.26	-0.11	-0.02	-0.46	-0.12	-0.16	0.13	7.49	7.11	200.60	11.26	22.23	22.54	22.62	22.33		7.24	0.41	-0.01	0.51	0.03	0.32	0.11			0.05	21.57
36	6/22/2004	00:05:04.84	3.37	3.06	5.45	0.31	-0.21	0.29	-0.08	0.27	-0.11	-0.02	-0.46	-0.12	-0.14	0.13	7.48	7.10	200.60	11.41	21.94	22.42	22.49	22.36		7.45	0.41	-0.01	0.52	0.04	0.33	0.11			0.05	22.23
37	6/22/2004	00:18:04.84	3.37	3.06	5.41	0.31	-0.21	0.28	-0.08	0.27	-0.11	-0.02	-0.46	-0.12	-0.16	0.13	7.48	7.10	201.12	9.18	22.15	22.54	22.54	22.33		7.67	0.41	-0.01	0.51	0.04	0.33	0.11			0.05	22.88
38	6/22/2004	00:31:04.84	3.37	3.05	5.41	0.31	-0.21	0.28	-0.09	0.27	-0.11	-0.02	-0.46	-0.12	-0.16	0.13	7.47	7.09	200.60	9.27	22.07	22.54	22.62	22.41		7.89	0.41	-0.01	0.51	0.03	0.33	0.11			0.05	23.54
39	6/22/2004	00:44:04.84	3.37	3.06	5.39	0.30	-0.22	0.28	-0.08	0.27	-0.11	-0.02	-0.47	-0.12	-0.14	0.13	7.51	7.13	200.60	9.55	21.99	22.46	22.46	22.33		8.10	0.40	-0.02	0.51	0.04	0.33	0.11			0.05	24.20
40	6/22/2004	00:57:04.84	3.37	3.06	5.38	0.31	-0.22	0.28	-0.09	0.26	-0.11	-0.03	-0.46	-0.12	-0.16	0.13	7.48	7.10	200.60	10.63	22.07	22.46	22.46	22.33		8.32	0.41	-0.02	0.51	0.03	0.32	0.11			0.05	24.86
41	6/22/2004	01:10:04.84	3.35	3.05	5.45	0.31	-0.22	0.28	-0.09	0.27	-0.11	-0.02	-0.46	-0.12	-0.16	0.13	7.52	7.14	200.60	10.80	22.07	22.54	22.54	22.41		8.54	0.41	-0.02	0.51	0.03	0.33	0.11			0.05	25.52
42	6/22/2004	01:23:04.84	3.35	3.05	5.41	0.30	-0.23	0.28	-0.09	0.26	-0.11	-0.03	-0.47	-0.12	-0.16	0.13	7.47	7.09	200.60	11.47	22.20	22.51	22.58	22.37		8.75	0.40	-0.03	0.51	0.03	0.32	0.11			0.05	26.18
43	6/22/2004	01:36:04.84	3.33	3.05	5.43	0.31	-0.22	0.28	-0.09	0.27	-0.11	-0.02	-0.47	-0.12	-0.16	0.13	7.49	7.11	200.60	9.90	22.07	22.54	22.54	22.33		8.97	0.41	-0.02	0.51	0.03	0.33	0.11			0.05	26.84
44	6/22/2004	01:49:04.84	3.35	3.05	5.39	0.30	-0.23	0.28	-0.10	0.26	-0.12	-0.03	-0.47	-0.12	-0.14	0.13	7.49	7.11	200.60	9.27	22.15	22.54	22.54	22.33		9.19	0.40	-0.03	0.51	0.02	0.32	0.10			0.05	27.50
45	6/22/2004	02:02:04.84	3.35	3.05	5.41	0.30	-0.23	0.28	-0.09	0.26	-0.11	-0.02	-0.47	-0.12	-0.16	0.13	7.50	7.12	200.60	11.02	22.07	22.54	22.54	22.33		9.40	0.40	-0.03	0.51	0.03	0.32	0.11			0.05	28.16
46	6/22/2004	02:15:04.84	3.35	3.05	5.39	0.30	-0.23	0.27	-0.09	0.26	-0.11	-0.02	-0.47	-0.12	-0.16	0.13	7.48	7.10	200.60	9.47	22.07	22.54	22.54	22.33		9.62	0.40	-0.03	0.50	0.03	0.32	0.11			0.05	28.82
47	6/22/2004	02:28:04.84	3.33	3.05	5.39	0.30	-0.23	0.28	-0.10	0.26	-0.11	-0.03	-0.47	-0.11	-0.16	0.13	7.52	7.14	200.60	10.88	22.20	22.59	22.58	22.37		9.84	0.40	-0.03	0.51	0.02	0.32	0.11			0.05	29.48
48	6/22/2004	02:41:04.84	3.35	3.05	5.38	0.30	-0.23	0.28	-0.09	0.26	-0.11	-0.03	-0.48	-0.12	-0.17	0.13	7.50	7.12	200.60	9.41	22.07	22.54	22.54	22.33		10.05	0.40	-0.03	0.51	0.03	0.32	0.11			0.05	30.14
49	6/22/2004	02:54:04.84	3.33	3.03	5.43	0.30	-0.23	0.28	-0.10	0.27	-0.11	-0.03	-0.47	-0.11	-0.17	0.13	7.50	7.12	200.60	9.07	22.15	22.54	22.54	22.33		10.27	0.40	-0.03	0.51	0.02	0.33	0.11			0.05	30.80
50	6/22/2004	03:07:04.84	3.33	3.05	5.39	0.29	-0.25	0.27	-0.12	0.26	-0.11	-0.03	-0.47	-0.12	-0.18	0.12	7.37	6.99	200.60	11.10	22.15	22.54	22.54	22.41		10.49	0.39	-0.05	0.50	0.00	0.32	0.11			0.05	31.45
51	6/22/2004	03:20:04.84	3.33	3.05	5.39	0.30	-0.23	0.28	-0.10	0.27	-0.12	-0.02	-0.48	-0.12	-0.18	0.13	7.48	7.10	201.12	10.49	22.07	22.54	22.54	22.33		10.70	0.40	-0.03	0.51	0.02	0.33	0.10			0.05	32.11
52	6/22/2004	03:33:04.84	3.35	3.05	5.39	0.31	-0.25	0.29	-0.10	0.27	-0.11	-0.02	-0.47	-0.10	-0.18	0.13	7.53	7.15	200.60	9.09	22.15	22.54	22.54	22.33		10.92	0.41	-0.05	0.52	0.02	0.33	0.11			0.05	32.77
53	6/22/2004	03:46:04.84	3.35	3.05	5.41	0.30	-0.26	0.27	-0.12	0.26	-0.11	-0.03	-0.47	-0.11	-0.19	0.13	7.48	7.10	200.60	9.52	21.99	22.54	22.54	22.33		11.14	0.40	-0.06	0.50	0.00	0.32	0.11			0.05	33.43
54	6/22/2004	03:59:04.84	3.33	3.05	5.43	0.30	-0.25	0.28	-0.12	0.26	-0.11	-0.03	-0.47	-0.11	-0.19	0.13	7.51	7.13	200.60	9.25	22.07	22.54	22.54	22.41		11.35	0.40	-0.05	0.51	0.00	0.32	0.11			0.05	34.09
55	6/22/2004	04:12:04.84	3.35	3.05	5.38	0.31	-0.26	0.28	-0.12	0.26	-0.11	-0.03	-0.47	-0.10	-0.19	0.13	7.47	7.09	200.60	10.56	22.15	22.54	22.54	22.33		11.57	0.41	-0.06	0.51	0.00	0.32	0.11			0.05	34.75
56	6/22/2004	04:25:04.84	3.35	3.05	5.39	0.31	-0.25	0.27	-0.12	0.26	-0.09	-0.04	-0.48	-0.10	-0.19	0.13	7.49	7.11	200.60	11.47	22.02	22.42	22.49	22.28		11.79	0.41	-0.05	0.50	0.00	0.32	0.13			0.05	35.41
57	6/22/2004	04:38:04.84	3.35	3.05	5.39	0.30	-0.26	0.28	-0.13	0.26	-0.09	-0.03	-0.47	-0.08	-0.19	0.13	7.50	7.12	200.60	9.25	22.23	22.54	22.54	22.33		12.00	0.40	-0.06	0.51	-0.01	0.32	0.13			0.05	36.07
58	6/22/2004	04:51:04.84	3.35	3.05	5.34	0.31	-0.26	0.28	-0.12	0.26	-0.09	-0.03	-0.47	-0.10	-0.18	0.13	7.53	7.15	200.60	9.86	22.06	22.45	22.45	22.24		12.22	0.41	-0.06	0.51	0.00	0.32	0.13			0.05	36.73
59	6/22/2004	05:04:04.84	3.33	3.05	5.38	0.30	-0.26	0.28	-0.12	0.26	-0.11	-0.03	-0.48	-0.10	-0.19	0.13	7.48	7.10	200.60	9.21	22.23	22.54	22.54	22.33		12.44	0.40	-0.06	0.51	0.00	0.32	0.11			0.05	37.39
60	6/22/2004	05:17:04.84	3.33	3.05	5.38	0.31	-0.26	0.29	-0.12	0.26	-0.09	-0.04	-0.47	-0.10	-0.19	0.13	7.51	7.13	200.60	10.71	22.18	22.50	22.49	22.28		12.65	0.41	-0.06	0.52	0.00	0.32	0.13			0.05	38.05
61	6/22/2004	05:30:04.84	3.33	3.03	5.39	0.30	-0.26	0.27	-0.13	0.26	-0.11	-0.03	-0.47	-0.10	-0.19	0.13	7.52	7.14	200.60	9.18	22.10	22.42	22.49	22.28		12.87	0.40	-0.06	0.50	-0.01	0.32	0.11			0.05	38.70
62	6/22/2004	05:43:04.84	3.33	3.03	5.41	0.30	-0.26	0.27	-0.13	0.25	-0.09	-0.04	-0.48	-0.11	-0.18	0.12	7.45	7.07	201.12	10.22	22.18	22.50	22.49	22.28		13.09	0.40	-0.06	0.50	-0.01	0.31	0.13			0.05	39.36
63	6/22/2004	05:56:04.84	3.35	3.05	5.38	0.31	-0.27	0.28	-0.13	0.26	-0.09	-0.03	-0.47	-0.11	-0.19	0.13	7.52	7.14	200.60	9.27	22.06	22.45	22.45	22.32		13.30	0.41	-0.07	0.51	-0.01	0.32	0.13			0.05	40.02
64	6/22/2004	06:09:04.84	3.33	3.05	5.38	0.31	-0.26	0.29	-0.13	0.27	-0.09	-0.04	-0.48	-0.10	-0.19	0.13	7.52	7.14	200.60	9.10	21.98	22.45	22.45	22.24		13.52	0.41	-0.06	0.52	-0.01	0.33	0.13			0.05	40.68
65	6/22/2004	06:22:04.84	3.33	3.05	5.39	0.31	-0.22	0.28	-0.08	0.27	-0.04	-0.04	-0.48	-0.12	-0.19	0.13	7.54	7.16	196.45	10.53	22.22	22.53	22.53	22.32		13.74	0.41	-0.02	0.51	0.04	0.33	0.18			0.05	41.34
66	6/22/2004	06:35:04.84	3.35	3.05	5.38	0.31	-0.22	0.28	-0.09	0.27	-0.06	-0.06	-0.48	-0.12	-0.19	0.12	7.46	7.08	196.45	10.67	21.97	22.44	22.44	22.23		13.95	0.41	-0.02	0.51	0.03	0.33	0.16			0.05	42.00
67	6/22/2004	06:48:04.84	3.37	3.05	5.38	0.31	-0.21	0.29	-0.08	0.27	-0.06	-0.04	-0.47	-0.13	-0.19	0.13	7.50	7.12	196.45	9.07	22.14	22.37	22.45	22.24		14.17	0.41	-0.01	0.52	0.04	0.33	0.16			0.05	42.66
68	6/22/2004	07:01:04.84	3.35	3.05	5.39	0.31	-0.22	0.29	-0.08	0.28	-0.04	-0.04	-0.46	-0.12	-0.19	0.13	7.54	7.16	196.45	10.02	22.14	22.45	22.45	22.24		14.39	0.41	-0.02	0.52	0.04	0.34	0.18			0.05	43.32
69	6/22/2004	07:14:04.84	3.35	3.06	5.39	0.31	-0.22	0.29	-0.09	0.27	-0.04	-0.04	-0.47	-0.12	-0.18	0.13	7.52	7.14	196.45	10.74	22.23	22.46	22.46	22.25		14.60	0.41	-0.02	0.52	0.03	0.33	0.18			0.05	43.98
70	6/22/2004	07:27:04.84	3.37	3.06	5.41	0.31	-0.22	0.28	-0.06	0.27	-0.04	-0.04	-0.48	-0.12	-0.18	0.13	7.48	7.10	196.45	9.36	22.28	22.51	22.42	22.21		14.82	0.41	-0.02	0.51	0.07	0.33	0.18			0.05	44.64
71	6/22/2004	07:40:04.84	3.37	3.06	5.43	0.32	-0.22	0.29	-0.09	0.27	-0.04	-0.04	-0.47	-0.12	-0.19	0.13	7.48	7.10	196.45	11.49	22.20	22.43	22.50	22.21		15.04	0.42	-0.02	0.52	0.03	0.33	0.18			0.05	45.29
72	6/22/2004	07:53:04.84	3.37	3.06	5.38	0.32	-0.22	0.30	-0.08	0.27	-0.04	-0.06	-0.46	-0.12	-0.18	0.13	7.52	7.14	196.45	10.02	22.38	22.53	22.53	22.32		15.25	0.42	-0.02	0.53	0.04	0.33	0.18			0.05	45.95
73	6/22/2004	08:06:04.84	3.37	3.06	5.36	0.32	-0.23	0.29	-0.09	0.27	-0.04	-0.06	-0.47	-0.13	-0.19	0.13	7.48	7.10	196.45	11.26	22.24	22.47	22.39	22.18		15.47	0.42	-0.03	0.52	0.03	0.33	0.18			0.05	46.61
74	6/22/2004	08:19:04.84	3.37	3.06	5.38	0.31	-0.22	0.29	-0.09	0.28	-0.04	-0.06	-0.47	-0.12	-0.18	0.13	7.53	7.15	196.45	9.13	22.34	22.49	22.41	22.28		15.69	0.41	-0.02	0.52	0.03	0.34	0.18			0.05	47.27
75	6/22/2004	08:32:04.84	3.37	3.06	5.38	0.32	-0.22	0.30	-0.09	0.27	-0.04	-0.06	-0.48	-0.12	-0.19	0.13	7.49	7.11	196.45	9.14	22.25	22.48	22.48	22.27		15.90	0.42	-0.02	0.53	0.03	0.33	0.18			0.05	47.93
76	6/22/2004	08:45:04.84	3.37	3.06	5.38	0.33	-0.22	0.30	-0.09	0.28	-0.04	-0.04	-0.47	-0.12	-0.19	0.13	7.50	7.12	196.45	9.12	22.44	22.51	22.50	22.29		16.12	0.43	-0.02	0.53	0.03	0.34	0.18			0.05	48.59
77	6/22/2004	08:58:04.84	3.37	3.08	5.38	0.33	-0.22	0.29	-0.08	0.27	-0.04	-0.06	-0.47	-0.16	-0.22	0.13	7.51	7.13	196.45	10.16	22.47	22.54	22.46	22.25		16.34	0.43	-0.02	0.52	0.04	0.33	0.18			0.05	49.25
78	6/22/2004	09:11:04.84	3.35	3.08	5.36	0.32	-0.19	0.30	-0.08	0.30	-0.01	-0.06	-0.47	-0.16	-0.22	0.13	7.48	7.10	196.45	9.50	22.47	22.62	22.62	22.33		16.55	0.42	0.02	0.53	0.04	0.36	0.21	5.65	6.20	0.05	49.91
79	6/22/2004	09:24:04.84	3.35	3.08	5.38	0.33	-0.20	0.30	-0.07	0.30	-0.01	-0.04	-0.47	-0.16	-0.22	0.13	7.53	7.15	196.45	9.53	22.56	22.63	22.55	22.34		16.77	0.43	0.00	0.53	0.05	0.36	0.21			0.05	50.57
80	6/22/2004	09:37:04.84	3.37	3.12	5.36	0.33	-0.19	0.29	-0.07	0.31	-0.01	-0.04	-0.47	-0.16	-0.22	0.13	7.46	7.08	196.45	9.08	22.61	22.68	22.67	22.38		16.99	0.43	0.02	0.52	0.05	0.37	0.21			0.05	51.23

Table H3-3-2. CIX Campaign II, Cycle 3, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
81	6/22/2004	09:50:04.84	3.37	3.12	5.41	0.35	-0.19	0.30	-0.06	0.31	-0.01	-0.04	-0.46	-0.16	-0.22	0.13	7.50	7.12	200.60	10.39	22.76	22.67	22.58	22.37		17.20	0.45	0.02	0.53	0.07	0.37	0.21			0.05	51.89
82	6/22/2004	10:03:04.84	3.39	3.12	5.38	0.35	-0.20	0.30	-0.06	0.31	0.01	-0.03	-0.45	-0.16	-0.22	0.14	7.56	7.18	200.60	9.46	22.72	22.63	22.63	22.42		17.42	0.45	0.00	0.53	0.07	0.37	0.23			0.05	52.54
83	6/22/2004	10:16:04.84	3.39	3.12	5.38	0.35	-0.20	0.29	-0.06	0.31	-0.01	-0.03	-0.46	-0.16	-0.23	0.13	7.48	7.10	200.60	9.40	22.77	22.68	22.59	22.46		17.64	0.45	0.00	0.52	0.07	0.37	0.21			0.05	53.20
84	6/22/2004	10:29:04.84	3.18	2.95	5.28	0.66	0.01	0.52	0.06	0.34	-0.12	0.01	0.06	0.00	0.16	0.13	7.28	6.89	200.60	10.99	22.61	22.68	22.67	22.46		17.85	0.76	0.21	0.75	0.18	0.40	0.10			0.05	53.87
85	6/22/2004	10:31:53.84	1.77	1.71	3.30	-0.12	-0.21	-0.28	-0.15	-0.06	-0.28	-0.12	-0.08	-0.26	-0.06	-0.04	0.15	0.04	200.60	10.54	22.77	22.76	22.67	22.46		17.90	-0.02	-0.01	-0.05	-0.03	0.00	-0.06			0.00	53.87
86	6/22/2004	10:34:03.84	0.96	0.88	2.49	-0.09	-0.20	-0.26	-0.12	-0.06	-0.24	-0.12	-0.04	-0.26	-0.06	-0.03	0.14	0.03	200.60	9.25	22.77	22.76	22.67	22.46		17.94	0.01	0.00	-0.03	0.00	0.00	-0.02			0.00	53.87
87	6/22/2004	10:41:13.84	3.37	3.10	5.47	0.68	0.41	0.52	0.47	0.34	0.05	0.07	0.13	-0.01	0.19	0.13	7.44	7.06	200.60	9.19	22.85	22.76	22.67	22.46		18.06	0.68	0.42	0.75	0.49	0.40	0.27			0.05	54.22
88	6/22/2004	10:54:13.84	3.37	3.10	5.45	0.68	0.41	0.53	0.47	0.34	0.05	0.07	0.13	0.00	0.20	0.13	7.46	7.08	200.60	9.36	22.97	22.80	22.72	22.43		18.27	0.68	0.42	0.76	0.49	0.40	0.27			0.05	54.87
89	6/22/2004	11:07:13.84	3.35	3.10	5.45	0.64	0.41	0.53	0.47	0.34	0.04	0.07	0.13	-0.01	0.21	0.13	7.46	7.08	200.60	9.20	23.07	22.82	22.73	22.52		18.49	0.64	0.42	0.76	0.49	0.40	0.26			0.05	55.52
90	6/22/2004	11:20:13.84	3.35	3.12	5.49	0.64	0.41	0.50	0.47	0.34	0.04	0.07	0.14	-0.01	0.21	0.14	7.44	7.06	200.60	9.50	23.08	22.83	22.74	22.53		18.71	0.64	0.42	0.73	0.49	0.40	0.26			0.05	56.18
91	6/22/2004	11:33:13.84	3.35	3.10	5.50	0.65	0.41	0.50	0.49	0.34	0.05	0.08	0.14	0.00	0.21	0.13	7.48	7.10	200.60	11.29	23.25	22.92	22.75	22.63		18.92	0.65	0.42	0.73	0.51	0.40	0.27			0.05	56.83
92	6/22/2004	11:46:13.84	3.35	3.10	5.47	0.64	0.41	0.50	0.47	0.31	0.05	0.08	0.16	0.02	0.21	0.13	7.44	7.06	200.60	9.17	23.42	22.93	22.77	22.64		19.14	0.64	0.42	0.73	0.49	0.37	0.27			0.05	57.49
93	6/22/2004	11:59:13.84	3.35	3.12	5.47	0.66	0.41	0.52	0.47	0.32	0.05	0.07	0.14	0.02	0.21	0.14	7.44	7.06	200.60	9.37	23.64	22.99	22.82	22.61		19.36	0.66	0.42	0.75	0.49	0.38	0.27			0.05	58.14
94	6/22/2004	12:12:13.84	3.33	3.10	5.49	0.66	0.43	0.52	0.47	0.31	0.07	0.08	0.14	0.00	0.21	0.14	7.44	7.06	200.60	9.60	23.69	22.95	22.79	22.66		19.57	0.66	0.44	0.75	0.49	0.37	0.29			0.05	58.79
95	6/22/2004	12:25:13.84	3.33	3.10	5.49	0.68	0.41	0.52	0.49	0.32	0.07	0.08	0.14	0.02	0.22	0.13	7.46	7.08	200.60	9.39	23.91	23.01	22.85	22.72		19.79	0.68	0.42	0.75	0.51	0.38	0.29			0.05	59.45
96	6/22/2004	12:38:13.84	3.33	3.10	5.47	0.66	0.43	0.51	0.49	0.32	0.07	0.07	0.16	0.02	0.22	0.14	7.44	7.06	200.60	9.26	23.87	23.06	22.89	22.68		20.01	0.66	0.44	0.74	0.51	0.38	0.29			0.05	60.10
97	6/22/2004	12:51:13.84	3.33	3.10	5.47	0.68	0.41	0.52	0.49	0.32	0.07	0.08	0.16	0.02	0.21	0.13	7.45	7.07	200.60	9.53	23.96	23.07	22.91	22.78		20.22	0.68	0.42	0.75	0.51	0.38	0.29			0.05	60.76
98	6/22/2004	13:04:13.84	3.33	3.10	5.49	0.68	0.43	0.53	0.49	0.33	0.07	0.08	0.16	0.02	0.22	0.13	7.46	7.08	200.60	9.11	24.09	23.12	22.95	22.82		20.44	0.68	0.44	0.76	0.51	0.39	0.29			0.05	61.41
99	6/22/2004	13:17:13.84	3.33	3.10	5.45	0.66	0.41	0.52	0.47	0.32	0.07	0.08	0.16	0.02	0.22	0.14	7.44	7.06	200.60	10.78	24.06	23.16	23.00	22.87		20.66	0.66	0.42	0.75	0.49	0.38	0.29			0.05	62.07
100	6/22/2004	13:30:13.84	3.31	3.08	5.43	0.68	0.41	0.53	0.45	0.33	0.07	0.06	0.16	0.02	0.21	0.09	7.42	7.04	200.60	9.34	24.10	23.29	23.04	23.00		20.87	0.68	0.42	0.76	0.47	0.39	0.29			0.05	62.72
101	6/22/2004	13:43:13.84	3.31	3.10	5.45	0.68	0.41	0.53	0.45	0.33	0.07	0.04	0.16	0.02	0.21	0.10	7.42	7.03	200.60	10.21	24.10	23.21	23.13	22.92		21.09	0.68	0.42	0.76	0.47	0.39	0.29			0.05	63.38
102	6/22/2004	13:56:13.84	3.31	3.10	5.43	0.68	0.49	0.53	0.46	0.33	0.07	0.06	0.16	-0.02	0.22	0.10	7.44	7.06	200.60	11.65	24.28	23.30	23.14	23.01		21.31	0.68	0.50	0.76	0.48	0.39	0.29			0.05	64.03
103	6/22/2004	14:09:13.84	3.29	3.08	5.47	0.68	0.49	0.53	0.46	0.33	0.03	0.06	0.16	-0.02	0.21	0.10	7.46	7.08	200.60	10.73	24.40	23.27	23.10	23.06		21.52	0.68	0.50	0.76	0.48	0.39	0.25			0.05	64.69
104	6/22/2004	14:22:13.84	3.29	3.08	5.47	0.68	0.50	0.53	0.46	0.33	0.03	0.06	0.16	-0.02	0.21	0.10	7.46	7.08	200.60	10.74	24.40	23.35	23.18	23.14		21.74	0.68	0.51	0.76	0.48	0.39	0.25			0.05	65.34
105	6/22/2004	14:35:13.84	3.28	3.08	5.45	0.65	0.50	0.53	0.46	0.34	0.03	0.06	0.16	-0.02	0.21	0.10	7.46	7.08	200.60	10.01	24.37	23.31	23.23	23.10		21.96	0.65	0.51	0.76	0.48	0.40	0.25			0.05	65.99
106	6/22/2004	14:48:13.84	3.29	3.08	5.45	0.65	0.49	0.50	0.45	0.31	0.03	0.06	0.16	-0.02	0.22	0.10	7.42	7.03	200.60	9.06	24.49	23.44	23.20	23.23		22.17	0.65	0.50	0.73	0.47	0.37	0.25			0.05	66.65
107	6/22/2004	15:01:13.84	3.29	3.08	5.41	0.64	0.50	0.50	0.46	0.31	0.03	0.06	0.16	-0.01	0.22	0.10	7.45	7.07	200.60	10.80	24.29	23.39	23.23	23.18		22.39	0.64	0.51	0.73	0.48	0.37	0.25			0.05	67.30
108	6/22/2004	15:14:13.84	3.29	3.08	5.47	0.65	0.50	0.51	0.45	0.31	0.03	0.06	0.16	-0.01	0.20	0.10	7.44	7.06	200.60	9.13	24.38	23.49	23.24	23.28		22.61	0.65	0.51	0.74	0.47	0.37	0.25			0.05	67.96
109	6/22/2004	15:27:13.84	3.28	3.06	5.47	0.65	0.50	0.50	0.46	0.31	0.03	0.06	0.16	-0.02	0.19	0.10	7.43	7.05	201.12	9.34	24.30	23.41	23.24	23.19		22.82	0.65	0.51	0.73	0.48	0.37	0.25			0.05	68.61
110	6/22/2004	15:40:13.84	3.28	3.08	5.45	0.65	0.46	0.51	0.46	0.32	0.03	0.06	0.16	-0.01	0.19	0.10	7.44	7.06	201.12	9.03	24.43	23.45	23.29	23.32		23.04	0.65	0.47	0.74	0.48	0.38	0.25			0.05	69.27
111	6/22/2004	15:53:13.84	3.28	3.06	5.45	0.65	0.50	0.50	0.46	0.32	0.03	0.06	0.16	-0.02	0.19	0.10	7.48	7.10	200.60	11.51	24.51	23.53	23.37	23.32		23.26	0.65	0.51	0.73	0.48	0.38	0.25			0.05	69.92
112	6/22/2004	16:06:13.84	3.28	3.06	5.45	0.65	0.46	0.51	0.46	0.31	0.03	0.06	0.16	-0.02	0.19	0.10	7.47	7.09	200.60	11.20	24.39	23.58	23.34	23.37		23.47	0.65	0.47	0.74	0.48	0.37	0.25			0.05	70.57
113	6/22/2004	16:19:13.84	3.26	3.06	5.47	0.65	0.46	0.51	0.46	0.32	0.03	0.06	0.16	-0.02	0.19	0.10	7.46	7.08	200.60	9.74	24.57	23.59	23.43	23.38		23.69	0.65	0.47	0.74	0.48	0.38	0.25			0.05	71.23
114	6/22/2004	16:32:13.84	3.26	3.06	5.45	0.65	0.46	0.50	0.46	0.31	0.03	0.06	0.16	-0.02	0.19	0.10	7.44	7.06	200.60	10.69	24.57	23.51	23.35	23.38		23.91	0.65	0.47	0.73	0.48	0.37	0.25			0.05	71.88
115	6/22/2004	16:45:13.84	3.28	3.06	5.45	0.65	0.48	0.51	0.46	0.32	0.03	0.06	0.16	-0.01	0.19	0.10	7.45	7.07	201.12	10.03	24.52	23.47	23.30	23.33		24.12	0.65	0.49	0.74	0.48	0.38	0.25			0.05	72.54
116	6/22/2004	16:58:13.84	3.26	3.06	5.45	0.66	0.48	0.51	0.46	0.33	0.03	0.06	0.12	-0.02	0.19	0.10	7.46	7.08	200.60	9.10	24.52	23.55	23.38	23.41		24.34	0.66	0.49	0.74	0.48	0.39	0.25			0.05	73.19
117	6/22/2004	17:11:13.84	3.24	3.08	5.39	0.64	0.46	0.50	0.45	0.33	0.03	0.06	0.12	-0.02	0.19	0.10	7.46	7.08	200.60	11.38	24.41	23.51	23.35	23.38		24.56	0.64	0.47	0.73	0.47	0.39	0.25	5.60	5.90	0.05	73.84
118	6/22/2004	17:24:13.84	3.24	3.06	5.41	0.65	0.46	0.50	0.45	0.32	0.03	0.06	0.12	-0.02	0.19	0.10	7.46	7.08	200.60	9.18	24.41	23.59	23.43	23.46		24.77	0.65	0.47	0.73	0.47	0.38	0.25			0.05	74.50
119	6/22/2004	17:37:13.84	3.26	3.06	5.41	0.65	0.48	0.51	0.46	0.32	0.03	0.06	0.12	-0.02	0.19	0.10	7.46	7.08	200.60	11.59	24.41	23.59	23.43	23.46		24.99	0.65	0.49	0.74	0.48	0.38	0.25			0.05	75.15
120	6/22/2004	17:50:13.84	3.24	3.08	5.38	0.65	0.46	0.50	0.45	0.33	0.03	0.06	0.13	-0.01	0.19	0.12	7.45	7.07	200.60	10.87	24.28	23.55	23.38	23.41		25.21	0.65	0.47	0.73	0.47	0.39	0.25			0.05	75.81
121	6/22/2004	18:03:13.84	3.24	3.06	5.39	0.65	0.48	0.50	0.45	0.33	0.03	0.06	0.12	-0.02	0.19	0.10	7.44	7.06	200.60	11.63	24.28	23.63	23.46	23.49		25.42	0.65	0.49	0.73	0.47	0.39	0.25			0.05	76.46
122	6/22/2004	18:16:13.84	3.24	3.06	5.41	0.65	0.46	0.50	0.45	0.33	0.03	0.06	0.13	-0.02	0.19	0.10	7.44	7.06	201.12	9.56	24.11	23.45	23.37	23.40		25.64	0.65	0.47	0.73	0.47	0.39	0.25			0.05	77.12
123	6/22/2004	18:29:13.84	3.24	3.06	5.38	0.65	0.48	0.51	0.45	0.33	0.03	0.06	0.12	-0.02	0.19	0.12	7.46	7.08	200.60	10.22	24.07	23.58	23.42	23.53		25.86	0.65	0.49	0.74	0.47	0.39	0.25			0.05	77.77
124	6/22/2004	18:42:13.84	3.24	3.08	5.41	0.65	0.46	0.51	0.45	0.32	0.03	0.06	0.12	-0.02	0.19	0.10	7.44	7.06	200.60	9.95	23.98	23.49	23.40	23.44		26.07	0.65	0.47	0.74	0.47	0.38	0.25			0.05	78.43
125	6/22/2004	18:55:13.84	3.24	3.06	5.41	0.64	0.48	0.51	0.45	0.33	0.03	0.06	0.12	-0.02	0.19	0.10	7.45	7.07	200.60	9.29	23.98	23.49	23.40	23.44		26.29	0.64	0.49	0.74	0.47	0.39	0.25			0.05	79.08
126	6/22/2004	19:08:13.84	3.26	3.06	5.36	0.66	0.46	0.51	0.45	0.33	0.04	0.06	0.12	-0.02	0.18	0.10	7.46	7.08	200.60	9.89	23.93	23.52	23.36	23.47		26.51	0.66	0.47	0.74	0.47	0.39	0.26			0.05	79.74
127	6/22/2004	19:21:13.84	3.26	3.06	5.41	0.66	0.48	0.52	0.46	0.33	0.03	0.06	0.16	-0.01	0.19	0.10	7.46	7.08	200.60	10.02	23.89	23.47	23.31	23.42		26.72	0.66	0.49	0.75	0.48	0.39	0.25			0.05	80.39
128	6/22/2004	19:34:13.84	3.26	3.06	5.39	0.65	0.46	0.50	0.45	0.32	0.03	0.06	0.14	-0.02	0.19	0.10	7.44	7.06	200.60	10.54	23.84	23.43	23.34	23.38		26.94	0.65	0.47	0.73	0.47	0.38	0.25			0.05	81.04
129	6/22/2004	19:47:13.84	3.26	3.06	5.39	0.65	0.48	0.51	0.45	0.31	0.03	0.06	0.16	-0.02	0.19	0.10	7.46	7.08	200.60	10.39	23.83	23.42	23.33	23.44		27.16	0.65	0.49	0.74	0.47	0.37	0.25			0.05	81.70
130	6/22/2004	20:00:13.84	3.26	3.08	5.38	0.64	0.46	0.50	0.44	0.31	0.03	0.06	0.17	-0.02	0.19	0.10	7.48	7.10	200.60	9.03	23.75	23.50	23.33	23.44		27.37	0.64	0.47	0.73	0.46	0.37	0.25			0.05	82.35
131	6/22/2004	20:13:13.84	3.28	3.08	5.38	0.65	0.48	0.51	0.45	0.32	0.03	0.06	0.16	-0.02	0.19	0.10	7.50	7.12	201.12	10.03	23.77	23.44	23.35	23.39		27.59	0.65	0.49	0.74	0.47	0.38	0.25			0.05	83.01
132	6/22/2004	20:26:13.84	3.29	3.08	5.38	0.65	0.50	0.51	0.44	0.34	0.03	0.06	0.16	-0.02	0.19	0.10	7.45	7.07	200.60	9.06	23.63	23.38	23.22	23.33		27.81	0.65	0.51	0.74	0.46	0.40	0.25			0.05	83.66
133	6/22/2004	20:39:13.84	3.29	3.08	5.38	0.69	0.50	0.52	0.45	0.34	0.03	0.06	0.16	-0.02	0.19	0.10	7.46	7.08	200.60	9.51	23.62	23.29	23.28	23.32		28.02	0.69	0.51	0.75	0.47	0.40	0.25			0.05	84.32
134	6/22/2004	20:52:13.84	3.31	3.10	5.36	0.69	0.50	0.53	0.44	0.33	0.03	0.06	0.16	0.02	0.21	0.10	7.42	7.04	200.60	11.70	23.33	23.32	23.32	23.35		28.24	0.69	0.51	0.76	0.46	0.39	0.25			0.05	84.97
135	6/22/2004	21:05:13.84	3.33	3.10	5.36	0.69	0.50	0.53	0.44	0.34	0.03	0.06	0.16	0.00	0.21	0.09	7.44	7.06	200.60	9.11	23.11	23.18	23.18	23.29		28.46	0.69	0.51	0.76	0.46	0.40	0.25			0.05	85.63
136	6/22/2004	21:18:13.84	3.31	3.10	5.38	0.69	0.50	0.53	0.44	0.33	0.03	0.06	0.16	0.02	0.21	0.10	7.45	7.07	200.60	9.30	23.11	23.18	23.26	23.21		28.67	0.69	0.51	0.76	0.46	0.39	0.25			0.05	86.28
137	6/22/2004	21:31:13.84	3.33	3.10	5.34	0.68	0.50	0.53	0.44	0.32	0.05	0.09	0.16	0.02	0.22	0.10	7.48	7.10	200.60	10.94	22.89	23.13	23.12	23.23		28.89	0.68	0.51	0.76	0.46	0.38	0.27			0.05	86.94
138	6/22/2004	21:44:13.84	3.33	3.10	5.36	0.69	0.50	0.53	0.46	0.32	0.05	0.08	0.16	0.02	0.22	0.10	7.42	7.03	200.60	10.17	22.97	23.13	23.12	23.15		29.11	0.69	0.51	0.76	0.48	0.38	0.27			0.05	87.59
139	6/22/2004	21:57:13.84	3.33	3.10	5.34	0.69	0.50	0.53	0.47	0.33	0.05	0.08	0.16	0.02	0.22	0.14	7.45	7.07	200.60	9.76	22.76	23.15	23.06	23.10		29.32	0.69	0.51	0.76	0.49	0.39	0.27			0.05	88.24
140	6/22/2004	22:10:13.84	3.33	3.10	5.36	0.69	0.50	0.53	0.46	0.32	0.05	0.08	0.16	0.02	0.21	0.13	7.45	7.07	200.60	9.28	22.64	22.95	22.95	22.98		29.54	0.69	0.51	0.76	0.48	0.38	0.27			0.05	88.90
141	6/22/2004	22:23:13.84	3.35	3.12	5.32	0.69	0.49	0.53	0.46	0.31	0.04	0.08	0.14	0.02	0.22	0.13	7.42	7.03	200.60	9.34	22.71	23.02	22.94	23.05		29.76	0.69	0.50	0.76	0.48	0.37	0.26			0.05	89.55
142	6/22/2004	22:36:13.84	3.33	3.10	5.36	0.69	0.50	0.53	0.46	0.32	0.04	0.07	0.14	0.02	0.22	0.13	7.43	7.05	200.60	9.27	22.58	22.98	22.89	22.92		29.97	0.69	0.51	0.76	0.48	0.38	0.26			0.05	90.21
143	6/22/2004	22:49:13.84	3.35	3.10	5.34	0.69	0.50	0.53	0.46	0.34	0.04	0.08	0.14	0.02	0.21	0.13	7.45	7.07	200.60	9.24	22.58	22.98	22.89	22.92		30.19	0.69	0.51	0.76	0.48	0.40	0.26			0.05	90.86
144	6/22/2004	23:02:13.84	3.33	3.10	5.32	0.69	0.49	0.53	0.46	0.34	0.04	0.08	0.14	0.00	0.21	0.13	7.44	7.06	200.60	9.90	22.57	22.88	22.88	22.91		30.41	0.69	0.50	0.76	0.48	0.40	0.26			0.05	91.51
145	6/22/2004	23:15:13.84	3.33	3.08	5.34	0.69	0.50	0.53	0.46	0.34	0.04	0.07	0.14	0.00	0.21	0.13	7.42	7.04	200.60	9.19	22.54	22.85	22.85	22.80		30.62	0.69	0.51	0.76	0.48	0.40	0.26			0.05	92.17
146	6/22/2004	23:28:13.84	3.33	3.06	5.38	0.69	0.49	0.57	0.46	0.34	0.03	0.08	0.16	0.02	0.22	0.14	7.42	7.04	200.60	11.36	22.62	22.93	22.93	22.88		30.84	0.69	0.50	0.80	0.48	0.40	0.25			0.05	92.82
147	6/22/2004	23:41:13.84	3.33	3.08	5.32	0.72	0.49	0.57	0.46	0.34	0.04	0.07	0.14	0.02	0.22	0.14	7.45	7.07	200.60	9.17	22.40	22.79	22.79	22.66		31.06	0.72	0.50	0.80	0.48	0.40	0.26			0.05	93.48
148	6/22/2004	23:54:13.84	3.33	3.08	5.36	0.72	0.50	0.57	0.46	0.34	0.04	0.08	0.16	0.02	0.22	0.13	7.42	7.04	200.60	10.32	22.45	22.84	22.75	22.71		31.27	0.72	0.51	0.80	0.48	0.40	0.26			0.05	94.13
149	6/23/2004	00:07:13.84	3.35	3.08	5.36	0.71	0.50	0.57	0.46	0.34	0.04	0.07	0.16	0.02	0.22	0.13	7.44	7.06	200.60	9.16	22.52	22.75	22.74	22.69		31.49	0.71	0.51	0.80	0.48	0.40	0.26			0.05	94.79
150	6/23/2004	00:20:13.84	3.33	3.08	5.36	0.72	0.50	0.57	0.46	0.34	0.04	0.08	0.14	0.02	0.21	0.14	7.45	7.07	200.60	9.14	22.52	22.75	22.66	22.61		31.71	0.72	0.51	0.80	0.48	0.40	0.26			0.05	95.44
151	6/23/2004	00:33:13.84	3.35	3.08	5.36	0.72	0.50	0.57	0.46	0.34	0.03	0.08	0.16	0.02	0.21	0.13	7.46	7.08	200.60	10.04	22.46	22.77	22.77	22.72		31.92	0.72	0.51	0.80	0.48	0.40	0.25			0.05	96.09
152	6/23/2004	00:46:13.84	3.35	3.08	5.34	0.72	0.49	0.57	0.46	0.34	0.03	0.06	0.14	0.02	0.19	0.14	7.44	7.06	200.60	10.84	22.47	22.70	22.70	22.57		32.14	0.72	0.50	0.80	0.48	0.40	0.25			0.05	96.75
153	6/23/2004	00:59:13.84	3.35	3.08	5.30	0.72	0.49	0.57	0.46	0.34	0.02	0.07	0.14	0.02	0.20	0.13	7.44	7.06	200.60	11.03	22.42	22.74	22.65	22.60		32.36	0.72	0.50	0.80	0.48	0.40	0.24			0.05	97.40
154	6/23/2004	01:12:13.84	3.35	3.08	5.34	0.72	0.49	0.58	0.46	0.34	0.04	0.06	0.14	0.02	0.20	0.14	7.47	7.09	200.60	11.63	22.38	22.61	22.69	22.48		32.57	0.72	0.50	0.81	0.48	0.40	0.26			0.05	98.06
155	6/23/2004	01:25:13.84	3.35	3.08	5.34	0.71	0.49	0.57	0.45	0.34	0.02	0.07	0.14	0.02	0.19	0.13	7.42	7.04	200.60	10.61	22.47	22.78	22.70	22.57		32.79	0.71	0.50	0.80	0.47	0.40	0.24			0.05	98.71
156	6/23/2004	01:38:13.84	3.35	3.08	5.32	0.74	0.50	0.60	0.46	0.34	0.04	0.06	0.14	0.02	0.20	0.13	7.46	7.08	200.60	10.03	22.30	22.61	22.61	22.48		33.01	0.74	0.51	0.83	0.48	0.40	0.26			0.05	99.37
157	6/23/2004	01:51:13.84	3.35	3.08	5.36	0.74	0.50	0.58	0.46	0.34	0.04	0.06	0.14	0.05	0.19	0.13	7.43	7.05	200.60	9.48	22.47	22.62	22.62	22.49		33.22	0.74	0.51	0.81	0.48	0.40	0.26			0.05	100.02
158	6/23/2004	02:04:13.84	3.35	3.08	5.34	0.72	0.50	0.58	0.46	0.34	0.03	0.06	0.14	0.04	0.18	0.13	7.46	7.08	200.60	9.77	22.42	22.66	22.65	22.44		33.44	0.72	0.51	0.81	0.48	0.40	0.25			0.05	100.68
159	6/23/2004	02:17:13.84	3.33	3.06	5.34	0.72	0.49	0.58	0.46	0.33	0.03	0.07	0.14	0.05	0.19	0.13	7.43	7.05	201.12	10.50	22.42	22.66	22.57	22.44		33.66	0.72	0.50	0.81	0.48	0.39	0.25			0.05	101.33
160	6/23/2004	02:30:13.84	3.33	3.06	5.34	0.74	0.49	0.60	0.45	0.34	0.03	0.07	0.13	0.05	0.19	0.13	7.44	7.06	200.60	10.64	22.38	22.61	22.61	22.48		33.87	0.74	0.50	0.83	0.47	0.40	0.25			0.05	101.99

Table H3-3-3. CIX Campaign II, Cycle 3, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow			T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ- ential	cumul- lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
161	6/23/2004	02:43:13.84	3.33	3.06	5.30	0.75	0.49	0.61	0.46	0.34	0.04	0.06	0.14	0.05	0.19	0.13	7.48	7.10	200.60	9.09	22.26	22.66	22.57	22.44		34.09	0.75	0.50	0.84	0.48	0.40	0.26			0.05	102.64
162	6/23/2004	02:56:13.84	3.33	3.06	5.32	0.74	0.49	0.60	0.46	0.34	0.03	0.06	0.13	0.05	0.19	0.13	7.42	7.04	200.60	9.25	22.47	22.62	22.62	22.41		34.31	0.74	0.50	0.83	0.48	0.40	0.25			0.05	103.29
163	6/23/2004	03:09:13.84	3.31	3.05	5.30	0.74	0.49	0.60	0.46	0.34	0.02	0.06	0.14	0.05	0.19	0.13	7.43	7.05	200.60	9.48	22.38	22.61	22.53	22.32		34.52	0.74	0.50	0.83	0.48	0.40	0.24			0.05	103.95
164	6/23/2004	03:22:13.84	3.31	3.05	5.34	0.75	0.50	0.61	0.46	0.34	0.03	0.06	0.13	0.05	0.19	0.13	7.45	7.07	200.60	11.64	22.50	22.57	22.57	22.36		34.74	0.75	0.51	0.84	0.48	0.40	0.25			0.05	104.60
165	6/23/2004	03:35:13.84	3.31	3.05	5.32	0.75	0.49	0.61	0.46	0.34	0.03	0.07	0.14	0.05	0.19	0.13	7.48	7.10	200.60	10.71	22.46	22.69	22.61	22.40		34.96	0.75	0.50	0.84	0.48	0.40	0.25			0.05	105.26
166	6/23/2004	03:48:13.84	3.31	3.05	5.30	0.76	0.50	0.62	0.46	0.34	0.03	0.06	0.14	0.05	0.20	0.13	7.48	7.10	200.60	10.10	22.54	22.61	22.53	22.32		35.17	0.76	0.51	0.85	0.48	0.40	0.25			0.05	105.91
167	6/23/2004	04:01:13.84	3.31	3.06	5.34	0.76	0.50	0.62	0.46	0.34	0.03	0.06	0.13	0.05	0.19	0.13	7.48	7.10	200.60	11.55	22.41	22.64	22.56	22.35		35.39	0.76	0.51	0.85	0.48	0.40	0.25			0.05	106.57
168	6/23/2004	04:14:13.84	3.31	3.06	5.30	0.74	0.48	0.60	0.46	0.34	0.02	0.06	0.13	0.05	0.19	0.13	7.40	7.02	200.60	9.61	22.46	22.61	22.53	22.40		35.61	0.74	0.49	0.83	0.48	0.40	0.24			0.05	107.22
169	6/23/2004	04:27:13.84	3.31	3.05	5.30	0.74	0.48	0.61	0.46	0.33	0.03	0.06	0.14	0.05	0.19	0.13	7.44	7.06	200.60	10.45	22.58	22.66	22.57	22.36		35.82	0.74	0.49	0.84	0.48	0.39	0.25			0.05	107.87
170	6/23/2004	04:40:13.84	3.31	3.05	5.32	0.76	0.49	0.61	0.46	0.34	0.03	0.06	0.14	0.05	0.19	0.13	7.49	7.11	200.60	11.21	22.54	22.61	22.61	22.40		36.04	0.76	0.50	0.84	0.48	0.40	0.25			0.05	108.53
171	6/23/2004	04:53:13.84	3.31	3.05	5.32	0.76	0.49	0.62	0.45	0.34	0.03	0.06	0.14	0.05	0.19	0.13	7.48	7.10	200.60	10.74	22.50	22.66	22.57	22.36		36.26	0.76	0.50	0.85	0.47	0.40	0.25			0.05	109.18
172	6/23/2004	05:06:13.84	3.31	3.05	5.28	0.76	0.49	0.62	0.46	0.34	0.03	0.06	0.13	0.04	0.19	0.13	7.44	7.06	200.60	10.54	22.46	22.53	22.53	22.32		36.47	0.76	0.50	0.85	0.48	0.40	0.25			0.05	109.84
173	6/23/2004	05:19:13.84	3.31	3.06	5.30	0.76	0.49	0.61	0.45	0.34	0.03	0.06	0.13	0.05	0.19	0.13	7.46	7.08	200.60	10.43	22.58	22.66	22.57	22.44		36.69	0.76	0.50	0.84	0.47	0.40	0.25			0.05	110.49
174	6/23/2004	05:32:13.84	3.31	3.06	5.30	0.76	0.49	0.62	0.46	0.34	0.03	0.07	0.14	0.05	0.22	0.13	7.45	7.07	200.60	10.23	22.41	22.56	22.56	22.35		36.91	0.76	0.50	0.85	0.48	0.40	0.25			0.05	111.15
175	6/23/2004	05:45:13.84	3.31	3.06	5.30	0.77	0.49	0.62	0.45	0.33	0.02	0.04	0.13	0.05	0.18	0.13	7.42	7.04	200.60	9.12	22.30	22.53	22.53	22.24		37.12	0.77	0.50	0.85	0.47	0.39	0.24			0.05	111.80
176	6/23/2004	05:58:13.84	3.33	3.06	5.28	0.77	0.50	0.62	0.46	0.34	0.03	0.04	0.14	0.05	0.19	0.13	7.45	7.07	200.60	9.30	22.38	22.61	22.53	22.32		37.34	0.77	0.51	0.85	0.48	0.40	0.25			0.05	112.46
177	6/23/2004	06:11:13.84	3.33	3.06	5.30	0.77	0.49	0.62	0.46	0.34	0.03	0.06	0.14	0.05	0.21	0.13	7.46	7.08	200.60	11.83	22.38	22.61	22.53	22.40		37.56	0.77	0.50	0.85	0.48	0.40	0.25			0.05	113.11
178	6/23/2004	06:24:13.84	3.33	3.06	5.30	0.77	0.49	0.62	0.45	0.34	0.02	0.06	0.14	0.05	0.21	0.13	7.44	7.06	200.60	9.16	22.42	22.57	22.49	22.36		37.77	0.77	0.50	0.85	0.47	0.40	0.24			0.05	113.76
179	6/23/2004	06:37:13.84	3.33	3.06	5.30	0.77	0.48	0.62	0.45	0.34	0.02	0.06	0.13	0.05	0.19	0.13	7.46	7.08	200.60	10.10	22.33	22.48	22.48	22.35		37.99	0.77	0.49	0.85	0.47	0.40	0.24			0.05	114.42
180	6/23/2004	06:50:13.84	3.35	3.08	5.30	0.77	0.49	0.63	0.46	0.34	0.03	0.07	0.14	0.05	0.21	0.13	7.44	7.06	200.60	10.92	22.47	22.62	22.54	22.33		38.21	0.77	0.50	0.86	0.48	0.40	0.25			0.05	115.07
181	6/23/2004	07:03:13.84	3.33	3.08	5.28	0.70	0.50	0.56	0.45	0.34	0.04	0.04	0.12	0.02	0.22	0.13	7.48	7.10	200.60	9.43	22.38	22.61	22.53	22.32		38.42	0.70	0.51	0.79	0.47	0.40	0.26			0.05	115.73
182	6/23/2004	07:16:13.84	3.33	3.08	5.30	0.70	0.49	0.55	0.46	0.34	0.03	0.06	0.13	0.02	0.22	0.13	7.46	7.08	200.60	9.73	22.42	22.57	22.57	22.36		38.64	0.70	0.50	0.78	0.48	0.40	0.25			0.05	116.38
183	6/23/2004	07:29:13.84	3.33	3.08	5.27	0.71	0.49	0.56	0.45	0.34	0.03	0.04	0.14	0.02	0.21	0.13	7.42	7.03	200.60	9.78	22.46	22.61	22.53	22.40		38.86	0.71	0.50	0.79	0.47	0.40	0.25			0.05	117.04
184	6/23/2004	07:42:13.84	3.35	3.08	5.25	0.71	0.50	0.57	0.46	0.34	0.04	0.04	0.14	0.02	0.22	0.13	7.46	7.08	201.12	10.87	22.38	22.61	22.53	22.32		39.07	0.71	0.51	0.80	0.48	0.40	0.26			0.05	117.69
185	6/23/2004	07:55:13.84	3.35	3.08	5.27	0.71	0.49	0.57	0.45	0.34	0.03	0.04	0.14	0.02	0.22	0.13	7.44	7.06	200.60	9.18	22.42	22.57	22.49	22.28		39.29	0.71	0.50	0.80	0.47	0.40	0.25			0.05	118.35
186	6/23/2004	08:08:13.84	3.33	3.08	5.28	0.71	0.49	0.56	0.45	0.34	0.03	0.04	0.13	0.02	0.20	0.13	7.42	7.04	200.60	9.15	22.26	22.57	22.57	22.36		39.51	0.71	0.50	0.79	0.47	0.40	0.25			0.05	119.00
187	6/23/2004	08:21:13.84	3.33	3.08	5.28	0.72	0.49	0.56	0.46	0.34	0.03	0.04	0.13	0.02	0.22	0.13	7.44	7.06	200.60	9.30	22.42	22.66	22.57	22.36		39.72	0.72	0.50	0.79	0.48	0.40	0.25			0.05	119.65
188	6/23/2004	08:34:13.84	3.35	3.08	5.25	0.72	0.49	0.57	0.46	0.34	0.04	0.06	0.14	0.02	0.19	0.13	7.47	7.09	200.60	9.30	22.39	22.70	22.62	22.41		39.94	0.72	0.50	0.80	0.48	0.40	0.26			0.05	120.31
189	6/23/2004	08:47:13.84	3.35	3.08	5.27	0.72	0.49	0.58	0.46	0.34	0.04	0.04	0.13	0.02	0.22	0.13	7.45	7.07	200.60	9.94	22.38	22.61	22.53	22.32		40.16	0.72	0.50	0.81	0.48	0.40	0.26			0.05	120.96
190	6/23/2004	08:55:03.84	2.21	2.15	3.78	-0.13	-0.10	-0.31	-0.21	-0.07	-0.34	-0.18	-0.04	-0.27	-0.12	-0.07	0.15	0.04	200.60	11.14	22.47	22.62	22.54	22.33		40.29	0.00	0.11	0.02	0.01	0.01	0.00			0.00	121.27
191	6/23/2004	08:57:13.84	0.81	0.73	2.40	-0.09	-0.11	-0.31	-0.21	-0.06	-0.30	-0.15	-0.02	-0.23	-0.08	-0.03	0.14	0.03	200.60	11.29	22.44	22.59	22.50	22.29		40.32	0.04	0.10	0.02	0.01	0.02	0.04			0.00	121.27
192	6/23/2004	08:59:23.84	2.01	1.76	4.09	0.75	0.61	0.57	0.53	0.34	0.10	-0.02	0.06	0.02	0.19	0.13	7.32	6.93	200.60	9.12	22.44	22.51	22.50	22.29		40.36	0.88	0.82	0.90	0.75	0.42	0.44			0.01	121.31
193	6/23/2004	09:09:03.84	3.33	3.08	5.43	0.77	0.57	0.58	0.49	0.33	0.07	0.04	0.16	0.02	0.21	0.13	7.43	7.05	200.60	9.27	22.56	22.63	22.55	22.34		40.52	0.90	0.78	0.91	0.71	0.41	0.41			0.05	121.80
194	6/23/2004	09:22:03.84	3.33	3.10	5.43	0.77	0.57	0.60	0.49	0.33	0.05	0.06	0.16	0.02	0.22	0.13	7.46	7.08	201.12	9.94	22.61	22.68	22.59	22.38		40.74	0.90	0.78	0.93	0.71	0.41	0.39			0.05	122.45
195	6/23/2004	09:35:03.84	3.33	3.08	5.39	0.74	0.56	0.58	0.47	0.33	0.05	0.04	0.16	0.02	0.22	0.13	7.37	6.99	200.60	9.49	22.81	22.72	22.64	22.43		40.95	0.87	0.77	0.91	0.69	0.41	0.39			0.05	123.10
196	6/23/2004	09:48:03.84	3.31	3.08	5.32	0.72	0.57	0.56	0.47	0.34	0.05	0.06	0.16	0.02	0.21	0.13	7.37	6.99	200.60	9.12	22.72	22.71	22.55	22.34		41.17	0.85	0.78	0.89	0.69	0.42	0.39			0.05	123.75
197	6/23/2004	10:01:03.84	3.31	3.08	5.32	0.75	0.57	0.57	0.49	0.34	0.07	0.06	0.16	0.02	0.22	0.14	7.40	7.01	200.60	9.16	22.83	22.73	22.65	22.44		41.39	0.88	0.78	0.90	0.71	0.42	0.41			0.05	124.40
198	6/23/2004	10:14:03.84	3.31	3.08	5.27	0.75	0.57	0.58	0.49	0.34	0.07	0.07	0.16	0.00	0.22	0.13	7.40	7.02	200.60	10.32	22.91	22.82	22.73	22.44		41.60	0.88	0.78	0.91	0.71	0.42	0.41			0.05	125.05
199	6/23/2004	10:27:03.84	3.31	3.08	5.32	0.74	0.57	0.60	0.49	0.34	0.07	0.06	0.16	0.02	0.22	0.13	7.41	7.03	200.60	11.23	22.99	22.73	22.65	22.44		41.82	0.87	0.78	0.93	0.71	0.42	0.41			0.05	125.70
200	6/23/2004	10:40:03.84	3.31	3.08	5.28	0.72	0.57	0.56	0.49	0.34	0.05	0.06	0.16	0.02	0.21	0.14	7.43	7.05	200.60	9.80	23.00	22.91	22.82	22.53		42.04	0.85	0.78	0.89	0.71	0.42	0.39			0.05	126.35
201	6/23/2004	10:53:03.84	3.31	3.08	5.27	0.74	0.57	0.57	0.49	0.33	0.07	0.07	0.16	0.02	0.21	0.13	7.40	7.02	200.60	9.28	23.04	22.87	22.79	22.58		42.25	0.87	0.78	0.90	0.71	0.41	0.41			0.05	127.00
202	6/23/2004	11:06:03.84	3.31	3.08	5.28	0.74	0.57	0.56	0.49	0.31	0.07	0.07	0.16	0.02	0.21	0.13	7.38	6.99	200.60	11.70	23.12	22.95	22.87	22.58		42.47	0.87	0.78	0.89	0.71	0.39	0.41			0.05	127.65
203	6/23/2004	11:19:03.84	3.29	3.08	5.23	0.75	0.57	0.57	0.47	0.31	0.05	0.07	0.16	0.02	0.21	0.13	7.39	7.01	200.60	9.11	23.02	22.93	22.85	22.56		42.69	0.88	0.78	0.90	0.69	0.39	0.39			0.05	128.29
204	6/23/2004	11:32:03.84	3.31	3.10	5.27	0.75	0.56	0.57	0.49	0.32	0.07	0.07	0.16	0.02	0.22	0.13	7.40	7.02	200.60	11.18	23.19	23.02	22.86	22.65		42.90	0.88	0.77	0.90	0.71	0.40	0.41			0.05	128.94
205	6/23/2004	11:45:03.84	3.29	3.08	5.27	0.77	0.59	0.60	0.50	0.32	0.07	0.08	0.16	0.02	0.22	0.13	7.40	7.02	200.60	10.23	23.32	22.99	22.90	22.70		43.12	0.90	0.80	0.93	0.72	0.40	0.41	5.60	5.90	0.05	129.59
206	6/23/2004	11:58:03.84	3.04	2.83	4.97	0.74	0.59	0.56	0.51	0.33	0.08	0.02	0.07	0.00	0.19	0.14	7.12	6.73	200.60	9.14	23.32	23.07	22.90	22.70		43.34	0.87	0.80	0.89	0.73	0.41	0.42			0.05	130.24
207	6/23/2004	12:11:03.84	3.28	3.08	5.30	0.75	0.57	0.58	0.50	0.31	0.07	0.08	0.16	0.02	0.22	0.13	7.38	6.99	200.60	9.15	23.45	23.03	22.95	22.74		43.55	0.88	0.78	0.91	0.72	0.39	0.41			0.05	130.89
208	6/23/2004	12:24:03.84	3.28	3.08	5.30	0.77	0.57	0.60	0.50	0.32	0.05	0.08	0.16	0.02	0.21	0.13	7.40	7.02	200.60	10.31	23.78	23.13	22.96	22.75		43.77	0.90	0.78	0.93	0.72	0.40	0.39			0.05	131.54
209	6/23/2004	12:37:03.84	3.28	3.08	5.27	0.77	0.57	0.60	0.49	0.33	0.05	0.08	0.16	0.02	0.21	0.13	7.37	6.99	200.60	11.30	23.87	23.14	22.97	22.85		43.99	0.90	0.78	0.93	0.71	0.41	0.39			0.05	132.19
210	6/23/2004	12:50:03.84	3.28	3.08	5.32	0.77	0.59	0.60	0.46	0.33	0.07	0.08	0.16	0.02	0.22	0.10	7.41	7.03	200.60	10.75	24.00	23.18	23.02	22.81		44.20	0.90	0.80	0.93	0.68	0.41	0.41			0.05	132.84
211	6/23/2004	13:03:03.84	3.28	3.08	5.28	0.79	0.59	0.61	0.47	0.34	0.07	0.04	0.17	0.02	0.21	0.10	7.42	7.03	200.60	9.30	23.87	23.14	22.97	22.85		44.42	0.92	0.80	0.94	0.69	0.42	0.41			0.05	133.49
212	6/23/2004	13:16:03.84	3.28	3.08	5.27	0.79	0.57	0.60	0.46	0.33	0.07	0.04	0.16	0.02	0.21	0.10	7.37	6.99	200.60	9.07	23.95	23.22	23.05	22.93		44.64	0.92	0.78	0.93	0.68	0.41	0.41			0.05	134.14
213	6/23/2004	13:29:03.84	3.28	3.08	5.28	0.79	0.59	0.61	0.46	0.34	0.04	0.06	0.16	0.02	0.22	0.09	7.41	7.03	200.60	9.17	23.92	23.18	23.10	22.97		44.85	0.92	0.80	0.94	0.68	0.42	0.38			0.05	134.79
214	6/23/2004	13:42:03.84	3.28	3.08	5.28	0.79	0.57	0.61	0.47	0.34	0.03	0.06	0.16	0.02	0.21	0.10	7.40	7.02	200.60	9.42	24.26	23.29	23.21	23.08		45.07	0.92	0.78	0.94	0.69	0.42	0.37			0.05	135.44
215	6/23/2004	13:55:03.84	3.26	3.06	5.27	0.79	0.59	0.62	0.47	0.34	0.03	0.06	0.16	-0.02	0.22	0.10	7.41	7.03	200.60	9.84	24.39	23.34	23.17	23.04		45.29	0.92	0.80	0.95	0.69	0.42	0.37			0.05	136.09
216	6/23/2004	14:08:03.84	3.26	3.06	5.25	0.76	0.46	0.62	0.47	0.34	0.03	0.04	0.16	-0.02	0.21	0.10	7.37	6.99	200.60	11.20	24.44	23.30	23.22	23.09		45.50	0.89	0.67	0.95	0.69	0.42	0.37			0.05	136.74
217	6/23/2004	14:21:03.84	3.26	3.08	5.25	0.76	0.48	0.62	0.47	0.34	0.03	0.04	0.16	-0.02	0.19	0.10	7.41	7.03	200.60	10.19	24.44	23.38	23.22	23.09		45.72	0.89	0.69	0.95	0.69	0.42	0.37			0.05	137.38
218	6/23/2004	14:34:03.84	3.24	3.08	5.27	0.76	0.46	0.58	0.46	0.34	0.03	0.06	0.17	-0.01	0.19	0.09	7.39	7.01	201.12	10.69	24.31	23.34	23.25	23.12		45.94	0.89	0.67	0.91	0.68	0.42	0.37			0.05	138.03
219	6/23/2004	14:47:03.84	3.26	3.08	5.23	0.77	0.46	0.60	0.47	0.36	0.03	0.06	0.17	-0.01	0.21	0.10	7.38	7.00	200.60	11.64	24.23	23.42	23.25	23.12		46.15	0.90	0.67	0.93	0.69	0.44	0.37			0.05	138.69
220	6/23/2004	15:00:03.84	3.26	3.06	5.27	0.79	0.46	0.61	0.49	0.36	0.03	0.06	0.16	0.00	0.19	0.10	7.42	7.04	200.60	9.07	24.36	23.46	23.22	23.17		46.37	0.92	0.67	0.94	0.71	0.44	0.37			0.05	139.34

Table H3-3-4. CIX Campaign II, Cycle 3, LAW Treatment

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero.
The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE units	TIME	P1 psig	P2 psig	P3 psig	DP1 inch water	DP2 inch water	DP3 inch water	DP4 inch water	DP5 inch water	DP6 inch water	DP7 inch water	DP8 inch water	DP9 inch water	DP10 inch water	DP11 inch water	Flow meter L/hr	flow cor. L/hr	Cond1 mS/cm	pH	T1 °C	T2 °C	T3 °C	T4 °C	T5 °C	elaps-ed (hours)	DP1 cor. inch water	DP2 cor. inch water	DP3 cor. inch water	DP4 cor. inch water	DP5 cor. inch water	DP6 cor. inch water	Resin H1 inches	Resin H2 inches	differ-ential BV	cumul-lative BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
221	6/23/2004	15:13:03.84	3.24	3.06	5.28	0.77	0.46	0.60	0.47	0.31	0.03	0.06	0.17	0.00	0.19	0.10	7.38	7.00	200.60	10.48	24.32	23.43	23.26	23.22		46.59	0.90	0.67	0.93	0.69	0.39	0.37			0.05	139.98
222	6/23/2004	15:26:03.84	3.24	3.06	5.30	0.79	0.44	0.62	0.47	0.31	0.03	0.04	0.17	0.00	0.19	0.10	7.36	6.98	200.60	9.17	24.37	23.56	23.31	23.26		46.80	0.92	0.65	0.95	0.69	0.39	0.37			0.05	140.63
223	6/23/2004	15:39:03.84	3.24	3.06	5.25	0.80	0.43	0.62	0.49	0.32	0.03	0.06	0.16	0.00	0.19	0.10	7.41	7.03	201.12	9.32	24.45	23.47	23.31	23.34		47.02	0.93	0.64	0.95	0.71	0.40	0.37			0.05	141.28
224	6/23/2004	15:52:03.84	3.22	3.06	5.27	0.80	0.44	0.63	0.47	0.32	0.03	0.06	0.17	0.02	0.18	0.10	7.40	7.02	200.60	9.20	24.24	23.43	23.26	23.30		47.24	0.93	0.65	0.96	0.69	0.40	0.37			0.05	141.93
225	6/23/2004	16:05:03.84	3.24	3.06	5.27	0.81	0.44	0.64	0.47	0.33	0.03	0.06	0.17	0.02	0.19	0.10	7.42	7.03	200.60	9.64	24.33	23.44	23.36	23.31		47.45	0.94	0.65	0.97	0.69	0.41	0.37			0.05	142.58
226	6/23/2004	16:18:03.84	3.24	3.05	5.28	0.80	0.43	0.62	0.47	0.31	0.03	0.06	0.16	0.02	0.19	0.10	7.36	6.98	200.60	10.04	24.37	23.47	23.31	23.34		47.67	0.93	0.64	0.95	0.69	0.39	0.37			0.05	143.23
227	6/23/2004	16:31:03.84	3.22	3.06	5.28	0.81	0.43	0.63	0.47	0.32	0.03	0.06	0.17	0.02	0.19	0.10	7.42	7.03	200.60	11.39	24.29	23.47	23.31	23.34		47.89	0.94	0.64	0.96	0.69	0.40	0.37			0.05	143.88
228	6/23/2004	16:44:03.84	3.22	3.06	5.23	0.81	0.44	0.64	0.49	0.32	0.04	0.06	0.13	0.02	0.19	0.10	7.37	6.99	200.60	10.75	24.38	23.57	23.40	23.44		48.10	0.94	0.65	0.97	0.71	0.40	0.38			0.05	144.53
229	6/23/2004	16:57:03.84	3.24	3.06	5.28	0.82	0.48	0.66	0.49	0.33	0.03	0.06	0.13	0.02	0.19	0.10	7.40	7.01	200.60	11.14	24.38	23.57	23.40	23.36		48.32	0.95	0.69	0.99	0.71	0.41	0.37			0.05	145.18
230	6/23/2004	17:10:03.84	3.22	3.06	5.25	0.74	0.49	0.57	0.49	0.33	0.03	0.06	0.13	0.00	0.19	0.10	7.41	7.03	200.60	10.27	24.22	23.49	23.32	23.36		48.54	0.87	0.70	0.90	0.71	0.41	0.37			0.05	145.84
231	6/23/2004	17:23:03.84	3.22	3.05	5.28	0.75	0.48	0.57	0.50	0.33	0.04	0.06	0.13	-0.01	0.19	0.10	7.39	7.01	200.60	9.08	24.14	23.49	23.32	23.36		48.75	0.88	0.69	0.90	0.72	0.41	0.38			0.05	146.49
232	6/23/2004	17:36:03.84	3.24	3.05	5.23	0.75	0.48	0.57	0.49	0.34	0.03	0.06	0.14	0.00	0.19	0.12	7.40	7.01	200.60	9.35	24.22	23.49	23.40	23.36		48.97	0.88	0.69	0.90	0.71	0.42	0.37			0.05	147.14
233	6/23/2004	17:49:03.84	3.22	3.06	5.27	0.76	0.48	0.58	0.50	0.33	0.03	0.06	0.13	0.02	0.19	0.10	7.42	7.03	200.60	9.10	24.14	23.41	23.40	23.36		49.19	0.89	0.69	0.91	0.72	0.41	0.37			0.05	147.79
234	6/23/2004	18:02:03.84	3.24	3.06	5.28	0.76	0.49	0.60	0.49	0.33	0.03	0.04	0.13	0.02	0.19	0.10	7.40	7.01	200.60	9.29	24.09	23.52	23.36	23.39		49.40	0.89	0.70	0.93	0.71	0.41	0.37			0.05	148.44
235	6/23/2004	18:15:03.84	3.22	3.05	5.28	0.77	0.49	0.60	0.49	0.33	0.04	0.06	0.13	0.02	0.19	0.10	7.40	7.02	200.60	10.44	24.06	23.49	23.40	23.44		49.62	0.90	0.70	0.93	0.71	0.41	0.38			0.05	149.09
236	6/23/2004	18:28:03.84	3.22	3.05	5.27	0.77	0.49	0.60	0.50	0.33	0.04	0.04	0.13	0.02	0.19	0.10	7.40	7.01	200.60	11.64	24.30	23.57	23.40	23.44		49.84	0.90	0.70	0.93	0.72	0.41	0.38			0.05	149.74
237	6/23/2004	18:41:03.84	3.22	3.06	5.27	0.77	0.48	0.61	0.49	0.32	0.03	0.04	0.12	0.00	0.19	0.12	7.40	7.01	200.60	10.81	24.17	23.44	23.44	23.39		50.05	0.90	0.69	0.94	0.71	0.40	0.37			0.05	150.39
238	6/23/2004	18:54:03.84	3.24	3.06	5.28	0.79	0.48	0.60	0.50	0.31	0.03	0.06	0.13	0.00	0.19	0.10	7.37	6.99	200.60	9.25	24.05	23.47	23.39	23.42		50.27	0.92	0.69	0.93	0.72	0.39	0.37			0.05	151.04
239	6/23/2004	19:07:03.84	3.24	3.06	5.30	0.80	0.48	0.62	0.49	0.33	0.04	0.06	0.13	0.02	0.19	0.10	7.42	7.04	201.12	9.10	23.97	23.47	23.39	23.42		50.49	0.93	0.69	0.95	0.71	0.41	0.38			0.05	151.69
240	6/23/2004	19:20:03.84	3.26	3.06	5.23	0.81	0.49	0.63	0.50	0.32	0.03	0.06	0.14	0.02	0.19	0.10	7.42	7.04	200.60	10.86	23.86	23.37	23.29	23.32		50.70	0.94	0.70	0.96	0.72	0.40	0.37			0.05	152.34
241	6/23/2004	19:33:03.84	3.24	3.06	5.28	0.79	0.48	0.62	0.49	0.34	0.03	0.06	0.17	0.00	0.19	0.09	7.39	7.01	200.60	9.16	23.78	23.45	23.29	23.40		50.92	0.92	0.69	0.95	0.71	0.42	0.37			0.05	152.99
242	6/23/2004	19:46:03.84	3.26	3.06	5.25	0.80	0.48	0.62	0.50	0.34	0.03	0.06	0.17	0.00	0.19	0.10	7.39	7.01	200.60	9.08	23.77	23.36	23.35	23.39		51.14	0.93	0.69	0.95	0.72	0.42	0.37			0.05	153.63
243	6/23/2004	19:59:03.84	3.28	3.06	5.25	0.83	0.51	0.66	0.47	0.34	0.03	0.06	0.17	0.02	0.19	0.10	7.40	7.01	200.60	11.47	23.66	23.33	23.33	23.28		51.35	0.96	0.72	0.99	0.69	0.42	0.37			0.05	154.28
244	6/23/2004	20:12:03.84	3.28	3.08	5.23	0.85	0.51	0.68	0.50	0.36	0.03	0.04	0.17	0.03	0.21	0.10	7.44	7.06	200.60	10.80	23.41	23.32	23.24	23.27		51.57	0.98	0.72	1.01	0.72	0.44	0.37			0.05	154.93
245	6/23/2004	20:25:03.84	3.29	3.08	5.25	0.86	0.52	0.68	0.47	0.34	0.03	0.06	0.17	0.03	0.22	0.10	7.42	7.04	200.60	9.70	23.27	23.26	23.26	23.29		51.79	0.99	0.73	1.01	0.69	0.42	0.37			0.05	155.58
246	6/23/2004	20:38:03.84	3.29	3.08	5.21	0.83	0.50	0.67	0.47	0.33	0.03	0.06	0.16	0.00	0.21	0.10	7.39	7.01	200.60	10.12	23.30	23.21	23.20	23.23		52.00	0.96	0.71	1.00	0.69	0.41	0.37			0.05	156.23
247	6/23/2004	20:51:03.84	3.29	3.08	5.21	0.85	0.51	0.68	0.47	0.33	0.07	0.08	0.17	0.02	0.21	0.10	7.36	6.98	200.60	9.19	23.14	23.13	23.12	23.15		52.22	0.98	0.72	1.01	0.69	0.41	0.41			0.05	156.88
248	6/23/2004	21:04:03.84	3.29	3.08	5.25	0.85	0.51	0.68	0.49	0.32	0.05	0.08	0.16	0.00	0.22	0.12	7.41	7.03	200.60	11.50	23.09	23.16	23.08	23.11		52.44	0.98	0.72	1.01	0.71	0.40	0.39			0.05	157.53
249	6/23/2004	21:17:03.84	3.31	3.08	5.25	0.85	0.51	0.69	0.50	0.32	0.07	0.08	0.17	0.02	0.21	0.13	7.40	7.02	200.60	9.87	23.04	23.11	23.03	23.14		52.65	0.98	0.72	1.02	0.72	0.40	0.41			0.05	158.18
250	6/23/2004	21:30:03.84	3.31	3.08	5.27	0.85	0.51	0.68	0.51	0.32	0.07	0.08	0.16	0.02	0.21	0.13	7.41	7.03	200.60	10.16	22.95	23.02	23.02	23.05		52.87	0.98	0.72	1.01	0.73	0.40	0.41			0.05	158.83
251	6/23/2004	21:43:03.84	3.33	3.10	5.27	0.85	0.51	0.68	0.51	0.32	0.07	0.08	0.16	0.02	0.22	0.13	7.43	7.05	200.60	10.14	22.99	23.06	22.97	22.92		53.09	0.98	0.72	1.01	0.73	0.40	0.41			0.05	159.48
252	6/23/2004	21:56:03.84	3.33	3.08	5.25	0.85	0.51	0.69	0.50	0.32	0.05	0.08	0.16	0.02	0.21	0.13	7.40	7.02	200.60	10.50	22.73	22.96	22.96	22.99		53.30	0.98	0.72	1.02	0.72	0.40	0.39			0.05	160.13
253	6/23/2004	22:09:03.84	3.33	3.10	5.25	0.86	0.51	0.69	0.50	0.36	0.07	0.07	0.16	0.02	0.22	0.13	7.40	7.02	201.12	10.65	22.73	22.88	22.88	22.91		53.52	0.99	0.72	1.02	0.72	0.44	0.41			0.05	160.78
254	6/23/2004	22:22:03.84	3.33	3.08	5.25	0.86	0.50	0.73	0.49	0.34	0.05	0.08	0.16	0.00	0.21	0.13	7.39	7.01	200.60	10.18	22.70	22.93	22.93	22.96		53.74	0.99	0.71	1.06	0.71	0.42	0.39			0.05	161.43
255	6/23/2004	22:35:03.84	3.31	3.08	5.21	0.88	0.49	0.71	0.49	0.34	0.05	0.07	0.16	0.02	0.21	0.13	7.32	6.94	201.12	9.48	22.53	22.76	22.75	22.71		53.95	1.01	0.70	1.04	0.71	0.42	0.39			0.05	162.08
256	6/23/2004	22:48:03.84	3.31	3.08	5.21	0.88	0.50	0.73	0.50	0.34	0.05	0.07	0.16	0.02	0.22	0.14	7.39	7.01	200.60	9.12	22.56	22.79	22.79	22.74		54.17	1.01	0.71	1.06	0.72	0.42	0.39			0.05	162.73
257	6/23/2004	23:01:03.84	3.33	3.06	5.23	0.88	0.50	0.74	0.50	0.34	0.07	0.07	0.16	0.02	0.21	0.13	7.42	7.03	200.60	9.81	22.40	22.79	22.79	22.74		54.39	1.01	0.71	1.07	0.72	0.42	0.41			0.05	163.38
258	6/23/2004	23:14:03.84	3.33	3.08	5.19	0.90	0.50	0.74	0.50	0.34	0.05	0.07	0.16	0.02	0.22	0.13	7.42	7.03	201.12	10.85	22.52	22.83	22.74	22.69		54.60	1.03	0.71	1.07	0.72	0.42	0.39			0.05	164.03
259	6/23/2004	23:27:03.84	3.31	3.06	5.23	0.90	0.50	0.74	0.49	0.34	0.05	0.07	0.16	0.02	0.22	0.13	7.40	7.01	200.60	11.41	22.35	22.75	22.74	22.69		54.82	1.03	0.71	1.07	0.71	0.42	0.39			0.05	164.68
260	6/23/2004	23:40:03.84	3.33	3.06	5.23	0.91	0.50	0.74	0.50	0.34	0.05	0.07	0.16	0.02	0.21	0.13	7.40	7.02	200.60	10.96	22.31	22.62	22.70	22.57		55.04	1.04	0.71	1.07	0.72	0.42	0.39			0.05	165.33
261	6/23/2004	23:53:03.84	3.31	3.06	5.23	0.92	0.50	0.74	0.49	0.34	0.05	0.06	0.16	0.05	0.21	0.13	7.41	7.03	200.60	9.36	22.50	22.74	22.73	22.60		55.25	1.05	0.71	1.07	0.71	0.42	0.39			0.05	165.98
262	6/24/2004	00:06:03.84	3.31	3.06	5.21	0.90	0.50	0.74	0.47	0.34	0.05	0.06	0.16	0.05	0.21	0.13	7.37	6.99	200.60	10.40	22.26	22.66	22.65	22.52		55.47	1.03	0.71	1.07	0.69	0.42	0.39			0.05	166.63
263	6/24/2004	00:19:03.84	3.31	3.06	5.23	0.92	0.50	0.74	0.49	0.34	0.05	0.07	0.16	0.04	0.21	0.13	7.37	6.99	201.12	11.50	22.34	22.57	22.57	22.44		55.69	1.05	0.71	1.07	0.71	0.42	0.39			0.05	167.28
264	6/24/2004	00:32:03.84	3.31	3.05	5.21	0.93	0.50	0.73	0.49	0.34	0.05	0.07	0.16	0.04	0.25	0.13	7.41	7.03	200.60	11.33	22.30	22.61	22.61	22.48		55.90	1.06	0.71	1.06	0.71	0.42	0.39			0.05	167.93
265	6/24/2004	00:45:03.84	3.31	3.05	5.21	0.92	0.50	0.74	0.47	0.34	0.05	0.06	0.16	0.05	0.21	0.13	7.38	6.99	201.12	9.26	22.26	22.57	22.57	22.44		56.12	1.05	0.71	1.07	0.69	0.42	0.39			0.05	168.57
266	6/24/2004	00:58:03.84	3.29	3.05	5.21	0.96	0.50	0.74	0.49	0.34	0.05	0.06	0.16	0.05	0.20	0.14	7.40	7.01	200.60	10.15	22.38	22.69	22.69	22.48		56.34	1.09	0.71	1.07	0.71	0.42	0.39			0.05	169.22
267	6/24/2004	01:11:03.84	3.31	3.05	5.19	0.96	0.50	0.74	0.49	0.34	0.05	0.06	0.16	0.05	0.22	0.13	7.40	7.02	200.60	9.50	22.14	22.53	22.53	22.40		56.55	1.09	0.71	1.07	0.71	0.42	0.39			0.05	169.87
268	6/24/2004	01:24:03.84	3.31	3.05	5.17	0.97	0.51	0.75	0.49	0.34	0.05	0.06	0.16	0.05	0.24	0.13	7.45	7.07	200.60	9.18	22.33	22.64	22.56	22.43		56.77	1.10	0.72	1.08	0.71	0.42	0.39			0.05	170.52
269	6/24/2004	01:37:03.84	3.31	3.05	5.19	0.96	0.50	0.74	0.47	0.34	0.04	0.06	0.16	0.05	0.22	0.13	7.38	7.00	200.60	9.38	22.09	22.64	22.56	22.35		56.99	1.09	0.71	1.07	0.69	0.42	0.38			0.05	171.17
270	6/24/2004	01:50:03.84	3.29	3.05	5.17	0.97	0.51	0.75	0.47	0.34	0.04	0.06	0.16	0.05	0.24	0.13	7.41	7.03	200.60	10.53	22.25	22.56	22.48	22.35		57.20	1.10	0.72	1.08	0.69	0.42	0.38			0.05	171.82
271	6/24/2004	02:03:03.84	3.31	3.03	5.19	0.97	0.50	0.75	0.47	0.34	0.05	0.04	0.16	0.05	0.22	0.13	7.40	7.01	200.60	9.30	22.13	22.52	22.51	22.30		57.42	1.10	0.71	1.08	0.69	0.42	0.39			0.05	172.47
272	6/24/2004	02:16:03.84	3.31	3.05	5.19	0.96	0.50	0.74	0.47	0.34	0.04	0.06	0.16	0.05	0.21	0.13	7.38	7.00	200.60	10.04	22.21	22.52	22.51	22.38		57.64	1.09	0.71	1.07	0.69	0.42	0.38			0.05	173.12
273	6/24/2004	02:29:03.84	3.31	3.05	5.17	0.98	0.50	0.77	0.49	0.34	0.04	0.06	0.16	0.05	0.22	0.13	7.41	7.03	200.60	10.84	22.29	22.52	22.51	22.30		57.85	1.11	0.71	1.10	0.71	0.42	0.38			0.05	173.77
274	6/24/2004	02:42:03.84	3.31	3.05	5.21	0.98	0.50	0.77	0.47	0.34	0.05	0.06	0.16	0.05	0.21	0.13	7.40	7.01	200.60	9.29	22.17	22.56	22.48	22.35		58.07	1.11	0.71	1.10	0.69	0.42	0.39			0.05	174.42
275	6/24/2004	02:55:03.84	3.31	3.03	5.23	0.98	0.50	0.78	0.49	0.34	0.05	0.06	0.16	0.05	0.21	0.12	7.42	7.03	200.60	9.22	22.40	22.55	22.47	22.34		58.29	1.11	0.71	1.11	0.71	0.42	0.39			0.05	175.07
276	6/24/2004	03:08:03.84	3.31	3.03	5.17	0.99	0.50	0.78	0.49	0.34	0.04	0.06	0.16	0.05	0.22	0.13	7.40	7.01	200.60	11.12	22.13	22.44	22.43	22.14		58.50	1.12	0.71	1.11	0.71	0.42	0.38			0.05	175.72
277	6/24/2004	03:21:03.84	3.31	3.03	5.19	0.82	0.49	0.64	0.47	0.34	0.05	0.06	0.16	0.05	0.21	0.13	7.38	7.00	200.60	9.15	22.41	22.48	22.48	22.35		58.72	0.95	0.70	0.97	0.69	0.42	0.39			0.05	176.37
278	6/24/2004	03:34:03.84	3.29	3.05	5.16	0.85	0.50	0.66	0.46	0.34	0.04	0.04	0.16	0.04	0.22	0.13	7.40	7.02	200.60	9.49	22.25	22.48	22.48	22.27		58.94	0.98	0.71	0.99	0.68	0.42	0.38			0.05	177.02
279	6/24/2004	03:47:03.84	3.29	3.03	5.17	0.85	0.50	0.68	0.49	0.34	0.05	0.06	0.16	0.05	0.22	0.13	7.42	7.04	200.60	9.36	22.33	22.48	22.48	22.19		59.15	0.98	0.71	1.01	0.71	0.42	0.39			0.05	177.67
280	6/24/2004	04:00:03.84	3.29	3.05	5.21	0.86	0.50	0.69	0.49	0.34	0.05	0.04	0.16	0.05	0.21	0.13	7.38	7.00	200.60	11.05	22.29	22.52	22.43	22.30		59.37	0.99	0.71	1.02	0.71	0.42	0.39	5.60	6.00	0.05	178.32
281	6/24/2004	04:13:03.84	3.29	3.05	5.19	0.87	0.50	0.71	0.47	0.34	0.04	0.06	0.16	0.05	0.22	0.13	7.40	7.01	200.60	10.13	22.29	22.52	22.43	22.22		59.59	1.00	0.71	1.04	0.69	0.42	0.38			0.05	178.97
282	6/24/2004	04:26:03.84	3.29	3.05	5.19	0.88	0.51	0.72	0.52	0.34	0.04	0.06	0.16	0.05	0.21	0.13	7.42	7.04	200.60	10.05	22.40	22.55	22.55	22.34		59.80	1.01	0.72	1.05	0.74	0.42	0.38			0.05	179.62
283	6/24/2004	04:39:03.84	3.29	3.05	5.19	0.83	0.50	0.66	0.47	0.34	0.05	0.06	0.16	0.05	0.21	0.12	7.42	7.03	200.60	11.10	22.16	22.47	22.39	22.18		60.02	0.96	0.71	0.99	0.69	0.42	0.39			0.05	180.26
284	6/24/2004	04:52:03.84	3.31	3.05	5.17	0.85	0.50	0.67	0.47	0.34	0.04	0.06	0.16	0.04	0.22	0.13	7.39	7.01	200.60	11.64	22.37	22.44	22.43	22.22		60.24	0.98	0.71	1.00	0.69	0.42	0.38			0.05	180.91
285	6/24/2004	05:05:03.84	3.29	3.03	5.19	0.86	0.51	0.68	0.47	0.34	0.04	0.04	0.16	0.05	0.21	0.13	7.40	7.02	200.60	10.37	22.21	22.44	22.43	22.22		60.45	0.99	0.72	1.01	0.69	0.42	0.38			0.05	181.56
286	6/24/2004	05:18:03.84	3.31	3.03	5.19	0.86	0.50	0.69	0.49	0.34	0.05	0.06	0.16	0.04	0.21	0.13	7.40	7.02	200.60	9.54	22.37	22.52	22.43	22.22		60.67	0.99	0.71	1.02	0.71	0.42	0.39			0.05	182.21
287	6/24/2004	05:31:03.84	3.29	3.05	5.17	0.87	0.50	0.69	0.47	0.34	0.04	0.06	0.16	0.04	0.21	0.13	7.40	7.02	200.60	9.10	22.32	22.55	22.47	22.26		60.89	1.00	0.71	1.02	0.69	0.42	0.38			0.05	182.86
288	6/24/2004	05:44:03.84	3.29	3.03	5.16	0.88	0.50	0.71	0.47	0.34	0.04	0.06	0.16	0.05	0.21	0.12	7.40	7.02	200.60	9.30	22.29	22.52	22.51	22.22		61.10	1.01	0.71	1.04	0.69	0.42	0.38			0.05	183.51
289	6/24/2004	05:57:03.84	3.31	3.05	5.17	0.88	0.51	0.72	0.49	0.34	0.05	0.07	0.16	0.05	0.22	0.13	7.42	7.03	200.60	9.54	22.36	22.51	22.42	22.21		61.32	1.01	0.72	1.05	0.71	0.42	0.39			0.05	184.16
290	6/24/2004	06:10:03.84	3.31	3.03	5.16	0.90	0.50	0.73	0.47	0.34	0.04	0.06	0.16	0.05	0.21	0.13	7.39	7.01	200.60	11.37	22.32	22.47	22.39	22.18		61.54	1.03	0.71	1.06	0.69	0.42	0.38			0.05	184.81
291	6/24/2004	06:23:03.84	3.09	2.84	4.97	0.82	0.54	0.63	0.51	0.34	0.09	0.03	0.06	0.00	0.19	0.12	7.16	6.77	200.60	11.37	22.36	22.51	22.42	22.13		61.75	0.95	0.75	0.96	0.73	0.42	0.43			0.05	185.46
292	6/24/2004	06:36:03.84	3.31	3.05	5.17	0.85	0.50	0.67	0.47	0.34	0.05	0.06	0.16	0.04	0.21	0.13	7.42	7.03	200.60	9.71	22.24	22.47	22.47	22.26		61.97	0.98	0.71	1.00	0.69	0.42	0.39			0.05	186.11
293	6/24/2004	06:49:03.84	3.31	3.06	5.14	0.86	0.50	0.68	0.49	0.34	0.04	0.08	0.16	0.04	0.22	0.13	7.39	7.01	200.60	9.18	22.29	22.44	22.35	22.14		62.19	0.99	0.71	1.01	0.71	0.42	0.38			0.05	186.76
294	6/24/2004	07:02:03.84	3.31	3.05	5.14	0.86	0.50	0.68	0.47	0.33	0.05	0.06	0.16	0.05	0.22	0.13	7.40	7.01	200.60	9.18	22.40	22.47	22.47	22.18		62.40	0.99	0.71	1.01	0.69	0.41	0.39			0.05	187.41
295	6/24/2004	07:15:03.84	3.31	3.05	5.21	0.88	0.50	0.71	0.47	0.36	0.05	0.04	0.14	0.05	0.21	0.13	7.40	7.01	200.60	9.15	22.24	22.39	22.39	22.18		62.62	1.01	0.71	1.04	0.69	0.44	0.39			0.05	188.06
296	6/24/2004	07:28:03.84	3.31	3.05	5.16	0.88	0.50	0.71	0.47	0.34	0.04	0.07	0.17	0.04	0.22	0.12	7.39	7.01	200.60	9.27	22.36	22.43	22.34	22.13		62.84	1.01	0.71	1.04	0.69	0.42	0.38			0.05	188.71
297	6/24/2004	07:41:03.84	3.33	3.06	5.17	0.88	0.50	0.72	0.49	0.34	0.05	0.04	0.16	0.04	0.21	0.13	7.40	7.01	200.60	9.35	22.20	22.43	22.34	22.13		63.05	1.01	0.71	1.05	0.71	0.42	0.39			0.05	189.36
298	6/24/2004	07:54:03.84	3.33	3.06	5.19	0.88	0.50	0.72	0.47	0.34	0.04	0.08	0.14	0.04	0.22	0.13	7.38	7.00	201.12	9.48	22.45	22.44	22.35	22.14		63.27	1.01	0.71	1.05	0.69	0.42	0.38			0.05	190.01
299	6/24/2004	08:07:03.84	3.33	3.06	5.17	0.85	0.50	0.67	0.49	0.34	0.04	0.08	0.16	0.05	0.22	0.13	7.40	7.01	200.60	9.55	22.37	22.44	22.35	22.14		63.49	0.98	0.71	1.00	0.71	0.42	0.38			0.05	190.65
300	6/24/2004	08:20:03.84	3.33	3.06	5.21	0.82	0.51	0.64	0.49	0.34	0.07	0.04	0.16	0.03	0.26	0.13	7.40	7.02	200.60	9.46	22.41	22.48	22.40	22.11		63.70	0.95	0.72	0.97	0.71	0.42	0.41			0.05	191.30
301	6/24/2004	08:33:03.84	3.33	3.06	5.19	0.82	0.51	0.63	0.49	0.34	0.05	0.04	0.16	0.04	0.25	0.13	7.42	7.03	200.60	9.30	22.38	22.45	22.36	22.15		63.92	0.95	0.72	0.96	0.71	0.42	0.39			0.05	191.95
302	6/24/2004	08:46:03.84	3.33	3.08	5.19	0.82	0.51	0.66	0.50	0.34	0.05	0.07	0.16	0.05	0.25	0.13	7.41	7.03	200.60	9.74	22.33	22.40	22.40	22.11		64.14	0.95	0.72	0.99	0.72	0.42	0.39			0.05	192.60
303	6/24/2004	08:59:03.84	3.33	3.08	5.19	0.83	0.50	0.66	0.49	0.34	0.05	0.04	0.14	0.05	0.25	0.13	7.40	7.01	201.12	10.09	22.55	22.54	22.38	22.17		64.35	0.96	0.71	0.99	0.71	0.42	0.39			0.05	193.25
304	6/24/2004	09:12:03.84	3.33	3.08	5.17	0.83	0.51	0.67	0.49	0.34	0.04	0.06	0.16	0.05	0.25	0.13	7.40	7.01	200.60	9.53	22.52	22.51	22.42	22.21		64.57	0.96	0.72	1.00	0.71	0.42	0.38			0.05	193.90
305	6/24/2004	09:25:03.84	3.33	3.08	5.21	0.82	0.51	0.64	0.50	0.34	0.05	0.06	0.16	0.04	0.22	0.12	7.38	6.99	200.60	10.02	22.56	22.55	22.47	22.18		64.79	0.95	0.72	0.97	0.72	0.42	0.39	5.70	6.00	0.05	194.55

Table H3-3-5. CIX Campaign II, Cycle 3, 0.1 M NaOH Displacement

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow meter	flow cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ-ential	cumul-lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-03539	R-02145	R-02919	R-03714	R-03713	R-03756	R-03751	R-03754	R-03749	R-03716	R-03763	R-03752	R-03755	R-03750	R-03703				TR-02814	R-02816	R-03724	R-01504	R-02933								inches	inches		
1	6/24/2004	10:47:48.84	-0.25	-0.17	1.15	2.51	0.00	2.29	-0.01	0.34	-0.20	-0.12	0.00	1.85	-0.02	-2.88	0.14	0.03	196.45	10.03	23.81	22.92	22.67	22.38		66.17									0.05	197.69
2	6/24/2004	10:51:48.84	2.39	-0.15	4.02	2.91	0.00	2.73	-0.01	0.75	-0.20	0.18	-0.02	2.10	-0.02	-2.87	7.22	6.83	200.60	10.43	23.86	22.96	22.64	22.43		66.23									0.05	197.89
3	6/24/2004	10:55:48.84	2.52	-0.13	4.15	2.97	0.00	2.81	-0.01	0.85	-0.22	0.41	-0.02	2.12	-0.02	-2.87	7.34	6.95	200.60	9.35	23.82	23.01	22.69	22.48		66.30									0.05	198.09
4	6/24/2004	10:59:48.84	2.52	-0.13	4.15	2.98	0.00	2.81	0.01	0.85	-0.19	0.71	-0.02	2.12	-0.02	-2.87	7.32	6.94	200.60	9.48	23.74	23.01	22.69	22.48		66.37									0.05	198.29
5	6/24/2004	11:03:48.84	2.52	-0.11	4.13	2.98	-0.01	2.81	-0.01	0.82	-0.20	1.00	-0.02	2.12	-0.01	-2.87	7.42	7.03	200.60	9.48	24.11	22.98	22.65	22.52		66.43									0.05	198.49
6	6/24/2004	11:07:48.84	2.54	-0.11	4.18	3.00	0.00	2.83	0.01	0.82	-0.19	1.28	-0.02	2.12	-0.02	-2.85	7.02	6.62	200.60	9.12	23.87	22.98	22.65	22.44		66.50									0.05	198.68
7	6/24/2004	11:11:48.84	2.45	-0.09	4.09	2.98	0.00	2.83	0.02	0.82	-0.19	1.46	-0.02	2.12	-0.01	-2.87	7.32	6.94	222.43	10.20	23.92	23.10	22.29	22.57		66.57									0.05	198.88
8	6/24/2004	11:15:48.84	2.28	-0.07	3.93	3.01	0.01	2.84	0.02	0.82	-0.18	1.52	-0.02	2.12	-0.01	-2.87	7.21	6.82	170.47	9.84	23.88	23.07	21.54	22.53		66.63									0.05	199.08
9	6/24/2004	11:19:48.84	2.06	-0.07	3.69	3.04	0.01	2.87	0.02	0.81	-0.18	1.53	-0.02	2.12	-0.01	-2.87	7.32	6.94	118.51	9.83	24.01	23.11	21.34	22.58		66.70									0.05	199.28
10	6/24/2004	11:23:48.84	1.82	-0.07	3.41	-2.39	0.01	-1.15	0.02	0.77	-0.18	1.29	-0.02	2.02	0.00	-2.85	7.06	6.66	96.69	12.07	23.61	23.11	21.42	22.50		66.77									0.05	199.48
11	6/24/2004	11:27:48.84	1.53	-0.06	3.14	0.35	0.00	0.12	0.02	0.15	-0.18	-0.07	-0.02	0.00	0.00	-2.87	7.50	7.12	92.54	9.86	23.89	23.16	21.63	22.55		66.83									0.05	199.68
12	6/24/2004	11:31:36.84	-1.15	-0.04	0.34	0.11	0.01	-0.14	0.02	0.04	-0.18	-0.25	0.00	0.02	0.00	-2.94	0.14	0.03	101.37	11.80	23.89	23.00	21.79	22.55		66.90	-0.03	-0.01	-0.06	0.00	-0.01	-0.01			0.00	199.73
13	6/24/2004	11:32:16.84	0.91	-0.04	2.55	0.42	0.02	0.19	0.02	0.17	-0.17	-0.21	-0.02	0.11	0.02	-2.84	4.31	3.92	101.37	12.37	23.97	23.16	21.71	22.55		66.91	0.28	0.00	0.27	0.00	0.12	0.00			0.00	199.74
14	6/24/2004	11:32:56.84	1.38	-0.02	3.01	0.37	0.02	0.13	0.02	0.14	-0.17	-0.24	-0.02	0.11	0.02	-2.88	7.15	6.76	97.21	10.04	23.89	23.16	21.79	22.55		66.92	0.23	0.00	0.21	0.00	0.09	0.00			0.01	199.77
15	6/24/2004	11:33:36.84	1.79	-0.02	3.37	0.38	0.01	0.16	0.02	0.15	-0.17	-0.24	-0.02	0.11	0.02	-2.88	7.23	6.84	88.38	11.84	23.89	23.16	21.79	22.63		66.93	0.24	-0.01	0.24	0.00	0.10	0.00			0.01	199.81
16	6/24/2004	11:34:16.84	1.95	0.00	3.56	0.38	0.02	0.16	0.02	0.15	-0.18	-0.24	-0.02	0.11	0.02	-2.85	7.18	6.79	79.55	11.99	23.97	23.16	21.79	22.55		66.94	0.24	0.00	0.24	0.00	0.10	-0.01			0.01	199.84
17	6/24/2004	11:34:56.84	1.93	0.00	3.52	0.38	0.02	0.16	0.02	0.14	-0.17	-0.25	-0.02	0.11	0.02	-2.85	7.21	6.82	74.87	12.09	24.05	23.16	21.79	22.55		66.95	0.24	0.00	0.24	0.00	0.09	0.00			0.01	199.87
18	6/24/2004	11:35:36.84	1.92	0.00	3.52	0.37	0.02	0.14	0.02	0.15	-0.18	-0.25	-0.02	0.11	0.02	-2.85	7.24	6.85	70.72	12.03	24.21	23.24	21.79	22.63		66.96	0.23	0.00	0.22	0.00	0.10	-0.01	6.15	5.90	0.01	199.90
19	6/24/2004	11:36:16.84	1.92	0.00	3.52	0.37	0.02	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.11	0.00	-2.87	7.38	6.99	70.72	11.98	24.37	23.16	21.79	22.55		66.97	0.23	0.00	0.24	0.00	0.10	0.00			0.01	199.94
20	6/24/2004	11:36:56.84	1.90	0.00	3.50	0.37	0.02	0.16	0.02	0.14	-0.17	-0.25	-0.02	0.11	0.02	-2.87	7.25	6.86	66.56	11.18	24.62	23.24	21.87	22.55		66.99	0.23	0.00	0.24	0.00	0.09	0.00			0.01	199.97
21	6/24/2004	11:37:36.84	1.90	0.00	3.52	0.38	0.02	0.16	0.02	0.15	-0.18	-0.25	-0.02	0.11	0.02	-2.87	7.35	6.97	66.56	12.60	24.78	23.16	21.79	22.55		67.00	0.24	0.00	0.24	0.00	0.10	-0.01			0.01	200.00
22	6/24/2004	11:38:16.84	1.90	0.02	3.50	0.38	0.04	0.16	0.02	0.14	-0.17	-0.25	-0.02	0.11	0.02	-2.87	7.21	6.82	66.56	12.18	24.94	23.16	21.79	22.55		67.01	0.24	0.02	0.24	0.00	0.09	0.00			0.01	200.04
23	6/24/2004	11:38:56.84	1.88	0.02	3.47	0.38	0.01	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.11	0.02	-2.85	7.44	7.06	66.56	10.23	25.02	23.16	21.79	22.55		67.02	0.24	-0.01	0.24	0.00	0.10	0.00			0.01	200.07
24	6/24/2004	11:39:36.84	1.86	0.02	3.48	0.38	0.02	0.16	0.02	0.14	-0.17	-0.25	-0.02	0.14	0.02	-2.87	7.46	7.08	66.56	12.45	25.18	23.24	21.95	22.63		67.03	0.24	0.00	0.24	0.00	0.09	0.00			0.01	200.10
25	6/24/2004	11:40:16.84	1.88	0.02	3.48	0.37	0.02	0.16	0.02	0.14	-0.18	-0.25	-0.02	0.14	0.02	-2.87	7.32	6.94	62.40	12.36	25.10	23.24	21.87	22.63		67.04	0.23	0.00	0.24	0.00	0.09	-0.01			0.01	200.14
26	6/24/2004	11:40:56.84	1.86	0.02	3.47	0.37	0.02	0.16	0.02	0.14	-0.18	-0.26	-0.02	0.15	0.02	-2.87	7.30	6.91	62.40	12.22	25.10	23.24	21.95	22.63		67.05	0.23	0.00	0.24	0.00	0.09	-0.01			0.01	200.17
27	6/24/2004	11:41:36.84	1.86	0.02	3.45	0.37	0.02	0.14	0.02	0.15	-0.18	-0.25	-0.02	0.15	0.02	-2.88	7.18	6.79	61.88	12.22	25.02	23.24	21.95	22.63		67.06	0.23	0.00	0.22	0.00	0.10	-0.01			0.01	200.20
28	6/24/2004	11:42:16.84	1.86	0.02	3.43	0.37	0.02	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.15	0.02	-2.87	7.42	7.03	62.40	12.52	25.06	23.29	22.08	22.67		67.07	0.23	0.00	0.24	0.00	0.10	0.00			0.01	200.24
29	6/24/2004	11:42:56.84	1.86	0.04	3.47	0.38	0.02	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.15	0.02	-2.87	7.16	6.77	61.88	10.08	25.02	23.24	22.03	22.55		67.09	0.24	0.00	0.24	0.00	0.10	0.00			0.01	200.27
30	6/24/2004	11:43:36.84	1.88	0.04	3.47	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.15	0.02	-2.87	7.36	6.98	62.40	11.99	25.02	23.24	22.11	22.55		67.10	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.30
31	6/24/2004	11:44:16.84	1.88	0.04	3.47	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.15	0.02	-2.85	7.43	7.05	62.40	10.85	25.06	23.29	22.24	22.75		67.11	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.33
32	6/24/2004	11:44:56.84	1.86	0.04	3.47	0.38	0.04	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.15	0.02	-2.87	7.15	6.76	57.73	12.32	25.06	23.29	22.32	22.67		67.12	0.24	0.02	0.25	0.00	0.10	0.00			0.01	200.37
33	6/24/2004	11:45:36.84	1.86	0.04	3.47	0.38	0.02	0.17	0.02	0.15	-0.18	-0.25	-0.02	0.15	0.02	-2.87	6.92	6.52	57.73	12.33	24.98	23.29	22.24	22.67		67.13	0.24	0.00	0.25	0.00	0.10	-0.01			0.01	200.40
34	6/24/2004	11:46:16.84	1.86	0.04	3.45	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.16	0.02	-2.85	7.28	6.89	58.25	10.02	25.06	23.21	22.24	22.67		67.14	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.43
35	6/24/2004	11:46:56.84	1.86	0.06	3.45	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.16	0.02	-2.85	7.26	6.87	57.73	12.48	24.90	23.29	22.32	22.67		67.15	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.47
36	6/24/2004	11:47:36.84	1.84	0.04	3.45	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.17	0.02	-2.85	7.50	7.12	58.25	12.35	24.98	23.21	22.32	22.59		67.16	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.50
37	6/24/2004	11:48:16.84	1.86	0.04	3.45	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.19	0.02	-2.85	7.46	7.08	57.73	12.35	24.98	23.21	22.32	22.67		67.17	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.53
38	6/24/2004	11:48:56.84	1.86	0.06	3.47	0.38	0.01	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.17	0.02	-2.87	7.42	7.03	57.73	10.17	24.98	23.29	22.48	22.67		67.19	0.24	-0.01	0.25	0.00	0.09	0.00			0.01	200.57
39	6/24/2004	11:49:36.84	1.84	0.06	3.45	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.19	0.02	-2.85	7.46	7.08	57.73	12.07	24.98	23.21	22.40	22.67		67.20	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.60
40	6/24/2004	11:50:16.84	1.84	0.04	3.45	0.38	0.01	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.19	0.02	-2.85	7.30	6.92	57.73	12.40	24.95	23.17	22.37	22.64		67.21	0.24	-0.01	0.24	0.00	0.10	0.00			0.01	200.63
41	6/24/2004	11:50:56.84	1.86	0.04	3.45	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.16	0.02	-2.87	7.30	6.92	57.73	12.19	24.95	23.25	22.45	22.64		67.22	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.66
42	6/24/2004	11:51:36.84	1.86	0.04	3.43	0.38	0.01	0.16	0.02	0.15	-0.17	-0.25	-0.02	0.17	0.02	-2.87	7.48	7.10	53.57	12.16	24.87	23.17	22.45	22.56		67.23	0.24	-0.01	0.24	0.00	0.10	0.00			0.01	200.70
43	6/24/2004	11:52:16.84	1.84	0.06	3.43	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.19	0.02	-2.85	7.34	6.96	53.57	12.08	24.95	23.25	22.45	22.64		67.24	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.73
44	6/24/2004	11:52:56.84	1.86	0.06	3.43	0.38	0.02	0.16	0.02	0.15	-0.17	-0.24	-0.02	0.19	0.02	-2.87	7.43	7.05	53.57	12.06	24.95	23.25	22.45	22.64		67.25	0.24	0.00	0.24	0.00	0.10	0.00			0.01	200.76
45	6/24/2004	11:53:36.84	1.86	0.06	3.47	0.38	0.02	0.16	0.02	0.15	-0.17	-0.24	-0.02	0.17	0.02	-2.85	7.61	7.23	53.57	10.17	24.95	23.17	22.37	22.56		67.26	0.24	0.00	0.24	0.00	0.10	0.00			0.01	200.80
46	6/24/2004	11:54:16.84	1.86	0.06	3.43	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.19	0.02	-2.87	7.30	6.92	53.57	12.09	24.87	23.17	22.45	22.64		67.27	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.83
47	6/24/2004	11:54:56.84	1.84	0.06	3.47	0.38	0.02	0.17	0.02	0.14	-0.17	-0.25	-0.02	0.19	0.02	-2.87	7.32	6.93	53.57	12.08	24.99	23.22	22.49	22.68		67.29	0.24	0.00	0.25	0.00	0.09	0.00			0.01	200.86
48	6/24/2004	11:55:36.84	1.84	0.06	3.43	0.38	0.02	0.16	0.02	0.14	-0.17	-0.26	-0.02	0.19	0.02	-2.87	7.38	6.99	53.57	12.65	24.91	23.22	22.49	22.60		67.30	0.24	0.00	0.24	0.00	0.09	0.00			0.01	200.90
49	6/24/2004	11:56:16.84	1.84	0.06	3.47	0.38	0.02	0.17	0.02	0.15	-0.17	-0.25	-0.02	0.19	0.00	-2.87	7.30	6.92	53.57	11.24	24.91	23.22	22.49	22.68		67.31	0.24	0.00	0.25	0.00	0.10	0.00			0.01	200.93
50	6/24/2004	11:56:56.84	1.86	0.06	3.43	0.38	0.02	0.16	0.02	0.15	-0.17	-0.24	-0.02	0.19	0.02	-2.87	7.38	7.00	53.57	12.64	24.91	23.22	22.57	22.68		67.32	0.24	0.00	0.24	0.00	0.10	0.00			0.01	200.96
51	6/24/2004	11:57:36.84	1.84	0.06	3.47	0.38	0.02	0.17	0.02	0.14	-0.18	-0.24	-0.02	0.19	0.02	-2.85	7.14	6.75	53.57	12.26	24.91	23.22	22.49	22.60		67.33	0.24	0.00	0.25	0.00	0.09	-0.01			0.01	201.00
52	6/24/2004	11:58:16.84	1.84	0.06	3.47	0.38	0.02	0.16	0.02	0.15	-0.18	-0.23	-0.02	0.19	0.02	-2.85	7.18	6.79	53.57	12.42	24.91	23.30	22.49	22.60		67.34	0.24	0.00	0.24	0.00	0.10	-0.01			0.01	201.03
53	6/24/2004	11:59:18.84	1.82	0.06	2.14	0.15	0.02	-0.08	0.02	0.04	-0.17	-0.29	-0.02	0.11	0.02	-2.98	5.11	4.71	53.57	12.32	23.76	23.27	22.78	22.73		67.36	0.01	0.00	0.00	0.00	-0.01	0.00			0.02	201.07
54	6/24/2004	12:00:06.84	1.82	0.06	0.27	0.15	0.02	-0.08	0.02	0.04	-0.17	-0.28	-0.02	0.11	0.02	-2.93	0.14	0.03	53.05	12.41	24.08	23.27	22.62	22.65		67.37	0.01	0.00	0.00	0.00	-0.01	0.00			0.00	201.08
55	6/24/2004	12:00:46.84	1.82	0.06	0.27	0.14	0.02	-0.08	0.02	0.04	-0.17	-0.29	-0.02	0.11	0.02	-2.93	0.14	0.03	53.57	12.06	24.16	23.27	22.62	22.65		67.38	0.00	0.00	0.00	0.00	-0.01	0.00			0.00	201.08
56	6/24/2004	12:01:26.84	1.82	0.07	0.27	0.14	0.02	-0.08	0.02	0.04	-0.17	-0.28	-0.02	0.11	0.02	-2.94	0.14	0.03	53.57	10.09	24.24	23.18	22.54	22.65		67.39	0.00	0.00	0.00	0.00	-0.01	0.00			0.00	201.08
57	6/28/2004	07:54:50.87	1.99	-0.68	0.20	0.38	0.04	0.13	0.01	0.42	-0.20	-0.06	0.02	0.17	-0.02	-2.78	0.14	0.03	30.51	9.27	23.23	22.18	21.53	21.80		72.28	0.30	-0.03	0.33	0.03	0.37	0.00			0.00	201.15
58	6/28/2004	07:58:50.87	1.82	-0.68	3.04	0.29	0.04	0.00	0.01	0.06	-0.18	-0.06	0.02	0.28	-0.01	-2.74	0.15	0.04	30.51	9.44	22.34	22.25	21.92	21.79		72.35	0.21	-0.03	0.20	0.03	0.01	0.02			0.00	201.15
59	6/28/2004	08:02:50.87	1.97	-0.68	3.04	0.21	0.04	-0.08	0.02	0.07	-0.19	0.03	0.02	0.25	-0.01	-2.83	0.14	0.03	34.66	9.23	22.16	22.15	22.06	21.77		72.42	0.13	-0.03	0.12	0.04	0.02	0.01			0.00	201.16
60	6/28/2004	08:06:50.87	1.70	-0.70	2.90	0.26	0.04	-0.04	0.02	0.07	-0.19	0.10	0.02	0.32	-0.02	-2.78	0.15	0.04	34.66	10.26	22.27	22.26	22.09	21.88		72.48	0.18	-0.03	0.16	0.04	0.02	0.01			0.00	201.19
61	6/28/2004	08:10:50.87	1.90	-0.70	3.65	0.38	0.04	0.17	0.02	0.12	-0.18	-0.03	0.02	0.32	-0.02	-2.66	6.86	6.46	34.66	10.09	21.57	22.21	22.12	21.83		72.55	0.30	-0.03	0.37	0.04	0.07	0.02			0.05	201.25
62	6/28/2004	08:14:50.87	1.92	-0.70	3.61	0.41	0.04	0.17	0.02	0.15	-0.19	-0.02	0.02	0.33	-0.02	-2.67	4.67	4.28	30.51	9.72	59.64	22.24	6.18	21.86		72.62	0.33	-0.03	0.37	0.04	0.10	0.01			0.03	201.36
63	6/28/2004	08:18:50.87	1.90	-0.70	3.63	0.40	0.04	0.17	0.01	0.15	-0.18	-0.01	0.02	0.31	-0.02	-2.67	4.59	4.20	26.09	9.32	57.02	22.21	7.97	21.84		72.68	0.32	-0.03	0.37	0.03	0.10	0.02			0.03	201.48
64	6/28/2004	08:22:50.87	1.90	-0.68	3.61	0.38	0.04	0.14	0.02	0.15	-0.17	-0.01	0.02	0.30	-0.01	-2.67	4.65	4.25	21.94	10.02	48.46	22.35	11.88	21.89		72.75	0.30	-0.03	0.34	0.04	0.10	0.03			0.03	201.61
65	6/28/2004	08:26:50.87	1.88	-0.68	3.63	0.38	0.04	0.16	0.02	0.15	-0.17	0.01	0.02	0.28	-0.01	-2.67	4.78	4.39	26.09	10.50	45.33	22.32	13.16	21.87		72.82	0.30	-0.03	0.36	0.04	0.10	0.03			0.03	201.73
66	6/28/2004	08:30:50.87	1.88	-0.70	3.61	0.36	0.04	0.11	0.02	0.14	-0.18	0.01	0.02	0.28	-0.01	-2.67	4.76	4.36	21.94	10.39	43.05	22.30	14.03	21.84		72.88	0.28	-0.03	0.31	0.04	0.09	0.02			0.03	201.85
67	6/28/2004	08:34:50.87	1.88	-0.70	3.61	0.36	0.04	0.09	0.02	0.14	-0.17	0.01	0.03	0.28	-0.02	-2.67	4.94	4.55	21.94	9.54	41.35	22.40	14.79	22.02		72.95	0.28	-0.03	0.29	0.04	0.09	0.03			0.03	201.97
68	6/28/2004	08:38:50.87	1.88	-0.68	3.58	0.35	0.04	0.08	0.02	0.11	-0.17	0.01	0.02	0.30	-0.02	-2.66	4.92	4.53	21.68	9.54	39.76	22.36	15.24	21.91		73.02	0.27	-0.03	0.28	0.04	0.06	0.03			0.03	202.10
69	6/28/2004	08:42:50.87	1.88	-0.68	3.58	0.35	0.04	0.06	0.02	0.11	-0.18	0.01	0.02	0.28	-0.02	-2.67	4.97	4.57	21.68	9.40	38.58	22.28	15.57	21.91		73.08	0.27	-0.03	0.26	0.04	0.06	0.02			0.03	202.23
70	6/28/2004	08:46:50.87	1.88	-0.68	3.58	0.35	0.04	0.06	0.02	0.11	-0.20	-0.03	0.02	0.26	-0.01	-2.66	4.95	4.55	21.94	9.32	37.80	22.37	15.90	21.92		73.15	0.27	-0.03	0.26	0.04	0.06	0.00			0.03	202.37
71	6/28/2004	08:50:50.87	1.88	-0.68	3.59	0.33	0.01	0.05	0.02	0.11	-0.20	-0.04	0.00	0.25	-0.01	-2.67	4.97	4.57	21.94	9.43	36.92	22.43	16.20	21.97		73.22	0.25	-0.05	0.25	0.04	0.06	0.00			0.03	202.49
72	6/28/2004	08:54:50.87	1.86	-0.68	3.58	0.33	0.00	0.03	0.02	0.10	-0.20	-0.03	0.02	0.25	-0.01	-2.67	5.02	4.62	21.94	9.61	36.26	22.40	16.50	21.95		73.28	0.25	-0.06	0.23	0.04	0.05	0.00			0.03	202.63
73	6/28/2004	08:58:50.87	1.88	-0.66	3.56	0.32	0.00	0.03	0.02	0.10	-0.20	-0.04	-0.02	0.25	-0.01	-2.67	4.91	4.51	21.94	9.93	35.52	22.45	16.63	22.00		73.35	0.24	-0.06	0.23	0.04	0.05	0.00			0.03	202.75
74	6/28/2004	09:02:50.87	1.88	-0.66	3.58	0.32	0.00	0.02	0.02	0.11	-0.20	-0.06	0.01	0.25	-0.02	-2.67	4.99	4.59	21.68	9.24	34.93	22.42	16.92	21.96		73.42	0.24	-0.06	0.22	0.04	0.06	0.00			0.03	202.88

Table H3-3-6. CIX Campaign II, Cycle 3, DI Water Pre-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.							**The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.**																												
						DP1	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**DP7**	**DP8**	**DP9**	**DP10**	**DP11**	**Flow**	**flow**									**DP1**	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**Resin**	**Resin**	**differ-**	**cumul-**
	DATE	**TIME**	**P1**	**P2**	**P3**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**meter**	**cor.**	**Cond1**	**pH**	**T1**	**T2**	**T3**	**T4**	**T5**	**elaps-**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**H1**	**H2**	**ential**	**lative**
	units		**psig**	**psig**	**psig**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**L/hr**	**L/hr**	**mS/cm**		**°C**	**°C**	**°C**	**°C**	**°C**	**ed**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inches**	**inches**	**BV**	**BV**
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	**(hours)**	**water**	**water**	**water**	**water**	**water**	**water**				
1	6/28/2004	08:39:50.87	1.88	-0.68	3.58	0.35	0.04	0.08	0.02	0.11	-0.17	0.02	0.02	0.28	-0.02	-2.67	4.97	4.57	21.94	9.54	39.36	22.28	15.40	21.91		73.03	0.27	-0.03	0.28	0.04	0.06	0.03			0.03	202.00
2	6/28/2004	08:41:50.87	1.88	-0.68	3.59	0.35	0.04	0.07	0.02	0.15	-0.17	0.01	0.03	0.28	-0.02	-2.67	4.99	4.59	21.68	9.34	39.02	22.33	15.53	21.87		73.07	0.27	-0.03	0.27	0.04	0.10	0.03			0.03	202.07
3	6/28/2004	08:43:50.87	1.82	-0.68	3.54	0.35	0.04	0.06	0.02	0.10	-0.20	0.01	0.02	0.27	-0.02	-2.66	5.04	4.64	26.09	9.50	38.54	22.33	15.61	21.95		73.10	0.27	-0.03	0.26	0.04	0.05	0.00			0.03	202.13
4	6/28/2004	08:45:50.87	1.88	-0.68	3.59	0.35	0.04	0.07	0.02	0.11	-0.20	-0.03	0.02	0.28	-0.02	-2.66	4.98	4.58	21.94	9.66	37.92	22.33	15.77	21.87		73.13	0.27	-0.03	0.27	0.04	0.06	0.00			0.03	202.20
5	6/28/2004	08:47:50.87	1.88	-0.68	3.59	0.35	0.00	0.06	0.02	0.11	-0.20	-0.03	0.02	0.26	-0.01	-2.67	4.97	4.57	21.94	10.78	37.53	22.34	15.95	21.96		73.17	0.27	-0.06	0.26	0.04	0.06	0.00			0.03	202.26
6	6/28/2004	08:49:50.87	1.88	-0.68	3.58	0.33	0.04	0.05	0.02	0.11	-0.17	-0.03	0.02	0.26	-0.02	-2.67	4.88	4.48	21.68	9.32	37.11	22.30	16.07	21.85		73.20	0.25	-0.03	0.25	0.04	0.06	0.03			0.03	202.33
7	6/28/2004	08:51:50.87	1.88	-0.68	3.58	0.33	0.00	0.05	0.02	0.10	-0.20	-0.03	-0.02	0.25	-0.01	-2.67	4.92	4.52	21.68	10.68	36.68	22.35	16.20	21.89		73.23	0.25	-0.06	0.25	0.04	0.05	0.00			0.03	202.39
8	6/28/2004	08:53:50.87	1.86	-0.68	3.59	0.32	0.01	0.03	0.02	0.11	-0.20	-0.04	0.01	0.26	-0.01	-2.67	4.95	4.55	21.94	11.48	36.37	22.36	16.37	21.98		73.27	0.24	-0.05	0.23	0.04	0.06	0.00			0.03	202.46
9	6/28/2004	08:55:50.87	1.86	-0.68	3.58	0.32	0.00	0.03	0.02	0.10	-0.20	-0.03	0.02	0.26	-0.01	-2.67	4.82	4.42	21.68	10.59	36.03	22.32	16.42	21.95		73.30	0.24	-0.06	0.23	0.04	0.05	0.00			0.03	202.52
10	6/28/2004	08:57:50.87	1.86	-0.66	3.56	0.32	0.01	0.02	0.02	0.10	-0.20	-0.04	0.00	0.25	-0.02	-2.67	4.94	4.55	21.68	9.40	35.76	22.37	16.55	22.00		73.33	0.24	-0.05	0.22	0.04	0.05	0.00			0.03	202.58
11	6/28/2004	08:59:50.87	1.88	-0.66	3.59	0.32	0.00	0.03	0.02	0.10	-0.20	-0.06	0.02	0.26	-0.02	-2.66	4.87	4.48	21.68	10.47	35.44	22.37	16.71	21.92		73.37	0.24	-0.06	0.23	0.04	0.05	0.00			0.03	202.65
12	6/28/2004	09:01:50.87	1.88	-0.66	3.58	0.32	0.00	0.03	0.02	0.10	-0.20	-0.04	-0.02	0.26	-0.02	-2.66	4.93	4.53	21.94	9.98	35.05	22.37	16.79	21.92		73.40	0.24	-0.06	0.23	0.04	0.05	0.00			0.03	202.71
13	6/28/2004	09:03:50.87	1.88	-0.66	3.56	0.31	0.01	0.03	0.02	0.10	-0.20	-0.06	0.00	0.25	-0.02	-2.66	4.82	4.43	21.68	10.02	34.81	22.29	16.87	21.92		73.43	0.23	-0.05	0.23	0.04	0.05	0.00			0.03	202.78
14	6/28/2004	09:05:50.87	1.88	-0.66	3.56	0.31	0.00	0.03	0.02	0.10	-0.20	-0.06	0.00	0.25	-0.02	-2.67	4.86	4.46	21.68	10.49	34.62	22.42	17.00	21.96		73.47	0.23	-0.06	0.23	0.04	0.05	0.00			0.03	202.84
15	6/28/2004	09:07:50.87	1.86	-0.66	3.56	0.31	0.00	0.02	0.02	0.10	-0.20	-0.06	0.00	0.26	-0.02	-2.67	4.87	4.48	21.94	9.13	34.35	22.38	17.13	22.01		73.50	0.23	-0.06	0.22	0.04	0.05	0.00			0.03	202.91
16	6/28/2004	09:09:50.87	1.82	-0.66	3.50	0.29	0.00	0.03	0.02	0.10	-0.20	-0.07	-0.02	0.24	-0.01	-2.67	4.74	4.34	21.94	10.23	34.23	22.35	17.25	21.97		73.53	0.21	-0.06	0.23	0.04	0.05	0.00			0.03	202.97
17	6/28/2004	09:11:50.87	1.88	-0.68	3.54	0.30	0.00	0.02	0.02	0.11	-0.20	-0.06	-0.02	0.25	-0.02	-2.66	4.83	4.43	21.94	9.15	34.07	22.43	17.33	21.97		73.57	0.22	-0.06	0.22	0.04	0.06	0.00			0.03	203.03
18	6/28/2004	09:13:50.87	1.88	-0.68	3.56	0.30	0.01	0.03	0.02	0.10	-0.20	-0.07	-0.02	0.25	-0.01	-2.66	4.85	4.45	21.94	9.54	33.85	22.44	17.51	22.06		73.60	0.22	-0.05	0.23	0.04	0.05	0.00			0.03	203.10
19	6/28/2004	09:15:50.87	1.88	-0.66	3.56	0.29	0.00	0.03	0.02	0.11	-0.20	-0.07	-0.02	0.25	-0.01	-2.67	4.90	4.50	21.68	10.65	33.53	22.36	17.51	21.90		73.63	0.21	-0.06	0.23	0.04	0.06	0.00			0.03	203.16
20	6/28/2004	09:17:50.87	1.88	-0.66	3.56	0.32	0.00	0.03	-0.02	0.11	-0.20	-0.07	-0.02	0.25	-0.02	-2.67	5.04	4.64	21.68	10.04	33.29	22.36	17.59	21.98		73.67	0.24	-0.06	0.23	0.00	0.06	0.00			0.03	203.22
21	6/28/2004	09:19:50.87	1.86	-0.66	3.54	0.29	0.00	0.03	-0.02	0.11	-0.20	-0.08	-0.02	0.24	-0.02	-2.67	4.91	4.51	21.94	11.29	33.06	22.28	17.59	21.90		73.70	0.21	-0.06	0.23	0.00	0.06	0.00			0.03	203.29
22	6/28/2004	09:21:50.87	1.88	-0.66	3.56	0.29	0.00	0.03	-0.02	0.11	-0.20	-0.08	-0.02	0.24	-0.02	-2.67	4.85	4.46	21.68	9.42	41.47	22.36	15.07	21.98		73.73	0.21	-0.06	0.23	0.00	0.06	0.00			0.03	203.35
23	6/28/2004	09:23:50.87	1.88	-0.66	3.56	0.29	0.00	0.03	-0.01	0.11	-0.20	-0.08	0.00	0.22	-0.01	-2.66	5.01	4.61	21.94	11.76	37.00	22.36	16.37	21.90		73.77	0.21	-0.06	0.23	0.01	0.06	0.00			0.03	203.42
24	6/28/2004	09:25:50.87	1.88	-0.66	3.56	0.29	0.00	0.02	-0.02	0.11	-0.20	-0.08	-0.02	0.24	-0.02	-2.66	4.85	4.46	21.94	10.09	34.80	22.44	17.10	21.98		73.80	0.21	-0.06	0.22	0.00	0.06	0.00			0.03	203.48
25	6/28/2004	09:27:50.87	1.88	-0.66	3.56	0.29	0.00	0.02	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.01	-2.66	4.83	4.43	21.94	9.05	33.66	22.48	17.47	22.03		73.83	0.21	-0.06	0.22	0.00	0.06	0.00			0.03	203.55
26	6/28/2004	09:29:50.87	1.88	-0.68	3.54	0.29	0.00	0.02	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.02	-2.67	4.86	4.46	21.68	9.07	33.15	22.45	17.60	21.99		73.87	0.21	-0.06	0.22	0.00	0.06	0.00			0.03	203.61
27	6/28/2004	09:31:50.87	1.88	-0.68	3.56	0.29	0.00	0.02	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.02	-2.66	4.94	4.54	21.94	9.62	32.64	22.49	17.89	22.04		73.90	0.21	-0.06	0.22	0.00	0.06	0.00			0.03	203.68
28	6/28/2004	09:33:50.87	1.88	-0.68	3.58	0.29	0.00	0.02	-0.02	0.11	-0.20	-0.08	0.00	0.22	-0.01	-2.66	4.94	4.55	21.68	10.23	32.21	22.46	18.10	22.09		73.93	0.21	-0.06	0.22	0.00	0.06	0.00			0.03	203.74
29	6/28/2004	09:35:50.87	1.88	-0.68	3.54	0.29	0.00	0.01	-0.01	0.11	-0.20	-0.08	-0.02	0.22	0.00	-2.67	4.88	4.48	21.68	10.99	31.86	22.42	18.22	22.05		73.97	0.21	-0.06	0.21	0.01	0.06	0.00			0.03	203.81
30	6/28/2004	09:37:50.87	1.88	-0.68	3.56	0.29	0.00	0.01	-0.02	0.12	-0.20	-0.08	-0.02	0.22	-0.01	-2.66	4.97	4.57	21.94	9.25	31.42	22.38	18.42	22.01		74.00	0.21	-0.06	0.21	0.00	0.07	0.00			0.03	203.87
31	6/28/2004	09:39:50.87	1.88	-0.68	3.54	0.29	0.00	0.00	-0.01	0.11	-0.20	-0.08	0.00	0.22	-0.01	-2.66	4.87	4.47	21.68	10.56	31.10	22.46	18.66	22.09		74.03	0.21	-0.06	0.20	0.01	0.06	0.00			0.03	203.93
32	6/28/2004	09:41:50.87	1.88	-0.68	3.54	0.29	0.00	0.00	-0.01	0.11	-0.20	-0.08	-0.02	0.21	-0.01	-2.66	4.99	4.59	21.94	9.18	31.02	22.46	18.66	22.01		74.07	0.21	-0.06	0.20	0.01	0.06	0.00			0.03	204.00
33	6/28/2004	09:43:50.87	1.88	-0.66	3.56	0.29	0.00	0.00	0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.02	-2.66	4.99	4.59	21.94	10.95	30.62	22.46	18.91	22.09		74.10	0.21	-0.06	0.20	0.04	0.06	0.00			0.03	204.06
34	6/28/2004	09:45:50.87	1.88	-0.68	3.56	0.29	0.00	0.00	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.01	-2.67	4.93	4.53	21.94	9.11	30.22	22.46	19.15	22.09		74.13	0.21	-0.06	0.20	0.00	0.06	0.00			0.03	204.13
35	6/28/2004	09:47:50.87	1.88	-0.66	3.56	0.29	0.01	0.00	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.01	-2.66	4.95	4.55	21.68	8.98	29.91	22.46	19.23	22.09		74.17	0.21	-0.05	0.20	0.00	0.06	0.00			0.03	204.19
36	6/28/2004	09:49:50.87	1.88	-0.66	3.54	0.27	0.00	-0.02	-0.01	0.11	-0.20	-0.08	-0.02	0.22	-0.02	-2.66	4.92	4.53	21.68	8.80	29.91	22.46	19.31	22.09		74.20	0.19	-0.06	0.18	0.01	0.06	0.00			0.03	204.26
37	6/28/2004	09:51:50.87	1.90	-0.66	3.54	0.27	0.00	-0.02	-0.02	0.11	-0.20	-0.08	0.00	0.21	-0.01	-2.66	4.98	4.58	21.68	9.73	30.39	22.55	19.24	22.18		74.23	0.19	-0.06	0.18	0.00	0.06	0.00			0.03	204.32
38	6/28/2004	09:53:50.87	1.88	-0.66	3.54	0.27	0.00	-0.02	-0.02	0.10	-0.20	-0.08	-0.02	0.22	0.00	-2.66	4.96	4.56	21.68	10.29	29.68	22.47	19.65	22.10		74.27	0.19	-0.06	0.18	0.00	0.05	0.00			0.03	204.39
39	6/28/2004	09:55:50.87	1.88	-0.66	3.52	0.26	0.01	-0.03	-0.02	0.11	-0.20	-0.08	-0.02	0.22	-0.02	-2.66	4.95	4.55	21.94	8.88	28.01	22.47	20.86	22.10		74.30	0.18	-0.05	0.17	0.00	0.06	0.00			0.03	204.45
40	6/28/2004	09:57:50.87	1.90	-0.66	3.58	0.25	0.00	-0.04	-0.01	0.10	-0.20	-0.08	-0.02	0.22	0.00	-2.66	4.94	4.54	21.68	8.82	28.33	22.47	20.86	22.10		74.33	0.17	-0.06	0.16	0.01	0.05	0.00			0.03	204.52
41	6/28/2004	09:59:50.87	1.88	-0.66	3.52	0.26	0.01	-0.04	-0.02	0.11	-0.19	-0.08	-0.02	0.22	-0.03	-2.66	4.99	4.59	21.68	9.12	26.33	22.47	22.15	22.10		74.37	0.18	-0.05	0.16	0.00	0.06	0.01			0.03	204.58
42	6/28/2004	10:01:50.87	1.88	-0.64	3.54	0.25	0.01	-0.04	-0.02	0.11	-0.20	-0.08	-0.02	0.22	0.00	-2.66	5.02	4.62	26.09	9.81	25.69	22.55	22.87	22.10		74.40	0.17	-0.05	0.16	0.00	0.06	0.00			0.03	204.65
43	6/28/2004	10:03:50.87	1.88	-0.66	3.54	0.25	0.00	-0.04	-0.01	0.11	-0.20	-0.08	-0.02	0.22	0.00	-2.66	4.94	4.55	26.09	3.10	19.71	22.52	26.20	22.14		74.43	0.17	-0.06	0.16	0.01	0.06	0.00			0.03	204.71
44	6/28/2004	10:05:50.87	1.88	-0.64	3.54	0.25	0.01	-0.04	-0.01	0.10	-0.20	-0.09	-0.02	0.19	0.00	-2.66	5.04	4.64	26.09	0.17	25.61	22.47	23.35	22.10		74.47	0.17	-0.05	0.16	0.01	0.05	0.00			0.03	204.78
45	6/28/2004	10:07:50.87	1.90	-0.64	3.54	0.25	0.00	-0.04	0.01	0.09	-0.20	-0.09	-0.02	0.22	-0.01	-2.66	4.94	4.54	26.09	2.01	27.01	22.52	22.27	22.14		74.50	0.17	-0.06	0.16	0.03	0.04	0.00			0.03	204.84
46	6/28/2004	10:09:50.87	1.88	-0.64	3.52	0.21	0.01	-0.04	-0.02	0.07	-0.20	-0.10	-0.02	0.22	-0.05	-2.66	4.88	4.48	26.09	1.08	27.17	22.52	21.95	22.14		74.53	0.13	-0.05	0.16	0.00	0.02	0.00			0.03	204.90
47	6/28/2004	10:11:50.87	1.90	-0.64	3.52	0.21	0.01	-0.04	-0.01	0.07	-0.19	-0.09	-0.02	0.21	-0.03	-2.66	4.89	4.50	26.09	1.84	27.25	22.60	21.79	22.14		74.57	0.13	-0.05	0.16	0.01	0.02	0.01			0.03	204.97
48	6/28/2004	10:13:50.87	1.88	-0.64	3.52	0.21	0.00	-0.04	-0.02	0.07	-0.20	-0.10	0.00	0.21	-0.01	-2.66	4.95	4.55	26.35	0.62	27.25	22.52	21.79	22.14		74.60	0.13	-0.06	0.16	0.00	0.02	0.00			0.03	205.03
49	6/28/2004	10:15:50.87	1.90	-0.64	3.56	0.21	0.01	-0.04	-0.01	0.07	-0.20	-0.10	-0.02	0.19	-0.02	-2.66	4.94	4.54	26.09	1.68	27.17	22.52	21.79	22.06		74.63	0.13	-0.05	0.16	0.01	0.02	0.00			0.03	205.10
50	6/28/2004	10:17:50.87	1.88	-0.64	3.52	0.21	0.01	-0.04	-0.02	0.07	-0.20	-0.10	-0.02	0.19	-0.03	-2.66	4.92	4.53	26.09	0.00	27.14	22.56	21.83	22.11		74.67	0.13	-0.05	0.16	0.00	0.02	0.00			0.03	205.16
51	6/28/2004	10:19:50.87	1.90	-0.64	3.52	0.21	0.01	-0.04	-0.01	0.07	-0.20	-0.10	0.00	0.19	-0.03	-2.66	4.93	4.53	30.51	1.57	27.03	22.53	21.96	22.15		74.70	0.13	-0.05	0.16	0.01	0.02	0.00			0.03	205.23
52	6/28/2004	10:21:50.87	1.88	-0.64	3.50	0.21	0.00	-0.04	0.02	0.07	-0.20	-0.12	0.00	0.19	-0.01	-2.66	4.97	4.57	30.51	0.72	26.99	22.49	22.01	22.12		74.73	0.13	-0.06	0.16	0.04	0.02	0.00			0.03	205.29
53	6/28/2004	10:23:50.87	1.88	-0.64	3.52	0.20	0.01	-0.04	-0.01	0.07	-0.20	-0.10	-0.02	0.19	-0.03	-2.66	4.95	4.55	30.51	0.32	26.99	22.49	22.09	22.20		74.77	0.12	-0.05	0.16	0.01	0.02	0.00			0.03	205.36
54	6/28/2004	10:25:50.87	1.88	-0.64	3.52	0.20	0.01	-0.07	0.01	0.07	-0.20	-0.10	-0.02	0.19	-0.02	-2.66	4.93	4.53	30.51	0.23	27.04	22.62	22.21	22.25		74.80	0.12	-0.05	0.14	0.03	0.02	0.00			0.03	205.42
55	6/28/2004	10:27:50.87	1.88	-0.64	3.54	0.19	0.01	-0.05	0.01	0.07	-0.19	-0.10	-0.02	0.19	-0.02	-2.66	4.99	4.59	30.51	1.59	26.88	22.62	22.29	22.17		74.83	0.11	-0.05	0.15	0.03	0.02	0.01			0.03	205.49
56	6/28/2004	10:29:50.87	1.62	-0.62	3.25	0.20	0.02	-0.07	-0.01	0.09	-0.20	-0.10	-0.02	0.20	-0.03	-2.65	5.05	4.65		1.32	26.72	22.62	22.29	22.25		74.87	0.12	-0.04	0.14	0.01	0.04	0.00			0.03	205.55
57	6/28/2004	10:31:50.87	1.88	-0.62	3.50	0.19	0.01	-0.07	0.02	0.07	-0.19	-0.10	-0.02	0.19	-0.02	-2.66	4.90	4.50		0.19	26.72	22.54	22.37	22.17		74.90	0.11	-0.05	0.14	0.04	0.02	0.01			0.03	205.62
58	6/28/2004	10:33:50.87	1.88	-0.62	3.52	0.18	0.01	-0.08	0.01	0.07	-0.20	-0.12	-0.02	0.19	-0.03	-2.65	4.98	4.58		0.92	26.56	22.54	22.37	22.17		74.93	0.10	-0.05	0.12	0.03	0.02	0.00			0.03	205.68
59	6/28/2004	10:35:50.87	1.88	-0.62	3.54	0.19	0.02	-0.07	0.02	0.07	-0.20	-0.10	0.00	0.19	-0.03	-2.66	4.97	4.57		1.57	26.56	22.62	22.62	22.25		74.97	0.11	-0.04	0.14	0.04	0.02	0.00			0.03	205.75
60	6/28/2004	10:37:50.87	1.88	-0.61	3.52	0.19	0.02	-0.07	-0.01	0.07	-0.19	-0.12	-0.02	0.19	-0.02	-2.66	4.85	4.46		0.66	26.40	22.70	22.62	22.17		75.00	0.11	-0.04	0.14	0.01	0.02	0.01			0.03	205.81
61	6/28/2004	10:39:50.87	1.88	-0.61	3.54	0.19	0.02	-0.07	-0.01	0.07	-0.20	-0.12	0.00	0.19	-0.02	-2.65	4.96	4.56		0.96	26.40	22.70	22.70	22.25		75.03	0.11	-0.04	0.14	0.01	0.02	0.00			0.03	205.87
62	6/28/2004	10:41:50.87	1.88	-0.61	3.54	0.19	0.02	-0.08	0.01	0.07	-0.19	-0.12	-0.02	0.19	-0.05	-2.66	4.93	4.53		0.77	26.24	22.62	22.70	22.25		75.07	0.11	-0.04	0.12	0.03	0.02	0.01			0.03	205.94
63	6/28/2004	10:43:50.87	1.86	-0.61	3.50	0.15	0.02	-0.07	0.01	0.07	-0.20	-0.12	-0.02	0.19	-0.03	-2.66	4.88	4.48		-0.14	26.12	22.67	22.74	22.21		75.10	0.07	-0.04	0.14	0.03	0.02	0.00			0.03	206.00
64	6/28/2004	10:45:50.87	1.88	-0.59	3.54	0.19	0.02	-0.07	-0.01	0.07	-0.20	-0.12	-0.02	0.19	-0.03	-2.66	4.94	4.55		-0.14	26.04	22.67	22.74	22.21		75.13	0.11	-0.04	0.14	0.01	0.02	0.00			0.03	206.07
65	6/28/2004	10:47:50.87	1.90	-0.59	3.50	0.18	0.02	-0.08	0.01	0.07	-0.19	-0.10	0.00	0.19	-0.02	-2.65	4.91	4.51		0.25	26.20	22.67	22.74	22.21		75.17	0.10	-0.04	0.12	0.03	0.02	0.01			0.03	206.13
66	6/28/2004	10:49:50.87	1.88	-0.59	3.54	0.18	0.04	-0.08	0.01	0.07	-0.20	-0.10	-0.02	0.19	-0.03	-2.66	4.95	4.55		1.16	26.20	22.67	22.74	22.21		75.20	0.10	-0.03	0.12	0.03	0.02	0.00			0.03	206.20
67	6/28/2004	10:51:50.87	1.88	-0.59	3.50	0.19	0.00	-0.07	0.02	0.07	-0.20	-0.10	-0.02	0.19	-0.03	-2.66	4.94	4.55		0.07	26.04	22.67	22.74	22.21		75.23	0.11	-0.06	0.14	0.04	0.02	0.00			0.03	206.26
68	6/28/2004	10:53:50.87	1.88	-0.59	3.50	0.19	0.02	-0.07	0.02	0.07	-0.20	-0.12	-0.02	0.19	-0.03	-2.66	4.89	4.50		-0.12	25.96	22.67	22.82	22.21		75.27	0.11	-0.04	0.14	0.04	0.02	0.00			0.03	206.33
69	6/28/2004	10:55:50.87	1.88	-0.57	3.52	0.19	0.04	-0.08	0.01	0.09	-0.18	-0.10	-0.02	0.19	-0.02	-2.65	4.92	4.53		0.96	25.93	22.79	22.87	22.34		75.30	0.11	-0.03	0.12	0.03	0.04	0.02			0.03	206.39
70	6/28/2004	10:57:50.87	1.88	-0.57	3.52	0.19	0.02	-0.08	0.01	0.07	-0.19	-0.10	-0.02	0.19	-0.02	-2.66	4.91	4.51		1.39	25.85	22.71	22.95	22.34		75.33	0.11	-0.04	0.12	0.03	0.02	0.01			0.03	206.46
71	6/28/2004	10:59:50.87	1.88	-0.57	3.50	0.19	0.02	-0.07	0.01	0.07	-0.19	-0.09	0.00	0.19	-0.03	-2.66	4.98	4.58		1.05	25.69	22.71	22.87	22.26		75.37	0.11	-0.04	0.14	0.03	0.02	0.01			0.03	206.52
72	6/28/2004	11:01:50.87	1.88	-0.57	3.50	0.18	0.04	-0.08	0.02	0.07	-0.19	-0.10	-0.02	0.19	-0.03	-2.66	4.92	4.53		0.15	25.69	22.71	22.79	22.18		75.40	0.10	-0.03	0.12	0.04	0.02	0.01			0.03	206.58

Table H3-3-7. CIX Campaign II, Cycle 3, 0.5 M Nitric Acid Eluent

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero.

The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow meter	flow cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-ed	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ-ential	cumul-lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	6/28/2004	10:44:50.87	1.88	-0.61	3.50	0.19	0.02	-0.08	-0.01	0.09	-0.19	-0.12	-0.02	0.19	-0.02	-2.66	4.89	4.50		-0.18	26.04	22.67	22.74	22.21		75.12	0.11	-0.04	0.12	0.01	0.04	0.01			0.03	206.00
2	6/28/2004	10:51:50.87	1.88	-0.59	3.50	0.19	0.00	-0.07	0.02	0.07	-0.20	-0.10	-0.02	0.19	-0.03	-2.66	4.94	4.55		0.07	26.04	22.67	22.74	22.21		75.23	0.11	-0.06	0.14	0.04	0.02	0.00			0.03	206.23
3	6/28/2004	10:58:50.87	1.88	-0.57	3.52	0.19	0.02	-0.07	0.02	0.07	-0.19	-0.10	0.00	0.19	-0.02	-2.66	4.89	4.49		-0.17	25.77	22.79	22.95	22.26		75.35	0.11	-0.04	0.14	0.04	0.02	0.01			0.03	206.45
4	6/28/2004	11:05:50.87	1.88	-0.55	3.52	0.19	0.04	-0.07	0.01	0.07	-0.18	-0.09	-0.02	0.19	-0.03	-2.66	4.94	4.55		-0.12	25.58	22.76	22.91	22.30		75.47	0.11	-0.03	0.14	0.03	0.02	0.02			0.03	206.68
5	6/28/2004	11:12:50.87	1.88	-0.55	3.52	0.15	0.02	-0.07	0.01	0.07	-0.19	-0.08	-0.02	0.19	-0.02	-2.65	4.94	4.54		-0.17	25.14	22.72	23.04	22.27		75.58	0.07	-0.04	0.14	0.03	0.02	0.01			0.03	206.90
6	6/28/2004	11:19:50.87	1.88	-0.53	3.50	0.15	0.02	-0.08	0.02	0.07	-0.18	-0.08	0.00	0.19	-0.02	-2.65	4.98	4.58		0.45	25.07	22.82	22.97	22.36		75.70	0.07	-0.04	0.12	0.04	0.02	0.02			0.03	207.13
7	6/28/2004	11:26:50.87	1.88	-0.53	3.52	0.15	0.04	-0.10	0.02	0.07	-0.19	-0.08	-0.02	0.19	-0.02	-2.66	4.92	4.52		0.83	24.88	22.86	23.02	22.41		75.82	0.07	-0.03	0.10	0.04	0.02	0.01			0.03	207.36
8	6/28/2004	11:33:50.87	1.88	-0.51	3.50	0.15	0.04	-0.10	0.02	0.07	-0.17	-0.08	0.00	0.19	-0.02	-2.65	5.02	4.62		0.56	24.76	22.83	22.98	22.37		75.93	0.07	-0.03	0.10	0.04	0.02	0.03			0.03	207.59
9	6/28/2004	11:40:50.87	1.86	-0.51	3.52	0.15	0.04	-0.10	0.02	0.05	-0.18	-0.08	-0.02	0.19	-0.02	-2.65	4.84	4.44		1.03	24.68	22.91	23.06	22.45		76.05	0.07	-0.03	0.10	0.04	0.00	0.02			0.03	207.81
10	6/28/2004	11:47:50.87	1.86	-0.50	3.48	0.15	0.04	-0.10	0.02	0.04	-0.17	-0.08	0.00	0.19	-0.01	-2.65	4.98	4.58		1.00	24.52	22.91	23.31	22.37		76.17	0.07	-0.03	0.10	0.04	-0.01	0.03			0.03	208.04
11	6/28/2004	11:54:50.87	1.86	-0.48	3.50	0.15	0.04	-0.10	0.02	0.04	-0.17	-0.08	0.00	0.19	-0.02	-2.66	4.94	4.54		0.82	24.45	23.00	23.56	22.47		76.28	0.07	-0.03	0.10	0.04	-0.01	0.03			0.03	208.26
12	6/28/2004	12:01:50.87	1.86	-0.46	3.48	0.15	0.04	-0.10	0.02	0.04	-0.17	-0.08	-0.02	0.19	-0.01	-2.65	4.99	4.59		0.74	24.37	23.00	23.72	22.47		76.40	0.07	-0.03	0.10	0.04	-0.01	0.03			0.03	208.49
13	6/28/2004	12:08:50.87	1.86	-0.44	3.47	0.15	0.04	-0.10	0.02	0.05	-0.17	-0.08	-0.02	0.19	-0.02	-2.66	4.91	4.51		0.90	24.34	23.05	23.93	22.43		76.52	0.07	-0.03	0.10	0.04	0.00	0.03			0.03	208.72
14	6/28/2004	12:15:50.87	1.86	-0.40	3.48	0.15	0.04	-0.10	0.02	0.04	-0.18	-0.08	-0.02	0.17	-0.02	-2.66	4.95	4.55	56.49	-0.17	24.31	23.09	24.13	22.48		76.63	0.07	-0.03	0.10	0.04	-0.01	0.02			0.03	208.95
15	6/28/2004	12:22:50.87	1.88	-0.39	3.50	0.16	0.04	-0.09	0.02	0.05	-0.17	-0.08	-0.02	0.19	-0.01	-2.65	5.08	4.68	69.48	-0.17	24.35	23.14	24.42	22.52		76.75	0.08	-0.03	0.11	0.04	0.00	0.03			0.03	209.17
16	6/28/2004	12:29:50.87	1.86	-0.37	3.48	0.15	0.04	-0.10	0.02	0.04	-0.17	-0.08	0.00	0.19	-0.01	-2.65	4.96	4.56	73.63	-0.17	24.32	23.18	24.71	22.65		76.87	0.07	-0.03	0.10	0.04	-0.01	0.03			0.03	209.40
17	6/28/2004	12:36:50.87	1.86	-0.33	3.47	0.15	0.04	-0.10	0.02	0.05	-0.17	-0.08	-0.02	0.19	-0.01	-2.65	4.94	4.54	78.05	-0.17	24.20	23.15	24.91	22.62		76.98	0.07	-0.03	0.10	0.04	0.00	0.03			0.03	209.63
18	6/28/2004	12:43:50.87	1.86	-0.33	3.48	0.16	0.04	-0.09	0.02	0.06	-0.17	-0.08	-0.02	0.19	-0.02	-2.65	5.14	4.73	78.05	0.29	24.08	23.18	25.11	22.57		77.10	0.08	-0.03	0.11	0.04	0.01	0.03			0.03	209.85
19	6/28/2004	12:50:50.87	1.86	-0.29	3.48	0.15	0.04	-0.10	0.02	0.05	-0.17	-0.08	0.00	0.19	-0.02	-2.65	4.80	4.40	73.89	1.21	24.12	23.23	25.31	22.62		77.22	0.07	-0.03	0.10	0.04	0.00	0.03			0.03	210.08
20	6/28/2004	12:57:50.87	1.86	-0.29	3.47	0.15	0.04	-0.10	0.02	0.05	-0.17	-0.08	0.00	0.19	-0.01	-2.65	4.81	4.41	73.89	1.06	24.17	23.28	25.52	22.74		77.33	0.07	-0.03	0.10	0.04	0.00	0.03			0.03	210.30
21	6/28/2004	13:04:50.87	1.84	-0.26	3.48	0.16	0.04	-0.09	0.02	0.06	-0.17	-0.08	-0.02	0.19	-0.02	-2.65	5.11	4.71	82.46	0.61	24.14	23.24	25.65	22.71		77.45	0.08	-0.03	0.11	0.04	0.01	0.03			0.03	210.53
22	6/28/2004	13:11:50.87	1.84	-0.24	3.47	0.15	0.04	-0.09	-0.02	0.05	-0.17	-0.10	-0.02	0.19	-0.02	-2.65	4.84	4.44	86.62	0.84	24.30	23.24	25.81	22.71		77.57	0.07	-0.03	0.11	0.00	0.00	0.03			0.03	210.75
23	6/28/2004	13:18:50.87	1.84	-0.18	3.47	0.16	0.04	-0.09	-0.02	0.06	-0.17	-0.12	-0.02	0.19	-0.02	-2.67	4.96	4.56	95.45	0.66	24.22	23.32	25.81	22.71		77.68	0.08	-0.03	0.11	0.00	0.01	0.03			0.03	210.98
24	6/28/2004	13:25:50.87	1.86	-0.18	3.45	0.16	0.04	-0.09	-0.02	0.06	-0.17	-0.12	-0.02	0.19	-0.02	-2.65	4.89	4.49	99.61	0.49	24.26	23.37	26.01	22.84		77.80	0.08	-0.03	0.11	0.00	0.01	0.03			0.03	211.21
25	6/28/2004	13:32:50.87	1.84	-0.17	3.47	0.16	0.04	-0.09	-0.01	0.07	-0.17	-0.12	-0.02	0.19	-0.02	-2.68	4.83	4.43	104.03	0.69	24.31	23.34	26.14	22.80		77.92	0.08	-0.03	0.11	0.01	0.02	0.03			0.03	211.43
26	6/28/2004	13:39:50.87	1.75	-0.15	3.39	0.18	0.04	-0.09	-0.02	0.07	-0.18	-0.12	-0.02	0.19	-0.02	-2.67	4.76	4.36	99.61	0.67	24.36	23.38	26.26	22.85		78.03	0.10	-0.03	0.11	0.00	0.02	0.02			0.03	211.65
27	6/28/2004	13:46:50.87	1.84	-0.11	3.47	0.18	0.04	-0.08	-0.02	0.07	-0.19	-0.12	0.00	0.20	-0.02	-2.68	5.08	4.68	108.44	0.87	24.40	23.43	26.31	22.81		78.15	0.10	-0.03	0.12	0.00	0.02	0.01			0.03	211.88
28	6/28/2004	13:53:50.87	1.84	-0.07	3.48	0.18	0.04	-0.09	-0.02	0.07	-0.18	-0.12	-0.02	0.16	-0.01	-2.67	4.89	4.50	112.60	1.03	24.37	23.39	26.44	22.86		78.27	0.10	-0.03	0.11	0.00	0.02	0.02			0.03	212.11
29	6/28/2004	14:00:50.87	1.84	-0.06	3.47	0.16	0.04	-0.08	-0.02	0.07	-0.20	-0.12	-0.02	0.16	-0.01	-2.67	4.80	4.41	112.60	0.95	24.45	23.39	26.52	22.86		78.38	0.08	-0.03	0.12	0.00	0.02	0.00	4.40		0.03	212.34
30	6/28/2004	14:07:50.87	1.84	-0.04	3.45	0.18	0.04	-0.09	-0.02	0.07	-0.20	-0.12	0.00	0.16	-0.02	-2.67	4.87	4.48	117.01	0.48	24.53	23.39	26.60	22.86		78.50	0.10	-0.03	0.11	0.00	0.02	0.00			0.03	212.56
31	6/28/2004	14:14:50.87	1.84	0.00	3.48	0.16	0.04	-0.08	-0.02	0.07	-0.20	-0.12	0.00	0.16	-0.01	-2.67	4.92	4.53	117.01	0.85	24.49	23.52	26.72	22.91		78.62	0.08	-0.03	0.12	0.00	0.02	0.00			0.03	212.79
32	6/28/2004	14:21:50.87	1.84	0.02	3.47	0.18	0.04	-0.08	-0.02	0.07	-0.20	-0.12	-0.02	0.17	-0.01	-2.68	4.97	4.57	117.01	0.15	24.45	23.39	26.68	22.86		78.73	0.10	-0.03	0.12	0.00	0.02	0.00			0.03	213.01
33	6/28/2004	14:28:50.87	1.84	0.04	3.47	0.14	0.04	-0.08	-0.02	0.09	-0.20	-0.12	-0.02	0.16	-0.02	-2.68	4.84	4.44	118.05	0.91	24.49	23.44	26.80	22.91		78.85	0.06	-0.03	0.12	0.00	0.04	0.00			0.03	213.24
34	6/28/2004	14:35:50.87	1.84	0.09	3.47	0.15	0.04	-0.08	-0.02	0.07	-0.20	-0.12	-0.02	0.17	-0.01	-2.68	4.85	4.46	121.43	0.81	24.49	23.44	26.88	22.91		78.97	0.07	-0.03	0.12	0.00	0.02	0.00			0.03	213.47
35	6/28/2004	14:42:50.87	1.84	0.11	3.43	0.14	0.04	-0.08	-0.02	0.07	-0.19	-0.12	-0.02	0.16	-0.02	-2.68	4.83	4.43	121.43	-0.18	24.41	23.44	26.96	22.91		79.08	0.06	-0.03	0.12	0.00	0.02	0.01			0.03	213.70
36	6/28/2004	14:49:50.87	1.84	0.13	3.45	0.15	0.04	-0.07	-0.01	0.07	-0.19	-0.12	0.00	0.19	-0.02	-2.67	5.21	4.81	125.85	1.23	24.42	23.45	26.97	23.00		79.20	0.07	-0.03	0.14	0.01	0.02	0.01			0.03	213.93
37	6/28/2004	14:56:50.87	1.82	0.15	3.45	0.15	0.04	-0.08	-0.02	0.07	-0.20	-0.12	-0.02	0.17	-0.01	-2.67	4.93	4.53	125.59	-0.17	24.25	23.44	27.04	22.98		79.32	0.07	-0.03	0.12	0.00	0.02	0.00			0.03	214.15
38	6/28/2004	15:03:50.87	1.82	0.18	3.43	0.14	0.04	-0.08	-0.02	0.07	-0.20	-0.12	-0.02	0.16	-0.01	-2.67	4.86	4.46	125.59	0.88	24.46	23.40	26.76	22.95		79.43	0.06	-0.03	0.12	0.00	0.02	0.00			0.03	214.38
39	6/28/2004	15:10:50.87	1.84	0.22	3.43	0.15	0.04	-0.09	-0.02	0.07	-0.20	-0.12	-0.02	0.16	-0.02	-2.68	4.80	4.41	125.59	0.16	24.39	23.42	26.78	23.04		79.55	0.07	-0.03	0.11	0.00	0.02	0.00			0.03	214.61
40	6/28/2004	15:17:50.87	1.82	0.24	3.43	0.14	0.04	-0.09	-0.02	0.07	-0.20	-0.12	0.00	0.16	-0.01	-2.68	4.87	4.48	125.59	-0.17	24.39	23.34	26.54	22.96		79.67	0.06	-0.03	0.11	0.00	0.02	0.00			0.03	214.83
41	6/28/2004	15:24:50.87	1.84	0.24	3.48	0.14	0.04	-0.09	-0.02	0.07	-0.19	-0.10	0.00	0.17	-0.01	-2.68	4.87	4.47	125.59	0.38	24.47	23.42	26.70	23.04		79.78	0.06	-0.03	0.11	0.00	0.02	0.01			0.03	215.06
42	6/28/2004	15:31:50.87	1.84	0.28	3.47	0.15	0.04	-0.08	-0.02	0.07	-0.19	-0.12	0.00	0.19	-0.01	-2.68	5.11	4.71	125.85	0.64	24.47	23.34	26.70	23.04		79.90	0.07	-0.03	0.12	0.00	0.02	0.01			0.03	215.29
43	6/28/2004	15:38:50.87	1.82	0.29	3.45	0.16	0.04	-0.09	-0.02	0.07	-0.20	-0.12	0.00	0.16	-0.01	-2.68	4.87	4.48	130.00	1.30	24.47	23.26	26.62	22.96		80.02	0.08	-0.03	0.11	0.00	0.02	0.00			0.03	215.51
44	6/28/2004	15:42:22.87	1.31	0.28	2.79	0.08	0.04	-0.20	-0.02	0.00	-0.20	-0.14	0.00	0.14	-0.02	-2.76	0.15	0.04	121.17	0.89	24.79	23.34	26.70	22.96		80.08	0.00	-0.03	0.00	0.00	-0.05	0.00			0.00	215.55
45	6/28/2004	15:48:42.87	1.82	0.31	3.43	0.11	0.04	-0.11	-0.02	0.04	-0.20	-0.12	0.00	0.15	-0.01	-2.88	3.43	3.08	130.00	0.65	24.31	23.34	26.62	23.04		80.18	-0.08	-0.03	-0.03	0.00	-0.01	0.00			0.02	215.66
46	6/28/2004	15:55:42.87	1.82	0.33	3.45	0.11	0.04	-0.11	-0.02	0.05	-0.20	-0.12	-0.02	0.17	-0.01	-2.89	3.33	2.98	130.00	-0.18	24.23	23.26	26.70	22.96		80.30	-0.08	-0.03	-0.03	0.00	0.00	0.00			0.02	215.82
47	6/28/2004	16:02:42.87	1.84	0.33	3.39	0.11	0.05	-0.11	-0.02	0.05	-0.20	-0.12	0.00	0.20	-0.02	-2.89	2.55	2.25	130.00	0.95	24.23	23.26	26.78	23.04		80.42	-0.08	-0.01	-0.03	0.00	0.00	0.00			0.02	215.97
48	6/28/2004	16:09:42.87	1.82	0.35	3.45	0.16	0.04	-0.09	-0.02	0.07	-0.20	-0.12	-0.02	0.25	-0.01	-2.88	3.77	3.40	130.00	0.96	24.47	23.34	26.70	22.96		80.53	-0.03	-0.03	-0.01	0.00	0.02	0.00			0.02	216.14
49	6/28/2004	16:16:42.87	1.82	0.37	3.43	0.11	0.04	-0.10	-0.02	0.05	-0.20	-0.12	-0.02	0.25	-0.02	-2.89	3.26	2.92	130.00	0.63	24.28	23.38	26.82	23.01		80.65	-0.08	-0.03	-0.02	0.00	0.00	0.00			0.02	216.30
50	6/28/2004	16:23:42.87	1.84	0.40	3.45	0.14	0.04	-0.08	-0.02	0.07	-0.20	-0.12	0.00	0.25	-0.02	-2.88	3.97	3.59	130.00	1.27	24.11	23.30	26.74	23.01		80.77	-0.05	-0.03	0.00	0.00	0.02	0.00			0.03	216.48
51	6/28/2004	16:30:42.87	1.84	0.40	3.43	0.11	0.04	-0.11	-0.02	0.05	-0.20	-0.12	0.00	0.27	-0.01	-2.89	3.90	3.53	134.42	-0.18	24.20	23.38	26.82	23.01		80.88	-0.08	-0.03	-0.03	0.00	0.00	0.00	4.40		0.03	216.65
52	6/28/2004	16:37:42.87	1.84	0.40	3.43	0.11	0.04	-0.10	-0.02	0.05	-0.20	-0.12	0.00	0.28	-0.02	-2.88	3.77	3.40	134.42	1.17	24.40	23.43	26.79	23.14		81.00	-0.08	-0.03	-0.02	0.00	0.00	0.00			0.02	216.82
53	6/28/2004	16:44:42.87	1.82	0.42	3.41	0.15	0.05	-0.09	-0.02	0.06	-0.20	-0.12	0.00	0.30	-0.02	-2.88	2.92	2.59	134.42	0.47	24.40	23.43	26.79	23.14		81.12	-0.04	-0.01	-0.01	0.00	0.01	0.00			0.02	216.98
54	6/28/2004	16:51:42.87	1.82	0.46	3.41	0.19	0.04	-0.10	-0.02	0.06	-0.20	-0.12	0.00	0.30	-0.02	-2.88	3.73	3.36	134.42	-0.08	24.13	23.47	26.92	23.10		81.23	0.00	-0.03	-0.02	0.00	0.01	0.00			0.02	217.15
55	6/28/2004	16:58:42.87	1.82	0.48	3.41	0.20	0.04	-0.09	-0.02	0.06	-0.20	-0.12	-0.02	0.30	-0.02	-2.89	3.38	3.03	134.42	-0.17	23.92	23.43	26.87	23.06		81.35	0.01	-0.03	-0.01	0.00	0.01	0.00			0.02	217.31
56	6/28/2004	17:05:42.87	1.81	0.48	3.39	0.21	0.04	-0.09	-0.02	0.05	-0.20	-0.12	-0.02	0.30	-0.01	-2.89	4.00	3.62	134.42	0.69	24.32	23.51	26.87	23.14		81.47	0.02	-0.03	-0.01	0.00	0.00	0.00			0.03	217.47
57	6/28/2004	17:12:42.87	1.82	0.48	3.41	0.22	0.04	-0.04	-0.02	0.07	-0.20	-0.12	0.00	0.32	-0.02	-2.87	3.40	3.05	134.16	0.44	24.32	23.51	26.87	23.14		81.58	0.03	-0.03	0.04	0.00	0.02	0.00			0.02	217.63
58	6/28/2004	17:19:42.87	1.82	0.50	3.37	0.21	0.04	-0.04	-0.01	0.03	-0.20	-0.12	-0.02	0.30	-0.02	-2.89	3.25	2.91	134.42	0.15	24.53	23.47	26.92	23.10		81.70	0.02	-0.03	0.04	0.01	-0.03	0.00			0.02	217.80
59	6/28/2004	17:26:42.87	1.82	0.51	3.47	0.26	0.08	0.00	-0.02	0.07	-0.20	-0.12	-0.02	0.30	-0.02	-2.88	2.55	2.25	134.16	-0.06	24.65	23.52	26.88	23.15		81.82	0.07	0.02	0.08	0.00	0.02	0.00			0.02	217.95
60	6/28/2004	17:33:42.87	1.84	0.55	3.39	0.29	0.08	0.03	-0.02	0.09	-0.20	-0.12	-0.02	0.31	-0.01	-2.88	3.83	3.46	134.42	0.89	24.53	23.47	26.76	23.10		81.93	0.10	0.02	0.11	0.00	0.04	0.00			0.02	218.11
61	6/28/2004	17:40:42.87	1.82	0.55	3.41	0.30	0.08	0.03	-0.01	0.11	-0.20	-0.12	-0.02	0.31	-0.02	-2.89	3.82	3.45	134.42	0.71	24.57	23.52	26.88	23.15		82.05	0.11	0.02	0.11	0.01	0.06	0.00			0.02	218.27
62	6/28/2004	17:47:42.87	1.82	0.57	3.39	0.30	0.05	0.03	-0.02	0.12	-0.20	-0.12	0.00	0.28	-0.02	-2.88	3.29	2.94	134.42	0.22	24.57	23.52	26.72	23.15		82.17	0.11	-0.01	0.11	0.00	0.07	0.00			0.02	218.43
63	6/28/2004	17:54:42.87	1.82	0.59	3.41	0.32	0.08	0.08	-0.02	0.15	-0.20	-0.09	-0.02	0.32	-0.01	-2.87	4.60	4.21	134.42	-0.01	24.29	23.47	26.44	23.10		82.28	0.13	0.02	0.16	0.00	0.10	0.00			0.03	218.61
64	6/29/2004	08:20:53.26	-0.95	-0.40	0.45	0.29	0.05	0.00	-0.02	0.05	-0.20	-0.13	0.00	0.28	-0.01	-2.90	0.14	0.03	147.41	0.49	22.34	22.33	25.14	22.04		87.35	0.10	-0.01	0.08	0.00	0.00	0.00			0.00	218.70
65	6/29/2004	08:27:53.37	-0.80	-0.42	0.62	0.29	0.05	0.00	-0.02	0.04	-0.19	-0.12	-0.02	0.28	-0.01	-2.90	0.14	0.03	142.99	-0.17	22.25	22.32	25.05	22.03		87.46	0.10	-0.01	0.08	0.00	-0.01	0.01			0.00	218.70
66	6/29/2004	08:34:53.37	0.83	-0.44	0.86	0.29	0.05	0.00	-0.02	0.05	-0.20	-0.12	-0.02	0.26	-0.01	-2.90	0.15	0.04	138.84	0.13	22.34	22.41	25.54	22.12		87.58	0.10	-0.01	0.08	0.00	0.00	0.00			0.00	218.70
67	6/29/2004	08:41:53.37	1.93	-0.42	3.56	0.38	0.05	0.12	-0.02	0.14	-0.20	-0.04	-0.02	0.32	-0.02	-2.69	7.46	7.08	151.56	0.78	-1.28	22.38	32.67	22.09		87.70	0.19	-0.01	0.20	0.00	0.09	0.00			0.05	218.95
68	6/29/2004	08:48:53.37	1.95	-0.42	3.52	0.38	0.05	0.09	-0.02	0.14	-0.20	-0.02	0.00	0.32	-0.01	-2.71	7.08	6.68	151.56	0.81	-0.62	22.38	31.88	22.09		87.81	0.19	-0.01	0.17	0.00	0.09	0.00			0.05	219.29
69	6/29/2004	08:55:53.37	1.95	-0.46	3.52	0.38	0.05	0.11	-0.02	0.14	-0.20	0.01	0.00	0.32	-0.01	-2.69	7.28	6.90	134.42	0.73	9.98	22.31	28.87	22.10		87.93	0.19	-0.01	0.19	0.00	0.09	0.00			0.05	219.63
70	6/29/2004	09:02:53.37	1.92	-0.44	3.48	0.37	0.05	0.09	-0.02	0.14	-0.19	0.02	0.00	0.31	-0.02	-2.69	7.24	6.86	52.07	0.53	15.98	22.36	26.60	22.06		88.05	0.18	-0.01	0.17	0.00	0.09	0.01			0.05	219.97
71	6/29/2004	09:09:53.37	1.90	-0.44	3.48	0.38	0.05	0.09	-0.02	0.15	-0.19	0.02	-0.02	0.31	-0.01	-2.69	7.34	6.96	26.09	1.85	16.95	22.36	26.12	22.06		88.16	0.19	-0.01	0.17	0.00	0.10	0.01			0.05	220.32

Table H3-3-8. CIX Campaign II, Cycle 3, DI Water Post-Elution Rinse

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
					DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
6/29/2004	09:01:53.37	1.92	-0.46	3.48	0.38	0.05	0.09	-0.01	0.14	-0.20	0.02	-0.02	0.31	-0.01	-2.71	7.32	6.94	56.49	-0.18	15.45	22.31	26.72	22.02		88.03	0.19	-0.01	0.17	0.01	0.09	0.00			0.05	220.00
6/29/2004	09:02:53.37	1.92	-0.44	3.48	0.37	0.05	0.09	-0.02	0.14	-0.19	0.02	0.00	0.31	-0.02	-2.69	7.24	6.86	52.07	0.53	15.98	22.36	26.60	22.06		88.05	0.18	-0.01	0.17	0.00	0.09	0.01			0.05	220.05
6/29/2004	09:03:53.37	1.92	-0.46	3.50	0.37	0.05	0.11	-0.02	0.14	-0.20	0.02	-0.02	0.31	-0.01	-2.69	7.16	6.77	43.50	1.46	15.93	22.31	26.40	22.02		88.06	0.18	-0.01	0.19	0.00	0.09	0.00			0.05	220.10
6/29/2004	09:04:53.37	1.90	-0.44	3.47	0.38	0.05	0.09	-0.01	0.14	-0.20	0.02	-0.02	0.32	-0.01	-2.69	7.33	6.95	39.08	-0.16	16.26	22.39	26.40	22.02		88.08	0.19	-0.01	0.17	0.01	0.09	0.00			0.05	220.15
6/29/2004	09:05:53.37	1.90	-0.44	3.48	0.37	0.05	0.09	-0.02	0.15	-0.20	0.02	-0.02	0.32	-0.01	-2.71	7.29	6.90	34.92	0.96	16.55	22.36	26.36	22.14		88.10	0.18	-0.01	0.17	0.00	0.10	0.00			0.05	220.20
6/29/2004	09:06:53.37	1.93	-0.44	3.47	0.37	0.05	0.11	-0.02	0.14	-0.19	0.02	-0.02	0.31	-0.01	-2.69	7.30	6.92	30.51	1.33	16.55	22.36	26.36	22.14		88.11	0.18	-0.01	0.19	0.00	0.09	0.01			0.05	220.24
6/29/2004	09:07:53.37	1.92	-0.44	3.48	0.38	0.05	0.11	-0.02	0.15	-0.19	0.02	0.00	0.30	-0.01	-2.69	7.31	6.92	30.51	-0.15	16.87	22.44	26.20	22.14		88.13	0.19	-0.01	0.19	0.00	0.10	0.01			0.05	220.29
6/29/2004	09:08:53.37	1.90	-0.46	3.50	0.35	0.05	0.09	-0.02	0.14	-0.20	0.01	-0.02	0.31	-0.01	-2.71	7.08	6.69	26.35	1.93	16.95	22.36	26.12	22.06		88.15	0.16	-0.01	0.17	0.00	0.09	0.00			0.05	220.34
6/29/2004	09:09:53.37	1.90	-0.44	3.48	0.38	0.05	0.09	-0.02	0.15	-0.19	0.02	-0.02	0.31	-0.01	-2.69	7.34	6.96	26.09	1.85	16.95	22.36	26.12	22.06		88.16	0.19	-0.01	0.17	0.00	0.10	0.01			0.05	220.39
6/29/2004	09:10:53.37	1.92	-0.44	3.48	0.37	0.05	0.09	-0.01	0.14	-0.20	0.02	0.00	0.31	-0.01	-2.71	7.27	6.88	21.68	0.41	17.12	22.36	26.12	22.14		88.18	0.18	-0.01	0.17	0.01	0.09	0.00			0.05	220.44
6/29/2004	09:11:53.37	1.90	-0.44	3.48	0.37	0.05	0.09	0.02	0.14	-0.20	0.02	-0.02	0.31	-0.01	-2.71	7.32	6.94	21.94	0.48	16.99	22.31	26.08	22.10		88.20	0.18	-0.01	0.17	0.04	0.09	0.00			0.05	220.49
6/29/2004	09:12:53.37	1.92	-0.44	3.48	0.38	0.05	0.09	0.02	0.14	-0.20	0.02	0.00	0.30	-0.02	-2.69	7.30	6.92	21.94	0.27	17.28	22.44	26.12	22.14		88.21	0.19	-0.01	0.17	0.04	0.09	0.00			0.05	220.54
6/29/2004	09:13:53.37	1.92	-0.44	3.48	0.36	0.06	0.09	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.16	6.77	21.94	2.73	17.28	22.36	26.12	22.06		88.23	0.17	0.00	0.17	0.00	0.10	0.00			0.05	220.59
6/29/2004	09:14:53.37	1.90	-0.44	3.47	0.37	0.06	0.09	0.02	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.71	7.28	6.90	17.52	1.38	17.31	22.31	26.00	22.02		88.25	0.18	0.00	0.17	0.04	0.10	0.00			0.05	220.64
6/29/2004	09:15:53.37	1.90	-0.44	3.48	0.37	0.06	0.11	-0.02	0.15	-0.20	0.02	0.00	0.30	-0.01	-2.69	7.28	6.90	17.52	2.54	17.31	22.31	26.08	22.10		88.26	0.18	0.00	0.19	0.00	0.10	0.00			0.05	220.69
6/29/2004	09:16:53.37	1.92	-0.44	3.48	0.37	0.06	0.11	-0.02	0.15	-0.19	0.02	-0.02	0.28	-0.01	-2.69	7.33	6.95	17.52	0.64	17.48	22.31	26.00	22.10		88.28	0.18	0.00	0.19	0.00	0.10	0.01			0.05	220.74
6/29/2004	09:17:53.37	1.90	-0.44	3.47	0.38	0.06	0.09	-0.01	0.15	-0.19	0.02	0.00	0.30	-0.01	-2.71	7.34	6.96	17.52	0.72	17.44	22.36	26.04	22.14		88.30	0.19	0.00	0.17	0.01	0.10	0.01	4.50		0.05	220.78
6/29/2004	09:18:53.37	1.90	-0.44	3.45	0.36	0.06	0.09	-0.02	0.15	-0.19	0.02	-0.02	0.28	-0.02	-2.69	7.18	6.79	17.52	3.00	17.56	22.31	26.00	22.10		88.31	0.17	0.00	0.17	0.00	0.10	0.01			0.05	220.83
6/29/2004	09:19:53.37	1.90	-0.44	3.47	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.71	7.46	7.08	17.52	1.92	17.56	22.31	26.00	22.10		88.33	0.19	0.00	0.19	0.00	0.10	0.00			0.05	220.88
6/29/2004	09:20:53.37	1.90	-0.46	3.48	0.38	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.30	6.91	17.52	3.04	17.68	22.36	26.04	22.06		88.35	0.19	0.00	0.17	0.00	0.10	0.00			0.05	220.93
6/29/2004	09:21:53.37	1.90	-0.46	3.47	0.38	0.06	0.09	-0.01	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.71	7.30	6.91	17.52	0.94	17.68	22.36	26.04	22.06		88.36	0.19	0.00	0.17	0.01	0.10	0.00			0.05	220.98
6/29/2004	09:22:53.37	1.90	-0.46	3.48	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	-0.02	0.30	-0.01	-2.71	7.33	6.95	17.52	1.45	17.68	22.36	26.04	22.06		88.38	0.19	0.00	0.19	0.00	0.10	0.00			0.05	221.03
6/29/2004	09:23:53.37	1.90	-0.48	3.47	0.37	0.06	0.09	-0.01	0.15	-0.20	0.03	0.00	0.30	-0.02	-2.69	7.28	6.90	17.52	1.67	17.77	22.36	26.04	22.06		88.40	0.18	0.00	0.17	0.01	0.10	0.00			0.05	221.08
6/29/2004	09:24:53.37	1.92	-0.46	3.47	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.45	7.07	17.52	2.30	17.89	22.40	26.09	22.11		88.41	0.19	0.00	0.19	0.00	0.10	0.00			0.05	221.13
6/29/2004	09:25:53.37	1.90	-0.46	3.48	0.37	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.71	7.30	6.92	13.10	1.30	17.93	22.28	26.04	22.06		88.43	0.18	0.00	0.17	0.00	0.10	0.00			0.05	221.18
6/29/2004	09:26:53.37	1.90	-0.46	3.48	0.37	0.06	0.09	0.02	0.15	-0.20	0.03	-0.02	0.28	-0.01	-2.71	7.28	6.90	13.10	3.01	17.89	22.32	26.09	22.11		88.45	0.18	0.00	0.17	0.04	0.10	0.00			0.05	221.23
6/29/2004	09:27:53.37	1.90	-0.48	3.48	0.37	0.06	0.09	0.02	0.15	-0.20	0.02	0.00	0.30	-0.02	-2.71	7.30	6.91	13.10	1.31	18.02	22.37	26.05	22.07		88.46	0.18	0.00	0.17	0.04	0.10	0.00			0.05	221.28
6/29/2004	09:28:53.37	1.90	-0.48	3.47	0.37	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.71	7.10	6.71	13.10	3.08	18.02	22.37	26.05	22.07		88.48	0.18	0.00	0.17	0.00	0.10	0.00			0.05	221.33
6/29/2004	09:29:53.37	1.90	-0.46	3.47	0.36	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.33	6.95	13.10	1.69	18.10	22.37	26.05	22.07		88.50	0.17	0.00	0.17	0.00	0.10	0.00			0.05	221.38
6/29/2004	09:30:53.37	1.92	-0.48	3.48	0.37	0.06	0.11	-0.01	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.31	6.92	13.10	2.77	18.10	22.37	26.13	22.07		88.51	0.18	0.00	0.19	0.01	0.10	0.00			0.05	221.43
6/29/2004	09:31:53.37	1.90	-0.48	3.47	0.37	0.06	0.09	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.28	6.90	13.10	2.47	18.18	22.37	26.13	22.07		88.53	0.18	0.00	0.17	0.00	0.10	0.00			0.05	221.47
6/29/2004	09:32:53.37	1.88	-0.48	3.47	0.37	0.06	0.09	-0.01	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.33	6.95	13.10	2.98	18.18	22.37	26.13	22.07		88.55	0.18	0.00	0.17	0.01	0.10	0.00			0.05	221.52
6/29/2004	09:33:53.37	1.90	-0.46	3.48	0.38	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.71	7.29	6.90	13.10	1.11	18.31	22.41	26.10	22.12		88.56	0.19	0.00	0.17	0.00	0.10	0.00			0.05	221.57
6/29/2004	09:34:53.37	1.90	-0.48	3.47	0.38	0.06	0.11	-0.01	0.15	-0.19	0.02	0.00	0.28	-0.01	-2.69	7.36	6.97	13.10	3.45	18.26	22.37	26.13	22.07		88.58	0.19	0.00	0.19	0.01	0.10	0.01			0.05	221.62
6/29/2004	09:35:53.37	1.90	-0.46	3.48	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.42	7.03	13.10	2.21	18.26	22.37	26.13	22.07		88.60	0.19	0.00	0.19	0.00	0.10	0.00			0.05	221.67
6/29/2004	09:36:53.37	1.90	-0.46	3.47	0.38	0.06	0.09	-0.02	0.15	-0.20	0.03	-0.02	0.30	-0.02	-2.69	7.28	6.90	13.10	3.19	18.39	22.41	26.10	22.12		88.61	0.19	0.00	0.17	0.00	0.10	0.00			0.05	221.72
6/29/2004	09:37:53.37	1.90	-0.46	3.47	0.38	0.06	0.09	-0.01	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.71	7.28	6.90	13.10	2.43	18.34	22.29	26.13	22.07		88.63	0.19	0.00	0.17	0.01	0.10	0.00			0.05	221.77
6/29/2004	09:38:53.37	1.90	-0.46	3.45	0.38	0.06	0.09	-0.02	0.14	-0.20	0.02	0.00	0.30	-0.02	-2.71	7.27	6.88	13.36	2.98	18.18	22.37	26.21	22.07		88.65	0.19	0.00	0.17	0.00	0.09	0.00			0.05	221.82
6/29/2004	09:39:53.37	1.90	-0.46	3.47	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.69	7.25	6.86	13.10	3.18	18.10	22.37	26.29	22.07		88.66	0.19	0.00	0.19	0.00	0.10	0.00			0.05	221.87
6/29/2004	09:40:53.37	1.90	-0.46	3.45	0.37	0.06	0.09	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.71	7.20	6.81	13.10	3.35	18.10	22.37	26.29	22.07		88.68	0.18	0.00	0.17	0.00	0.10	0.00			0.05	221.92
6/29/2004	09:41:53.37	1.90	-0.46	3.48	0.38	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.30	-0.01	-2.69	7.31	6.92	13.36	3.56	18.15	22.41	26.42	22.20		88.70	0.19	0.00	0.17	0.00	0.10	0.00			0.05	221.97
6/29/2004	09:42:53.37	1.90	-0.46	3.48	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.01	-2.71	7.29	6.90	13.36	1.86	18.10	22.37	26.37	22.15		88.71	0.19	0.00	0.19	0.00	0.10	0.00			0.05	222.02
6/29/2004	09:43:53.37	1.90	-0.48	3.47	0.38	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.30	-0.01	-2.71	7.28	6.90	13.10	3.00	18.23	22.41	26.34	22.12		88.73	0.19	0.00	0.17	0.00	0.10	0.00			0.05	222.06
6/29/2004	09:44:53.37	1.90	-0.46	3.47	0.38	0.06	0.09	-0.02	0.15	-0.20	0.03	0.00	0.28	-0.01	-2.69	7.28	6.90	13.36	1.09	18.23	22.41	26.42	22.12		88.75	0.19	0.00	0.17	0.00	0.10	0.00			0.05	222.11
6/29/2004	09:45:53.37	1.90	-0.46	3.47	0.38	0.06	0.09	-0.01	0.15	-0.20	0.03	-0.02	0.28	-0.01	-2.71	7.30	6.92	13.10	3.09	18.07	22.41	26.50	22.12		88.76	0.19	0.00	0.17	0.01	0.10	0.00			0.05	222.16
6/29/2004	09:46:53.37	1.90	-0.46	3.45	0.37	0.06	0.09	-0.01	0.15	-0.19	0.02	0.00	0.27	-0.01	-2.71	7.10	6.71	13.10	2.14	18.15	22.41	26.42	22.04		88.78	0.18	0.00	0.17	0.01	0.10	0.01			0.05	222.21
6/29/2004	09:47:53.37	1.90	-0.46	3.45	0.38	0.06	0.09	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.69	7.28	6.90	13.10	3.02	18.15	22.41	26.42	22.12		88.80	0.19	0.00	0.17	0.00	0.10	0.00	4.90		0.05	222.26
6/29/2004	09:48:53.37	1.90	-0.46	3.45	0.38	0.06	0.11	-0.02	0.15	-0.19	0.02	0.00	0.28	-0.01	-2.69	7.33	6.95	13.10	3.47	18.10	22.37	26.37	22.15		88.81	0.19	0.00	0.19	0.00	0.10	0.01			0.05	222.31
6/29/2004	09:49:53.37	1.90	-0.46	3.47	0.38	0.06	0.12	-0.02	0.15	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.31	6.92	13.36	3.06	18.10	22.37	26.45	22.07		88.83	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.36
6/29/2004	09:50:53.37	1.90	-0.46	3.47	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.02	-2.71	7.30	6.92	13.10	2.33	18.02	22.37	26.53	22.15		88.85	0.19	0.00	0.19	0.00	0.10	0.00			0.05	222.41
6/29/2004	09:51:53.37	1.90	-0.46	3.45	0.38	0.06	0.11	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.28	6.90	13.10	4.02	17.89	22.40	26.57	22.11		88.86	0.19	0.00	0.19	0.00	0.10	0.00			0.05	222.46
6/29/2004	09:52:53.37	1.90	-0.46	3.45	0.38	0.06	0.12	-0.02	0.15	-0.20	0.02	-0.02	0.27	-0.01	-2.69	7.27	6.88	13.10	2.35	17.73	22.32	26.65	22.03		88.88	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.51
6/29/2004	09:53:53.37	1.90	-0.46	3.43	0.38	0.06	0.12	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.02	-2.69	7.33	6.95	13.10	2.61	17.57	22.40	26.81	22.11		88.90	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.56
6/29/2004	09:54:53.37	1.90	-0.46	3.47	0.38	0.06	0.12	-0.02	0.15	-0.20	0.03	0.00	0.28	-0.02	-2.69	7.34	6.96	13.10	3.18	17.49	22.40	26.81	22.11		88.91	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.61
6/29/2004	09:55:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.71	7.41	7.03	13.10	5.72	17.33	22.40	26.97	22.11		88.93	0.21	0.00	0.21	0.00	0.10	0.00			0.05	222.66
6/29/2004	09:56:53.37	1.90	-0.48	3.43	0.38	0.06	0.12	-0.02	0.15	-0.20	0.02	-0.02	0.28	-0.02	-2.71	7.32	6.93	13.10	5.27	17.08	22.40	27.05	22.11		88.95	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.70
6/29/2004	09:57:53.37	1.90	-0.48	3.45	0.40	0.06	0.12	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.30	6.92	8.69	5.49	17.08	22.40	27.13	22.11		88.96	0.21	0.00	0.20	0.00	0.10	0.00			0.05	222.75
6/29/2004	09:58:53.37	1.90	-0.48	3.47	0.40	0.06	0.12	-0.02	0.15	-0.20	0.02	-0.02	0.27	-0.01	-2.69	7.33	6.95	8.95	6.16	16.92	22.40	27.13	22.11		88.98	0.21	0.00	0.20	0.00	0.10	0.00			0.05	222.80
6/29/2004	09:59:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.71	7.32	6.93	8.95	4.92	16.80	22.45	27.25	22.15		89.00	0.21	0.00	0.21	0.00	0.10	0.00			0.05	222.85
6/29/2004	10:00:53.37	1.90	-0.48	3.47	0.38	0.06	0.13	-0.01	0.15	-0.20	0.02	-0.02	0.28	-0.01	-2.69	7.32	6.94	8.95	3.96	16.72	22.45	27.33	22.15		89.01	0.19	0.00	0.21	0.01	0.10	0.00			0.05	222.90
6/29/2004	10:01:53.37	1.90	-0.48	3.43	0.38	0.06	0.12	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.71	7.28	6.89	8.95	6.48	16.64	22.37	27.33	22.15		89.03	0.19	0.00	0.20	0.00	0.10	0.00			0.05	222.95
6/29/2004	10:02:53.37	1.90	-0.48	3.47	0.38	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.28	-0.02	-2.69	7.31	6.92	8.95	5.47	16.32	22.45	27.57	22.07		89.05	0.19	0.00	0.21	0.00	0.11	0.00			0.05	223.00
6/29/2004	10:03:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.02	0.15	-0.20	0.01	0.00	0.27	-0.01	-2.71	7.28	6.90	8.95	5.80	16.32	22.37	27.57	22.15		89.06	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.05
6/29/2004	10:04:53.37	1.90	-0.48	3.45	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	-0.02	0.27	-0.02	-2.71	7.28	6.89	8.95	6.60	16.32	22.45	27.73	22.15		89.08	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.10
6/29/2004	10:05:53.37	1.90	-0.46	3.47	0.40	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.27	-0.01	-2.69	7.32	6.94	8.95	6.54	16.19	22.48	27.69	22.11		89.10	0.21	0.00	0.21	0.00	0.11	0.00			0.05	223.15
6/29/2004	10:06:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.01	0.16	-0.19	0.02	0.00	0.27	-0.01	-2.71	7.32	6.94	8.95	6.59	16.03	22.48	27.93	22.19		89.11	0.21	0.00	0.21	0.01	0.11	0.01			0.05	223.20
6/29/2004	10:07:53.37	1.90	-0.46	3.45	0.38	0.06	0.13	-0.02	0.16	-0.19	0.02	0.00	0.28	-0.02	-2.69	7.32	6.94	13.10	5.64	15.95	22.48	27.85	22.11		89.13	0.19	0.00	0.21	0.00	0.11	0.01			0.05	223.25
6/29/2004	10:08:53.37	1.88	-0.46	3.45	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.71	7.17	6.78	17.52	4.72	15.86	22.48	27.93	22.11		89.15	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.30
6/29/2004	10:09:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.26	-0.02	-2.71	7.28	6.89	13.10	4.59	15.91	22.53	28.05	22.23		89.16	0.19	0.00	0.21	0.00	0.11	0.00			0.05	223.34
6/29/2004	10:10:53.37	1.90	-0.46	3.48	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.69	7.28	6.90	13.10	6.82	15.78	22.48	28.08	22.19		89.18	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.39
6/29/2004	10:11:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.26	-0.01	-2.71	7.30	6.91	13.10	5.76	15.70	22.48	28.08	22.19		89.20	0.19	0.00	0.21	0.00	0.11	0.00			0.05	223.44
6/29/2004	10:12:53.37	1.90	-0.46	3.45	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.32	6.94	13.10	7.29	15.62	22.48	28.08	22.19		89.21	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.49
6/29/2004	10:13:53.37	1.90	-0.46	3.48	0.40	0.06	0.13	-0.02	0.16	-0.20	0.01	0.00	0.26	-0.01	-2.69	7.28	6.89	13.10	5.16	15.62	22.48	28.16	22.19		89.23	0.21	0.00	0.21	0.00	0.11	0.00			0.05	223.54
6/29/2004	10:14:53.37	1.90	-0.46	3.47	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.30	6.92	13.10	5.70	15.57	22.44	28.20	22.14		89.25	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.59
6/29/2004	10:15:53.37	1.90	-0.46	3.47	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.35	6.97	13.10	6.95	15.49	22.44	28.20	22.14		89.26	0.22	0.00	0.21	0.00	0.12	0.00			0.05	223.64
6/29/2004	10:16:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.01	0.16	-0.20	0.01	-0.02	0.26	-0.02	-2.69	7.22	6.83	13.10	6.58	15.57	22.44	28.28	22.22		89.28	0.19	0.00	0.21	0.01	0.11	0.00			0.05	223.69
6/29/2004	10:17:53.37	1.90	-0.48	3.45	0.40	0.05	0.13	-0.02	0.17	-0.20	0.01	-0.02	0.26	-0.01	-2.69	7.31	6.92	13.10	6.47	15.49	22.44	28.28	22.14		89.30	0.21	-0.01	0.21	0.00	0.12	0.00	5.40		0.05	223.74
6/29/2004	10:18:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.26	-0.02	-2.69	7.32	6.93	13.10	8.49	15.49	22.44	28.28	22.14		89.31	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.79

Table H3-3-9. CIX Campaign II, Cycle 3, 0.25M NaOH Regenerant

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. **The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.**

DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow	Cond1	pH	T1	T2	T3	T4	T5	elaps-	DP1 cor.	DP2 cor.	DP3 cor.	DP4 cor.	DP5 cor.	DP6 cor.	Resin H1	Resin H2	differ- ential BV	cumul- lative BV
units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches		
instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
6/29/2004	10:04:53.37	1.90	-0.48	3.45	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	-0.02	0.27	-0.02	-2.71	7.28	6.89	8.95	6.60	16.32	22.45	27.73	22.15		89.08	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.00
6/29/2004	10:05:53.37	1.90	-0.46	3.47	0.40	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.27	-0.01	-2.69	7.32	6.94	8.95	6.54	16.19	22.48	27.69	22.11		89.10	0.21	0.00	0.21	0.00	0.11	0.00			0.05	223.05
6/29/2004	10:06:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.01	0.16	-0.19	0.02	0.00	0.27	-0.01	-2.71	7.32	6.94	8.95	6.59	16.03	22.48	27.93	22.19		89.11	0.21	0.00	0.21	0.01	0.11	0.01			0.05	223.10
6/29/2004	10:07:53.37	1.90	-0.46	3.45	0.38	0.06	0.13	-0.02	0.16	-0.19	0.02	0.00	0.28	-0.02	-2.69	7.32	6.94	13.10	5.64	15.95	22.48	27.85	22.11		89.13	0.19	0.00	0.21	0.00	0.11	0.01			0.05	223.15
6/29/2004	10:08:53.37	1.88	-0.46	3.45	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.71	7.17	6.78	17.52	4.72	15.86	22.48	27.93	22.11		89.15	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.20
6/29/2004	10:09:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.26	-0.02	-2.71	7.28	6.89	13.10	4.59	15.91	22.53	28.05	22.23		89.16	0.19	0.00	0.21	0.00	0.11	0.00			0.05	223.25
6/29/2004	10:10:53.37	1.90	-0.46	3.48	0.38	0.06	0.13	-0.02	0.15	-0.20	0.02	0.00	0.27	-0.02	-2.69	7.28	6.90	13.10	6.82	15.78	22.48	28.08	22.19		89.18	0.19	0.00	0.21	0.00	0.10	0.00			0.05	223.29
6/29/2004	10:11:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.02	0.16	-0.20	0.02	0.00	0.26	-0.01	-2.71	7.30	6.91	13.10	5.76	15.70	22.48	28.08	22.19		89.20	0.19	0.00	0.21	0.00	0.11	0.00			0.05	223.34
6/29/2004	10:12:53.37	1.90	-0.46	3.45	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.32	6.94	13.10	7.29	15.62	22.48	28.08	22.19		89.21	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.39
6/29/2004	10:13:53.37	1.90	-0.46	3.48	0.40	0.06	0.13	-0.02	0.16	-0.20	0.01	0.00	0.26	-0.01	-2.69	7.28	6.89	13.10	5.16	15.62	22.48	28.16	22.19		89.23	0.21	0.00	0.21	0.00	0.11	0.00			0.05	223.44
6/29/2004	10:14:53.37	1.90	-0.46	3.47	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.30	6.92	13.10	5.70	15.57	22.44	28.20	22.14		89.25	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.49
6/29/2004	10:15:53.37	1.90	-0.46	3.47	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.27	-0.01	-2.71	7.35	6.97	13.10	6.95	15.49	22.44	28.20	22.14		89.26	0.22	0.00	0.21	0.00	0.12	0.00			0.05	223.54
6/29/2004	10:16:53.37	1.90	-0.46	3.47	0.38	0.06	0.13	-0.01	0.16	-0.20	0.01	-0.02	0.26	-0.02	-2.69	7.22	6.83	13.10	6.58	15.57	22.44	28.28	22.22		89.28	0.19	0.00	0.21	0.01	0.11	0.00			0.05	223.59
6/29/2004	10:17:53.37	1.90	-0.48	3.45	0.40	0.05	0.13	-0.02	0.17	-0.20	0.01	-0.02	0.26	-0.01	-2.69	7.31	6.92	13.10	6.47	15.49	22.44	28.28	22.14		89.30	0.21	-0.01	0.21	0.00	0.12	0.00	5.40		0.05	223.64
6/29/2004	10:18:53.37	1.90	-0.48	3.47	0.40	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.26	-0.02	-2.69	7.32	6.93	13.10	8.49	15.49	22.44	28.28	22.14		89.31	0.21	0.00	0.21	0.00	0.12	0.00			0.05	223.69
6/29/2004	10:19:53.37	1.90	-0.48	3.45	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.26	-0.02	-2.69	7.34	6.95	13.10	8.27	15.54	22.48	28.24	22.19		89.33	0.22	0.00	0.21	0.00	0.12	0.00			0.05	223.74
6/29/2004	10:20:53.37	1.90	-0.48	3.45	0.41	0.06	0.14	-0.02	0.17	-0.20	0.01	-0.02	0.22	-0.01	-2.69	7.34	6.96	13.10	9.18	15.67	22.53	28.29	22.23		89.35	0.22	0.00	0.22	0.00	0.12	0.00			0.05	223.79
6/29/2004	10:21:53.37	1.88	-0.50	3.43	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	-0.02	0.26	-0.01	-2.69	7.32	6.93	13.10	9.36	15.67	22.53	28.21	22.23		89.36	0.22	0.00	0.21	0.00	0.12	0.00			0.05	223.84
6/29/2004	10:22:53.37	1.90	-0.48	3.43	0.40	0.06	0.13	-0.01	0.16	-0.20	0.01	-0.02	0.26	-0.05	-2.69	7.28	6.89	13.10	7.38	15.75	22.53	28.13	22.15		89.38	0.21	0.00	0.21	0.01	0.11	0.00			0.05	223.89
6/29/2004	10:23:53.37	1.90	-0.48	3.43	0.42	0.06	0.13	-0.02	0.17	-0.20	0.02	-0.02	0.26	-0.05	-2.69	7.36	6.97	13.10	8.50	15.91	22.53	28.21	22.23		89.40	0.23	0.00	0.21	0.00	0.12	0.00			0.05	223.94
6/29/2004	10:24:53.37	1.90	-0.48	3.45	0.41	0.06	0.13	-0.02	0.17	-0.20	0.01	-0.02	0.22	-0.02	-2.71	7.28	6.90	13.10	9.51	15.91	22.53	28.21	22.23		89.41	0.22	0.00	0.21	0.00	0.12	0.00			0.05	223.99
6/29/2004	10:25:53.37	1.90	-0.46	3.45	0.41	0.06	0.13	-0.01	0.17	-0.19	0.01	-0.02	0.26	-0.05	-2.71	7.29	6.90	13.36	10.13	15.91	22.45	28.21	22.23		89.43	0.22	0.00	0.21	0.01	0.12	0.01			0.05	224.03
6/29/2004	10:26:53.37	1.90	-0.48	3.45	0.41	0.06	0.13	-0.02	0.18	-0.20	0.01	-0.02	0.26	-0.02	-2.69	7.24	6.85	13.10	9.70	15.75	22.53	28.29	22.15		89.45	0.22	0.00	0.21	0.00	0.13	0.00			0.05	224.08
6/29/2004	10:27:53.37	1.90	-0.48	3.45	0.41	0.06	0.14	-0.02	0.18	-0.20	0.02	0.00	0.24	-0.02	-2.69	7.30	6.92	13.10	9.75	15.83	22.53	28.21	22.15		89.46	0.22	0.00	0.22	0.00	0.13	0.00			0.05	224.13
6/29/2004	10:28:53.37	1.90	-0.46	3.45	0.42	0.06	0.13	-0.02	0.17	-0.20	0.01	0.00	0.26	-0.03	-2.69	7.27	6.88	13.10	8.62	15.75	22.53	28.37	22.23		89.48	0.23	0.00	0.21	0.00	0.12	0.00			0.05	224.18
6/29/2004	10:29:53.37	1.90	-0.46	3.43	0.41	0.06	0.13	-0.02	0.17	-0.20	0.01	0.00	0.25	-0.05	-2.69	7.30	6.91	13.10	10.30	15.59	22.45	28.37	22.23		89.50	0.22	0.00	0.21	0.00	0.12	0.00			0.05	224.23
6/29/2004	10:30:53.37	1.90	-0.46	3.43	0.41	0.06	0.13	-0.02	0.17	-0.20	0.01	-0.02	0.22	-0.02	-2.71	7.13	6.74	13.10	9.96	15.50	22.53	28.37	22.23		89.51	0.22	0.00	0.21	0.00	0.12	0.00			0.05	224.28
6/29/2004	10:31:53.37	1.90	-0.46	3.43	0.41	0.06	0.13	-0.02	0.17	-0.20	0.01	-0.02	0.22	-0.01	-2.69	7.22	6.83	13.10	8.86	15.50	22.53	28.45	22.23		89.53	0.22	0.00	0.21	0.00	0.12	0.00			0.05	224.33
6/29/2004	10:32:53.37	1.90	-0.46	3.45	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	-0.02	0.22	-0.01	-2.71	7.24	6.86	13.36	8.87	15.50	22.53	28.53	22.32		89.55	0.22	0.00	0.21	0.00	0.12	0.00			0.05	224.38
6/29/2004	10:33:53.37	1.90	-0.46	3.45	0.41	0.06	0.13	-0.02	0.17	-0.20	0.02	0.00	0.24	-0.05	-2.69	7.18	6.79	13.10	10.15	15.42	22.53	28.53	22.15		89.56	0.22	0.00	0.21	0.00	0.12	0.00			0.05	224.42
6/29/2004	10:34:53.37	1.90	-0.46	3.45	0.42	0.06	0.13	-0.02	0.18	-0.20	0.01	0.00	0.24	-0.05	-2.71	7.30	6.92	13.10	8.10	15.34	22.53	28.61	22.23		89.58	0.23	0.00	0.21	0.00	0.13	0.00			0.05	224.47
6/29/2004	10:35:53.37	1.90	-0.46	3.45	0.42	0.06	0.13	-0.02	0.17	-0.20	0.02	-0.02	0.22	-0.05	-2.71	7.28	6.90	13.36	9.78	15.34	22.53	28.61	22.23		89.60	0.23	0.00	0.21	0.00	0.12	0.00			0.05	224.52
6/29/2004	10:36:53.37	1.90	-0.46	3.43	0.42	0.06	0.13	-0.02	0.17	-0.20	-0.01	0.00	0.22	-0.03	-2.71	7.31	6.92	13.10	9.43	15.34	22.53	28.61	22.23		89.61	0.23	0.00	0.21	0.00	0.12	0.00			0.05	224.57
6/29/2004	10:37:53.37	1.90	-0.46	3.45	0.42	0.06	0.13	-0.02	0.17	-0.20	0.01	0.00	0.24	-0.05	-2.69	7.29	6.90	13.10	8.38	15.34	22.53	28.61	22.32		89.63	0.23	0.00	0.21	0.00	0.12	0.00			0.05	224.62
6/29/2004	10:38:53.37	1.51	-0.46	2.90	0.05	0.06	-0.25	-0.02	-0.02	-0.20	-0.08	0.00	0.13	-0.02	-2.80	0.14	0.03	17.52	8.46	16.89	22.53	27.73	22.23		89.65	-0.14	0.00	-0.17	0.00	-0.07	0.00			0.00	224.62
6/29/2004	10:39:53.37	1.13	-0.46	2.49	0.05	0.06	-0.25	-0.02	-0.02	-0.20	-0.08	-0.02	0.11	-0.02	-2.80	0.14	0.03	21.68	9.99	16.40	22.53	27.81	22.23		89.66	-0.14	0.00	-0.17	0.00	-0.07	0.00	5.70		0.00	224.62
6/29/2004	10:57:56.87	-0.75	-0.44	0.67	0.19	0.06	-0.08	-0.01	0.06	-0.20	-0.06	0.00	0.19	-0.05	-2.80	0.15	0.04	13.36	9.98	14.23	22.63	28.15	22.34		89.97	0.00	0.00	0.00	0.01	0.01	0.00			0.01	224.63
6/29/2004	10:58:04.17	-0.75	-0.44	0.67	0.19	0.06	-0.08	-0.01	0.06	-0.20	-0.06	0.00	0.19	-0.05	-2.80	0.15	0.04	13.36	9.98	14.23	22.63	28.15	22.34		89.97	0.00	0.00	0.00	0.01	0.01	0.00			0.00	224.63
6/29/2004	10:58:14.37	-0.75	-0.44	0.67	0.19	0.06	-0.08	-0.02	0.05	-0.20	-0.06	-0.02	0.19	-0.05	-2.80	0.15	0.04	13.10	10.09	14.23	22.63	28.15	22.34		89.97	0.00	0.00	0.00	0.00	0.00	0.00			0.00	224.63
6/29/2004	10:58:24.37	-0.75	-0.46	0.67	0.19	0.06	-0.08	-0.02	0.05	-0.20	-0.04	0.00	0.19	-0.05	-2.80	0.14	0.03	13.10	9.01	14.23	22.63	28.15	22.34		89.97	0.00	0.00	0.00	0.00	0.00	0.00			0.00	224.63

Table H3-4-1. CIX Campaign II, Cycle 4, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	6/29/2004	15:22:46.07	-0.78	-0.75	0.73	0.19	0.07	-0.11	-0.01	0.04	-0.20	-0.06	0.00	0.19	-0.01	-2.80	0.14	0.04	8.95	9.78	16.89	23.90	27.66	23.61	13.09	0.00							5.85	5.90	0.01	0.00
2	6/29/2004	16:10:15.07	1.77	1.85	3.89	0.00	0.06	-0.28	0.02	0.17	-0.20	0.06	-0.02	-0.18	-0.03	0.24	10.80	10.61	4.53	10.24	21.22	23.39	27.71	23.66	12.65	0.79									0.08	0.79
3	6/29/2004	16:31:15.07	1.81	1.89	3.93	-1.00	0.06	-1.26	-0.02	-0.06	-0.19	-0.48	-0.02	-0.79	-0.02	0.24	10.79	10.61	56.49	9.15	21.93	23.69	26.41	23.80	12.79	1.14									0.08	2.38
4	6/29/2004	16:52:15.07	1.55	1.89	4.29	-1.02	1.24	-1.30	1.14	0.41	0.48	-1.24	0.24	-0.88	0.48	0.37	7.39	7.01	155.98	8.56	23.74	23.81	24.53	23.68	12.84	1.49									0.05	3.74
5	6/29/2004	17:13:15.07	2.25	2.51	4.81	-1.39	0.84	-1.69	0.74	0.41	0.20	-1.78	0.27	-1.14	0.36	0.23	10.83	10.65	186.37	8.22	23.62	23.93	24.00	23.39	12.71	1.84									0.08	5.30
6	6/29/2004	17:34:15.07	2.14	2.15	3.67	-0.90	1.59	-0.64	1.49	-0.18	1.19	-0.70	-2.43	-1.06	-0.90	10.01	9.25	8.95	194.95	10.59	23.90	23.73	23.89	23.44	12.68	2.19									0.06	6.89
7	6/29/2004	17:44:25.07	2.34	2.70	4.88	0.61	1.33	0.88	1.21	0.64	0.43	0.06	0.34	-0.02	1.09	0.34	13.25	13.34	194.95	10.32	23.95	23.78	23.78	23.49	12.89	2.36	1.51	1.43	1.53	1.44	0.76	0.71			0.02	7.44
8	6/29/2004	17:47:55.07	2.36	2.62	4.62	0.22	0.95	0.47	0.83	0.44	0.21	-0.04	0.27	-0.16	0.82	0.21	10.81	10.63	194.95	8.11	23.74	23.89	23.73	23.44	12.60	2.42	1.12	1.05	1.12	1.06	0.56	0.49			0.01	7.71
9	6/29/2004	17:51:25.07	2.36	2.62	4.66	0.21	0.95	0.47	0.83	0.44	0.23	-0.04	0.25	-0.16	0.84	0.23	10.85	10.67	194.95	9.36	23.66	23.89	23.73	23.44	12.60	2.48	1.11	1.05	1.12	1.06	0.56	0.51			0.01	7.98
10	6/29/2004	17:54:55.07	2.38	2.62	4.64	0.21	0.96	0.45	0.85	0.44	0.23	-0.04	0.24	-0.16	0.84	0.23	10.81	10.63	194.95	10.88	23.62	23.85	23.76	23.39	12.63	2.54	1.11	1.06	1.10	1.08	0.56	0.51			0.01	8.24
11	6/29/2004	17:58:25.07	2.38	2.62	4.66	0.21	0.95	0.46	0.85	0.45	0.21	-0.06	0.28	-0.16	0.82	0.21	10.85	10.67	194.95	8.29	23.78	23.93	23.68	23.39	12.71	2.59	1.11	1.05	1.11	1.08	0.57	0.49			0.01	8.51
12	6/29/2004	18:01:55.07	2.38	2.64	4.64	0.21	0.95	0.46	0.85	0.45	0.21	-0.06	0.28	-0.17	0.84	0.21	10.87	10.70	194.95	8.30	23.86	24.01	23.68	23.39	12.71	2.65	1.11	1.05	1.11	1.08	0.57	0.49			0.01	8.77
13	6/29/2004	18:05:25.07	2.38	2.62	4.62	0.22	0.93	0.44	0.83	0.43	0.20	-0.07	0.27	-0.18	0.82	0.21	10.83	10.65	194.95	10.81	23.94	23.93	23.60	23.31	12.63	2.71	1.12	1.03	1.09	1.06	0.55	0.48			0.01	9.04
14	6/29/2004	18:08:55.07	2.38	2.64	4.64	0.21	0.94	0.44	0.84	0.43	0.21	-0.07	0.27	-0.18	0.82	0.21	10.75	10.57	194.95	10.01	23.89	23.96	23.64	23.27	12.58	2.77	1.11	1.04	1.09	1.07	0.55	0.49			0.01	9.30
15	6/29/2004	18:12:25.07	2.38	2.62	4.66	0.21	0.93	0.44	0.84	0.43	0.21	-0.08	0.27	-0.18	0.84	0.21	10.81	10.63	194.95	9.54	23.81	23.88	23.64	23.35	12.75	2.83	1.11	1.03	1.09	1.07	0.55	0.49			0.01	9.57
16	6/29/2004	18:15:55.07	2.38	2.62	4.68	0.21	0.94	0.44	0.85	0.44	0.21	-0.08	0.27	-0.19	0.82	0.21	10.81	10.63	194.95	9.90	23.89	23.96	23.56	23.35	12.58	2.89	1.11	1.04	1.09	1.08	0.56	0.49			0.01	9.83
17	6/29/2004	18:19:25.07	2.38	2.64	4.62	0.22	0.94	0.44	0.84	0.43	0.21	-0.08	0.27	-0.18	0.82	0.21	10.81	10.63	194.95	10.50	23.84	23.91	23.51	23.30	12.54	2.94	1.12	1.04	1.09	1.07	0.55	0.49			0.01	10.10
18	6/29/2004	18:22:55.07	2.39	2.62	4.64	0.21	0.94	0.44	0.85	0.44	0.21	-0.08	0.25	-0.19	0.82	0.21	10.81	10.63	194.95	9.14	23.92	23.91	23.51	23.30	12.70	3.00	1.11	1.04	1.09	1.08	0.56	0.49			0.01	10.36
19	6/29/2004	18:26:25.07	2.39	2.64	4.68	0.21	0.96	0.44	0.88	0.45	0.23	-0.08	0.25	-0.18	0.84	0.23	10.90	10.73	194.95	8.52	23.84	23.91	23.51	23.38	12.62	3.06	1.11	1.06	1.09	1.11	0.57	0.51			0.01	10.63
20	6/29/2004	18:29:55.07	2.39	2.62	4.62	0.20	0.94	0.41	0.85	0.43	0.20	-0.09	0.27	-0.19	0.82	0.21	10.80	10.62	194.95	9.85	23.76	23.91	23.51	23.38	12.70	3.12	1.10	1.04	1.06	1.08	0.55	0.48			0.01	10.89
21	6/29/2004	18:33:25.07	2.39	2.62	4.64	0.21	0.94	0.41	0.87	0.43	0.21	-0.09	0.25	-0.18	0.82	0.21	10.80	10.61	194.95	8.57	23.72	23.87	23.46	23.33	12.49	3.18	1.11	1.04	1.06	1.10	0.55	0.49			0.01	11.15
22	6/29/2004	18:36:55.07	2.39	2.62	4.64	0.21	0.94	0.41	0.85	0.43	0.20	-0.09	0.28	-0.18	0.82	0.21	10.80	10.62	194.95	9.56	23.88	23.95	23.38	23.33	12.57	3.24	1.11	1.04	1.06	1.08	0.55	0.48			0.01	11.42
23	6/29/2004	18:40:25.07	2.39	2.64	4.64	0.21	0.94	0.40	0.83	0.42	0.20	-0.10	0.27	-0.18	0.82	0.21	10.80	10.61	194.69	8.40	23.88	23.95	23.38	23.41	12.73	3.29	1.11	1.04	1.05	1.06	0.54	0.48			0.01	11.68
24	6/29/2004	18:43:55.07	2.39	2.62	4.62	0.20	0.94	0.40	0.84	0.43	0.21	-0.12	0.27	-0.18	0.82	0.21	10.80	10.62	194.95	10.05	23.83	23.90	23.34	23.37	12.52	3.35	1.10	1.04	1.05	1.07	0.55	0.49			0.01	11.95
25	6/29/2004	18:47:25.07	2.39	2.62	4.62	0.21	0.94	0.40	0.85	0.43	0.20	-0.10	0.28	-0.18	0.82	0.21	10.81	10.63	194.95	9.57	23.67	23.90	23.34	23.37	12.69	3.41	1.11	1.04	1.05	1.08	0.55	0.48			0.01	12.21
26	6/29/2004	18:50:55.07	2.39	2.62	4.66	0.21	0.94	0.40	0.85	0.42	0.21	-0.12	0.27	-0.18	0.82	0.21	10.81	10.63	194.95	9.36	23.54	23.94	23.37	23.40	12.64	3.47	1.11	1.04	1.05	1.08	0.54	0.49			0.01	12.48
27	6/29/2004	18:54:25.07	2.39	2.62	4.68	0.20	0.94	0.44	0.85	0.43	0.21	-0.10	0.25	-0.18	0.81	0.21	10.80	10.62	194.95	9.01	23.54	23.94	23.37	23.32	12.56	3.53	1.10	1.04	1.09	1.08	0.55	0.49			0.01	12.74
28	6/29/2004	18:57:55.07	2.41	2.62	4.64	0.19	0.95	0.44	0.84	0.45	0.21	-0.12	0.25	-0.18	0.82	0.20	10.79	10.61	194.95	10.64	23.62	24.02	23.29	23.40	12.64	3.59	1.09	1.05	1.09	1.07	0.57	0.49			0.01	13.01
29	6/29/2004	19:01:25.07	2.39	2.62	4.66	0.19	0.94	0.44	0.85	0.45	0.20	-0.12	0.25	-0.18	0.82	0.21	10.78	10.60	194.69	10.25	23.66	23.89	23.24	23.36	12.51	3.64	1.09	1.04	1.09	1.08	0.57	0.48			0.01	13.27
30	6/29/2004	19:04:55.07	2.41	2.64	4.62	0.21	0.95	0.44	0.84	0.44	0.21	-0.12	0.25	-0.19	0.82	0.20	10.83	10.65	194.95	9.53	23.53	23.92	23.20	23.31	12.46	3.70	1.11	1.05	1.09	1.07	0.56	0.49			0.01	13.54
31	6/29/2004	19:08:25.07	2.41	2.62	4.64	0.22	0.94	0.44	0.84	0.45	0.21	-0.12	0.25	-0.18	0.80	0.21	10.80	10.61	194.95	10.43	23.61	23.84	23.20	23.31	12.46	3.76	1.12	1.04	1.09	1.07	0.57	0.49			0.01	13.80
32	6/29/2004	19:11:55.07	2.39	2.64	4.66	0.21	0.94	0.44	0.84	0.44	0.20	-0.12	0.27	-0.18	0.81	0.20	10.79	10.61	194.95	8.78	23.50	23.89	23.32	23.36	12.51	3.82	1.11	1.04	1.09	1.07	0.56	0.48			0.01	14.07
33	6/29/2004	19:15:25.07	2.41	2.62	4.66	0.21	0.95	0.44	0.85	0.45	0.20	-0.12	0.27	-0.16	0.81	0.20	10.80	10.62	194.95	8.70	23.37	23.76	23.20	23.31	12.38	3.88	1.11	1.05	1.09	1.08	0.57	0.48			0.01	14.33
34	6/29/2004	19:18:55.07	2.41	2.62	4.66	0.22	0.95	0.45	0.87	0.45	0.23	-0.12	0.24	-0.16	0.81	0.21	10.77	10.58	194.95	8.82	23.37	23.84	23.28	23.39	12.38	3.94	1.12	1.05	1.10	1.10	0.57	0.51			0.01	14.60
35	6/29/2004	19:22:25.07	2.41	2.62	4.64	0.21	0.95	0.44	0.85	0.45	0.20	-0.12	0.27	-0.16	0.81	0.21	10.80	10.61	194.95	10.85	23.32	23.88	23.23	23.34	12.50	3.99	1.11	1.05	1.09	1.08	0.57	0.48			0.01	14.86
36	6/29/2004	19:25:55.07	2.41	2.62	4.64	0.21	0.94	0.44	0.84	0.45	0.20	-0.12	0.27	-0.16	0.81	0.21	10.80	10.61	194.95	9.48	23.28	23.75	23.18	23.30	12.53	4.05	1.11	1.04	1.09	1.07	0.57	0.48			0.01	15.13
37	6/29/2004	19:29:25.07	2.41	2.64	4.64	0.21	0.94	0.44	0.85	0.44	0.20	-0.12	0.25	-0.16	0.80	0.20	10.80	10.61	194.95	8.66	23.36	23.83	23.26	23.30	12.45	4.11	1.11	1.04	1.09	1.08	0.56	0.48			0.01	15.39
38	6/29/2004	19:32:55.07	2.41	2.64	4.66	0.21	0.94	0.44	0.85	0.45	0.21	-0.12	0.25	-0.14	0.81	0.21	10.81	10.63	194.95	10.99	23.31	23.78	23.22	23.25	12.48	4.17	1.11	1.04	1.09	1.08	0.57	0.49			0.01	15.66
39	6/29/2004	19:36:25.07	2.41	2.64	4.64	0.21	0.95	0.44	0.85	0.44	0.21	-0.12	0.27	-0.16	0.82	0.20	10.81	10.63	194.95	8.71	23.44	23.83	23.26	23.30	12.53	4.23	1.11	1.05	1.09	1.08	0.56	0.49			0.01	15.92
40	6/29/2004	19:39:55.07	2.41	2.62	4.64	0.21	0.94	0.42	0.84	0.45	0.20	-0.12	0.27	-0.16	0.82	0.20	10.80	10.62	194.95	9.60	23.31	23.86	23.22	23.33	12.48	4.29	1.11	1.04	1.07	1.07	0.57	0.48			0.01	16.19
41	6/29/2004	19:43:25.07	2.41	2.62	4.60	0.22	0.95	0.41	0.85	0.45	0.20	-0.12	0.25	-0.16	0.80	0.20	10.80	10.61	194.95	10.71	23.31	23.78	23.22	23.33	12.57	4.34	1.12	1.05	1.06	1.08	0.57	0.48			0.01	16.45
42	6/29/2004	19:46:55.07	2.41	2.62	4.64	0.21	0.95	0.44	0.85	0.45	0.20	-0.12	0.25	-0.16	0.82	0.20	10.80	10.62	194.95	10.12	23.35	23.74	23.17	23.20	12.27	4.40	1.11	1.05	1.09	1.08	0.57	0.48			0.01	16.71
43	6/29/2004	19:50:25.07	2.43	2.62	4.64	0.20	0.94	0.41	0.84	0.45	0.20	-0.12	0.27	-0.16	0.81	0.20	10.79	10.61	194.95	10.32	23.27	23.74	23.17	23.20	12.52	4.46	1.10	1.04	1.06	1.07	0.57	0.48			0.01	16.98
44	6/29/2004	19:53:55.07	2.41	2.62	4.66	0.21	0.95	0.42	0.85	0.44	0.21	-0.12	0.25	-0.14	0.82	0.20	10.81	10.63	194.95	10.96	23.35	23.82	23.17	23.28	12.52	4.52	1.11	1.05	1.07	1.08	0.56	0.49			0.01	17.24
45	6/29/2004	19:57:25.07	2.41	2.62	4.64	0.21	0.95	0.42	0.85	0.45	0.20	-0.12	0.25	-0.16	0.82	0.21	10.83	10.65	194.95	10.13	23.35	23.82	23.17	23.28	12.52	4.58	1.11	1.05	1.07	1.08	0.57	0.48			0.01	17.51
46	6/29/2004	20:00:55.07	2.43	2.64	4.64	0.21	0.95	0.42	0.85	0.45	0.21	-0.12	0.25	-0.14	0.80	0.20	10.80	10.61	194.95	10.85	23.27	23.82	23.17	23.20	12.44	4.64	1.11	1.05	1.07	1.08	0.57	0.49			0.01	17.77
47	6/29/2004	20:04:25.07	2.43	2.62	4.64	0.20	0.95	0.40	0.85	0.45	0.21	-0.12	0.24	-0.16	0.81	0.21	10.77	10.59	194.95	9.01	23.27	23.74	23.17	23.20	12.36	4.69	1.10	1.05	1.05	1.08	0.57	0.49			0.01	18.04
48	6/29/2004	20:07:55.07	2.43	2.64	4.66	0.19	0.93	0.40	0.84	0.45	0.20	-0.10	0.29	-0.16	0.80	0.20	10.77	10.59	194.95	8.73	23.22	23.77	23.21	23.24	12.47	4.75	1.09	1.03	1.05	1.07	0.57	0.48			0.01	18.30
49	6/29/2004	20:11:25.07	2.41	2.62	4.64	0.21	0.95	0.41	0.84	0.44	0.20	-0.12	0.29	-0.14	0.81	0.20	10.84	10.67	194.95	10.18	23.22	23.77	23.13	23.24	12.55	4.81	1.11	1.05	1.06	1.07	0.56	0.48			0.01	18.57
50	6/29/2004	20:14:55.07	2.43	2.62	4.62	0.20	0.98	0.41	0.85	0.44	0.20	-0.10	0.29	-0.14	0.82	0.20	10.81	10.63	194.95	10.75	23.30	23.77	23.21	23.24	12.39	4.87	1.10	1.08	1.06	1.08	0.56	0.48			0.01	18.83
51	6/29/2004	20:18:25.07	2.43	2.64	4.66	0.20	0.99	0.40	0.87	0.45	0.21	-0.12	0.28	-0.17	0.85	0.21	10.81	10.63	194.95	10.15	23.17	23.73	23.16	23.19	12.51	4.93	1.10	1.09	1.05	1.10	0.57	0.49			0.01	19.10
52	6/29/2004	20:21:55.07	2.43	2.64	4.64	0.19	0.99	0.41	0.87	0.45	0.20	-0.12	0.28	-0.17	0.85	0.21	10.80	10.61	194.95	9.01	23.17	23.73	23.16	23.19	12.42	4.99	1.09	1.09	1.06	1.10	0.57	0.48			0.01	19.36
53	6/29/2004	20:25:25.07	2.43	2.62	4.60	0.18	1.00	0.40	0.87	0.45	0.21	-0.12	0.28	-0.17	0.80	0.20	10.80	10.61	194.95	10.23	23.09	23.73	23.16	23.19	12.42	5.04	1.08	1.10	1.05	1.10	0.57	0.49			0.01	19.63
54	6/29/2004	20:28:55.07	2.43	2.62	4.64	0.20	1.00	0.40	0.87	0.45	0.20	-0.12	0.29	-0.16	0.82	0.20	10.81	10.63	194.95	10.53	23.09	23.73	23.16	23.19	12.51	5.10	1.10	1.10	1.05	1.10	0.57	0.48			0.01	19.89
55	6/29/2004	20:32:25.07	2.43	2.62	4.62	0.20	1.00	0.41	0.87	0.45	0.20	-0.12	0.29	-0.16	0.85	0.20	10.84	10.67	194.95	9.03	23.05	23.68	23.11	23.15	12.46	5.16	1.10	1.10	1.06	1.10	0.57	0.48			0.01	20.16
56	6/29/2004	20:35:55.07	2.45	2.64	4.64	0.19	0.96	0.40	0.80	0.44	0.16	-0.13	0.27	-0.18	0.84	0.20	10.77	10.58	194.95	8.74	22.92	23.63	23.07	23.10	12.33	5.22	1.09	1.06	1.05	1.03	0.56	0.44			0.01	20.42
57	6/29/2004	20:39:25.07	2.43	2.64	4.64	0.19	0.99	0.40	0.85	0.45	0.21	-0.12	0.29	-0.16	0.86	0.20	10.80	10.62	194.95	10.26	22.84	23.63	23.07	23.18	12.41	5.28	1.09	1.09	1.05	1.08	0.57	0.49			0.01	20.69
58	6/29/2004	20:42:55.07	2.43	2.62	4.62	0.18	0.99	0.40	0.84	0.45	0.20	-0.09	0.28	-0.18	0.82	0.20	10.72	10.54	194.95	9.47	22.84	23.63	22.99	23.10	12.33	5.34	1.08	1.09	1.05	1.07	0.57	0.48			0.01	20.95
59	6/29/2004	20:46:25.07	2.43	2.62	4.64	0.19	0.98	0.40	0.84	0.45	0.20	-0.08	0.29	-0.19	0.84	0.20	10.77	10.59	194.95	10.88	22.79	23.67	23.02	23.05	12.28	5.39	1.09	1.08	1.05	1.07	0.57	0.48			0.01	21.21
60	6/29/2004	20:49:55.07	2.43	2.64	4.64	0.19	1.00	0.40	0.85	0.45	0.20	-0.08	0.28	-0.17	0.86	0.21	10.80	10.62	194.95	9.61	22.71	23.67	23.10	23.13	12.37	5.45	1.09	1.10	1.05	1.08	0.57	0.48			0.01	21.48
61	6/29/2004	20:53:25.07	2.45	2.62	4.64	0.19	0.99	0.40	0.85	0.45	0.21	-0.08	0.28	-0.18	0.86	0.20	10.78	10.60	194.95	8.81	22.79	23.67	23.02	23.13	12.45	5.51	1.09	1.09	1.05	1.08	0.57	0.49			0.01	21.74
62	6/29/2004	20:56:55.07	2.43	2.62	4.64	0.19	1.00	0.40	0.87	0.44	0.21	-0.08	0.29	-0.18	0.86	0.20	10.79	10.61	194.95	8.98	22.67	23.62	23.05	23.09	12.24	5.57	1.09	1.10	1.05	1.10	0.56	0.49			0.01	22.01
63	6/29/2004	21:00:25.07	2.45	2.62	4.62	0.19	0.99	0.40	0.84	0.44	0.20	-0.08	0.29	-0.19	0.87	0.20	10.79	10.61	194.95	11.10	22.67	23.62	23.05	23.09	12.40	5.63	1.09	1.09	1.05	1.07	0.56	0.48			0.01	22.27
64	6/29/2004	21:03:55.07	2.45	2.64	4.60	0.18	0.99	0.40	0.87	0.45	0.21	-0.09	0.28	-0.19	0.86	0.20	10.78	10.60	194.95	10.93	22.62	23.65	23.01	23.12	12.43	5.69	1.08	1.09	1.05	1.10	0.57	0.49			0.01	22.54
65	6/29/2004	21:07:25.07	2.45	2.62	4.64	0.19	1.00	0.40	0.87	0.48	0.20	-0.08	0.28	-0.18	0.86	0.20	10.81	10.63	194.95	9.06	22.57	23.61	23.04	23.07	12.39	5.74	1.09	1.10	1.05	1.10	0.60	0.48			0.01	22.80
66	6/29/2004	21:10:55.07	2.45	2.64	4.62	0.18	0.99	0.42	0.85	0.47	0.20	-0.10	0.27	-0.18	0.86	0.20	10.79	10.61	194.95	10.44	22.53	23.56	22.92	23.03	12.34	5.80	1.08	1.09	1.07	1.08	0.59	0.48			0.01	23.07
67	6/29/2004	21:14:25.07	2.45	2.64	4.62	0.19	1.00	0.44	0.85	0.48	0.24	-0.09	0.29	-0.18	0.86	0.20	10.83	10.65	194.95	10.67	22.45	23.56	22.92	23.03	12.18	5.86	1.09	1.10	1.09	1.08	0.60	0.52			0.01	23.33
68	6/29/2004	21:17:55.07	2.47	2.64	4.62	0.19	1.00	0.42	0.85	0.48	0.24	-0.09	0.28	-0.18	0.86	0.20	10.80	10.61	194.95	9.90	22.48	23.52	22.95	23.06	12.21	5.92	1.09	1.10	1.07	1.08	0.60	0.52			0.01	23.60
69	6/29/2004	21:21:25.07	2.45	2.64	4.64	0.21	1.00	0.41	0.87	0.48	0.24	-0.09	0.28	-0.18	0.86	0.20	10.80	10.61	194.95	10.74	22.60	23.55	22.90	23.02	12.08	5.98	1.11	1.10	1.06	1.10	0.60	0.52			0.01	23.86
70	6/29/2004	21:24:55.07	2.45	2.62	4.64	0.21	1.01	0.41	0.87	0.49	0.24	-0.10	0.28	-0.18	0.86	0.20	10.78	10.60	194.95	9.01	22.84	23.63	22.98	23.02	12.25	6.04	1.11	1.11	1.06	1.10	0.61	0.52			0.01	24.13
71	6/29/2004	21:28:25.07	2.45	2.62	4.60	0.21	0.99	0.41	0.85	0.49	0.24	-0.10	0.28	-0.19	0.86	0.20	10.77	10.59	194.95	9.89	22.76	23.55	22.90	23.02	12.25	6.09	1.11	1.09	1.06	1.08	0.61	0.52			0.01	24.39
72	6/29/2004	21:31:55.07	2.45	2.62	4.60	0.21	0.99	0.40	0.85	0.48	0.24	-0.10	0.28	-0.18	0.86	0.24	10.80	10.62	194.95	10.77	22.60	23.55	22.90	23.02	12.25	6.15	1.11	1.09	1.05	1.08	0.60	0.52			0.01	24.66
73	6/29/2004	21:35:25.07	2.45	2.64	4.64	0.21	1.00	0.42	0.87	0.48	0.24	-0.12	0.28	-0.18	0.86	0.24	10.87	10.69	194.95	11.24	22.60	23.55	22.90	22.94	12.08	6.21	1.11	1.10	1.07	1.10	0.60	0.52			0.01	24.92
74	6/29/2004	21:38:55.07	2.45	2.62	4.62	0.21	0.99	0.41	0.85	0.48	0.24	-0.09	0.29	-0.18	0.86	0.24	10.80	10.61	194.95	9.19	22.47	23.50	22.78	22.89	12.12	6.27	1.11	1.09	1.06	1.08	0.60	0.52			0.01	25.19
75	6/29/2004	21:42:25.07	2.45	2.62	4.64	0.19	0.99	0.41	0.88	0.49	0.24	-0.10	0.29	-0.18	0.86	0.24	10.78	10.60	194.95	8.95	22.39	23.50	22.78	22.97	12.04	6.33	1.09	1.09	1.06	1.11	0.61	0.52			0.01	25.45
76	6/29/2004	21:45:55.07	2.47	2.64	4.64	0.21	1.00	0.40	0.89	0.48	0.24	-0.10	0.28	-0.18	0.86	0.24	10.80	10.62	194.95	11.03	22.31	23.50	22.86	22.89	12.12	6.39	1.11	1.10	1.05	1.12	0.60	0.52			0.01	25.71
77	6/29/2004	21:49:25.07	2.47	2.64	4.60	0.21	0.99	0.41	0.89	0.48	0.24	-0.12	0.27	-0.18	0.86	0.24	10.77	10.58	194.95	10.11	22.34	23.46	22.81	22.92	12.15	6.44	1.11	1.09	1.06	1.12	0.60	0.52			0.01	25.98
78	6/29/2004	21:52:55.07	2.47	2.64	4.60	0.20	0.99	0.41	0.89	0.49	0.24	-0.10	0.28	-0.18	0.86	0.24	10.81	10.63	194.95	9.26	22.46	23.49	22.77	22.88	12.11	6.50	1.10	1.09	1.06	1.12	0.61	0.52			0.01	26.24
79	6/29/2004	21:56:25.07	2.47	2.64	4.62	0.20	1.00	0.41	0.88	0.48	0.24	-0.12	0.28	-0.19	0.86	0.23	10.77	10.59	194.95	11.42	22.54	23.49	22.77	22.88	12.27	6.56	1.10	1.10	1.06	1.11	0.60	0.52			0.01	26.51
80	6/29/2004	21:59:55.07	2.47	2.64	4.60	0.20	0.98	0.41	0.87	0.47	0.23	-0.12	0.29	-0.19	0.86	0.24	10.78	10.60	194.95	10.54	22.46	23.57	22.85	22.96	12.19	6.62	1.10	1.08	1.06	1.10	0.59	0.51			0.01	26.77

Table H3-4-2. CIX Campaign II, Cycle 4, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.				The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																															
					DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
81	6/29/2004	22:03:25.07	2.47	2.61	4.59	0.21	0.95	0.42	0.84	0.48	0.19	-0.10	0.34	-0.19	0.84	0.24	10.78	10.60	194.95	11.46	22.41	23.53	22.80	22.91	12.06	6.68	1.11	1.05	1.07	1.07	0.60	0.47			0.01	27.04
82	6/29/2004	22:06:55.07	2.47	2.61	4.57	0.20	1.00	0.41	0.89	0.48	0.24	-0.12	0.28	-0.19	0.85	0.24	10.77	10.58	194.95	8.85	22.25	23.45	22.80	22.83	12.06	6.74	1.10	1.10	1.06	1.12	0.60	0.52			0.01	27.30
83	6/29/2004	22:10:25.07	2.47	2.61	4.57	0.20	1.00	0.40	0.89	0.48	0.24	-0.12	0.27	-0.16	0.85	0.23	10.77	10.59	194.95	11.36	22.25	23.45	22.72	22.83	12.06	6.79	1.10	1.10	1.05	1.12	0.60	0.52			0.01	27.57
84	6/29/2004	22:13:55.07	2.47	2.57	4.66	0.24	1.06	0.44	0.99	0.49	0.31	-0.14	0.24	-0.14	0.86	0.29	10.82	10.64	194.95	10.97	22.37	23.48	22.75	22.87	12.09	6.85	1.14	1.16	1.09	1.22	0.61	0.59			0.01	27.83
85	6/29/2004	22:17:25.07	2.49	2.61	4.60	0.21	1.01	0.40	0.90	0.48	0.25	-0.12	0.28	-0.16	0.86	0.24	10.78	10.59	194.69	8.88	22.53	23.56	22.75	22.87	12.18	6.91	1.11	1.11	1.05	1.13	0.60	0.53			0.01	28.10
86	6/29/2004	22:20:55.07	2.47	2.61	4.57	0.22	0.62	0.41	0.57	0.47	-0.01	-0.09	0.60	-0.17	0.85	0.30	10.75	10.56	194.95	10.98	22.37	23.48	22.75	22.79	12.09	6.97	1.12	0.72	1.06	0.80	0.59	0.27			0.01	28.36
87	6/29/2004	22:24:25.07	2.47	2.62	4.55	0.25	0.91	0.45	0.73	0.48	-0.01	-0.08	0.33	-0.17	0.86	0.24	10.84	10.67	194.95	10.79	22.37	23.48	22.67	22.79	12.26	7.03	1.15	1.01	1.10	0.96	0.60	0.27			0.01	28.63
88	6/29/2004	22:27:55.07	2.74	2.94	4.20	0.33	3.17	0.52	3.19	0.55	2.15	-0.19	-1.66	-0.14	0.91	0.95	11.06	10.90	194.95	10.20	22.37	23.48	22.67	22.87	12.18	7.09	1.23	3.27	1.17	3.42	0.67	2.43			0.01	28.89
89	6/29/2004	22:31:25.07	2.47	2.61	4.59	0.20	1.00	0.40	0.88	0.47	0.25	-0.12	0.28	-0.16	0.84	0.24	10.77	10.58	194.95	9.56	22.24	23.44	22.71	22.82	12.13	7.14	1.10	1.10	1.05	1.11	0.59	0.53			0.01	29.16
90	6/29/2004	22:34:55.07	2.49	2.66	5.39	0.20	0.98	0.40	0.88	0.47	0.23	-0.12	0.29	-0.18	0.82	0.29	10.72	10.53	194.95	11.00	22.24	23.44	22.63	22.82	12.13	7.20	1.10	1.08	1.05	1.11	0.59	0.51			0.01	29.42
91	6/29/2004	22:38:25.07	2.43	2.61	4.84	0.30	1.01	0.47	0.89	0.50	0.20	-0.06	0.49	-0.13	0.91	0.37	10.83	10.65	194.95	11.10	22.35	23.47	22.66	22.77	12.00	7.26	1.20	1.11	1.12	1.12	0.62	0.48			0.01	29.68
92	6/29/2004	22:41:55.07	2.47	2.61	4.59	0.20	0.99	0.40	0.89	0.47	0.23	-0.12	0.27	-0.18	0.82	0.24	10.76	10.58	194.95	10.38	22.43	23.47	22.66	22.85	12.00	7.32	1.10	1.09	1.05	1.12	0.59	0.51			0.01	29.95
93	6/29/2004	22:45:25.07	2.49	2.62	4.57	0.21	1.00	0.41	0.90	0.48	0.24	-0.12	0.27	-0.16	0.84	0.23	10.77	10.59	194.95	9.32	22.35	23.47	22.66	22.77	12.16	7.38	1.11	1.10	1.06	1.13	0.60	0.52			0.01	30.21
94	6/29/2004	22:48:55.07	2.49	2.61	4.59	0.21	1.00	0.40	0.89	0.48	0.24	-0.12	0.28	-0.16	0.84	0.24	10.80	10.61	194.95	11.14	22.27	23.47	22.66	22.77	12.16	7.44	1.11	1.10	1.05	1.12	0.60	0.52			0.01	30.48
95	6/29/2004	22:52:25.07	2.49	2.61	4.59	0.21	1.01	0.40	0.90	0.48	0.24	-0.12	0.28	-0.14	0.86	0.24	10.84	10.66	194.95	9.13	22.15	23.42	22.54	22.73	11.95	7.49	1.11	1.11	1.05	1.13	0.60	0.52			0.01	30.74
96	6/29/2004	22:55:55.07	2.49	2.62	4.57	0.21	1.01	0.40	0.92	0.48	0.24	-0.12	0.27	-0.18	0.85	0.23	10.80	10.61	194.95	9.49	22.15	23.42	22.62	22.73	12.12	7.55	1.11	1.11	1.05	1.15	0.60	0.52			0.01	31.01
97	6/29/2004	22:59:25.07	2.49	2.62	4.60	0.21	1.00	0.40	0.89	0.48	0.23	-0.12	0.28	-0.17	0.86	0.24	10.82	10.64	194.95	9.65	22.31	23.42	22.62	22.73	12.04	7.61	1.11	1.10	1.05	1.12	0.60	0.51			0.01	31.27
98	6/29/2004	23:02:55.07	2.47	2.61	4.57	0.20	1.00	0.41	0.88	0.47	0.24	-0.12	0.29	-0.17	0.85	0.24	10.81	10.63	194.95	11.13	22.34	23.46	22.57	22.68	12.15	7.67	1.10	1.10	1.06	1.11	0.59	0.52			0.01	31.54
99	6/29/2004	23:06:25.07	2.49	2.61	4.55	0.21	1.01	0.40	0.90	0.48	0.24	-0.12	0.28	-0.17	0.86	0.23	10.82	10.64	194.95	9.11	22.31	23.42	22.62	22.73	12.12	7.73	1.11	1.11	1.05	1.13	0.60	0.52			0.01	31.80
100	6/29/2004	23:09:55.07	2.49	2.61	4.59	0.21	1.01	0.40	0.89	0.48	0.24	-0.12	0.27	-0.17	0.85	0.23	10.80	10.62	194.95	10.85	22.18	23.38	22.49	22.68	11.99	7.79	1.11	1.11	1.05	1.12	0.60	0.52			0.01	32.07
101	6/29/2004	23:13:25.07	2.49	2.61	4.57	0.20	1.00	0.40	0.89	0.47	0.23	-0.13	0.28	-0.18	0.85	0.23	10.78	10.60	194.95	10.32	22.02	23.30	22.49	22.68	11.91	7.84	1.10	1.10	1.05	1.12	0.59	0.51			0.01	32.33
102	6/29/2004	23:16:55.07	2.49	2.61	4.60	0.21	1.01	0.40	0.92	0.48	0.24	-0.12	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	11.57	22.14	23.33	22.44	22.64	11.86	7.90	1.11	1.11	1.05	1.15	0.60	0.52			0.01	32.60
103	6/29/2004	23:20:25.07	2.49	2.61	4.60	0.19	1.00	0.40	0.89	0.47	0.24	-0.13	0.28	-0.18	0.85	0.23	10.78	10.59	194.95	9.88	22.30	23.41	22.52	22.72	11.94	7.96	1.09	1.10	1.05	1.12	0.59	0.52			0.01	32.86
104	6/29/2004	23:23:55.07	2.49	2.61	4.59	0.20	1.01	0.40	0.88	0.47	0.25	-0.13	0.27	-0.18	0.86	0.24	10.77	10.59	194.95	9.18	22.30	23.41	22.52	22.72	12.11	8.02	1.10	1.11	1.05	1.11	0.59	0.53			0.01	33.13
105	6/29/2004	23:27:25.07	2.49	2.61	4.57	0.19	1.00	0.40	0.89	0.47	0.24	-0.12	0.27	-0.18	0.86	0.23	10.80	10.62	194.95	9.17	22.22	23.33	22.44	22.72	12.11	8.08	1.09	1.10	1.05	1.12	0.59	0.52			0.01	33.39
106	6/29/2004	23:30:55.07	2.49	2.61	4.59	0.20	1.00	0.41	0.90	0.47	0.24	-0.12	0.28	-0.18	0.86	0.23	10.81	10.63	194.95	11.36	22.06	23.33	22.44	22.72	11.94	8.14	1.10	1.10	1.06	1.13	0.59	0.52			0.01	33.66
107	6/29/2004	23:34:25.07	2.49	2.61	4.59	0.20	1.02	0.41	0.92	0.48	0.24	-0.13	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	8.94	22.01	23.29	22.40	22.67	11.90	8.19	1.10	1.12	1.06	1.15	0.60	0.52			0.01	33.92
108	6/29/2004	23:37:55.07	2.49	2.61	4.59	0.20	1.01	0.41	0.90	0.47	0.24	-0.12	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	8.99	22.17	23.37	22.48	22.67	12.06	8.25	1.10	1.11	1.06	1.13	0.59	0.52			0.01	34.18
109	6/29/2004	23:41:25.07	2.49	2.61	4.60	0.20	1.01	0.41	0.90	0.48	0.24	-0.13	0.28	-0.18	0.86	0.24	10.80	10.61	194.95	9.06	22.33	23.37	22.48	22.67	11.98	8.31	1.10	1.11	1.06	1.13	0.60	0.52			0.01	34.45
110	6/29/2004	23:44:55.07	2.49	2.61	4.57	0.20	1.00	0.40	0.89	0.47	0.23	-0.13	0.28	-0.19	0.86	0.23	10.77	10.58	194.95	10.95	22.12	23.32	22.43	22.63	12.01	8.37	1.10	1.10	1.05	1.12	0.59	0.51			0.01	34.71
111	6/29/2004	23:48:25.07	2.49	2.61	4.60	0.18	1.01	0.40	0.90	0.45	0.24	-0.13	0.27	-0.18	0.86	0.23	10.78	10.59	194.69	9.89	22.09	23.29	22.40	22.59	11.98	8.43	1.08	1.11	1.05	1.13	0.57	0.52			0.01	34.98
112	6/29/2004	23:51:55.07	2.49	2.61	4.59	0.19	1.01	0.40	0.90	0.47	0.24	-0.13	0.27	-0.18	0.86	0.23	10.78	10.60	194.95	10.01	22.09	23.37	22.48	22.67	11.98	8.49	1.09	1.11	1.05	1.13	0.59	0.52			0.01	35.24
113	6/29/2004	23:55:25.07	2.49	2.61	4.57	0.20	1.01	0.41	0.90	0.47	0.24	-0.13	0.27	-0.18	0.86	0.23	10.80	10.62	194.95	10.37	21.96	23.24	22.35	22.54	11.77	8.54	1.10	1.11	1.06	1.13	0.59	0.52			0.01	35.51
114	6/29/2004	23:58:55.07	2.49	2.61	4.60	0.20	1.01	0.40	0.89	0.45	0.24	-0.13	0.28	-0.18	0.86	0.23	10.80	10.61	194.95	9.00	22.29	23.32	22.43	22.63	12.01	8.60	1.10	1.11	1.05	1.12	0.57	0.52			0.01	35.77
115	6/30/2004	00:02:25.07	2.49	2.61	4.59	0.21	1.01	0.40	0.89	0.47	0.24	-0.12	0.28	-0.19	0.86	0.24	10.80	10.62	194.95	9.12	22.29	23.32	22.43	22.63	12.01	8.66	1.11	1.11	1.05	1.12	0.59	0.52			0.01	36.04
116	6/30/2004	00:05:55.07	2.49	2.61	4.60	0.19	1.01	0.40	0.90	0.45	0.25	-0.14	0.27	-0.18	0.86	0.24	10.78	10.60	194.95	9.39	22.21	23.40	22.43	22.63	12.09	8.72	1.09	1.11	1.05	1.13	0.57	0.53			0.01	36.30
117	6/30/2004	00:09:25.07	2.49	2.62	4.59	0.20	1.00	0.40	0.89	0.45	0.23	-0.13	0.28	-0.19	0.86	0.23	10.80	10.61	194.95	9.24	22.12	23.32	22.35	22.54	11.85	8.78	1.10	1.10	1.05	1.12	0.57	0.51			0.01	36.57
118	6/30/2004	00:12:55.07	2.49	2.62	4.60	0.20	1.02	0.40	0.90	0.47	0.24	-0.13	0.27	-0.18	0.86	0.23	10.80	10.62	194.95	9.22	22.04	23.32	22.35	22.54	11.85	8.84	1.10	1.12	1.05	1.13	0.59	0.52			0.01	36.83
119	6/30/2004	00:16:25.07	2.49	2.61	4.59	0.21	1.01	0.40	0.89	0.47	0.24	-0.13	0.27	-0.18	0.86	0.23	10.79	10.61	194.95	9.08	22.21	23.32	22.43	22.63	12.01	8.89	1.11	1.11	1.05	1.12	0.59	0.52			0.01	37.10
120	6/30/2004	00:19:55.07	2.49	2.62	4.57	0.19	1.01	0.40	0.90	0.45	0.24	-0.13	0.27	-0.18	0.86	0.23	10.79	10.61	194.95	11.33	22.24	23.27	22.39	22.58	11.80	8.95	1.09	1.11	1.05	1.13	0.57	0.52			0.01	37.36
121	6/30/2004	00:23:25.07	2.49	2.61	4.57	0.20	1.01	0.40	0.90	0.47	0.23	-0.13	0.27	-0.18	0.86	0.23	10.80	10.62	194.95	10.11	22.21	23.40	22.43	22.63	12.01	9.01	1.10	1.11	1.05	1.13	0.59	0.51			0.01	37.63
122	6/30/2004	00:26:55.07	2.50	2.62	4.59	0.19	1.01	0.42	0.89	0.45	0.23	-0.13	0.27	-0.19	0.86	0.23	10.79	10.61	194.95	9.48	22.08	23.36	22.39	22.58	12.05	9.07	1.09	1.11	1.07	1.12	0.57	0.51			0.01	37.89
123	6/30/2004	00:30:25.07	2.50	2.62	4.57	0.20	1.01	0.40	0.89	0.45	0.24	-0.13	0.29	-0.18	0.86	0.23	10.82	10.64	194.95	11.18	22.04	23.32	22.43	22.54	12.01	9.13	1.10	1.11	1.05	1.12	0.57	0.52			0.01	38.16
124	6/30/2004	00:33:55.07	2.49	2.61	4.59	0.21	1.01	0.41	0.90	0.47	0.24	-0.13	0.28	-0.19	0.86	0.23	10.81	10.63	194.95	10.03	22.08	23.27	22.31	22.50	11.80	9.19	1.11	1.11	1.06	1.13	0.59	0.52			0.01	38.42
125	6/30/2004	00:37:25.07	2.49	2.62	4.60	0.21	1.02	0.41	0.92	0.49	0.24	-0.13	0.27	-0.18	0.86	0.23	10.83	10.65	194.95	9.34	22.19	23.23	22.26	22.53	11.84	9.24	1.11	1.12	1.06	1.15	0.61	0.52			0.01	38.68
126	6/30/2004	00:40:55.07	2.50	2.62	4.59	0.19	1.02	0.40	0.90	0.49	0.24	-0.14	0.27	-0.18	0.86	0.24	10.80	10.61	194.95	10.48	22.19	23.23	22.34	22.53	12.00	9.30	1.09	1.12	1.05	1.13	0.61	0.52			0.01	38.95
127	6/30/2004	00:44:25.07	2.50	2.62	4.59	0.20	1.00	0.41	0.90	0.49	0.23	-0.13	0.28	-0.18	0.86	0.23	10.82	10.64	194.95	9.38	22.11	23.23	22.34	22.45	11.84	9.36	1.10	1.10	1.06	1.13	0.61	0.51			0.01	39.22
128	6/30/2004	00:47:55.07	2.50	2.62	4.57	0.19	1.01	0.42	0.90	0.45	0.24	-0.14	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	11.42	22.03	23.23	22.26	22.45	11.84	9.42	1.09	1.11	1.07	1.13	0.57	0.52			0.01	39.48
129	6/30/2004	00:51:25.07	2.50	2.61	4.59	0.19	1.02	0.40	0.90	0.45	0.24	-0.15	0.27	-0.18	0.89	0.23	10.78	10.60	194.95	9.51	22.19	23.31	22.34	22.53	12.08	9.48	1.09	1.12	1.05	1.13	0.57	0.52			0.01	39.74
130	6/30/2004	00:54:55.07	2.49	2.62	4.60	0.21	1.01	0.41	0.92	0.47	0.24	-0.14	0.27	-0.18	0.86	0.24	10.81	10.63	194.95	9.12	22.19	23.23	22.34	22.45	11.84	9.54	1.11	1.11	1.06	1.15	0.59	0.52			0.01	40.01
131	6/30/2004	00:58:25.07	2.50	2.62	4.57	0.20	1.01	0.44	0.90	0.49	0.23	-0.13	0.28	-0.19	0.86	0.21	10.81	10.63	194.69	9.42	22.11	23.23	22.26	22.45	11.76	9.59	1.10	1.11	1.09	1.13	0.61	0.51			0.01	40.27
132	6/30/2004	01:01:55.07	2.49	2.61	4.59	0.21	1.02	0.40	0.90	0.49	0.24	-0.14	0.27	-0.18	0.86	0.23	10.81	10.63	194.95	11.13	22.03	23.23	22.26	22.45	11.84	9.65	1.11	1.12	1.05	1.13	0.61	0.52			0.01	40.54
133	6/30/2004	01:05:25.07	2.50	2.62	4.59	0.20	1.02	0.44	0.92	0.49	0.24	-0.14	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	10.66	21.92	23.19	22.31	22.50	11.88	9.71	1.10	1.12	1.09	1.15	0.61	0.52			0.01	40.80
134	6/30/2004	01:08:55.07	2.50	2.62	4.59	0.19	1.01	0.41	0.89	0.49	0.24	-0.14	0.27	-0.18	0.86	0.23	10.80	10.61	194.95	10.95	21.92	23.19	22.31	22.50	11.88	9.77	1.09	1.11	1.06	1.12	0.61	0.52			0.01	41.07
135	6/30/2004	01:12:25.07	2.50	2.61	4.59	0.18	1.01	0.44	0.89	0.47	0.24	-0.14	0.27	-0.18	0.90	0.21	10.77	10.58	194.95	11.17	21.95	23.23	22.34	22.45	11.92	9.83	1.08	1.11	1.09	1.12	0.59	0.52			0.01	41.33
136	6/30/2004	01:15:55.07	2.50	2.61	4.57	0.21	1.01	0.41	0.89	0.50	0.23	-0.13	0.28	-0.18	0.90	0.23	10.81	10.63	194.95	9.08	22.11	23.31	22.26	22.53	11.84	9.89	1.11	1.11	1.06	1.12	0.62	0.51			0.01	41.60
137	6/30/2004	01:19:25.07	2.50	2.62	4.59	0.20	1.02	0.44	0.92	0.47	0.24	-0.14	0.27	-0.18	0.90	0.23	10.82	10.64	194.95	10.27	22.11	23.31	22.34	22.53	11.92	9.94	1.10	1.12	1.09	1.15	0.59	0.52			0.01	41.86
138	6/30/2004	01:22:55.07	2.50	2.61	4.59	0.20	1.02	0.44	0.92	0.50	0.24	-0.15	0.27	-0.18	0.90	0.23	10.80	10.61	194.95	10.51	22.03	23.23	22.26	22.45	11.76	10.00	1.10	1.12	1.09	1.15	0.62	0.52			0.01	42.13
139	6/30/2004	01:26:25.07	2.49	2.61	4.57	0.21	1.04	0.44	0.90	0.50	0.24	-0.15	0.27	-0.18	0.90	0.23	10.81	10.63	194.95	10.74	21.87	23.23	22.26	22.45	11.84	10.06	1.11	1.14	1.09	1.13	0.62	0.52			0.01	42.39
140	6/30/2004	01:29:55.07	2.50	2.62	4.57	0.21	1.00	0.44	0.89	0.49	0.24	-0.14	0.27	-0.19	0.90	0.23	10.78	10.59	194.95	10.35	21.95	23.23	22.26	22.53	11.84	10.12	1.11	1.10	1.09	1.12	0.61	0.52			0.01	42.66
141	6/30/2004	01:33:25.07	2.49	2.61	4.59	0.22	1.01	0.44	0.89	0.49	0.23	-0.14	0.28	-0.18	0.90	0.23	10.80	10.62	194.95	11.51	22.07	23.18	22.21	22.41	11.95	10.18	1.12	1.11	1.09	1.12	0.61	0.51			0.01	42.92
142	6/30/2004	01:36:55.07	2.50	2.61	4.59	0.21	1.02	0.44	0.90	0.50	0.24	-0.14	0.27	-0.19	0.91	0.23	10.85	10.67	194.69	9.37	22.07	23.26	22.21	22.41	11.79	10.24	1.11	1.12	1.09	1.13	0.62	0.52			0.01	43.19
143	6/30/2004	01:40:25.07	2.50	2.61	4.57	0.20	1.02	0.44	0.90	0.49	0.24	-0.15	0.27	-0.18	0.91	0.23	10.83	10.65	194.95	9.61	22.03	23.23	22.26	22.45	11.84	10.29	1.10	1.12	1.09	1.13	0.61	0.52			0.01	43.45
144	6/30/2004	01:43:55.07	2.49	2.61	4.59	0.21	1.02	0.44	0.92	0.49	0.24	-0.14	0.27	-0.18	0.91	0.23	10.83	10.65	194.95	11.10	22.03	23.31	22.26	22.53	12.00	10.35	1.11	1.12	1.09	1.15	0.61	0.52			0.01	43.72
145	6/30/2004	01:47:25.07	2.49	2.61	4.59	0.19	1.00	0.44	0.90	0.50	0.23	-0.13	0.28	-0.18	0.90	0.21	10.79	10.61	194.95	9.11	21.95	23.23	22.26	22.45	11.84	10.41	1.09	1.10	1.09	1.13	0.62	0.51			0.01	43.98
146	6/30/2004	01:50:55.07	2.50	2.61	4.57	0.21	1.02	0.44	0.90	0.49	0.24	-0.14	0.27	-0.18	0.90	0.23	10.81	10.63	194.95	10.72	22.02	23.22	22.17	22.44	11.83	10.47	1.11	1.12	1.09	1.13	0.61	0.52			0.01	44.25
147	6/30/2004	01:54:25.07	2.50	2.61	4.57	0.21	1.01	0.44	0.90	0.49	0.23	-0.14	0.27	-0.18	0.90	0.21	10.77	10.59	194.69	10.34	22.15	23.26	22.29	22.49	11.87	10.53	1.11	1.11	1.09	1.13	0.61	0.51			0.01	44.51
148	6/30/2004	01:57:55.07	2.49	2.61	4.59	0.19	1.02	0.44	0.90	0.49	0.24	-0.14	0.27	-0.19	0.90	0.23	10.77	10.59	194.95	9.94	22.07	23.26	22.29	22.49	11.87	10.59	1.09	1.12	1.09	1.13	0.61	0.52			0.01	44.77
149	6/30/2004	02:01:25.07	2.49	2.61	4.57	0.20	1.02	0.44	0.92	0.49	0.23	-0.14	0.27	-0.18	0.90	0.23	10.80	10.62	194.95	10.77	21.99	23.18	22.13	22.41	11.79	10.64	1.10	1.12	1.09	1.15	0.61	0.51			0.01	45.04
150	6/30/2004	02:04:55.07	2.50	2.61	4.57	0.24	1.02	0.44	0.90	0.49	0.23	-0.14	0.27	-0.19	0.92	0.23	10.84	10.66	194.95	9.43	21.99	23.10	22.13	22.41	11.71	10.70	1.14	1.12	1.09	1.13	0.61	0.51			0.01	45.30
151	6/30/2004	02:08:25.07	2.50	2.62	4.57	0.21	1.02	0.44	0.92	0.49	0.23	-0.14	0.27	-0.18	0.91	0.23	10.80	10.62	194.95	10.86	22.10	23.22	22.25	22.44	11.83	10.76	1.11	1.12	1.09	1.15	0.61	0.51			0.01	45.57
152	6/30/2004	02:11:55.07	2.49	2.61	4.57	0.25	1.04	0.44	0.92	0.49	0.24	-0.15	0.27	-0.18	0.91	0.23	10.83	10.65	194.95	9.39	22.10	23.22	22.17	22.44	11.83	10.82	1.15	1.14	1.09	1.15	0.61	0.52			0.01	45.83
153	6/30/2004	02:15:25.07	2.49	2.61	4.59	0.20	1.02	0.44	0.93	0.49	0.23	-0.15	0.27	-0.18	0.91	0.23	10.79	10.61	194.95	9.55	22.15	23.26	22.21	22.41	11.95	10.88	1.10	1.12	1.09	1.16	0.61	0.51			0.01	46.10
154	6/30/2004	02:18:55.07	2.49	2.61	4.57	0.19	1.01	0.44	0.89	0.49	0.23	-0.14	0.27	-0.18	0.91	0.23	10.78	10.59	194.95	10.68	21.95	23.23	22.18	22.45	11.67	10.94	1.09	1.11	1.09	1.12	0.61	0.51			0.01	46.36
155	6/30/2004	02:22:25.07	2.49	2.61	4.59	0.22	1.02	0.44	0.92	0.49	0.24	-0.15	0.27	-0.18	0.92	0.23	10.80	10.62	194.95	10.02	21.91	23.18	22.13	22.41	11.87	10.99	1.12	1.12	1.09	1.15	0.61	0.52			0.01	46.63
156	6/30/2004	02:25:55.07	2.50	2.61	4.59	0.20	1.01	0.44	0.90	0.49	0.23	-0.15	0.28	-0.18	0.91	0.23	10.82	10.64	194.95	10.45	22.02	23.14	22.17	22.36	11.74	11.05	1.10	1.11	1.09	1.13	0.61	0.51			0.01	46.89
157	6/30/2004	02:29:25.07	2.49	2.61	4.59	0.24	1.02	0.44	0.93	0.49	0.24	-0.15	0.27	-0.18	0.92	0.23	10.79	10.61	194.95	11.56	22.18	23.22	22.17	22.36	11.83	11.11	1.14	1.12	1.09	1.16	0.61	0.52			0.01	47.16
158	6/30/2004	02:32:55.07	2.50	2.61	4.59	0.22	1.02	0.44	0.92	0.48	0.23	-0.15	0.27	-0.19	0.91	0.23	10.79	10.61	194.95	9.27	22.15	23.26	22.21	22.41	11.87	11.17	1.12	1.12	1.09	1.15	0.60	0.51			0.01	47.42
159	6/30/2004	02:36:25.07	2.49	2.61	4.59	0.22	1.02	0.44	0.92	0.49	0.24	-0.14	0.27	-0.19	0.91	0.23	10.81	10.63	194.95	10.21	22.07	23.26	22.13	22.41	11.79	11.23	1.12	1.12	1.09	1.15	0.61	0.52			0.01	47.69
160	6/30/2004	02:39:55.07	2.50	2.61	4.57	0.19	1.01	0.44	0.90	0.48	0.23	-0.14	0.27	-0.18	0.90	0.23	10.78	10.59	194.95	9.36	21.91	23.18	22.13	22.41	11.71	11.29	1.09	1.11	1.09	1.13	0.60	0.51			0.01	47.95

Table H3-4-3. CIX Campaign II, Cycle 4, LAW Treatment

	DATE	TIME	P1	P2	P3	DP1 inch	DP2 inch	DP3 inch	DP4 inch	DP5 inch	DP6 inch	DP7 inch	DP8 inch	DP9 inch	DP10 inch	DP11 inch	Flow meter	flow cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-ed	DP1 cor. inch	DP2 cor. inch	DP3 cor. inch	DP4 cor. inch	DP5 cor. inch	DP6 cor. inch	Resin H1	Resin H2	differ-ential	cumul-lative
	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero.																																			
	The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																																			
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	(hours)	water	water	water	water	water	water	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933											
161	6/30/2004	02:43:25.07	2.50	2.61	4.59	0.21	1.04	0.44	0.92	0.50	0.24	-0.15	0.27	-0.18	0.93	0.23	10.83	10.65	194.95	9.48	22.07	23.26	22.21	22.41	11.87	11.34	1.11	1.14	1.09	1.15	0.62	0.52			0.01	48.22
162	6/30/2004	02:46:55.07	2.49	2.61	4.59	0.22	1.04	0.44	0.92	0.49	0.24	-0.14	0.25	-0.19	0.90	0.23	10.77	10.59	194.95	9.36	22.10	23.22	22.17	22.44	11.74	11.40	1.12	1.14	1.09	1.15	0.61	0.52			0.01	48.48
163	6/30/2004	02:50:25.07	2.49	2.61	4.59	0.22	1.01	0.44	0.92	0.49	0.23	-0.15	0.28	-0.18	0.92	0.23	10.81	10.63	194.95	9.31	22.10	23.22	22.17	22.36	11.83	11.46	1.12	1.11	1.09	1.15	0.61	0.51			0.01	48.75
164	6/30/2004	02:53:55.07	2.49	2.61	4.59	0.25	1.04	0.44	0.92	0.49	0.24	-0.14	0.27	-0.18	0.92	0.23	10.81	10.63	194.95	9.47	21.94	23.14	22.09	22.28	11.74	11.52	1.15	1.14	1.09	1.15	0.61	0.52			0.01	49.01
165	6/30/2004	02:57:25.07	2.50	2.61	4.57	0.22	1.02	0.44	0.92	0.49	0.23	-0.14	0.27	-0.18	0.92	0.23	10.80	10.61	194.95	9.36	21.99	23.18	22.21	22.41	11.79	11.58	1.12	1.12	1.09	1.15	0.61	0.51			0.01	49.28
166	6/30/2004	03:00:55.07	2.49	2.61	4.57	0.24	1.02	0.44	0.92	0.50	0.23	-0.12	0.27	-0.18	0.93	0.23	10.82	10.64	194.95	9.17	21.94	23.14	22.09	22.36	11.83	11.64	1.14	1.12	1.09	1.15	0.62	0.51			0.01	49.54
167	6/30/2004	03:04:25.07	2.49	2.61	4.57	0.22	1.02	0.44	0.92	0.49	0.23	-0.14	0.27	-0.18	0.93	0.23	10.80	10.61	194.95	9.17	22.10	23.14	22.17	22.44	11.74	11.69	1.12	1.12	1.09	1.15	0.61	0.51			0.01	49.81
168	6/30/2004	03:07:55.07	2.49	2.61	4.57	0.21	1.02	0.44	0.92	0.49	0.23	-0.15	0.27	-0.18	0.91	0.23	10.80	10.61	194.95	10.26	22.10	23.14	22.09	22.36	11.74	11.75	1.11	1.12	1.09	1.15	0.61	0.51			0.01	50.07
169	6/30/2004	03:11:25.07	2.49	2.61	4.57	0.25	1.02	0.44	0.92	0.49	0.23	-0.15	0.27	-0.18	0.92	0.23	10.80	10.61	194.95	9.15	22.02	23.22	22.17	22.44	11.91	11.81	1.15	1.12	1.09	1.15	0.61	0.51			0.01	50.33
170	6/30/2004	03:14:55.07	2.49	2.61	4.60	0.24	1.02	0.44	0.92	0.48	0.24	-0.12	0.27	-0.18	0.93	0.23	10.80	10.61	194.95	9.25	21.94	23.14	22.17	22.36	11.83	11.87	1.14	1.12	1.09	1.15	0.60	0.52			0.01	50.60
171	6/30/2004	03:18:25.07	2.49	2.61	4.60	0.24	1.04	0.45	0.93	0.49	0.24	-0.12	0.27	-0.18	0.93	0.23	10.81	10.63	194.95	9.24	22.02	23.22	22.17	22.44	11.74	11.93	1.14	1.14	1.10	1.16	0.61	0.52			0.01	50.86
172	6/30/2004	03:21:55.07	2.49	2.61	4.59	0.25	1.02	0.44	0.94	0.49	0.23	-0.14	0.28	-0.19	0.92	0.23	10.81	10.63	194.95	10.44	22.18	23.22	22.17	22.36	11.83	11.99	1.15	1.12	1.09	1.17	0.61	0.51			0.01	51.13
173	6/30/2004	03:25:25.07	2.49	2.61	4.57	0.24	1.02	0.44	0.92	0.49	0.24	-0.12	0.27	-0.18	0.92	0.24	10.81	10.63	194.95	9.45	22.18	23.14	22.17	22.36	11.74	12.04	1.14	1.12	1.09	1.15	0.61	0.52			0.01	51.39
174	6/30/2004	03:28:55.07	2.49	2.61	4.55	0.24	1.04	0.44	0.95	0.49	0.24	-0.15	0.27	-0.18	0.93	0.23	10.83	10.65	194.95	9.58	22.02	23.14	22.09	22.36	11.83	12.10	1.14	1.14	1.09	1.18	0.61	0.52			0.01	51.66
175	6/30/2004	03:32:25.07	2.49	2.61	4.57	0.25	1.02	0.44	0.94	0.49	0.24	-0.12	0.27	-0.19	0.93	0.23	10.84	10.67	194.95	9.53	21.94	23.14	22.17	22.36	11.83	12.16	1.15	1.12	1.09	1.17	0.61	0.52			0.01	51.92
176	6/30/2004	03:35:55.07	2.49	2.59	4.55	0.25	1.02	0.44	0.92	0.49	0.23	-0.12	0.28	-0.18	0.93	0.23	10.83	10.65	194.95	9.12	22.02	23.14	22.09	22.36	11.74	12.22	1.15	1.12	1.09	1.15	0.61	0.51			0.01	52.19
177	6/30/2004	03:39:25.07	2.50	2.61	4.59	0.22	1.02	0.44	0.92	0.48	0.23	-0.12	0.27	-0.19	0.92	0.23	10.78	10.59	194.95	9.19	22.14	23.09	22.12	22.40	11.78	12.28	1.12	1.12	1.09	1.15	0.60	0.51			0.01	52.45
178	6/30/2004	03:42:55.07	2.49	2.61	4.59	0.22	1.01	0.44	0.90	0.48	0.21	-0.12	0.28	-0.18	0.93	0.23	10.78	10.59	194.95	10.12	22.14	23.17	22.12	22.40	11.78	12.34	1.12	1.11	1.09	1.13	0.60	0.49			0.01	52.72
179	6/30/2004	03:46:25.07	2.49	2.61	4.57	0.25	1.04	0.44	0.93	0.49	0.23	-0.14	0.27	-0.18	0.92	0.23	10.81	10.63	194.95	9.99	22.10	23.22	22.09	22.36	11.74	12.39	1.15	1.14	1.09	1.16	0.61	0.51			0.01	52.98
180	6/30/2004	03:49:55.07	2.49	2.61	4.59	0.25	1.02	0.44	0.93	0.49	0.24	-0.12	0.27	-0.18	0.93	0.23	10.84	10.66	194.95	10.39	21.94	23.14	22.09	22.36	11.83	12.45	1.15	1.12	1.09	1.16	0.61	0.52			0.01	53.25
181	6/30/2004	03:53:25.07	2.49	2.59	4.59	0.24	1.02	0.44	0.92	0.48	0.23	-0.12	0.27	-0.18	0.93	0.21	10.77	10.59	194.95	9.27	21.94	23.14	22.09	22.36	11.74	12.51	1.14	1.12	1.09	1.15	0.60	0.51			0.01	53.51
182	6/30/2004	03:56:55.07	2.49	2.59	4.57	0.24	1.02	0.44	0.92	0.49	0.23	-0.12	0.27	-0.19	0.92	0.23	10.80	10.62	194.95	9.45	22.06	23.09	22.12	22.32	11.86	12.57	1.14	1.12	1.09	1.15	0.61	0.51			0.01	53.78
183	6/30/2004	04:00:25.07	2.49	2.59	4.57	0.21	1.04	0.44	0.92	0.49	0.24	-0.14	0.27	-0.19	0.92	0.23	10.82	10.64	194.95	9.35	22.14	23.09	22.04	22.32	11.70	12.63	1.11	1.14	1.09	1.15	0.61	0.52			0.01	54.04
184	6/30/2004	04:03:55.07	2.49	2.61	4.57	0.24	1.02	0.44	0.92	0.49	0.23	-0.15	0.28	-0.19	0.93	0.23	10.79	10.61	194.95	10.42	22.10	23.22	22.17	22.36	11.83	12.69	1.14	1.12	1.09	1.15	0.61	0.51			0.01	54.31
185	6/30/2004	04:07:25.07	2.49	2.61	4.57	0.25	1.04	0.44	0.93	0.49	0.24	-0.14	0.25	-0.18	0.93	0.23	10.83	10.65	194.95	10.50	22.02	23.14	22.09	22.36	11.83	12.74	1.15	1.14	1.09	1.16	0.61	0.52			0.01	54.57
186	6/30/2004	04:10:55.07	2.49	2.59	4.57	0.24	1.02	0.44	0.93	0.49	0.23	-0.12	0.27	-0.18	0.92	0.23	10.80	10.61	194.95	10.80	21.86	23.06	22.09	22.28	11.66	12.80	1.14	1.12	1.09	1.16	0.61	0.51			0.01	54.84
187	6/30/2004	04:14:25.07	2.49	2.61	4.59	0.24	1.02	0.44	0.90	0.48	0.23	-0.12	0.28	-0.19	0.93	0.21	10.81	10.63	194.95	9.72	21.98	23.09	22.12	22.32	11.70	12.86	1.14	1.12	1.09	1.13	0.60	0.51			0.01	55.10
188	6/30/2004	04:17:55.07	2.50	2.61	4.57	0.22	1.02	0.44	0.92	0.49	0.23	-0.12	0.28	-0.19	0.92	0.23	10.78	10.59	194.95	10.91	22.14	23.17	22.12	22.32	11.78	12.92	1.12	1.12	1.09	1.15	0.61	0.51			0.01	55.36
189	6/30/2004	04:21:25.07	2.49	2.61	4.57	0.24	1.04	0.44	0.92	0.49	0.23	-0.12	0.27	-0.18	0.93	0.23	10.78	10.59	194.95	10.95	22.06	23.17	22.12	22.32	11.94	12.98	1.14	1.14	1.09	1.15	0.61	0.51			0.01	55.63
190	6/30/2004	04:24:55.07	2.49	2.61	4.59	0.24	1.02	0.44	0.92	0.49	0.24	-0.12	0.27	-0.18	0.93	0.23	10.80	10.62	194.95	9.49	21.98	23.17	22.12	22.32	11.70	13.04	1.14	1.12	1.09	1.15	0.61	0.52			0.01	55.89
191	6/30/2004	04:28:25.07	2.49	2.61	4.59	0.24	1.04	0.44	0.94	0.49	0.23	-0.12	0.27	-0.18	0.93	0.23	10.78	10.60	194.95	9.37	21.90	23.09	22.04	22.32	11.70	13.09	1.14	1.14	1.09	1.17	0.61	0.51			0.01	56.16
192	6/30/2004	04:31:55.07	2.49	2.59	4.57	0.24	1.04	0.45	0.92	0.48	0.23	-0.12	0.27	-0.18	0.93	0.23	10.77	10.59	194.69	9.18	21.98	23.09	22.04	22.32	11.70	13.15	1.14	1.14	1.10	1.15	0.60	0.51			0.01	56.42
193	6/30/2004	04:35:25.07	2.49	2.61	4.57	0.22	1.02	0.44	0.92	0.49	0.23	-0.13	0.25	-0.19	0.93	0.21	10.77	10.58	194.95	9.46	22.09	23.13	22.08	22.35	11.73	13.21	1.12	1.12	1.09	1.15	0.61	0.51			0.01	56.69
194	6/30/2004	04:38:55.07	2.49	2.61	4.59	0.24	1.02	0.44	0.94	0.49	0.23	-0.12	0.28	-0.19	0.93	0.23	10.80	10.61	194.95	11.45	22.09	23.13	22.08	22.27	11.73	13.27	1.14	1.12	1.09	1.17	0.61	0.51			0.01	56.95
195	6/30/2004	04:42:25.07	2.49	2.59	4.57	0.24	1.04	0.44	0.93	0.49	0.24	-0.12	0.27	-0.18	0.92	0.23	10.77	10.59	194.95	10.47	21.98	23.09	22.12	22.40	11.78	13.33	1.14	1.14	1.09	1.16	0.61	0.52			0.01	57.22
196	6/30/2004	04:45:55.07	2.49	2.61	4.59	0.25	1.04	0.44	0.96	0.49	0.24	-0.12	0.27	-0.18	0.93	0.23	10.82	10.64	194.95	10.32	21.90	23.09	22.12	22.32	11.78	13.39	1.15	1.14	1.09	1.19	0.61	0.52			0.01	57.48
197	6/30/2004	04:49:25.07	2.49	2.59	4.55	0.22	1.04	0.44	0.96	0.49	0.24	-0.12	0.27	-0.19	0.93	0.23	10.80	10.62	194.95	10.62	21.98	23.09	22.12	22.32	11.78	13.44	1.12	1.14	1.09	1.19	0.61	0.52			0.01	57.75
198	6/30/2004	04:52:55.07	2.49	2.59	4.59	0.22	1.04	0.44	0.94	0.49	0.24	-0.12	0.27	-0.18	0.92	0.23	10.79	10.61	194.95	9.19	22.14	23.09	22.12	22.32	11.70	13.50	1.12	1.14	1.09	1.17	0.61	0.52			0.01	58.01
199	6/30/2004	04:56:25.07	2.49	2.59	4.55	0.24	1.04	0.44	0.95	0.49	0.23	-0.12	0.28	-0.19	0.92	0.23	10.80	10.62	194.95	10.86	22.09	23.13	22.08	22.27	11.73	13.56	1.14	1.14	1.09	1.18	0.61	0.51			0.01	58.28
200	6/30/2004	04:59:55.07	2.49	2.61	4.57	0.22	1.02	0.44	0.95	0.48	0.23	-0.12	0.28	-0.18	0.92	0.21	10.80	10.62	194.95	9.44	21.90	23.01	22.04	22.32	11.62	13.62	1.12	1.12	1.09	1.18	0.60	0.51			0.01	58.54
201	6/30/2004	05:03:25.07	2.49	2.59	4.59	0.24	1.02	0.44	0.96	0.49	0.23	-0.12	0.27	-0.19	0.92	0.23	10.80	10.61	194.95	9.14	21.90	23.09	22.12	22.32	11.78	13.68	1.14	1.12	1.09	1.19	0.61	0.51			0.01	58.81
202	6/30/2004	05:06:55.07	2.49	2.59	4.57	0.24	1.05	0.44	0.96	0.48	0.23	-0.13	0.25	-0.18	0.93	0.23	10.81	10.63	194.95	10.38	22.01	23.13	22.16	22.35	11.73	13.74	1.14	1.15	1.09	1.19	0.60	0.51			0.01	59.07
203	6/30/2004	05:10:25.07	2.49	2.59	4.59	0.25	1.04	0.44	0.96	0.50	0.24	-0.12	0.27	-0.18	0.93	0.23	10.87	10.70	194.95	9.59	22.17	23.05	22.08	22.27	11.73	13.79	1.15	1.14	1.09	1.19	0.62	0.52			0.01	59.34
204	6/30/2004	05:13:55.07	2.49	2.59	4.59	0.25	1.04	0.44	0.96	0.49	0.24	-0.12	0.27	-0.18	0.93	0.23	10.82	10.64	194.95	10.98	22.01	23.05	22.00	22.27	11.73	13.85	1.15	1.14	1.09	1.19	0.61	0.52			0.01	59.60
205	6/30/2004	05:17:25.07	2.49	2.59	4.57	0.22	1.04	0.44	0.96	0.49	0.23	-0.13	0.27	-0.18	0.93	0.21	10.75	10.56	194.95	9.89	21.98	23.09	22.04	22.32	11.62	13.91	1.12	1.14	1.09	1.19	0.61	0.51			0.01	59.86
206	6/30/2004	05:20:55.07	2.50	2.59	4.59	0.22	1.02	0.44	0.95	0.48	0.23	-0.13	0.30	-0.19	0.93	0.21	10.78	10.59	194.95	9.43	21.85	23.05	22.00	22.27	11.82	13.97	1.12	1.12	1.09	1.18	0.60	0.51			0.01	60.13
207	6/30/2004	05:24:25.07	2.49	2.61	4.55	0.24	1.04	0.44	0.95	0.48	0.23	-0.12	0.27	-0.18	0.95	0.21	10.77	10.59	194.95	9.42	21.93	22.97	22.00	22.19	11.57	14.03	1.14	1.14	1.09	1.18	0.60	0.51			0.01	60.39
208	6/30/2004	05:27:55.07	2.50	2.59	4.55	0.24	1.04	0.44	0.95	0.49	0.23	-0.12	0.28	-0.18	0.86	0.23	10.84	10.66	194.95	9.35	22.17	23.13	22.08	22.27	11.73	14.09	1.14	1.14	1.09	1.18	0.61	0.51			0.01	60.66
209	6/30/2004	05:31:25.07	2.49	2.61	4.57	0.24	1.05	0.44	0.96	0.48	0.23	-0.13	0.25	-0.19	0.86	0.23	10.80	10.61	194.95	9.14	22.09	23.05	22.00	22.27	11.65	14.14	1.14	1.15	1.09	1.19	0.60	0.51			0.01	60.92
210	6/30/2004	05:34:55.07	2.49	2.61	4.59	0.22	1.04	0.44	0.96	0.48	0.23	-0.13	0.29	-0.19	0.86	0.23	10.80	10.62	194.95	11.64	21.93	23.05	22.08	22.27	11.82	14.20	1.12	1.14	1.09	1.19	0.60	0.51			0.01	61.19
211	6/30/2004	05:38:25.07	2.49	2.61	4.59	0.24	1.04	0.44	0.95	0.48	0.23	-0.12	0.27	-0.19	0.87	0.23	10.78	10.60	194.95	10.58	22.01	23.05	22.08	22.27	11.65	14.26	1.14	1.14	1.09	1.18	0.60	0.51			0.01	61.45
212	6/30/2004	05:41:55.07	2.50	2.59	4.59	0.24	1.04	0.44	0.95	0.48	0.23	-0.13	0.27	-0.19	0.86	0.23	10.82	10.64	194.95	10.65	22.17	23.05	22.08	22.27	11.82	14.32	1.14	1.14	1.09	1.18	0.60	0.51			0.01	61.72
213	6/30/2004	05:45:25.07	2.49	2.61	4.57	0.22	1.05	0.44	0.96	0.49	0.23	-0.13	0.27	-0.21	0.86	0.23	10.80	10.61	194.95	10.95	22.25	23.05	22.08	22.27	11.65	14.38	1.12	1.15	1.09	1.19	0.61	0.51			0.01	61.98
214	6/30/2004	05:48:55.07	2.49	2.61	4.55	0.24	1.04	0.44	0.95	0.49	0.24	-0.12	0.30	-0.18	0.86	0.23	10.80	10.61	194.95	10.60	22.17	23.13	22.08	22.27	11.82	14.44	1.14	1.14	1.09	1.18	0.61	0.52			0.01	62.25
215	6/30/2004	05:52:25.07	2.49	2.59	4.57	0.24	1.02	0.44	0.94	0.48	0.21	-0.12	0.28	-0.19	0.86	0.21	10.81	10.63	194.95	11.62	22.01	23.05	22.08	22.27	11.57	14.49	1.14	1.12	1.09	1.17	0.60	0.49			0.01	62.51
216	6/30/2004	05:55:55.07	2.50	2.59	4.59	0.24	1.04	0.45	0.96	0.48	0.23	-0.13	0.30	-0.18	0.86	0.23	10.80	10.62	194.95	9.18	21.85	23.05	22.00	22.19	11.73	14.55	1.14	1.14	1.10	1.19	0.60	0.51			0.01	62.78
217	6/30/2004	05:59:25.07	2.49	2.59	4.59	0.22	1.07	0.44	0.96	0.49	0.23	-0.13	0.30	-0.19	0.86	0.23	10.80	10.61	194.69	10.11	21.93	23.05	22.00	22.27	11.65	14.61	1.12	1.17	1.09	1.19	0.61	0.51			0.01	63.04
218	6/30/2004	06:02:55.07	2.50	2.61	4.59	0.24	1.04	0.44	0.96	0.49	0.23	-0.12	0.30	-0.19	0.86	0.23	10.82	10.64	194.95	9.61	22.13	23.08	22.03	22.22	11.77	14.67	1.14	1.14	1.09	1.19	0.61	0.51			0.01	63.31
219	6/30/2004	06:06:25.07	2.49	2.59	4.57	0.22	1.07	0.44	0.96	0.48	0.23	-0.13	0.27	-0.19	0.86	0.21	10.81	10.63	194.95	9.72	22.13	23.08	22.03	22.22	11.69	14.73	1.12	1.17	1.09	1.19	0.60	0.51			0.01	63.57
220	6/30/2004	06:09:55.07	2.50	2.61	4.55	0.24	1.04	0.44	0.96	0.49	0.24	-0.14	0.30	-0.19	0.86	0.23	10.81	10.63	194.95	9.24	21.96	23.00	22.03	22.22	11.61	14.79	1.14	1.14	1.09	1.19	0.61	0.52			0.01	63.84
221	6/30/2004	06:13:25.07	2.50	2.61	4.59	0.24	1.07	0.44	0.96	0.48	0.24	-0.12	0.27	-0.18	0.86	0.23	10.80	10.62	194.95	10.77	21.96	23.08	22.11	22.30	11.77	14.84	1.14	1.17	1.09	1.19	0.60	0.52			0.01	64.10
222	6/30/2004	06:16:55.07	2.50	2.61	4.59	0.22	1.07	0.44	0.95	0.48	0.23	-0.14	0.29	-0.19	0.86	0.21	10.77	10.59	194.95	9.30	22.00	22.95	21.99	22.26	11.56	14.90	1.12	1.17	1.09	1.18	0.60	0.51			0.01	64.37
223	6/30/2004	06:20:25.07	2.50	2.62	4.57	0.24	1.06	0.44	0.95	0.49	0.23	-0.15	0.28	-0.22	1.51	0.23	10.77	10.59	194.95	9.44	22.21	23.00	22.03	22.22	11.20	14.96	1.14	1.16	1.09	1.18	0.61	0.51			0.01	64.63
224	6/30/2004	06:23:55.07	2.50	2.64	4.60	0.24	1.07	0.44	0.96	0.50	0.23	-0.14	0.25	-0.18	1.51	0.23	10.78	10.60	194.95	11.34	22.29	23.00	22.03	22.22	11.44	15.02	1.14	1.17	1.09	1.19	0.62	0.51			0.01	64.89
225	6/30/2004	06:27:25.07	2.50	2.62	4.60	0.25	1.06	0.44	0.96	0.50	0.23	-0.14	0.28	-0.21	1.50	0.23	10.80	10.61	194.95	9.36	22.13	23.00	21.95	22.22	11.36	15.08	1.15	1.16	1.09	1.19	0.62	0.51			0.01	65.16
226	6/30/2004	06:30:55.07	2.52	2.64	4.60	0.25	1.06	0.44	0.95	0.50	0.23	-0.15	0.30	-0.19	1.50	0.23	10.83	10.65	194.95	10.14	22.01	22.97	22.00	22.27	11.24	15.14	1.15	1.16	1.09	1.18	0.62	0.51			0.01	65.42
227	6/30/2004	06:34:25.07	2.50	2.64	4.57	0.25	1.06	0.44	0.95	0.50	0.23	-0.15	0.30	-0.19	1.50	0.23	10.81	10.63	194.95	9.36	22.05	22.92	21.95	22.14	11.20	15.19	1.15	1.16	1.09	1.18	0.62	0.51			0.01	65.69
228	6/30/2004	06:37:55.07	2.52	2.64	4.59	0.25	1.06	0.44	0.95	0.50	0.23	-0.14	0.30	-0.19	1.51	0.23	10.81	10.63	194.95	11.45	22.13	22.92	22.03	22.22	11.28	15.25	1.15	1.16	1.09	1.18	0.62	0.51			0.01	65.95
229	6/30/2004	06:41:25.07	2.50	2.64	4.59	0.25	1.06	0.44	0.95	0.49	0.23	-0.14	0.27	-0.21	1.50	0.23	10.81	10.63	194.95	9.55	22.29	23.00	22.03	22.22	11.36	15.31	1.15	1.16	1.09	1.18	0.61	0.51			0.01	66.22
230	6/30/2004	06:44:55.07	2.52	2.64	4.60	0.25	1.07	0.44	0.96	0.50	0.24	-0.14	0.30	-0.19	1.50	0.23	10.69	10.50	194.95	9.27	22.13	23.00	22.03	22.22	11.36	15.37	1.15	1.17	1.09	1.19	0.62	0.52			0.01	66.48
231	6/30/2004	06:48:25.07	2.50	2.64	4.60	0.25	1.06	0.44	0.94	0.50	0.23	-0.14	0.31	-0.19	1.50	0.23	10.81	10.63	194.95	9.78	22.01	22.97	22.08	22.19	11.24	15.43	1.15	1.16	1.09	1.17	0.62	0.51			0.01	66.75
232	6/30/2004	06:51:55.07	2.50	2.64	4.60	0.25	1.07	0.44	0.96	0.50	0.23	-0.14	0.30	-0.18	1.51	0.21	10.83	10.65	194.95	9.43	22.09	22.89	22.00	22.19	11.32	15.49	1.15	1.17	1.09	1.19	0.62	0.51			0.01	67.01
233	6/30/2004	06:55:25.07	2.50	2.64	4.59	0.25	1.07	0.44	0.96	0.49	0.23	-0.15	0.30	-0.21	1.51	0.23	10.81	10.63	194.95	10.95	22.21	22.92	22.03	22.22	11.28	15.54	1.15	1.17	1.09	1.19	0.61	0.51			0.01	67.28
234	6/30/2004	06:58:55.07	2.52	2.64	4.59	0.25	1.07	0.44	0.98	0.52	0.24	-0.15	0.29	-0.21	1.51	0.23	10.81	10.63	194.95	11.05	22.33	23.05	22.08	22.27	11.32	15.60	1.15	1.17	1.09	1.21	0.64	0.52			0.01	67.54
235	6/30/2004	07:02:25.07	2.50	2.64	4.59	0.25	1.07	0.44	0.96	0.52	0.23	-0.14	0.30	-0.19	1.50	0.23	10.80	10.62	194.95	9.19	22.17	22.97	22.00	22.19	11.24	15.66	1.15	1.17	1.09	1.19	0.64	0.51			0.01	67.81
236	6/30/2004	07:05:55.07	2.50	2.62	4.60	0.25	1.07	0.44	0.96	0.50	0.24	-0.14	0.30	-0.19	1.50	0.23	10.81	10.63	194.69	10.75	22.09	22.97	22.00	22.19	11.24	15.72	1.15	1.17	1.09	1.19	0.62	0.52			0.01	68.07
237	6/30/2004	07:09:25.07	2.50	2.64	4.59	0.24	1.07	0.44	0.95	0.50	0.23	-0.14	0.30	-0.19	1.50	0.23	10.74	10.55	194.95	10.03	22.06	23.01	22.04	22.24	11.37	15.78	1.14	1.17	1.09	1.18	0.62	0.51			0.01	68.34
238	6/30/2004	07:12:55.07	2.50	2.64	4.59	0.25	1.07	0.44	0.96	0.50	0.24	-0.14	0.30	-0.19	1.51	0.23	10.80	10.62	194.95	9.24	22.14	23.01	22.04	22.24	11.37	15.84	1.15	1.17	1.09	1.19	0.62	0.52			0.01	68.60
239	6/30/2004	07:16:25.07	2.50	2.64	4.60	0.25	1.07	0.44	0.95	0.50	0.23	-0.15	0.30	-0.19	1.50	0.23	10.77	10.58	194.95	9.21	22.17	22.97	22.00	22.19	11.24	15.89	1.15	1.17	1.09	1.18	0.62	0.51			0.01	68.87
240	6/30/2004	07:19:55.07	2.50	2.64	4.59	0.21	1.06	0.44	0.95	0.48	0.23	-0.15	0.30	-0.21	1.50	0.21	10.72	10.54	194.95	9.19	22.22	23.01	22.04	22.15	11.29	15.95	1.11	1.16	1.09	1.18	0.60	0.51			0.01	69.13

Table H3-4-4. CIX Campaign II, Cycle 4, LAW Treatment

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
241	6/30/2004	07:23:25.07	2.50	2.64	4.60	0.25	1.07	0.44	0.96	0.52	0.23	-0.14	0.30	-0.19	1.51	0.23	10.78	10.60	194.95	9.84	22.18	23.06	22.01	22.20	11.42	16.01	1.15	1.17	1.09	1.19	0.64	0.51			0.01	69.40
242	6/30/2004	07:31:01.07	2.50	2.68	4.62	0.99	1.07	0.84	0.96	0.48	0.23	0.19	0.30	0.05	1.71	0.23	10.81	10.63	194.95	9.48	22.02	22.90	22.01	22.12	11.34	16.14	1.22	1.17	1.24	1.19	0.54	0.54			0.08	69.82
243	6/30/2004	07:52:01.07	2.47	2.61	4.53	0.96	1.02	0.82	0.93	0.48	0.20	0.17	0.29	0.05	1.67	0.20	10.50	10.29	0.11	10.56	22.11	22.99	22.02	22.13	11.35	16.49	1.19	1.12	1.22	1.16	0.54	0.51			0.07	71.38
244	6/30/2004	08:13:01.07	2.47	2.61	4.51	0.96	1.01	0.80	0.93	0.48	0.21	0.15	0.27	0.05	1.67	0.21	10.51	10.30	0.11	10.42	22.19	23.07	22.10	22.21	11.35	16.84	1.19	1.11	1.20	1.16	0.54	0.52			0.07	72.92
245	6/30/2004	08:34:01.07	2.47	2.61	4.53	0.90	1.02	0.80	0.90	0.48	0.21	0.13	0.25	0.05	1.67	0.21	10.51	10.31	0.11	11.06	22.40	23.11	21.98	22.18	11.39	17.19	1.13	1.12	1.20	1.13	0.54	0.52			0.07	74.46
246	6/30/2004	08:55:01.07	2.45	2.61	4.51	0.90	1.02	0.78	0.92	0.45	0.21	0.14	0.25	0.05	1.67	0.21	10.53	10.33	0.11	10.69	22.37	23.08	22.11	22.22	11.44	17.54	1.13	1.12	1.18	1.15	0.51	0.52			0.07	76.00
247	6/30/2004	09:16:01.07	2.45	2.61	4.53	0.88	1.01	0.75	0.90	0.45	0.21	0.14	0.27	0.05	1.67	0.21	10.48	10.27	0.37	9.66	22.61	23.16	22.03	22.30	11.36	17.89	1.11	1.11	1.15	1.13	0.51	0.52			0.07	77.54
248	6/30/2004	09:37:01.07	2.45	2.61	4.53	0.90	1.01	0.75	0.90	0.45	0.21	0.14	0.27	0.05	1.65	0.21	10.52	10.31	0.11	9.29	22.71	23.26	22.13	22.33	11.63	18.24	1.13	1.11	1.15	1.13	0.51	0.52			0.07	79.08
249	6/30/2004	09:58:01.07	2.45	2.61	4.51	0.90	1.02	0.77	0.92	0.48	0.21	0.15	0.27	0.05	1.66	0.23	10.53	10.33	0.11	10.63	23.09	23.40	22.27	22.46	11.69	18.59	1.13	1.12	1.17	1.15	0.54	0.52			0.07	80.62
250	6/30/2004	10:19:01.07	2.43	2.61	4.55	0.88	1.02	0.77	0.92	0.48	0.23	0.15	0.27	0.04	1.67	0.23	10.51	10.30	0.11	9.85	23.61	23.52	22.39	22.50	11.64	18.94	1.11	1.12	1.17	1.15	0.54	0.54			0.07	82.16
251	6/30/2004	10:40:01.07	2.41	2.59	4.53	0.85	1.02	0.74	0.92	0.49	0.21	0.15	0.27	0.04	1.67	0.24	10.47	10.26	0.11	10.12	23.76	23.59	22.38	22.57	11.88	19.29	1.08	1.12	1.14	1.15	0.55	0.52			0.07	83.70
252	6/30/2004	11:01:01.07	2.41	2.61	4.53	0.86	1.02	0.74	0.92	0.45	0.21	0.15	0.27	0.05	1.67	0.23	10.49	10.29	0.11	9.14	23.90	23.64	22.52	22.63	11.85	19.64	1.09	1.12	1.14	1.15	0.51	0.52			0.07	85.24
253	6/30/2004	11:22:01.07	2.39	2.61	4.53	0.86	1.02	0.74	0.93	0.47	0.23	0.17	0.27	0.05	1.67	0.20	10.54	10.33	0.11	10.46	23.83	23.74	22.69	22.88	11.95	19.99	1.09	1.12	1.14	1.16	0.53	0.54			0.07	86.78
254	6/30/2004	11:43:01.07	2.39	2.61	4.55	0.86	1.02	0.74	0.90	0.48	0.24	0.13	0.28	0.05	1.71	0.20	10.53	10.33	177.80	9.46	23.84	23.83	22.78	22.89	12.12	20.34	1.09	1.12	1.14	1.13	0.54	0.55			0.07	88.32
255	6/30/2004	12:04:01.07	2.39	2.61	4.53	0.85	1.04	0.74	0.92	0.48	0.20	0.13	0.28	0.05	1.71	0.20	10.50	10.29	177.80	10.29	23.89	23.80	22.91	23.02	12.17	20.69	1.08	1.14	1.14	1.15	0.54	0.51			0.07	89.86
256	6/30/2004	12:25:01.07	2.38	2.59	4.57	0.86	1.05	0.74	0.90	0.48	0.21	0.13	0.27	0.05	1.60	0.20	10.52	10.31	177.54	9.28	23.66	23.81	23.08	23.11	12.27	21.04	1.09	1.15	1.14	1.13	0.54	0.52			0.07	91.40
257	6/30/2004	12:46:01.07	2.38	2.59	4.53	0.86	1.04	0.74	0.90	0.49	0.20	0.13	0.28	0.05	1.61	0.20	10.48	10.27	177.54	9.48	23.40	23.72	23.07	23.10	12.17	21.39	1.09	1.14	1.14	1.13	0.55	0.51			0.07	92.94
258	6/30/2004	13:07:01.07	2.39	2.61	4.55	0.85	1.05	0.74	0.90	0.48	0.21	0.13	0.28	0.05	1.61	0.20	10.48	10.27	177.54	9.12	23.19	23.66	23.17	23.12	12.27	21.74	1.08	1.15	1.14	1.13	0.54	0.52			0.07	94.48
259	6/30/2004	13:28:01.07	2.43	2.62	4.53	0.86	1.05	0.74	0.90	0.48	0.20	0.12	0.28	0.05	1.65	0.20	10.51	10.31	177.54	11.30	23.00	23.63	23.15	23.10	12.09	22.09	1.09	1.15	1.14	1.13	0.54	0.51			0.07	96.01
260	6/30/2004	13:49:01.07	2.43	2.62	4.55	0.86	1.05	0.74	0.92	0.45	0.20	0.15	0.27	0.05	1.63	0.20	10.52	10.32	177.54	10.30	22.62	23.49	23.09	23.12	12.03	22.44	1.09	1.15	1.14	1.15	0.51	0.51			0.07	97.55
261	6/30/2004	14:10:01.07	2.45	2.62	4.53	0.88	1.05	0.74	0.92	0.48	0.24	0.15	0.28	0.05	1.63	0.24	10.49	10.29	177.54	10.29	22.47	23.42	22.94	22.89	12.04	22.79	1.11	1.15	1.14	1.15	0.54	0.55			0.07	99.09
262	6/30/2004	14:31:01.07	2.45	2.62	4.55	0.88	1.06	0.74	0.95	0.48	0.24	0.15	0.27	0.04	1.63	0.23	10.48	10.27	177.54	10.16	22.38	23.25	22.85	22.80	11.86	23.14	1.11	1.16	1.14	1.18	0.54	0.55			0.07	100.63
263	6/30/2004	14:52:01.07	2.45	2.61	4.51	0.86	1.05	0.74	0.94	0.45	0.24	0.13	0.27	0.05	1.63	0.23	10.51	10.31	177.54	9.78	22.43	23.31	22.74	22.61	11.84	23.49	1.09	1.15	1.14	1.17	0.51	0.55			0.07	102.17
264	6/30/2004	15:13:01.07	2.45	2.61	4.51	0.86	1.05	0.74	0.93	0.44	0.23	0.13	0.27	0.05	1.63	0.23	10.47	10.26	177.54	9.14	22.30	23.17	22.60	22.56	11.62	23.84	1.09	1.15	1.14	1.16	0.50	0.54			0.07	103.71
265	6/30/2004	15:34:01.07	2.45	2.59	4.55	0.86	1.06	0.74	0.94	0.45	0.24	0.13	0.27	0.05	1.63	0.23	10.49	10.28	177.54	9.18	22.06	23.17	22.52	22.56	11.78	24.19	1.09	1.16	1.14	1.17	0.51	0.55			0.07	105.25
266	6/30/2004	15:55:01.07	2.45	2.59	4.51	0.86	1.06	0.74	0.95	0.45	0.23	0.13	0.27	0.04	1.63	0.23	10.49	10.29	177.54	9.40	22.30	23.25	22.44	22.48	11.78	24.54	1.09	1.16	1.14	1.18	0.51	0.54			0.07	106.79
267	6/30/2004	16:16:01.07	2.43	2.59	4.51	0.86	1.06	0.74	0.95	0.45	0.23	0.13	0.27	0.05	1.65	0.21	10.51	10.31	177.54	9.19	22.14	23.17	22.36	22.40	11.62	24.89	1.09	1.16	1.14	1.18	0.51	0.54			0.07	108.33
268	6/30/2004	16:37:01.07	2.43	2.57	4.55	0.86	1.06	0.74	0.95	0.44	0.23	0.13	0.27	0.05	1.65	0.21	10.49	10.29	177.54	10.00	22.09	23.21	22.32	22.43	11.65	25.24	1.09	1.16	1.14	1.18	0.50	0.54			0.07	109.87
269	6/30/2004	16:58:01.07	2.43	2.59	4.53	0.86	1.07	0.74	0.96	0.45	0.23	0.13	0.27	0.05	1.65	0.21	10.52	10.31	177.54	11.76	22.42	23.22	22.33	22.44	11.66	25.59	1.09	1.17	1.14	1.19	0.51	0.54			0.07	111.41
270	6/30/2004	17:19:01.07	2.43	2.59	4.53	0.86	1.06	0.74	0.95	0.45	0.21	0.12	0.25	0.05	1.63	0.21	10.48	10.27	177.54	9.12	22.63	23.26	22.29	22.49	11.71	25.94	1.09	1.16	1.14	1.18	0.51	0.52			0.07	112.95
271	6/30/2004	17:40:01.07	2.43	2.59	4.55	0.86	1.05	0.74	0.94	0.45	0.21	0.12	0.25	0.05	1.60	0.21	10.50	10.29	177.54	11.68	22.55	23.18	22.29	22.41	11.63	26.29	1.09	1.15	1.14	1.17	0.51	0.52			0.07	114.49
272	6/30/2004	18:01:01.07	2.45	2.61	4.53	0.86	1.06	0.74	0.96	0.45	0.24	0.12	0.25	0.05	1.61	0.23	10.51	10.31	177.54	11.36	22.60	23.23	22.34	22.45	11.76	26.64	1.09	1.16	1.14	1.19	0.51	0.55			0.07	116.03
273	6/30/2004	18:22:01.07	2.45	2.61	4.51	0.86	1.07	0.74	0.95	0.45	0.23	0.12	0.25	0.05	1.61	0.21	10.50	10.29	177.54	9.46	22.60	23.15	22.34	22.45	11.76	26.99	1.09	1.17	1.14	1.18	0.51	0.54			0.07	117.57
274	6/30/2004	18:43:01.07	2.45	2.61	4.51	0.86	1.06	0.74	0.95	0.44	0.23	0.12	0.25	0.05	1.62	0.21	10.49	10.28	177.54	9.54	22.71	23.18	22.29	22.49	11.71	27.34	1.09	1.16	1.14	1.18	0.50	0.54			0.07	119.11
275	6/30/2004	19:04:01.07	2.45	2.61	4.53	0.86	1.07	0.74	0.95	0.45	0.21	0.13	0.27	0.04	1.63	0.23	10.51	10.30	177.54	9.72	22.66	23.14	22.33	22.44	11.58	27.69	1.09	1.17	1.14	1.18	0.51	0.52			0.07	120.65
276	6/30/2004	19:25:01.07	2.45	2.59	4.51	0.86	1.07	0.74	0.96	0.44	0.23	0.12	0.27	0.05	1.67	0.21	10.50	10.29	177.54	9.24	22.62	23.17	22.28	22.40	11.62	28.04	1.09	1.17	1.14	1.19	0.50	0.54			0.07	122.19
277	6/30/2004	19:46:01.07	2.45	2.59	4.51	0.86	1.07	0.77	0.98	0.45	0.23	0.13	0.25	0.05	1.67	0.21	10.51	10.31	177.54	9.18	22.57	23.21	22.40	22.43	11.81	28.39	1.09	1.17	1.17	1.21	0.51	0.54			0.07	123.73
278	6/30/2004	20:07:01.07	2.45	2.61	4.53	0.86	1.09	0.74	0.98	0.45	0.23	0.13	0.27	0.05	1.67	0.21	10.50	10.29	177.54	10.34	22.53	23.08	22.27	22.30	11.60	28.74	1.09	1.19	1.14	1.21	0.51	0.54			0.07	125.27
279	6/30/2004	20:28:01.07	2.45	2.59	4.53	0.86	1.07	0.78	0.98	0.48	0.21	0.13	0.25	0.05	1.67	0.20	10.49	10.29	177.54	9.16	22.48	23.03	22.23	22.34	11.64	29.09	1.09	1.17	1.18	1.21	0.54	0.52			0.07	126.81
280	6/30/2004	20:49:01.07	2.45	2.61	4.51	0.86	1.10	0.78	0.99	0.49	0.23	0.13	0.25	0.05	1.67	0.21	10.51	10.30	177.54	9.23	22.48	23.03	22.23	22.26	11.56	29.44	1.09	1.20	1.18	1.22	0.55	0.54			0.07	128.35
281	6/30/2004	21:10:01.07	2.45	2.59	4.51	0.88	1.06	0.78	0.95	0.48	0.21	0.13	0.27	0.05	1.67	0.21	10.48	10.27	177.54	9.62	22.48	23.03	22.23	22.26	11.56	29.79	1.11	1.16	1.18	1.18	0.54	0.52			0.07	129.89
282	6/30/2004	21:31:01.07	2.45	2.59	4.53	0.90	1.10	0.78	0.99	0.48	0.23	0.12	0.25	0.05	1.67	0.21	10.52	10.31	177.54	10.09	22.40	23.03	22.15	22.26	11.64	30.14	1.13	1.20	1.18	1.22	0.54	0.54			0.07	131.43
283	6/30/2004	21:52:01.07	2.45	2.61	4.49	0.88	1.10	0.77	0.98	0.48	0.23	0.15	0.27	0.05	1.67	0.21	10.47	10.26	177.80	9.54	22.40	23.03	22.23	22.26	11.64	30.49	1.11	1.20	1.17	1.21	0.54	0.54			0.07	132.97
284	6/30/2004	22:13:01.07	2.45	2.59	4.51	0.88	1.09	0.78	0.96	0.48	0.21	0.15	0.27	0.05	1.67	0.20	10.50	10.29	177.54	9.79	22.44	22.99	22.18	22.21	11.59	30.84	1.11	1.19	1.18	1.19	0.54	0.52			0.07	134.51
285	6/30/2004	22:34:01.07	2.45	2.59	4.53	0.88	1.10	0.78	1.01	0.49	0.21	0.15	0.27	0.05	1.67	0.20	10.53	10.33	177.54	10.98	22.35	22.99	22.10	22.21	11.51	31.19	1.11	1.20	1.18	1.24	0.55	0.52			0.07	136.05
286	6/30/2004	22:55:01.07	2.47	2.61	4.51	0.88	1.12	0.78	1.03	0.48	0.23	0.15	0.25	0.05	1.67	0.21	10.52	10.32	177.54	10.49	22.31	22.94	22.13	22.17	11.46	31.54	1.11	1.22	1.18	1.26	0.54	0.54			0.07	137.59
287	6/30/2004	23:16:01.07	2.47	2.59	4.51	0.88	1.11	0.77	1.03	0.48	0.23	0.15	0.25	0.05	1.67	0.20	10.49	10.28	177.54	9.23	22.23	22.86	22.05	22.17	11.38	31.89	1.11	1.21	1.17	1.26	0.54	0.54			0.07	139.13
288	6/30/2004	23:37:01.07	2.47	2.61	4.49	0.88	1.11	0.77	1.03	0.47	0.23	0.14	0.25	0.05	1.67	0.20	10.49	10.29	177.54	11.51	22.31	22.94	22.13	22.17	11.55	32.24	1.11	1.21	1.17	1.26	0.53	0.54			0.07	140.67
289	6/30/2004	23:58:01.07	2.47	2.61	4.53	0.88	1.15	0.78	1.03	0.47	0.23	0.14	0.25	0.05	1.67	0.20	10.49	10.28	177.54	9.32	22.34	22.90	22.01	22.12	11.50	32.59	1.11	1.25	1.18	1.26	0.53	0.54			0.07	142.21
290	7/1/2004	00:19:01.07	2.47	2.59	4.49	0.88	1.16	0.78	1.04	0.48	0.23	0.15	0.29	0.05	1.66	0.20	10.51	10.30	177.54	10.02	22.42	22.90	22.01	22.12	11.34	32.94	1.11	1.26	1.18	1.27	0.54	0.54			0.07	143.74
291	7/1/2004	00:40:01.07	2.47	2.59	4.51	0.88	1.16	0.78	1.03	0.47	0.23	0.14	0.29	0.05	1.67	0.20	10.49	10.29	177.54	9.24	22.50	22.90	22.01	22.12	11.34	33.29	1.11	1.26	1.18	1.26	0.53	0.54			0.07	145.28
292	7/1/2004	01:01:01.07	2.47	2.61	4.49	0.90	1.16	0.77	1.03	0.47	0.21	0.15	0.29	0.05	1.67	0.20	10.49	10.28	177.54	10.63	22.54	22.93	22.04	22.07	11.45	33.64	1.13	1.26	1.17	1.26	0.53	0.52			0.07	146.82
293	7/1/2004	01:22:01.07	2.47	2.61	4.51	0.90	1.16	0.78	1.04	0.47	0.23	0.14	0.29	0.05	1.67	0.20	10.51	10.31	177.80	9.55	22.54	22.93	22.04	22.15	11.37	33.99	1.13	1.26	1.18	1.27	0.53	0.54			0.07	148.36
294	7/1/2004	01:43:01.07	2.47	2.59	4.51	0.90	1.17	0.77	1.04	0.48	0.23	0.15	0.29	0.05	1.67	0.20	10.54	10.34	177.54	10.59	22.46	22.85	21.96	21.99	11.37	34.34	1.13	1.27	1.17	1.27	0.54	0.54			0.07	149.90
295	7/1/2004	02:04:01.07	2.47	2.59	4.53	0.90	1.16	0.77	1.04	0.47	0.25	0.14	0.29	0.05	1.67	0.19	10.46	10.25	177.54	10.50	22.57	22.80	21.92	22.03	11.32	34.69	1.13	1.26	1.17	1.27	0.53	0.56			0.07	151.44
296	7/1/2004	02:25:01.07	2.47	2.59	4.51	0.90	1.16	0.78	1.04	0.48	0.24	0.14	0.29	0.05	1.67	0.20	10.50	10.29	177.54	10.47	22.54	22.85	21.96	22.07	11.45	35.04	1.13	1.26	1.18	1.27	0.54	0.55			0.07	152.98
297	7/1/2004	02:46:01.07	2.47	2.59	4.51	0.88	1.16	0.77	1.04	0.47	0.21	0.14	0.28	0.05	1.67	0.19	10.50	10.29	177.54	10.61	22.65	22.80	22.00	21.95	11.32	35.39	1.11	1.26	1.17	1.27	0.53	0.52			0.07	154.52
298	7/1/2004	03:07:01.07	2.47	2.57	4.51	0.90	1.18	0.78	1.05	0.48	0.26	0.14	0.29	0.05	1.67	0.20	10.52	10.32	177.54	10.53	22.65	22.89	22.00	22.11	11.32	35.74	1.13	1.28	1.18	1.28	0.54	0.57			0.07	156.06
299	7/1/2004	03:28:01.07	2.45	2.59	4.51	0.88	1.17	0.78	1.05	0.48	0.21	0.13	0.29	0.05	1.67	0.20	10.49	10.29	177.80	10.47	22.61	22.84	21.87	21.98	11.28	36.09	1.11	1.27	1.18	1.28	0.54	0.52			0.07	157.60
300	7/1/2004	03:49:01.07	2.45	2.57	4.49	0.90	1.17	0.78	1.05	0.47	0.23	0.13	0.28	0.05	1.67	0.20	10.52	10.31	177.54	10.20	22.70	22.85	21.96	21.99	11.29	36.44	1.13	1.27	1.18	1.28	0.53	0.54			0.07	159.14
301	7/1/2004	04:10:01.07	2.45	2.57	4.51	0.88	1.17	0.77	1.05	0.47	0.21	0.13	0.28	0.05	1.67	0.20	10.51	10.30	177.54	9.41	22.62	22.85	21.96	21.99	11.37	36.79	1.11	1.27	1.17	1.28	0.53	0.52			0.07	160.68
302	7/1/2004	04:31:01.07	2.45	2.57	4.51	0.90	1.16	0.78	1.05	0.47	0.21	0.14	0.29	0.05	1.67	0.20	10.48	10.27	177.54	10.32	22.57	22.72	21.92	21.95	11.24	37.14	1.13	1.26	1.18	1.28	0.53	0.52			0.07	162.22
303	7/1/2004	04:52:01.07	2.45	2.59	4.51	0.90	1.17	0.78	1.05	0.48	0.25	0.14	0.29	0.05	1.67	0.20	10.52	10.31	177.54	9.22	22.49	22.80	21.92	21.95	11.41	37.49	1.13	1.27	1.18	1.28	0.54	0.56			0.07	163.76
304	7/1/2004	05:13:01.07	2.45	2.59	4.53	0.90	1.18	0.78	1.06	0.48	0.25	0.15	0.29	0.05	1.67	0.20	10.52	10.31	177.54	9.38	22.49	22.72	21.92	21.95	11.24	37.84	1.13	1.28	1.18	1.29	0.54	0.56			0.07	165.30
305	7/1/2004	05:34:01.07	2.45	2.59	4.49	0.88	1.18	0.78	1.06	0.47	0.26	0.13	0.29	0.05	1.67	0.20	10.51	10.30	177.54	10.55	22.65	22.72	21.92	21.95	11.32	38.19	1.11	1.28	1.18	1.29	0.53	0.57			0.07	166.84
306	7/1/2004	05:55:01.07	2.45	2.59	4.51	0.88	1.18	0.78	1.06	0.47	0.25	0.13	0.29	0.05	1.67	0.20	10.49	10.28	177.54	10.88	22.53	22.68	21.79	21.90	11.11	38.54	1.11	1.28	1.18	1.29	0.53	0.56			0.07	168.38
307	7/1/2004	06:16:01.07	2.47	2.59	4.51	0.88	1.20	0.78	1.06	0.47	0.26	0.13	0.28	0.05	1.67	0.20	10.54	10.33	177.54	11.63	22.61	22.76	21.87	21.90	11.28	38.89	1.11	1.30	1.18	1.29	0.53	0.57			0.07	169.92
308	7/1/2004	06:37:01.07	2.47	2.59	4.51	0.88	1.15	0.77	1.03	0.48	0.24	0.12	0.29	0.05	1.60	0.19	10.48	10.27	177.54	10.17	22.53	22.76	21.87	21.90	11.28	39.24	1.11	1.25	1.17	1.26	0.54	0.55			0.07	171.46
309	7/1/2004	06:58:01.07	2.45	2.59	4.51	0.88	1.18	0.78	1.04	0.48	0.26	0.13	0.29	0.05	1.61	0.20	10.47	10.26	177.54	11.58	22.56	22.71	21.82	21.94	11.23	39.59	1.11	1.28	1.18	1.27	0.54	0.57			0.07	173.00
310	7/1/2004	07:19:01.07	2.45	2.59	4.49	0.88	1.18	0.78	1.04	0.48	0.26	0.13	0.29	0.05	1.65	0.20	10.51	10.30	177.54	9.40	22.65	22.64	21.84	21.95	11.49	39.94	1.11	1.28	1.18	1.27	0.54	0.57			0.07	174.54
311	7/1/2004	07:40:01.07	2.47	2.59	4.53	0.88	1.17	0.78	1.03	0.48	0.25	0.12	0.28	0.05	1.67	0.20	10.49	10.29	177.54	9.55	22.75	22.74	21.93	21.96	11.50	40.29	1.11	1.27	1.18	1.26	0.54	0.56			0.07	176.08
312	7/1/2004	08:01:01.07	2.47	2.61	4.51	0.88	1.18	0.78	1.04	0.49	0.26	0.13	0.29	0.05	1.67	0.20	10.52	10.31	177.54	10.02	22.57	22.48	21.84	21.87	11.24	40.64	1.11	1.28	1.18	1.27	0.55	0.57			0.07	177.62
313	7/1/2004	08:22:01.07	2.47	2.61	4.51	0.90	1.18	0.77	1.05	0.48	0.25	0.13	0.29	0.05	1.69	0.20	10.49	10.29	177.54	9.21	22.75	22.66	21.85	21.88	11.50	40.99	1.13	1.28	1.17	1.28	0.54	0.56			0.07	179.16
314	7/1/2004	08:43:01.07	2.47	2.61	4.51	0.88	1.18	0.78	1.04	0.48	0.24	0.12	0.29	0.05	1.67	0.21	10.50	10.29	177.54	9.48	22.70	22.53	21.80	21.83	11.37	41.34	1.11	1.28	1.18	1.27	0.54	0.55			0.07	180.70
315	7/1/2004	09:04:01.07	2.47	2.61	4.51	0.90	1.16	0.77	1.06	0.49	0.23	0.13	0.29	0.05	1.68	0.20	10.48	10.27	181.96	10.46	22.76	22.59	21.86	21.89	11.35	41.69	1.13	1.26	1.17	1.29	0.55	0.54			0.07	182.23
316	7/1/2004	09:25:01.07	2.47	2.61	4.51	0.90	1.17	0.78	1.06	0.48	0.23	0.13	0.29	0.05	1.67	0.21	10.52	10.31	181.96	9.30	22.76	22.67	21.94	21.97	11.43	42.04	1.13	1.27	1.18	1.29	0.54	0.54			0.07	183.77
317	7/1/2004	09:46:01.07	2.45	2.61	4.53	0.88	1.18	0.78	1.05	0.48	0.21	0.13	0.29	0.05	1.67	0.21	10.48	10.27	181.96	9.42	22.87	22.62	21.81	21.84	11.14	42.39	1.11	1.28	1.18	1.28	0.54	0.52			0.07	185.31
318	7/1/2004	10:07:01.07	2.45	2.61	4.49	0.91	1.20	0.78	1.09	0.49	0.23	0.14	0.29	0.05	1.67	0.21	10.54	10.33	181.96	9.18	23.02	22.69	21.88	21.83	11.21	42.74	1.14	1.30	1.18	1.32	0.55	0.54			0.07	186.85
319	7/1/2004	10:28:01.07	2.45	2.61	4.53	0.87	1.17	0.78	1.09	0.49	0.23	0.13	0.25	0.05	1.67	0.21	10.54	10.33	181.70	10.28	23.02	22.69	21.88	21.91	11.13	43.09	1.10	1.27	1.18	1.32	0.55	0.54			0.07	188.39
320	7/1/2004	10:49:01.07	2.45	2.59	4.49	0.85	1.15	0.74	1.04	0.47	0.23	0.09	0.25	0.05	1.63	0.23	10.50	10.29	181.96	9.25	23.10	22.69	21.96	21.91	11.21	43.44	1.08	1.25	1.14	1.27	0.53	0.54			0.07	189.93
321	7/1/2004	11:10:01.07	2.45	2.59	4.53	0.87	1.16	0.74	1.06	0.48	0.23	0.09	0.25	0.05	1.67	0.24	10.48	10.27	181.96	9.42	23.11	22.78	21.97	21.92	11.30	43.79	1.10	1.26	1.14	1.29	0.54	0.54			0.07	191.47

Table H3-4-5. CIX Campaign II, Cycle 4, 0.1 M NaOH Displacement

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																						
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																																	
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow										DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5		elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C		ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933		(hours)	water	water	water	water	water	water				
1	7/1/2004	11:18:01.07	2.03	2.13	3.94	0.58	0.85	0.46	0.73	0.34	0.12	-0.01	0.13	-0.05	1.51	0.13	7.92	7.55	177.54	9.18	23.00	22.83	22.02	21.97	11.51		43.92									0.05	191.77
2	7/1/2004	11:21:01.07	2.39	2.48	4.04	0.54	0.80	0.41	0.67	0.32	0.08	0.01	0.17	-0.05	1.53	-2.63	7.30	6.91	177.54	9.56	22.92	23.23	22.02	22.05	11.43		43.97									0.05	191.92
3	7/1/2004	11:24:01.07	2.39	2.46	4.02	0.55	0.79	0.42	0.67	0.32	0.07	0.01	0.17	-0.06	1.74	-2.77	7.29	6.90	177.54	10.26	22.79	23.50	21.97	22.01	11.38		44.02									0.05	192.07
4	7/1/2004	11:27:01.07	2.39	2.50	4.00	0.53	0.80	0.40	0.67	0.32	0.08	0.01	0.14	-0.05	1.94	-2.80	7.24	6.85	177.54	9.38	23.00	23.63	22.02	22.05	11.43		44.07									0.05	192.21
5	7/1/2004	11:30:01.07	2.39	2.48	4.02	0.54	0.80	0.40	0.68	0.32	0.09	0.02	0.14	-0.05	2.12	-2.80	7.31	6.93	177.54	9.32	22.92	23.71	22.02	22.05	11.43		44.12							5.65	5.80	0.05	192.36
6	7/1/2004	11:33:01.07	2.39	2.50	4.00	0.55	0.79	0.42	0.67	0.32	0.07	0.02	0.17	-0.06	2.36	-2.80	7.28	6.89	177.54	10.64	22.92	23.79	22.10	22.05	11.43		44.17									0.05	192.51
7	7/1/2004	11:36:01.07	2.39	2.51	4.02	0.57	0.82	0.44	0.69	0.32	0.09	0.02	0.16	-0.05	2.59	-2.80	7.31	6.93	177.54	10.68	22.87	23.67	21.97	22.01	11.55		44.22									0.05	192.65
8	7/1/2004	11:39:01.07	2.39	2.51	4.04	0.53	0.80	0.40	0.67	0.31	0.09	0.01	0.14	-0.06	2.77	-2.82	7.24	6.86	177.54	10.08	22.87	23.50	22.05	22.01	11.55		44.27									0.05	192.81
9	7/1/2004	11:42:01.07	2.39	2.51	4.05	0.53	0.79	0.40	0.67	0.32	0.07	0.01	0.14	-0.05	2.96	-2.82	7.22	6.83	177.54	9.45	22.79	23.42	21.97	22.01	11.38		44.32									0.05	192.95
10	7/1/2004	11:45:01.07	2.39	2.53	4.02	0.57	0.85	0.42	0.73	0.32	0.09	0.02	0.16	-0.06	3.15	-2.82	7.34	6.96	177.54	10.31	22.92	23.47	22.02	22.13	11.51		44.37									0.05	193.10
11	7/1/2004	11:48:01.07	2.39	2.53	4.05	0.54	1.04	0.40	0.93	0.32	0.09	0.01	0.14	-0.06	3.16	-2.80	7.34	6.95	177.54	9.30	23.00	23.47	22.02	22.05	11.43		44.42									0.05	193.25
12	7/1/2004	11:51:01.07	2.39	2.55	4.07	0.54	1.29	0.41	1.19	0.32	0.09	0.02	0.14	-0.06	3.09	-2.80	7.33	6.95	177.54	10.96	23.04	23.52	21.98	22.10	11.48		44.47									0.05	193.40
13	7/1/2004	11:54:01.07	2.27	2.42	3.93	0.47	1.44	0.35	1.34	0.28	0.01	0.10	0.31	-0.03	3.05	-2.80	7.22	6.84	177.54	10.71	23.12	23.60	22.06	22.10	11.56		44.52									0.05	193.54
14	7/1/2004	11:57:01.07	2.39	2.55	4.11	0.54	1.76	0.42	1.65	0.32	0.09	0.02	0.14	-0.06	3.05	-2.82	7.33	6.95	177.54	10.36	22.88	23.44	21.98	22.02	11.39		44.57									0.05	193.69
15	7/1/2004	12:00:01.07	2.39	2.57	4.09	0.58	2.04	0.44	1.91	0.34	0.10	0.02	0.14	-0.05	3.03	-2.80	7.50	7.12	177.54	11.15	22.88	23.44	22.06	22.10	11.48		44.62							5.65	5.80	0.05	193.84
16	7/1/2004	12:03:01.07	2.39	2.57	4.11	0.55	2.22	0.44	2.11	0.33	0.10	0.02	0.16	-0.05	3.03	-2.80	7.32	6.94	177.54	10.62	22.88	23.52	22.15	22.10	11.48		44.67									0.05	193.99
17	7/1/2004	12:06:01.07	2.39	2.57	4.11	0.55	2.38	0.41	2.27	0.32	0.07	0.01	0.17	-0.05	3.02	-2.82	7.28	6.90	177.54	10.99	22.80	23.84	22.06	22.10	11.56		44.72									0.05	194.13
18	7/1/2004	12:09:01.07	2.39	2.59	4.07	0.52	2.60	0.40	2.50	0.31	0.10	0.01	0.13	-0.05	2.99	-2.82	7.02	6.63	177.54	10.57	22.88	23.92	22.06	22.10	11.64		44.77									0.05	194.28
19	7/1/2004	12:12:01.07	2.38	2.61	4.13	0.54	2.82	0.40	2.71	0.32	0.21	0.01	0.16	-0.06	2.99	-2.82	7.28	6.90	177.54	10.66	22.96	23.92	22.06	22.10	11.56		44.82									0.05	194.43
20	7/1/2004	12:15:01.07	2.38	2.61	4.13	0.55	3.02	0.44	2.92	0.33	0.40	0.02	0.19	-0.06	2.99	-2.82	7.32	6.94	177.54	9.25	22.96	23.84	22.06	22.10	11.64		44.87									0.05	194.57
21	7/1/2004	12:18:01.07	2.39	2.62	4.13	0.54	3.16	0.41	3.06	0.32	0.53	0.01	0.28	-0.06	2.99	-2.82	7.32	6.93	177.54	9.17	22.96	23.76	22.06	22.10	11.56		44.92									0.05	194.72
22	7/1/2004	12:21:01.07	2.38	2.61	4.15	0.54	3.20	0.40	3.10	0.32	0.58	0.02	0.45	-0.06	2.99	-2.80	7.28	6.90	177.54	9.17	23.09	23.64	22.11	22.22	11.60		44.97									0.05	194.87
23	7/1/2004	12:24:01.07	2.38	2.61	4.15	0.54	3.22	0.40	3.11	0.32	0.59	0.02	0.63	-0.06	2.99	-2.82	7.18	6.79	177.54	9.26	23.09	23.56	22.19	22.22	11.69		45.02									0.05	195.02
24	7/1/2004	12:27:01.07	2.39	2.62	4.18	0.53	3.22	0.40	3.11	0.32	0.61	0.01	0.83	-0.06	2.99	-2.83	7.18	6.80	177.80	9.31	23.01	23.48	22.19	22.22	11.69		45.07									0.05	195.16
25	7/1/2004	12:30:01.07	2.38	2.66	4.15	0.54	3.23	0.41	3.12	0.32	0.61	0.02	1.05	-0.06	2.99	-2.82	7.24	6.86	177.54	11.67	23.01	23.56	22.11	22.22	11.60		45.12							5.65	6.00	0.05	195.31
26	7/1/2004	12:33:01.07	2.38	2.64	4.16	0.57	3.25	0.42	3.14	0.33	0.62	0.02	1.27	-0.05	2.99	-2.82	7.32	6.94	177.54	9.25	23.09	23.40	22.11	22.14	11.69		45.17									0.05	195.46
27	7/1/2004	12:36:01.07	2.38	2.61	4.13	0.55	3.22	0.42	3.11	0.33	0.61	0.02	1.46	-0.02	2.99	-2.83	7.28	6.90	177.54	11.36	23.14	23.45	22.16	22.19	11.65		45.22									0.05	195.61
28	7/1/2004	12:39:01.07	2.39	2.53	4.04	0.54	3.25	0.41	3.12	0.32	0.61	0.01	1.55	0.11	2.99	-2.82	7.28	6.89	177.54	9.16	23.18	23.65	22.12	21.83	11.70		45.27									0.05	195.75
29	7/1/2004	12:42:01.07	2.39	2.46	3.94	0.54	3.25	0.41	3.12	0.33	0.62	0.01	1.59	0.35	3.00	-2.82	7.29	6.90	177.54	11.57	23.34	23.57	22.20	21.19	11.62		45.32									0.05	195.90
30	7/1/2004	12:45:01.07	2.39	2.42	3.98	0.55	3.25	0.42	3.15	0.33	0.62	0.02	1.60	0.63	3.00	-2.82	7.44	7.06	177.54	9.17	23.66	23.41	22.20	20.87	11.70		45.37									0.05	196.05
31	7/1/2004	12:48:01.07	2.41	2.44	3.91	0.55	3.23	0.42	3.12	0.32	0.61	0.02	1.64	0.86	3.02	-2.82	7.30	6.91	177.54	11.30	23.74	23.41	22.20	20.79	11.70		45.42									0.05	196.20
32	7/1/2004	12:51:01.07	2.41	2.42	3.94	0.57	3.25	0.42	3.12	0.33	0.61	0.02	1.64	1.11	3.02	-2.83	7.32	6.94	177.54	9.18	23.90	23.33	22.20	21.11	11.70		45.47									0.05	196.34
33	7/1/2004	12:54:01.07	2.43	2.44	3.94	0.54	3.23	0.41	3.14	0.32	0.62	0.01	1.65	1.35	3.02	-2.82	7.24	6.85	177.54	10.19	23.98	23.49	22.20	21.43	11.86		45.52									0.05	196.49
34	7/1/2004	12:57:01.07	2.45	2.44	3.94	0.54	3.25	0.41	3.15	0.33	0.62	0.02	1.64	1.52	3.02	-2.82	7.32	6.94	177.54	9.54	23.90	23.41	22.20	21.59	11.78		45.57									0.05	196.64
35	7/1/2004	13:00:01.07	1.93	1.84	3.34	-0.06	3.09	-0.20	2.94	0.03	0.45	-0.40	2.04	1.56	2.99	-2.82	7.33	6.95	177.80	9.44	23.90	23.57	22.20	21.75	11.78		45.62							5.60	6.30	0.05	196.79
36	7/1/2004	13:03:01.07	2.45	2.46	4.02	0.59	3.25	0.45	3.14	0.31	0.62	0.01	1.64	1.85	2.99	-2.82	7.20	6.82	177.54	9.20	23.79	23.46	22.25	21.96	11.74		45.67									0.05	196.94
37	7/1/2004	13:06:01.07	2.45	2.46	3.96	0.66	3.26	0.57	3.14	0.32	0.62	0.01	1.64	1.94	2.99	-2.82	7.24	6.86	177.54	9.44	23.55	23.38	22.25	22.04	11.74		45.72									0.05	197.08
38	7/1/2004	13:09:01.07	2.49	2.50	4.00	0.87	3.25	0.74	3.15	0.32	0.62	0.02	1.65	1.95	2.98	-2.82	7.30	6.92	177.54	9.32	23.55	23.46	22.25	22.12	11.74		45.77									0.05	197.23
39	7/1/2004	13:12:01.07	2.49	2.50	4.02	1.13	3.27	0.99	3.15	0.32	0.62	0.02	1.64	1.93	2.99	-2.82	7.28	6.90	177.54	9.45	23.39	23.38	22.25	22.20	11.74		45.82									0.05	197.38
40	7/1/2004	13:15:01.07	2.50	2.50	4.04	1.37	3.23	1.23	3.12	0.33	0.61	0.03	1.66	1.89	2.99	-2.82	7.29	6.90	177.54	9.42	23.31	23.38	22.25	22.20	11.66		45.87									0.05	197.53
41	7/1/2004	13:18:01.07	2.50	2.51	4.04	1.59	3.25	1.45	3.14	0.33	0.61	0.03	1.66	1.89	2.99	-2.83	7.30	6.92	177.54	9.58	23.23	23.38	22.33	22.28	11.83		45.92									0.05	197.67
42	7/1/2004	13:21:01.07	2.54	2.53	4.05	1.77	3.26	1.65	3.15	0.31	0.63	0.02	1.65	1.89	2.99	-2.82	7.28	6.89	177.54	9.12	23.23	23.46	22.33	22.28	11.83		45.97									0.05	197.82
43	7/1/2004	13:24:01.07	2.54	2.53	4.05	1.98	3.25	1.87	3.14	0.33	0.61	0.02	1.66	1.85	2.99	-2.82	7.28	6.90	177.54	10.08	23.39	23.46	22.33	22.36	11.91		46.02									0.05	197.97
44	7/1/2004	13:27:01.07	2.56	2.55	4.11	2.19	3.23	2.06	3.14	0.34	0.62	0.02	1.66	1.85	2.99	-2.82	7.28	6.90	177.54	10.48	23.47	23.38	22.25	22.36	11.83		46.07									0.05	198.12
45	7/1/2004	13:30:01.07	2.58	2.57	4.09	2.41	3.23	2.27	3.12	0.39	0.61	0.03	1.67	1.85	2.99	-2.83	7.28	6.90	177.54	9.62	23.51	23.50	22.37	22.49	11.87		46.12							5.80	6.20	0.05	198.26
46	7/1/2004	13:33:01.07	2.58	2.61	4.15	2.62	3.26	2.50	3.14	0.52	0.62	0.06	1.65	1.85	2.99	-2.82	7.31	6.93	177.54	9.30	23.51	23.58	22.37	22.41	11.79		46.17									0.05	198.41
47	7/1/2004	13:36:01.07	2.60	2.62	4.13	2.79	3.25	2.67	3.15	0.63	0.62	0.09	1.65	1.85	2.99	-2.82	7.22	6.83	177.54	9.28	23.43	23.50	22.29	22.41	11.71		46.22									0.05	198.56
48	7/1/2004	13:39:01.07	2.61	2.62	4.16	2.89	3.25	2.77	3.14	0.75	0.62	0.23	1.66	1.85	2.99	-2.83	7.31	6.93	177.54	9.25	23.27	23.42	22.29	22.41	11.63		46.27									0.05	198.71
49	7/1/2004	13:42:01.07	2.63	2.64	4.15	2.95	3.23	2.84	3.14	0.76	0.62	0.37	1.66	1.85	2.99	-2.82	7.20	6.82	177.54	9.93	23.31	23.46	22.33	22.44	11.66		46.32									0.05	198.85
50	7/1/2004	13:45:01.07	2.65	2.66	4.16	2.98	3.26	2.84	3.15	0.79	0.62	0.56	1.65	1.85	2.99	-2.82	7.35	6.97	177.54	9.75	23.23	23.46	22.33	22.44	11.58		46.37									0.05	199.00
51	7/1/2004	13:47:37.07	2.67	2.68	4.18	2.98	3.25	2.88	3.14	0.81	0.62	0.76	1.66	1.85	2.99	-2.82	7.31	6.93	177.54	9.53	23.31	23.54	22.41	22.52	11.66		46.41									0.02	199.13
52	7/1/2004	13:50:02.07	2.67	2.68	4.20	3.01	3.25	2.87	3.14	0.81	0.62	0.92	1.66	1.85	2.99	-2.82	7.28	6.89	177.54	9.26	23.31	23.54	22.33	22.44	11.66		46.45									0.05	199.25
53	7/1/2004	13:53:02.07	2.67	2.68	4.16	3.00	3.23	2.88	3.14	0.82	0.61	1.11	1.66	1.85	2.99	-2.83	7.08	6.69	181.96	9.87	23.39	23.46	22.41	22.44	11.58		46.50									0.05	199.40
54	7/1/2004	13:56:02.07	2.63	2.66	4.16	3.02	3.22	2.90	3.15	0.82	0.62	1.26	1.66	1.85	3.00	-2.82	7.32	6.94	199.36	10.20	23.47	23.46	22.41	22.52	11.58		46.55									0.05	199.54
55	7/1/2004	13:59:02.07	2.58	2.59	4.11	3.01	3.23	2.90	3.14	0.82	0.61	1.36	1.66	1.85	3.02	-2.82	7.21	6.82	207.94	9.42	23.43	23.42	22.29	22.49	11.63		46.60									0.05	199.69
56	7/1/2004	14:02:02.07	2.52	2.53	4.05	2.92	3.25	2.81	3.14	0.83	0.61	1.41	1.66	1.96	3.00	-2.82	7.39	7.01	199.36	9.55	23.35	23.50	22.05	22.49	11.63		46.65									0.05	199.83
57	7/1/2004	14:05:02.07	2.39	2.39	3.91	2.95	3.23	2.84	3.14	0.83	0.61	1.47	1.68	1.95	3.03	-2.82	7.51	7.13	164.55	9.95	23.27	23.42	21.57	22.49	11.63		46.70									0.05	199.98
58	7/1/2004	14:08:02.07	2.27	2.29	3.80	2.95	3.22	2.83	3.12	0.82	0.62	1.47	1.67	1.95	3.03	-2.82	7.29	6.90	134.16	9.92	23.19	23.50	21.33	22.57	11.63		46.75									0.05	200.13
59	7/1/2004	14:11:02.07	2.01	2.02	3.54	2.95	3.23	2.83	3.14	0.83	0.61	1.47	1.68	1.95	3.02	-2.83	7.28	6.90	112.60	10.68	23.19	23.42	21.25	22.49	11.63		46.80									0.05	200.28
60	7/1/2004	14:14:02.07	1.97	1.98	3.50	2.96	3.23	2.84	3.14	0.85	0.62	1.47	1.66	1.95	3.03	-2.83	7.28	6.90	99.61	9.76	23.19	23.50	21.17	22.49	11.63		46.85									0.05	200.43
61	7/1/2004	14:17:02.07	1.95	1.95	3.50	2.97	3.25	2.84	3.15	0.85	0.62	1.48	1.66	1.95	3.03	-2.82	7.28	6.90	95.19	9.53	23.32	23.55	21.29	22.53	11.76		46.90									0.05	200.58
62	7/1/2004	14:20:02.07	1.93	1.95	3.45	2.98	3.23	2.84	3.14	0.85	0.62	1.50	1.66	1.95	3.03	-2.83	7.30	6.92	86.62	9.51	23.32	23.55	21.45	22.53	11.76		46.95									0.05	200.72
63	7/1/2004	14:23:02.07	1.92	1.93	3.47	2.97	3.23	2.85	3.14	0.85	0.61	1.51	1.67	1.94	3.04	-2.83	7.28	6.90	82.20	11.30	23.28	23.60	21.58	22.58	11.72		47.00									0.05	200.87
64	7/1/2004	14:26:02.07	1.92	1.93	3.47	2.98	3.23	2.87	3.14	0.85	0.63	1.51	1.66	1.95	3.05	-2.82	7.31	6.93	73.63	11.39	23.28	23.52	21.66	22.58	11.80		47.05									0.05	201.02
65	7/1/2004	14:29:02.07	1.73	1.71	3.21	20.01	3.22	20.00	3.12	20.28	0.61	-20.24	1.66	0.02	3.05	-2.83	6.92	6.53	73.63	9.43	23.04	23.52	21.74	22.58	11.80		47.10									0.05	201.12
66	7/1/2004	14:32:02.07	0.91	0.75	2.33	-0.25	-20.19	-0.48	-20.23	-0.16	0.31	-0.54	1.51	0.11	20.20	-2.83	7.48	7.10	78.05	9.60	23.12	22.95	21.90	22.50	11.72		47.15									0.05	201.26
67	7/1/2004	14:35:02.07	0.43	0.11	1.12	-0.46	-0.37	-0.64	-0.57	-0.23	-0.55	-0.86	-0.45	-0.08	-0.05	20.01	4.70	4.31	86.62	9.54	23.53	22.87	21.90	22.58	11.88		47.20							6.10	6.45	0.03	201.41
68	7/1/2004	14:38:02.07	1.88	1.87	3.45	0.41	0.49	0.20	0.34	0.17	-0.09	-0.54	-0.27	0.36	0.51	0.07	7.18	6.79	69.48	9.83	23.12	23.27	21.82	22.50	11.72		47.25									0.05	201.54

Table H3-4-6. CIX Campaign II, Cycle 4, DI Water Pre-Elution Rinse

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow									DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	DATE	TIME	P1	P2	P3	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
	units		psig	psig	psig	water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		°C	°C	°C	°C	°C	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	7/1/2004	14:44:04.07	1.09	-1.10	0.42	0.16	0.23	-0.08	0.13	0.07	-0.17	-0.59	-0.41	0.30	0.49	0.01	0.14	0.04	69.48	11.98	23.36	23.36	22.23	22.66	12.13	47.35	-0.14	-0.16	-0.56	-0.12	-0.16	0.03			0.00	201.59
2	7/1/2004	14:45:04.07	1.09	-1.10	0.44	0.16	0.23	-0.04	0.12	0.07	-0.17	-0.57	-0.42	0.30	0.49	-0.01	0.15	0.04	69.22	11.26	23.36	23.36	22.15	22.66	11.97	47.37	-0.13	-0.16	-0.56	-0.08	-0.17	0.03			0.00	201.59
3	7/1/2004	14:46:04.07	1.09	-1.10	0.42	0.16	0.23	-0.04	0.12	0.07	-0.17	-0.56	-0.42	0.31	0.49	0.01	0.14	0.04	69.48	9.95	23.24	23.31	22.18	22.61	11.92	47.39	-0.14	-0.16	-0.56	-0.08	-0.17	0.03			0.00	201.59
4	7/1/2004	14:47:04.07	1.09	-1.12	0.42	0.18	0.23	-0.04	0.13	0.07	-0.17	-0.56	-0.42	0.31	0.49	0.01	0.14	0.04	69.48	9.50	23.16	23.31	22.10	22.61	11.92	47.40	-0.14	-0.15	-0.56	-0.08	-0.16	0.03			0.00	201.59
5	7/1/2004	14:48:04.07	1.09	-1.10	0.42	0.18	0.23	-0.04	0.12	0.07	-0.18	-0.54	-0.42	0.31	0.49	0.01	0.14	0.04	73.63	10.97	23.24	23.31	22.18	22.61	11.92	47.42	-0.14	-0.15	-0.56	-0.08	-0.17	0.03			0.00	201.59
6	7/1/2004	14:49:04.07	1.07	0.73	2.20	0.18	0.10	-0.04	-0.06	0.07	-0.24	-0.56	-0.45	0.31	0.42	-0.04	0.14	0.04	73.89	9.55	23.28	23.68	22.31	22.74	12.13	47.44	1.64	-0.15	-0.69	-0.08	-0.35	0.03			0.00	201.59
7	7/1/2004	14:50:04.07	1.07	0.39	1.85	0.18	0.10	-0.04	-0.01	0.07	-0.24	-0.56	-0.45	0.31	0.46	0.01	0.15	0.04	78.31	9.47	23.20	23.60	22.23	22.58	12.13	47.45	1.29	-0.15	-0.69	-0.08	-0.30	0.03			0.00	201.59
8	7/1/2004	14:51:04.07	1.07	0.07	1.57	0.19	0.13	-0.04	0.02	0.07	-0.24	-0.54	-0.46	0.32	0.46	-0.01	0.14	0.04	78.05	9.48	23.16	23.47	22.26	22.53	12.08	47.47	1.01	-0.13	-0.66	-0.08	-0.27	0.03			0.00	201.59
9	7/1/2004	14:52:04.07	1.07	0.62	2.20	0.19	0.51	-0.04	0.40	0.07	-0.08	-0.56	-0.37	0.32	0.56	0.07	8.14	7.78	73.63	9.54	23.08	23.31	22.26	22.61	12.00	47.49	1.64	-0.13	-0.28	-0.08	0.11	0.03			0.06	201.59
10	7/1/2004	14:53:04.07	1.07	1.16	2.73	0.19	0.49	-0.04	0.38	0.07	-0.08	-0.56	-0.37	0.32	0.56	0.05	7.02	6.62	65.06	10.18	23.08	23.47	22.26	22.61	12.00	47.50	2.17	-0.13	-0.30	-0.08	0.09	0.03			0.05	201.65
11	7/1/2004	14:54:04.07	1.09	1.73	3.26	0.19	0.49	-0.04	0.36	0.07	-0.08	-0.54	-0.37	0.32	0.56	0.02	7.10	6.71	56.49	9.58	23.00	23.55	22.26	22.61	11.92	47.52	2.70	-0.13	-0.30	-0.08	0.07	0.03			0.05	201.69
12	7/1/2004	14:55:04.07	1.09	1.82	3.37	0.19	0.51	-0.04	0.38	0.09	-0.09	-0.53	-0.36	0.32	0.56	0.02	7.34	6.96	52.07	9.61	23.00	23.55	22.34	22.61	12.00	47.54	2.81	-0.13	-0.28	-0.08	0.09	0.05			0.05	201.74
13	7/1/2004	14:56:04.07	1.09	1.84	3.41	0.19	0.49	-0.04	0.38	0.07	-0.09	-0.54	-0.35	0.32	0.56	0.01	7.27	6.88	52.07	11.49	22.92	23.55	22.34	22.61	11.84	47.55	2.85	-0.13	-0.30	-0.08	0.09	0.03			0.05	201.79
14	7/1/2004	14:57:04.07	1.11	1.84	3.39	0.19	0.49	-0.04	0.36	0.07	-0.09	-0.53	-0.35	0.32	0.57	-0.01	7.10	6.71	48.17	9.62	22.87	23.58	22.29	22.57	11.79	47.57	2.83	-0.13	-0.30	-0.08	0.07	0.03			0.05	201.84
15	7/1/2004	14:58:04.07	1.11	1.82	3.37	0.19	0.49	-0.04	0.38	0.07	-0.09	-0.52	-0.36	0.33	0.56	0.01	7.38	6.99	47.65	11.61	22.83	23.62	22.33	22.60	11.83	47.59	2.81	-0.13	-0.30	-0.08	0.09	0.03			0.05	201.89
16	7/1/2004	14:59:04.07	1.09	1.80	3.37	0.18	0.49	-0.04	0.36	0.07	-0.09	-0.52	-0.35	0.32	0.56	0.01	7.28	6.89	47.65	11.56	22.87	23.58	22.37	22.65	11.79	47.60	2.81	-0.15	-0.30	-0.08	0.07	0.03			0.05	201.94
17	7/1/2004	15:00:04.07	1.09	1.82	3.39	0.18	0.49	-0.04	0.36	0.07	-0.09	-0.52	-0.36	0.32	0.56	0.01	7.20	6.81	47.65	9.46	22.74	23.54	22.33	22.60	11.74	47.62	2.83	-0.15	-0.30	-0.08	0.07	0.03	6.10	6.50	0.05	201.99
18	7/1/2004	15:01:04.07	1.09	1.82	3.36	0.19	0.50	-0.04	0.38	0.07	-0.11	-0.52	-0.35	0.32	0.56	0.01	7.40	7.01	47.65	12.08	22.83	23.46	22.33	22.52	11.66	47.64	2.80	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.04
19	7/1/2004	15:02:04.07	1.09	1.80	3.34	0.19	0.49	-0.04	0.38	0.07	-0.09	-0.52	-0.36	0.32	0.57	-0.01	7.28	6.90	47.65	9.46	22.83	23.46	22.33	22.60	11.58	47.65	2.78	-0.13	-0.30	-0.08	0.09	0.03			0.05	202.09
20	7/1/2004	15:03:04.07	1.09	1.82	3.37	0.18	0.48	-0.04	0.35	0.07	-0.09	-0.52	-0.35	0.32	0.57	-0.01	7.26	6.87	47.65	9.66	22.74	23.38	22.33	22.60	11.74	47.67	2.81	-0.15	-0.32	-0.08	0.06	0.03			0.05	202.14
21	7/1/2004	15:04:04.07	1.11	1.82	3.39	0.18	0.49	-0.04	0.38	0.07	-0.09	-0.52	-0.36	0.32	0.57	-0.01	7.31	6.93	47.65	9.48	22.83	23.38	22.33	22.60	11.74	47.69	2.83	-0.15	-0.30	-0.08	0.09	0.03			0.05	202.18
22	7/1/2004	15:05:04.07	1.09	1.82	3.37	0.19	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.58	0.01	7.52	7.14	47.65	9.58	22.78	23.33	22.28	22.56	11.62	47.70	2.81	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.23
23	7/1/2004	15:06:04.07	1.09	1.80	3.41	0.19	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.58	0.01	7.32	6.94	47.65	10.65	22.86	23.25	22.36	22.56	11.70	47.72	2.85	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.28
24	7/1/2004	15:07:04.07	1.09	1.82	3.39	0.18	0.49	-0.04	0.36	0.07	-0.09	-0.52	-0.35	0.32	0.58	0.01	7.30	6.92	47.65	10.10	22.83	23.30	22.41	22.68	11.74	47.74	2.83	-0.15	-0.30	-0.08	0.07	0.03			0.05	202.33
25	7/1/2004	15:08:04.07	1.09	1.80	3.37	0.18	0.50	-0.04	0.38	0.07	-0.11	-0.52	-0.35	0.32	0.58	-0.01	7.20	6.81	47.65	10.28	22.86	23.33	22.36	22.64	11.70	47.75	2.81	-0.15	-0.29	-0.08	0.09	0.03			0.05	202.38
26	7/1/2004	15:09:04.07	1.09	1.82	3.39	0.18	0.49	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.34	6.96	47.65	10.57	22.86	23.33	22.44	22.64	11.78	47.77	2.83	-0.15	-0.30	-0.08	0.09	0.03			0.05	202.43
27	7/1/2004	15:10:04.07	1.09	1.80	3.36	0.18	0.49	-0.04	0.36	0.07	-0.09	-0.52	-0.36	0.32	0.58	-0.01	7.29	6.90	47.65	9.65	22.86	23.33	22.36	22.64	11.78	47.79	2.80	-0.15	-0.30	-0.08	0.07	0.03			0.05	202.48
28	7/1/2004	15:11:04.07	1.09	1.82	3.39	0.18	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.38	6.99	43.50	10.31	22.86	23.25	22.36	22.64	11.78	47.80	2.83	-0.15	-0.29	-0.08	0.09	0.03			0.05	202.53
29	7/1/2004	15:12:04.07	1.09	1.80	3.36	0.19	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.27	6.88	43.50	9.48	22.86	23.33	22.36	22.64	11.70	47.82	2.80	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.58
30	7/1/2004	15:13:04.07	1.09	1.80	3.39	0.19	0.51	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.33	0.59	0.01	7.22	6.84	43.50	11.77	22.94	23.25	22.44	22.64	11.70	47.84	2.83	-0.13	-0.28	-0.08	0.09	0.03			0.05	202.63
31	7/1/2004	15:14:04.07	1.09	1.82	3.41	0.19	0.50	-0.04	0.39	0.07	-0.08	-0.52	-0.35	0.32	0.58	-0.01	7.10	6.71	43.50	9.56	22.86	23.17	22.36	22.64	11.70	47.85	2.85	-0.13	-0.29	-0.08	0.10	0.03			0.05	202.68
32	7/1/2004	15:15:04.07	1.09	1.80	3.37	0.19	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.50	7.12	43.50	11.67	22.94	23.17	22.44	22.64	11.70	47.87	2.81	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.73
33	7/1/2004	15:16:04.07	1.07	1.82	3.36	0.19	0.50	-0.03	0.38	0.07	-0.11	-0.52	-0.36	0.32	0.59	-0.01	7.26	6.88	43.50	9.71	22.86	23.17	22.36	22.56	11.62	47.89	2.80	-0.13	-0.29	-0.07	0.09	0.03			0.05	202.78
34	7/1/2004	15:17:04.07	1.07	1.82	3.37	0.18	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.34	0.32	0.59	-0.01	7.30	6.92	43.50	10.44	22.94	23.17	22.44	22.64	11.70	47.90	2.81	-0.15	-0.29	-0.08	0.09	0.03			0.05	202.83
35	7/1/2004	15:18:04.07	1.07	1.80	3.37	0.18	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.36	0.32	0.59	-0.01	7.25	6.86	43.50	10.33	22.86	23.17	22.36	22.56	11.62	47.92	2.81	-0.15	-0.29	-0.08	0.09	0.03			0.05	202.87
36	7/1/2004	15:19:04.07	1.07	1.80	3.36	0.18	0.49	-0.04	0.38	0.07	-0.09	-0.53	-0.35	0.32	0.59	-0.01	7.10	6.71	43.50	9.73	22.94	23.17	22.36	22.64	11.62	47.94	2.80	-0.15	-0.30	-0.08	0.09	0.03			0.05	202.92
37	7/1/2004	15:20:04.07	1.07	1.82	3.37	0.19	0.50	-0.04	0.38	0.07	-0.11	-0.52	-0.34	0.32	0.59	-0.01	7.21	6.82	43.50	9.53	22.94	23.17	22.36	22.56	11.62	47.95	2.81	-0.13	-0.29	-0.08	0.09	0.03			0.05	202.97
38	7/1/2004	15:21:04.07	1.07	1.82	3.39	0.18	0.50	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.27	6.88	43.50	9.46	22.94	23.17	22.36	22.56	11.62	47.97	2.83	-0.15	-0.29	-0.08	0.09	0.03			0.05	203.02
39	7/1/2004	15:22:04.07	1.07	1.82	3.36	0.19	0.51	-0.04	0.38	0.07	-0.09	-0.52	-0.35	0.33	0.59	-0.01	7.53	7.15	43.50	10.44	22.94	23.17	22.44	22.64	11.62	47.99	2.80	-0.13	-0.28	-0.08	0.09	0.03			0.05	203.07
40	7/1/2004	15:23:04.07	1.07	1.82	3.39	0.19	0.51	-0.04	0.39	0.07	-0.09	-0.52	-0.34	0.32	0.59	-0.01	7.28	6.89	43.50	9.61	23.02	23.17	22.44	22.64	11.62	48.00	2.83	-0.13	-0.28	-0.08	0.10	0.03			0.05	203.12
41	7/1/2004	15:24:04.07	1.05	1.82	3.39	0.19	0.51	-0.04	0.40	0.06	-0.09	-0.52	-0.35	0.32	0.60	0.01	7.36	6.97	43.50	9.80	23.07	23.22	22.49	22.68	11.74	48.02	2.83	-0.13	-0.28	-0.08	0.11	0.02			0.05	203.17
42	7/1/2004	15:25:04.07	1.05	1.82	3.37	0.18	0.51	-0.04	0.40	0.06	-0.09	-0.52	-0.32	0.32	0.60	0.01	7.44	7.06	43.50	10.46	22.99	23.14	22.49	22.68	11.74	48.04	2.81	-0.15	-0.28	-0.08	0.11	0.02			0.05	203.22
43	7/1/2004	15:26:04.07	1.05	1.82	3.39	0.18	0.51	-0.04	0.39	0.06	-0.09	-0.52	-0.34	0.32	0.59	0.01	7.32	6.93	43.50	9.58	22.99	23.22	22.49	22.68	11.74	48.05	2.83	-0.15	-0.28	-0.08	0.10	0.02			0.05	203.27
44	7/1/2004	15:27:04.07	1.05	1.82	3.37	0.18	0.51	-0.03	0.39	0.07	-0.09	-0.52	-0.35	0.32	0.60	-0.01	6.96	6.57	43.50	10.12	22.99	23.14	22.49	22.68	11.74	48.07	2.81	-0.15	-0.28	-0.07	0.10	0.03			0.05	203.32
45	7/1/2004	15:28:04.07	1.05	1.82	3.37	0.19	0.50	-0.04	0.39	0.07	-0.11	-0.52	-0.35	0.32	0.59	0.01	7.16	6.77	43.50	11.47	22.99	23.14	22.41	22.60	11.58	48.09	2.81	-0.13	-0.29	-0.08	0.10	0.03			0.05	203.37
46	7/1/2004	15:29:04.07	1.05	1.82	3.39	0.19	0.51	-0.04	0.40	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.18	6.79	43.50	9.46	23.07	23.14	22.49	22.68	11.66	48.10	2.83	-0.13	-0.28	-0.08	0.11	0.03			0.05	203.41
47	7/1/2004	15:30:04.07	1.05	1.82	3.37	0.18	0.51	-0.04	0.40	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.46	7.08	43.50	10.02	23.07	23.14	22.49	22.68	11.74	48.12	2.81	-0.15	-0.28	-0.08	0.11	0.03	6.10	6.50	0.05	203.46
48	7/1/2004	15:31:04.07	1.05	1.80	3.37	0.18	0.51	-0.04	0.39	0.07	-0.09	-0.52	-0.35	0.32	0.59	0.01	7.18	6.80	43.50	9.56	23.07	23.14	22.49	22.68	11.66	48.14	2.81	-0.15	-0.28	-0.08	0.10	0.03			0.05	203.51
49	7/1/2004	15:32:04.07	1.03	1.82	3.36	0.19	0.52	-0.04	0.40	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.36	6.97	43.50	9.48	23.07	23.14	22.49	22.68	11.66	48.15	2.80	-0.13	-0.27	-0.08	0.11	0.03			0.05	203.56
50	7/1/2004	15:33:04.07	1.03	1.80	3.37	0.18	0.52	-0.03	0.40	0.07	-0.09	-0.52	-0.32	0.32	0.60	-0.01	7.26	6.87	43.50	11.77	23.11	23.18	22.54	22.73	11.71	48.17	2.81	-0.15	-0.27	-0.07	0.11	0.03			0.05	203.61
51	7/1/2004	15:34:04.07	1.03	1.82	3.36	0.18	0.52	-0.03	0.40	0.07	-0.09	-0.52	-0.35	0.32	0.59	-0.01	7.35	6.97	43.50	11.51	22.99	23.22	22.41	22.60	11.58	48.19	2.80	-0.15	-0.27	-0.07	0.11	0.03			0.05	203.66
52	7/1/2004	15:35:04.07	1.03	1.82	3.39	0.18	0.54	-0.03	0.41	0.07	-0.09	-0.52	-0.34	0.33	0.60	-0.01	7.57	7.19	43.50	10.67	23.11	23.34	22.46	22.65	11.63	48.20	2.83	-0.15	-0.25	-0.07	0.12	0.03			0.05	203.71
53	7/1/2004	15:36:04.07	1.03	1.82	3.37	0.18	0.54	-0.03	0.41	0.07	-0.09	-0.52	-0.32	0.32	0.60	0.01	7.30	6.92	43.50	10.64	23.11	23.50	22.54	22.73	11.79	48.22	2.81	-0.15	-0.25	-0.07	0.12	0.03			0.05	203.76
54	7/1/2004	15:37:04.07	1.03	1.82	3.36	0.18	0.52	-0.02	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.59	-0.01	7.63	7.25	43.24	9.55	23.11	23.66	22.46	22.73	11.79	48.24	2.80	-0.15	-0.27	-0.06	0.12	0.03			0.05	203.81
55	7/1/2004	15:38:04.07	1.02	1.80	3.39	0.18	0.52	-0.03	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.20	6.81	43.50	11.94	23.11	23.91	22.54	22.65	11.79	48.25	2.83	-0.15	-0.27	-0.07	0.12	0.03			0.05	203.86
56	7/1/2004	15:39:04.07	1.02	1.82	3.37	0.18	0.52	-0.02	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.60	-0.01	7.20	6.82	43.50	9.83	23.11	23.99	22.54	22.65	11.79	48.27	2.81	-0.15	-0.27	-0.06	0.12	0.03			0.05	203.91
57	7/1/2004	15:40:04.07	1.02	1.80	3.39	0.19	0.54	-0.03	0.41	0.07	-0.09	-0.52	-0.34	0.33	0.60	0.01	7.47	7.09	43.50	11.62	23.11	24.07	22.54	22.65	11.79	48.29	2.83	-0.13	-0.25	-0.07	0.12	0.03			0.05	203.96
58	7/1/2004	15:41:04.07	1.02	1.80	3.37	0.18	0.55	-0.03	0.42	0.07	-0.08	-0.52	-0.34	0.32	0.60	0.01	7.51	7.13	43.50	9.58	23.16	24.11	22.50	22.69	11.84	48.30	2.81	-0.15	-0.24	-0.07	0.13	0.03			0.05	204.01
59	7/1/2004	15:42:04.07	1.03	1.80	3.39	0.18	0.54	-0.02	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.34	6.95	43.50	11.19	23.16	24.03	22.50	22.69	11.84	48.32	2.83	-0.15	-0.25	-0.06	0.12	0.03			0.05	204.06
60	7/1/2004	15:43:04.07	1.02	1.80	3.34	0.19	0.54	-0.02	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.59	0.02	7.34	6.95	43.50	11.70	23.16	24.03	22.50	22.69	11.76	48.34	2.78	-0.13	-0.25	-0.06	0.12	0.03			0.05	204.11
61	7/1/2004	15:44:04.07	1.03	1.80	3.39	0.19	0.54	0.00	0.41	0.07	-0.09	-0.52	-0.32	0.32	0.60	-0.01	7.38	6.99	43.50	10.57	23.16	23.95	22.50	22.69	11.67	48.35	2.83	-0.13	-0.25	-0.04	0.12	0.03			0.05	204.16
62	7/1/2004	15:45:04.07	1.00	1.80	3.34	0.19	0.54	0.00	0.42	0.07	-0.09	-0.52	-0.34	0.32	0.59	0.01	7.26	6.88	43.50	9.62	23.16	23.95	22.50	22.69	11.76	48.37	2.78	-0.13	-0.25	-0.04	0.13	0.03			0.05	204.21
63	7/1/2004	15:46:04.07	1.02	1.82	3.36	0.18	0.55	-0.02	0.42	0.07	-0.09	-0.51	-0.34	0.32	0.59	0.01	7.38	7.00	43.50	11.66	23.24	23.95	22.50	22.69	11.84	48.39	2.80	-0.15	-0.24	-0.06	0.13	0.03			0.05	204.26
64	7/1/2004	15:47:04.07	1.02	1.80	3.36	0.19	0.54	-0.02	0.42	0.07	-0.09	-0.52	-0.34	0.32	0.59	0.01	7.68	7.30	43.24	9.61	23.20	23.92	22.55	22.66	11.72	48.40	2.80	-0.13	-0.25	-0.06	0.13	0.03			0.05	204.31
65	7/1/2004	15:48:04.07	1.02	1.80	3.37	0.19	0.56	0.00	0.44	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.37	6.99	43.50	9.54	23.28	23.92	22.55	22.66	11.80	48.42	2.81	-0.13	-0.23	-0.04	0.15	0.03			0.05	204.36
66	7/1/2004	15:49:04.07	1.00	1.80	3.37	0.19	0.55	0.00	0.41	0.07	-0.08	-0.52	-0.34	0.32	0.60	0.01	7.42	7.04	43.50	9.53	23.20	23.92	22.55	22.66	11.80	48.44	2.81	-0.13	-0.24	-0.04	0.12	0.03			0.05	204.41
67	7/1/2004	15:50:04.07	1.02	1.80	3.39	0.19	0.56	-0.02	0.42	0.07	-0.08	-0.52	-0.32	0.33	0.60	0.01	7.52	7.14	43.50	12.06	23.28	24.00	22.63	22.74	11.88	48.45	2.83	-0.13	-0.23	-0.06	0.13	0.03			0.05	204.46
68	7/1/2004	15:51:04.07	1.00	1.82	3.37	0.18	0.54	0.00	0.41	0.07	-0.09	-0.52	-0.34	0.32	0.60	0.01	7.30	6.92	43.50	9.47	23.28	23.92	22.55	22.66	11.80	48.47	2.81	-0.15	-0.25	-0.04	0.12	0.03			0.05	204.51
69	7/1/2004	15:52:04.07	1.00	1.63	3.08	0.19	0.10	0.00	-0.02	0.07	-0.28	-0.52	-0.42	0.33	0.43	-0.09	3.86	3.49	43.50	9.57	23.28	23.36	22.55	22.66	11.80	48.49	2.52	-0.13	-0.69	-0.04	-0.31	0.03			0.02	204.56
70	7/1/2004	15:53:04.07	1.00	1.17	2.64	0.20	0.13	0.00	0.02	0.07	-0.28	-0.52	-0.42	0.33	0.46	-0.11	0.15	0.04	43.50	9.67	23.28	23.27	22.55	22.66	11.97	48.50	2.08	-0.12	-0.66	-0.04	-0.27	0.03			0.00	204.58
71	7/1/2004	15:54:04.07	1.00	0.77	2.25	0.19	0.17	0.00	0.02	0.07	-0.24	-0.52	-0.42	0.32	0.47	-0.08	0.15	0.04	43.50	10.70	23.20	23.11	22.47	22.66	11.88	48.52	1.69	-0.13	-0.62	-0.04	-0.27	0.03			0.00	204.58
72	7/1/2004	15:55:04.07	1.00	0.42	1.91	0.20	0.21	0.00	0.06	0.09	-0.24	-0.52	-0.42	0.32	0.49	-0.07	0.15	0.04	43.50	12.00	23.33	23.08	22.59	22.79	11.93	48.54	1.35	-0.12	-0.58	-0.04	-0.23	0.05			0.09	204.58
73	7/6/2004	06:33:06.07	-0.44	-1.43	0.16	0.33	0.57	0.03	0.33	0.04	-0.17	-0.18	-0.02	0.36	0.36	0.01	0.14	0.04	26.09	9.48	22.41	22.57	22.16	22.11	11.49	53.55	-0.40	0.01	-0.22	-0.01	0.04	0.00	6.10	6.40	0.00	204.67
74	7/6/2004	06:33:13.53	-0.44	-1.43	0.16	0.33	0.57	0.03	0.33	0.04	-0.17	-0.18	-0.02	0.36	0.36	0.01	0.14	0.04	26.09	9.48	22.41	22.57	22.16	22.11	11.49	53.55	-0.40	0.01	-0.22	-0.01	0.04	0.00			0.00	204.68
75	7/6/2004	06:34:13.57	-0.45	-1.43	0.16	0.33	0.57	0.02	0.33	0.05	-0.17	-0.18	-0.02	0.36	0.35	-0.01	0.14	0.04	26.09	11.44	22.41	22.49	22.08	22.11	11.33	53.57	-0.40	0.01	-0.22	-0.02	0.04	0.01			0.00	204.68
76	7/6/2004	06:35:13.57	-0.45	-1.43	0.14	0.35	0.79	0.02	0.33	0.04	-0.17	-0.18	-0.02	0.35	0.36	-0.01	0.14	0.04	26.09	9.63	22.49	22.49	22.16	22.11	11.41	53.59	-0.42	0.03	0.00	-0.02	0.04	0.00			0.00	204.68
77	7/6/2004	06:36:13.57	-0.45	-1.43	0.14	0.33	0.79	0.02	0.33	0.04	-0.18	-0.18	-0.02	0.36	0.36	0.01	0.14	0.04	26.09	10.37	22.49	22.49	22.08	22.11	11.33	53.60	-0.42	0.01	0.00	-0.02	0.04	0.00			0.00	204.68
78	7/6/2004	06:37:13.57	-0.47	0.18	1.76	0.32	0.79	0.02	0.33	0.04	-0.18	-0.15	-0.02	0.35	0.35	0.01	0.15	0.04	26.09	11.01	22.49	22.73	22.16	22.19	11.33	53.62	1.20	0.00	0.00	-0.02	0.04	0.00			0.00	204.68

Table H3-4-7. CIX Campaign II, Cycle 4, 0.5 M Nitric Acid Eluent

	Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure																																			
	would be zero when the flow was zero.					The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.																														
						DP1	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**DP7**	**DP8**	**DP9**	**DP10**	**DP11**	**Flow**	**flow**									**DP1**	**DP2**	**DP3**	**DP4**	**DP5**	**DP6**	**Resin**	**Resin**	**differ-**	**cumul-**
	DATE	**TIME**	**P1**	**P2**	**P3**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**meter**	**cor.**	**Cond1**	**pH**	**T1**	**T2**	**T3**	**T4**	**T5**	**elaps-**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**cor.**	**H1**	**H2**	**ential**	**lative**
	units		**psig**	**psig**	**psig**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**water**	**L/hr**	**L/hr**	**mS/cm**		**°C**	**°C**	**°C**	**°C**	**°C**	**ed**	**inch**	**inch**	**inch**	**inch**	**inch**	**inch**	**inches**	**inches**	**BV**	**BV**
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	**(hours)**	**water**	**water**	**water**	**water**	**water**	**water**				
1	7/6/2004	06:33:06.07	-0.44	-1.43	0.16	0.33	0.57	0.03	0.33	0.04	-0.17	-0.18	-0.02	0.36	0.36	0.01	0.14	0.04	26.09	9.48	22.41	22.57	22.16	22.11	11.49	53.55	-0.40	0.01	-0.22	-0.01	0.04	0.00	6.10	6.40	0.00	204.58
2	7/6/2004	06:45:13.57	-0.47	0.37	1.94	0.33	0.83	0.03	0.39	0.04	-0.16	-0.18	0.01	0.36	0.36	-0.03	2.24	1.96	30.51	10.43	22.46	22.53	22.12	22.40	11.62	53.75	1.38	0.01	0.04	-0.01	0.10	0.00			0.01	204.61
3	7/6/2004	06:58:13.57	-0.44	1.76	3.34	0.33	0.82	0.03	0.39	0.04	-0.16	-0.17	0.03	0.36	0.35	0.10	2.29	2.00	26.09	10.02	22.62	38.35	22.12	22.56	11.45	53.97	2.78	0.01	0.03	-0.01	0.10	0.00			0.01	204.79
4	7/6/2004	07:11:13.57	-0.42	1.74	3.32	0.32	0.82	0.06	0.42	0.07	-0.16	-0.15	0.03	0.36	0.35	0.10	2.46	2.16	26.09	10.40	22.61	38.73	22.03	22.55	11.28	54.19	2.76	0.00	0.03	0.02	0.13	0.03			0.02	204.98
5	7/6/2004	07:24:13.57	-0.45	1.95	3.52	0.33	0.80	0.07	0.38	0.07	-0.14	-0.15	0.02	0.36	0.31	0.09	2.22	1.94	21.68	9.68	22.82	36.34	22.08	22.59	11.33	54.40	2.96	0.01	0.01	0.03	0.09	0.03			0.01	205.17
6	7/6/2004	07:37:13.57	-0.49	1.73	3.28	0.35	0.79	0.07	0.36	0.07	-0.16	-0.15	0.03	0.36	0.30	0.08	2.34	2.04	21.94	10.18	22.94	34.97	22.04	22.56	11.37	54.62	2.72	0.03	0.00	0.03	0.07	0.03			0.01	205.36
7	7/6/2004	07:50:13.57	-0.51	1.73	3.28	0.35	0.77	0.07	0.36	0.07	-0.17	-0.14	0.03	0.35	0.30	0.07	2.34	2.05	21.68	11.18	22.94	33.70	22.04	22.56	11.29	54.84	2.72	0.03	-0.02	0.03	0.07	0.03			0.01	205.54
8	7/6/2004	08:03:13.57	-0.55	1.73	3.26	0.35	0.77	0.07	0.34	0.07	-0.16	-0.18	0.03	0.36	0.29	0.07	2.62	2.31	21.68	10.04	23.03	32.84	22.14	22.57	11.47	55.05	2.70	0.03	-0.02	0.03	0.05	0.03			0.02	205.75
9	7/6/2004	08:16:13.57	-0.60	2.48	4.02	0.31	0.74	0.03	0.33	0.07	-0.17	-0.18	0.03	0.35	0.26	0.07	2.57	2.26	21.68	8.94	23.21	32.38	22.15	22.42	11.31	55.27	3.46	-0.01	-0.05	-0.01	0.04	0.03			0.02	205.96
10	7/6/2004	08:29:13.57	-0.62	1.74	3.32	0.32	0.88	0.03	0.31	0.04	-0.17	-0.18	0.05	0.36	0.26	0.07	2.60	2.29	21.68	11.20	23.14	31.91	22.16	22.35	11.41	55.49	2.76	0.00	0.09	-0.01	0.02	0.00			0.02	206.17
11	7/6/2004	08:42:13.57	-0.67	1.74	3.32	0.32	0.87	0.03	0.31	0.04	-0.17	-0.18	0.03	0.36	0.26	0.07	2.58	2.27	21.68	11.10	23.26	31.56	22.28	22.32	11.53	55.70	2.76	0.00	0.08	-0.01	0.02	0.00			0.02	206.38
12	7/6/2004	08:55:13.57	-0.67	1.76	3.28	0.35	0.84	0.03	0.30	0.04	-0.17	-0.15	0.01	0.36	0.22	0.07	2.59	2.28	21.68	9.42	22.91	31.37	22.41	22.44	11.42	55.92	2.72	0.03	0.05	-0.01	0.01	0.00			0.02	206.60
13	7/6/2004	09:08:13.57	-0.73	1.76	3.32	0.35	0.84	0.03	0.30	0.06	-0.17	-0.15	0.01	0.33	0.22	0.07	2.61	2.30	21.94	8.82	23.16	31.22	22.58	22.45	11.67	56.14	2.76	0.03	0.05	-0.01	0.01	0.02			0.02	206.81
14	7/6/2004	09:21:13.57	-0.75	1.80	3.34	0.36	0.83	0.03	0.29	0.07	-0.17	-0.15	0.01	0.33	0.22	0.07	2.62	2.31	21.68	10.71	23.08	30.98	22.58	22.53	11.76	56.35	2.78	0.04	0.04	-0.01	0.00	0.03			0.02	207.02
15	7/6/2004	09:34:13.57	-0.73	1.78	3.30	0.35	0.82	0.03	0.30	0.07	-0.16	-0.15	0.00	0.36	0.22	0.07	2.62	2.31	21.68	8.81	23.09	30.75	22.59	22.54	11.60	56.57	2.74	0.03	0.03	-0.01	0.01	0.03			0.02	207.23
16	7/6/2004	09:47:13.57	-0.75	1.80	3.34	0.31	0.82	0.03	0.29	0.07	-0.16	-0.14	0.00	0.35	0.22	0.07	2.61	2.30	21.68	10.18	23.26	30.53	22.69	22.64	11.70	56.79	2.78	-0.01	0.03	-0.01	0.00	0.03			0.02	207.45
17	7/6/2004	10:00:13.57	-0.75	1.78	3.34	0.31	0.82	0.01	0.28	0.07	-0.16	-0.15	-0.02	0.35	0.22	0.07	2.58	2.28	21.94	8.72	23.55	30.49	22.89	22.76	11.74	57.00	2.78	-0.01	0.03	-0.03	-0.01	0.03			0.02	207.66
18	7/6/2004	10:13:13.57	-0.77	1.80	3.37	0.31	0.80	0.02	0.28	0.04	-0.16	-0.15	-0.02	0.36	0.22	0.07	2.57	2.26	21.68	8.69	23.64	29.95	22.98	22.94	11.84	57.22	2.81	-0.01	0.01	-0.02	-0.01	0.00			0.02	207.87
19	7/6/2004	10:26:13.57	-0.77	1.82	3.41	0.31	0.79	0.02	0.26	0.04	-0.16	-0.14	-0.02	0.36	0.22	0.07	2.58	2.28	21.68	11.13	23.97	29.24	23.08	23.11	11.93	57.44	2.85	-0.01	0.00	-0.02	-0.03	0.00			0.02	208.08
20	7/6/2004	10:39:13.57	-0.75	1.80	3.36	0.31	0.79	0.03	0.26	0.05	-0.16	-0.12	-0.03	0.36	0.24	0.04	2.60	2.29	26.09	9.36	23.86	29.05	23.12	23.15	11.98	57.65	2.80	-0.01	0.00	-0.01	-0.03	0.01			0.02	208.29
21	7/6/2004	10:52:13.57	-0.77	1.82	3.37	0.31	0.78	0.03	0.26	0.04	-0.14	-0.12	-0.03	0.36	0.22	0.04	2.63	2.32	21.68	9.66	23.95	29.14	23.13	23.41	11.99	57.87	2.81	-0.01	-0.01	-0.01	-0.03	0.00			0.02	208.51
22	7/6/2004	11:05:13.57	-0.73	1.82	3.34	0.32	0.77	0.03	0.24	0.04	-0.18	-0.14	-0.02	0.36	0.21	0.05	2.59	2.28	26.09	0.14	24.04	28.35	23.23	23.42	12.17	58.09	2.78	0.00	-0.02	-0.01	-0.05	0.00			0.02	208.72
23	7/6/2004	11:18:13.57	-0.77	1.76	3.30	0.32	0.78	0.03	0.23	0.04	-0.18	-0.14	-0.03	0.36	0.22	0.05	2.58	2.28	26.09	-0.02	24.10	28.65	23.28	23.48	12.22	58.30	2.74	0.00	-0.01	-0.01	-0.06	0.00			0.02	208.93
24	7/6/2004	11:31:13.57	-0.73	1.76	3.34	0.32	0.77	0.05	0.20	0.04	-0.19	-0.15	-0.02	0.37	0.22	0.05	2.56	2.25	30.51	-0.17	24.31	28.70	23.33	23.52	12.27	58.52	2.78	0.00	-0.02	0.01	-0.09	0.00			0.02	209.14
25	7/6/2004	11:44:13.57	-0.75	1.76	3.32	0.32	0.78	0.05	0.22	0.04	-0.19	-0.14	-0.02	0.37	0.20	0.05	2.59	2.28	30.51	0.43	24.32	28.79	23.42	23.53	12.20	58.74	2.76	0.00	-0.01	0.01	-0.08	0.00			0.02	209.35
26	7/6/2004	11:57:13.57	-0.75	1.76	3.34	0.30	0.77	0.07	0.22	0.05	-0.18	-0.14	-0.02	0.35	0.19	0.05	2.64	2.33	34.66	0.68	24.44	28.67	23.55	23.58	12.33	58.95	2.78	-0.02	-0.02	0.03	-0.08	0.01			0.02	209.57
27	7/6/2004	12:10:13.57	-0.71	1.76	3.32	0.31	0.74	0.02	0.22	0.07	-0.17	-0.15	-0.05	0.36	0.19	0.05	2.57	2.26	39.08	0.67	24.28	28.59	23.55	23.50	12.41	59.17	2.76	-0.01	-0.05	-0.02	-0.08	0.03			0.02	209.78
28	7/6/2004	12:23:13.57	-0.73	1.78	3.36	0.31	0.73	0.03	0.22	0.04	-0.17	-0.14	-0.04	0.36	0.20	0.05	2.61	2.30	43.50	0.24	24.50	28.49	23.61	23.56	12.39	59.39	2.80	-0.01	-0.06	-0.01	-0.08	0.00			0.02	209.99
29	7/6/2004	12:36:13.57	-0.71	1.76	3.34	0.32	0.73	0.03	0.22	0.04	-0.18	-0.13	-0.04	0.36	0.19	0.05	2.57	2.26	47.65	-0.18	24.55	28.22	23.57	23.61	12.52	59.60	2.78	0.00	-0.06	-0.01	-0.08	0.00		4.60	0.02	210.20
30	7/6/2004	12:49:13.57	-0.69	1.78	3.36	0.32	0.73	0.03	0.23	0.04	-0.17	-0.12	-0.04	0.36	0.20	0.07	2.61	2.30	47.65	-0.18	24.37	28.68	23.79	23.66	12.66	59.82	2.80	0.00	-0.06	-0.01	-0.06	0.00			0.02	210.41
31	7/6/2004	13:02:13.57	-0.71	1.78	3.34	0.31	0.73	0.02	0.22	0.04	-0.17	-0.12	-0.04	0.36	0.19	0.07	2.55	2.24	52.07	0.73	24.54	28.93	23.80	23.60	12.67	60.04	2.78	-0.01	-0.06	-0.02	-0.08	0.00			0.02	210.63
32	7/6/2004	13:15:13.57	-0.66	1.76	3.32	0.32	0.74	0.03	0.23	0.04	-0.16	-0.12	-0.04	0.36	0.21	0.07	2.61	2.30	52.07	-0.18	24.22	29.01	23.80	23.52	12.67	60.25	2.76	0.00	-0.05	-0.01	-0.06	0.00			0.02	210.84
33	7/6/2004	13:28:13.57	-0.67	1.76	3.36	0.31	0.74	0.05	0.23	0.04	-0.17	-0.12	-0.04	0.36	0.21	0.07	2.58	2.28	60.90	0.50	24.55	29.26	23.90	23.45	12.85	60.47	2.80	-0.01	-0.05	0.01	-0.06	0.00			0.02	211.05
34	7/6/2004	13:41:13.57	-0.62	1.78	3.34	0.32	0.73	0.06	0.23	0.05	-0.16	-0.12	-0.04	0.36	0.21	0.07	2.55	2.25	65.06	-0.18	24.35	29.05	23.93	23.48	10.18	60.69	2.78	0.00	-0.06	0.02	-0.06	0.01			0.02	211.26
35	7/6/2004	13:54:13.57	-0.62	1.76	3.36	0.31	0.73	0.07	0.20	0.06	-0.16	-0.12	-0.03	0.36	0.21	0.07	2.63	2.32	65.06	0.26	24.55	29.10	24.06	23.69	10.72	60.90	2.80	-0.01	-0.06	0.03	-0.09	0.02			0.02	211.48
36	7/6/2004	14:07:13.57	-0.56	1.76	3.34	0.32	0.74	0.06	0.23	0.06	-0.16	-0.12	-0.04	0.36	0.21	0.07	2.61	2.30	69.48	0.34	24.52	28.83	24.02	23.66	10.53	61.12	2.78	0.00	-0.05	0.02	-0.06	0.02			0.02	211.69
37	7/6/2004	14:20:13.57	-0.56	1.74	3.32	0.31	0.73	0.06	0.23	0.05	-0.16	-0.13	-0.04	0.36	0.20	0.07	2.57	2.26	69.48	-0.17	24.36	28.75	23.94	23.66	10.36	61.34	2.76	-0.01	-0.06	0.02	-0.06	0.01			0.02	211.90
38	7/6/2004	14:33:13.57	-0.55	1.76	3.36	0.32	0.68	0.07	0.22	0.06	-0.16	-0.12	-0.04	0.35	0.21	0.07	2.61	2.30	73.89	0.57	24.37	29.00	24.04	23.75	10.46	61.55	2.80	0.00	-0.11	0.03	-0.08	0.02		4.60	0.02	212.11
39	7/6/2004	14:46:13.57	-0.53	1.76	3.36	0.33	0.68	0.06	0.23	0.06	-0.16	-0.12	-0.03	0.36	0.21	0.07	2.64	2.33	73.63	-0.11	24.41	29.03	24.07	23.78	10.16	61.77	2.80	0.01	-0.11	0.02	-0.06	0.02			0.02	212.32
40	7/6/2004	14:59:13.57	-0.53	1.74	3.36	0.33	0.68	0.06	0.20	0.07	-0.16	-0.12	-0.04	0.36	0.21	0.07	2.59	2.28	73.63	0.49	24.33	29.19	24.15	23.78	10.41	61.99	2.80	0.01	-0.11	0.02	-0.09	0.03			0.02	212.54
41	7/6/2004	15:12:13.57	-0.51	1.76	3.34	0.35	0.70	0.07	0.19	0.07	-0.16	-0.12	-0.04	0.36	0.22	0.07	2.61	2.30	73.63	-0.17	24.53	29.32	24.12	23.83	10.46	62.20	2.78	0.03	-0.10	0.03	-0.10	0.03			0.02	212.75
42	7/6/2004	15:25:13.57	-0.49	1.74	3.30	0.35	0.72	0.07	0.20	0.07	-0.14	-0.12	-0.03	0.35	0.22	0.07	2.59	2.28	73.89	0.08	24.33	29.51	24.15	23.86	10.25	62.42	2.74	0.03	-0.07	0.03	-0.09	0.03			0.02	212.96
43	7/6/2004	15:38:13.57	-0.44	1.76	3.37	0.35	0.71	0.07	0.20	0.07	-0.14	-0.12	-0.03	0.36	0.22	0.07	2.68	2.37	73.63	0.69	24.25	29.43	24.07	23.94	9.84	62.64	2.81	0.03	-0.08	0.03	-0.09	0.03			0.02	213.17
44	7/6/2004	15:51:13.57	-0.44	1.74	3.34	0.35	0.72	0.06	0.20	0.07	-0.14	-0.12	-0.04	0.36	0.21	0.07	2.61	2.30	73.63	-0.18	24.39	29.74	24.22	24.01	10.07	62.85	2.78	0.03	-0.07	0.02	-0.09	0.03			0.02	213.39
45	7/6/2004	16:04:13.57	-0.40	1.74	3.36	0.35	0.72	0.06	0.20	0.07	-0.14	-0.12	-0.03	0.36	0.21	0.07	2.55	2.25	78.05	-0.13	24.38	29.72	24.13	24.00	10.14	63.07	2.80	0.03	-0.07	0.02	-0.09	0.03			0.02	213.60
46	7/6/2004	16:17:13.57	-0.42	1.74	3.36	0.35	0.72	0.06	0.19	0.07	-0.16	-0.12	-0.04	0.36	0.21	0.07	2.64	2.33	78.05	0.65	24.47	30.06	24.14	24.01	10.15	63.29	2.80	0.03	-0.07	0.02	-0.10	0.03			0.02	213.81
47	7/6/2004	16:30:13.57	-0.38	1.76	3.36	0.35	0.73	0.06	0.20	0.07	-0.14	-0.12	-0.04	0.36	0.21	0.07	2.61	2.30	78.05	-0.18	24.55	30.21	24.14	24.09	10.40	63.50	2.80	0.03	-0.06	0.02	-0.09	0.03			0.02	214.02
48	7/6/2004	16:43:13.57	-0.36	1.76	3.36	0.35	0.73	0.06	0.20	0.07	-0.14	-0.12	-0.04	0.36	0.22	0.05	2.61	2.30	78.05	0.38	24.39	30.45	24.14	24.09	10.23	63.72	2.80	0.03	-0.06	0.02	-0.09	0.03			0.02	214.24
49	7/6/2004	16:56:13.57	-0.36	1.74	3.32	0.35	0.73	0.06	0.20	0.07	-0.14	-0.12	-0.03	0.36	0.21	0.07	2.59	2.28	78.05	0.90	24.44	30.82	24.19	24.14	10.28	63.94	2.76	0.03	-0.06	0.02	-0.09	0.03			0.02	214.45
50	7/6/2004	17:09:13.57	-0.33	1.74	3.36	0.35	0.74	0.06	0.19	0.07	-0.14	-0.12	-0.04	0.35	0.21	0.07	2.59	2.28	78.05	1.02	24.28	30.98	24.19	24.14	10.53	64.15	2.80	0.03	-0.05	0.02	-0.10	0.03			0.02	214.66
51	7/6/2004	17:22:13.57	-0.29	1.74	3.32	0.33	0.72	0.07	0.20	0.07	-0.14	-0.12	-0.03	0.36	0.21	0.07	2.54	2.23	78.05	-0.18	24.31	31.17	24.14	24.25	10.23	64.37	2.76	0.01	-0.07	0.03	-0.09	0.03			0.02	214.87
52	7/6/2004	17:35:13.57	-0.27	1.76	3.37	0.35	0.74	0.06	0.19	0.07	-0.16	-0.12	-0.03	0.36	0.22	0.07	2.61	2.30	78.05	0.03	24.43	31.60	24.09	24.20	10.27	64.59	2.81	0.03	-0.05	0.02	-0.10	0.03			0.02	215.08
53	7/6/2004	17:48:13.57	-0.23	1.74	3.34	0.35	0.74	0.07	0.20	0.06	-0.14	-0.12	-0.02	0.35	0.21	0.05	2.60	2.29	78.05	-0.15	24.33	31.90	24.08	24.19	10.09	64.80	2.78	0.03	-0.05	0.03	-0.09	0.02			0.02	215.30
54	7/6/2004	18:01:13.57	-0.23	1.73	3.32	0.33	0.73	0.06	0.20	0.05	-0.14	-0.12	-0.03	0.36	0.21	0.07	2.58	2.27	78.05	-0.12	24.53	32.41	24.03	24.23	10.37	65.02	2.76	0.01	-0.06	0.02	-0.09	0.01			0.02	215.51
55	7/6/2004	18:14:13.57	-0.20	1.73	3.32	0.32	0.73	0.05	0.19	0.04	-0.14	-0.12	-0.03	0.36	0.21	0.05	2.62	2.31	78.05	0.98	24.32	32.76	23.99	24.18	10.16	65.24	2.76	0.00	-0.06	0.01	-0.10	0.00			0.02	215.72
56	7/6/2004	18:27:13.57	-0.20	1.74	3.37	0.31	0.73	0.06	0.19	0.04	-0.14	-0.12	-0.04	0.36	0.20	0.05	2.62	2.31	77.79	0.50	24.36	33.35	23.94	24.21	10.11	65.45	2.81	-0.01	-0.06	0.02	-0.10	0.00			0.02	215.93
57	7/6/2004	18:40:13.57	-0.14	1.74	3.30	0.32	0.73	0.03	0.19	0.04	-0.16	-0.12	-0.03	0.35	0.20	0.05	2.63	2.32	82.46	0.02	24.26	33.89	23.85	24.20	10.26	65.67	2.74	0.00	-0.06	-0.01	-0.10	0.00			0.02	216.15
58	7/6/2004	18:53:13.57	-0.16	1.74	3.36	0.32	0.73	0.03	0.19	0.04	-0.16	-0.12	-0.03	0.36	0.20	0.05	2.59	2.28	82.46	1.05	24.18	34.68	23.85	24.20	9.85	65.89	2.80	0.00	-0.06	-0.01	-0.10	0.00			0.02	216.36
59	7/6/2004	19:06:13.57	-0.14	1.76	3.37	0.31	0.73	0.02	0.23	0.04	-0.16	-0.12	-0.04	0.35	0.19	0.04	2.54	2.23	82.20	0.67	24.18	35.47	23.77	24.20	9.94	66.10	2.81	-0.01	-0.06	-0.02	-0.06	0.00			0.02	216.57
60	7/6/2004	19:19:13.57	-0.10	1.73	3.28	0.32	0.72	0.02	0.22	0.04	-0.16	-0.13	-0.04	0.33	0.19	0.04	2.57	2.26	82.46	0.31	24.06	36.22	23.64	24.07	9.97	66.32	2.72	0.00	-0.07	-0.02	-0.08	0.00			0.02	216.78
61	7/6/2004	19:32:13.57	-0.10	1.73	3.34	0.32	0.72	0.03	0.23	0.07	-0.16	-0.12	-0.04	0.32	0.20	0.04	2.58	2.27	82.20	0.55	24.01	37.04	23.68	24.19	9.84	66.54	2.78	0.00	-0.07	-0.01	-0.06	0.03			0.02	216.99
62	7/6/2004	19:45:13.57	-0.12	1.74	3.36	0.35	0.72	0.06	0.22	0.07	-0.16	-0.12	-0.04	0.32	0.19	0.04	2.59	2.28	82.20	-0.03	24.03	37.85	23.54	24.13	9.78	66.75	2.80	0.03	-0.07	0.02	-0.08	0.03			0.02	217.20
63	7/6/2004	19:58:13.57	-0.09	1.74	3.36	0.35	0.72	0.06	0.20	0.06	-0.16	-0.12	-0.04	0.35	0.19	0.04	2.60	2.29	82.46	-0.17	23.83	38.74	23.57	24.08	9.73	66.97	2.80	0.03	-0.07	0.02	-0.09	0.02			0.02	217.42
64	7/6/2004	20:11:13.57	-0.05	1.74	3.36	0.33	0.72	0.06	0.20	0.05	-0.16	-0.12	-0.04	0.36	0.19	0.03	2.62	2.31	82.20	0.55	23.61	39.47	23.43	24.03	9.59	67.19	2.80	0.01	-0.07	0.02	-0.09	0.01			0.02	217.63
65	7/6/2004	20:24:13.57	-0.09	1.74	3.34	0.32	0.72	0.06	0.20	0.04	-0.17	-0.12	-0.04	0.36	0.19	0.03	2.61	2.30	82.20	0.74	23.59	40.32	23.34	23.93	9.42	67.40	2.78	0.00	-0.07	0.02	-0.09	0.00			0.02	217.84
66	7/6/2004	20:37:13.57	-0.05	1.73	3.32	0.31	0.73	0.06	0.20	0.04	-0.17	-0.12	-0.02	0.35	0.18	0.03	2.62	2.31	82.20	0.54	23.30	40.89	23.20	23.96	9.19	67.62	2.76	-0.01	-0.06	0.02	-0.09	0.00			0.02	218.05
67	7/6/2004	20:50:13.57	-0.07	1.74	3.34	0.31	0.74	0.03	0.19	0.04	-0.18	-0.12	-0.02	0.35	0.19	0.03	2.60	2.29	82.20	0.51	23.31	41.77	23.21	23.89	9.37	67.84	2.78	-0.01	-0.05	-0.01	-0.10	0.00			0.02	218.27
68	7/6/2004	21:03:13.57	-0.05	1.73	3.36	0.31	0.74	0.03	0.20	0.04	-0.18	-0.12	-0.02	0.35	0.20	0.03	2.58	2.27	82.46	0.85	23.17	42.41	23.08	23.83	9.15	68.05	2.80	-0.01	-0.05	-0.01	-0.09	0.00			0.02	218.48
69	7/6/2004	21:16:13.57	-0.09	1.76	3.34	0.31	0.74	0.03	0.19	0.04	-0.17	-0.12	-0.02	0.33	0.22	0.03	2.63	2.32	82.20	-0.18	23.12	43.23	23.03	23.78	9.10	68.27	2.78	-0.01	-0.05	-0.01	-0.10	0.00			0.02	218.69

Table H3-4-8. CIX Campaign II, Cycle 4, DI Water Post-Elution Rinse

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow								DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	units		psig	psig	psig	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.	Cond1	pH	T1	T2	T3	T4	T5	elaps-	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
						water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm		ºC	ºC	ºC	ºC	ºC	ed	inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	7/6/2004	21:12:13.57	-0.07	1.73	3.34	0.32	0.76	0.03	0.19	0.04	-0.18	-0.12	0.00	0.35	0.22	0.03	2.62	2.31	86.62	0.91	23.12	42.91	23.03	23.70	9.18	68.20	2.78	0.00	-0.03	-0.01	-0.10	0.00			0.02	218.70
2	7/6/2004	21:15:13.57	-0.09	1.69	3.26	0.32	0.74	0.02	0.19	0.04	-0.19	-0.12	-0.02	0.35	0.22	0.04	2.55	2.24	82.46	0.91	23.20	43.23	23.03	23.78	9.10	68.25	2.70	0.00	-0.05	-0.02	-0.10	0.00			0.02	218.75
3	7/6/2004	21:18:13.57	-0.07	1.73	3.36	0.31	0.74	0.03	0.19	0.04	-0.18	-0.12	0.00	0.35	0.22	0.04	2.59	2.28	82.46	0.47	23.16	43.34	22.98	23.74	9.13	68.30	2.80	-0.01	-0.05	-0.01	-0.10	0.00			0.02	218.80
4	7/6/2004	21:21:13.57	-0.09	1.73	3.34	0.32	0.74	0.02	0.19	0.04	-0.18	-0.08	0.00	0.36	0.22	0.03	2.59	2.28	86.62	0.94	23.16	43.57	22.98	23.74	9.22	68.35	2.78	0.00	-0.05	-0.02	-0.10	0.00			0.02	218.85
5	7/6/2004	21:24:13.57	-0.09	1.74	3.30	0.31	0.74	0.03	0.19	0.04	-0.18	-0.08	0.00	0.33	0.22	0.03	2.63	2.32	86.62	-0.08	23.19	43.68	23.02	23.77	9.25	68.40	2.74	-0.01	-0.05	-0.01	-0.10	0.00			0.02	218.90
6	7/6/2004	21:27:13.57	-0.09	1.73	3.32	0.32	0.74	0.03	0.19	0.04	-0.18	-0.08	0.00	0.33	0.21	0.03	2.61	2.30	86.62	1.00	23.16	43.81	22.98	23.66	9.22	68.45	2.76	0.00	-0.05	-0.01	-0.10	0.00			0.02	218.94
7	7/6/2004	21:30:13.57	-0.09	1.67	3.21	0.32	0.60	0.03	0.06	0.04	-0.27	-0.08	-0.08	0.33	0.13	-0.03	0.14	0.04	86.88	-0.15	23.16	44.04	22.98	23.58	8.89	68.50	2.65	0.00	-0.19	-0.01	-0.23	0.00			0.00	218.99
8	7/6/2004	21:33:13.57	-0.10	0.70	2.25	0.32	0.62	0.03	0.09	0.05	-0.24	-0.08	-0.04	0.32	0.15	0.01	0.14	0.04	65.06	-0.18	23.16	45.75	23.06	23.26	9.22	68.55	1.69	0.00	-0.17	-0.01	-0.20	0.01			0.00	218.99
9	7/6/2004	21:36:13.57	-0.10	0.95	2.55	0.32	0.77	0.03	0.20	0.04	-0.17	-0.08	-0.02	0.33	0.21	0.04	3.35	3.00	69.48	-0.17	23.20	44.24	23.03	23.62	9.02	68.60	1.99	0.00	-0.02	-0.01	-0.09	0.00			0.02	219.02
10	7/6/2004	21:39:13.57	-0.09	1.71	3.30	0.31	0.76	0.03	0.20	0.04	-0.17	-0.09	0.00	0.32	0.22	-0.01	3.34	2.99	86.62	0.54	23.17	44.75	23.00	23.59	9.31	68.65	2.74	-0.01	-0.03	-0.01	-0.09	0.00			0.02	219.08
11	7/6/2004	21:42:13.57	-0.10	1.74	3.36	0.32	0.76	0.02	0.20	0.04	-0.18	-0.08	0.00	0.32	0.22	-0.13	3.45	3.10	86.62	0.81	23.16	44.90	22.98	23.58	9.22	68.70	2.80	0.00	-0.03	-0.02	-0.09	0.00			0.02	219.14
12	7/6/2004	21:45:13.57	-0.10	1.73	3.34	0.31	0.76	0.03	0.19	0.04	-0.18	-0.08	0.00	0.32	0.22	-0.14	3.38	3.03	86.62	-0.17	23.16	45.05	22.98	23.58	9.13	68.75	2.78	-0.01	-0.03	-0.01	-0.10	0.00			0.02	219.21
13	7/6/2004	21:48:13.57	-0.10	1.73	3.26	0.32	0.77	0.03	0.19	0.04	-0.17	-0.09	0.00	0.33	0.22	-0.14	3.31	2.96	86.62	0.56	23.24	44.97	22.98	23.66	8.97	68.80	2.70	0.00	-0.02	-0.01	-0.10	0.00			0.02	219.27
14	7/6/2004	21:51:13.57	-0.10	1.73	3.34	0.31	0.77	0.03	0.22	0.04	-0.17	-0.09	0.00	0.33	0.24	-0.14	3.52	3.16	86.62	-0.17	23.19	43.22	22.94	23.61	9.09	68.85	2.78	-0.01	-0.02	-0.01	-0.08	0.00			0.02	219.34
15	7/6/2004	21:54:13.57	-0.09	1.74	3.32	0.32	0.76	0.03	0.19	0.04	-0.18	-0.08	0.00	0.32	0.25	-0.14	3.71	3.34	86.62	0.54	23.19	40.48	22.94	23.61	9.17	68.90	2.76	0.00	-0.03	-0.01	-0.10	0.00			0.02	219.41
16	7/6/2004	21:57:13.57	-0.10	1.74	3.34	0.31	0.77	0.02	0.20	0.04	-0.13	-0.09	-0.02	0.32	0.26	-0.14	3.24	2.89	86.62	-0.01	23.15	39.57	22.89	23.65	9.12	68.95	2.78	-0.01	-0.02	-0.02	-0.09	0.00			0.02	219.47
17	7/6/2004	22:00:13.57	-0.10	1.74	3.34	0.32	0.76	0.02	0.19	0.07	-0.14	-0.09	-0.02	0.33	0.26	-0.14	3.29	2.94	86.62	0.26	23.07	38.71	22.89	23.65	9.04	69.00	2.78	0.00	-0.03	-0.02	-0.10	0.03		4.50	0.02	219.54
18	7/6/2004	22:03:13.57	-0.10	1.73	3.34	0.31	0.76	0.03	0.19	0.06	-0.18	-0.09	0.00	0.32	0.29	-0.12	3.20	2.86	86.62	0.82	23.10	36.07	22.85	23.60	8.91	69.05	2.78	-0.01	-0.03	-0.01	-0.10	0.02			0.02	219.60
19	7/6/2004	22:06:13.57	-0.10	1.74	3.32	0.32	0.76	0.02	0.19	0.05	-0.14	-0.09	0.00	0.32	0.29	-0.14	3.47	3.11	86.62	-0.18	23.10	33.54	22.93	23.60	8.99	69.10	2.76	0.00	-0.03	-0.02	-0.10	0.01			0.02	219.66
20	7/6/2004	22:09:13.57	-0.12	1.74	3.34	0.32	0.76	0.06	0.19	0.05	-0.14	-0.10	0.00	0.32	0.29	-0.12	3.61	3.25	86.62	0.40	23.02	31.40	22.85	23.60	8.99	69.15	2.78	0.00	-0.03	0.02	-0.10	0.01			0.02	219.73
21	7/6/2004	22:12:13.57	-0.12	1.74	3.30	0.32	0.77	0.06	0.19	0.07	-0.14	-0.12	-0.02	0.32	0.30	-0.14	3.10	2.76	86.62	0.85	23.02	30.13	22.85	23.52	9.08	69.20	2.74	0.00	-0.02	0.02	-0.10	0.03			0.02	219.80
22	7/6/2004	22:15:13.57	-0.12	1.74	3.34	0.32	0.76	0.06	0.19	0.07	-0.14	-0.12	0.00	0.32	0.32	-0.12	3.27	2.92	86.62	-0.18	23.05	29.21	22.80	23.55	9.03	69.25	2.78	0.00	-0.03	0.02	-0.10	0.03			0.02	219.86
23	7/6/2004	22:18:13.57	-0.10	1.74	3.34	0.35	0.77	0.06	0.18	0.07	-0.14	-0.10	0.00	0.32	0.32	-0.14	3.02	2.69	86.62	0.96	23.01	28.52	22.75	23.51	8.98	69.30	2.78	0.03	-0.02	0.02	-0.11	0.03			0.02	219.92
24	7/6/2004	22:21:13.57	-0.10	1.76	3.34	0.36	0.77	0.06	0.20	0.07	-0.14	-0.10	-0.02	0.32	0.32	-0.11	3.24	2.90	86.62	-0.18	23.01	27.97	22.83	23.51	8.90	69.35	2.78	0.04	-0.02	0.02	-0.09	0.03			0.02	219.98
25	7/6/2004	22:24:13.57	-0.12	1.76	3.30	0.35	0.76	0.05	0.19	0.07	-0.14	-0.10	-0.02	0.32	0.32	-0.11	3.10	2.77	86.62	0.48	22.92	27.56	22.74	23.42	8.81	69.40	2.74	0.03	-0.03	0.01	-0.10	0.03			0.02	220.05
26	7/6/2004	22:27:13.57	-0.10	1.76	3.28	0.35	0.76	0.06	0.19	0.07	-0.14	-0.10	0.00	0.32	0.32	-0.11	3.11	2.77	86.62	-0.18	23.04	27.36	22.79	23.54	9.10	69.45	2.72	0.03	-0.03	0.02	-0.10	0.03			0.02	220.11
27	7/6/2004	22:30:13.57	-0.12	1.74	3.30	0.35	0.76	0.05	0.23	0.07	-0.14	-0.10	-0.02	0.32	0.32	-0.11	3.49	3.14	91.04	0.79	23.00	27.08	22.82	23.50	8.97	69.50	2.74	0.03	-0.03	0.01	-0.06	0.03		4.50	0.02	220.17
28	7/6/2004	22:33:13.57	-0.12	1.74	3.28	0.35	0.76	0.03	0.22	0.07	-0.14	-0.12	0.00	0.32	0.32	-0.11	3.39	3.04	91.04	-0.17	22.95	26.79	22.78	23.45	8.92	69.55	2.72	0.03	-0.03	-0.01	-0.08	0.03			0.02	220.24
29	7/6/2004	22:36:13.57	-0.12	1.76	3.30	0.35	0.76	0.05	0.23	0.07	-0.14	-0.10	0.00	0.32	0.35	-0.11	3.45	3.10	91.04	0.45	22.87	26.63	22.70	23.45	8.76	69.60	2.74	0.03	-0.03	0.01	-0.06	0.03			0.02	220.30
30	7/6/2004	22:39:13.57	-0.12	1.74	3.32	0.36	0.77	0.05	0.24	0.07	-0.14	-0.12	-0.02	0.32	0.35	-0.12	3.48	3.13	91.04	0.49	22.91	26.43	22.73	23.41	8.88	69.65	2.76	0.04	-0.02	0.01	-0.05	0.03			0.02	220.37
31	7/6/2004	22:42:13.57	-0.12	1.74	3.34	0.35	0.77	0.03	0.24	0.07	-0.14	-0.12	-0.02	0.32	0.35	-0.11	3.48	3.13	91.04	0.31	22.91	26.35	22.73	23.49	8.96	69.70	2.78	0.03	-0.02	-0.01	-0.05	0.03			0.02	220.43
32	7/6/2004	22:45:13.57	-0.12	1.76	3.36	0.35	0.78	0.03	0.24	0.07	-0.16	-0.12	0.00	0.32	0.35	-0.12	3.37	3.02	91.04	0.06	22.91	26.19	22.73	23.49	8.79	69.75	2.80	0.03	-0.01	-0.01	-0.05	0.03			0.02	220.50
33	7/6/2004	22:48:13.57	-0.12	1.76	3.36	0.35	0.79	0.03	0.25	0.07	-0.16	-0.12	0.00	0.32	0.35	-0.12	3.94	3.57	91.04	0.53	22.94	26.14	22.77	23.44	8.99	69.80	2.80	0.03	0.00	-0.01	-0.04	0.03			0.03	220.56
34	7/6/2004	22:51:13.57	-0.14	1.76	3.32	0.35	0.79	0.03	0.25	0.07	-0.14	-0.13	0.00	0.32	0.33	-0.11	3.78	3.41	91.04	0.49	22.86	26.06	22.77	23.44	8.83	69.85	2.76	0.03	0.00	-0.01	-0.04	0.03			0.02	220.63
35	7/6/2004	22:54:13.57	-0.12	1.76	3.30	0.35	0.78	0.02	0.25	0.07	-0.17	-0.12	-0.02	0.32	0.33	-0.12	3.69	3.33	91.04	0.66	22.90	26.09	22.64	23.39	8.87	69.90	2.74	0.03	-0.01	-0.02	-0.04	0.03			0.02	220.70
36	7/6/2004	22:57:13.57	-0.14	1.74	3.34	0.35	0.79	0.03	0.26	0.07	-0.16	-0.12	-0.02	0.32	0.35	-0.12	2.70	2.39	91.04	0.21	22.81	26.01	22.64	23.31	8.78	69.95	2.78	0.03	0.00	-0.01	-0.03	0.03			0.02	220.77
37	7/6/2004	23:00:13.57	-0.12	1.76	3.34	0.35	0.79	0.03	0.28	0.07	-0.17	-0.12	-0.02	0.32	0.33	-0.12	3.61	3.25	91.04	0.79	22.81	25.93	22.64	23.31	8.62	70.00	2.78	0.03	0.00	-0.01	-0.01	0.03		4.50	0.02	220.83
38	7/6/2004	23:03:13.57	-0.14	1.76	3.32	0.35	0.80	0.03	0.31	0.07	-0.13	-0.12	0.00	0.32	0.36	-0.11	3.30	2.95	91.04	0.57	22.81	26.01	22.64	23.31	8.70	70.05	2.76	0.03	0.01	-0.01	0.02	0.03			0.02	220.90
39	7/6/2004	23:06:13.57	-0.14	1.76	3.32	0.35	0.79	0.02	0.31	0.07	-0.16	-0.12	0.00	0.33	0.33	-0.12	3.74	3.37	91.04	0.67	22.77	26.05	22.59	23.35	8.74	70.10	2.76	0.03	0.00	-0.02	0.02	0.03			0.02	220.96
40	7/6/2004	23:09:13.57	-0.14	1.76	3.32	0.35	0.80	0.03	0.31	0.07	-0.16	-0.12	0.00	0.35	0.33	-0.12	3.53	3.18	91.04	0.74	22.85	25.89	22.67	23.35	8.65	70.15	2.76	0.03	0.01	-0.01	0.02	0.03			0.02	221.04
41	7/6/2004	23:12:13.57	-0.14	1.76	3.30	0.35	0.80	0.03	0.30	0.07	-0.17	-0.12	0.00	0.36	0.33	-0.13	3.15	2.81	91.04	0.14	22.80	25.76	22.63	23.30	8.85	70.20	2.74	0.03	0.01	-0.01	0.01	0.03			0.02	221.10
42	7/6/2004	23:15:13.57	-0.14	1.76	3.32	0.35	0.82	0.03	0.33	0.07	-0.17	-0.12	-0.02	0.36	0.33	-0.12	3.16	2.82	91.04	0.33	22.80	25.68	22.63	23.30	8.85	70.25	2.76	0.03	0.03	-0.01	0.04	0.03			0.02	221.17
43	7/6/2004	23:18:13.57	-0.14	1.74	3.30	0.35	0.83	0.02	0.33	0.07	-0.16	-0.12	-0.02	0.35	0.33	-0.12	2.70	2.38	91.04	0.13	22.68	25.56	22.58	23.26	8.64	70.30	2.74	0.03	0.04	-0.02	0.04	0.03			0.02	221.23
44	7/6/2004	23:21:13.57	-0.14	1.74	3.30	0.35	0.84	0.02	0.31	0.07	-0.16	-0.12	0.00	0.36	0.33	-0.11	3.78	3.41	91.04	0.37	22.76	25.48	22.58	23.26	8.64	70.35	2.74	0.03	0.05	-0.02	0.02	0.03			0.02	221.30
45	7/6/2004	23:24:13.57	-0.16	1.74	3.28	0.35	0.84	0.03	0.31	0.07	-0.17	-0.12	-0.02	0.35	0.32	-0.13	3.57	3.21	91.04	0.20	22.68	25.48	22.50	23.26	8.81	70.40	2.72	0.03	0.05	-0.01	0.02	0.03			0.02	221.37
46	7/6/2004	23:27:13.57	-0.16	1.76	3.32	0.36	0.85	0.02	0.33	0.07	-0.16	-0.12	-0.02	0.35	0.33	-0.12	2.52	2.21	91.04	0.61	22.76	25.40	22.58	23.26	8.81	70.45	2.76	0.04	0.06	-0.02	0.04	0.03			0.02	221.43
47	7/6/2004	23:30:13.57	-0.16	1.76	3.28	0.36	0.87	0.03	0.34	0.07	-0.16	-0.12	0.00	0.36	0.33	-0.12	3.31	2.96	91.04	0.38	22.71	25.27	22.54	23.21	8.68	70.50	2.72	0.04	0.08	-0.01	0.05	0.03		4.50	0.02	221.49
48	7/6/2004	23:33:13.57	-0.16	1.76	3.30	0.35	0.88	0.03	0.36	0.07	-0.16	-0.12	0.00	0.36	0.33	-0.11	2.43	2.13	91.04	-0.18	22.76	25.24	22.58	23.26	8.97	70.55	2.74	0.03	0.09	-0.01	0.07	0.03			0.02	221.56
49	7/6/2004	23:36:13.57	-0.18	1.76	3.32	0.35	0.89	0.02	0.36	0.07	-0.16	-0.12	-0.02	0.35	0.32	-0.12	3.14	2.80	91.04	0.67	22.63	25.19	22.46	23.13	8.68	70.60	2.76	0.03	0.10	-0.02	0.07	0.03			0.02	221.62
50	7/6/2004	23:39:13.57	-0.18	1.78	3.32	0.35	0.89	0.03	0.38	0.09	-0.14	-0.13	0.00	0.36	0.33	-0.12	3.85	3.48	91.04	-0.18	22.71	25.11	22.46	23.13	8.68	70.65	2.76	0.03	0.10	-0.01	0.09	0.05			0.02	221.68
51	7/6/2004	23:42:13.57	-0.18	1.78	3.32	0.36	0.90	0.03	0.40	0.07	-0.12	-0.12	0.00	0.35	0.36	-0.11	4.51	4.12	91.04	0.10	22.84	25.00	22.58	23.26	8.81	70.70	2.76	0.04	0.11	-0.01	0.11	0.03			0.03	221.75
52	7/6/2004	23:45:13.57	-0.18	1.76	3.32	0.35	0.90	0.02	0.39	0.07	-0.13	-0.12	0.00	0.35	0.32	-0.13	3.35	3.00	91.04	0.45	22.71	25.11	22.54	23.29	8.76	70.75	2.76	0.03	0.11	-0.02	0.10	0.03			0.02	221.82
53	7/6/2004	23:48:13.57	-0.18	1.76	3.34	0.35	0.90	0.03	0.39	0.06	-0.13	-0.12	0.00	0.31	0.32	-0.12	3.11	2.77	91.04	-0.18	22.71	25.03	22.54	23.21	8.84	70.80	2.78	0.03	0.11	-0.01	0.10	0.02			0.02	221.88
54	7/6/2004	23:51:13.57	-0.20	1.76	3.30	0.35	0.90	0.02	0.39	0.06	-0.11	-0.12	-0.02	0.33	0.33	-0.12	2.80	2.48	91.04	0.63	22.71	25.03	22.46	23.13	8.60	70.85	2.74	0.03	0.11	-0.02	0.10	0.02			0.02	221.95
55	7/6/2004	23:54:13.57	-0.20	1.78	3.34	0.35	0.90	0.03	0.39	0.06	-0.12	-0.12	0.00	0.35	0.32	-0.12	3.24	2.89	91.04	0.31	22.75	24.91	22.49	23.17	8.80	70.90	2.78	0.03	0.11	-0.01	0.10	0.02			0.02	222.01

Table H3-4-9. CIX Campaign II, Cycle 4, 0.25M NaOH Regenerant

Raw differential pressures were adjusted by adding or subtracting an offset so that the corrected differential pressure would be zero when the flow was zero. The flowmeter reading was corrected using flow checks using a graduated cylinder and stopwatch.

	DATE	TIME	P1	P2	P3	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	Flow	flow	Cond1	pH	T1	T2	T3	T4	T5	elaps-	DP1	DP2	DP3	DP4	DP5	DP6	Resin	Resin	differ-	cumul-
	units		psig	psig	psig	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	meter	cor.			ºC	ºC	ºC	ºC	ºC	ed	cor.	cor.	cor.	cor.	cor.	cor.	H1	H2	ential	lative
						water	water	water	water	water	water	water	water	water	water	water	L/hr	L/hr	mS/cm								inch	inch	inch	inch	inch	inch	inches	inches	BV	BV
	instrument		TR-3539	TR-2145	TR-2919	TR-3714	TR-3713	TR-3756	TR-3751	TR-3754	TR-3749	TR-3716	TR-3763	TR-3752	TR-3755	TR-3750	TR-3703				TR-2814	TR-2816	TR-3724	TR-1504	TR-2933	(hours)	water	water	water	water	water	water				
1	7/6/2004	23:56:13.57	-0.20	1.43	2.93	0.35	0.79	0.03	0.29	0.07	-0.17	-0.12	-0.04	0.35	0.26	-0.19	0.14	0.04	82.20	0.14	22.70	25.10	22.45	22.80	8.67	70.94	2.37	0.03	0.00	-0.01	0.00	0.03			0.07	220.50
2	7/7/2004	07:52:58.07	-0.75	-1.27	0.33	0.32	0.89	0.03	0.31	0.07	-0.17	-0.12	-0.04	0.32	0.36	-0.14	0.14	0.04	86.62	0.80	22.74	24.50	22.08	22.03	8.21	75.88	-0.24	0.00	0.10	-0.01	0.02	0.03			0.00	220.57
3	7/7/2004	07:56:58.07	-0.77	1.65	3.28	0.31	1.01	0.02	0.45	0.05	-0.11	-0.12	0.02	0.32	0.40	0.02	7.63	7.25	99.61	0.35	22.75	21.69	22.17	22.37	8.06	75.95	2.72	-0.01	0.22	-0.02	0.16	0.01			0.05	220.58
4	7/7/2004	08:00:58.07	-0.77	1.74	3.39	0.31	1.01	0.03	0.46	0.05	-0.11	-0.12	0.06	0.32	0.38	0.04	7.32	6.94	104.03	-0.16	22.75	6.70	22.17	22.45	8.31	76.02	2.83	-0.01	0.22	-0.01	0.17	0.01			0.05	220.77
5	7/7/2004	08:04:58.07	-0.77	2.09	3.74	0.32	1.01	0.03	0.45	0.04	-0.09	-0.12	0.07	0.32	0.37	0.04	7.34	6.95	112.60	0.59	22.67	7.93	22.17	22.37	8.47	76.08	3.18	0.00	0.22	-0.01	0.16	0.00			0.05	220.97
6	7/7/2004	08:08:58.07	-0.77	1.74	3.37	0.32	1.01	0.02	0.46	0.04	-0.11	-0.12	0.08	0.32	0.37	0.05	7.28	6.90	99.61	-0.18	22.67	9.66	22.17	22.37	8.47	76.15	2.81	0.00	0.22	-0.02	0.17	0.00			0.05	221.17
7	7/7/2004	08:12:58.07	-0.77	1.74	3.41	0.31	1.01	0.03	0.46	0.05	-0.11	-0.12	0.12	0.32	0.36	0.04	7.28	6.90	99.61	0.64	22.67	11.38	22.17	22.37	8.47	76.22	2.85	-0.01	0.22	-0.01	0.17	0.01			0.05	221.37
8	7/7/2004	08:16:58.07	-0.77	1.74	3.39	0.32	1.02	0.03	0.46	0.04	-0.11	-0.12	0.13	0.32	0.36	0.04	7.34	6.95	99.61	-0.17	22.71	15.51	22.14	22.41	8.43	76.28	2.83	0.00	0.23	-0.01	0.17	0.00			0.05	221.56
9	7/7/2004	08:20:58.07	-0.78	1.73	3.36	0.32	1.04	0.03	0.46	0.05	-0.11	-0.12	0.14	0.32	0.36	0.05	7.55	7.17	43.50	0.08	22.84	19.12	22.18	22.46	8.48	76.35	2.80	0.00	0.25	-0.01	0.17	0.01			0.05	221.76
10	7/7/2004	08:24:58.07	-0.80	1.69	3.34	0.32	1.05	0.03	0.46	0.04	-0.09	-0.12	0.14	0.32	0.35	0.04	7.47	7.09	21.68	0.73	22.93	20.18	22.27	22.39	8.33	76.42	2.78	0.00	0.26	-0.01	0.17	0.00			0.05	221.97
11	7/7/2004	08:28:58.07	-0.82	1.71	3.34	0.32	0.99	0.02	0.46	0.04	-0.09	-0.12	0.16	0.32	0.36	0.05	7.48	7.10	17.52	-0.08	22.98	20.71	22.32	22.43	8.37	76.48	2.78	0.00	0.20	-0.02	0.17	0.00			0.05	222.17
12	7/7/2004	08:32:58.07	-0.82	1.71	3.36	0.33	0.98	0.03	0.46	0.04	-0.11	-0.12	0.16	0.32	0.33	0.04	7.49	7.11	13.10	0.06	22.98	20.87	22.24	22.43	8.46	76.55	2.80	0.01	0.19	-0.01	0.17	0.00			0.05	222.37
13	7/7/2004	08:36:58.07	-0.82	1.71	3.34	0.33	0.98	0.03	0.46	0.04	-0.09	-0.12	0.16	0.32	0.35	0.05	7.50	7.12	13.10	1.26	23.06	21.12	22.32	22.51	8.46	76.62	2.78	0.01	0.19	-0.01	0.17	0.00			0.05	222.58
14	7/7/2004	08:40:58.07	-0.82	1.71	3.32	0.35	0.99	0.02	0.46	0.05	-0.09	-0.12	0.14	0.32	0.32	0.05	7.48	7.10	8.69	2.72	22.98	21.20	22.32	22.59	8.37	76.68	2.76	0.03	0.20	-0.02	0.17	0.01		4.50	0.05	222.78
15	7/7/2004	08:44:58.07	-0.84	1.71	3.36	0.35	1.00	0.03	0.46	0.05	-0.09	-0.12	0.16	0.32	0.32	0.05	7.51	7.13	8.69	2.81	23.06	21.20	22.40	22.83	8.54	76.75	2.80	0.03	0.21	-0.01	0.17	0.01			0.05	222.98
16	7/7/2004	08:48:58.07	-0.84	1.69	3.32	0.35	1.00	0.03	0.46	0.05	-0.08	-0.12	0.14	0.32	0.32	0.05	7.53	7.15	8.95	2.85	22.94	21.32	22.45	22.88	8.59	76.82	2.76	0.03	0.21	-0.01	0.17	0.01			0.05	223.19
17	7/7/2004	08:52:58.07	-0.84	1.71	3.34	0.35	1.02	0.03	0.46	0.06	-0.08	-0.12	0.16	0.32	0.32	0.05	7.50	7.12	8.95	2.67	23.07	21.37	22.49	23.01	8.71	76.88	2.78	0.03	0.23	-0.01	0.17	0.02			0.05	223.39
18	7/7/2004	08:56:58.07	-0.84	1.73	3.36	0.35	1.01	0.02	0.46	0.06	-0.07	-0.12	0.16	0.32	0.32	0.05	7.53	7.15	8.69	2.90	23.07	21.45	22.49	23.17	8.63	76.95	2.80	0.03	0.22	-0.02	0.17	0.02			0.05	223.59
19	7/7/2004	09:00:58.07	-0.84	1.73	3.36	0.35	1.05	0.02	0.46	0.06	-0.07	-0.12	0.14	0.32	0.32	0.05	7.47	7.09	8.69	3.24	23.03	21.66	22.46	23.21	8.51	77.02	2.80	0.03	0.26	-0.02	0.17	0.02			0.05	223.79
20	7/7/2004	09:04:58.07	-0.86	1.74	3.39	0.35	1.04	0.03	0.46	0.07	-0.07	-0.12	0.16	0.32	0.32	0.05	7.51	7.13	4.53	3.35	22.95	21.74	22.46	23.29	8.43	77.08	2.83	0.03	0.25	-0.01	0.17	0.03			0.05	224.00
21	7/7/2004	09:08:58.07	-0.86	1.78	3.41	0.35	1.02	0.03	0.46	0.07	-0.07	-0.12	0.14	0.33	0.31	0.05	7.48	7.10	4.53	4.44	23.00	21.86	22.58	23.42	8.64	77.15	2.85	0.03	0.23	-0.01	0.17	0.03			0.05	224.20
22	7/7/2004	09:12:58.07	-0.88	1.76	3.41	0.35	1.04	0.03	0.46	0.07	-0.07	-0.13	0.16	0.30	0.31	0.05	7.44	7.06	4.53	5.97	23.04	21.83	22.55	23.54	8.53	77.22	2.85	0.03	0.25	-0.01	0.17	0.03			0.05	224.40
23	7/7/2004	09:16:58.07	-0.88	1.78	3.41	0.35	1.06	0.03	0.46	0.07	-0.07	-0.12	0.16	0.30	0.31	0.05	7.50	7.12	4.27	5.88	22.96	21.83	22.55	23.54	8.53	77.28	2.85	0.03	0.27	-0.01	0.17	0.03			0.05	224.60
24	7/7/2004	09:20:58.07	-0.88	1.80	3.41	0.35	1.07	0.03	0.46	0.07	-0.06	-0.12	0.14	0.31	0.31	0.07	7.50	7.12	8.69	6.59	23.01	21.87	22.59	23.59	8.49	77.35	2.85	0.03	0.28	-0.01	0.17	0.03			0.05	224.81
25	7/7/2004	09:24:58.07	-0.88	1.82	3.45	0.35	1.09	0.03	0.46	0.07	-0.06	-0.12	0.14	0.31	0.31	0.07	7.52	7.14	8.69	6.84	23.15	21.93	22.57	23.65	8.71	77.42	2.89	0.03	0.30	-0.01	0.17	0.03			0.05	225.01
26	7/7/2004	09:28:58.07	-0.88	1.71	3.36	0.35	1.13	0.02	0.46	0.07	-0.06	-0.12	0.14	0.30	0.31	0.05	7.50	7.12	8.69	4.64	23.24	21.94	22.66	23.74	8.81	77.48	2.80	0.03	0.34	-0.02	0.17	0.03			0.05	225.21
27	7/7/2004	09:32:58.07	-0.88	1.71	3.32	0.35	1.04	0.03	0.46	0.07	-0.06	-0.12	0.14	0.32	0.32	0.05	7.50	7.12	8.95	5.40	23.28	21.91	22.63	23.78	8.69	77.55	2.76	0.03	0.25	-0.01	0.17	0.03			0.05	225.41
28	7/7/2004	09:36:58.07	-0.88	1.71	3.32	0.35	1.02	0.02	0.47	0.07	-0.06	-0.12	0.14	0.32	0.31	0.05	7.52	7.14	8.95	8.59	23.33	21.87	22.59	23.83	8.74	77.62	2.76	0.03	0.23	-0.02	0.18	0.03			0.05	225.62
29	7/7/2004	09:40:58.07	-0.89	1.73	3.34	0.35	1.02	0.02	0.46	0.07	-0.03	-0.12	0.14	0.32	0.31	0.07	7.50	7.12	8.69	7.53	23.42	21.88	22.69	24.00	8.75	77.68	2.78	0.03	0.23	-0.02	0.17	0.03		5.70	0.05	225.82
30	7/7/2004	09:44:58.07	-0.89	1.71	3.36	0.33	1.01	0.03	0.47	0.07	-0.04	-0.12	0.14	0.32	0.31	0.07	7.51	7.13	8.95	7.56	23.55	21.93	22.65	24.05	8.79	77.75	2.80	0.01	0.22	-0.01	0.18	0.03			0.05	226.02
31	7/7/2004	09:48:58.07	-0.89	1.73	3.37	0.31	1.01	0.03	0.49	0.07	-0.06	-0.12	0.14	0.33	0.31	0.07	7.49	7.11	8.69	9.61	23.56	21.94	22.74	24.06	8.72	77.82	2.81	-0.01	0.22	-0.01	0.20	0.03			0.05	226.23
32	7/7/2004	09:52:58.07	-0.88	1.71	3.36	0.32	0.99	0.03	0.49	0.07	-0.04	-0.10	0.14	0.32	0.31	0.05	7.48	7.10	8.95	8.02	23.56	21.94	22.74	24.14	8.81	77.88	2.80	0.00	0.20	-0.01	0.20	0.03			0.05	226.43
33	7/7/2004	09:56:58.07	-0.88	1.73	3.36	0.32	0.99	0.00	0.47	0.07	-0.04	-0.12	0.14	0.32	0.31	0.07	7.47	7.09	8.95	9.02	23.48	21.86	22.66	24.14	8.72	77.95	2.80	0.00	0.20	-0.04	0.18	0.03			0.05	226.63
34	7/7/2004	10:00:58.07	-0.89	1.63	3.15	0.32	0.57	0.00	0.09	0.07	-0.24	-0.10	0.03	0.32	0.15	-0.03	0.67	0.51	8.95	8.15	23.48	22.02	22.74	24.14	8.81	78.02	2.59	0.00	-0.22	-0.04	-0.20	0.03		6.05	0.00	226.83
35	7/7/2004	10:04:58.07	-0.89	0.33	1.91	0.31	0.63	0.01	0.15	0.07	-0.20	-0.10	0.06	0.32	0.22	-0.03	0.14	0.04	8.69	9.94	23.57	22.03	22.75	23.83	8.16	78.08	1.35	-0.01	-0.16	-0.03	-0.14	0.03			0.00	226.84
36	7/7/2004	10:08:58.07	-0.89	1.71	3.36	0.31	0.98	0.01	0.49	0.04	-0.04	-0.10	0.14	0.32	0.31	-0.03	7.52	7.14	8.95	8.73	23.62	22.48	22.80	24.20	8.86	78.15	2.80	-0.01	0.19	-0.03	0.20	0.00			0.05	227.00
37	7/7/2004	10:12:58.07	-0.89	1.71	3.37	0.32	0.98	0.02	0.49	0.04	-0.04	-0.09	0.14	0.32	0.32	-0.03	7.50	7.12	8.95	8.58	23.66	22.45	22.85	24.24	8.75	78.22	2.81	0.00	0.19	-0.02	0.20	0.00			0.05	227.20
38	7/7/2004	10:16:58.07	-0.89	1.73	3.37	0.31	0.99	0.02	0.50	0.04	-0.04	-0.09	0.14	0.32	0.32	-0.03	7.49	7.11	8.95	10.39	23.71	22.41	22.81	24.21	8.79	78.28	2.81	-0.01	0.20	-0.02	0.21	0.00			0.05	227.41
39	7/7/2004	10:20:58.07	-0.89	1.73	3.36	0.31	0.99	0.02	0.49	0.04	-0.04	-0.09	0.14	0.32	0.32	-0.03	7.49	7.11	8.95	10.14	23.76	22.38	22.78	24.25	8.76	78.35	2.80	-0.01	0.20	-0.02	0.20	0.00			0.05	227.61
40	7/7/2004	10:24:58.07	-0.89	1.73	3.36	0.32	0.99	0.03	0.50	0.04	-0.04	-0.08	0.14	0.32	0.32	-0.03	7.48	7.10	8.69	10.26	23.80	22.26	22.90	24.30	8.72	78.42	2.80	0.00	0.20	-0.01	0.21	0.00			0.05	227.81
41	7/7/2004	10:28:58.07	-0.88	1.74	3.37	0.32	0.99	0.02	0.49	0.04	-0.04	-0.08	0.14	0.32	0.33	-0.03	7.44	7.06	8.95	10.19	23.84	22.22	22.86	24.33	8.76	78.48	2.81	0.00	0.20	-0.02	0.20	0.00			0.05	228.01
42	7/7/2004	10:32:58.07	-0.89	1.74	3.37	0.32	1.00	0.02	0.50	0.04	-0.06	-0.08	0.13	0.32	0.35	-0.03	7.49	7.11	8.95	9.05	23.80	22.18	22.82	24.30	8.64	78.55	2.81	0.00	0.21	-0.02	0.21	0.00			0.05	228.22
43	7/7/2004	10:36:58.07	-0.89	1.74	3.37	0.31	1.01	0.03	0.52	0.04	-0.04	-0.08	0.14	0.32	0.36	-0.04	7.60	7.23	8.95	11.31	23.72	22.02	22.82	24.22	8.72	78.62	2.81	-0.01	0.22	-0.01	0.23	0.00			0.05	228.42
44	7/7/2004	10:40:58.07	-0.89	1.76	3.43	0.31	1.01	0.02	0.52	0.05	-0.04	-0.08	0.13	0.32	0.35	-0.07	7.48	7.10	8.69	8.97	23.85	21.99	22.87	24.11	8.69	78.68	2.87	-0.01	0.22	-0.02	0.23	0.01			0.05	228.62
45	7/7/2004	10:44:58.07	-0.89	1.78	3.41	0.32	1.02	0.02	0.55	0.04	-0.04	-0.08	0.13	0.32	0.35	-0.03	7.49	7.11	8.95	10.47	23.89	22.03	22.92	24.07	8.65	78.75	2.85	0.00	0.23	-0.02	0.26	0.00			0.05	228.82
46	7/7/2004	10:48:58.07	-0.89	1.78	3.41	0.31	1.04	0.02	0.56	0.04	-0.06	-0.08	0.13	0.32	0.36	-0.03	7.56	7.19	8.95	11.79	23.89	22.28	22.92	23.99	8.74	78.82	2.85	-0.01	0.25	-0.02	0.27	0.00			0.05	229.03
47	7/7/2004	10:52:58.07	-0.88	1.78	3.43	0.32	1.05	0.03	0.56	0.04	-0.06	-0.08	0.13	0.32	0.36	-0.03	7.43	7.05	13.10	10.65	23.97	22.03	23.00	23.91	8.82	78.88	2.87	0.00	0.26	-0.01	0.27	0.00			0.05	229.23
48	7/7/2004	10:56:58.07	-0.88	1.80	3.43	0.31	1.06	0.03	0.56	0.04	-0.04	-0.08	0.12	0.32	0.35	-0.04	7.48	7.10	13.10	9.21	23.94	22.08	22.96	23.88	8.78	78.95	2.87	-0.01	0.27	-0.01	0.27	0.00			0.05	229.43
49	7/7/2004	11:00:58.07	-0.88	1.80	3.43	0.32	1.06	0.02	0.56	0.04	-0.04	-0.08	0.13	0.32	0.35	-0.04	7.58	7.20	13.10	11.58	23.94	22.00	22.96	23.80	8.87	79.02	2.87	0.00	0.27	-0.02	0.27	0.00			0.05	229.63
50	7/7/2004	11:04:58.07	-0.88	1.82	3.45	0.32	1.09	0.03	0.56	0.04	-0.04	-0.08	0.12	0.32	0.35	-0.07	7.49	7.11	13.10	11.48	23.99	22.13	23.01	23.76	8.91	79.08	2.89	0.00	0.30	-0.01	0.27	0.00			0.05	229.84
51	7/7/2004	11:08:58.07	-0.88	1.82	3.45	0.32	1.10	0.02	0.56	0.04	-0.04	-0.08	0.12	0.33	0.35	-0.07	7.46	7.08	13.10	10.54	24.03	22.17	22.97	23.65	8.96	79.15	2.89	0.00	0.31	-0.02	0.27	0.00			0.05	230.04
52	7/7/2004	11:12:58.07	-0.88	1.82	3.47	0.32	1.12	0.03	0.53	0.04	-0.03	-0.08	0.13	0.33	0.36	-0.07	7.59	7.21	13.10	11.07	24.11	22.17	23.05	23.65	9.04	79.22	2.91	0.00	0.33	-0.01	0.24	0.00			0.05	230.24
53	7/7/2004	11:16:58.07	-0.86	1.82	3.47	0.31	1.09	0.03	0.53	0.04	-0.03	-0.08	0.13	0.35	0.35	-0.07	7.47	7.09	13.36	10.92	24.08	22.38	23.10	23.45	9.01	79.28	2.91	-0.01	0.30	-0.01	0.24	0.00			0.05	230.45
54	7/7/2004	11:20:58.07	-0.88	1.84	3.45	0.31	1.07	0.02	0.53	0.04	-0.03	-0.08	0.13	0.35	0.36	-0.07	7.49	7.11	13.10	9.57	24.08	22.38	23.02	23.37	9.01	79.35	2.89	-0.01	0.28	-0.02	0.24	0.00			0.05	230.65
55	7/7/2004	11:24:58.07	-0.88	1.84	3.48	0.31	1.07	0.03	0.53	0.04	-0.03	-0.08	0.14	0.36	0.36	-0.07	7.52	7.14	17.52	10.98	24.16	22.54	23.02	23.13	9.01	79.42	2.92	-0.01	0.28	-0.01	0.24	0.00			0.05	230.85
56	7/7/2004	11:28:58.07	-0.88	1.74	3.36	0.32	1.07	0.03	0.57	0.04	-0.03	-0.10	0.14	0.35	0.36	-0.07	7.53	7.15	17.52	9.19	24.20	22.75	23.07	23.02	8.97	79.48	2.80	0.00	0.28	-0.01	0.28	0.00			0.05	231.05
57	7/7/2004	11:32:58.07	-0.88	1.73	3.41	0.31	1.07	0.03	0.52	0.04	-0.03	-0.12	0.14	0.35	0.36	-0.07	7.48	7.10	17.52	10.10	24.25	22.79	23.11	22.98	8.94	79.55	2.85	-0.01	0.28	-0.01	0.23	0.00			0.05	231.26
58	7/7/2004	11:36:58.07	-0.88	1.74	3.39	0.31	1.07	0.03	0.53	0.04	-0.07	-0.12	0.14	0.35	0.35	-0.07	7.50	7.12	17.52	11.11	24.30	22.84	23.16	23.03	8.82	79.62	2.83	-0.01	0.28	-0.01	0.24	0.00			0.05	231.46
59	7/7/2004	11:40:58.07	-0.88	1.73	3.37	0.31	1.09	0.05	0.53	0.04	-0.06	-0.12	0.14	0.36	0.36	-0.07	7.48	7.10	17.52	9.66	24.30	22.76	23.16	23.03	8.82	79.68	2.81	-0.01	0.30	0.01	0.24	0.00			0.05	231.66
60	7/7/2004	11:44:58.07	-0.86	1.73	3.37	0.32	1.09	0.05	0.53	0.04	-0.07	-0.12	0.16	0.32	0.36	-0.07	7.50	7.12	17.52	8.85	24.30	22.76	23.16	23.03	8.99	79.75	2.81	0.00	0.30	0.01	0.24	0.00			0.05	231.87
61	7/7/2004	11:48:58.07	-0.88	1.76	3.41	0.32	1.09	0.05	0.53	0.04	-0.07	-0.12	0.16	0.32	0.35	-0.07	7.44	7.06	13.10	8.93	24.34	22.81	23.21	23.16	9.03	79.82	2.85	0.00	0.30	0.01	0.24	0.00			0.05	232.07
62	7/7/2004	11:52:58.07	-0.88	-1.05	0.56	0.32	0.79	0.05	0.29	0.04	-0.17	-0.12	0.06	0.32	0.32	-0.11	0.15	0.04	13.10	10.98	24.39	23.01	23.17	23.12	8.83	79.88	0.00	0.00	0.00	0.01	0.00	0.00			0.00	232.22
63	7/7/2004	11:56:58.07	-0.88	-1.05	0.56	0.32	0.79	0.06	0.29	0.04	-0.17	-0.12	0.06	0.32	0.32	-0.11	0.14	0.04	13.10	10.30	24.44	22.98	23.22	23.17	8.96	79.95	0.00	0.00	0.00	0.02	0.00	0.00			0.00	232.22

Section H4: Pilot Feed Waste Evaporator Process (TLP) Raw Data

Like for the FEP, the TLP data were obtained ever 60 seconds, however the following tables have been reduced in size to show only the data ever 300 seconds. The full data stream is available upon request.

The short headings for used in TLP tables the are described below

Legend for TLP Data

Conc Temp. Reboiler In	Concentrate Temperature at Reboiler Inlet
Conc Temp. Reboiler out	Concentrate Temperature at Reboiler Outlet
Reboiler Steam Supply Temp.	Reboiler Steam Supply Temperature
Ejector Steam Supply Temp.	Ejector (Vacuum Pump) Steam Supply Temperature
Cooling Water Supply Temp.	Cooling Water Supply (to all condensers) Temperature
Evap. Vessel Temp.	Evaporator Vessel Concentrate Temperature
Primary Condensate Temp.	Primary Condensate Temperature
Inter. Cond. Outlet Temp.	Inter-condenser Outlet Temperature
After Cond. Outlet Temp.	After-condenser Outlet Temperature
Recirc. Flow Rate	Recirculation Flow Rate of Concentrate
Feed Rate	Feed Rate to the Evaporator Recirculation Loop
Prim. Condensate Flow	Primary Condensate Flow Rate
Intercondenser Press.	Intercondenser Pressure
Evaporator Press.	Evaporator Pressure

Table H4-1a: Campaign II

TLP Campaign II Data

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
1	5/12/2004	6:25:05 AM	44.04	47.37	109.87	173.09	22.89	44.91	22.95	23.68	25.45	67.76	0.01	0.00	-3.06	-4.81
2	5/12/2004	6:35:07 AM	65.26	67.10	135.69	174.69	20.82	64.97	23.24	21.74	23.72	84.05	-0.01	0.00	-9.19	-10.92
3	5/12/2004	6:45:08 AM	49.51	53.79	146.32	170.92	20.54	49.42	24.26	21.38	23.25	83.69	-0.01	0.18	-11.47	-13.33
4	5/12/2004	6:55:09 AM	46.52	50.07	147.14	174.60	20.43	46.37	23.76	21.37	23.36	83.30	-0.01	0.66	-11.71	-13.40
5	5/12/2004	7:05:11 AM	45.95	49.88	147.99	174.18	20.36	45.80	24.01	21.29	23.27	83.12	0.08	0.33	-11.80	-13.43
6	5/12/2004	7:15:12 AM	48.32	52.70	147.94	172.93	20.32	48.52	23.84	21.21	23.16	83.24	0.79	0.23	-11.54	-13.42
7	5/12/2004	7:25:13 AM	56.13	60.36	147.98	170.89	20.29	56.31	23.72	21.12	23.01	83.55	0.73	0.16	-10.94	-12.67
8	5/12/2004	7:35:15 AM	55.72	59.90	147.50	170.29	20.24	55.81	23.75	21.06	22.97	83.43	0.65	0.91	-11.00	-12.73
9	5/12/2004	7:45:16 AM	55.44	59.63	147.90	170.61	20.24	55.49	23.91	21.05	23.00	83.32	0.61	0.55	-11.07	-12.79
10	5/12/2004	7:55:17 AM	56.39	60.52	147.19	170.43	20.23	56.46	23.76	21.05	22.95	83.22	0.59	0.52	-11.01	-12.76
11	5/12/2004	8:05:19 AM	57.16	61.25	146.67	170.34	20.23	57.24	23.71	21.04	22.93	83.14	0.57	0.51	-10.97	-12.74
12	5/12/2004	8:15:20 AM	57.24	61.03	147.59	170.03	20.22	57.30	23.40	21.02	22.92	83.05	0.55	0.50	-10.98	-12.74
13	5/12/2004	8:25:21 AM	52.48	55.90	147.85	174.59	20.22	52.39	23.57	21.10	23.18	82.62	0.42	0.45	-11.39	-13.16
14	5/12/2004	8:35:23 AM	53.23	56.83	148.12	174.10	20.20	53.30	23.08	20.99	23.11	82.50	0.35	0.33	-11.48	-13.16
15	5/12/2004	8:45:24 AM	59.60	62.42	147.72	174.84	20.19	59.56	22.69	20.73	23.17	82.67	0.33	0.24	-11.60	-12.51
16	5/12/2004	8:55:26 AM	56.81	60.32	148.32	173.92	20.19	56.76	23.36	21.07	23.12	83.40	0.45	0.52	-11.12	-12.88
17	5/12/2004	9:05:27 AM	55.69	59.26	148.45	173.41	20.18	55.70	23.31	21.05	23.07	84.31	0.47	0.52	-11.22	-13.01
18	5/12/2004	9:15:28 AM	56.30	59.79	148.46	173.21	20.16	56.30	23.22	21.03	23.03	85.02	0.46	0.45	-11.20	-12.97
19	5/12/2004	9:25:30 AM	56.77	60.22	148.50	173.28	20.15	56.74	23.28	21.02	23.03	85.26	0.45	0.44	-11.19	-12.95
20	5/12/2004	9:35:31 AM	56.71	60.14	148.50	173.35	20.15	56.69	23.20	21.02	23.02	85.35	0.44	0.44	-11.23	-12.96
21	5/12/2004	9:45:33 AM	57.24	60.62	148.53	173.26	20.14	57.21	23.19	21.01	23.01	85.24	0.43	0.44	-11.22	-12.96
22	5/12/2004	9:55:34 AM	57.69	61.04	148.55	173.22	20.14	57.69	23.11	21.01	23.01	85.12	0.45	0.44	-11.19	-12.95
23	5/12/2004	10:05:35 AM	57.86	61.17	148.54	173.31	20.14	57.85	23.12	21.01	23.01	85.35	0.45	0.43	-11.21	-12.96
24	5/12/2004	10:15:37 AM	61.22	64.64	143.85	171.06	20.14	61.31	22.70	20.98	22.92	87.22	0.39	0.42	-10.88	-12.86
25	5/12/2004	10:25:38 AM	59.07	62.44	144.46	171.56	20.14	58.83	24.73	21.00	22.94	86.84	0.40	0.36	-11.24	-13.04
26	5/12/2004	10:35:39 AM	58.08	61.15	142.37	170.92	20.15	57.68	22.95	20.96	22.86	86.29	0.46	0.33	-11.24	-13.35
27	5/12/2004	10:45:41 AM	60.33	62.84	136.50	170.39	20.13	59.72	22.82	20.94	22.80	87.29	0.52	0.72	-10.94	-13.33
28	5/12/2004	10:55:42 AM	60.54	63.04	138.69	170.16	20.13	59.46	23.47	20.94	22.79	87.37	0.51	0.38	-11.02	-13.28
29	5/12/2004	11:05:44 AM	60.44	62.95	141.51	170.16	20.12	59.32	23.60	20.94	22.81	87.28	0.49	0.48	-11.06	-13.28

Table H4-1b: Campaign II

TLP Campaign II Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
30	5/12/2004	11:15:45 AM	60.76	63.25	140.24	170.35	20.12	59.64	23.47	20.93	22.80	87.21	0.43	0.49	-11.06	-13.29
31	5/12/2004	11:25:46 AM	61.27	63.72	140.28	170.38	20.12	60.06	23.48	20.94	22.81	86.86	0.07	0.47	-11.08	-13.28
32	5/12/2004	11:35:48 AM	61.72	64.01	140.12	170.12	20.12	60.66	23.26	20.94	22.77	86.03	0.57	0.49	-11.02	-13.27
33	5/12/2004	11:45:49 AM	73.68	62.59	141.21	170.60	20.11	59.14	23.32	20.94	22.80	86.37	0.81	0.45	-11.09	-13.26
34	5/12/2004	11:55:50 AM	177.30	57.58	143.58	173.53	20.11	54.59	23.12	20.99	22.98	86.18	0.51	0.46	-11.43	-13.39
35	5/12/2004	12:05:52 PM	177.35	60.02	148.62	173.66	20.12	56.70	23.13	20.99	23.01	86.44	0.58	0.43	-11.35	-13.40
36	5/12/2004	12:15:53 PM	177.43	61.35	148.57	173.17	20.11	58.14	22.84	20.97	22.96	86.59	0.60	0.46	-11.21	-13.39
37	5/12/2004	12:25:54 PM	177.49	63.98	147.75	174.33	20.11	61.59	22.42	21.00	23.04	86.86	0.56	0.17	-10.85	-13.25
38	5/12/2004	12:35:56 PM	65.82	60.06	147.57	175.34	20.12	57.86	22.00	21.03	23.11	86.79	0.56	0.32	-11.16	-13.28
39	5/12/2004	12:45:57 PM	61.19	64.10	148.41	174.39	20.13	61.07	22.64	21.02	23.06	87.04	0.10	0.53	-10.91	-13.26
40	5/12/2004	12:55:59 PM	63.06	66.00	148.56	174.33	20.13	63.07	22.78	21.03	23.10	86.61	0.19	0.22	-10.77	-12.83
41	5/12/2004	1:06:00 PM	59.12	62.16	148.41	174.22	20.13	59.92	22.31	21.04	23.11	87.25	0.30	0.20	-10.88	-12.83
42	5/12/2004	1:16:01 PM	59.33	62.47	148.31	174.27	20.15	59.19	23.19	21.04	23.04	88.19	0.04	0.24	-10.87	-12.84
43	5/12/2004	1:26:03 PM	59.17	62.27	148.46	174.32	20.13	59.12	23.06	21.03	23.06	87.81	0.29	0.29	-10.92	-12.84
44	5/12/2004	1:36:04 PM	59.50	62.57	148.46	174.36	20.15	59.48	22.93	21.03	23.07	87.86	0.41	0.81	-10.91	-12.84
45	5/12/2004	1:46:05 PM	59.79	62.82	148.47	174.18	20.14	59.77	22.91	21.03	23.09	87.80	0.40	0.40	-10.91	-12.84
46	5/12/2004	1:56:07 PM	60.08	63.08	148.48	174.29	20.16	60.06	22.96	21.05	23.14	87.75	0.40	0.39	-10.92	-12.86
47	5/12/2004	2:06:08 PM	58.09	61.49	145.51	173.06	20.17	57.96	23.97	21.02	23.02	87.47	0.41	0.39	-11.22	-13.03
48	5/12/2004	2:16:10 PM	60.19	63.72	136.60	170.20	20.16	60.19	23.05	20.96	22.80	87.45	0.39	0.36	-10.92	-12.91
49	5/12/2004	2:26:11 PM	57.59	61.21	135.97	170.56	20.16	57.55	23.74	20.96	22.82	87.02	0.40	0.62	-11.18	-13.01
50	5/12/2004	2:36:12 PM	58.98	62.54	136.99	170.46	20.18	58.96	23.49	20.98	22.82	86.74	0.46	0.53	-11.10	-12.91
51	5/12/2004	2:46:14 PM	58.69	62.28	136.71	170.97	20.18	58.70	23.51	20.99	22.86	86.40	0.65	0.47	-11.12	-12.93
52	5/12/2004	2:56:15 PM	56.35	60.00	140.48	170.31	20.20	56.32	23.76	20.98	22.83	86.08	0.67	0.48	-11.31	-13.10
53	5/12/2004	3:06:17 PM	57.05	60.72	137.44	170.75	20.20	57.15	23.45	21.01	22.86	86.15	0.84	0.51	-11.21	-13.01
54	5/12/2004	3:16:18 PM	56.71	60.41	138.63	170.64	20.20	56.81	23.58	21.00	22.85	86.46	0.87	0.47	-11.19	-13.01
55	5/12/2004	3:26:19 PM	56.33	60.04	138.44	170.56	20.20	56.44	23.53	21.00	22.86	86.86	0.86	0.48	-11.21	-13.03
56	5/12/2004	3:36:21 PM	56.40	60.12	138.93	170.63	20.21	56.47	23.69	21.01	22.85	87.03	0.74	0.48	-11.24	-13.03
57	5/12/2004	3:46:22 PM	56.24	59.97	138.52	170.80	20.21	56.30	23.63	21.01	22.89	86.98	0.71	0.50	-11.25	-13.04
58	5/12/2004	3:56:23 PM	56.42	60.14	139.05	170.95	20.21	56.40	23.75	21.01	22.89	86.97	0.45	0.49	-11.28	-13.05

Table H4-1c: Campaign II

TLP Campaign II Data (Contd…)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
59	5/12/2004	4:06:25 PM	56.39	60.06	139.73	170.71	20.20	56.33	23.71	21.01	22.90	86.63	0.31	0.50	-11.31	-13.10
60	5/12/2004	4:16:26 PM	57.34	60.98	140.53	170.65	20.19	57.35	23.64	21.00	22.85	86.35	0.65	0.49	-11.24	-13.02
61	5/12/2004	4:26:28 PM	56.05	59.77	139.13	170.88	20.18	56.16	23.59	20.99	22.87	86.31	0.99	0.49	-11.26	-13.05
62	5/12/2004	4:36:29 PM	55.52	59.27	140.26	170.96	20.17	55.67	23.49	20.97	22.88	86.77	1.00	0.48	-11.27	-13.05
63	5/12/2004	4:46:30 PM	55.33	59.13	140.38	170.95	20.19	55.48	23.58	20.98	22.87	87.00	0.95	0.48	-11.27	-13.05
64	5/12/2004	4:56:32 PM	55.61	59.38	138.95	170.63	20.19	55.72	23.60	20.98	22.85	87.18	0.88	0.48	-11.23	-13.02
65	5/12/2004	5:06:33 PM	55.54	59.34	140.05	170.94	20.19	55.64	23.61	20.98	22.88	87.20	0.85	0.49	-11.23	-13.02
66	5/12/2004	5:16:34 PM	56.39	60.14	139.75	170.83	20.19	56.32	23.76	20.98	22.88	87.26	0.28	0.49	-11.22	-12.99
67	5/12/2004	5:26:36 PM	57.24	60.94	140.09	171.20	20.19	57.06	23.83	20.99	22.90	86.90	-0.01	0.51	-11.27	-13.00
68	5/12/2004	5:36:37 PM	57.59	61.21	140.02	170.88	20.19	57.52	23.57	20.99	22.86	86.36	0.27	0.52	-11.25	-13.05
69	5/12/2004	5:46:39 PM	57.91	61.52	140.81	171.10	20.19	57.94	23.57	20.99	22.86	86.31	0.74	0.49	-11.27	-13.03
70	5/12/2004	5:56:40 PM	53.42	55.43	136.53	174.36	20.18	53.58	21.17	21.07	23.01	86.03	0.69	0.48	-11.23	-13.20
71	5/12/2004	6:06:41 PM	52.99	54.54	132.01	174.54	20.17	52.69	22.99	20.95	22.64	86.23	0.12	0.20	-10.46	-12.32

Table H4-2a: Campaign III

TLP Campaign III Data

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
1	7/8/2004	6:17:45 AM	23.02	22.63	22.36	168.01	22.42	20.71	22.54	23.27	25.37	0.11	-0.01	0.14	-1.82	-3.40
2	7/8/2004	6:27:46 AM	23.89	24.07	40.64	175.43	21.92	23.26	21.90	22.90	25.10	40.56	-0.01	0.01	-8.36	-10.12
3	7/8/2004	6:37:47 AM	50.70	52.66	143.53	174.96	21.75	51.11	21.69	22.69	24.87	90.62	-0.01	0.03	-9.39	-11.22
4	7/8/2004	6:47:49 AM	58.87	59.17	136.30	175.55	21.65	58.68	21.60	22.62	24.81	89.88	-0.01	0.02	-9.83	-11.74
5	7/8/2004	6:57:50 AM	57.33	59.56	131.53	174.77	21.57	57.14	23.71	22.52	24.65	90.17	0.15	0.14	-10.33	-12.11
6	7/8/2004	7:07:52 AM	49.34	53.59	145.57	172.53	21.51	49.46	25.55	22.41	24.48	89.38	0.70	0.35	-11.28	-12.99
7	7/8/2004	7:17:53 AM	50.90	55.25	142.48	170.54	21.47	51.00	25.60	22.34	24.29	89.10	0.60	0.86	-11.16	-12.93
8	7/8/2004	7:27:54 AM	51.88	56.17	140.26	170.95	21.41	52.00	25.11	22.44	24.05	89.31	0.67	0.55	-11.08	-12.91
9	7/8/2004	7:37:56 AM	52.00	56.24	141.57	170.37	21.34	52.16	24.73	22.30	23.91	89.08	0.76	0.54	-11.10	-12.87
10	7/8/2004	7:47:57 AM	52.53	56.76	141.31	170.71	21.33	52.71	24.82	22.30	23.92	89.15	0.85	0.54	-11.10	-12.84
11	7/8/2004	7:57:58 AM	52.50	56.71	144.03	170.73	21.30	52.67	24.77	22.27	23.91	89.21	0.82	0.55	-11.13	-12.85
12	7/8/2004	8:08:00 AM	52.80	56.99	142.12	170.86	21.27	52.96	24.66	22.25	23.89	89.16	0.70	0.53	-11.11	-12.89
13	7/8/2004	8:18:01 AM	53.33	57.47	141.00	170.51	21.27	53.42	24.77	22.24	23.87	89.21	0.56	0.55	-11.11	-12.87
14	7/8/2004	8:28:03 AM	53.71	57.84	141.73	170.83	21.25	53.76	24.69	22.23	23.88	88.88	0.49	0.53	-11.08	-12.86
15	7/8/2004	8:38:04 AM	54.25	58.32	141.42	170.61	21.24	54.30	24.73	22.21	23.84	88.89	0.47	0.55	-11.07	-12.86
16	7/8/2004	8:48:05 AM	55.54	59.52	141.23	170.51	21.24	55.66	24.25	38.16	23.73	88.76	0.49	0.49	-10.28	-12.79
17	7/8/2004	8:58:07 AM	56.58	60.19	144.92	170.94	21.24	56.63	24.58	30.33	23.85	88.81	0.51	0.55	-10.72	-12.68
18	7/8/2004	9:08:08 AM	55.05	59.01	140.81	170.42	21.21	55.12	24.52	22.21	23.79	88.58	0.48	0.52	-11.05	-12.90
19	7/8/2004	9:18:09 AM	55.70	59.64	139.96	170.90	21.21	55.74	24.57	22.22	23.81	88.38	0.47	0.52	-11.00	-12.91
20	7/8/2004	9:28:11 AM	55.83	59.72	139.89	170.26	21.20	55.89	24.47	22.19	23.76	88.15	0.44	0.51	-11.03	-12.89
21	7/8/2004	9:38:12 AM	56.02	59.89	140.09	170.49	21.18	56.07	24.51	22.19	23.78	88.19	0.49	0.52	-11.05	-12.87
22	7/8/2004	9:48:14 AM	56.14	59.98	141.20	170.30	21.17	56.24	24.38	22.17	23.76	88.05	0.59	0.50	-11.06	-12.86
23	7/8/2004	9:58:15 AM	56.25	60.10	141.91	170.51	21.19	56.32	24.52	22.20	23.78	88.00	0.58	0.51	-11.07	-12.84
24	7/8/2004	10:08:16 AM	55.98	59.82	141.75	170.54	21.18	56.12	24.37	22.18	23.76	87.94	0.77	0.50	-11.10	-12.85
25	7/8/2004	10:18:18 AM	56.34	60.15	140.59	170.31	21.14	56.46	24.31	22.15	23.73	88.00	0.68	0.49	-11.06	-12.87
26	7/8/2004	10:28:19 AM	56.80	60.60	141.83	170.38	21.17	56.87	24.44	22.17	23.75	87.92	0.51	0.50	-11.08	-12.86
27	7/8/2004	10:38:20 AM	56.92	60.70	141.81	170.48	21.14	56.98	24.35	22.15	23.76	87.87	0.53	0.50	-11.07	-12.90
28	7/8/2004	10:48:22 AM	56.45	60.26	143.02	170.66	21.17	56.61	24.34	22.18	23.77	87.85	0.78	0.49	-11.13	-12.92
29	7/8/2004	10:58:23 AM	57.18	60.91	141.91	170.21	21.14	57.25	24.18	22.14	23.73	87.76	0.41	0.47	-11.08	-12.92

Table H4-2b: Campaign III

TLP Campaign III Data (Contd..)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	°C	°C	°C	°C	°C	°C	°C	°C	GPM	GPM	GPM	PSIG	PSIG
30	7/8/2004	11:08:24 AM	57.60	61.32	142.60	170.43	21.16	57.60	24.56	22.17	23.76	87.64	0.34	0.52	-11.12	-12.92
31	7/8/2004	11:18:26 AM	57.01	60.77	143.99	170.60	21.14	57.11	24.37	22.16	23.76	87.07	0.69	0.50	-11.13	-12.91
32	7/8/2004	11:28:27 AM	56.42	60.23	140.19	170.72	21.16	56.66	24.22	22.18	23.76	87.20	0.94	0.48	-11.08	-12.89
33	7/8/2004	11:38:29 AM	56.40	60.19	142.42	170.53	21.13	56.55	24.23	22.14	23.74	87.36	0.66	0.48	-11.10	-12.90
34	7/8/2004	11:48:30 AM	57.05	60.83	142.92	170.76	21.15	57.11	24.45	22.17	23.77	87.26	0.53	0.50	-11.10	-12.93
35	7/8/2004	11:58:31 AM	57.40	61.11	142.43	170.16	21.13	57.47	24.29	22.14	23.73	87.17	0.51	0.49	-11.09	-12.92
36	7/8/2004	12:08:33 PM	57.42	61.15	142.65	170.53	21.16	57.53	24.37	22.17	23.78	87.13	0.66	0.49	-11.11	-12.90
37	7/8/2004	12:18:34 PM	57.32	61.04	142.90	170.82	21.14	57.44	24.32	22.16	23.78	87.33	0.68	0.49	-11.12	-12.89
38	7/8/2004	12:28:35 PM	57.68	61.37	141.83	170.36	21.17	57.84	24.21	22.18	23.76	87.24	0.74	0.46	-11.09	-12.93
39	7/8/2004	12:38:37 PM	56.94	60.67	143.06	170.71	21.14	57.12	24.25	22.16	23.77	87.40	0.90	0.49	-11.13	-12.94
40	7/8/2004	12:48:38 PM	56.93	60.67	144.05	170.71	21.17	57.13	24.37	22.19	23.79	88.01	0.97	0.49	-11.14	-12.92
41	7/8/2004	12:58:40 PM	57.52	61.17	141.17	170.00	21.15	57.65	24.08	22.16	23.74	88.99	0.66	0.45	-11.06	-12.91
42	7/8/2004	1:08:41 PM	57.83	61.51	143.88	170.66	21.18	57.84	24.54	22.21	23.81	88.89	0.35	0.52	-11.13	-12.91
43	7/8/2004	1:18:42 PM	57.25	60.94	144.19	170.96	21.16	57.33	24.42	22.19	23.81	88.52	0.64	0.50	-11.15	-12.90
44	7/8/2004	1:28:44 PM	57.25	60.95	143.17	170.22	21.18	57.43	24.35	22.20	23.78	88.16	0.76	0.49	-11.10	-12.86
45	7/8/2004	1:38:45 PM	57.12	60.81	142.10	170.45	21.17	57.32	24.29	22.19	23.79	88.55	0.90	0.48	-11.06	-12.86
46	7/8/2004	1:48:46 PM	56.57	60.32	142.06	170.98	21.17	56.75	24.37	22.21	23.83	88.84	0.90	0.49	-11.10	-12.94
47	7/8/2004	1:58:48 PM	56.92	60.64	141.12	170.55	21.19	57.12	24.32	22.22	23.80	88.99	0.88	0.48	-11.05	-12.92
48	7/8/2004	2:08:49 PM	56.93	60.65	140.69	170.51	21.18	57.12	24.36	22.21	23.81	89.27	0.87	0.49	-11.06	-12.89
49	7/8/2004	2:18:51 PM	57.64	61.34	141.41	170.41	21.21	57.73	24.45	22.23	23.81	89.30	0.53	0.49	-11.02	-12.86
50	7/8/2004	2:28:52 PM	57.48	61.16	141.79	170.52	21.20	57.54	24.41	22.23	23.81	89.13	0.40	0.49	-11.07	-12.86
51	7/8/2004	2:38:53 PM	57.13	60.81	144.17	170.85	21.19	57.19	24.57	22.22	23.84	88.91	0.54	0.52	-11.14	-12.90
52	7/8/2004	2:48:55 PM	57.59	61.26	142.31	170.96	21.20	57.68	24.42	22.23	23.85	88.99	0.61	0.49	-11.10	-12.93
53	7/8/2004	2:58:56 PM	57.51	61.17	142.25	170.66	21.23	57.64	24.30	22.25	23.82	88.66	0.67	0.47	-11.08	-12.91
54	7/8/2004	3:08:58 PM	56.84	60.53	141.76	170.50	21.20	57.00	24.43	22.22	23.82	88.52	0.80	0.50	-11.08	-12.92
55	7/8/2004	3:18:59 PM	56.23	59.97	143.54	170.89	21.20	56.39	24.44	22.23	23.85	88.68	0.86	0.50	-11.13	-12.91
56	7/8/2004	3:29:00 PM	56.63	60.37	142.65	170.65	21.23	56.82	24.39	22.25	23.84	88.79	0.86	0.48	-11.09	-12.90
57	7/8/2004	3:39:02 PM	56.85	60.59	142.24	170.88	21.22	57.04	24.33	22.26	23.86	89.02	0.85	0.48	-11.06	-12.85
58	7/8/2004	3:49:03 PM	56.13	59.90	143.04	170.92	21.22	56.30	24.48	22.25	23.86	89.05	0.85	0.50	-11.13	-12.89

Table H4-2c: Campaign III

TLP Campaign III Data (Contd..)

	DATE	TIME	Conc Temp. Reboiler In	Conc Temp. Reboiler out	Reboiler Steam Supply Temp.	Ejector Steam Supply Temp.	Cooling Water Supply Temp.	Evap. Vessel Temp.	Primary Conden-sate Temp.	Inter. Cond. Outlet Temp.	After Cond. Outlet Temp.	Recirc. Flow Rate	Feed Rate	Prim. Conden-sate Flow	Intercondenser Press.	Evapo-rator. Press.
			°C	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**°C**	**GPM**	**GPM**	**GPM**	**PSIG**	**PSIG**
59	7/8/2004	3:59:04 PM	56.83	60.56	140.31	170.89	21.21	57.00	24.29	22.25	23.85	89.30	0.79	0.47	-11.05	-12.85
60	7/8/2004	4:09:06 PM	56.46	60.14	143.73	170.30	21.21	56.45	24.56	22.24	23.84	89.19	0.27	0.52	-11.17	-12.91
61	7/8/2004	4:19:07 PM	57.85	61.50	141.29	170.90	21.23	57.83	24.46	22.27	23.85	88.96	0.28	0.50	-11.06	-12.85
62	7/8/2004	4:29:08 PM	57.81	61.44	143.04	170.96	21.23	57.88	24.39	22.27	23.86	88.78	0.66	0.48	-11.10	-12.88
63	7/8/2004	4:39:10 PM	57.00	60.68	143.55	170.86	21.23	57.14	24.49	22.27	23.87	88.95	0.89	0.50	-11.15	-12.92
64	7/8/2004	4:49:11 PM	57.03	60.70	140.80	170.65	21.24	57.14	24.37	22.26	23.84	88.71	0.69	0.49	-11.11	-12.88
65	7/8/2004	4:59:13 PM	57.17	60.85	141.43	170.91	21.27	57.27	24.42	22.29	23.89	88.55	0.75	0.48	-11.06	-12.87
66	7/8/2004	5:09:14 PM	56.35	60.06	141.55	170.82	21.26	56.53	24.44	22.28	23.89	88.72	0.91	0.49	-11.11	-12.88
67	7/8/2004	5:19:15 PM	57.15	60.82	140.15	170.50	21.26	57.19	24.35	22.27	23.87	88.79	0.38	0.48	-11.04	-12.85

Appendix I: SIPP Interim Reports

At the termination of each of the first three campaigns that made up the four-campaign SIPP task, an interim report was issued as per the Task Plan (Duignan, 2003c). Each of those interim reports discussed not only the campaign that had just ended, but those that preceded it. As such, this, the fourth report, not only discusses the last campaign, Campaign IV, but also contrasts the highlights of the results obtained in the preceding campaigns. Each of the interim reports was made to be stand alone and, therefore, contains a significant amount detail To include all of the detail contain in the interim reports into the body of this Final report would have made the report difficult to read.

The interim reports are referenced throughout this report and are listed in the Reference section. However, while those reports are accessible through the Westinghouse Savannah River Document Control their accessibility to the RPP-WTP project may be time consuming to obtain. Therefore, the three interim reports are annexed here in their entirety for ready reference.

Those reports are:

Appendix Section: I-1

Report Title: Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign I
Report Date: April 2004
WSRC Report Number: WSRC-TR-2004-00201, Rev. 0
RPP-WTP Report Number: SRT-RPP-2004-00034, Rev. 0
Number of Roman and Cardinal Numbered Pages: 46

Appendix Section: I-2

Report Title: Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign II
Report Date: September 2004
WSRC Report Number: WSRC-TR-2004-00478, Rev. 0
RPP-WTP Report Number: SRNL-RPP-2004-00075, Rev. 0
Number of Roman and Cardinal Numbered Pages: 200

Appendix Section: I-3

Report Title: Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign III
Report Date: November 2004
WSRC Report Number: WSRC-TR-2004-00565, Rev. 0
RPP-WTP Report Number: SRNL-RPP-2004-00092, Rev. 0
Number of Roman and Cardinal Numbered Pages: 165

Appendix Section: I-1

Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign I

[For Information Only]

INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT - CAMPAIGN I

April 2004

SAVANNAH RIVER NATIONAL LABORATORY

UNCLASSIFIED
DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

ADC & Reviewing Official: John Steinke
(Name and Title)

Date: 5/12/04

ADDITIONAL APPROVAL, IF APPLICABLE:

Official: for W.L. Tamosaitis
R&T Manager, RPP Hanford

Date: 5/18/04

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

Prepared for the U.S. Department of Energy Under Contract Number DEAC09-96SR18500

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Prepared For
U.S. Department of Energy

WSRC-TR-2004-00201, REV. 0
SRT-RPP-2004-00034, REV. 0

Key Words:
Ultrafiltration
Hanford Tank 241 AY-102/C-106

Retention:
Permanent

Key WTP R&T References:
Test Specifications:
24590-PTF-TSP-RT-02-015, Rev. 0, 15 Nov. 2002
24590-PTF-TSP-RT-03-002, Rev. 0, 05 Jun. 2003
Test Plan: WSRC-TR-2003-00338, Rev. 0, 04 Aug. 2003 (or SRT-RPP-2003000165)
Test Exceptions: None
R&T Focus Area: Ultrafiltration & SIPP
Test Scoping Statements: S-48 & S-134

INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT - CAMPAIGN I

M.R. Duignan, SRNL
J.R. Zamecnik, SRNL
M.R. Williams, SRNL

Issue Date: 19 APRIL 2004

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

Prepared for the U.S. Department of Energy Under Contract Number DE-AC09-96SR18500

REVIEWS AND APPROVALS

M.R. Duignan Engineering Development Laboratory RPP-WTP/SRNL — Date: 11 May 2004

J.R. Zamecnik, Process Development RPP-WTP/SRNL — Date: 5-11-04

M.R. Williams, Engineering Development Laboratory RPP-WTP/SRNL — Date: 5/11/04

H.N. Guerrero, Technical Reviewer, Engineering Development Laboratory/SRNL — Date: 5/11/04

T.B. Calloway, Jr., Level 4 Manager, Process Development RPP-WTP/SRNL — Date: 5/12/04

D.B. Burns, Level 4 Manager, Engineering Development Laboratory RPP-WTP/SRNL — Date: 5/12/04

R.A. Peterson, RPP Customer — Date: 5/18/04

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LIST OF NOMENCLATURE

ADS	Analytical Development Section (part of WSRC/SRNL)
AN102	Department of Energy Hanford Site Tank 241-AN-102
AN107	Department of Energy Hanford Site Tank 241-AN-107
AY102/C106	Department of Energy Hanford Site Combined Tanks 241-AY-102 and 241-C-106
BNI	Bechtel National, Inc.
CFD	Computational Fluid Dynamics
CUF	Cells Ultrafiltration facility (bench-top cross-flow filter used with both radioactively cold and hot wastes)
°C	Degree Centigrade (or Celcius)
D	Diameter
DIF	Deionized and Filtered (0.1 micron) Water
DOE	United States Department of Energy
dP	Differential Pressure
ft	Foot
i.d. or ID	Inside Diameter
in.	inch
hr	Time: Hour
HLW	High Lever (Activity) Waste
l or L	Liter
LAW	Low (Level) Activity Waste
m	Meter
M	Molar
Mg	Milligram
min	Time: Minute
ml or mL	Milliliter
mm	Millimeter
nominal	The word “nominal” for a filter rating is a vague term because its meaning is manufacturer dependent. Further, a “nominal” rating does not give an exact size to a filter medium, but rather an approximation to the expected performance of a filter. In the case of Mott, a nominal rated 0.1-μm filter means that approximately 95% of particles greater than 0.1 μm will not pass the filter.
NTU	Nephelometric Turbidity Unit
Pa	Pascal
PSD	Particle Size Distribution
psi	Pounds Per Square Inch
psig	Pounds Force Per Square Inch Gauge
psid	Pounds Force Per Square Inch Difference
QA	Quality Assurance
RPP	River Protection Project (at the DOE Hanford Site)
o.d. or OD	Outside Diameter

OLI	Modeling software which is part of Environmental Simulation Program software package used in developing the SIPP task
s or sec	Time: Second
SIPP	Semi-Integrated Pilot Plant
SRNL	Savannah River National Laboratory (part of WSRC)
Std Dev	Standard Deviation
TS	Total Solids
EDL	Engineering Development Laboratory (part of WSRC/SRNL)
TMP	Transmembrane Pressure (the average pressure drop across the thickness of the filter medium – perpendicular to the slurry flow.)
TRU	Transuranic
UDS	Undissolved Solids
UF	Ultrafiltration
UFP	Ultrafiltration Process (part of the RPP-WTP Pretreatment Facility)
V	Velocity of the slurry flow along the length of the filter tubes
WGI	Washington Group International
WTP	Waste & Immobilization Treatment Plant
WSRC	Westinghouse Savannah River Company

ABSTRACT

The first step towards performing the Semi Integrated Pilot Plant (SIPP) task was to subject a simulant of Hanford Tank 241-AY-102/C-106 (AY102/C106) to cross-flow ultrafiltration. That task is comprised of four campaigns of which the first, Campaign I, is the subject of this interim report. The report is called interim because it is limited to the results obtained from a single campaign and further limited to only highlights of that single campaign. A final report will follow Campaign IV and its intent is to comprehensively cover the overall task activities, as well as the full database accumulated and the equipment used during the yearlong SIPP task.

The SIPP task is considered semi-integrated because it only deals with the pretreatment operations of the DOE River Protection Plan – Waste Treatment and Immobilization Plant (RPP-WTP). That is, the pilot plant starts by receiving waste from the tank farm and ends when waste is processed to the point of being sent for vitrification.

SIPP is a limited version of the plant's pretreatment facility in that it tests pilot scale unit operation of Feed Evaporation, Ultrafiltration, Cesium Ion Exchange, and finally Treated LAW Evaporation. However, an integral part of SIPP is to produce the many recycle streams that must also be processed with stored tank farm waste. That is, it is very important to know the impact that the recycle streams will have on the operation of the several unit operations so as to better model the plant's overall pretreatment throughput, leading to a production rate of stabilized waste.

While Campaign II, III, and IV will utilize all four-unit operations and incorporate the many recycle streams, Campaign I is limited to the ultrafiltration of a single waste stream (AY102/C106) without recycles. This was done for three reasons: 1. To obtain filter flux results on a single waste to compare to other single waste filter tests done in the past so that filter performance can be determined, 2. To obtain filter flux results on a single waste to compare to the filter performance when the many recycle streams are added to that waste to determine their effect on flux, and 3. To produce first generation recycle streams for subsequent campaigns. Ultrafiltration will be the single largest source of such streams (~40%) and creating those streams by other means would lead to large uncertainties.

Campaign I started with a batch of AY102/C106 simulant at a prototypic undissolved solids (UDS) concentration of 12 wt%, which was then filtered to 24 wt% UDS and a final volume of 37 gallons. This volume represents the 18,000[†] gallons for the full-scale RPP-WTP. The batch was then washed twice with a caustic solution (0.01 M NaOH). Each wash volume (45 gallons) was based on planned plant flowsheet and each washing batch was administered in 22 equal minibatches to mimic twenty-two 1000-gallons batches to be used for each washing cycle in the full-scale plant. Finally, the washed simulated waste was drained from the ultrafiltration unit and stored for eventual vitrification and the unit was prototypically rinsed and acid cleaned to show cleaning effectiveness.

[†] After Campaign I began in January 2004, RPP-WTP increased the base filter batch size from 18,000 to 21,550 gallons.

During concentration[‡], the simulated waste started at a permeate filter flux of 0.014 gpm/ft^2 at 12.5 wt% UDS with a density of 1.27 kg/L, consistency of 13.4 mPa-s, and yield stress of 4.9 Pa. At the end of concentration' the permeate filter flux was 0.005 gpm/ft^2 at 23.7 wt% UDS with a density of 1.36 kg/L, consistency of 23.8 mPa-s, and yield stress of 34.8 Pa. The overall mean permeate filter flux during the 12 hours of concentration was 0.008 gpm/ft^2. Throughout concentration no solids were found in the separated permeate. The measured permeate turbidity remained below 0.5 NTU, which is significantly below the 2 NTU threshold set in the task plan to indicate significant solids.

To meet test requirements, before waste washing began, the solids concentration of the batch was reduced to 20 wt% UDS. During the first washing cycle the simulated waste started at a permeate filter flux of 0.015 gpm/ft^2 at 19.6 wt% UDS with a density of 1.33 kg/L, consistency of 19.1 mPa-s, and yield stress of 8.5 Pa. At the end of the first washing the permeate filter flux was 0.023 gpm/ft^2 at 20.1 wt% UDS with a density of 1.17 kg/L, consistency of 12.6 mPa-s, and yield stress of 10.4 Pa. The overall average permeate filter flux during the 7 hours of cycle 1 washing was 0.018 gpm/ft^2. During the second washing cycle the simulated waste started at a permeate filter flux of 0.025 gpm/ft^2. At the end of the second washing the permeate filter flux was 0.032 gpm/ft^2 at 20.6 wt% UDS with a density of 1.16 kg/L, consistency of 9.0 mPa-s, and yield stress of 8.2 Pa. The overall average permeate filter flux during the 4 hours of cycle 2 washing was 0.029 gpm/ft^2.

The filter cleaning sequence followed the RPP-WTP planned process of first rinsing the filter with caustic solution, then clean it three times with 2 M nitric acid, and finally rinsing twice with caustic solution. Each of the three acid cleaning lasted 90 minutes long with a significant permeate flux improvement after each. At the start of cleaning the permeate flux of the 2 M nitric acid was 0.10 gpm/ft^2 and after 4.5 hours, the three acid cleanings increased that flux to 0.32 gpm/ft^2.

Finally, the before and after water test to evaluate the level of cleanliness showed that the filter did not return to pre-test water permeate fluxes, but it was still more than an order of magnitude higher than when filtering waste. The average pre-test water permeate flux was 0.9 gpm/ft^2 at 11 ft/s axial velocity and a TMP of 30 psid. The average post-test water permeate flux was 0.2 gpm/ft^2 at 11 ft/s axial velocity and a TMP of 30 psid.

[‡] Unless otherwise noted, all the data described in the Abstract were obtained with the pilot ultrafiltration test rig operating at a constant slurry axial velocity of 11 ft/s, a transmembrane pressure of 40 psid, and a temperature of 25°C.

1.0 TESTING SUMMARY

1.1 OBJECTIVES

Campaign I, one of four planned campaigns for the SIPP task, is a completely separate body of work from Campaigns II to IV. This work was originally scoped as a stand alone task and as such had its own test specification (Townson, 2002; Scoping Statement S-48). That specification has since been incorporated into the larger SIPP task, which has a large set of objectives, many of which do not apply to this first campaign. However, the objectives listed in Scoping Statement S-48 are still applicable and therefore listed below:

Test Objective	Objective Met (Y/N)	Discussion
1. Collect data on performance of the ultrafilter unit to dewater the simulant derived from the tank 241-AY-102/C-106 characterization.	Y	Data were collected and discussed throughout this report.
2. Estimate the removal efficiency for soluble species and aid calculations to minimize the mass of waste oxides vitrified as HLW.	Y	Efficiency was determined from periodic samples. See the last column of Table 3.
3. Multi-tube cross-flow filtration tests will yield representative data on equipment performance (permeate flux, backpulse efficiency) and this will be cross checked by separate work done using the simulant and active waste at single tube scale.	Y	Pilot data obtained are compared to bench-top simulant and active waste test in section 2.12.

1.2 TEST EXCEPTIONS

List Test Exceptions	Describe Test Exceptions
1.None	N/A

1.3 RESULTS AND PERFORMANCE AGAINST SUCCESS CRITERIA

List Success Criteria	Explain How the Tests Did or Did Not Meet the Success Criteria
1.The project flowsheet currently assumes the concentrated slurry contains 20 wt% UDS, this test needs to confirm (or improve upon) that assumption. The target for this test will be set at 25 wt% UDS.	The assumption was confirmed by dewatering to greater than 20 wt% UDS. The maximum concentration attained was 24 wt% UDS.
2. No solids must pass into the ultrafiltration permeate (<0.001 wt% UDS) and/or permeate < 2 NTU.	Periodic turbidity checks consistency indicated the permeate to be solids free with a measurement of < 0.5 NTU

3. The mean flux throughout the complete dewatering cycle should be greater than 0.0277 gpm/ft^2 (24590-PTF-RPT-ENG-01-002, Rev. 0. *Impact of Study #17 on the Configuration of Ultrafiltration System*) and the TMP less than 60 psig.	The mean flux for dewatering the AY-102/C-106 simulant was 0.008 gpm/ft^2 over the 12.6-hour test; concentrating from 12.5 to 24 wt% UDS. While this flux is significantly below the desired mean flux of 0.0277 gpm/ft^2, the simulant does match the real waste behavior. There was 1 real waste test and 2 simulant tests at the bench-top scale. The solids concentration starting and ending points are all different, but a comparison can be made from 12.5 to 14 wt% UDS. The real waste mean permeate flux was 0.013 gpm/ft^2, the two bench-top test gave, 0.012 and 0.016 gpm/ft^2. The pilot-scale permeate flux, of this report, obtained 0.011 gpm/ft^2.
4. Determination of de-watering flux vs. wt% UDS solids at an optimum flow/TMP condition.	Those data were obtained and discussed in section 2.6.
5. Performance data generated from this simulant test matches data generated from similar test with real AY-102/C-106 waste samples.	Yes. See answer to item 3.
6. The cross-flow test rig after chemical cleaning can be returned to pre-test operating levels.	As shown in section 2.10 the post-test mean water flux at a TMP = 20 psid was 0.14 gpm/ft^2 and did not return to the 0.54 gpm/ft^2 obtained from the pre-test water flux. However, the post-test water flux was 5 times higher that the WTP dewater flux of 0.0277 gpm/ft^2 and was more than 17 times greater that the actual mean dewater flux of 0.008 gpm/ft^2.

1.4 QUALITY REQUIREMENTS

This work was conducted in accordance with the RPP-WTP QA requirements specified for work conducted by SRNL as identified in DOE IWO M0SRLE60. SRNL has provided matrices to WTP, demonstrating compliance of the SRNL QA program with the requirements specified by WTP. Specific information regarding the compliance of the SRNL QA program with RW-0333P, Revision 10, NQA-1 1989, Part 1, Basic and Supplementary Requirements and NQA-2a 1990, Subpart 2.7 is contained in these matrices.

1.5 R&T TEST CONDITIONS

List R&T Test Conditions	Were Test Conditions Followed?
1.The target minimum reportable quantity for each analyte in Table 1.2 (Townson, 2002) shall be reviewed to confirm that the minimum detection limit (MDL) is at least 3X below the target minimum reportable quantity. If the required MDL is not achievable for any particular analyte, then that analyte must be identified with the corresponding MDL value in the test plan.	All analytes that could not meet the listed criterion were indicated in the task plan and approved before testing began.
2. Permeate will be analyzed for solids by turbidity and the particle size, if sufficient solids make this possible, using a Lasentec particle size analyzer.	As listed in Success Criterion No. 2 the turbidity indicated that no significant undissolved solids were found, therefore no particle size distribution measurements were needed.
3. The QC target requirements listed in Tables 1.3, 1.4, and 1.5 (Townson, 2002) shall be reviewed and any requirements that are not expected to be met shall be identified and the expected delta from the criteria be identified. Permeate will be analyzed for solids by turbidity and the particle size, if sufficient solids make this possible, using a Lasentec particle size analyzer.	As listed in Success Criterion No. 2 the turbidity indicated that no significant undissolved solids were found, therefore no particle size distribution measurements were needed.

1.6 SIMULANT USE

A simulant of Hanford tank 241-AY-102/C-106 was used. The simulant was developed by SRNL (Zamecnik, et al., 2004) and evaluated against an actual waste sample. See section 3.3.

1.7 DISCREPANCIES AND FOLLOW-ON TESTS

No discrepancies occurred during testing, but there will be follow-on work. This test, referred to as Campaign I, is the first of four Campaigns, which make up an overall task referred to as Semi Integrated Pilot Plant (SIPP) (Duignan, 2003c).

2.0 DISCUSSION

2.1 *INTRODUCTION*

Bechtel National, Inc. (BNI) has been contracted by the Department of Energy (DOE) to design a Waste Treatment and Immobilization Plant (WTP) to stabilize liquid radioactive waste that is stored at the Hanford Site as part of the River Protection Project (RPP). Because of its experience with radioactive waste stabilization, the Savannah River National Laboratory (SRNL) of the Westinghouse Savannah River Company (WSRC) is working with BNI and Washington Group International (WGI), to help design and test certain parts of the waste treatment facility. One part of the process is the separation of radioactive solids from the liquid wastes by cross-flow ultrafiltration. This task tested a cross-flow filter, prototypic in porosity, length and diameter, with a simulated radioactive waste, made to prototypically represent the chemical and physical characteristics of a Hanford waste in tank 241-AY-102/C-106 (AY102/C106)).

This technical baseline research and development work was initiated by a WGI test specification (Townson, 2002) to test a simulated radioactive waste in an existing pilot scale cross-flow filtration system in the Engineering Development Laboratory (EDL) of SRNL. This specification requested a similar test to those previously done on the same equipment (Duignan, 2000a, Duignan, 2000b, Duignan, 2003a). The main difference was the simulated wasted tested. As in previous simulant tests, the actual waste was first filtered at a bench-top scale (Poirier et al., 2003) and then an SRNL simulant was developed (Zamecnik et al., 2004). In that same bench-top simulant report, the simulant was found to have the same filter performance as the actual waste. This report deals with the pilot-scale testing of that proven simulant to determine full-scale filter performance data.

The chosen filter was manufactured by the Mott Metallurgical Corporation to meet RPP-WTP specifications (Townson, 2002, Longwell, 2003), as follows:

7 filter tubes with each having an inside diameter of 0.5-inch
90-inch porous length for each filter tube and made of stainless steel
Nominal rated 0.1 micron filter element (‘nominal’ is explained in the nomenclature)

and the pilot test rig was designed to have the following:

Maximum axial velocity through filter tubes of 15 ft/s (4.6 m/s)
Maximum transmembrane pressure (TMP) of 60 psid (414 M Pa)
Maximum axial velocity to be achievable at the maximum TMP
Instrumentation to monitor the axial velocity, the permeate flow rate, the TMP, and the slurry temperature
All materials to be compatible with the high-caustic simulants and the 2 M nitric acid cleaning solution

All specifications were met or exceeded.

Before testing began, a larger task emerged to include not only filtration, but also all of the principal unit operations that make up the RPP-WTP pretreatment facility. They include: Feed Evaporation, Ultrafiltration, Ion Exchange, and then Treated LAW Evaporation and this larger test is referred to as the Semi Integrated Pilot Plant (SIPP). It is referred to as "semi-integrated" because the test does not include the vitrification portion of the plant. Another Test Specification was issued (Longwell, 2003) which incorporated the filtration Test Specification as a first step in the process to test all the unit operations. In general, the requirements of the initial Test Specification did not significantly change, but were only supplemented with further testing that would follow the ultrafiltration test. In the context, of the SIPP task, the ultrafiltration test gained a larger role. This test was now referred to as Campaign I, since it is the first of four planned campaigns of SIPP. Campaign I was not only to obtain filter performance data of AY102/C106 to compare to other single-waste filter test, but it would also produce several recycle streams, e.g., solutions used to wash the waste stream, solutions used to rinse and clean the filter, etc. Once these recycle streams were generated they could be combined with other streams to be fed to the entire series of unit operations in order to learn how those streams affect plant operations. Further, after the filter recycle streams are produced and combined with plant waste to be processed, the single waste, i.e., AY102/C102, filter data could be compared to those data after recycle streams are added. Such information would be more useful for RPP-WTP plant design since under steady state operations the plant will always operate with some feedback secondary streams, making the test data much more prototypic.

This report will discuss the filter operation during dewatering, constant slurry solids concentration, slurry washing, rinsing and cleaning, and highlights of simulant changes undergone from concentration to washing.

A summary of EDL task activities is as follows:

WGI Test Specification for UF Test Received – December 2002
WGI Test Specification for SIPP Received – June 2003
WSRC Task Technical & Quality Assurance Plan Approved – August 2003
Test Procedure Approved – October 2003
Received AY102/C106 Simulant – January 2004
Campaign I Test – 26 January to 12 February 2004

2.2 *CAMPAIGN I TEST MATRIX AND SIPP MODELING*

The ultrafiltration test specification (Townson, 2002) indicated the test matrix to be used and combined with the SIPP test specification (Longwell, 2003), several of the ultrafiltration test runs were eliminated. Table 1 shows the test matrix, which was summarized and condensed from both specifications. The number ordering of the test specifications has been maintained so that it could be compared to the original requirements. However, since several tests were eliminated by the second test specification, there are gaps between several of the test run numbers.

Table 1. Overall SIPP Campaign I Test Matrix

Test No.	Test Activity	Trans-membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp (°C)	Run Time (min.)
1.00A	Water (1)	10	11	25	20
1.00B	Water	20	11	25	20
1.00C	Water	30	11	25	20
1.03	Dewater to 25 wt% (2)	40	12	25	(3)
1.04	25 wt%	40	11	25	120
1.07	25 wt%	30	9	25	60
1.08	25 wt%	30	13	25	60
1.09	25 wt%	50	13	25	60
1.10	25 wt%	50	9	25	60
1.11	25 wt%	40	11	25	120
1.16	25 wt%	40	11	25	120
Wash	20 wt% (4)	40	12	30	(5)
1.17	> 20 wt%	40	12	25	(6)
1.18A	Water Rinse	40	12	25	30
1.18B	Acid clean (8)	40	12	25	90
1.18C	Acid clean	40	12	25	90
1.18D	Acid clean	40	12	25	90
1.19A	Water Rinse	20	12	25	30
1.19B	Water Rinse	20	12	25	30
1.19C	Water Rinse	20	12	25	30
1.20	Water (9)	10, 20, 30	11	25	60

Notes:
(1) - The water was deionized, filtered with a 0.1-micron absolute filter, then made caustic to 0.1 M NaOH (but 0.01 M NaOH for washing).
(2) - wt% = weight percent of undissolved solids
(3) - Run time is the time to dewater the simulant from the low wt% to the final concentration. The only test specification requirement was to run for no less than 12 hours.
(4) - To meet the test spec. the slurry was diluted to 20 wt% UDS, then washed with two volumes of water (note 1) each equaling 21/18 x simulant volume. Each wash was broken down into 22 mini-washes.
(5) - The wash run time was the time necessary to introduce and remove all 22 subvolumes.
(6) - Test 1.17 run time was not fixed. Filtering was to continue until the simulant plugged the filter, or some test rig limit was reached.
(8) - 2 M nitric acid was used.
(9) - The rinse water from run 1.19C was left in the test rig for this test.

This test matrix and, in general, all SIPP Campaign I work, was not impacted significantly by SIPP needs. That is, Campaign I is still the independent filter test as described by Townson, 2003. However, the following campaigns are highly dependent on resulting simulant streams from Campaign I and as such all four campaigns needed to be planned together. To plan for SIPP, SRNL did its own modeling to determine how to run Campaigns II, III, IV through Campaign I dependence. Using the RPP-WTP flowsheet (Lee and Binsfield), an OLI model was made of steady-state Pretreatment operation. This model was used to determine the operation of the pilot-scale unit operations of the Pretreatment system. Campaign I was used by the model to make the connection between pilot-scales and the full-size plant. A key parameter for the rate of glass production in the plant is the size of the Ultrafiltration washed batch of HLW. The pilot ultrafiltration batch size for waste is 140 L (or 37 gallons). The

plant UFP batch size was 18,000[†] gallons. With this scale, the OLI model was used to scale all other pilot streams. Where the model was useful in directing some of the Campaign I testing is in the caustic and acidic streams used to rinse and clean the filter after dewatering. These streams would be stored after Campaign I to be recycled as part of the feed for Campaign II. The model indicated Campaign II recycle streams volumes and therefore solids concentrations could be estimated from expected waste heels in the plant. This will be discussed in more detail in the section on rinsing and cleaning.

2.3 *SIMULANT*

The principal reason for this test was to evaluate filter performance for a simulated waste from Hanford Tank 241-AY-102/C-106, therefore, the test is only as good as the simulant used. Previously, an actual waste sample was obtained from Hanford and cross-flow filter tested at a bench-top scale[‡] (Poirier et al., 2003). A simulant recipe was developed and within measurement uncertainty, matched the chemical breakdown of the actual waste shown in Table 2. The simulant was then tested with the bench-top scale, CUF Run 1, to evaluate its performance against the actual waste. Within measurement uncertainty the two filter results were the same (Zamecnik et al, 2004) as is shown in Fig. 1.

Table 2. AY-102 / C-106 Actual Waste Composition

Species	mg/kg	Species	mg/kg	Species	mg/kg
Ag	254	Mg	217	Y	27.5
Al	15579	Mn	4889	Zn	36.2
B	13.9	Mo	47.3	Zr	708
Ba	100	Na	76878	NO3-	255
Bi	5.69	Ni	594	NO2-	4077
Ca	693	Nd	211	PO4[-3]	3618
Cd	19.9	P	1670	SO4=	1700
Ce	146	Pb	703	C2O4-	2882
Co	5.97	Pr	59.9	Cl	125
Cr	382	Rb	2.02	Br	84.8
Cs	3.77	S	716	F	139
Cu	44.4	Si	9075	COOH-	129
Fe	22682	Sr	64.2	Citrate	47.5
K	365	U	548	CH3COO-	422
La	102	V	5.87	OH-	6235
Li	92.6	W	125	CO3=	58474

[†] After Campaign I was complete the RPP-WTP UFP batch size was increased from 18,000 gallons to 21,550 gallons to account for waste heels in the tanks. That change is incorporated in future campaigns, but not for Campaign I.
[‡] The bench-top test apparatus is referred to a CUF = Cells Unit Filter, because it was made to operate in the radioactive hot cells at SRNL.

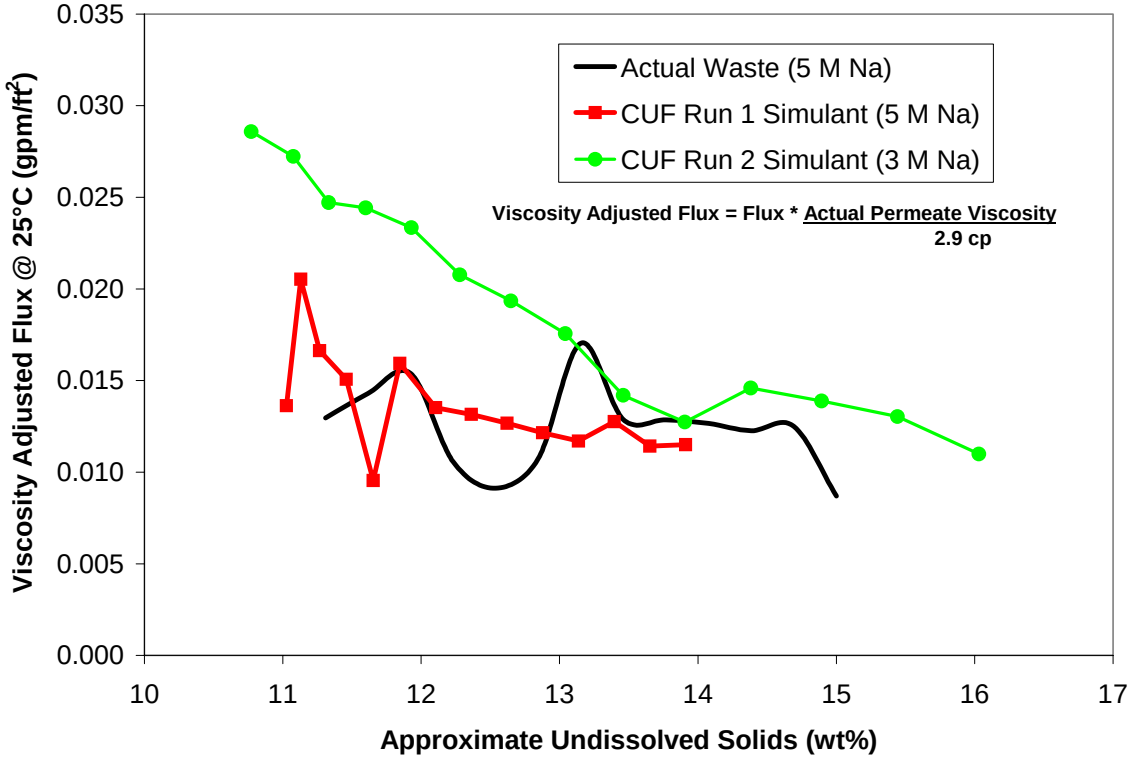


Figure 1. A bench-top scale comparison of actual to simulated waste of AY102/C106

Unfortunately, when both the actual waste and simulants were evaporated to attain a sodium molarity of 5 M, a significant amount of solids, basically calcium carbonate, precipitated causing pluggages throughout the filter test apparatus. This is the reason why the actual waste and CUF Run 1 curves in Fig. 1 fluctuate so much. A decision was made not to boil the simulant, but to leave it at the 3 M sodium concentration that the actual waste had when it was first received. Another bench-top filter test, CUF Run 2, was done with a second simulant batch that was left at 3 M sodium. Unfortunately, there was not another actual waste sample to repeat that test, but since permeate flux is strongly dependent upon the permeate viscosity all the data were adjusted, with the equation show in Fig. 1, to that of the actual waste, i.e., 2.9 cp, thus a better comparison can be made. Even with the viscosity adjustment, the 3 M sodium simulant, from 11 to 15 wt% UDS, had a higher permeate flux. A relatively smooth descent in flux for CUF Run 2 indicated a significant reduction in precipitated solids in the feed.

The bench-top studies were accepted by WTP as sufficient to verify the AY102/C106 simulant and allow pilot-scale work to proceed. The actual simulant development is beyond the scope of this interim report and will be reported in final documentation. However, a short description of its preparation will help understanding the pilot-scale test. There are many steps in making the very complex simulant, including precipitations and washings. For the bench-top work, the simulant was made at SRNL. For the pilot scale work, the quantity was too large to be easily handled. In fact, since the filter test was combined with the SIPP task

in which simulant would be needed for several test campaigns, it was more efficient to procure the simulant from an outside vendor. Even with the many steps to make the simulants the final act of joining the many parts together was very crucial to obtain a desired end product. To obtain a simulant in exactly the form needed it was purchased in three complex mixtures which would be finalized just before each pilot filter test was to begin. In fact, the selected vendor actually made small portions of the several simulant constituents, then shipped them to SRNL to be evaluated before the end products could be made. It consisted of three procured parts, which were: Supernatant, Precipitated sludge solids, and Wet Sodium Aluminosilicate (NAS). These parts were joined together in a very specific sequence, with several dry chemicals to obtain exactly the simulant needed. The general proportions were:

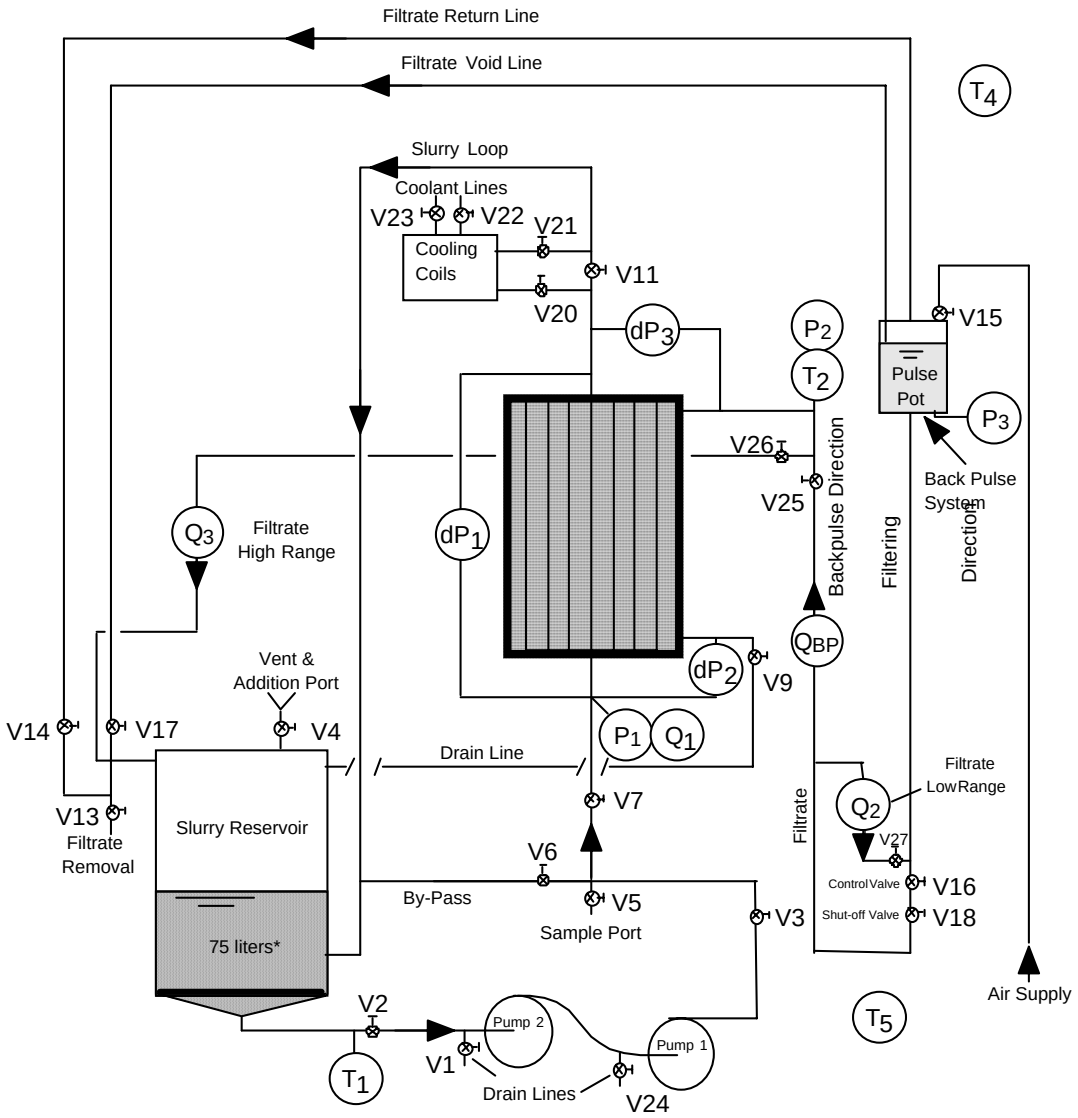
Constituent	Mass Percentage
Wet additions	
Supernate Simulant	15.91
Precipitated Sludge Solids	72.17
NAS	8.44
Dry additions	
Al(OH)3	1.72
Al2O3	0.61
Calcium Phosphate Tribasic	0.04
SiO2	1.11
Total	100%

The actual combination of all of the above was quite complex but percentages shown are what were necessary to have a starting feed of approximately 12 wt% UDS. To fine tune the solids concentration some of the supernatant was purposely left out of the mixture during preparation so the solids content could be sampled and then diluted with just enough liquid to achieve the target solids content. Even with all the care taken the target solids content of 11.8 wt% turned out to be 12.5 wt% when the experiment began.

Approximately, 80 gallon of the slurry was made during the week of 19 January 2004 and was complete on 22 January, approximately 116 hours before its first use on 27 January.

2.4 *EQUIPMENT*

For convenience a simple schematic of the test apparatus is shown in Fig. 2. Details of the overall system has been previously well documented (Duignan, 2000a, Duignan 2000b, Duignan 2003). A detailed description of the equipment will be included SIPP final report with highlights of changes specific for current testing.



*** INSTRUMENTATION ***

Flow	Pressure	Temperature
Q_1 = slurry	P_1 = slurry at filter	T_1 = slurry loop
Q_2 = low filtrate	P_2 = filtrate at filter	T_2 = filtrate loop
Q_3 = high filtrate	P_3 = filtrate at pulsepot	T_3 = cleaning loop
Q_{BP} = backpulse	dP_1 = axial slurry drop	T_4 = ambient at top
	dP_2 = slurry-to-filtrate drop at bottom of filter	T_5 = ambient at bottom
	dP_3 = slurry to filtrate drop at top of filter	
	$TMP = (dP_2 + dP_3) / 2$	

Figure 2. Cross-flow Ultrafilter

2.5 *MEASUREMENT UNCERTAINTY*

The derivation of measurement uncertainty will not be shown in this single-campaign interim report, but will be included in the final report that will incorporate results from all four campaigns. The uncertainties listed here are based on past work, which was done, on the same equipment under similar circumstances and similar individual instrument uncertainties (Duignan 2003a). These uncertainties are to illustrate the expected magnitude of principal parameters measured throughout this test. They are instrumental in determining the significance in comparing any two datum points. The measurement uncertainties (at the 95% confidence level) for the important calculated quantities are:

Slurry Velocity in a Filter Tube	=	± 6 %
Transmembrane Pressure	=	± 2 %
Temperature Corrected Permeate Flux	=	± 6 %

For analytical results included herein the measurement uncertainty vary and sometimes can be large. Uncertainties for data obtain from outside organizations, i.e., Analytical Development Section or the Mobile Laboratory of SRNL are beyond the scope of this task but they are assumed to be no larger than ± 20% of any result shown. For properties measured in the Engineering Development Laboratory, the following uncertainties on a reading were obtained through calibration:

Slurry or Liquid Density =	± 0.5%
Liquid Viscosity =	± 0.5 %
Turbidity =	± 0.1 NTU

2.6 *AY102/C106 CONCENTRATION (DEWATERING)*

Clearly the principal reason to perform Campaign I is to obtain filter flux data which is assumed prototypic to full-scale plant operation. The filter is prototypic in most of its features. They are: porous tube length of 90 inches, porous tube inside diameter of 0.5 inches, outside diameter of 0.75 inches, nominal porous size of 0.1 micron, symmetric stainless steel sintered porous wall construction, axial slurry velocity of 11 to 12 ft/s, and a transmembrane pressure of approximately 40 psid. It is not prototypic in three features: it only has 7 tubes instead of 241 tubes, it was mounted vertical instead of horizontal, and while the backpulse system functions prototypically, its design must be different because of scaling.

In general, filter performance data from the pilot test rig are assumed to well represent those that will be obtained in the full-scale unit. Differences in filter operation that will ultimately be realized during plant operation will likely result from differences between the simulant used and several very complex waste streams to be filtered. Little is known on how gross and especially subtle differences in the many waste-stream properties will affect filtration. However, this study should help to better understand filter operation that will be very useful plant operation.

Figure 3 shows the temporal permeate flux data with the ordinate adjusted for temperature, as required by the RPP-WTP test specification to account for the effect of viscosity. The adjustment equation is:

$$\text{Adjusted Flux} = \text{Flux (gpm/ft}^2\text{)} \times \exp(2500 \times ((1/(273+T))-(1/298)))$$

where T = slurry/permeate temperature in degrees Celcius

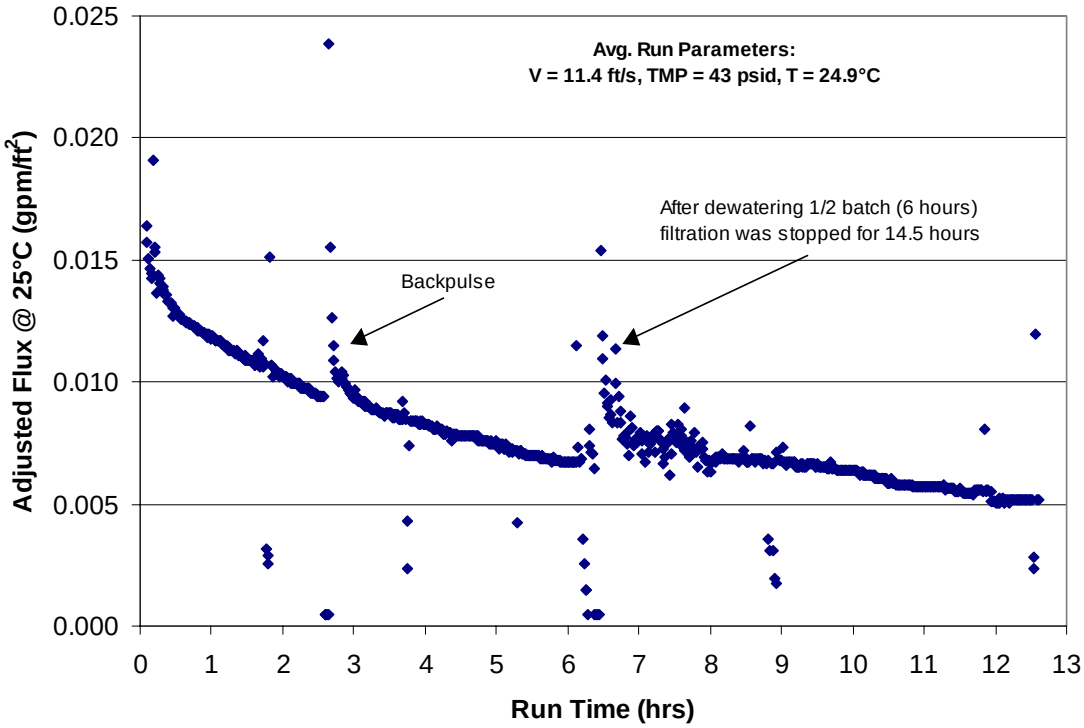


Figure 3. Dewatering of AY102/C106 simulant

The entire run time can be seen as approximately 12.5 hours. However, in an attempt to match plant operation, the dewatering was stopped at the one-half batch mark and allowed to sit for a minimum of 12 hours; it turned out to be 14.5 hours. This hold period was done to mimic the much longer time needed to filter in the plant during which some waste instabilities may cause changes, e.g., precipitation. The entire dewatering process took 27 hours but Fig. 3 only shows the actual filtering time. The data scatter in Fig. 3 was caused by two actions: sampling and backpulsing. At approximately every two hours samples were drawn. To draw permeate samples, it was necessary to divert the permeate flow for a few seconds into a sample bottle, including the time it took to rinse out the sampling port and bottle. At approximately two-hour intervals, there are data points below and above the main filter flux curve. These indicated the opening and closing of the permeate sampling valve. The two larger disturbances were caused be backpulsing. The criterion was backpulse when the flux dropped below 0.015 gpm/ft^2. However, as is evident, the flux started very close to the criterion, therefore, it was changed to backpulse when the flux dropped below 0.010 gpm/ft^2. At 2.5 hours into the run, the flux dropped to 0.0095 gpm/ft^2 and a backpulse was

initiated, but within 30 minutes the flux returned to what it had been before the backpulse. Because of the poor recovery, a backpulse was not repeated during the first one-half batch of dewatering. On the next day, which is shown as the 6.5-hour point, the dewatering began once again and it was started with a backpulse. Once again, it only took a few minutes for the flux to return to the main flux curve. The further instability at the beginning of the first day was probably caused by the settling of the viscous slurry and it seems that between 60 to 90 minutes were needed to fully mix and bring the dewatering to steady state again.

Another way to understand the dewatering process is to see how the undissolved solids changed. Figure 4 repeats the data of Fig. 3, but the corresponding solids concentration has been substituted for time. These concentration data were obtained by the samples taken during the test and then extrapolation between the sample points by knowing how much permeate mass was removed with time. Some flux results are from 12.5 wt% UDS to:

24 wt% UDS the mean flux was 0.008 gpm/ft^2,
20 wt% UDS the mean flux was 0.009 gpm/ft^2,
15 wt% UDS the mean flux was 0.011 gpm/ft^2.

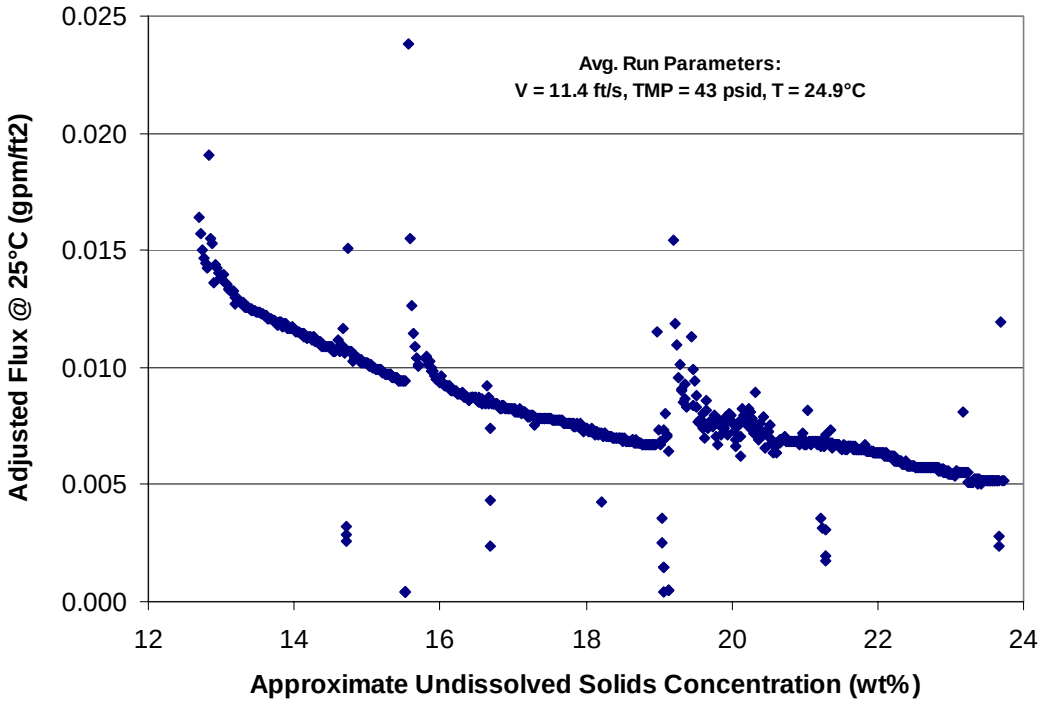


Figure 4. Dewatering of AY102/C106 simulant

The plant operation will concentrate the waste in the ultrafilter to approximately 17 wt% UDS, therefore all of the campaigns of SIPP have a target of 20 wt% UDS to obtain information at an upper bound. However, there is little filter data at the higher concentrations so the Test Specification for this filter work indicate a concentration of 25 wt% UDS as the target if obtainable. The dewater test was stopped after 12.5 hours of

filtering because the rough estimate† of concentration indicated 25 wt% UDS. The actual value was 23.7 wt% UDS. Table 3 shows rheological and other physical data of the slurry and permeate during the dewatering.

Table 3. Rheological and other data during dewatering of AY102/C106 simulant

Approx. Run Time	Slurry						Permeate		
When Sampled	Density	Total Solids	UDS	Consistency	Yield Stress	Particle Size [mean(std dev)]	Density	Viscosity	Turbidity
hour	g/mL	wt%	wt%	mPa-s	Pa	Vol. Dist. | Num. Dist. (micron)	g/mL	mPa-s	NTU
0	1.27	27.4	12.5	13.4	4.9	2.2 (1.8) | 0.7 (0.3)	n/a	n/a	n/a
2	1.28	29.2	14.6	12.8	10.4		1.17	2.50	0.30
4	1.30	31.0	16.8	15.1	15.1		n/a	n/a	n/a
6	1.33	32.9	19.1	17.6	22.4		1.17	n/a	n/a
8	1.33	34.7	21.3	19.6	30.9		n/a	2.48	0.25
10	1.37	36.3	23.1	20.9	35.5		n/a	n/a	n/a
12.6	1.36	36.9	23.7	23.8	34.8	1.8 (1.3) | 0.6 (0.2)	1.17	2.50	n/a

As can be seen from the table, the consistency of the slurry simulant almost doubled from 13 to 24 mPa-s, which coincidentally matched the concentration of undissolved solids. During the same time period, the yield stress increased a factor of 7 (i.e., 5 to 35 Pa), while the density increase was 7% (i.e., 1.27 to 1.36 g/mL). The fact that there was a finite yield stress means the waste stream is rheologically non-Newtonian. More specifically the waste is shear thinning. The solids particle behavior makes sense in that there was very little change to the bulk of the particle sizes. The mean size of both number distributions reduced insignificantly, while the range of sizes became more uniform as seen be the small standard deviations after dewatering. The permeate rheology showed that the density and the viscosity did not change throughout the process. Since the turbidity measurements of the permeate were significantly lower than the test specification threshold of 2 NTU the permeate was considered free of solids.

2.7 *AY102/C106 STEADY STATE*

This portion of the Ultrafiltration Test Specification (Townson, 2002) is not incorporated in any of the subsequent filter tests in SIPP. For Campaign I, as in past filtration tests (Duignan, 2000a; Duignan, 2000b; Duignan, 2003a), a series of operational parameters, i.e., axial slurry velocity (V) and transmembrane pressure (TMP) were obtained to contrast to previous filter tests to further complete the filter database. However, the number of steady-state tests was limited since six of the original thirteen test runs were removed by the SIPP test specification (Longwell, 2003). As shown in Table 1, the remaining test numbers were: 1.04, 1.07, 1.08, 1.09, 1.10, 1.11, 1.16. Figure 5 shows the average results for all of those tests. Three of those tests, i.e., 1.04, 1.11, and 1.16 had a duration of 120 minutes, while the rest were done for 1 hour, as per the filtration test specification (Townson, 2002). To have an equal comparison, all the test averages for the first 60 minutes of data from each test are shown. As expected the tests with the highest axial velocity had the highest filter flux. Tests

† Real time concentration analysis was not available and only the initial samples taken on the previous day were used to extrapolate to estimate the 25 wt% UDS.

1.08, 1.09, 1.11, 1.16 all were statistically the same and V ranged from 11 to 13 ft/s. The TMP ranged from 30 to 50 psid, but as in the past, the permeate flux was relatively insensitive to changes in TMP in that range of pressures. Runs 1.07 and 1.10 had significantly lower fluxes, which was a direct result of V being 9 ft/s or lower. The odd point was the first, Test 1.04. It was odd because it was lower than the tests with fluxes between 0.007 and 0.008 gpm/ft^2 which had the same flow parameters of V and TMP (tests 1.11 and 1.16), but on the other hand the average filter flux of Test 1.04 was 0.0055 gpm/ft^2, which was very close to the flux at the end of the dewatering test, i.e., 0.0052 gpm/ft^2, as seen as in Figs. 3 or 4. One explanation may be a change in particle size. Table 3 shows that at the end of dewatering, i.e., after 12.6 hours of filtering, the particle size had a Volume distribution mean of 1.8 micron and a Number distribution mean of 0.6 micron. By the end of steady state testing those means moved to slightly smaller sizes. The Volume distribution changed from uni-modal to bi-modal with 75% of the particles having a mean of 1.5 micron and 25% with a mean of 0.5 micron. The Number distribution changed even less to a mono-modal mean of 0.5 micron. However, there is not enough information to definitively state that these small particle changes affected the filter flux.

Based on the steady-state results, the standing recommendation to operate the filter at an axial velocity of 11 ft/s, or above, and a TMP above 30 psid remains the same. The higher the axial velocity, the faster permeate will be produced.

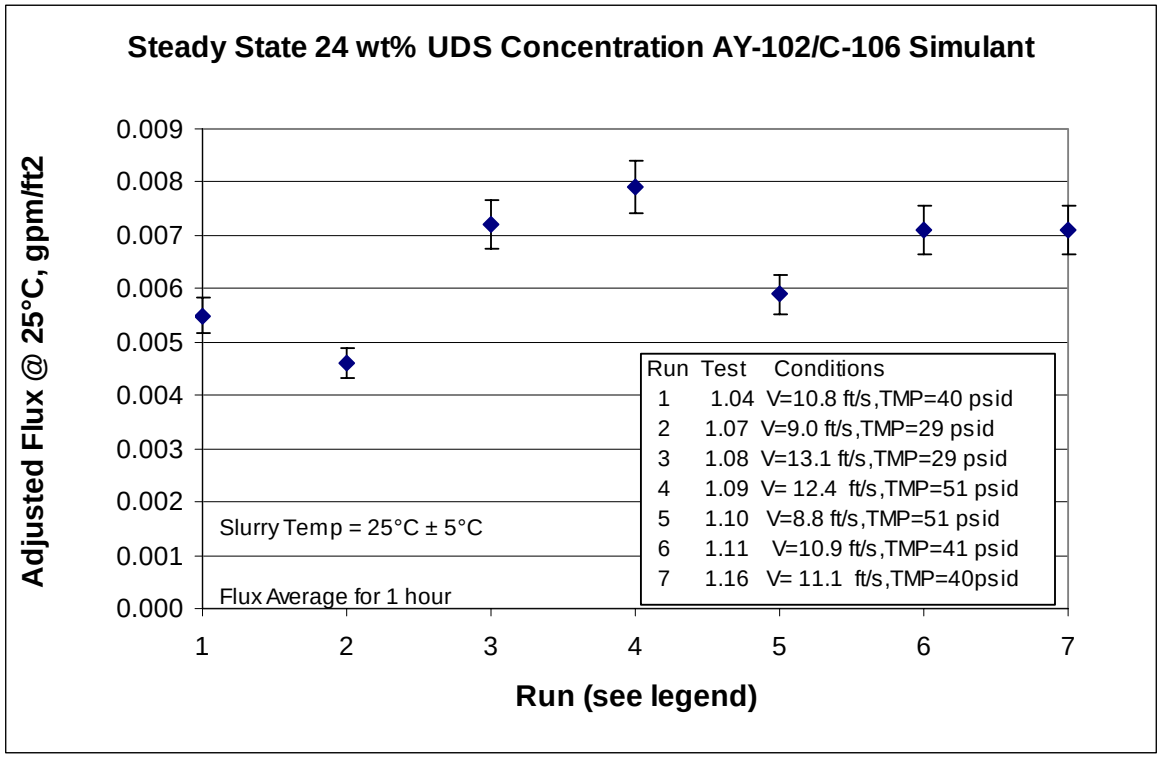


Figure 5. Steady Steady Permeate Flux

2.8 *AY102/C106 WASHING*

One very import aspect of this filter task was to see the effects of washing the slurry. Initially this was combined with both washing and leaching, but according to the Test Specification (Longwell, 2003) either route could have been chosen by RPP-WTP. The RPP-WTP customer decided not to leach, which left only the two washing sequences. In the plant, the filtration batch size was set at 18,000 gallons (see the first footnote on page 10). Once all the waste that needs separation is fed through the filter and concentrated to a 25[†] wt% UDS, the waste is washed twice with 21,770 gallons (this is the volume of one permeate storage tank). The WTP will transfer the wash water (actually it is process water, which for this test is made of 0.01 M NaOH) in 1,000-gallon batches. To mimic plant operation, the wash water was transferred to the pilot test rig in 22 mini-batches. Since the batch size was 140 liters, batch of wash water was 140 L x 21,770/18,000 = 169.3 L, making each mini-batch of wash water 7.7 liters. That is, to the concentrated slurry (it was at 24 wt% UDS) 7.7 L of 0.01 M NaOH were added and then dewatered until 7.7 L of permeate was removed. This was repeated 22 times. This was one complete wash cycle, which was repeated, for a total of 44 mini-batches of wash water. Figure 6 shows the first washing cycle results.

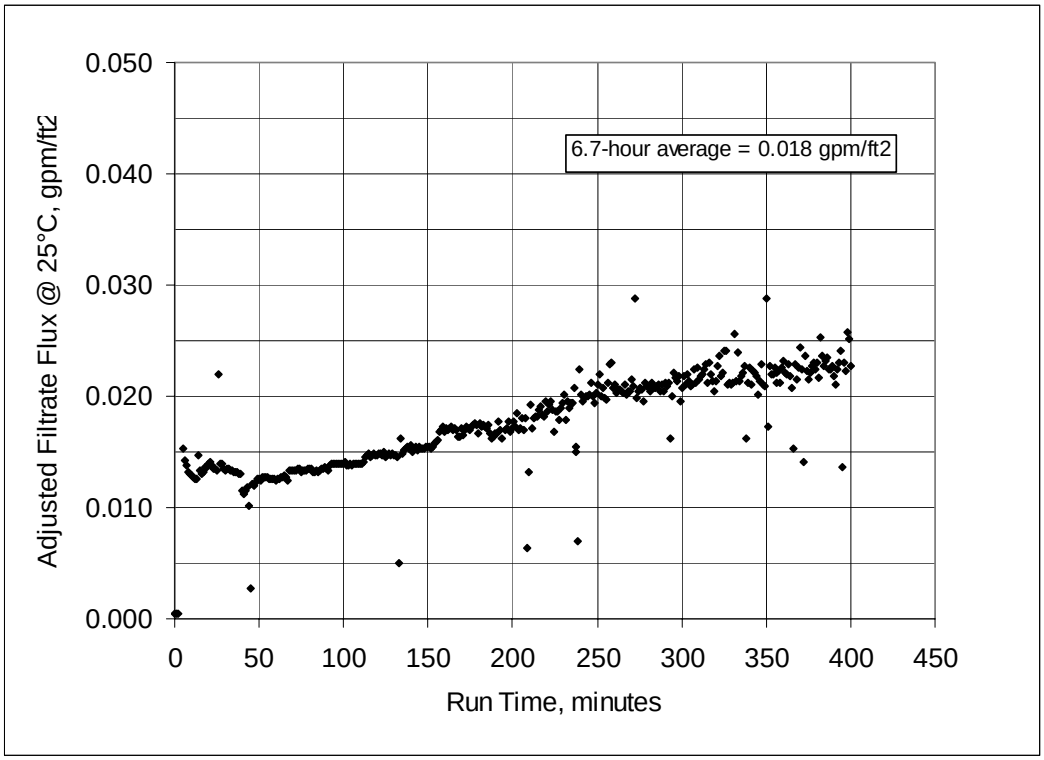


Figure 6. 1st washing of concentrated AY102/C106 with 22 mini-batches

[average operating parameters: V= 12.1 ft/s, TMP=41 psia, T=25°C]

[†] The plant value is actually closer to 17 wt% UDS. See the dewatering section for an explanation.

As water was added to the concentrated simulant the permeate flux slowly increased from 0.015 to 0.023 gpm/ft^2 during the first wash cycle. Figure 7 shows during the second washing cycle the flux continued to increase but at a much slower rate, from approximately 0.025 to 0.031 gpm/ft^2.

The flux data in Fig. 6 start steady but becomes a more erratic, with the transition somewhere between 150 and 200 minutes. The 150-minute mark is when approximately 35% of the first entire washing batch is processed (at around the 8th mini-batch). This instability may always occur when reducing the supernatant density with water , but some of it may have been a systematic problem. All liquid flow rates in the test rig were measured with a magnetic flow meter, which relies on ions in the stream to measure flow. As the ions are being washed away the meters have to rely on a smaller population to make measurements.

Another feature of the data is what appears to be outliers; the data points above and below the main filter flux data. Those for the most part indicate when a sample was taken. To take a sample of permeate that stream is temporarily redirected to a sampling station, which stops the flow for a very short period of time. Then when the sample is taken, there is a very short surge as permeate pressure reestablishes steady state flow.

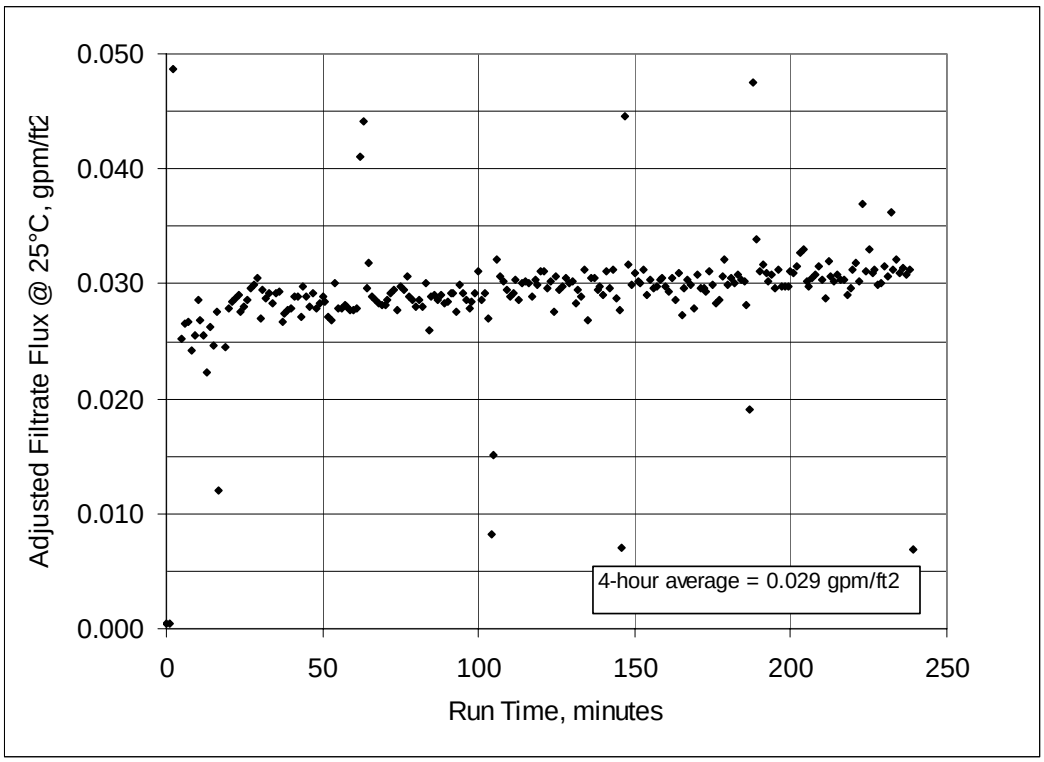


Figure 7. 2nd washing of concentrated AY102/C106 with 22 mini-batches

[average operating parameters: V= 12.1 ft/s, TMP=40 psia, T=25°C]

The solids data shown in Fig. 8 seems straight forward. The total solids decrease quickly in the beginning, from 33 to 27 wt%, and conversely the undissolved solids increased, from 19 to 20 wt%, which was expected as the supernatant was being replaced by more and more water. Between the 13th and 44th wash, the total solids decreased asymptotically to 23 wt%, but the undissolved solids basically remained the same at 20 to 21 wt%. The only way that the "undissolved" solids concentration could remain constant, while the supernatant was becoming less dense, because of washing, is if some of the solids actually did dissolve. In fact, this did happen as evidenced from the temporary increases in some of the analytes like fluoride, Fig. 14 and especially oxalate, Fig. 17. The oxalate dissolution is also the reason the total organic carbon peaked approximately midway through washing, see Fig. 24. A measure of the insoluble solids before and after washing indicated that approximately 7% of the solids did dissolve.

The rheological data in Fig. 8 were generally as expected. As the number of washes increased, the consistency of the simulated waste slurry was cut in half; it decreased from a high of 19 mPa-s at 19.6 wt% UDS then dropped to 9 mPa-s at 20.6 wt% UDS. However, the yield stress stayed the same (i.e., 8.5 to 8.2 Pa), which was unexpected since a past test (see Fig. 64 of Duignan, 2003a) with an Envelope C waste showed that the yield stress doubled for similar slurry washing. This is good news since avoiding a higher yield stress would not challenge the pumps more. Finally, the density of the slurry dropped from 1.33 g/ml before washing to 1.16 g/ml after the first washing cycle. During the second washing cycle (mini-washes 23 to 44) the slurry density remained basically constant, indicating that the majority of the soluble solids were removed during the first 22 mini-washes.

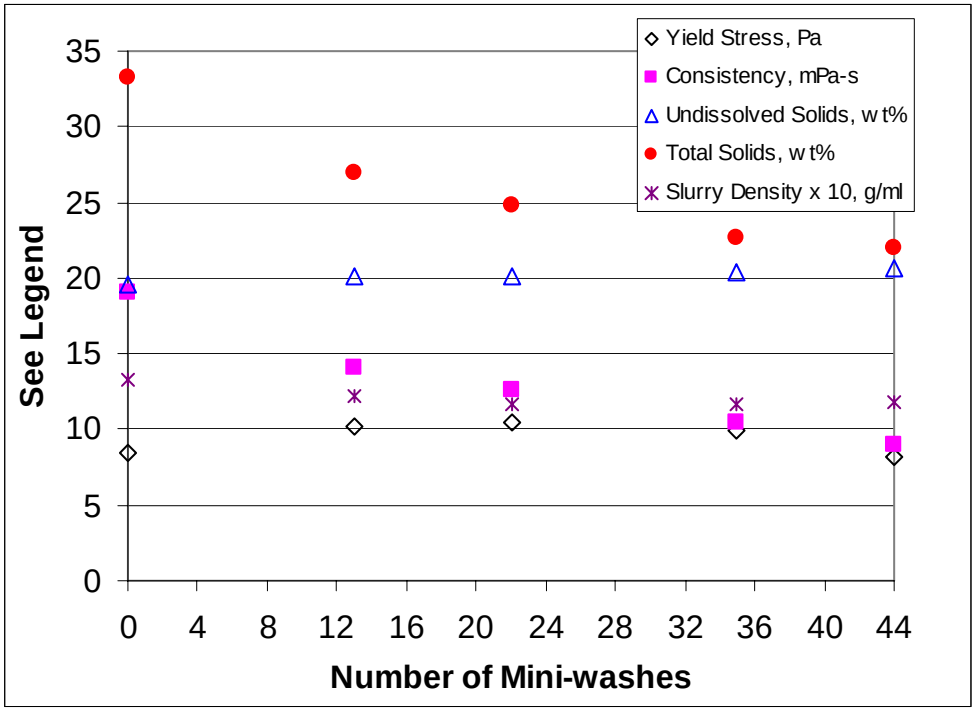


Figure 8. Solids and rheological data throughout simulant washing

Throughout washing, permeate samples were taken at approximately every 4th washing. (The washing number sampling points were: 1, 5, 9, 13, 17, 22). These numbers are important because while both slurry and permeate samples were taken at the same time, they are not matched samples. Since the permeate flux is very low it takes approximately 30 minutes for permeate created at the filter to flow to the sampling point. With this knowledge, it is easy to relate slurry and permeate samples by matching the time difference. For this interim report, the following figures show the effect of washing on a particular analyte from the slurry. However, it is important to realize that the very first sample of permeate does not reflect the result of washed slurry, it is actually permeate of unwashed slurry, since the washed slurry permeate was in the permeate line at that time.

The next sixteen figures (i.e., Figs. 9 to 24) show analytical results of the analyte concentrations in the slurry being washed. To obtain these concentrations the appropriate concentration was measured in each one of the thirteen (13) permeate samples during washing (i.e., twelve were taken during the washing process and the first one, before the washing began). Then with the measured concentrations from the initial slurry sample, the intermediary slurry concentration could be calculated.

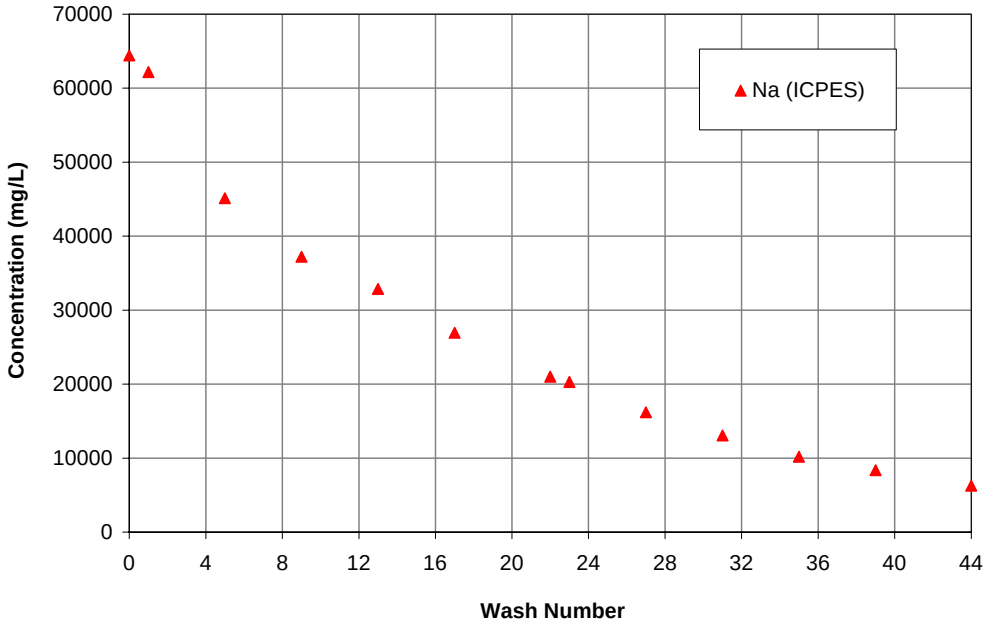


Figure 9. Soluble sodium in the slurry during washing

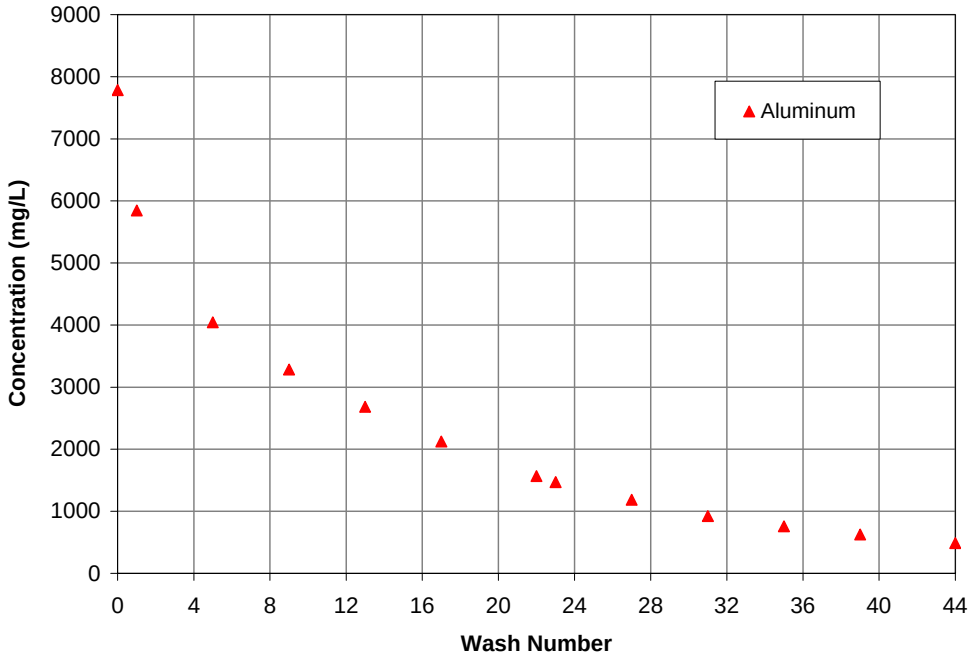


Figure 10. Soluble aluminum in the slurry during washing

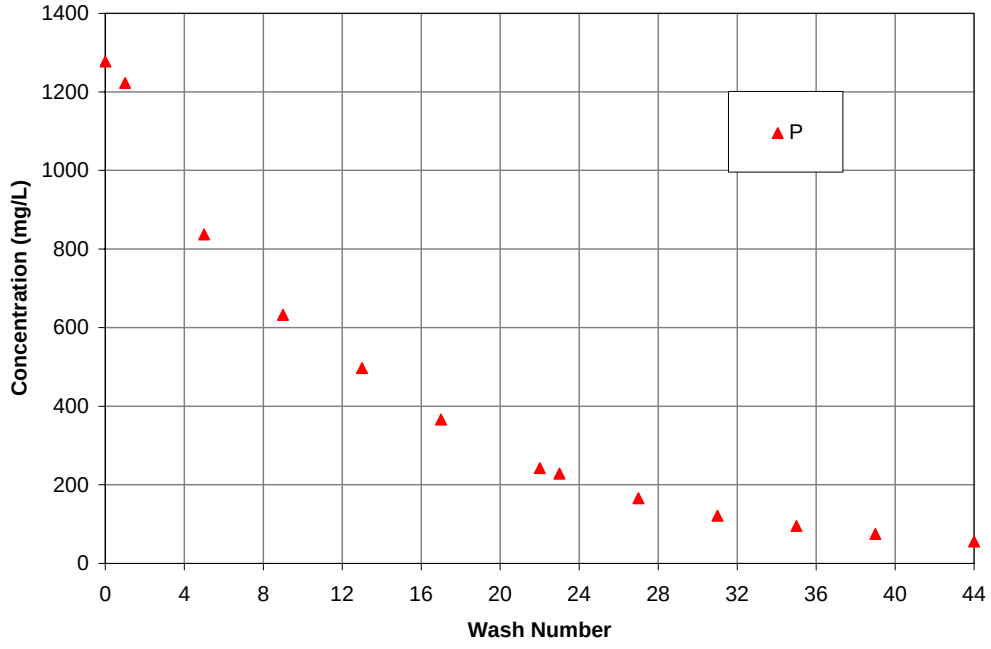


Figure 11. Soluble phosphorus in the slurry during washing

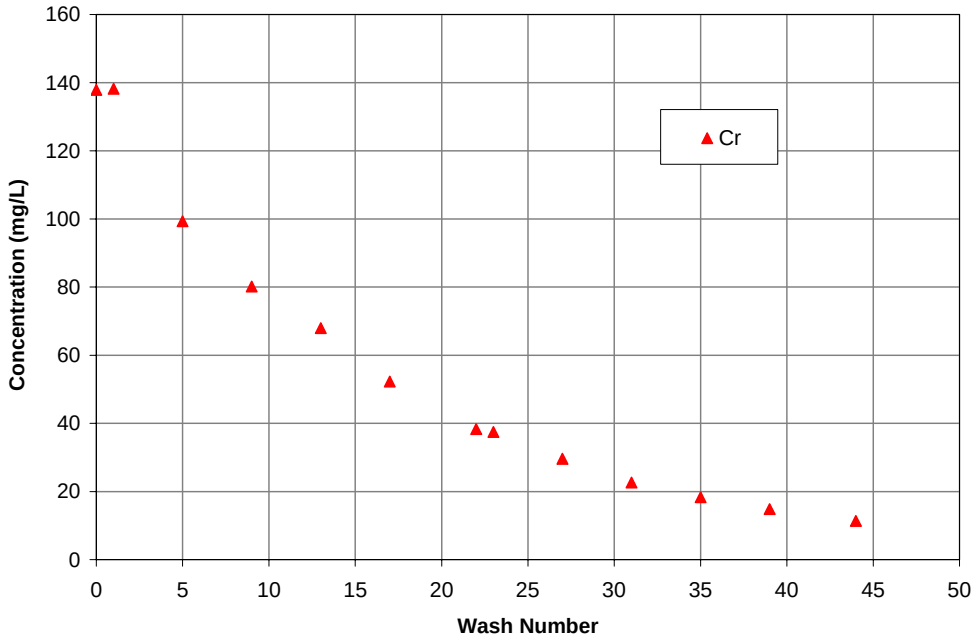


Figure 12. Soluble chromium in the slurry during washing

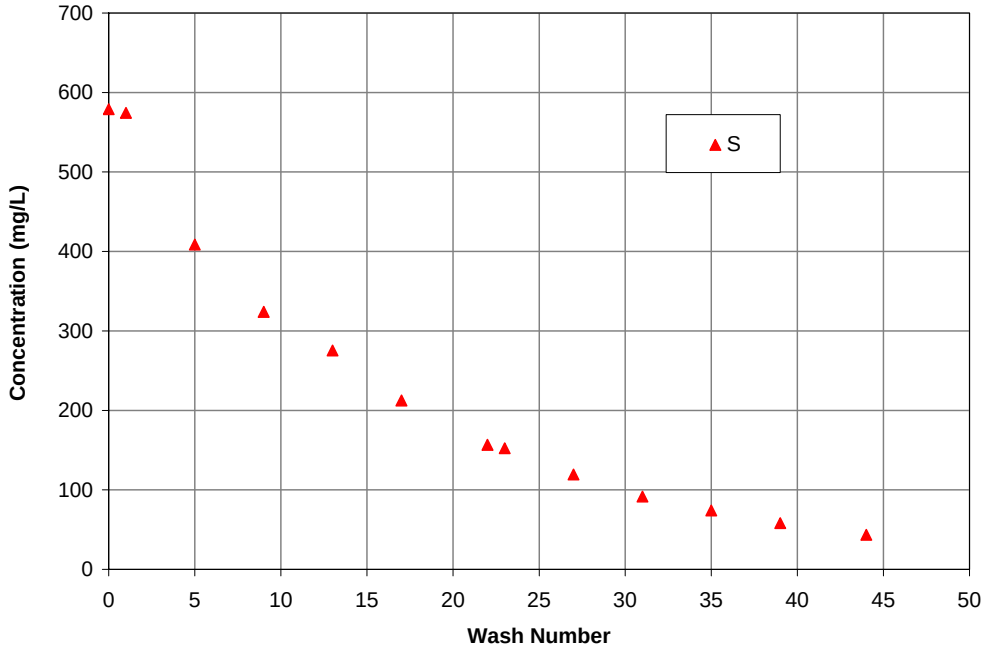


Figure 13. Soluble sulfur in the slurry during washing

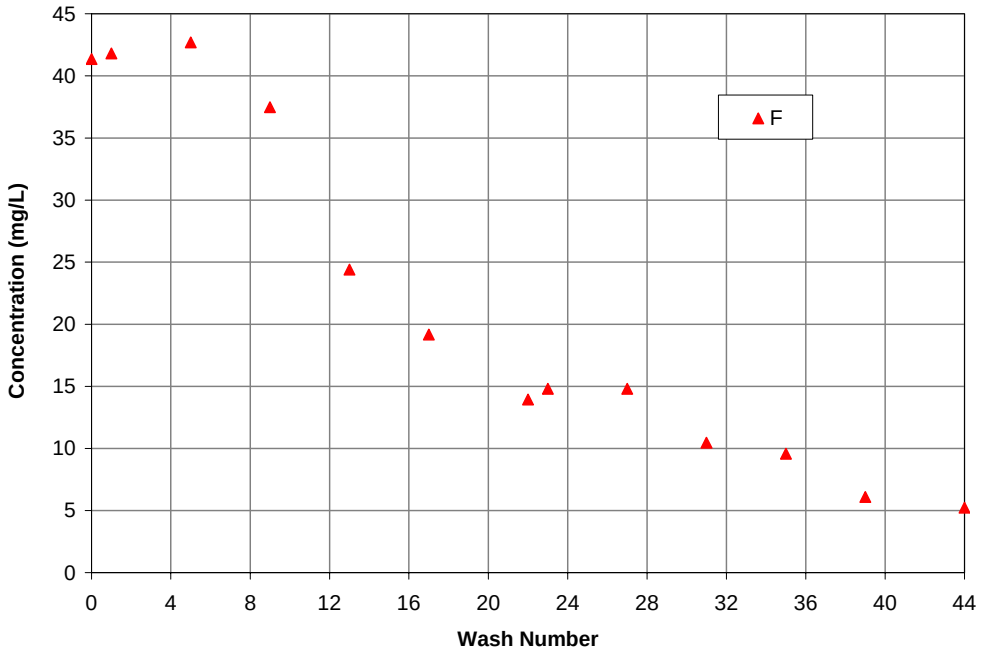


Figure 14. Soluble fluoride in the slurry during washing

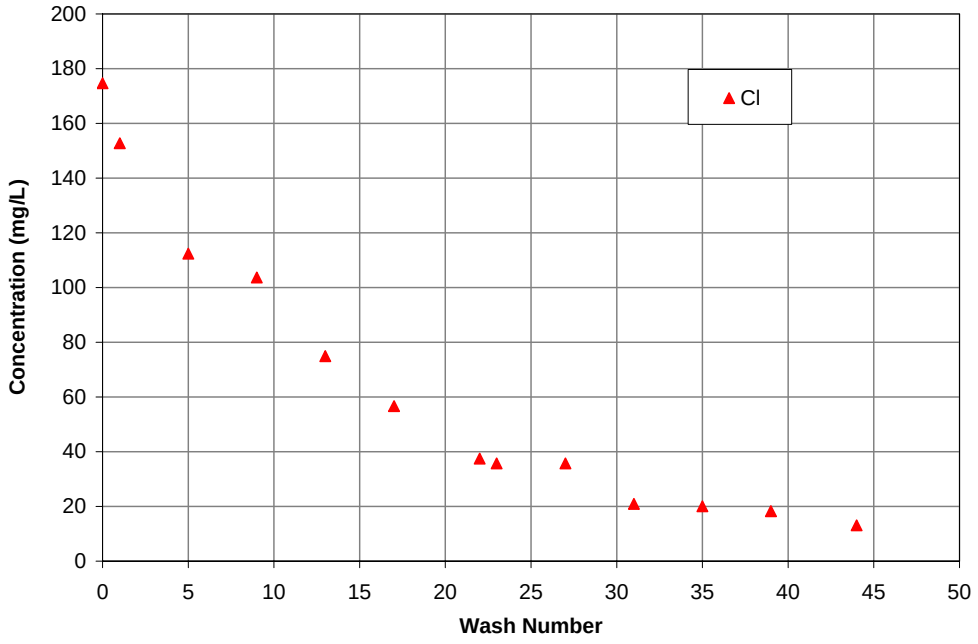


Figure 15. Soluble chloride in the slurry during washing

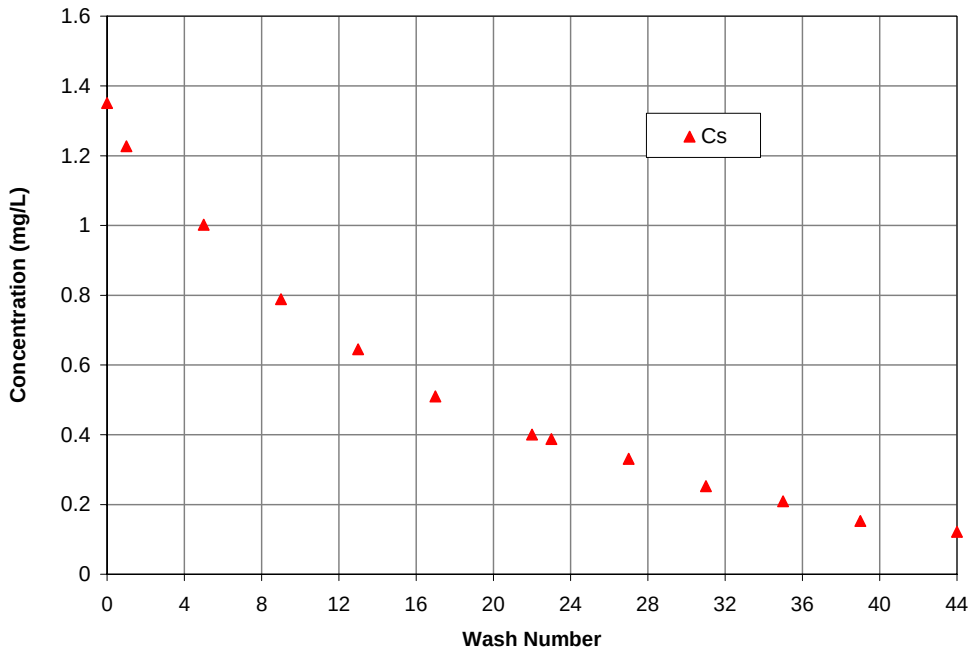


Figure 16. Soluble cesium in the slurry during washing

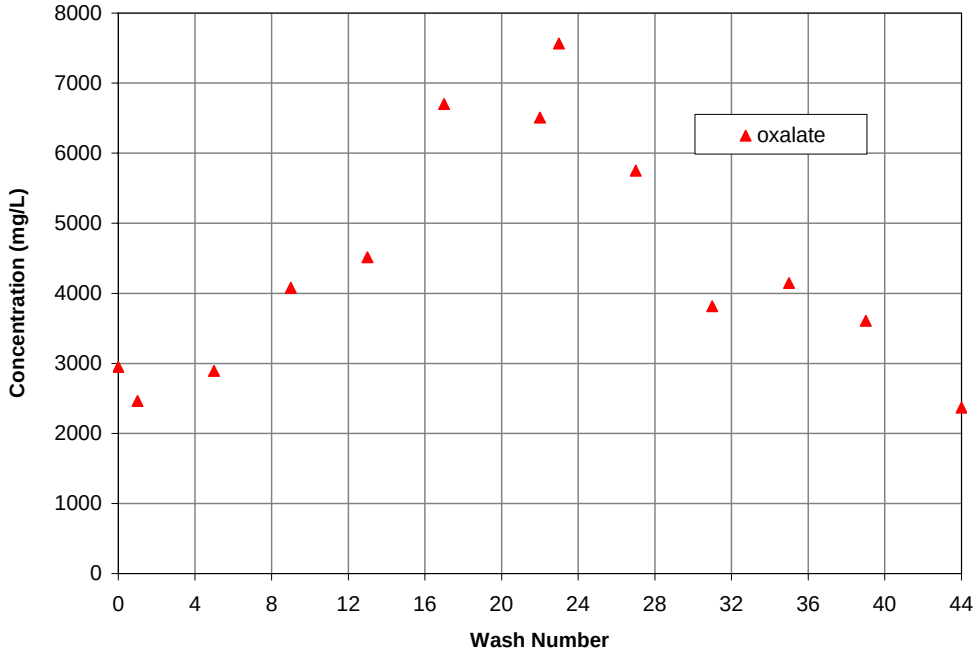


Figure 17. Soluble oxalate in the slurry during washing

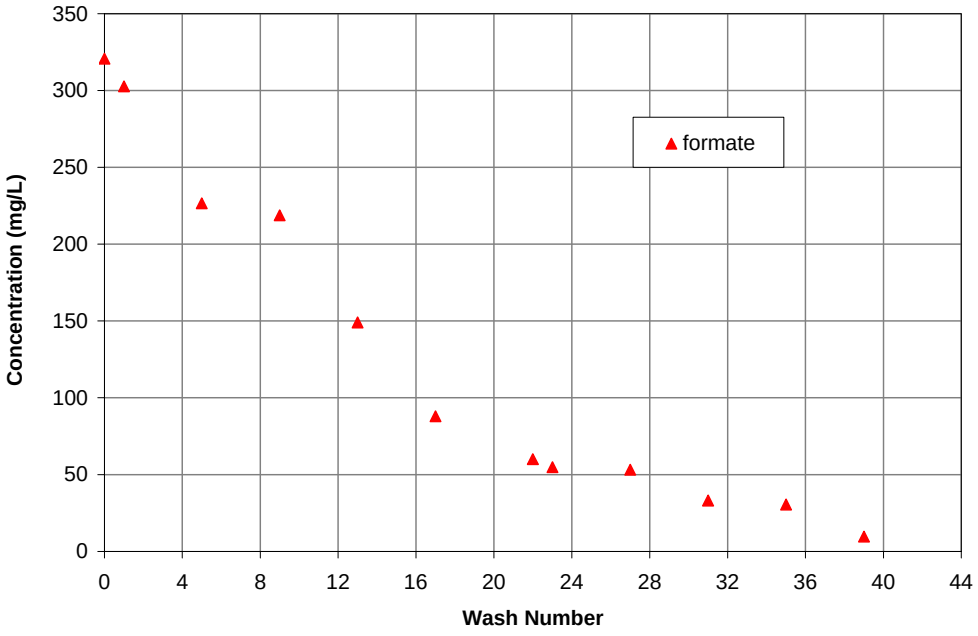


Figure 18. Soluble formate in the slurry during washing

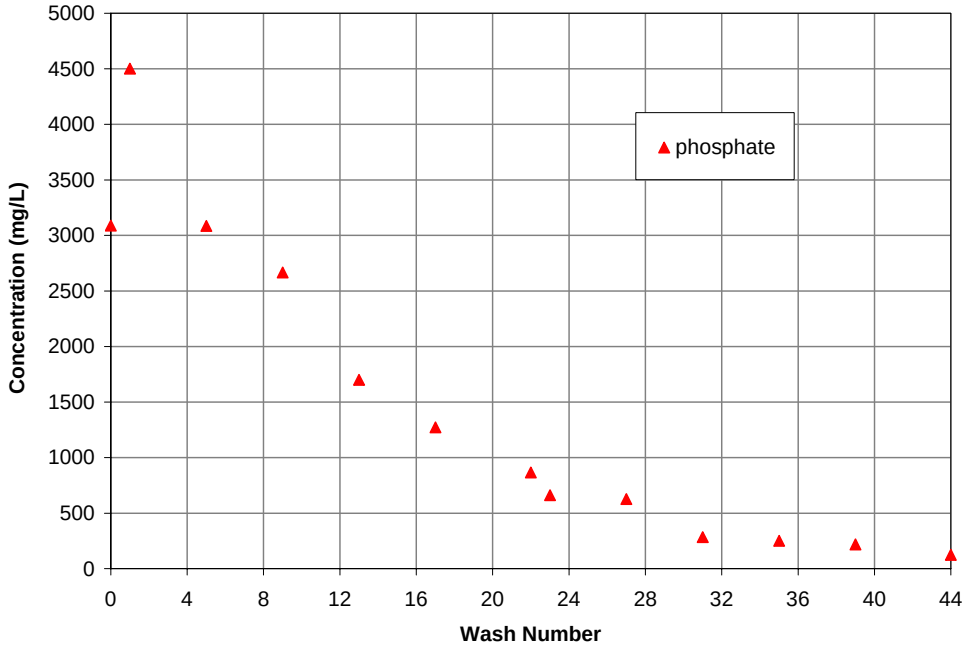


Figure 19. Soluble phosphate in the slurry during washing

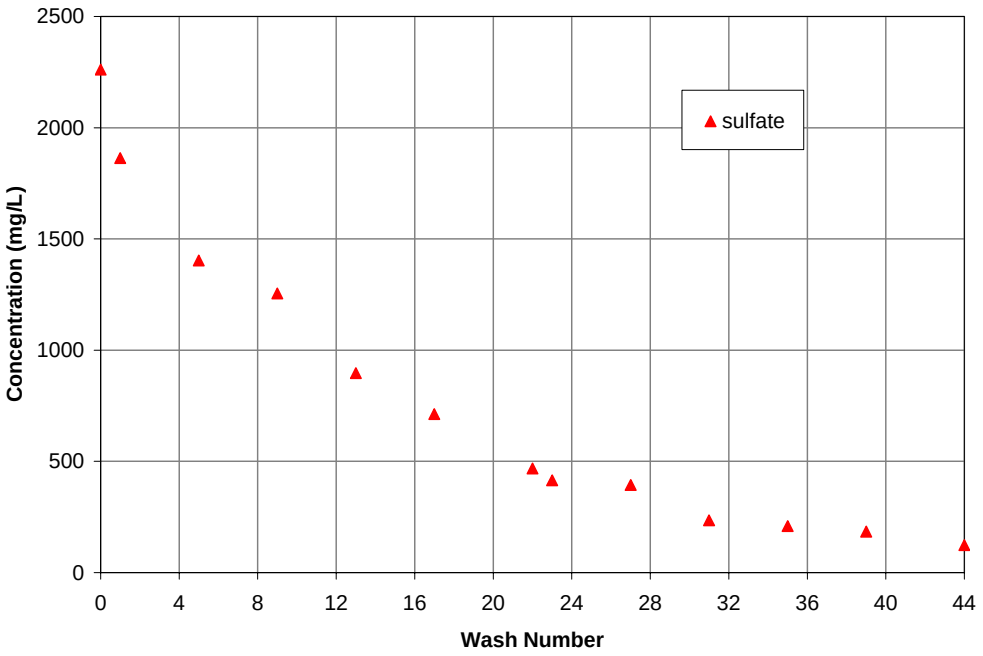


Figure 20. Soluble sulfate in the slurry during washing

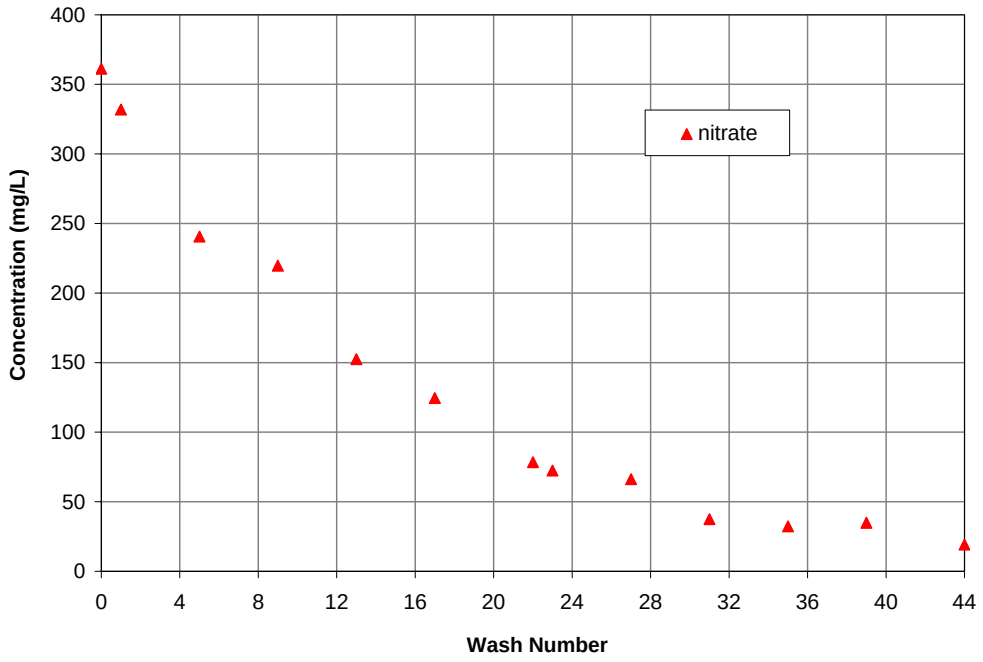


Figure 21. Soluble nitrate in the slurry during washing

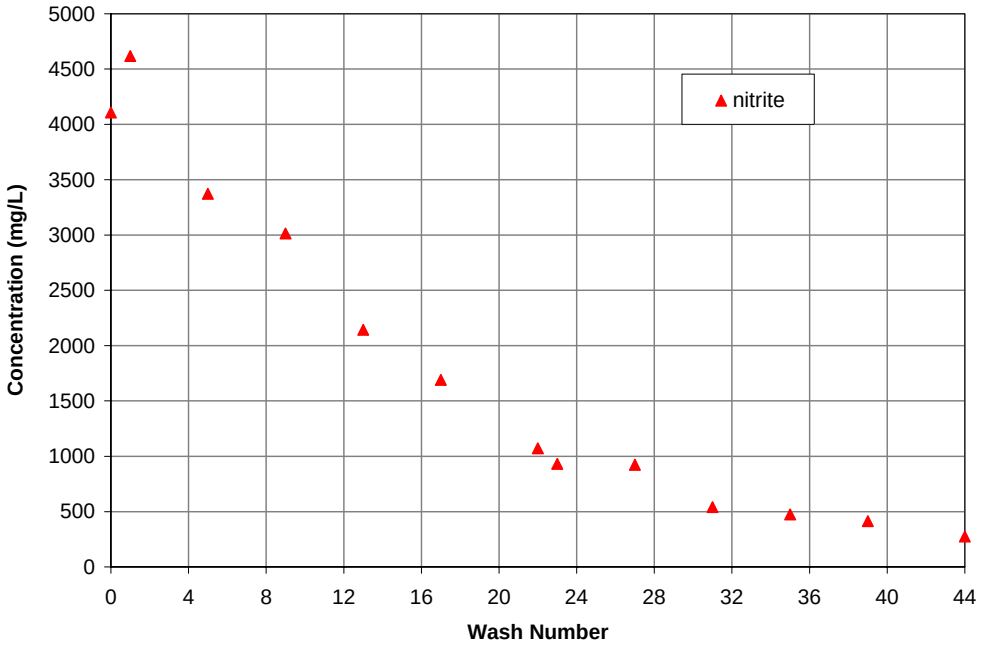


Figure 22. Soluble nitrite in the slurry during washing

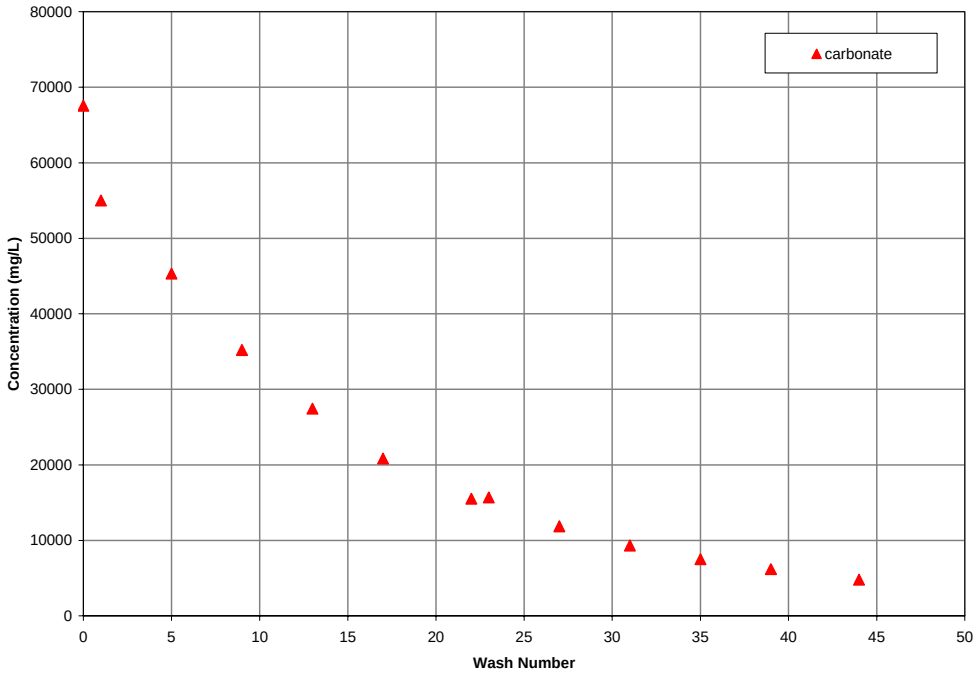


Figure 23. Soluble carbonate in the slurry during washing

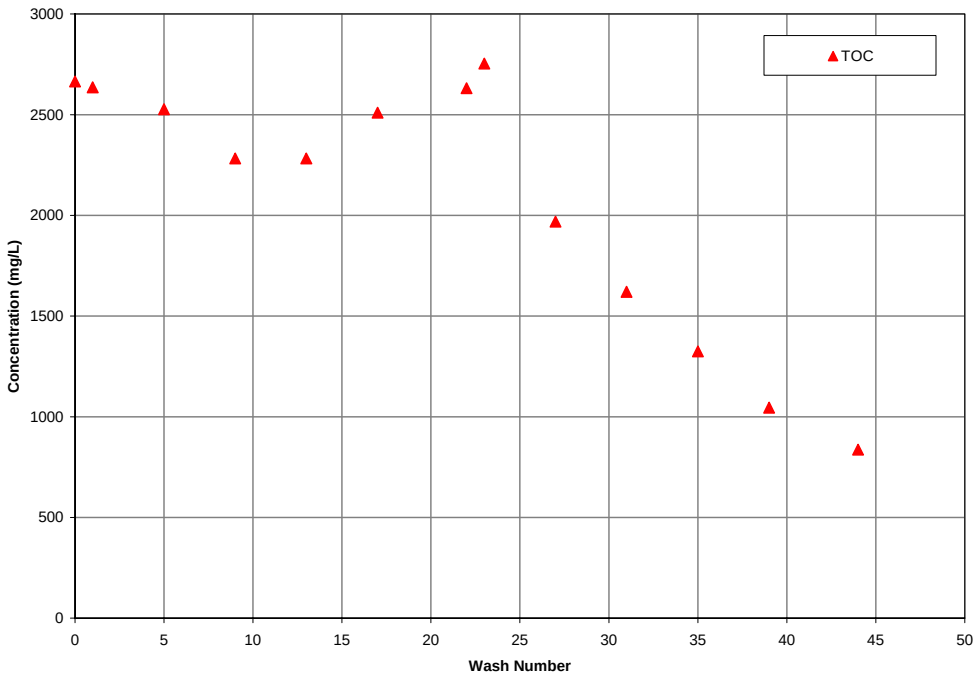


Figure 24. Soluble total organic carbon in the slurry during washing

2.9 *AY102/C106 FINAL CONCENTRATION*

As with the steady-state tests, there were no surprises during final concentration of the washed slurry when it was concentrated from 20.6 to approximately 29 wt% UDS. Once again, this portion of the Ultrafiltration Test Specification (Townson, 2002) is not incorporated in any of the subsequent filter tests in SIPP and the principal reason for concentrating the washed slurry was to try to plug the filter and then attempt a recovery. Unfortunately for the pilot test, as in the past tests, the filter did not plug. However, this is good news for the plant. Figure 25 shows that during the 2 hours of dewatering, the washed slurry filter flux dropped steadily from 0.03 to 0.01 gpm/ft^2, while the solids concentration increased from 21 to 29 wt% UDS.

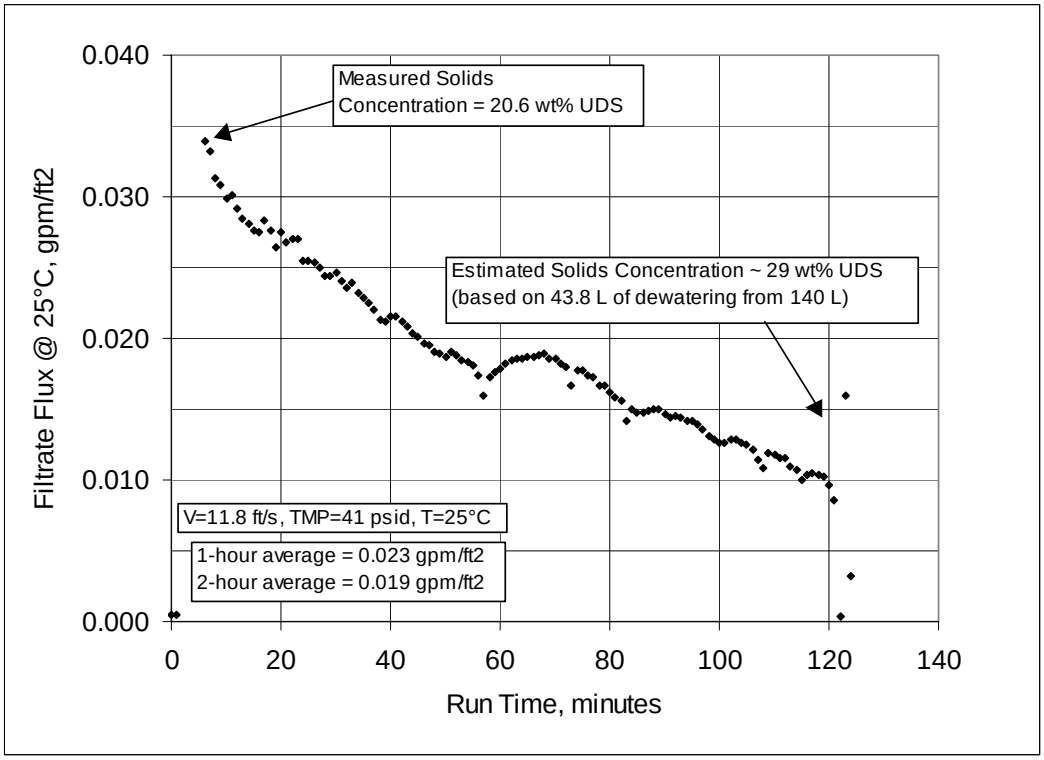


Figure 25. Post-wash dewatering

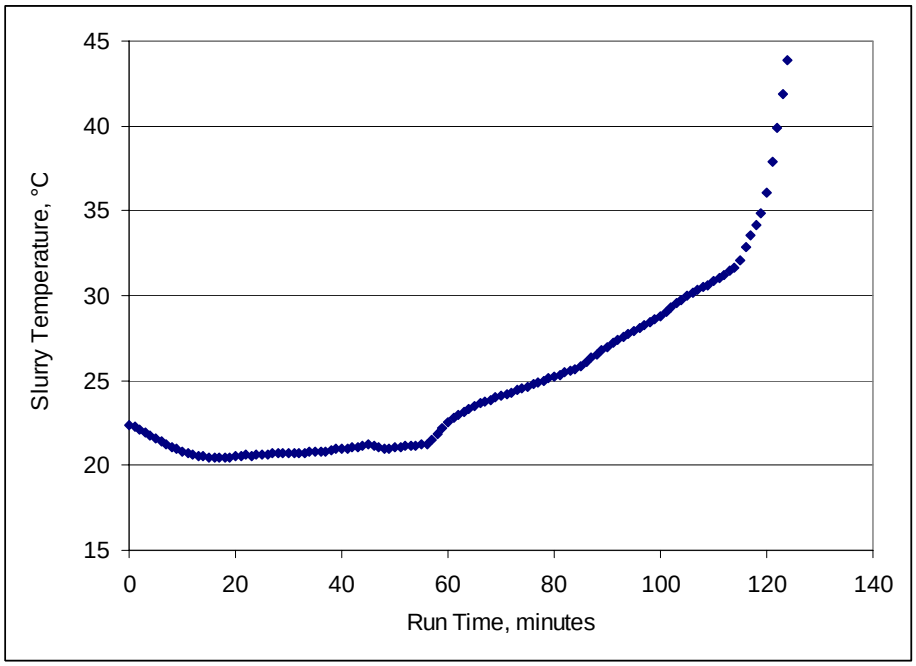


Figure 26. Temperature of the post-wash slurry during final concentration

As in the past, the dewatering had to be stopped because of the slurry temperature. Figure 26 shows the temperature history. To increase the time of dewatering, the temperature of the slurry was cooled down to approximate 20°C, which was the lower limit of the Test Specified (Townson, 2002) of 25°C ±5°C. After about 100 minutes of concentration, the upper operating temperature of 30°C was reached, but for this test concentration could continue until the safe limits of the test rig, which was set at 50°C temperature. After approximately 120 minutes of operation the temperature was increasing at approximately 2°C per minute. At 44°C, the test rig was shut down because even after shut down it takes a few minutes for the thermal momentum to stop and the cooling system to reverse the temperature rise, which was caused by pump heat.

Plugging of the filter did occur, but only after the test was over. The filter test rig was shut down for two hours to allow the temperature to decrease. When it was restarted slurry would not flow through the filter. In an attempt to break up the pluggage, the filter was disconnected from the pump recirculation loop and all of the permeate, which was previously removed during the concentration, was replaced. The idea was to bring all the thick slurry in the pumps back to its initial consistency, then allow the slurry to push through the filter tubes. However, even after dilution the filter remained plugged. Another attempt was made by closing the valves downstream of the filter (see valves V11 and V20 in Fig. 2) and backpulse through the filter. With the downstream valves closed, the only way for slurry, liquid, and air to leave the system was through the filter entrance back through the pumps and into the feed tank. This was done and since the liquid level in the feed tank increased significantly during the backpulse, this meant something flowed through the porous filter walls and out the filter entrance. By accident the backpulse air valve was left open a little too long and some air was also fed through the filter wall and into the slurry. Next, the main valve downstream of the filter (V11) was opened and then the pumps were very slowly powered up. The idea was that if the backpulse stream only left small fissures in the slurry, which was plugging the filter, then a very slow flow of slurry from the pumps would move through those fissures and erode the pluggage. That is, it was feared that a strong pulse of slurry from the pumps being on at full force may close those fissures. In any case, the slow flowing slurry worked and within 10 minutes, the filter pressure dropped to expected values, thus indicating the pluggage was removed and flow reestablished. A fast check of the filter permeate flux after the recovery confirmed that the filter returned to the same state it had before the post-wash final concentration began.

2.10 *FILTER RINSING AND CLEANING*

To follow the RPP-WTP flowsheet after slurry washing, the filter system was deinventoried of the slurry and the process of rinsing and cleaning begun. It involved first rinsing the system with a mild caustic solution (0.1 M NaOH) for 30 minutes, then the filter was cleaned three times with 2 M nitric acid. Each acid cleaning was done for 90 minutes. Finally the system was rinsed two more times with mild caustic rinses at 30 minutes each. The filter was checked with the caustic solution to measure “water” flux to compare to the pre-test caustic water baseline test, i.e., test number 1.00.

Figure 27 shows the permeate flux history of the pre-cleaning caustic rinse after a backpulse and Fig. 30 (a) shows a settled sample of the rinse solution, which had pH~13. Notice the large amount of undissolved solids.

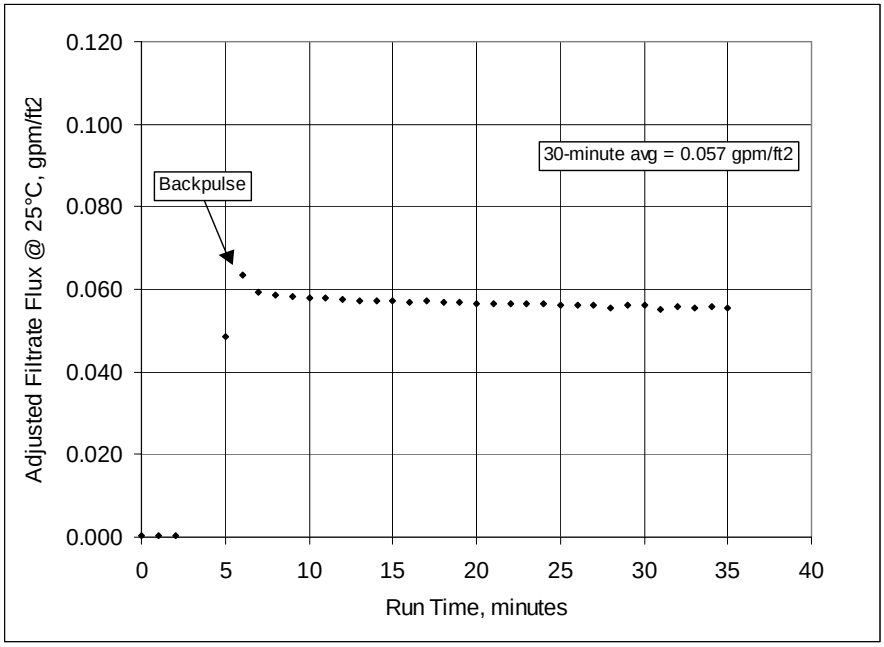


Figure 27. Pre-cleaning caustic rinse of 0.1 M NaOH

[average operating parameters: V= 10.9 ft/s, TMP=21 psia, T=24°C]

The concentration of those solids turned out to be approximately 8 wt% and represented the expected heel left in the filter loop and feed tank during the first rinsing. To obtain this mixture, 7.5 liters of the previously washed slurry at 21 wt% UDS was added to the 100 liters of 0.01 M NaOH rinse solution. After Campaign I ended, SRNL found out from WTP that most of the heel in the feed tank will be steam lifted out of the filter feed tank, therefore, the first rinse solution in the full scale unit will have closer to 2 wt% UDS than 8 wt% UDS.

Figure 28 shows the filter flux results for all three nitric acid cleanings. The time gap between each two cleanings was the time necessary to deinventory the filter system and put in another charge of acid. It is interesting to see that the curve almost looks continuous when the gaps are kept. This implies that while the filter system was stopped and emptied of the dirty acid stream and replaced with the new one, the acid left in, and on, the filter porous tube continued to dissolve solids. Unfortunately, since the flux data were still increasing at the end of the last 90-minutes cleaning, further cleaning may be warranted. Fig. 30 (b), (c), and (d) show the dirty cleaning solutions, which all have a pH~1.

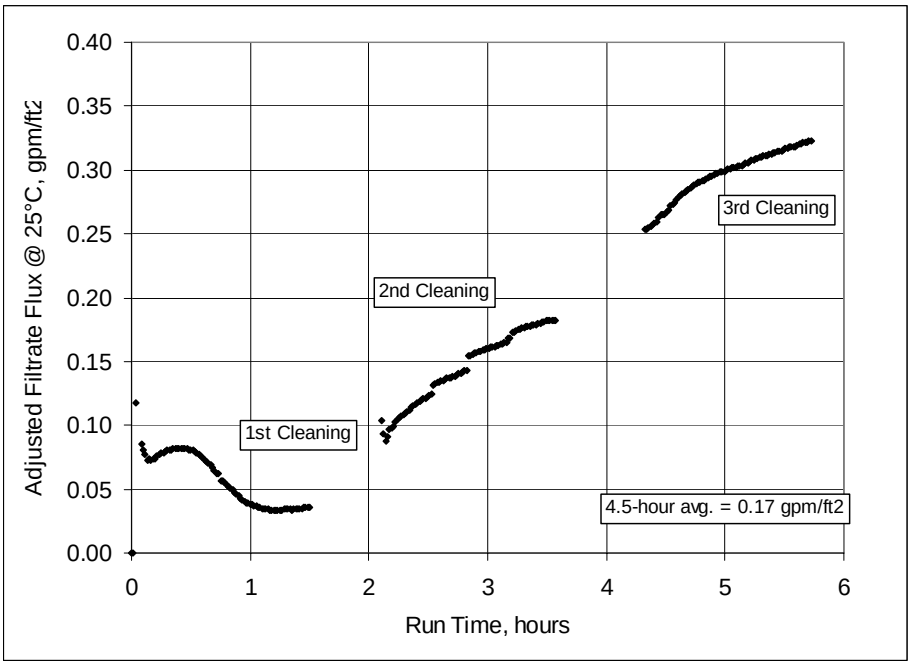


Figure 28. Three 90-minute periods of cleaning with 2 M HNO3

[average operating parameters: V= 11.0 ft/s, TMP=40 psia, T=25°C]

Notice that Fig. 30 (b) is much whiter, or cloudier, than the following two samples of cleaning solution. The first acid cleaning had significant solids and the first data set in Fig. 28 shows the filter flux actually dropping. It appears that while the solids were dissolving they were forming a sticky mass on the filter surface, which caused the flux to drop. After about 1 hour, the flux stopped dropping and began to increase. While the flux continued to increase for the remaining cleaning periods there were still solids present and it was really only until the last cleaning, Fig.30 (d), that no solids were visible.

Following the cleaning, there were two more caustic rinses. As is clear from Fig. 29 the permeate flux dropped very fast during the first caustic rinse. This has always been the result of adding a caustic rinse after acid cleaning because after draining all the acid solution there are always trapped pockets of acid in the filter system, as well as all the acid solution that coat the system walls. Many of the dissolved solids in the remaining acid precipitates and causes a reduction in filter flux. There were even enough acid to make the first caustic rinse acidic. The measured pH level in the first post-clean rinse solution was pH~1. However, it appeared to clear in the last acid cleaning solution, see Fig. 30 (e). The final 0.1 M NaOH rinse remained caustic. It had a pH of 12, which means that most of the acid was flushed out of the system. However, in the last rinse the precipitated solids became visible.

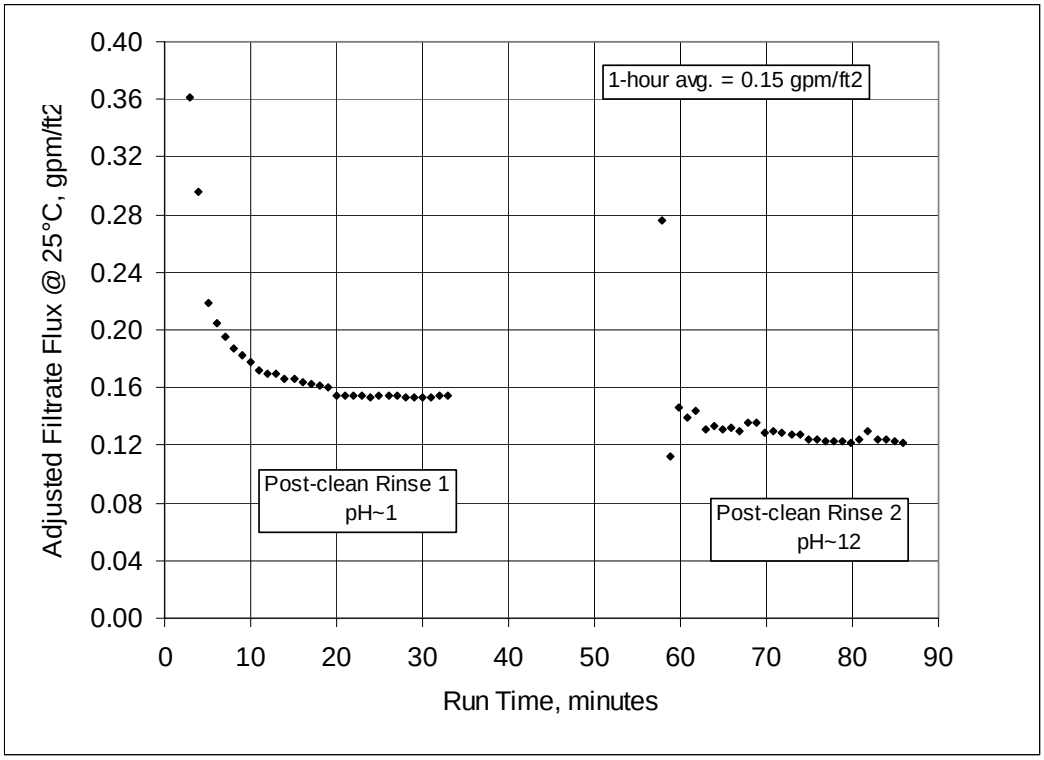


Figure 29. Two post-cleaning caustic rinses of 0.1 M NaOH

[average operating parameters: V= 11.0 ft/s, TMP=20 psia, T=24°C]

(a) (b) (c) (d) (e) (f)

Figure 30. Rinse and cleaning recycle streams

(a) pre-clean caustic rinse, pH~13, (b) first 2 M nitric cleaning, pH~1, (c) second 2 M nitric cleaning, pH~1, (d) third 2 M nitric cleaning, pH~1, (e) first post-clean caustic rinse, pH~1, (f) second post-clean caustic rinse, pH~12

Those solids appear reddish, see Fig. 30 (f), which implied some percentage of iron. At the end of the last caustic rinse the permeate flux had asymptotically dropped to 0.12 gpm/ft^2. This caustic flux was still more than 15 times higher than the average dewatering permeate flux of 0.007 gpm/ft^2.

2.11 *FILTER BASELINING*

As seen in the past (Duignan, 2000a), the filter flux for the post-test water run always is lower than the initial water runs, see Fig. 31. It is not known why the filter always give much better results before testing. One reason may be that while the pilot test rig sits idle for many months, and in this case it was approximately 1 year since its last use, the filter remains submerged in a mild caustic solution to keep it wet and prevent the growth of algae. During that time, any solids lodged in the filter walls may be slowly dissolving, giving higher flux results for its next use. This fact should become clearer between Campaign I and II of the SIPP because the idle period for the filter was only approximately 10 weeks. In any case, the lower post-test water flux should not be a problem because it is still more than an order of magnitude higher than when filtering slurry wastes. There is some past evidence that the level of cleanliness of the filter may not affect the permeate flux of the waste as long as the clean water flux is significantly higher. What significant means is not known, but performance from one campaign to the next should indicate how the partially clean filter substrate performs. That is, does it get progressively worse or does it reach some repeatable clean condition above which it is not efficient to spend more time or money to clean.

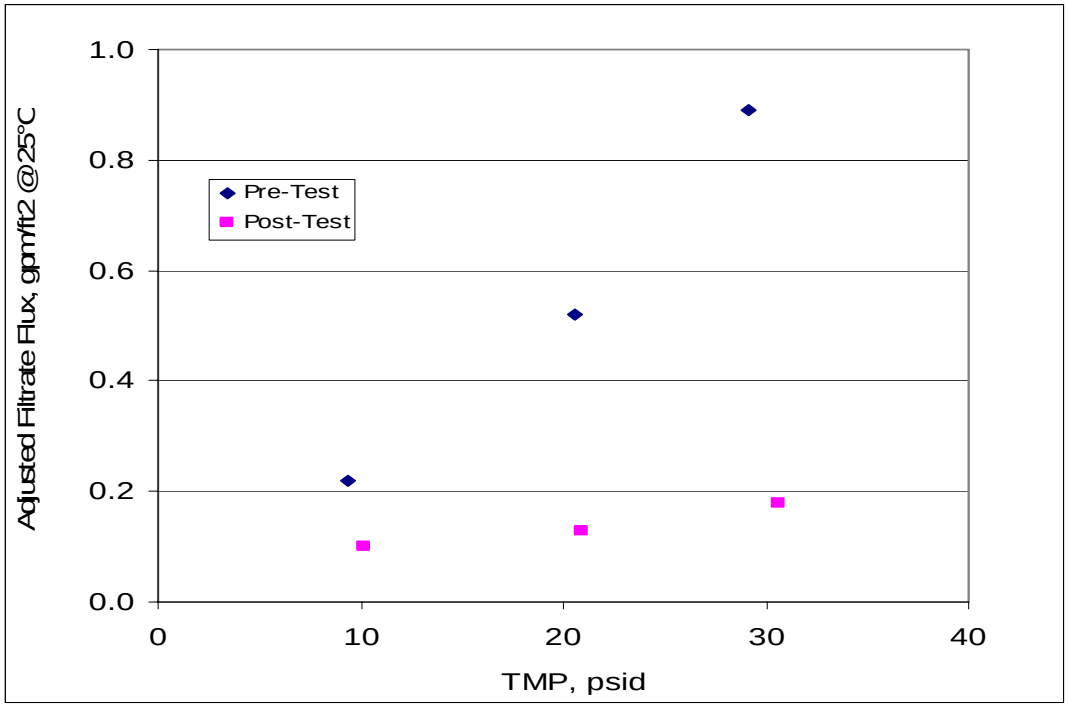


Figure 31. Pre- and post-test water (0.1 M NaOH) baseline test runs

[average operating parameters: V= 11.0 ft/s, T=26°C]

2.12 *PILOT FILTER VS. BENCH-TOP TESTING*

After completing Campaign I, the filter results were compared to bench-top (CUF) work. While the comparison is not exact due to differences in scale (see Duignan, 2003a, section 3.3.3.2, 3.3.3.3, and 3.3.3.4), it is instructive to contrast differences. Figure 32 is a repeat of CUF Run 2 data, see Fig. 1, with the data from Fig. 4 superimposed.

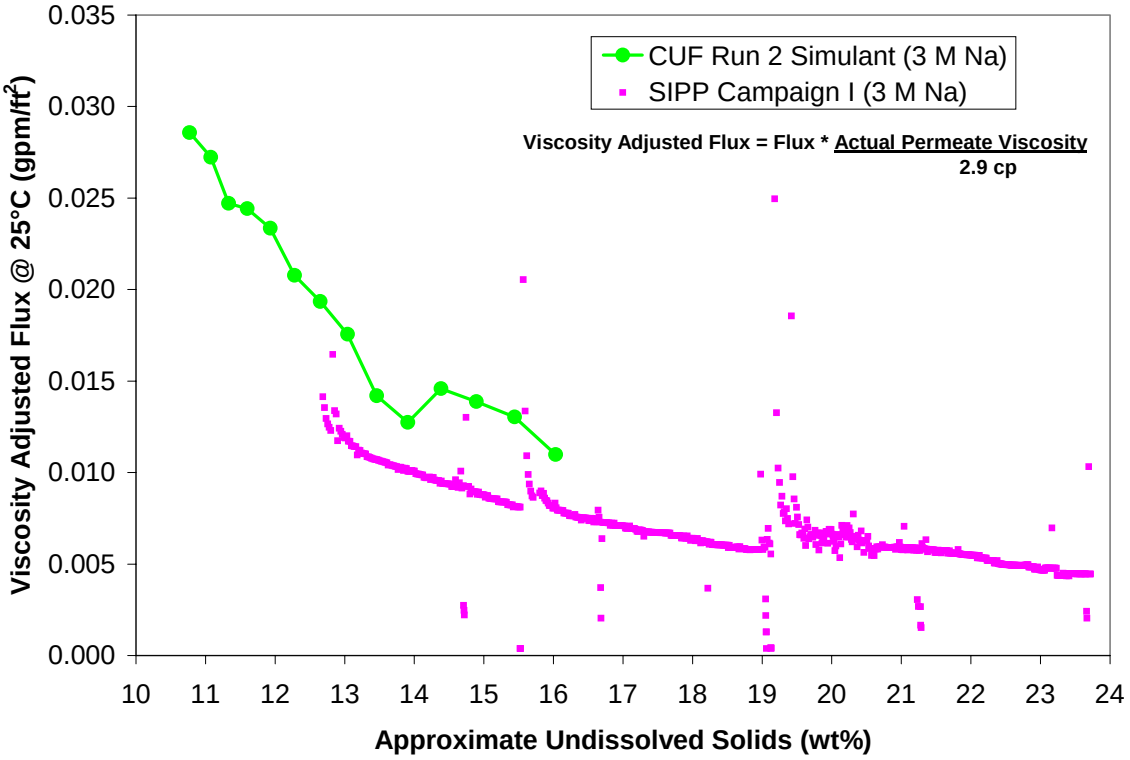


Figure 32. Comparison of the pilot to bench-top (CUF) scale tests with AY102/C106 simulant

[Compare with Fig. 1]

Note, that like the bench-top data, the pilot data were adjusted for differences in permeate viscosity. As has been seen in the past (e.g., see section 3.3.3.3 in Duignan, 2003a), the bench-top data are above the pilot data. Past estimates have indicated differences of at least 30%, which would bring the two curves very close to each other. The bench-top (CUF) data had to be stopped at 16 wt% UDS due to system limitations. However, as the slurry becomes more concentrated the two curves would expect to be even closer when the filter cake becomes very thick and differences in scale become smaller.

3.0 CONCLUSIONS

The average pilot ultrafiltration permeate flux data for AY-102/C-106 simulant was less than the expected WTP design of 0.0277 gpm/ft^2, but was considered to be representative of the actual Hanford waste. Therefore, the flux obtained in this test is that which may be expected during actual operation. A summary of the overall conclusions follows:

- Average permeate flux when dewatering from 12 to 24 wt% was 0.008 gpm/ft^2.
- At no time did the permeate turbidity measure to be higher than 0.5 NTU and therefore the permeate was considered always free of solids.
- Steady-state solids concentration confirmed that the best permeate flux is obtained with the slurry axial velocity was at or above 11 ft/s.
- When washing a batch of waste, which was concentrated to 20 wt% UDS, with two equal batches of 0.01 M NaOH solution, the consistency was reduced by one-half, but the yield stress remained statistically constant.
- When washing, many elements like sodium and aluminum were reduced by almost an order of magnitude. Some species in the undissolved solids actually did dissolve, like oxalate and fluoride, causing the concentration of undissolved solids to decrease as the dense supernatant was replaced with caustic water.
- When the filter became plugged with highly concentrated solids, recovery was possible for the vertically mounted filter by backpulsing after the downstream slurry valve was closed.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pretest cleanliness.

4.0 FUTURE WORK

As per the SIPP test specification (Longwell, 2003), the work discussed in this interim report is for Campaign I, which was only the first of four campaigns. Future work will be reported in other interim reports to culminate in a final report near the end of this calendar year. The final report will mention any future work outside of the current task, which may be the result of information elicited from the SIPP task.

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Appendix Section: I-2

Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign II

[For Information Only]

INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT CAMPAIGN II

September 2004

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24590-PTF-TSP-RT-02-015, Rev. 0, 15 Nov. 2002
24590-PTF-TSP-RT-03-002, Rev. 0, 05 Jun. 2003
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Test Plans:
WSRC-TR-2003-00338, Rev. 0, 04 Aug. 2003 (SRT-RPP-2003-000165) and WSRC-TR-2001-00340, Rev. 0, 06 Feb. 2002 (or SRT-RPP-2001-000116) (CIX chemical testing only)

Test Exceptions:
All of the following test exceptions only affect the CIX chemical testing sub-task: WSRC-TR-2001-00340
24590-WTP-TEF-RT-02-025, Rev. 0, 20 May 2002
24590-WTP-TEF-RT-02-046, Rev. 0, 01 Aug. 2002
24590-WTP-TEF-RT-03-004, Rev. 0, 07 Feb. 2003
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24590-WTP-TEF-RT-03-037, Rev. 1, 17 Sept. 2003
24590-WTP-TEF-RT-03-054, Rev. 0, 17 Sept. 2003
24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003
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INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT - CAMPAIGN II

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NOMENCLATURE

AA	Atomic absorption (spectroscopy)
ACTL	Aiken County Technology Laboratory
ADS	Analytical Development Section (part of WSRC/SRNL)
AP101	DOE Hanford Site Tanks 241-AP-101 simulated waste
AN102	DOE Hanford Site Tank 241-AN-102
AN107	DOE Hanford Site Tank 241-AN-107
AY102	DOE Hanford Site Combined Tanks 241-AY-102 and 241-C-106
BNI	Bechtel National, Inc.
CIX	Cesium Ion Exchange (Process) (part of the RPP-WTP Pretreatment Facility)
CFD	Computational Fluid Dynamics
CUF	Cells Unit Filter (bench-top cross-flow filter used with both radioactively cold and hot wastes)
°C	Degree Centigrade (or Celsius)
D	Diameter
DIF	Deionized and Filtered (0.1 micron) Water
DOE	United States Department of Energy
dP	Differential Pressure
DS	Dissolved solids
EDL	Engineering Development Laboratory (part of WSRC/SRNL)
EPDM	Ethylene Propylene Diene Monomer
FEP	(Waste) Feed Evaporation Process (part of the RPP-WTP Pretreatment Facility)
ft	Foot
gm	Gram
gpm	Gallons per Minute
HLP	High Level (Activity Waste) Process
HLW	High Level (Activity) Waste
hr	Hour
i.d. or ID	Inside Diameter
ICPES	Inductively coupled plasma emission spectroscopy
ICPMS	Inductively coupled plasma mass spectrometry
IHLW	Immobilized high level waste (glass)
ILAW	Immobilized low activity waste (glass)
in.	Inch
IX	Ion Exchange
hr	Time: Hour
l or L	Liter
LAW	Low (Level) Activity Waste
m	Meter
M	Molar (mol/L)
Mg	Milligram
min	Minute
ml or mL	Milliliter
mm	Millimeter

MTG/d	Metric tons glass/day
NAS	Sodium Aluminosilicate
nominal	The word "nominal" for a filter rating is a vague term. Its meaning is manufacturer dependent. Further, a "nominal" rating does not give an exact size to a filter medium, but rather an approximation to the expected performance of a filter. In the case of Mott, a nominal rated 0.1-μm filter means that approximately 95% of particles greater than 0.1 μm will not pass the filter.
NTU	Nephelometric Turbidity Unit
o.d. or OD	Outside Diameter
OLI	Modeling software which is part of Environmental Simulation Program software package used in developing the SIPP task
Pa	Pascal
PSD	Particle Size Distribution
psi	Pounds Per Square Inch
psig	Pounds Force Per Square Inch Gauge
psid	Pounds Force Per Square Inch Difference
PWD	Plant Wash and Disposal (System)
QA	Quality Assurance
RLD	Radioactive Liquid (Waste) Disposal (System)
RPP	River Protection Project (at the DOE Hanford Site)
s or sec	Second
SBS	Submerged Bed Scrubber – source of LAW and HLW melter recycle streams
SIPP	Semi-Integrated Pilot Plant
SRNL	Savannah River National Laboratory (part of WSRC)
SS	Suspended solids
SSM	Steady-State Matrix (Applies to Campaign I only – see Fig. 33)
Std Dev, σ	Standard Deviation
TLP	Treated (Feed) LAW Process (part of the RPP-WTP Pretreatment Facility)
TS	Total Solids
TMP	Transmembrane Pressure (the average pressure drop across the thickness of the filter medium – perpendicular to the slurry flow.)
TRU	Transuranic
UDS	Undissolved Solids
UF	Ultrafiltration
UFP	Ultrafiltration Process (part of the RPP-WTP Pretreatment Facility)
V	Velocity of the slurry flow along the length of the filter tubes
VSL	Vitreous State Laboratory (of Catholic University of America, Wash. DC)
WGI	Washington Group International
WTP	Waste & Immobilization Treatment Plant
WSRC	Westinghouse Savannah River Company
XRD	X-ray diffraction

Also note: Within this report, supernate refers to the liquid (undissolved solids-free) portion of a slurry sample. When referring to the ultrafiltration process, the permeate is synonymous with the slurry supernate; either term can thus be used, but permeate will be the preferred term herein. For the evaporation operations, the liquid fraction of the slurry feed or bottoms product will be called the supernate.

ABSTRACT

Campaign II, the second step towards the Semi Integrated Pilot Plant (SIPP) task, done by the Savannah River National Laboratory (SRNL) at the Savannah River Site, was to take the several recycle streams produced in Campaign I, the first step of the task, and combine them with other simulated recycle and chosen waste streams. The combined stream was processed in a fashion that mimicked the pretreatment operations of the DOE River Protection Project – Waste Treatment and Immobilization Plant (RPP-WTP). The SIPP task is considered semi-integrated because it only deals with the pretreatment operations of the RPP-WTP. That is, the pilot plant starts by receiving waste from the tank farm and ends when waste is processed to the point of being sent for vitrification. The resulting pretreated LAW and HLW simulants produced by the SIPP are shipped to VSL[†] for vitrification in pilot WTP melters.

Within the SIPP task these steps are referred to as Campaigns and there are four Campaigns in all. Campaign I, which is completely different than other campaigns, subjected a simulant of Hanford Tank 241-AY-102/C-106 (AY102) waste to cross-flow ultrafiltration only and in that process several important recycle streams were produced as a result of washing the simulant and cleaning the cross-flow filter. These streams are to feed subsequent campaigns and that work was the subject of the issued Campaign I interim report (Duignan et al. 2004).

The operation of each of the subsequent campaigns, i.e., II, III, and IV, while different from Campaign I, are very similar to each other, and can be best understood as the process of operating a series of Pretreatment Unit Operations in a somewhat prototypic manner. That is, while Campaign I studied the operation of a single, albeit important, Pretreatment Unit Operation, i.e., Ultrafiltration, all subsequent campaigns are to study the four major unit operations that make-up the RPP-WTP Pretreatment Facility. They are: Waste Feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and the Treated LAW Evaporation Process (TLP). Each of the campaigns operate basically as a separate subtask, but as with Campaign I, the recycle streams produced in one campaign feeds into the subsequent campaign. Therefore, all four campaigns are chemically connected through these recycle streams, which carry over effects of the preceding campaign.

The results of Campaign II operations are the subject of this second interim report. The reports are called interim because they are limited to the results obtained from a single campaign (or past campaigns) and further limited to only highlights of that single campaign. A final report will follow Campaign IV and its intent is to comprehensively cover the overall task activities, as well as the full database accumulated and the equipment used during the yearlong SIPP task.

SIPP is a limited version of the plant's pretreatment facility in that it tests pilot-scale unit operations of FEP, UFP, CIX, and TLP only. However, an integral part of SIPP is to produce the many recycle streams that must also be processed with stored tank farm

[†] Vitreous State Laboratory of the Catholic University of America

waste. That is, it is very important to know the impact that the recycle streams will have on the operation of the several unit operations so as to better model the plant's overall pretreatment throughput, leading to a production rate of stabilized waste.

This report will begin with a summary of the overall operation of the task done during Campaign II to understand the layout of this report. This summary is then followed with highlights of the test results.

With input and review from Hanford, SRNL developed a steady-state OLI/ESP model of the RPP-WTP Pretreatment Facility operation. That model's principal role was to determine the amounts of simulated wastes needed for each of the four unit operations. In general, it did well, but was found to be off by approximately 15% in predicted SIPP volumes due to unknowns in the undissolved solids of the several simulants. For example, the UF feed composition calculated from the *model* inputs, assuming no dissolution occurs upon mixing, was 2.97 wt% UDS versus the model value of 2.45 wt% where dissolution occurred. When this 0.52 wt% of solids in the slurry is added to the supernate as soluble solids, the supernate dissolved solids content increases from 28.1 to 29.2 wt%, exactly as shown in the model. (This example is explained in detail in Section 2.7.4.2.1 and with Table 30.)

FEP Evaporation
The entire evaporation process proceeded as designed and a total of 1,125 liters of feed was concentrated to 147 liters. During evaporation a vacuum of 1 psia (6.9 kPa) at approximately 50°C was maintained and the average evaporation rate was approximately 0.43 gpm (1.5 lpm). No significant foaming was observed prior to the addition of antifoam agent and during the evaporation process; the froth height remained around 1 ft (0.3 m). At start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. Overall, the composition of the FEP feed was predicable by mass balance of the individual feed streams. The dissolved metals concentrations paralleled the ratios in the AY102 simulant present in the recycles. Finally, most of the oxalate present in the feed was precipitated beginning when approximately 53% of the feed by volume had been evaporated. The oxalate appears to have precipitated as the Na salt $Na_2C_2O_4$.

UFP
The average permeate flux when dewatering from ~4 to ~24 wt% was 0.011 gpm/ft^2 and when cleaning the filter, 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. The turbidity of the permeate from dewatering and slurry washing was always lower than 0.5 NTU, indicating that the permeate was free of significant solids. Even after 14 days the permeate turbidity increase to 0.56 NTU (see Table 26), which indicated that there was no significant post-filtration precipitation. (However, AY102-only permeate from Campaign I did post-precipitate after 2 months.). Washing of concentrated slurry raised its yield stress from about 10 to 15 Pa, but lowered the consistency from about 23 to 13 mPa·s and from the Campaign I data it was found that the yield stress of unwashed slurry is reduced upon extended pumping. The washing data did match previous SRNL and literature leaching and washing data for soluble washable species (see Table 36).

Because of substantial amount of heel material during rinsing and cleaning of the filter, the use of a more concentrated NaOH solution for the third caustic flush during filter cleaning may be warranted since the pH of the spent third wash was acidic. Finally, at least 92% of the antifoam remained in the HLW sludge slurry after filtration. However, due to Dow Corning's difficulties in measuring true concentrations of antifoam the measurement uncertainties were very large and submitted samples are being rechecked and will be reported in future SIPP reports.

CIX

The ion exchange resin SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five-molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of waste were treated. However, the analytical inability to measure very low cesium concentrations in five-molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of waste was treated. On performing a mass balance, the masses of cesium in and out of the resin beds for Cycles 1 and 2 balanced to within measurement uncertainty. Hydraulically, the pressure drops throughout the two cycles were low and the resin beds permeabilities were approximately the same as were measured for the 24-inch Test (Fowley et al, 2004).

TLP Evaporation

The Pilot-scale evaporator operated well for the TLP evaporation in concentrating the TLP simulant from an initial density of 1.14 kg/L to 1.395 kg/L at 25° C (1.360 kg/L at 50° C). There was no significant foaming observed prior to the addition of antifoam agent and during the evaporation process, the froth height remained around 1 ft (0.3 m). The two Demisters, in series, operated well with no significant differential pressure build-up across the Demisters during the TLP Campaign II. However, condensation had to be purged from the instrumentation lines during the campaign. The composition of the products from the TLP matched what was expected from the mass balance. Finally, no precipitation was noted of additional solids beyond those in the feed.

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1.0 TESTING SUMMARY

1.1 OBJECTIVES

Campaign II, one of four planned campaigns for the SIPP task, is the first test that includes all four WTP Pretreatment Facility unit operations, along with the incorporation of recycle waste streams. The objectives listed below are those given in the RPP-WTP Test Specification (Longwell, 2003) for completeness, however, only the body of work approved in the WSRC Technical Task and Quality Assurance Plan (Duignan, 2003c) is required to satisfy this task. Objectives not met because they were not agreed to in the Task Plan are so noted.

Overall Test Objectives	Objective Met (Y/N)	Discussion
1. Modify the design and operation of the existing pretreatment pilot facilities to extent necessary to mimic the WTP Pretreatment Facilities.	Y	Each of the four unit operations that comprise the SIPP test were either modified or built to meet planned operation.
2. Operate the (pilot) integrated facilities using simulated AY102 (Envelope A/D) and AP101 (Envelope A) waste feeds.	Y	Campaign II involved the use of simulated AY102, AP101, as well as other waste streams, which were recycle streams.
3. Collect chemical and physical property data to be defined in the test plan then refine and validate the thermodynamic model(s) developed by SRNL.	Y	Sufficient property data were obtained to satisfy project needs as is evidenced by the customer approval of the Campaign II sample plan before testing began.
4. Demonstrate pretreatment production rates required to produce 80 metric tons per day of LAW glass and 5.4 metric tons of HLW glass. These are contract defined "expected" production throughputs for 5-day sprint runs listed in Table C.6-5.1 of the contract (DOE 2003). These required flow rates will be determined before testing begins by application of the appropriate scale factors to the unit operations that represent an equivalence of pretreatment throughput to meet maximum glass production.	N	The unit production rates were measured but the targets were not met. The SIPP task was limited to four separate unit operations that comprise the principal operations of the RPP-WTP Pretreatment Facility. The pilot FEP and TLP evaporation units exceeded the plant-modeled rate of 0.395 gpm. The pilot CIX was subjected to a test exception (described in Section 1.2), which changed this objective. The pilot CIX goal was no longer to show production rate, but to demonstrate cesium removal efficiency. The prototypic LAW resin bed residence time took precedence over production rate, and thus production throughput rate was not demonstrated. As shown in Campaign I, the pilot ultrafiltration permeate rate during dewatering from 3.4 to 20 wt% UDS was 0.015 gpm/ft2. This rate is below the target rate of 0.02 gpm/ft2, but is representative of the filter process since a similar flux rate was obtained for both Campaign I, with no recycle streams, and Campaign II, which included several recycle streams.

FEP/TLP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the Waste Feed Evaporator and the Treated LAW Evaporator using simulants derived from the integrated operation of the pretreatment pilot plant.	Y	Feeds for both the FEP and TLP evaporators included derived simulants or recycle streams produced during SIPP operations.
2. Recycle secondary waste generated from the ultrafiltration pilot operations and the ion exchange unit operation to the evaporators.	Y	Recycle streams from the ultrafiltration pilot operation from Campaign I were fed to the FEP evaporator. However, the test specification indicated that no pilot CIX secondary streams will be processed. [Longwell, 2003: section 6.2, 6th paragraph].
3. Operate the pilot evaporator using simulated HLW Submerged Bed Scrubber solution, simulated Pretreatment Caustic Scrubbers, ion exchange recycle solutions, and ultrafiltration recycles generated from pilot operations.	Y	Campaign II used all the streams indicated except those produced from the pilot CIX. Pilot CIX recycle streams will be used for Campaign III.
4. Operate the pilot evaporator using simulated LAW Submerged Bed Scrubber solution and ion exchange treated feed to produce LAW feed solution.	Y	See the preceding response.
5. Compare the results (solubility, chemical, and physical properties, which will be indicated in the test plan) developed on the pilot scale with results developed by experiments conducted at the bench scale.	N	However, any extant bench-scale data will be used for such comparisons in the final report.
6. Determine the chemical and physical properties of simulants evaporated at the pilot scale as a function of sodium concentration and temperature.	N	The approved task plan did not require these property vs. temperature evaluations. However, densities and sodium concentrations were measured and included in this report.
7. Evaluate the selected antifoam reagent performance in the evaporators.	Y	Antifoam was added to both evaporators and those results are discussed herein.
8. Evaluate the effect of in-leakage on air emissions.	N	This work was not included in the approved task plan due to cost.
9. Determine the chemical and physical properties of concentrated recycle and waste blends, which will be indicated in the test plan, to be sent for precipitation/ultrafiltration.	Y	The concentrated bottoms streams were analyzed and discussed herein.
10. Operate the pilot evaporator unit assuming a full-scale WTP Pretreatment process flow rate of 80/5.4 MTG/d.	Y	Both evaporators were run at a rate of better than the plant rate of 0.395 gpm. Which was based on a production rate of 80/6 MTG/d (Calloway, 2004).

UFP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate with prototypical wash/leach/wash/steps using simulated AY102 and AP101 and concentrated evaporator recycles.	Y	The approved task plan made the leach step optional, pending RPP-WTP guidance. Before testing began RPP-WTP decided against doing the leach step. All other objectives were met.
2. Operate with prototypical/recommended Ultrafiltration cleaning method.	Y	RPP-WTP recommended continued use of 2 M nitric acid for cleaning, which was done.
3. Determine the chemical and physical properties of the concentrated solids, washed solids, leached solids, and final solids product derived from each campaign.	Y	Properties of the concentrates were measured. However no leaching was performed as requested by the RPP-WTP customer.
4. Determine the chemical and physical properties of permeate, recycles, and cleaning solutions, which will be indicated in the test plan, derived from each campaign.	Y	Properties of those streams were measured and discussed herein.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	N	No bench scale experiments were done to study the effects of recycles.
6. Provide pump data (pump curves) for the high solid content slurries.	N	This requirement was not included in the approved task plan.
7. Demonstrate operation of the Ultrafiltration unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	See response 4 to the Overall Test Objectives, above.
8. Evaluate the downstream effects of antifoam reagent. Determine the fate of the reagent by tracking its concentration through the integrated pilot.	N	The effect on filter flux seemed to be insignificant, but it is discussed herein along with that data used to track the antifoam.

CIX Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the pilot ion exchange unit using ultrafiltration permeate produced using simulated AY102 and AP101.	Y	This was done along with the bottoms produced by evaporating the several recycle streams.
2. Operate the pilot ion exchange unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	Test Exception 24590-WTP-TEF-RT-03-069 required the pilot CIX show prototypic cesium removal. This required matching the Plant's treated waste residence time in the resin and not the full-scale flow rate. Therefore, this objective could not be met.
3. Demonstrate ion exchange column operating parameters using the recommended ion exchange resin.	Y	The currently planned resin, SuperLig®644 was employed.

CIX Test Objectives	Objective Met (Y/N)	Discussion
4. Determine the chemical and physical properties, which will be indicated in the test plan, of all ion exchange effluents.	Y	Properties of those streams were measured and discussed herein.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	N	No bench scale experiments were done to study the effects of recycles.
6. Determine the chemical and physical properties, which will be indicated in the test plan, of blended ion exchange secondary wastes (pre-elution rinse and spent regenerant) that are recycled back to the waste feed evaporation system.	Y	No pilot CIX recycle streams were required for Campaign II pilot waste feed evaporation, as per the approved Task Plan, but samples were taken from the streams that will be used for Campaign III. Those results are discussed herein.
7. Determine the chemical and physical properties of ion exchange eluates, which will be indicated in the test plan.	Y	Properties of those streams were measured and discussed herein.
8. Evaluate the potential effects of the evaporator antifoam reagent on ion exchange performance.	Y	The effect on ion exchanger seemed to be insignificant, based on good cesium removal.

1.2 TEST EXCEPTIONS

List Test Exceptions	Describe Test Exceptions
1. 24590-WTP-TEF-RT-02-025, Rev. 0, 20 May 2002	See Test Exception No. 7.
2. 24590-WTP-TEF-RT-02-046, Rev. 0, 01 Aug. 2002	See Test Exception No. 7.
3. 24590-WTP-TEF-RT-03-004, Rev. 0, 07 Feb. 2003	See Test Exception No. 7.
4. 24590-WTP-TEF-RT-03-037, Rev. 0, 30 Jul. 2003	See Test Exception No. 7.
5. 24590-WTP-TEF-RT-03-037, Rev. 1, 17 Sept. 2003	See Test Exception No. 7.
6. 24590-WTP-TEF-RT-03-054, Rev. 0, 17 Sept. 2003	See Test Exception No. 7.
7. 24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003	As of the completion of Campaign II there was no test exception to the SIPP task plan (Duignan et al., 2004). All of the listed test exceptions, 1 though 7, affect only a task plan dealing solely with ion exchange operation (Steimke, 2002). For completeness, all the test exceptions were listed but only this seventh test exception impacts SIPP test. As with all the other pilot unit operation the pilot CIX was to operate in a fashion to demonstrate the rate of glass production. However, RPP-WTP thought it was more important to demonstrate cesium removal efficiency. Since prototypic column flow rates and prototypic resin residence time must be different for other than full-scale sizes. The pilot unit was not used at a LAW flow rate that would demonstrate glass production rates. This seventh test exception describes how the pilot scale IX columns would operate to demonstrate cesium removal. That removal efficiency is what is discussed herein.

1.3 RESULTS AND PERFORMANCE AGAINST SUCCESS CRITERIA

List Success Criteria	Explain How the Tests Did or Did Not Meet the Success Criteria
1. The integrated operation of the pretreatment process produces vitrification feed streams similar in chemical composition to those produced in bench scale experiments.	Bench scale experiments were not part of the SIPP scope. However, the SIPP task did produce both LAW and HLW feed streams with simulated waste and recycle streams that were processed in the same manner expected for the RPP-WTP Pretreatment Facility. The chemical composition obtained is that which is expected for the full-scale facility and therefore this criterion was met.
2. The integrated pretreatment process demonstrates a scaled throughput of 80 MTG/d of LAW and 5.4 MTG/d of HLW.	This success criterion was partially met in that both the pilot FEP and TLP operated at, or above the evaporation rate (0.395 gpm) necessary to meet the stated glass production rates. The pilot UFP realized a dewatering filter flux rate of 0.015 gpm/ft^2. This value is below the rate needed meet the glass production rates, but is representative of rate obtained from bench scale test with actual waste. The pilot CIX rate purposely did not meet the full-scale plant rate, because it was required to operate at a slower rate that matched the residence time the plant waste will have in the resin.

1.4 QUALITY REQUIREMENTS

This work was conducted in accordance with the RPP-WTP QA requirements specified for work conducted by SRNL as identified in DOE IWO M0SRLE60. SRNL has provided matrices to WTP, demonstrating compliance of the SRNL QA program with the requirements specified by WTP. Specific information regarding the compliance of the SRNL QA program with RW-0333P, Revision 10, NQA-1 1989, Part 1, Basic and Supplementary Requirements and NQA-2a 1990, Subpart 2.7 is contained in these matrices.

1.5 R&T TEST CONDITIONS

List R&T Test Conditions	Were Test Conditions Followed?
1. SRNL shall prepare a specific test plan containing detailed information needed to implement (the) test specification. The test plan shall also include, as appropriate, references to documents that drive test documentation requirements to assure data integrity and reproducibility. This would include such items as detailed test procedures, instrument calibration, methods of data gathering, etc. The test plan shall indicate what methodologies will be employed to verify or validate data produced during testing activities. A draft test plan shall be submitted to WTP R & T for review and comment. Comments labeled "Mandatory" by the reviewer require a disposition. The changes in the test plan shall be provided electronically and clearly identified by redline/strikeout or highlighting to facilitate the review process. The final test plan must be approved by a WTP R & T representative prior to performing work.	As required a test plan was developed (Duignan, 2003c) to meet the test specification. All analytes that could not meet the listed criterion were indicated in the task plan and approved before testing began. Documents that were available before and when the test plan was completed were referenced therein, but those that were not, e.g. procedures, calibration, will be references as they become available in the subsequent task reports. The test plan was submitted to WTP R&T for review and approval. All reviewers' comments were addressed and disposition, after which the report was approved by WTP R&T prior to testing, thus it became the principal document to carry out testing.
2. Volumetric waste-to-recycle ratios will be calculated using appropriate WTP's Aspen Custom Modeler (ACM) Model runs as a basis for the combined feed stream. The block diagram to be used for this work is depicted in Figure 1. Simulant AY102 feed rate will be established based on the requirement for scaled 6 MTG/d HLW production, and AP101 feed rate will be based on the additional requirement to produce scaled 80 MTG/d LAW production. Tankage required for execution of the work will be provided and incorporated as required by [SRNL]. Prior to initiation of the test campaigns, the system will be simulated using the OLI Environmental Simulation Program (ESP) models developed in previous completed evaporation tasks. The expanded waste feed evaporation model, which includes ultrafiltration and recycles, along with the treated feed evaporation model will simulate the pilot operations under minimum (48/3.2 MTG/d) and expected (80/5.4 MTG/d) operating conditions. Output of the models will then be compared to above referenced ACM model runs and the data obtained during the pilot operations. Results of this modeling effort will be discussed with WTP R&T personnel and approval of the path forward obtained **PRIOR TO START** of testing.	As required, SRNL developed an OLI model based on several sources, included ACM and sources for ACM prior to any SIPP testing. The modeling results were compared to ACM results by both SRNL and RPP-WTP personnel. The OLI results were scaled to SIPP operation to assist in completing a test plan and to determine waste stream and recycle stream volumetric needs. The model was also used to determine scaled flowrates of each of the four unit operation in order to know what operation rate were necessary to meet full-scale plant glass production rates of 80 MTG/d from LAW and 5.4 MTG/d from HLW.

List R&T Test Conditions	Were Test Conditions Followed?
3. The LAW and HLW SBS recycles will be simulants generated from VSL/Duratek pilot melter testing.	Both submerged bed scrubber (SBS) recycle streams were obtained from VSL and used in Campaign II testing.
4. The simulant waste feeds will be based on approved formulations developed under the WTP's waste simulant program participated in by [SRNL].	The simulated waste feed AY102 was developed and validated by SRNL (Zamecnik, et al., 2004). It was filter tested at the bench scale against an actual waste sample. The formulation was approved by WTP R&T before its use. The formulation for the simulated feed AP101 was developed by Battelle (Russell, et al., 2003) and approved by WTP R&T. All other waste streams used for SIPP are either recycle streams or derived from recycle streams.
5. Generation of initial ultrafiltration recycles will be accomplished by performing the work specified in *AY102 Simulant Pilot Scale Ultrafiltration and Washing Test*, 24590-PTF-TSP-RT-02-015 (Townson, 2002).	The production of these recycle streams was done during Campaign I (Duignan et al., 2004).
6. An exception to the test matrix defined in (the Campaign I test) specification 24590-PTF-TSP-RT-02-015 will be to not perform certain tests specified in Appendix A, Table 1.1 (of that specification). The tests that will not be performed are (listed in the SIPP Test Specification, Longwell, 2003.)	The tests indicated in the SIPP Test Specification were not performed.

1.6 SIMULANT USE

Many simulated waste streams were either used or produced during Campaign II testing. Those include Hanford tank farm stored wastes, i.e., tank 241-AY-102/C-106, herein referred to as AY102, and tank 241-AP-101, herein referred to as AP101. During the process of making glass many recycle streams will be generated and processed. Those include streams from the: HLW and LAW Submerged Bed Scrubbers, Vessel Vent System, HLW Glass Canister Decontamination process, FEP and TLP condensate solutions, UFP wash permeate, UFP rinse solutions, UFP acid cleaning solutions, UFP loop flush solutions, CIX caustic LAW displacement solutions, CIX post elution rinse solutions, and CIX caustic regeneration solutions. These streams are discussed throughout this report.

1.7 DISCREPANCIES AND FOLLOW-ON TESTS

No discrepancies occurred during testing, but there will be follow-on work. This test, referred to as Campaign II, is the second of four Campaigns, which make up an overall task referred to as Semi Integrated Pilot Plant (SIPP) (Duignan, 2003c).

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2.0 DISCUSSION

2.1 *INTRODUCTION*

Bechtel National, Inc. (BNI) has been contracted by the Department of Energy (DOE) to design a Waste Treatment and Immobilization Plant (WTP) to stabilize liquid radioactive wastes that are stored at the Hanford Site as part of the River Protection Project (RPP). Because of its experience with radioactive waste stabilization, the Savannah River National Laboratory (SRNL) of the Westinghouse Savannah River Company (WSRC) is working with BNI and Washington Group International (WGI), to help design and test certain parts of the waste treatment facility. A major part of the waste stabilization process is the pretreatment of the wastes before vitrification, which will occur in the Pretreatment Facility where both HLW and LAW product streams will be handled. SRNL has constructed a Semi Integrated Pilot Plant (SIPP), which imitates important unit operations of the pretreatment process. However, since the actual pilot-scale vitrification is not handled by SRNL, the pilot plant is referred to as semi integrated. After SIPP pretreats the waste streams into vitrification feed streams, they will be shipped to the Vitreous State Laboratory (VSL) of Catholic University of America complete the entire process.

The subject of this report is the testing of one phase, or campaign, of all of the four principal unit operations that comprise the RPP-WTP Pretreatment Facility, i.e., Waste feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and Treated LAW Evaporation Process (TLP). The operation and results of each of these unit operations are explained herein.

This technical baseline research and development work was initiated by a WGI test specification (Longwell, 2003) to test simulated radioactive wastes in pilot scale pretreatment unit operations in the Engineering Development Laboratory (EDL) of SRNL. This report deals with the second of a four-campaign task, but it is the first campaign to use all four unit operations. Campaign I was at one time a completely separate task (Townson, 2003) to filter a specific waste. Subsequently, that first campaign was incorporated into the SIPP task to eliminate duplication of effort and to produce several important recycle streams. While, Campaign I was limited to a single unit operation, ultrafiltration, and a single waste stream, i.e., AY102, the process of operating the filter unit allowed the production of many of the important recycle streams needed to carry out the more comprehensive Campaign II test. After dewatering the single waste stream, the slurry was washed to produce one recycle stream. Then the filter unit was flushed, cleaned, and rinsed, thus creating other important recycle streams. Besides producing recycles, the Campaign I single-waste filter results were then used to compare with filter results obtained after mixing that waste stream with others, i.e., AP101 and the many recycle streams. A further benefit to limiting Campaign I to a single waste stream was that the filter results could be compared to the pilot filter tests done with other single waste streams, (see Duignan, 2000a, Duignan, 2000b, Duignan, 2003a).

This report will discuss the four pilot unit operations during Campaign II. There were many individuals involved and the information for each section was provided primarily by each of the principal investigators. They are:

Simulant development and sample analyses John R. Zamecnik
Simulant and sample handling – Michael R. Williams
SIPP Computational OLI/ESP Modeling – C. Dan Barnes
FEP operation – Zafar H. Qureshi
UFP operation – Mark D. Fowley
CIX operation – John L. Steimke
TLP operation – Duane J. Adamson

A summary of EDL task activities is as follows:

WGI Test Specification for UF Test Received – December 2002
WGI Test Specification for SIPP Received – June 2003
WSRC Task Technical & Quality Assurance Plan Approved – August 2003
Test Procedure Approved – October 2003
Received AY102/C106 Simulant – January 2004
Campaign I – 26 January to 12 February 2004
Campaign II – 12 April to 14 May 2004

2.2 *THE PLAN*

Initial planning for the Semi Integrated Pilot Plant (SIPP) was to decide what to study. One of the first decisions was to limit the task to the RPP-WTP Pretreatment Facility since pilot melter facilities already existed at another site[†]. This is the reason that this task is referred to as "Semi Integrated," i.e., to indicate that vitrification is not part of the pilot operations at the Savannah River National Laboratory (SRNL). The next step was to decide which simulant(s) to test. Since the waste types at Hanford were broadly classified as envelopes A, B, C, and D (Eibling and Nash, 2001), therefore three campaigns were planned, one for each envelope, except D. Envelope D is basically a sludge, which would not be processed alone, but would be mixed with some of the other envelopes. As such, each campaign would process a chosen simulated waste through the principal unit processes of the Pretreatment Facility. Those units are the Feed (Waste) Evaporator Process (FEP), Ultrafiltration Process (UFP), Cesium Exchange (Process) (CIX), the Treated LAW Evaporation Process (TLP), and for Envelope C-types wastes, the Strontium-Transuranics (Sr/TRU) Precipitation Process.

Having a task that would test a range of possible waste types was a good comprehensive approach; however, to obtain meaningful operational data for the plant it was not just a matter of processing each of the different wastes once through each of the unit process. Steady state operation of the Pretreatment Facility would also have to include all the recycle waste streams. That is, in the process of separating the wastes into necessary components for further processing, other waste streams are produced. A few of those

[†] The Vitreous State Laboratory at Catholic University of America in Washington, DC.

streams are: waste washings, filter cleaning and rinsing solutions, CIX regeneration solutions, HLW canister decontamination solutions, vessel vent solutions, submerged bed scrubber solutions from both the HLW and LAW vitrification facilities, etc. In steady state these recycle streams will be recycled to different locations in the Pretreatment Facility. Those streams need to be included to simulate the actual plant operation. This means that each of the campaigns would have to run many times until the effects of the recycle streams stabilized so that steady state operation is realized. After reevaluating the task needs, available funds and time, it was clear that the scope had to be reduced. It would be limited to processing a key waste stream with all the recycle streams and then processed enough times that steady-state operation would be attained. Focus was then directed to the wastes that the plant would use for commissioning, i.e., 241-AY-102/ C-106, here referred to as AY102, and 241-AP-101, herein referred to as AP101. The first waste is the result of two waste tanks that have already been mixed together, AY-102 and C-106 and is classified as an Envelope A/D mixture. The second waste, AP101, is an Envelope A waste. With this waste, all of the principal WTP Pretreatment Processes would be tested except the Sr/TRU Process because it did not include an Envelope C-type waste.

The SIPP task was dedicated to perform integrated processing of one selected waste stream combination that included recycle streams produced during the processing of waste through the four pilot-scale unit operations. As such, the testing of an "integrated" process is integrated in the sense of capturing the salient chemical processes, that is, it is important to note that the SIPP is not integrated with respect to time. The operation of the Pretreatment Facility is complex in both chemistry and time, but the many interconnected systems and supporting processes that will exist in the plant to allow the four main unit operation to function were not included in SIPP because of schedule and expense. Just the scaling issues alone, for an entire Pretreatment facility, would have been an almost impossible task to accomplish. In short, running the four principal unit operations with simulated waste and recycle streams as chemically close as to what will result in the plant was accepted as the most efficient use of the time and money available. Time of operation was limited to the operation of each individual unit operation only, and not to their temporal interdependence on the supporting Pretreatment Facility operations, e.g. vessel fillings, waste testing and adjusting, waste transfers, line flushings, etc. However, prototypical hold times (see Appendix B) between the four unit operations were included to provide sufficient time for precipitation of slow forming salts, e.g., Sodium Aluminosilicate and $NaF_7(PO_4)_2$.

To reiterate, the SIPP task is the operation of four individual and separate pilot-scale unit operations, each successively processing a single waste stream combination, which is chemically connected through the feedback of recycle streams. The plan is described in the RPP-WTP test specification (Longwell, 2003) and in the WSRC technical task plan (Duignan, 2003c). The task's original series of three campaigns was maintained, but instead of processing different waste types, only one type would be used. Each successive campaign introduced recycle streams produced from the preceding stream. To feed the first campaign an extra, initial, campaign was added. This addition was actually an already planned ultrafiltration test (Townson, 2002). That test became known as Campaign I and it only processed a simulant of AY102. In this way the filtration results

of Campaign I served three purposes: 1. To generate a filtration data set for a single-waste type that could be compared to past single-waste filtration tests, 2. to become a baseline for filtration of AY102 in order to determine how additions of AP101 and recycles to that waste effect filtration, and 3. to produce a series of recycle streams to feed to Campaign II. The last reason was very important to SIPP because the UFP produces several important recycle streams, i.e., slurry washing permeate, sludge loop flushing, loop acid cleaning, and loop caustic rinsings. Campaign I was performed in January and February of 2004 and the results were published in Duignan et al., 2004. As summary of all the campaigns is as follows:

Campaign I	UFP only with simulate of (AY102)
Campaign II[†]	All four unit operations with simulant of (AY102) + (AP101) + recycle streams (normally the CIX also has recycle streams but since Campaign I did not test the CIX they were not included in Campaign II).
Campaign III	All four unit operations with simulant of (AY102) + (AP101) + 2nd generation recycle streams (but 1st generation CIX recycle streams).
Campaign IV[‡]	Two unit operations (FEP and UFP) with simulant of (AY102) + (AP101) + 3rd generation recycle streams (but 2nd generation CIX recycle streams).

As shown in the preceding Section 1.1, on "Test Objectives," there were many objectives; the details of which will not be repeated here, but will be discussed in the appropriate later sections. However, the major goals were to better understand how each of the four pilot-scale unit operation process waste, to study how the processes change with successively complex recycle streams, and to produce throughput data to benchmark computer codes being developed by Bechtel and others, and to predict and plan for, plant operation.

Figure 1 is a schematic of the overall SIPP operation. It is broken into the four unit operations and indicates both the salient chemical and time steps. The operations are listed in a chronological order, at least with respect to the SIPP test, with the top (FEP) section being first. Of course the plant will be much more complex. A very short summary of the overall operation is as follows:

1. FEP evaporates a combined mixture of recycles.
2. UFP filters a combined mixture of the FEP concentrated product and waste from the tank farm until the mixture reaches a target concentration. The UFP produces two streams: the permeate which is sent to the CIX for LAW processing, and the concentrated slurry. That slurry is then washed to remove many of the soluble solids after which it is sent to the HLW melter facility.
3. CIX takes the permeate from the UFP and removes most of the soluble, but radioactive, cesium.

[†] This report deals specifically with Campaign II results.
[‡] As of May 2004 RPP-WTP informed SRNL to change the scope of Campaign IV to test a new filter made by GKN, which was chosen instead of the Mott for the RPP-WTP Pretreatment Facility Ultrafiltration Process. The number of the unit operations was reduced from four to two for Campaign IV, those being the pilot-scale FEP and UFP so that GKN performance could be compared to the Mott.

4. TLP takes the CIX product, which still has very low levels of radiation, and evaporates most of the water before it is sent to the LAW melter facility.

The evaporation of the many combined recycle streams in the FEP will be operated in a continuous sense, in that after it fills the UFP preparation tank for one filter train (there will be two UFPs), it will feed the preparation tank for the other filter train. However, the FEP must ultimately be a batch operation because it will be receiving waste from recycle tanks (PWD = Plant Wash and Disposal System) that will be batched through the FEP only after the feed is adjusted for pH and tested for acceptance.

When the UFP feed and preparation tanks are full and ready for processing, the filtration can commence. This process is also batch, but the feed tank must be continuously fed with new feed as dewatering is ongoing. The feed tank will have a base volume of 21,550 gallons into which approximately 1000 gallons will be transferred from the preparation tank. Each time the feed tank level drops to 21,550 gallons another batch of 1000 gallons will be transferred until the dewatered slurry reaches its target solids concentration. For this task, the target was 20 wt% insoluble solids. This dewatering process is shown in the UFP section of Figure 1 as the top filtration loop. The middle loop illustrates the washing and leaching of the final concentrated slurry batch. (Note: For SIPP, the leaching process was not performed as requested by RPP-WTP (Calloway, 2004)). After the concentrated waste is washed, it is then sent to the HLW melter for further processing, but for the SIPP, the washed slurry is simply drummed to be shipped for processing in a pilot HLW melter. With the loop de-inventoried, the final loop shows that the UFP undergoes caustic rinsing and acid cleaning, in preparation for the next batch.

For the plant, the CIX does not necessarily have to wait for the entire filtration process to end. There are several filter permeate tanks to feed the CIX and they receive permeate from each of the two filter trains. However, for SIPP the CIX can begin after a fixed amount of permeate is produced from the UFP, which is approximately 200 bed volumes. A bed volume is the volume of space occupied in an IX column by the resin, including the interstitial spaces among the resin particles. The plant will process a minimum of 100 bed volumes (~ 30,000 gallons) of permeate before a IX column needs regeneration. Originally, the SIPP IX was to demonstrate the design throughput rate of treated waste, like the other pilot unit operations, but it was thought more important to use it for chemical testing to show cesium removal efficiency. This meant the important parameter would be a prototypic residence time for permeate in the resin, or 3 bed volumes per hour. For the 6-inch diameter pilot scale column, this resulted in a very low flow rate (~0.031 gpm), more than two orders of magnitude slower than the plant design flowrate of 15 gpm. SIPP used 200 bed volumes because several past tests had indicated that the resin may last longer than the original plant design of 100 bed volumes. It was very important to show how long the resin truly lasts before needing to regenerate it. The third section of Fig. 1 shows two columns because of the two processes that occur within CIX: the first process is the removal of cesium, the second processes is a series of steps to regenerate the resin.

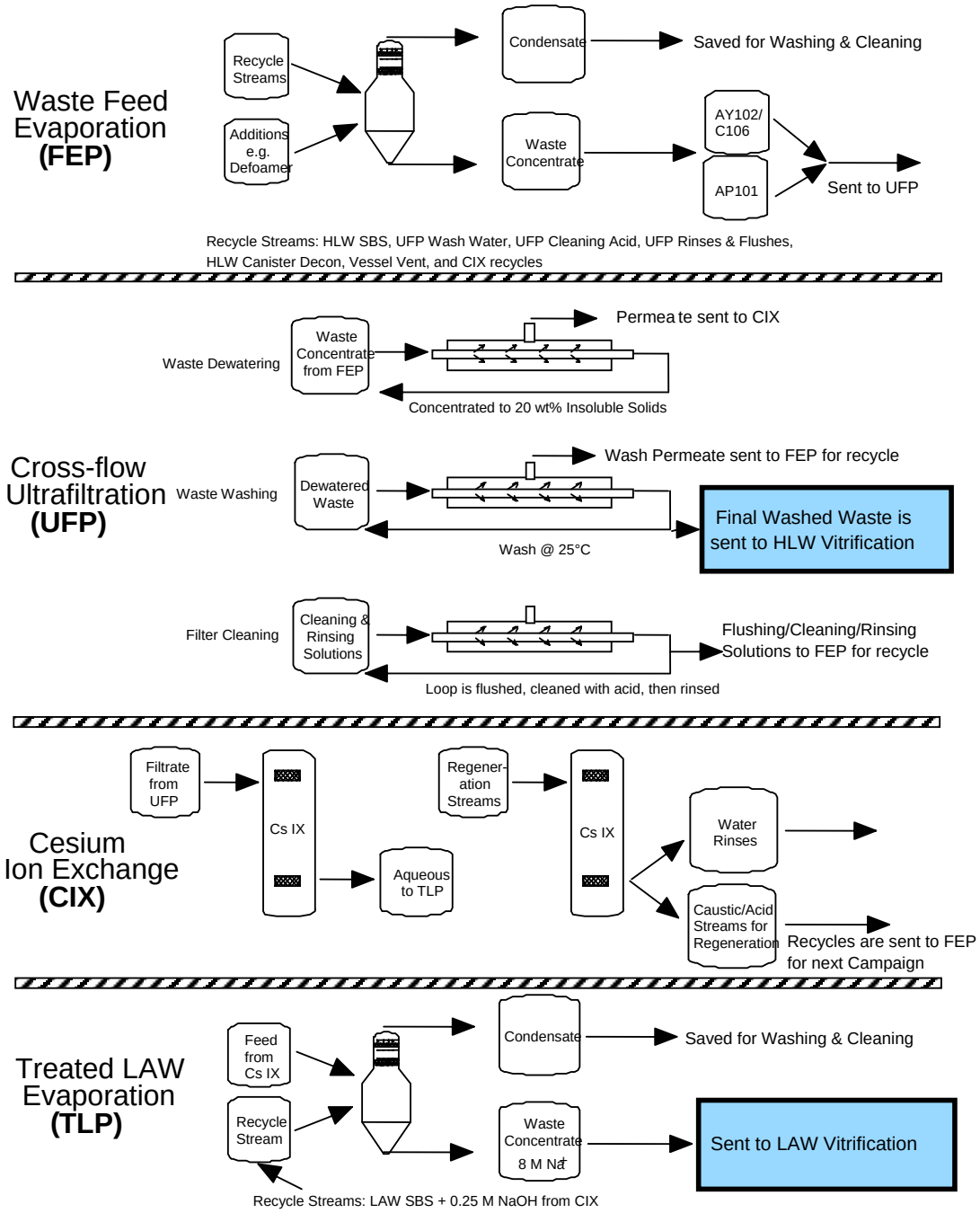

Figure 1. Schematic of the overall task operation taken from the task plan

The final section of Fig. 1 shows the TLP operation. The CIX product is mostly water and the TLP removes it while concentrating the sodium up to 8 M. This is the last step before the treated LAW stream is sent to the LAW melter facility.

Along the way, several recycle streams are created in the UFP and the CIX, as well as from other sources, like the submerged bed scrubber quencher streams from both the HLW and LAW melter facilities. These recycle streams are then fed back in the process, which then repeat. For the SIPP, this repeating results in the different campaigns.

2.3 *THE COMPUTATIONAL MODEL*

In general, this section will not explain the details in *how* the modeling for SIPP was done, but *why* it was done and *what* was done. The *how* is explained in Appendix A, and the complete set of modeling results can be found in Barnes, 2004. It is important to note that the computational assistance brought to bear for SIPP was only to help in planning, as requested by the Test Specification (Longwell, 2003; in the first two paragraphs of section 6.2 of that document.). There were several RPP extant models of certain aspects of the WTP Pretreatment Facility, but no single model or package that incorporated both dynamic mechanical and chemical operation. Since SIPP was basically four quasi-steady-state unit operations and since it was important to obtain fairly accurate chemical compositions as simulated waste was being processed, a steady-state model was therefore developed that could handle the complex chemistries of the treated wastes.

In concept, the operation of the SIPP is straightforward, but determining the exact simulant needs is quite complicated because of the differing scales of each pilot-scale unit operation and the chemical interaction among the recycle streams from all the campaigns. A very important part in developing the test matrix of the task plan was knowing how much simulant to use and how should all the different waste and recycle streams be mixed together. That need was satisfied by computationally predicting SIPP streams for all four campaigns. As an added benefit, once the model was made, it would be possible to evaluate changes in simulant volumes and mixing ratios to determine if the entire SIPP process comes to steady state. Steady state could be shown, at least chemically, by demonstrating that the products produced in SIPP change insignificantly from one campaign to the next.

From the beginning it was clear that an accurate model of the entire operation of Pretreatment Facility was not possible, but to show how SIPP was to operate, model accuracy was really not necessary. For SIPP, the model was to serve two purposes: determine how much slurry to use and what would be the mix ratio of feeds (simulated wastes and recycle streams) for each of the unit operations. The Test Specification requested that the WTP Aspen Custom Modeler (ACM) Model be used to obtain the bases for the combined feed streams, i.e., the feed mix ratios. With the feed stream obtained in this manner an OLI Environmental Simulation Program (OLI/ESP) was used to determine the steady-state operation for each unit operation.

Figure 2 shows the results of the OLI/ESP model that includes WTP accepted mixture ratios for combined feed streams from the ACM model. Once again, details can be found in Appendix A, but some of the salient features are described here.

The principal value in the entire figure is the initial "batch" size of the UFP feed tank. In Table 1 this batch size for the SIPP is shown in red as 140 liters and is listed as "UF1 SLURRY (batch at 20 wt% UDS)." This waste volume is very significant because it will be the batch size of HLW sent for HLW vitrification. When this batch is dewatered to some predetermined concentration of insoluble solids (it was 20 wt% for SIPP), then the permeate produced during dewatering will be the batch size of LAW sent for LAW vitrification.

Table 1. Feeds and products for planning SIPP developed for OLI/ESP computer model

WTP Process	Stream Type	Stream Name	Campaign (in Liters)			
			I	II	III	IV
FEP	Feed Recycle Streams	UFP & CIX RECYCLEs (previous campaign)	N/A	583.1	602.8	602.8
		HLW (Submerged Bed Scrubber)	N/A	190.6	190.6	189.9
		PVP (Vessel Vent System)	N/A	220.7	220.7	220.0
		HLW DECON	N/A	114.6	114.7	114.3
	Products Produced	FEP CONDENSATE (to be process wash)	N/A	996.0	980.6	984.9
		FEP COOLED BOTTOMS (UFP feed)	N/A	114.4	150.8	144.9
UFP Feeds	Feed	AY102 WASTE (at 12 wt% UDS)	253.5	252.4	242.2	241.4
	Feed	AP101 WASTE (at ~ 8 M Na^+)	N/A	671.3	674.4	672.1
UFP	Products Produced	UF1 FILTRATE (routed to CIX, then TLP)	113.5	922.3	952.2	943.7
		UF1 SLURRY (batch at 20 wt% UDS)	140	116.8	116.4	116.1
	Batch Waste Washing	FEP COND WASH (0.01 M NaOH)		281.1	281.5	280.7
		19 M NaOH (to adjust FEP COND)		1.8	0.2	0.2
		TOTAL CAUSTIC WASH	338.6	282.5	281.6	280.8
	Filter Rinsing & Cleaning	FEP COND ACID (2 M HNO3)		86.1	85.8	85.6
		12 M HNO3 (to adjust FEP COND)		17.0	17.0	16.9
		TOTAL ACID CLEANING	122.5	102.2	101.9	101.6
		FEP CONDENSATE TO CAUSTIC RINSE		101.8	101.5	101.2
		19 M NaOH (to adjust FEP COND)		0.5	0.5	0.5
		TOTAL CAUSTIC RINSE (0.1 M NaOH)		102.2	101.8	101.5
		TOTAL CAUSTIC RINSE (for FEP recycle))	117.1	97.6	97.3	97.0
	Final Filter Products	HLW SLURRY (to HLW melter)	138.1	110.8	110.3	110.0
		TOTAL FEP RECYCLE (for next campaign)	583.1	602.8	604.8	602.3
CIX	Column Regeneration Products Produced	CIX 0.1 M NaOH RINSE (for FEP recycle)	N/A	36.9	38.1	37.8
		CIX DI WATER (for FEP recycle)		36.9	38.1	37.8
		CIX 0.25 M NaOH (for FEP recycle)	N/A	40.0	41.3	40.9
		CIX 0.25 M NaOH (for TLP recycle)	N/A	36.9	38.1	37.8
TLP	Feeds wFiltrate	LAW SBS (Submerged Bed Scrubber)	N/A	833.0	832.9	830.2
	Products Produced	TLP CONDENSATE (to be process wash)	N/A	1214.1	1231.4	1224.9
		TLP COOLED BOTTOMS (to LAW melter)	N/A	589.3	603.4	598.1

This SIPP batch of 140 liters[†] for Campaign I was arbitrarily chosen, but once chosen all other volumes were the result of SIPP processing. The choice was made by using existing test facilities, where the pilot UFP could contain 140 liters and still have enough room to feed in more slurry until dewatering is complete. Knowing this batch size, using the feed stream ratios from the ACM model, and the chemical makeup of the base waste slurry, i.e., AY102/C106 and AP101, the OLI/ESP model could then be iterated among all of the campaigns to result in the numbers shown in Table 1. Note that the batch size of 140 liters, with 20 wt% insoluble solids, changes from Campaign I to a value of approximately 116 liters (with 20 wt% insoluble solids) for all the other campaigns, and as such, the 116-liter volume was taken as equivalent to the full scale UFP batch[‡] size in those campaigns. The difference between the batch size for Campaign I (140 L) and the subsequent campaigns (116 L) was not well understood when the task was planned but because the sophisticated OLI/ESP software includes all the steady state chemistry of the processed wastes, which included dozens of compounds, it was assumed that differences in the starting waste slurries resulted in this "discrepancy." That is, Campaign I only processed a single waste, AY102, while the other campaigns included also AP101 and the concentrated recycle streams from the FEP. The inputs for the known waste chemistries, of the starting feeds, were checked many times to verify accuracy, therefore the difference was assumed to be real. In any case, the purpose of the model was to be used as a tool to plan the task and procure needed quantities of simulant, therefore further investigations on the (~15%) difference[*] were not thought necessary. The simulated waste products were procured with enough safety margin to cover any problems if, for instance, shortages occurred during experimentation.

As shown in Fig. 1, once the UFP is finished concentrating, the waste is washed with approximately 0.01 M NaOH. The plant will hold the slurry volume constant and feed in two volumes of the caustic solution, each volume approximately equal to the volume of slurry, before sending the waste to the HLW Vitrification Facility. While the plant will hold the UFP volume constant, the model resulted in slightly smaller volumes, see the line in Table 1 entitled, "HLW Slurry (to HLW melter)." due to computational requirements. These are the simulated processed feeds for HLW vitrification. The other highlighted lines in Table 1 are: "AY102 WASTE (at 12 wt% UDS)," which was the amount of feed AY102 simulant needed; "AP101 WASTE (at ~ 8 M Na)," which was the amount of feed AP101 simulant needed; "UFP & CIX RECYCLEs (previous campaign)," which was the portion of recycle streams carried over from the previous campaign to be mixed with other recycle streams that did not come directly from one of the four unit

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[†] For WTP this batch size was 18,000 gallons when this task began, but it currently stands at 21,550 gallons. In fact, for Campaign I operation, the 18,000-gallons size was valid and used for scaling purposes, but with Campaign II and all subsequent campaigns the latter volume was used.

[‡] Same as the above footnote

[*] In fact, the actual discrepancy was not understood until after Campaign III was complete and analysis of the SIPP data was underway. The problem turned out to be something that could not be easily resolved a priori because of the OLI/ESP. For the software package to converge on a solution the anion and cation charges of ALL simulant analytes must balance. Unfortunately, the simulated wastes streams contained many unknown complex insoluble solids compounds for which ion charge balances had to be assumed. Those assumptions caused the resulting volumetric difference once a slurry was concentrated to 20 wt% insoluble solids. This is a clear example of the current limitations of computational models and the need for benchmarking to experimental results of complex interactions.

operations; finally, the last line contains the volumes of LAW that are treated through all four unit operation and are ready as feed for LAW vitrification.

An important goal of the OLI/ESP SIPP model was to show if steady state operation is attained. That is, if after four campaigns the unit operation volumetric needs change significantly, it would have meant that more campaigns would be necessary. When doing the model it was not clear what would be a significant difference, but fortunately steady state was attained very fast. The volumetric flow rates differences between Campaigns II and III turned out to be small and even smaller between Campaigns III and IV. In fact, as described in Appendix A, the difference in the recycle volumetric flow rates for the last two campaigns was less than 0.09%.

Another feature included in Table 1, but not obvious, is the feed proportions used for each unit operation, which were supplied by the ACM model. For each of the campaigns, the proportions are slightly different, but not significantly so. The feed for the FEP was made up from only recycle streams and the volumetric proportion of each of the streams used is shown in Table 2.

While the proportions in Table 2 are close to the recycle stream values in the planning table shown as Table 1, they will not be exactly the same because of last minute changes, round off numbers, and uncertainties in some of the streams. For example, the amount of recycle stream (7) was changed several times by WTP because the exact amount of material that will come from the UFP loop during flushing is not well characterized. Moreover, for a time the fate of UFP loop flush material was uncertain. Also note, that while Table 2 contains what was believed to be the brunt of the recycle stream sources, the design of the plant was (and still is) continually evolving, which may have a significant impact on those streams in both composition and volume. For instance, recycle streams that were not considered, but will likely have an impact on future operations of the WTP, were the slurries that will be generated during equipment and vessel maintenance activities in the vitrification facilities. These waste streams will be much higher in silica and other glass former chemicals, e.g., Li, than the simulated recycles streams tested in the SIPP. Compounds that contain lithium are very insoluble in solutions containing aluminum and could impact filtration.

One of the most useful aspects of the results in Table 1 was to know the amount of simulated waste slurry to procure for the SIPP task. With the initial pilot-scale UFP feed tank volume fixed at 140 liters, then all other volumes could be calculated after the effect of recycle streams were computationally considered. Once the amount of the AY102 and AP101 were known, their procurement could begin. Their makeup, especially the former, is very complex and expensive (it was discussed in Duignan, et al., 2004; see Section 2.3) and the coordination of simulant procurement was a major effort for the task.

Table 2. Percent contribution for each of the recycle streams to the total FEP feed

List of Recycle Streams Used for SIPP and Verified by WTP	Percentage of Recycle to FEP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) HLW SBS	n/a	17.1%	17.5%	17.4%
(2) Vessel Vent	n/a	19.7%	20.3%	20.2%
(3) HLW Can. Decon	n/a	10.3%	10.5%	10.5%
(4) UFP Recycle (0.01 M NaOH)	n/a	30.3%	21.7%	21.6%
(5) UFP Recycle (0.1 M NaOH)	n/a	10.5%	9.0%	8.9%
(6) UFP Recycle (2 M HNO3)	n/a	11.0%	9.4%	9.4%
(7) UFP Recycle (3 Loop Flushes)	n/a	1.2%	1.2%	1.2%
(8) CIX Recycle (0.1 M NaOH)	n/a	0.0%	3.4%	3.5%
(9) CIX Recycle (DI Water)	n/a	0.0%	3.4%	3.5%
(10) CIX Recycle (0.25 M NaOH)	n/a	0.0%	3.7%	3.8%
Total Feed to the FEP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made by an outside vendor: VSL***
(2) and (3) were made for each campaign
(4) to (10) were products of unit operations
* Campaign I only used a single simulated waste with no recycles in a single unit operation, i.e., UFP.
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

There were many routes to operating the UFP, but for SIPP, and initial plant operation, it was thought prudent to only use the FEP to process recycle streams and the UFP would be the starting point for tank farm wastes. One major benefit of this method was that it minimizes insoluble solids in the FEP and thus hopefully minimizes condenser fouling that would affect operational efficiency. This means that the feed for the UFP had three waste sources, one of which came from the FEP after the recycle streams were concentrated to a target density. The other two were mentioned above. Their individual contributions to the UFP feed are shown in Table 3.

Table 3. Percent contribution for each of the UFP feed streams

Feed Streams Used for SIPP in the UFP and Verified by WTP	Percentage of Streams to UFP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) FEP Bottoms	0%	11.1%	14.3%	13.8%
(2) AY-102/C-106	100%	24.3%	22.6%	22.8%
(3) AP-101	0%	64.6%	63.1%	63.4%
Total Feed to the UFP	100%	100%	100%	100%

Notes:
Source of Streams: (1) was concentrated from recycles in the FEP
(2) outside vendor, but finalized in EDL**
(3) came from an outside vendor
* Campaign I only used a single simulated waste.
** EDL = Engineering Development Laboratory of the Savannah River National Laboratory of the Westinghouse Savannah River Company where SIPP pilot-scale testing was performed.

As with the recycle percentages in Table 2, the percentages in Table 3 are slightly different than what is shown in Table 1. Those differences are mostly attributed to volumes actually created during experimentation. The computational volumes were not expected to be exact and while the values in Table 3, were (Campaigns I and II) or are to be (Campaigns III and IV) used for SIPP, the actual plant mixture may still be different as its design continues to evolve.

One product of the pilot-scale UFP is the permeate produced during dewatering. This waste stream is then sent on to the CIX in its preparation for LAW vitrification. As this task evolved, the pilot-scale CIX operation was disassociated from measuring volumetric throughput to measure glass production, because WTP thought it more important to understand the cesium removal efficiency of the chosen resin, SuperLig®644. This requirement made the amount of permeate important, since cesium removal was to be studied. It was necessary to have 400 “bed volumes” of feed for each campaign, excluding Campaign I. A bed volume is the space occupied in a ion exchange column by settled resin. For the pilot-scale CIX that volume was approximately 2.3 liters, making the produced number of bed volumes 401, 414, and 410 for Campaigns II, III, and IV, respectively. This can be seen in the Table 1 line entitled, “UF1 FILTRATE (routed to CIX, then TLP)”. For example, in Campaign II the permeate produced form the UFP was 922.3 liters, or 922.3/2.3 = 401 bed volumes.

Finally, the proportions of different feeds for the pilot-scale TLP were needed. Those are shown in Table 4.

Table 4. Percent contribution for each of the TLP feed streams

Feed Streams Used for SIPP in the TLP and Verified by WTP	Waste Stream Vol. % to TLP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) LAW SBS (from LAW melter)	n/a	47.4%	45.7%	45.8%
(2) 0.25 M NaOH (recycle from CIX)	n/a	0.0%	2.1%	2.1%
(3) Treated LAW from CIX	n/a	52.6%	52.2%	52.1%
Total Feed to the TLP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made by an outside vendor: VSL***
(2) comes from a regenerated IX column
(3) comes from CIX after Cs is removed
* Campaign I did employ the pilot-scale TLP
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

As with Tables 2 and 3, the percentages in Table 4 differ slightly than those from Table 1 because of limitations in the model, but all the values were sufficient to plan and begin testing. With the plan and model in place then the test matrix could be established and the plans finalized.

2.4 *THE OVERALL SIPP TEST MATRIX*

With the plan in place and the planning results from the computational model, an overall test matrix was established. The following matrix was not the last word on how each of the unit operation was to run, but it was the starting point for each of the unit operations to develop individual test plans, as well as the simulant mixing and sample plans. As the task began with Campaign I (Duignan, et al., 2004), and then on to Campaign II the matrix continued to evolve as WTP needs changed, therefore, this test matrix may be slightly different than the individual test plans, but is instructive here to illustrate the overall operation of SIPP. See the overall test matrix, then some global explanation can be given to better understand SIPP in its “integrated” form before discussing each of the individual unit operation and their results.

That matrix is shown in pieces in the following series of figures:

[Note that , Table X >> Table Y means: table x indicates the wait time before using slurry in the table y unit operation.]

Table 5 (simulant aging)	>>	Table 6 (pilot FEP unit operation)
Table 7 (simulant aging)	>>	Table 8 (pilot UFP unit operation)
Table 9 (simulant aging)	>>	Table 10 (pilot CIX unit operation – first cycle)
	>>	Table 11 (pilot CIX unit operation – second cycle)
Table 12 (simulant aging)	>>	Table 13 (pilot TLP unit operation)

These nine figures are in chronological order of performance.

First, Figs. 5, 7, 9, and 12 were included to show hold-up time intervals between unit operations, especially because they were not part of the computational model, which was done at steady state. In an attempt to mimic the periods that waste "waits" before being processed in each unit operation, some prototypic times were included in SIPP

Table 5. Hold period before pilot-scale FEP begins[†]

	Pre-FEP Hold Times (stipulated by WTP)										
	Minimum hold time between the time recycle stream mixture and beginning evaporation.			2	days						

The actual hold times for process feeds were controversial and, in fact, were not available when Campaign I was performed in January 2004. Actually, since Campaign I was a single-waste filter test, the concept of wait time to plant operation made little sense. However, this is not true for the other three campaigns, which deal with waste and recycle mixing and adjusting before each processing step. Waste aging may affect many processing steps, for example, the post-UFP precipitation was a key issue for the ion exchange system. Using the appropriate WTP plant hold times allow this issue to be resolved. At approximately three weeks before Campaign II, WTP sent information to SRNL to make rough determinations of those periods (see the e-mail in Appendix B). For example, Table 5 allows time for the mixed multiple recycle streams to age. Recycle streams are fed from several different sources to the Plant Wash and Disposal System tanks that will feed the Waste feed Evaporation Process. The recycle streams come in at different rates and then need to be adjusted for pH as the acid and alkaline streams merge in order to mitigate the precipitation of solids or gels. After the adjustment, the FEP is fed, but because of the large scale, the transfer times are not insignificant. As explained in Appendix B, the time associated in the pre-evaporation process is approximately 2 days and therefore, once the SIPP FEP feed of recycle streams is adjusted properly it is held for that number of days before evaporation begins.

For each of the unit operations, a hold time is set after the appropriate feed is made ready. In summary those simulated minimum hold times are:

After joining recycle feeds and before processing in the FEP – 2 days
After making FEP bottoms and before joining it with other UFP feeds – 2 days

[†] Blanks in all tables in this report are intentional.

After joining waste feeds and before processing in the UFP – 2 days
After producing UFP permeate and before processing in the CIX – 4.5 days
After joining treated LAW with recycle streams and before processing in the TLP – 2 days

Table 6. Pilot-scale FEP test matrix with the colored columns representing Campaign II

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
FEP	Locate Feeds	(1) HLW SBS	n/a	n/a	17.1%	50.4	17.5%	50.4	17.4%	50.2	
		(2) Vessel Vent	n/a	n/a	19.7%	58.3	20.3%	58.3	20.2%	58.1	
		(3) HLW Can. Decon	n/a	n/a	10.3%	30.3	10.5%	30.3	10.5%	30.2	
		(4) UFP Recycle (0.01 M NaOH)	n/a	n/a	30.3%	89.5	21.7%	62.4	21.6%	62	
		(5) UFP Recycle (0.1 M NaOH)	n/a	n/a	10.5%	30.9	9.0%	25.8	8.9%	25.7	
		(6) UFP Recycle (2 M HNO3)	n/a	n/a	11.0%	32.4	9.4%	27	9.4%	26.9	
		(7) UFP Recycle (3 Loop Flushes)	n/a	n/a	1.2%	3.50	1.2%	3.50	1.2%	3.50	
		(8) CIX Recycle (0.1 M NaOH)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(9) CIX Recycle (DI Water)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(10) CIX Recycle (0.25 M NaOH)	n/a	n/a	0.0%	0	3.7%	10.6	3.8%	10.9	
		Total	n/a	n/a	100.0%	295.3	100.0%	287.7	100.0%	287.7	
FEP	Evaporate at	Condensate produced =		0.0	gallons	266.3	gallons	262.2	gallons	263.4	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm	Concentrate produced =		n/a	gallons	30.6	gallons	40.3	gallons	38.8	gallons
		Time to concentrate (@ 0.395 gpm) =		n/a	hours	11.2	hours	11.1	hours	11.1	hours
FEP Recycle Stream Notes:											
(1) SBS HLW recycle: This a vendor supplied stream. Use as is.											
(2) Vessel Vent recycle:Is made to match collection from VVS. Caustic is added to demineralized water to 0.1 M NaOH.											
(3) HLW Canister Decontamination recycle: Is made to match Decon Stream. The expected concentration of contaminates need to be added to model stream.											
(4) UFP Wash Water recycle: This scaled recycle washes the scaled concentrated filtered sludge. Use as is.											
(5) UFP caustic recycle: UF surface area is rinsed therefore this recycle must be adjusted to have correct concentration of sludge material.											
(6) UFP acid recycle: UF surface area is cleaned, therefore this recycle must be adjusted to have correct concentration of dissolved sludge material.											
(7) After UFP waste washing the loop will be flushed with 2,100 gallons of process water. This stream will be adjusted for the estimated sludge content expected.											
(8) CIX caustic recycle from initial step to regenerated column by replacing treated LAW with 0.1 M NaOH. Use as is.											
(9) CIX neutral recycle to remove 0.5 M HNO3 from column. Use as is.											
(10) CX caustic recycle the first portion of 0.25 M NaOH used to regenerate IX column. Use as is.											
Non-prototypicality Note:											
Many tank-to-tank transfers will be done with steam jets that will create an undetermined amount of condensed steam. These addition are neglected.											

Once the recycle streams were mixed in the planned proportions, Table 2, and the appropriate hold time was realized, then the FEP test matrix, shown in Table 6, was performed. The goal was to concentrate the feed stream so that it had a sodium molarity of 5, but the "visible" target was an evaporated slurry density of 1.266 g/cc at 50°C and 1 psia (which is 1.252 g/cc at 1 atm). Density was used because the WTP will only be able to control concentration by measuring density.

Table 7. Hold period before pilot-scale UFP begins

	Inter-Unit Operations Hold Times (Stipulated by WTP)								
	Minimum hold time between the receipt of the FEP concentrate to the time it is mixed with waste simulants AY102/C106 + AP101					2	days		
	Minimum hold time between the time of making = FEP concentrate + AY102/C106 + AP101, and beginning dewatering.					3	days		

When the FEP was complete its slurry product was held for 2 days, Table 7, before being mixed in the planned proportions, Table 3, with the simulated wastes of AY102 and AP101. Completing this mixture started another 3-day clock before starting the UFP. While processing the waste through the UFP is complicated with several activities involving the washing of the concentrated slurry to the cleaning of the filter loop (see Table 8), the basic operation is to separate the waste feed stream into a HLW product, containing all of the insoluble solids, and its supernatant, containing most of the cesium. This was done by dewatering the feed from a concentration less than 5 wt% to 20 wt% insoluble solids. The details of the UFP operation will be discussed in the appropriate

subsection of this report. One feature that is not immediately obvious is the process containing an internal hold time. Dewatering in WTP will be a relatively lengthy process because filtration is very slow and the volumes are very large. While the waste is waiting to be processed through the UFP, it will be sitting in the feed preparation tank, which feeds the feed tank. During this process period, chemical reactions may still be occurring within the waste and crystallization or precipitation may result. In an attempt to capture these transient phenomena, a waiting period was inserted in the dewatering process of the pilot UFP. The period is a 12-hour hold time, which is arbitrary, but is loosely connected to the planned plant operational time of the UFP, and was acceptable to the WTP project.

Table 8. Pilot-scale UFP test matrix with the colored columns representing Campaign II

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
UFP	Locate Feeds	FEP Bottoms	0.0%	0	11.1%	30.6	14.3%	40.3	13.8%	38.8	
		AY102/C106	100.0%	67	24.3%	66.7	22.7%	64	22.8%	63.8	
		AP101	0.0%	0	64.6%	177.4	63.1%	178.2	63.4%	177.6	
		Total	100.0%	67	100.0%	274.662	100.0%	282.4901	100.0%	280.172	
		Inhibited water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
	Filter at	Time for baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
	0.02 gpm/ft2	Starting simulant volume =	Camp I used ~75 gal	67	gallons	274.662	gallons	282.4901	gallons	280.172	gallons
	or 0.134 gpm	Time to cool to 25°C before use =	to obtain ~25 wt%	0	hours	0	hours	0	hours	0	hours
	for a 6.71 ft2	Concentrate produced at 20 wt% =		37.0	gallons	30.9	gallons	30.8	gallons	30.7	gallons
	filter area	Permeate produced =		30.0	gallons	243.8	gallons	251.7	gallons	249.5	gallons
		Total time to concentrate =		3.7	hours	30.3	hours	31.3	hours	31.0	hours
		Time for first half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Hold for 12 hours =		12	hours	12	hours	12	hours	12	hours
		Time for second half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Time for steady-state matrix =	(Campaign I only >>)	13	hours	n/a	n/a	n/a	hours	n/a	hours
	1st Wash >>	Wash water (0.01 M NaOH,) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
		Wash Notes: 1. Campaign I wash vol. = waste vol. x 21.77/18, but recent WTP change now is waste vol. x 21.77/21.55 and will be used for Campaigns II>IV.									
		2. Campaign I concentrated waste to 24 wt% UDS during dewatering therefore the UDS was reduced to 20 wt% before washing.									
		Time for initial wash =		5.6	hours	3.9	hours	3.9	hours	3.9	hours
	2nd Wash >>	Wash water (0.01 M NaOH) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
	Made 60%	Time for final wash =		3.5	hours	2.4	hours	2.4	hours	2.4	hours
	faster than the	Volume to remove for Max wt% =	(Campaign I only >>)	21	gallons	n/a	gallons	n/a	gallons	n/a	gallons
	1st Wash from	Time to concentrate =	(Campaign I only >>)	2.6	hours	n/a	gallons	n/a	gallons	n/a	gallons
	the Campaign I										
	test. That is,	**Washed Concentrate for HLW vitrification**		36.5	gallons	29.3	gallons	29.1	gallons	29.1	gallons
	0.134x1.6 =										
	0.214 gpm	Rinse water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		Rinse 1 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Rinse 2 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Time for final water baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
		Total Continuous Time per Campaign =		38.4	hour	46.6	hour	47.6	hour	47.3	hour
Non-prototypicality Note:											
The 12-hour hold time between half batches during scaled dewatering is an attempt to capture some of the precipitation dynamics that will occur in the waste during concentration. However, full-scale dewatering will take hundreds of hours therefore not all dynamics will happen.											

The pilot-scale UFP produced permeate that was needed for the next step in the SIPP operation, i.e., pilot CIX. While the UFP continued to process the dewatered slurry with washing and cleaning the UFP loop with both caustic and acid flushes, the permeate sat in the pilot CIX feed tank to age at least 4.5 days, as shown in Table 9.

Table 9. Hold period before pilot-scale CIX begins

	Inter-Unit Operations Hold Time (stipulated by WTP)					
	Minimum hold time between the receipt of the UFP permeate to the time it is processed by the CIX	4.5	days			

As it turned out it was convenient to produce the first permeate on a Monday and then to begin pilot CIX operation the following Monday. There were approximately 6.5 days between the end of the first half of permeate production, sometime after midnight of that Monday, the planned start of the CIX. Pilot CIX operation was also broken in two parts because it was necessary to run with two complete ion exchange cycles, which allowed both IX columns to take turns as the lead or the lag column. This is the reason there are two CIX tables, i.e., Tables 10 and 11. The basic difference between them is that the lead column in the first cycle of operation, Table 10, became the lag column in the second cycle, Table 11. The permeate produced during the pilot UFP was sufficient to satisfy the CIX cycle need of 400 bed volumes of feed (~900 liters). Each cycle included the processing of 200 bed volumes of UFP permeate and then the lead column would undergo regeneration for use in the next cycle as the lag column.

The colored portion of Table 10 highlights the work done for this report, that is, Campaign II. Campaign II included pilot CIX cycles 1 and 2. Once again, Campaign I did not include any ion exchange work, which explains why cycle 1 began in Campaign II.

Table 10. Pilot-scale CIX (1st half) test matrix with the colored columns representing Campaign II

				Campaign I		Campaign II		Campaign III		Campaign IV	
				Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes	
Process	Action	Feeds									
Cs IX	Locate Feeds	Total UFP permeate feed		n/a	n/a	243.8	gallons	251.7	gallons	249.5	gallons
		This permeate must wait at least 48 hours after being created from the UFP before being treated.									
		Both the lead and lag columns start cycle I filled with 0.25 M Na									
		Water used for eluate, water buffer, and 0.25 M Na must be made from fresh distilled water									
		Water used for 0.1 M Na solution can come from evaporation condensates									
		There will be two columns referred to as A & B									
Cs IX	Treat Waste	Cs IX Test No.				**1**		**3**		**5**	
	Simulant and	Lead>Lag Column =		n/a	n/a	A>B		A>B		A>B	
	regenerate as	Cycle I (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
	indicated	Number of BV (BV ~ 0.617 gal.) >>>	Column I.D. = 5.5 inches	n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate	Bed Height = 6.0 inches	n/a	n/a	3.0	BV/hour	3.0	BV/hour	1.5	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	68.0	hours	134.8	hours
		Regeneration									
	▲	Column to be regenerated and eluted =				A		A		A	
		0.1 M NaOH displacement									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	1.0	BV/hour	2.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	15.0	hours	7.5	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
	▼	Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			87.0	hours	81.6	hours	155.9	hours

Once both cycles of a Campaign are complete then both columns are filled with 0.1 M NaOH to keep the resin stable for the next campaign. This inter-campaign period would be no less than 5 weeks.

Table 11. Pilot-scale CIX (2nd half) test matrix with the colored columns representing Campaign II

Cs IX		Cs IX Test No.				**2**		**4**		**6**	
		Lead/Lag Column =		n/a	n/a	B>A		B>A		A>B	
		Cycle 2 (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	4.5	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	45.3	hours	67.4	hours
		Regeneration									
		Column to be regenerated and eluted =				B		B		A + B	
		0.1 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	0.5	BV/hour	1.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	30.0	hours	15.0	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			102.0	hours	66.5	hours	88.5	hours
			Total CIX Campaign Flow Time =			189.0	hours	148.1	hours	244.5	hour
						7.9	days	6.2	days	10.2	days
			Total Volumes for Campaigns II, III, and IV:				Totals				
				BV	Gallons		Available for				
			0.1 M NaOH	18.0	11.1		recycles	11.1			
			DI Water	36.0	22.2	→		22.2			
			0.5 M HNO3	90.0	55.5			0.0			
			0.25 M NaOH	36.0	22.2			22.2	Per Campaign		
							Total	55.5	18.5	gallons	
Non-prototypicality Note:											
Scaled CIX testing will be determining cold cesium breakthrough by using a range of BV flow rates which bound the full scale unit. However, the superficial liquid velocity of the plant is approximately 5 cm/min, which is 5 to 13 times greater than the range to be used at the pilot scale.											

The final step in the SIPP was once again to evaporate the waste. The now treated simulated LAW product from the CIX was mixed with two recycle streams shown in Table 4. After mixing, the resulting solution was held before processing, Table 12.

Table 12. Hold period before pilot-scale TLP begins

	Pre-TLP Hold Times (stipulated by WTP)										
	Minimum hold time between the time recycle and waste streams are mixed and beginning evaporation.					2	days				

The operation of the pilot TLP, Table 13 was similar to the pilot FEP, Table 6. However, in the TLP the goal was to concentrate the feed stream so that it had a sodium molarity of 8. Once again the "visible" target was an evaporated slurry density of 1.360 g/cc at 50°C and 1 psia (which is 1.395 g/cc at 1 atm). Density was used because the WTP will only be able to control concentration by measuring density. A large difference between the pilot FEP and TLP operations was the quantity of concentrated product produced. For the FEP, the final volume of the concentrate could be completely contained within the

confines of the evaporator (<50 gallons), but for the TLP the concentrated volume was approximately 3 times larger. That is, the FEP was shut down just when steady-state waste concentration was reached. For the TLP, steady-state waste concentration was reached well before the waste feed was exhausted. This meant the TLP produced a continuous waste stream after the TLP contents reached the steady-state density target. The only significant impact this difference had on operation was to the defoamer chemical added to the waste. The concentration of defoamer was to be maintained at 1500 ppm, therefore, once the TLP reached steady state and concentrated waste was being removed, defoamer was periodically added.

Table 13. Pilot-scale TLP test matrix with the colored columns representing Campaign II

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
TLP	Locate Feeds	Simulant	n/a	n/a	52.6%	243.8	52.2%	251.7	52.1%	249.5	
		(Recycle 1) SBS LAW	n/a	n/a	47.4%	220.1	45.7%	220.1	45.8%	219.3	
		(Recycle 2) 0.25 M NaOH from CIX	n/a	n/a	0.0%	0	2.1%	10	2.1%	10.1	
		Total	n/a	n/a	100.0%	463.862	100.0%	481.7901	100.0%	478.872	
TLP	Evaporate at	Condensate produced =		0.0	gallons	320.8	gallons	325.3	gallons	323.6	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm										
		Concentrate produced for LAW vitrification		n/a	gallons	155.7	gallons	159.4	gallons	158.0	gallons
		Time to concentrate =		n/a	hours	13.5	hours	13.7	hours	13.7	hours
TLP Recycle Stream Notes											
(1) SBS LAW recycle: This a vendor supplied stream. Use as is.											
(2) Caustic IX regeneration recycle: This stream should have the appropriate concentration of caustic, I.e., 0.25 M NaOH. Use as is.											

The timetable for Campaign II is listed in Table 14. It started on the day indicated, i.e., Monday, 12 April, 2004, but since this schedule was published before the test began minor changes occurred. However, those changes were insignificant.

The only other aspect of the test not shown in all the matrix tables is the disposition of the water products. That is, the treated waste from the TLP was drummed to be sent to VSL for LAW melter operations and the washed concentrated slurry from the UFP was drummed to be sent to VSL for HLW melter operation. The other product is all the boiled off and condensed water from both evaporation operations. Those waters were mixed together, as they will be in the plant and then a portion is reused to make rinse solutions for the UFP and displacement solution for the CIX.

Table 14. Pilot-scale schedule for Campaign II

Start Date		Personnel Nomeclature:					Notes:	(1) Hold times are included to mimick times that				
26-Jan-04		da=D.Adamson, ma=M.Armstrong, db=D.Burns, vb=V.Bush,						the plant is filling/transfer between unit operations.				
12-Apr-04		jc=J.Corbett, md=M.Duignan, df=D.Foreman, mf=M.Fowley,						Those times begin when a mixture is FIRST made,				
6-Jun-04		sh=S.Hatcher, jm=J.Mills, zq=Z.Qureshi,mr=M.Restivo						therefore mixing times are also included.				
26-Jul-04		ts=T.Steeper, js=J.Steimke, mw=M.Williams, jz=J.Zamecnik						(2) CIX # of days is only valid for Campaign II				
Campaign II												
Day	Unit Op	Activity	Expt	Backup	Non-E.	Backup	Unit Op	Activity	Expt	Backup	Non-E.	Backup
12-Apr-04	FEP	Mix Recycles	jz/mw	mw/jz	df	vb						
13-Apr-04	FEP	Admin Hold (1)										
14-Apr-04	FEP	Evaporation	zq	da	jm	vb	UFP	Baseline	mf	md	ma	df
15-Apr-04	FEP	Product Transfers	zq	da	jm	vb	UFP	Admin Hold (1)				
16-Apr-04	FEP	Clean Equipment	zq	da	jm	vb	UFP	Mix UF feeds	jz/mw	mw/jz	df	vb
17-Apr-04							UFP	Admin Hold (1)				
18-Apr-04							UFP	Admin Hold (1)				
19-Apr-04							UFP	Dewater	mf	md	ma	df
20-Apr-04							UFP	Dewater	mf	md	ma	df
21-Apr-04	CIX (2)	Admin Hold (1)					UFP	Transfers/Wash	mf	md	ma	df
22-Apr-04	CIX	Admin Hold (1)					UFP	Wash	mf	md	ma	df
23-Apr-04	CIX	Admin Hold (1)										
24-Apr-04	CIX	Admin Hold (1)										
25-Apr-04	CIX	Admin Hold (1)										
26-Apr-04	CIX	Treat Simulant	js	da	df	vb	UFP	Rinse/Clean	mf	md	ma	df
27-Apr-04	CIX	Treat Simulant	js	da	df	vb	UFP	Baseline	mf	md	ma	df
28-Apr-04	CIX	Treat Simulant	js	da	df	vb						
29-Apr-04	CIX	0.1 M Caustic/DI Water Flush	js	da	df	vb						
30-Apr-04												
1-May-04												
2-May-04												
3-May-04	CIX	0.5 M HNO3	js	da	df	vb						
4-May-04	CIX	DI Water Flush	js	da	df	vb						
5-May-04	CIX	0.25 M NaOH Regeneration	js	da	df	vb						
6-May-04	CIX	Treat Simulant	js	da	df	vb						
7-May-04	CIX	Treat Simulant	js	da	df	vb						
8-May-04	CIX	Treat Simulant	js	da	df	vb						
9-May-04												
10-May-04	CIX	0.1 M Caustic/DI Water Flush	js	da	df	vb	TLP	Make Feed	jz/mw	mw/jz	df	vb
11-May-04	CIX	0.5 M HNO3	js	da	df	vb	TLP	Admin Hold (1)				
12-May-04	CIX	DI Water Flush	js	da	df	vb	TLP	Evaporation	da	zq	vb	jm
13-May-04	CIX	0.25 M NaOH Regeneration	js	da	df	vb	TLP	Product Transfers	da	zq	vb	jm
14-May-04							TLP	Clean Equipment	da	zq	vb	jm

2.5 *THE PRINCIPAL WASTE SIMULANTS:* AY102 AND AP101 (AUTHOR – ZAMECNIK)

Together with the pilot-scale FEP concentrated recycle streams, the waste feed for the pilot-scale UFP contained two simulated Hanford waste streams: tank 241-AY-102/C-106 referred herein as AY102, and tank 241-AP-101, referred herein as AP101.

The composition and properties of AY102, including the distribution of species between the solid and supernate phases, has been previously described (Duignan, et al., 2004; Zamecnik, et al., 2004). This simulant was blended at SRNL from fractions manufactured by Optima Chemical (Douglas, GA) and additional reagents, as described in the references. The AP101 simulant formulation was defined by Pacific Northwest National Laboratory (Russell, et al., 2003) and the simulant was manufactured by Optima Chemical. The measured total slurry compositions of both of these simulants are shown in Table 15.

Table 15. Measured Simulant Compositions

All values mg/L except as noted.	AY102 Slurry		AP101	
Total Solids (wt%)	26.80		31.94	
Undissolved Solids (wt%)	11.75		0.00	
Supernate Solids (wt%)	17.05		31.94	
Density kg/L	1.240		1.279	
Ag	624		37.3	
Al	15996	17484*	7469	6932*
B	<165		<142	
Ba	293	255	<1.53	
Bi	6.93		0.0576	
Ca	1131	1500	23.0	
Cd	46.8		<3.9	
Ce	366		<127	
Co	151		<15.6	
Cr	632	634	179	175
Cs	18.7		6.02	
Cs	<17		<19.6	
Cu	77.9	81.8	<5.86	
Fe	35836	35216	76.4	68.4
K	373		30568	
La	305		13.9	
Li	<24.8		<21.1	
Mg	379	373	5.51	
Mn	7812	7638	3.00	
Mo	<17		<10.6	
Na (ICPES)	84283		127900	
Na (AA)	91760		129179	
Na average	88021		128540	
Na (M)	3.83		5.59	
Nd	847		<72.9	

Table 15 continued

All values mg/L except as noted.	AY102 Slurry		AP101	
Ni	1151		357	
P	1748	1600	269	
Pb	1662	1593	<156	
Pr	170		0.0223	
Rb	4.60		6.06	
S	892	899	1599	1426
Si	11016		329	
Sr	279	292	<1.18	
W	<84.7		<97.7	
Y	50.8		0.0728	
Zn	81.3		5.95	
Zr	484		<5.86	
bromide	69.4		<128	
chloride	165		1530	
fluoride	43.4		28.0	
formate	389		1380	
nitrate	319		105000	
nitrite	4228		33400	
oxalate	9213		1550	
phosphate	3807		1150	
sulfate	1860		3740	
acetate	415		1727	
citric acid	<81.8		<104	
formate	264		1432	

* Some rows two measurements. Those are the result of using two different dissolution methods.

2.6 *PILOT WASTE FEED EVAPORATOR* (AUTHORS - QURESHI, WILLIAMS & ZAMECNIK)

The Waste Feed Evaporator Process, or FEP, is the first unit operation in the RPP-WTP Pretreatment Facility that a waste (< 5 M Na) will see on start up. However, if the incoming wastes or waste blends are greater than 5 M Na, the FEP evaporators are used to concentrate WTP recycle streams for blending with the fresh tank waste. Since the AY102 and AP101 have sufficient sodium concentration, the SIPP FEP operations only included evaporation of SIPP recycles. The SIPP FEP bottoms stream was then mixed with simulated waste streams, i.e., AY102 and AP101 that would normally come from the Hanford Tank farm to produce a feed stream for the Ultrafiltration Process (UFP) unit operation.

This section will explain the pilot-scale FEP unit operation that was done as part of Campaign II testing. The process started with the preparation of the FEP feed product, which was a mixture of many recycle streams in a predetermined fashion, see Table 2. A chemical explanation of the feed (recycle) stream formation will be followed by a short description on how feed formation was handled just before FEP operation and then how the waste stream was handled during and after its concentration. The following section will discuss the physical equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made for the FEP unit operation.

2.6.1 Chemical Description of the Pilot FEP Feed Stream (Author – Zamecnik)

The feed for the FEP was a series of recycle streams to be produced from operating the RPP-WTP Pretreatment Facility. The basis for the quantities of each recycle used was the modeling work done for the SIPP (Barnes, 2003), see Table 2. The basis for creating each recycle is shown in Fig. 2. This basis uses the information provided by WTP at the time this work was done; the current WTP operational plans may be different from what is described below.

The process was assumed to create 21,550 gal of concentrated HLW slurry per batch, with 16,750 gal going on to the HLW melter, 4300 gal "recycle" returning back to the feed tank, and a 500-gal heel remaining in the UFP feed tank. This 500-gal volume is referred to as the ejector heel, because it is what remains after the 4300 gallons of slurry is steam "ejected" from the tank. At the time of Campaign II testing the exact placement of the ejected slurry was still not well determined, therefore, for the SIPP the recycle of the 4,300 gal was not considered; this material was sent on to the HLW melter. Note that the 300 gallons of sludge estimated to be in the inlet of the pump is included in the 4,800 gal in the tank.

For the plant, the pump loop contains ~700 gal of washed concentrated slurry. The loop is first drained to the Plant Overflow Vessel (PWD-VSL-33; the hyphenated tank numbers used in this section corresponds to those in the actual WTP plant) and then it is rinsed with three additions of ~700 gal each of condensate or water. Since all of the thick slurry will not drain out, we approximated the un-drained slurry as 10% of the volume, or 70 gal. (If it all drained out, the rinses would not be needed.) The first rinse was then 630 gal and subsequent draining and rinsing assumed much less residual slurry. The final rinse was assumed to leave about 0.25 wt% undissolved solids. With this sequence of rinsing, the material transferred to PWD-33 would be about 2,005 gal of slurry-condensate mixture with about 7.7 wt% undissolved solids.

In the SIPP, this process was approximated by mixing 4.6L of washed concentrated slurry with 8.6L of condensate from the FEP evaporator. This condensate represents that which would be collected in plant Radioactive Liquid Disposal (RLD) process and used for rinsing purposes. This made-up the recycle that would go to Campaign III. The same recycle stream for Campaign II was made up from Campaign I washed concentrated slurry and deionized and filtered (DIF) water (because Campaign I did not include evaporation and thus no condensate was available). The residual rinse in the filter loop that would be present at the start of the first 0.1M NaOH rinse was made from ~0.1L of washed concentrated slurry and 12.5L of FEP condensate.

The tank heel prior to each rinse and acid cleaning step was estimated to give the correct undissolved solids loading expected for plant operation. Note that in the SIPP, the amount of rinse and acid used is greater, on a proportional basis, than in the WTP. To account for using more rinse or acid, a proportionally larger heel is left.

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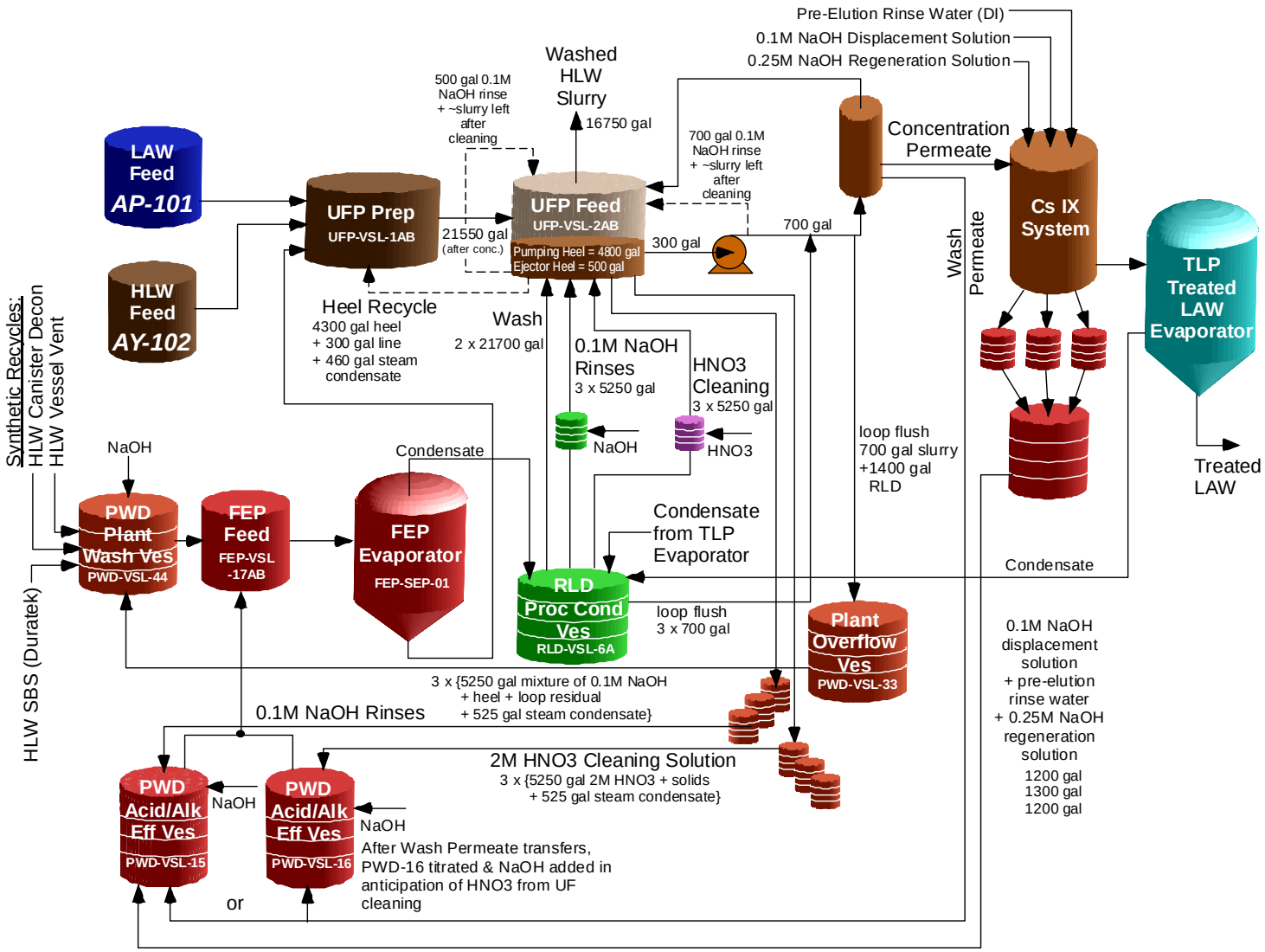


Figure 2. Basis for Generation of Recycles

The ejector heel of 500 gal of washed concentrated slurry was simulated in the SIPP by adding 4L of washed concentrated slurry back into the filter feed tank. Based on previous experience, we assumed that about 5L of slurry was held up in the filter loop, giving a total slurry inventory prior to rinsing of about 9L. The amount of slurry actually retained in the filter loop was found to be closer to 22L in Campaign III, so the amount of solids in the feed tank at the start of the rinse for Campaign II was much higher than expected or planned.

In the subsequent rinsing and cleaning steps, the ejector heel was approximated by putting back about 20L of the drained solution. With dilute slurries, the amount of holdup in the UF system was about 1.6L. The 21.6L of heel in each step, mixed with 94.6L of caustic rinse or acid was the same ratio as the heel + filter loop (500 + 700 gal) remaining in the WTP to the rinse amount (5,250 gal); both ratios were 0.228.

For Campaign I the first 0.1M NaOH rinse recycle generated for Campaign II contained too much undissolved solids; the UDS was 7.4 wt% versus the desired 1.8 wt%. Due to a misunderstanding of the WTP flowsheet, the steam ejection of the pump heel (from 4,800 gal to 500 gal) was not accounted for, so the solids content in this first rinse recycle was much too high. To account for this, the amount of first rinse used was less than the amount of the second and third rinses to give the correct undissolved solids content. Unfortunately, a spreadsheet error resulted in still adding too much of the first rinse. The first rinse added was 18.2L, with 49.5L each of the other two rinses; the correct amounts should have been 3.3L of first rinse and 56.9L each of rinses two and three. This error resulted in there being approximately 4.46 kg of undissolved solids in the FEP feed versus the desired approximately 3.34 kg. (The measurement of the undissolved solids content of recycle streams, which was less than 1 wt% undissolved solids, is subject to significant error, which may be greater than ±100%.)

Figure 3 shows a schematic of the FEP feed blending and Fig. 4 shows the amounts of recycle streams mixed to give the FEP feed. The amount of the combined HLW recycles and the UFP loop flush, or PWD-44, used is shown by (4) in Fig. 4. The measured total solids and density of this mixture matches the prediction well, but the UDS measured was 0.09 vs. 0.40 wt%. The FEP feed composition is shown as (7) in Fig. 4. In both the actual mixing and in a lab test, the HLW SBS solids, which are easily suspended and remain suspended for days, were flocculated and quickly precipitated when mixed with the synthetic recycles.

In making the SIPP UFP recycles, they were arbitrarily split between the PWD-VSL-15 and PWD-VSL-16 tanks. Into PWD-15 was added the second batch of UFP wash permeate (from the second 22 wash sequence) and the three caustic UFP flushes; all were caustic, except for the second flush, which was acidic due to the acid cleaning heel. The amount of caustic flush 1 added was less than that of flushes 2 & 3 to give closer to the correct undissolved solids in the recycle stream since the flush 1 UDS was too high. The resulting solution was predicted to be caustic, as it was eventually found to be. These four solutions were added in the order given above, and at no time did the bulk solution pH drop below 12.

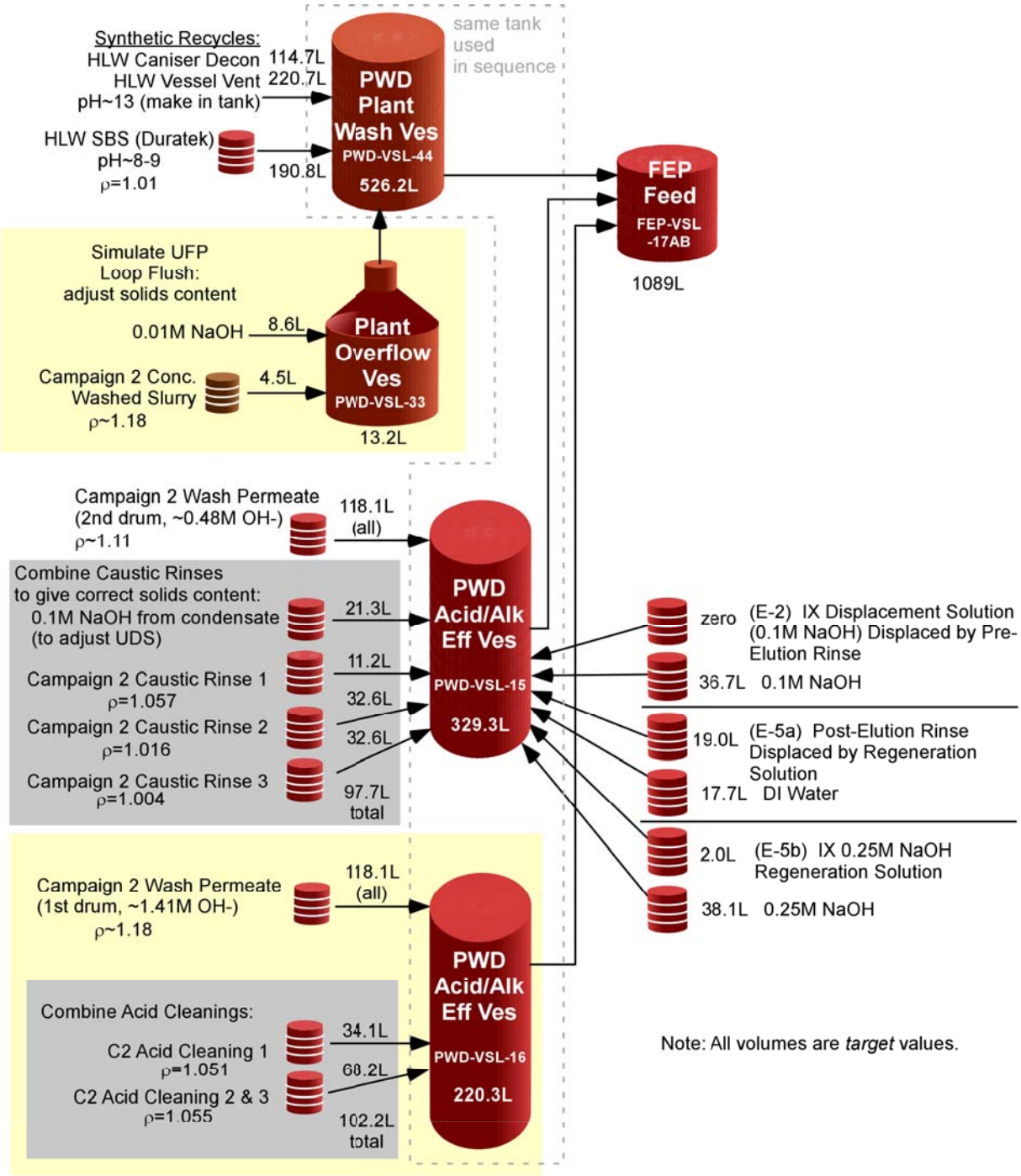


Figure 3. FEP Feed Blending

❶ **Synthetic Recycles:**

	HLW Canister Decon	HLW Vessel Vent	Combined
Volume (L)			331.5
Mass (kg)	114.7	220.7	335.4
Total Solids (wt%)			1.29
Undissolved Solids (wt%)			0.00
Density (kg/L)			*1.012*
Total Solids (kg)			4.31
Undissolved Solids (kg)			0.00

❷ **HLW SBS Recycle (from Duratek)**

Volume (L)	190.8
Mass (kg)	192.7
Total Solids (wt%)	0.74
Undissolved Solids (wt%)	0.59
Density (kg/L)	1.010
Total Solids (kg)	1.43
Undissolved Solids (kg)	1.14

❸ **PWD-VSL-33 Plant Overflow Vessel Simulated UFP Loop Flush:**

	Water*	Campaign 1 Washed Slurry	Loop Flush
Volume (L)	8.60	4.50	13.10
Mass (kg)	8.60	5.33	13.93
Total Solids (wt%)			8.39
Undissolved Solids (wt%)			7.42
Density (kg/L)		1.184	1.063
Total Solids (kg)			1.17
Undissolved Solids (kg)			1.03

* water simulates condensate

❹ **PWD-VSL-44 Plant Wash Vessel**

Calculated	Measured @
535.4	535.4
542.0	539.7
1.27	1.28
0.40	0.09
1.012	1.008
6.90	6.91
2.17	0.49

@ volume set = calculated

❺ **PWD-VSL-15 PWD Acid/Alkaline Effluent Vessel**

	Campaign 1 Wash Permeate, 2nd 22 Washes*	Campaign 1 Caustic Flush 1	Campaign 1 Caustic Flush 2	Campaign 1 Caustic Flush 3
Volume (L)	169.30	18.20	49.50	49.50
Mass (kg)	175.06	19.57	49.95	49.60
Total Solids (wt%)	3.73	9.71	0.83	0.76
Undissolved Solids (wt%)	0.00	8.27	0.00	0.00
Density (kg/L)	1.034	1.075	1.009	1.002
Total Solids (kg)	6.53	1.90	0.41	0.38
Undissolved Solids (kg)	0.00	1.62	0.00	0.00

*only ~162L permeate available; added ~7L 0.05M NaOH

PWD-VSL-15 PWD Acid/Alkaline Effluent Vessel

Combined Calculated	Combined Measured
286.50	286.5
294.17	293.66
3.13	2.86
0.55	0.40
1.027	1.025
9.22	8.40
1.62	1.17

@ volume set = calculated

❻ **PWD-VSL-16 PWD Acid/Alkaline Effluent Vessel**

	Campaign 1 Wash Permeate, 1st 22 Washes*	Campaign 1 Acid Cleaning 1 @	Campaign 2 Acid Cleaning 2 + 3 @	50 wt% NaOH
Volume (L)	169.30	37.40	85.00	11.55
Mass (kg)	186.23	39.49	90.36	17.56
Total Solids (wt%)	10.94	10.23	11.52	23.00
Undissolved Solids (wt%)	0.00	0.99	0.09	0.00
Density (kg/L)	1.100	1.056	1.063	1.520
Total Solids (kg)	20.37	4.04	10.41	4.04
Undissolved Solids (kg)	0.00	0.39	0.08	0.00

*only ~162L permeate available; added ~7L 0.1M NaOH

@ total solids = measured + calculated due to nitrate (nitrate in HNO3 lost in solids determination due to evaporation)

PWD-VSL-16 PWD Acid/Alkaline Effluent Vessel

Combined Calculated	Combined Measured
303.25	303.25
333.64	0.00
11.65	11.67
0.14	0.00
1.100	1.096
38.86	38.78
0.47	0.00

@ volume set = calculated

❼ **FEP Feed (Combined Recycles)**

Calculated (from Measureds)	*Calculated from Calculateds*	*Calculated (using calc. PWD-44)*
1125.1	*1125.1*	*1125.1*
1165.6	*1170.1*	*1168.0*
4.64	*4.70*	*4.63*
0.14	*0.36*	*0.29*
1.036	*1.040*	*1.038*
54.09	*54.99*	*54.08*
1.66	*4.26*	*3.34*
7a	7b	7c

Figure 4. Mixing of Recycles

The PWD-16 tank recycles were the first 22 washes permeate, the three acid cleanings, and NaOH for pH adjustment. The first 22 washes permeate was used with the acid since it contained more caustic than the second 22 washes permeate, and thus less NaOH would be required to neutralize the acid. The addition order was the wash permeate, then the NaOH, then the acid solutions. The amount of NaOH had been previously calculated and also tested in a small bench-scale test. An excess of 10% of NaOH was actually added to account for discrepancies in the actual volumes used. Again, the pH never dropped below 12 during mixing.

The measured solids loadings for the combined PWD-15 and -16 recycle streams were both slightly less than predicted from addition of the individual components. For the acid cleanings, the total solids content was estimated as the measured value plus the amount

that would be due to the nitrate present; the nitrate in the HNO_3 was evaporated during the solids determination. Table 16 summarizes the amounts of each of the recycle steams.

Table 16. Recycle Streams

Stream	Source	Volume (L)
HLW SBS Liquid	Duratek	190.8
Vessel Vent Liquid	Synthetic	220.7
HLW Canister Decon Liquid	Synthetic	114.7
UFP Recycle – Wash Permeate	Campaign I	338.8
1st 22 Washes Permeate		162.3
0.1M NaOH		7.0
2nd 22 Washes Permeate		162.3
0.05M NaOH		7.0
UFP Recycle - 0.1 M NaOH Rinse	Campaign I	117.0
1st Rinse		18.2
2nd Rinse		49.5
3rd Rinse		49.5
UFP Recycle - 2M HNO_3 Cleaning	Campaign I	122.6
1st Cleaning		37.5
2nd Cleaning		37.5
3rd Cleaning		37.5
UFP Recycle - UF Loop Flushes	Campaign I	13.2
0.01M NaOH (to approximate condensate)		8.6
Campaign I Washed Concentrated Slurry		4.6
CIX Recycles	none	0
50 wt% NaOH to Adjust pH	reagents	11.6
TOTAL		1129

The synthetic HLW recycles were made up from reagents to approximate the expected compositions. The vessel vent liquid was 0.1M NaOH, while the HLW canister decon liquid was 0.15M NaOH and 0.29M $NaNO_3$. The wash permeate, 0.1M NaOH rinses, and the 2M HNO_3 cleaning liquids were generated from Campaign I. The amount of wash permeate available was slightly less than needed, so about 7L of 0.1M NaOH and 7L of 0.05M NaOH were added to approximate the permeates from the first 22 and second 22 washes, respectively, from Campaign I. Note that the amount of each NaOH rinse and HNO_3 cleaning solution available from Campaign I was greater than that needed.

The composition of the recycles is shown in Table 17. The three simulated recycle tanks were combined to make the FEP evaporator feed. These recycles were combined in the order: PWD-44, PWD-15, and then PWD-16. Nothing unusual was observed when these were mixed.

Table 17. Measured Recycle Compositions

		HLW SBS	HLW SBS	HLW SBS	Loop Flush	Permeate from 1st 22 Washes	Permeate from 2nd 22 Washes	Caustic Flush 1	Caustic Flushes 2 + 3	Acid Cleaning 1	Acid Cleaning 2	Acid Cleaning 3	Acid Cleaning Composite
Total Solids	wt%	0.74			8.39	10.9	3.73	9.71	0.800	1.07	0.18	0	NM
Undissolved Solids	wt%	0.59			7.42	0	0	8.27	0	0.99	0	0	NM
Supernate Solids	wt%	0.15			1.05	10.9	3.73	1.57	0.800	0	0	0	NM
Density	kg/L	1.01-1.03			1.063	1.10	1.03	1.09	1.01	1.06	1.06	1.06	1.06
pH						~13	~12.7	12.7	0.80 11.2	<1	<1	<1	<1
Elemental Analysis Sample Preparation		None	Filtered	Dissolution		None	None	Dissolution	Dissolution	Filtered	Filtered	Filtered	Dissolution
Elements by ICPES (unless otherwise noted)													
Ag	mg/L	<0.3	<0.3	<7.58		<0.6	<0.6	410	<15.0	12.8	2.82	0.727	21.0
Al	mg/L	16.6	0.669	19.1		3860	1040	6680	<25.0	256	42.0	8.00	302
B	mg/L	522	506	605.0		<0.12	0.621	50.0		4.00	0	<0.12	
Ba	mg/L	0.145	1.81	<0.505		<0.04	<0.04	191	<1.00	11.4	1.73	0.321	9.00
Bi (ICPMS)	mg/L					NM	<0.01	<0.01	<0.01				<0.01
Ca	mg/L	9.01	5.89	9.3		<0.06	<0.06	1070	<1.00	37.7	6.14	0.155	32.0
Cd	mg/L	0.380	0.0377	0.7		<0.04	<0.04	30.0	<1.00	1.35	0.239	0.0414	2.00
Ce	mg/L	<0.7	<0.7	<17.7		<1.4	<1.4	250	<35.0	11.6	1.82	<1.4	<33.0
Co	mg/L	<0.08	<0.08	<2.02		<0.16	<0.16	30.0	<4.00	0.377	<0.16	<0.16	<4.00
Cr	mg/L	5.96	3.69	12.4		94.0	26.0	310	<2.00	16.0	3.00	1.00	15.0
Cs (AA)	mg/L					0.860	0.27	<16.4	<4.95	<0.1	<0.1	<0.1	<4.72
Cs (ICPMS)	mg/L					NM	0.263	0.635	0.138				0.120
Cu	mg/L	1.46	1.09	<0.758		<0.06	<0.06	50.0	<1.00	2.40	0.505	0.108	2.00
Fe	mg/L	83.2	1.42	114.8		<0.08	<0.08	21700	9.00	1050	200	40.0	1020
K (AA)	mg/L	<3.75				1000	344	39.2	<7.43	5.00	1.00	0.170	<7.08
La	mg/L	2.51	<0.1	2.6		<0.2	<0.2	190	<5.00	<12	<12	<12	7.00
Li	mg/L	109	106	110.4		<0.4	<0.4	<33.0	<10.0	8.91	1.60	0.257	<9.00
Mg	mg/L	34.7	28.6	36.1		<0.01	<0.01	230	0.250	<0.4	<0.4	<0.4	10.0
Mn	mg/L	5.31	0.253	6.0		<0.02	<0.02	4810	2.00	10.9	2.02	0.376	212
Mo	mg/L	<0.1	<0.1	<2.53		<0.2	<0.2	<16.0	<5.00	219	42.0	8.00	5.00
Na	mg/L	992	978	988.7		44200	14100	9280	2110	<0.2	<0.2	<0.2	1240
Na (AA)	mg/L	918				52400	16800	9090	2070	1200	206	40.2	1180

Table 17 (continued)		HLW SBS	HLW SBS	HLW SBS	Loop Flush	Permeate from 1st 22 Washes	Permeate from 2nd 22 Washes	Caustic Flush 1	Caustic Flushes 2 + 3	Acid Cleaning 1	Acid Cleaning 2	Acid Cleaning 3	Acid Cleaning Composite
Nd	mg/L	1.45	<0.9	<22.7		<1.8	<1.8	538	<45.0	1230	224	41.0	<42.0
Ni	mg/L	0.468	0.255	1.6		0.387	<0.12	713	3.00	25.6	4.65	<1.8	35.0
P	mg/L	0.932	<0.8	<20.2		740	139	351	<40.0	33.0	6.00	1.00	<38.0
Pb	mg/L	1.67	<0.8	<20.2		<1.6	<1.6	1110	<40.0	17.0	5.00	2.00	<38.0
Pr (ICPMS)	mg/L						<0.01	124	0.0620				5.56
Rb (ICPMS)	mg/L	0.670					0.0110	0.352	0.0160				<0.01
Re	mg/L	3.69	3.74	3.8						47.0	9.00	<1.6	
S	mg/L	117	121	123.0		385	102	260	<50.0	8.47	<2	<2	<47.0
Si	mg/L	70.0	14.6	59.5		8.18	2.70	6310	722	98.0	20.0	5.00	878
Sr	mg/L	17.5	8.38	17.8		0.0767	0.0188	190	0	9.00	4.00	1.00	8.00
Ti	mg/L	1.80	<0.03	1.7		<0.06	<0.06	10.0	<1.00	0.113	<0.06	<0.06	<1.00
W	mg/L					44.0	12.0	<82.0	<25.0	<1	<1	<1	<24.0
Y (ICPMS)	mg/L						<0.01	36.1	0.0220				1.64
Zn	mg/L	18.9	0.751	20.6		<0.04	<0.04	180	1.00	3.61	0.643	0.0943	2.00
Zr	mg/L	0.336	<0.03	0.8		<0.06	<0.06	300	1.00	0.246	1.83	0.971	13.0
Anions by IC:													
bromide	mg/L	<10		<10		27.0	<100	<79	<100				
chloride	mg/L	332		332		97.0	21.0	12.0	<20				
fluoride	mg/L	43.0		43		36.0	7.00	7.00	<20				
formate	mg/L	<10		<10		165	10.0	11.0	<100				
nitrate	mg/L	<10		<10		216	36.0	23.0	12500				
nitrite	mg/L	<10		<10		3170	528	198	<100				
oxalate	mg/L	34.0		34		5530	4440	1400	<100				
phosphate	mg/L	991		991		2740	266	328	<100				
sulfate	mg/L	287		287		1250	225	98.0	<50				
Anions by IEC:													
acetate	mg/L					35.0	101						
citric acid	mg/L					<10	<10						
formate	mg/L					189	46.0						
Carbonate (from TIC)	mg/L					5900	1775						
Oxalate (from TOC)	mg/L					754	745						

2.6.2 Simulant Handling (Author – Williams)

For the following description of how the recycle FEP feed stream was made at the experimental site, see Fig. 3. A 760-liter tank was used to mix pilot-scale quantities of simulated HLW recycles that were then transferred to the pilot-scale FEP Feed Tank, which represented the plant tank: FEP-VSL-17AB. On 7 April 2004, pilot-scale quantities of HLW Canister Decon and HLW Vessel Vent solutions were synthesized by combining 330 liters of deionized and filtered (DIF) water with 3 kg of 50 wt% NaOH, 2.77 kg of sodium nitrate, and 192.7 kg of HLW SBS Quencher solution from VSL. At this stage, the mixing tank represented the plant tank: PWD-VSL-44. To this mixture, the contents of mock plant tank PWD-VSL-33 (Plant Overflow Vessel) were added, which contained 5.31 kg of Campaign I concentrated washed HLW slurry from drum No. RM-03-280, 8.6 liters of DIF water and 6.88 grams of 50 wt% NaOH. After mixing the entire contents of the mock PWD-VSL-44, they were transferred to the FEP Feed Tank, also on 7 April.

On 8 April, the then empty 760-liter mixing tank was used as a plant mock PWD-VSL-15 tank and was filled with caustic recycle streams from Campaign I. To that tank, the second of two drums of wash permeate was added, drum No. RM-03-270, which contained 175.1 kg of material. Then the 0.1 M caustic flush recycle stream was added from three drums referred to as caustic flush 1, 2, and 3. They were from drums Nos. RM-03-281, RM-03-285, and RM-03-284, which contained 19.6 kg, 49.9 kg, and 49.6 kg, respectively. The target pH for this mixture was to be greater than or equal to 12, and since the pH was measured at 13 no additional NaOH was added. The contents of this mock PWD-VSL-15 mixing vessel were then added to the mixture in the FEP Feed Tank, also on 8 April.

Once again the 760-liter mixing tank was empty and this time it would represent the plant PWD-VSL-16 tank to receive the acidic recycle streams. That solution had to be adjusted to be alkaline before being joined to the caustic contents of the FEP feed tank. Specifically, the empty tank was first filled with 186.2 kg of 0.1 M NaOH wash permeate from the first of two drums of wash permeate recycle, drum No. RM-03-269. (This drum actually had only 179.3 kg, so an additional 6.9 kg of fresh 0.1 M NaOH were added to make up the difference.) While the tank agitator was running, 17.6 kg of fresh 50 wt% NaOH were added. This amount of the added caustic was based on the amount of acidic recycle streams to be neutralized before being introduced to the FEP. Into the waiting mixture of caustic were added two drums of spent 2 M nitric acid UFP cleaning solution with constant stirring. From the drum (referred to as acid cleaning 1) No. RM-03-307 an amount of 39.5 kg was transferred and from RM-03-305 (referred to as acid cleaning 2 & 3) an amount of 90.4 kg was transferred. The pH of the solution after mixing was measured to be 12.8. The acid/caustic mixture was transferred to the FEP Feed Tank on 12 April to start the clock on a 2-day holding period before evaporation began. To roughly see what each of these mixtures looked like Fig. 5 shows the line-up of each after the solids have settled. To understand Fig. 5 compare those pictures with Fig. 3, which

schematically shows the four individual mixtures that eventually were joined to make the final FEP feed.

(a) (b) (c) (d) (e)

Figure 5. Picture of the Settled Contents of the Mixtures Shown in Fig. 3: They Are Simulants of (a) PWD-VSL-16, (b) PWD-VSL-15, (c) PWD-VSL-33, (d) PWD-VSL-44, and (e) FEP feed

The total material mixed in the pilot-scale FEP unit operation Feed Tank, Fig. 6, and subsequently sent to the FEP Evaporator, was 1,170.3 kg.

Figure 6. Pilot-scale FEP Unit Operation Feed Tank

After evaporation started on 14 April, and during the first 30 minutes of operation, 278.4 g of Dow Corning Q2-3183A antifoam were added in three batches of 92.8 g each. This was done to attain a target concentration of 1500 ppm of antifoam that the WTP plans to utilize. Note that, per the vendor's recommendation the antifoam was diluted to a 10:1 ratio with deionized and filtered water (DIF) before the addition was made. At the end of FEP testing, a total of 183.7 kg of concentrate "FEP bottoms" were produced with a density of 1.256 gm/ml, as measured by volumetric flask at 25.5°C, and 1.263 gm/ml, as measured by densitometer.

2.6.3 Pilot FEP Equipment (Author – Qureshi)

All evaporation campaigns were performed in the Pilot-Scale Evaporator designed and constructed for the RPP Project. The evaporator is located in the Engineering Development Laboratory of the Savannah River National Laboratory (SRNL).

Figure 7 shows the Process and Instrumentation Diagram (P&ID). The Pilot Scale Evaporator System consists of many sub-systems provided below alphabetically.

- Antifoam System
- Concentrate Loop
- Evaporator Recirculation
- Feed Loop
- House Air
- Jet Pump
- Primary Condensate
- Process Water
- Secondary Condensate
- Steam Generator
- Spray Water

Typically, each of the SIPP campaigns was to evaporate about 1,000 liters of waste simulant. For this campaign, Campaign II, 1,170 kg were used which was approximately 1,125 liters. The pilot-scale SIPP evaporator uses forced circulation where heat is added in the reboiler that is essentially a shell and tube heat exchange with steam on the shell side. No evaporation occurs in the reboiler due to hydrostatic pressure head. The evaporator vessel is kept under vacuum (~ 1 psia or 6.9 kPa) and the boiling temperature for water is about 104°F (40°C) at this pressure. The simulant has a boiling point elevation of about 11°F (~6°C). (Thus the entire evaporation process occurs at moderate temperatures, 100 - 120 F (44° - 49°C)). The evaporator vessel is about 27 feet (8.2 m) tall with a nominal inside diameter of 17" (0.43 m). The bottom 12 feet of the vessel is stainless steel and the top 15 feet is acrylic, see Fig. 8.

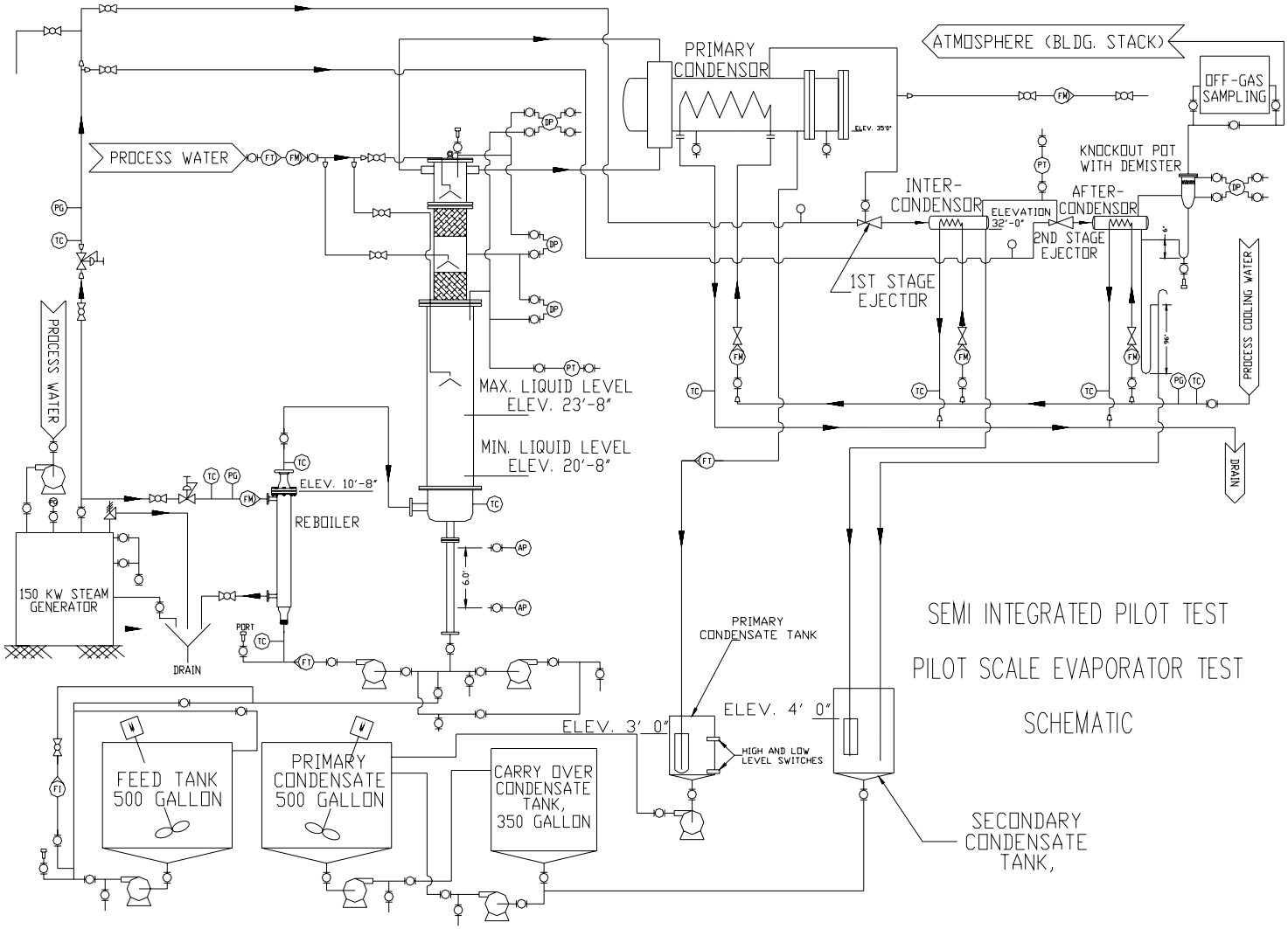


Figure 7. SIPP Pilot-Scale FEP/TLP Unit

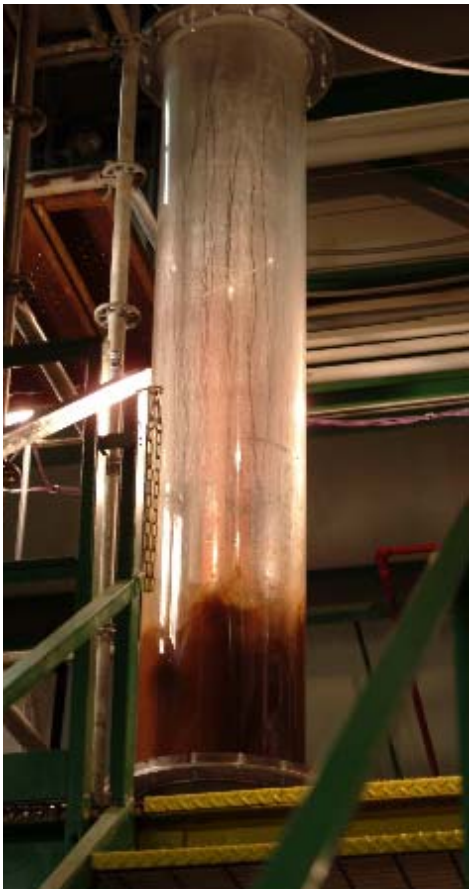


Figure 8. SIPP Pilot-Scale FEP/TLP Unit: 15-foot Acrylic Section with Ongoing Evaporation

Of the bottom 12 feet (3.7 m), the stainless steel vessel is only 2 feet (0.6 m) high and the remaining height of 10 feet (3 m) is taken up by a 2” (0.05 m) stainless steel pipe. The boiling surface is maintained in the lower part of the acrylic section. The minimum and maximum liquid levels in the acrylic section are 5" (0.13 m) and 40" (1.0 m), respectively, see Fig 9.

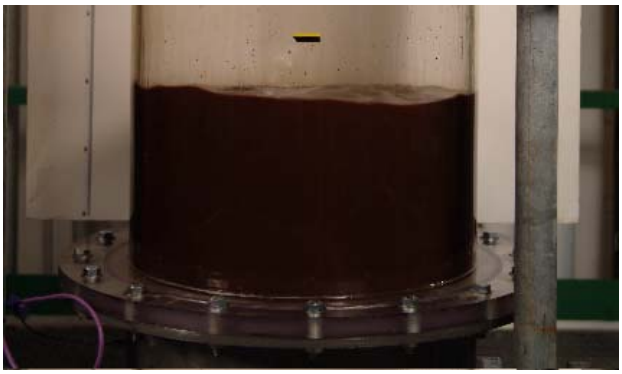


Figure 9. SIPP Pilot-Scale FEP/TLP Unit: Feed Ready for Evaporation to Commence

The designed capacity of evaporator vessel is about 40 gallons (151 liters) and a feed tank supplies the simulant to the evaporator. The evaporator is designed to evaporate 0.4 – 0.5 gpm (1.5 – 1.9 lpm) of water. Figure 10 shows the pilot-scale FEP at approximately the 30-gallons level while evaporating at approximately 0.5 gpm, before and after defoamer was added.

(a) Before Defoamer Addition (b) After Defoamer Addition

Figure 10. SIPP Pilot-Scale FEP/TLP Unit: Evaporating

The water vapor is condensed in the primary condenser. Under steady conditions, the concentrate is removed from the recirculation line and collected in a drum. The condensate from the primary condenser is collected in the primary condensate tank. A two-stage steam driven jet pump maintains desired vacuum in the evaporator vessel. The jet pump has its own set of condensers, inter and after-condenser. A separate tank catches the condensate from the jet pump. Several sample and injection ports are provided to draw samples and inject antifoam agent as needed. All test data was acquired by a data acquisition system (DAS). Additionally, manual data and observations were recorded in the lab notebook issued for this task.

2.6.4 Pilot FEP Operation (Author – Qureshi)

Prior to the SIPP campaigns, the evaporator system was disassembled, cleaned, inspected and reassembled. The system was found to be free of any material defects, fouling and malfunction from previous evaporation runs. After assembly of the system the following tests were performed to ensure proper operation of the evaporator.

2.6.4.1 Experimental Facility Leak Testing

Objective – Determine if the system can hold vacuum and the air in-leakage rate is acceptable

Test Sequence

i) Isolated the Evaporator Recirculation (ER) Loop from rest of the system by closing appropriate valves.

ii) Disconnected the First Stage Ejector line from the primary condenser and connected a vacuum pump at the primary condenser discharge.

iii) Filled water in Evaporator vessel to the maximum operating liquid level (about 40" (1.02 m)) in the lower acrylic section.

iv) Filled up the primary dip tube reservoir with water.

v) Started and operated the vacuum pump until the water level in the dip tube is about 31 feet (9.4 m) of water.

vi) Verified that there was no air bubbling into the system.

vii) Verified that the system can hold vacuum for about 30 minutes.

2.6.4.2 Evaporation Test with Water

Objective - To shake down the system and its components using water as test fluid prior to the chemical runs.

Test Sequence

i) Isolated the Reboiler and the Jet Pump from the Steam Generator.

ii) Started the Steam Generator.

iii) Filled the Feed Tank with Process Water to about 25% level (about 125 gallons (743 liters)).

iv) Using the Feed Loop pump FL-PU1, transferred water from the Feed Tank to the evaporator vessel to a level about 40” (1.02 m) in the acrylic section.

v) Filled the primary condensate and secondary condensate dip tubes with water.

vi) Started the Jet Pump Vacuum System.

vii) Started the main recirculation pump and started supplying steam to the Reboiler.

viii) Adjusted steam to the Reboiler to limit the system temperature below 140°F (60°C).

ix) Once the system pressure dropped to about 1 psia (6.9 kPa), boiled water for about 30 minutes.

x) After completing the water boiling test, turned off the steam supply to the Jet Pump and the Reboiler and shut down the Steam Generator.

2.6.4.3 SIPP-Feed Evaporation Process (FEP)Tests

Objective - To perform pilot scale tests of the Feed Evaporation Process.

This evaporation campaign used about 1125 liters (1170 kg) of FEP Feed. The feed composition and mixing process is described in sections 2.6.1 and 2.6.2.

The FEP Evaporation Campaign II took about 12 hours to complete. During this time period, several samples were drawn as outlined in SIPP Sample Matrix Campaign II (see Appendix D).

Test Sequence

i) Started Steam Generator and the Data Acquisition System.

ii) Ran the Feed Tank mixer for about 5 minutes.

iii) Using the Feed Loop Pump, transferred feed from the Feed Tank to the evaporator vessel to about 24” (0.61 m) level in the clear section.

iv) Filled the primary condensate and secondary condensate dip tubes with water.

v) Supplied process water to the Jet Pump condensers and started the Jet Pump.

vi) Supplied process water to the Primary Condenser to about 30 gpm (114 lpm).

vii) Started the main recirculation pump and turned on the steam to the Reboiler.

viii) Once the feed reached the saturation temperature and boiling started, maintained the liquid level in the evaporator by feeding the appropriate amount of feed using the feed pump.

ix) Recorded all the temperature, pressure and flow date via DAS. Additionally, video taped the action near the boiling surface as needed at different times

x) Antifoam agent was added to the recirculation loop at the beginning of the evaporation campaign.

xi) Drew liquid samples according the sample matrix.

xii) Continued evaporation process until the target density of 1.25 g/ml @ 25°C was reached.

xiii) Once the evaporation campaign was complete, the steam generator was shut down and all the concentrate was transferred into a 55-gal drum.

xiv) After removing all the concentrate, filled the system with water (~30 gallons (114 liters)) and rinsed it thoroughly by running the recirculation pump.

2.6.5 Pilot FEP Discussion of Results

2.6.5.1 Experimental Observations *(Author – Qureshi)*

The SIPP FEP Campaign II was run on Wednesday, 14 April 2004 in SRNL's Engineering Development Lab. A total of about 1,125 liters of feed was concentrated down to about 147 liters. The entire evaporation process proceeded without any glitch or equipment failure. The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water. The average evaporation rate during this campaign was around 0.43 gpm.

Table 18 provides a chronology of the evaporation campaign. Time recorded below follows a military format.

Table 18. Chronology of the evaporation campaign

Time	Event	Comments
0600	Started Steam Generator	
0615	Started Feed Mixing by pump recirculation and agitator	
0640	Pulled Feed sample	
0642	Started Feed transfer to evaporator vessel	
0644	Started Jet Pump to pull vacuum in the evaporator	
0647	Stopped Feed transfer	
0648	Started main circulation pump	
0649	Started steam supply to reboiler	
0700	Pulled 200 ml sample from the evaporator circulation loop	Density 1.015 g/ml @65C
0715	Steady boiling taking place	No significant foaming
0739	500 ppm of antifoam agent added to the recirc. loop	Addition time ~ 1 minute
0744	Additional 500 ppm of antifoam added to the recirc. loop	Stable froth height ~ 1 ft.
0749	Additional 500 ppm of antifoam added to the recirc. loop	
1000	Pulled all samples at 400 liter total transfer	
1010	Pulled 50 ml from evaporator for density check	1.09 g/ml @ 50C
1145	Pulled all samples at 600 liter total transfer	
1215	Pulled 50 ml from evaporator for density check	1.13 g/ml @ 50C
1254	Pulled 10 ml sample for density check with density meter	1.16 g/ml @ 20C
1330	Pulled all samples at 800 liter total transfer	
1415	Pulled 10 ml sample for density check with density meter	1.211 g/ml @ 20C
1600	Pulled 10 ml sample for density check with density meter	1.224 g/ml @ 20C

1632	Pulled 10 ml sample for density check with density meter	1.25 g/ml @ 20C Target value reached
1645	System shut down. Concentrate made 147.2 liters (38.9 gal)	
1700	Pulled all end samples	
1710	Transferred all concentrate to a 55 gal drum	Density in drum 1.248 g/ml

2.6.5.2 FEP Waste Products (Author – Zamecnik)

Table 19 shows that the predicted and measured solids concentrations in the FEP feed matched well. Table 20 shows the FEP feed and bottoms compositions. The feed was concentrated from 1,125L to 147.2L final volume. For the bottoms sample, elemental analyses from both the microwave and sodium peroxide dissolutions are shown for selected elements. The IC analyses were performed on filtered samples, so these analyses represent only the soluble portion of the total species. The "Total Mass" columns show the calculated total mass of each species based on the measured concentration and the calculated total mass. The "Bottoms/Feed %" column shows that for most of the more abundant species, the material balance closes reasonably well. The total mass that was calculated was very consistent, with the bottoms being 99.5% of the feed. A notable exception is oxalate, which was present in the bottoms at only 10% of its initial amount, indicating that 90% of the dissolved oxalate precipitated during the evaporation process. The elemental compositions of the supernate portion of the feed and bottoms supernates are also shown in Table 20. Note that the supernate portion is the liquid (undissolved solids-free) part of the stream.

Table 21 summarizes the masses of selected dissolved and total species in the FEP evaporator feed and bottoms. Species expected to be and found to be mostly undissolved were Ag, Ba, Ca, Fe, Mg, Mn, Nd, Na, and Si. Aluminum was about 45% undissolved, sodium was perhaps 8% undissolved, and Cr was about 38% undissolved. These values parallel the relative amount of soluble to total of each species in the AY102 slurry, which was the major solids-containing component of the recycle. The small amounts of dissolved Ag, Ca, Nd, and Ni, which were initially present in the supernate portion of the feed, appeared to have precipitated. The dissolved Si content did not decrease. Table 21 also shows that about 1,536 g of oxalate apparently precipitated. When this oxalate is combined with Na as its cation, the total predicted amount of sodium oxalate precipitated is 2,339 g, which is extremely close to the measured increase in undissolved solids of 2,281 g. Therefore, precipitation of sodium oxalate accounts for the increase in undissolved solids seen.

Figure 11 shows the mass of total solids, undissolved solids, and soluble sodium oxalate during the evaporation as a function of concentrate sodium. The dotted line for the oxalate is hypothetical since there are no intermediate data. The graph shows that the precipitation of oxalate appears to have started when the bottoms sodium concentration reached 2.6 M, which corresponded to when 50% of the total volume of feed was evaporated.

Table 19. Material Balance on FEP Evaporator

FEP Feed
(Combined Recycles)

	(7a) Calculated rom Measured FEP Feed)	(7b) Calculated (from alculated FEP Feed)	(7c) Calculated (using calc. PWD-44)	(7d) Measured, Sample 1 @	(7e) Measured, Sample 2 @
Volume (L)	*1125.1*	*1125.1*	*1125.1*	1125.1	1125.1
Mass (kg)	*1165.6*	*1170.1*	*1168.0*	1166.7	1166.7
Total Solids (wt%)	*4.64*	*4.70*	*4.63*	4.69	4.72
Undissolved Solids (wt%)	*0.14*	*0.36*	*0.29*	0.17	0.29
Density (kg/L)	*1.036*	*1.040*	*1.038*	1.037	1.037
Total Solids (kg)	*54.09*	*54.99*	*54.08*	54.72	55.07
Undissolved Solids (kg)	*1.66*	*4.26*	*3.34*	1.98	3.38

volume set = calculated

Evaporator Bottoms

Volume Fed (L)	200	400	600	800	1125
Mass Fed (kg)	207	415	622	830	1167
Volume (L)	147.6	147.6	147.6	147.6	147.6
Mass (kg)	158.9	164.8	170.7	176.5	186.0
Total Solids (wt%)	7.88	11.88	16.33	21.02	28.95
Undissolved Solids (wt%)	0.37	0.59	0.99	1.93	3.03
Density (kg/L)	*1.077*	*1.116*	*1.156*	*1.196*	1.261
Total Solids (kg)	12.52	19.58	27.87	37.10	53.85
Undissolved Solids (kg)	0.59	0.97	1.69	3.41	5.63

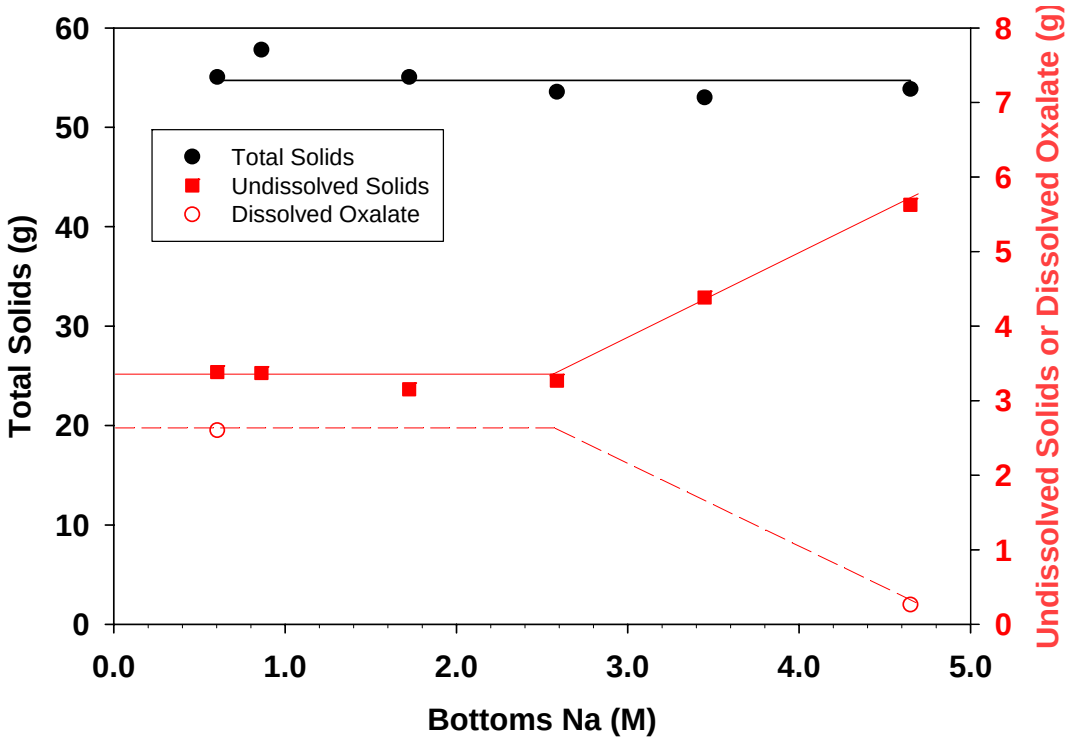


Figure 11. Total & Undissolved Solids in pilot-scale FEP unit operation

Table 20. Analyses of FEP Feed & Bottoms & Material Balance

	FEP Feed Slurry	FEP Bottoms Slurry		FEP Feed Slurry	FEP Bottoms Slurry	Bottoms/ Feed %	FEP Feed Supernate	FEP Bottoms Supernate
Total Solids (wt%)	4.72	28.9	Volume (L)	1125	147.6	NA		
Undissolved Solids (wt%)	0.290	3.03	Mass (kg)	1168	186.0	NA		
Supernate Solids (wt%)	4.44	26.7	Undissolved Solids (g)	3340	5630	NC		
Density (kg/L)	1.04	1.26	Total Solids (kg)	54.08	53.83	99.5		
pH	NM	13.0						
Elements:	**mg/L**	**mg/L**		**Total Mass (g)**			**mg/L**	
Ag	<34.2	112	95.0	<38.5	16.6		0.827	<0.6
Al	954	6900	6590	1070	1020	95%	567	4640
B	<146	698		<164	103		83.0	690
Ba	5.38	47.7		6.05	7.04	116%	<0.024	<0.04
Ca	214	447		240	66.0	27%	1.17	<0.06
Cd	<4.15	7.78		<4.67	1.15		<0.028	<0.04
Ce	<131	<127		<147	<18.7		<1.54	<1.4
Co	231	147		260	21.8	8%	<0.088	<0.16
Cr	52.9	237	212	59.5	35.0	59%	20.3	150
Cu	16.6	16.9	16.5	18.7	2.50	13%	<0.1	0.139
Cs (ICPMS)	0.580	15.3		0.652	2.25	345%		
Cs (AA)	<20.7	<18.2		<23.3	<2.69			13.4
Fe	866	5800	5620	974	856	88%	<0.088	<0.08
K (AA)	<31.1	305		<35	45.0		41.4	305
La	<12.5	60.0		<14.1	8.86		<1.4	<0.2
Li	28.8	140	126	32.4	20.6	64%	0.230	8.86
Mg	14.6	104	102	16.4	15.3	93%	<0.168	0.0226
Mn	162	1190	1190	182	175	96%	<0.018	<0.02
Mo	<20.7	<18.2		<23.3	<2.69		<0.2	0.479
Na	16385	118739		18434	17526	95%	13878	107000
Na (AA)	161074	116596		18084	17210	95%	15300	114000
Na (average)	16229	117668		18259	17368	95%	14589	110500
Nd	<74.7	106		<84	15.7		<0.52	<1.8
Ni	216	1150		243	169	70%	0.398	0.357
P	<166	1121		<187	165		128	1100
Pb	<166	223		<187	32.9		<1.38	<1.6
Pr (ICPMS)	3.80	30.3		4.27	4.47	105%		
Rb (ICPMS)	0.385	1.26		0.433	0.186	43%		
S	227	908	768	256	134	52%	95.2	790
Si	385	1990		433	294	68%	5.48	37.9
Sr	14.1	86.9	80.5	15.8	12.8	81%	<0.01	0.402
Ti	7.64	11.5	5.77	8.59	1.70	20%	<0.28	<0.06
V	<83.1	<72.6		<93.5	<10.7			
W	<104	<90.8		<117	<13.4			90.0
Y (ICPMS)	1.21	8.97		1.37	1.32	97%		
Zn	5.08	46.1		5.71	6.81	119%	<0.74	1.86
Zr	24.1	85.7	78.5	27.1	12.7	47%	<0.096	0.0820

Table 20 (continued)	FEP Feed	FEP Bottoms		FEP Feed Slurry	FEP Bottoms Slurry	Bottoms/ Feed %	FEP Feed Supernate	FEP Bottoms Supernate
Anions (Soluble)	**mg/L**	**mg/L**		**Total Mass (g)**				
bromide	32.0	53.0		36.0	7.82	22%		
chloride	83.0	609		93.4	89.9	96%		
fluoride	11.0	145		12.4	21.4	173%		
formate	39.0	408		43.9	60.2	137%		
nitrate	15000	119000		16875	17600	104%		
nitrite	495	3740		548	552	101%		
oxalate	1520	1180		1710	174	10%		
phosphate	563	4240		633	626	99%		
sulfate	257	1960		289	289	100%		
Total Carbonate	1500	9500		1690	1400	83%		

* Elements measured on Microwave or Na Peroxide dissolution; highest or best value shown; selected comparison values shown for Bottoms

Table 21. Masses of Total and Dissolved Species in FEP Evaporator Streams

	Total Slurry Mass in Feed (g)	Total Slurry Mass in Bottoms (g)	Supernate Only Mass in Feed (g)	Supernate Only Mass in Bottoms (g)	Comments
Undissolved Solids	3345	5626			precipitation occurred
Ag	<38.5	16.6	0.930	<0.089	mostly undissolved; dissolved portion may have precipitated
Al	1073	1018	638	685	~45% undissolved
B	<164	103	93.4	102	soluble
Ba	6.05	7.04	<0.027	<0.006	undissolved
Ca	240	66.0	1.32	<0.009	mostly undissolved; dissolved portion may have precipitated
Cr	59.5	35.0	22.9	22.1	~38% undissolved
Fe	974	856	<0.099	<0.012	undissolved
K	<35	45.0	46.6	45.0	all dissolved
Mg	16.4	15.3	<0.189	0.003	undissolved
Mn	182	175	<0.020	<0.003	undissolved
Na	18259	17368	16414	16310	~8% undissolved
Nd	<84	15.7	<0.585	<0.266	mostly undissolved; dissolved portion may have precipitated
Ni	243	169	0.448	0.053	mostly undissolved; dissolved portion may have precipitated
P	<187	165	144	162	all dissolved
S	256	134	107	117	all dissolved
Si	433	294	6.16	5.60	mostly undissolved; dissolved portion did not precipitate
soluble phosphate	633	626			
soluble sulfate	289	289			
soluble oxalate	1710	174			oxalate precipitated
total carbonate	1688	1402			

oxalate precipitated	1536	g	
Na precipitated with oxalate	803	g	
total sodium oxalate precipitated	2339	g	precipitation of sodium oxalate accounts for increased
increase in undissolved solids	2281	g	mass of undissolved solids

The condensate from the FEP evaporator was analyzed for metals and anions. The only species detected above the detection limits were Na (4-20 mg/L), Cr (2 mg/L), B (7 mg/L), and Si (17 mg/L); no anions were detected. The pH was found to be 9.4, and the density 1.00. Note that 20 mg/L of Na as NaOH would give a pH of 10.9, so the 9.4 pH is consistent with this upper bound.

The fate of the added Dow Corning Q2-3183A antifoam was monitored by measuring the concentration of the antifoam in the initial charge to the evaporator, in the final bottoms product, and in the condensate. The analyses were performed by Dow Corning Analytical Services, as shown in Appendix C. The antifoam concentrations were measured by Fourier Transform Infrared Spectroscopy (FTIR) on hexane extracts of the samples. Actually, only the silicone portion, which is 40 wt% of the total mass, of the antifoam was quantified; the antifoam concentration was then calculated as 2.5 times the measured value. The FTIR was calibrated on the silicone portion of the antifoam molecule rather than on the actual antifoam. The antifoam was added to the evaporator in three batches after boil-up had been initiated. After all of the antifoam was added, the first sample was taken. The calculated concentration of antifoam in the bottoms at 25°C was 1,887 mg/L (1,500 mg/kg @ 50°C). The measured concentration in a sample immediately after addition was 3,950 mg/L. Figure 12 is a schematic of the SIPP system showing the amount of antifoam in several streams. The final bottoms product was found to have an antifoam concentration of 6,025 mg/L. Both of these values are significantly higher than the calculated addition. Dow-Corning is currently rerunning these samples and also standard antifoam solutions. The wide variation in these values indicates that it is both difficult to sample the slurry representatively and difficult to quantitatively analyze the samples for this antifoam agent. The analysis of the condensate sample is pending; however the antifoam concentration is expected to be below the detection limit of 25 mg/L since the condensate contained very little of any solutes when analyzed by ICPES and IC.

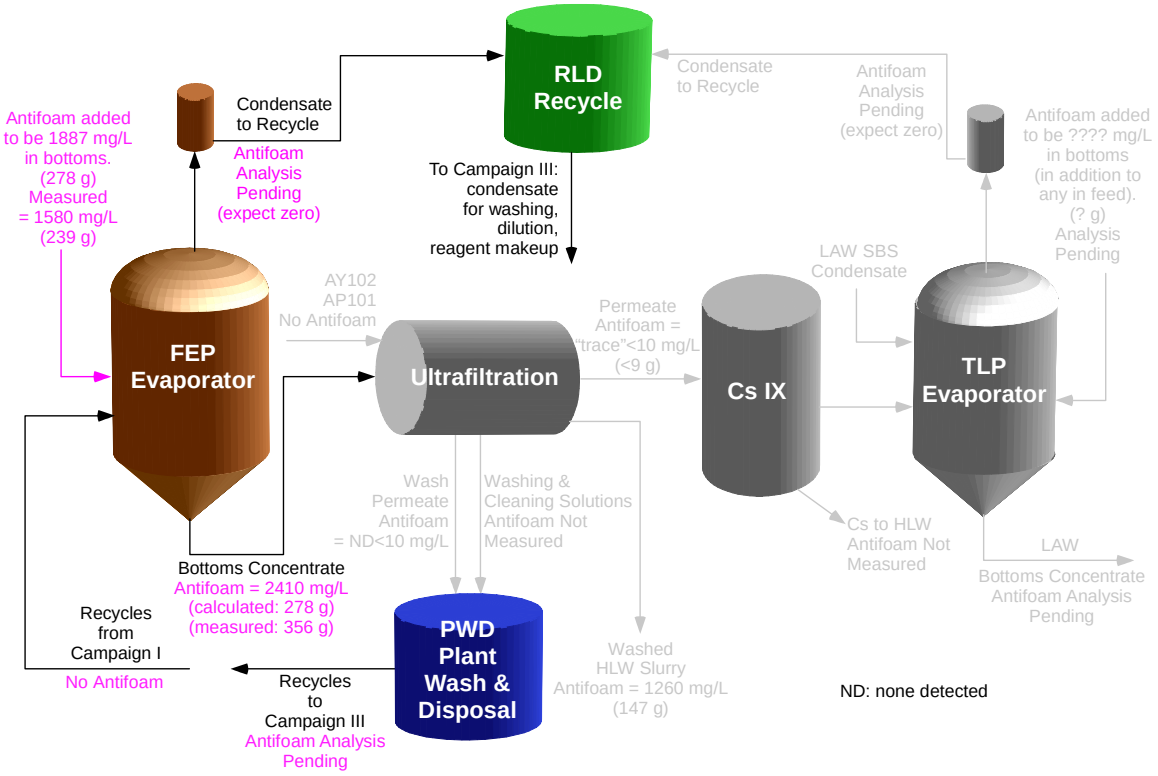


Figure 12. Schematic of Antifoam Fate in the SIPP

2.6.6 Pilot FEP Conclusions

2.6.6.1 Experimental Observations (Author – Qureshi)

During SIPP FEP Campaign II, a total of about 1,125 liters of feed was concentrated down to about 147 liters. The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C). The entire evaporation process proceeded as designed. The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water. The average evaporation rate during this campaign was around 0.43 gpm.

No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad. However, during start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.

The concentrate density was measured by three methods during the evaporation process. In the first method, warm concentrate (~50°C) was drawn in a 50 or 200 ml flask and weighed immediately on a scale accurate to 0.1 g. The second method employed a density meter with an accuracy of 0.001 g/ml. The density meter would cool the sample and the density was reported at 20 C. The third method was online density measurement using two absolute pressure

transducers placed 6 ft (1.82 m) apart in a vertical leg of the evaporator recirculation loop. This method resulted in large uncertainties in density measurement since two large pressure signals were subtracted. Thus samples were drawn periodically for density measurement by the more accurate density meter.

2.6.6.2 Waste Products Observations (Author – Zamecnik)

- The composition of the FEP feed was predictable by mass balance of the individual feed streams.
- Dissolved metals concentrations parallel the ratios in the AY102 simulant present in the recycles.
- Dissolved oxalate, present in the feed, began to precipitate when approximately 53% (see Fig. 11) of the feed had been evaporated. A total of about 90 wt% (see Figs. 20 and 21) of that oxalate precipitated at the end of evaporation. The oxalate appears to have precipitated as the Na salt $Na_2C_2O_4$.

2.7 *PILOT ULTRAFILTRATION* (AUTHORS – FOWLEY, WILLIAMS & ZAMECNIK)

The Ultrafiltration Process, or UFP, is the second separation technology unit operation in the RPP-WTP that a waste will see on start up. This is true for SIPP, since the chosen waste type, Envelope A/D, is not subjected to precipitation before filtration. However, in steady-state operation the idea of first, second, third, etc. loses meaning since the many systems throughout the plant could be operating simultaneously on the many stages of waste processing. With respect to SIPP, UFP is the second separation operation in line and filters a mixture of FEP bottoms mixed with simulated wastes of AY102 and AP101 to produce two products: 1. A concentrated slurry HLW product, and 2. A liquid LAW product in preparation for vitrification.

This section will explain the pilot UFP unit operation that was done as part of Campaign II testing. The process started with the preparation of the feed product, which was a mixture of FEP bottoms and simulated tank farm waste streams in a predetermined fashion, see Table 3. The chemical explanation of the feed stream formation will be followed by a short description on how feed formation was handled just before UFP operation and then how the waste stream was handled during and after its separation. The following section will discuss the physical equipment used to filter the waste and how the test was run. Finally, the results will be discussed and conclusions made.

2.7.1 Chemical Description of the Pilot-Scale UFP Feed Stream (Author – Zamecnik)

Figure 13 and Figure 14 show schematically how the concentration, washing, rinsing and cleaning steps were performed. The pilot-scale UFP feed slurry was made by combining the FEP evaporator bottoms, AY102 slurry simulant, and AP101 supernate simulant. Table 22 summarizes the compositions of these feed streams and Table 23 compares calculated versus measured compositions.

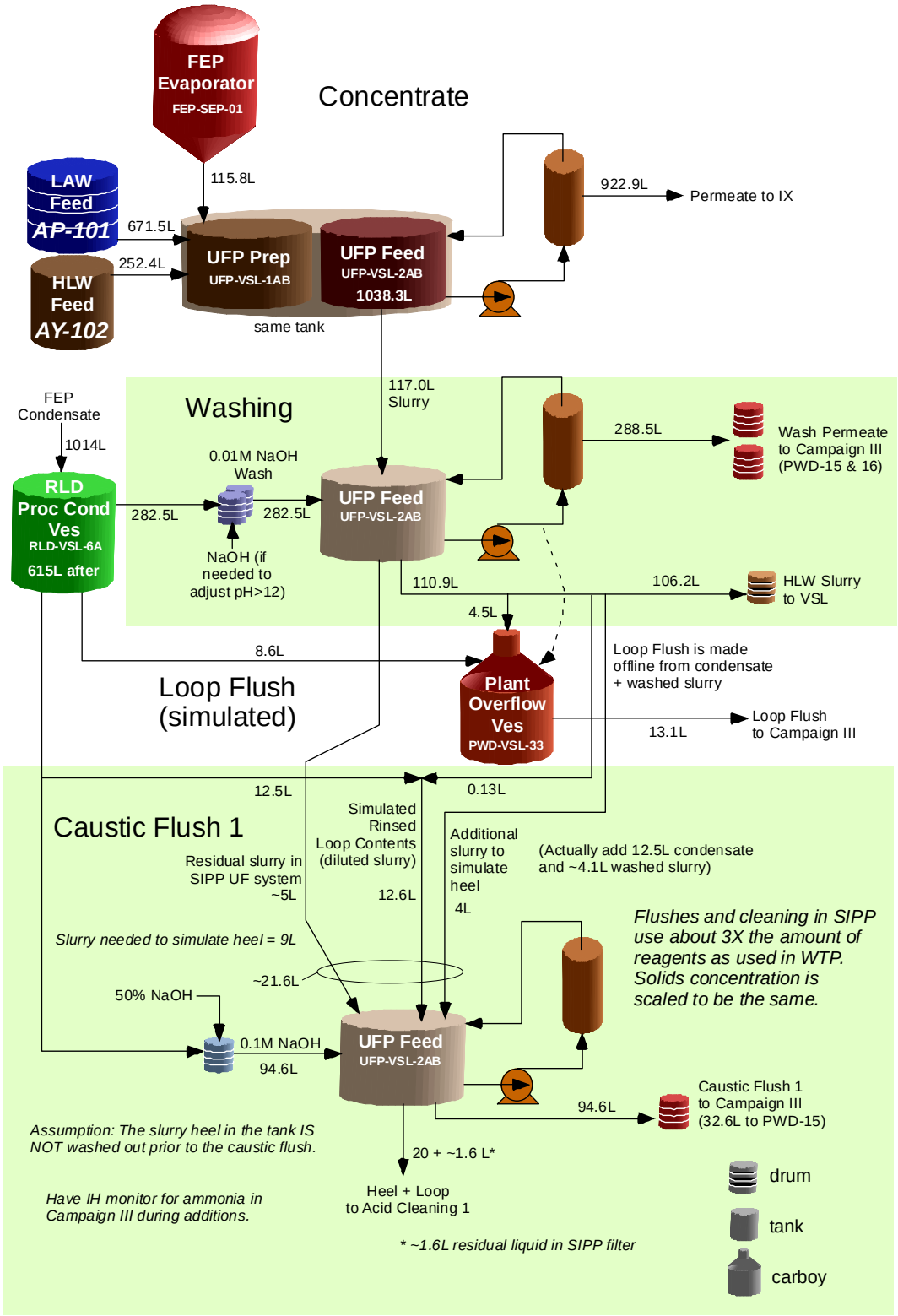


Figure 13. Schematic of the Planned Ultrafiltration Process – Page 1

(Note: The expected "residual slurry" of 5 L during the Caustic Flush 1 step turned out to be approximately 22 liters and the existing flush stream was closer to 112 L instead of 94.6 L, but all other steps followed the plan.)

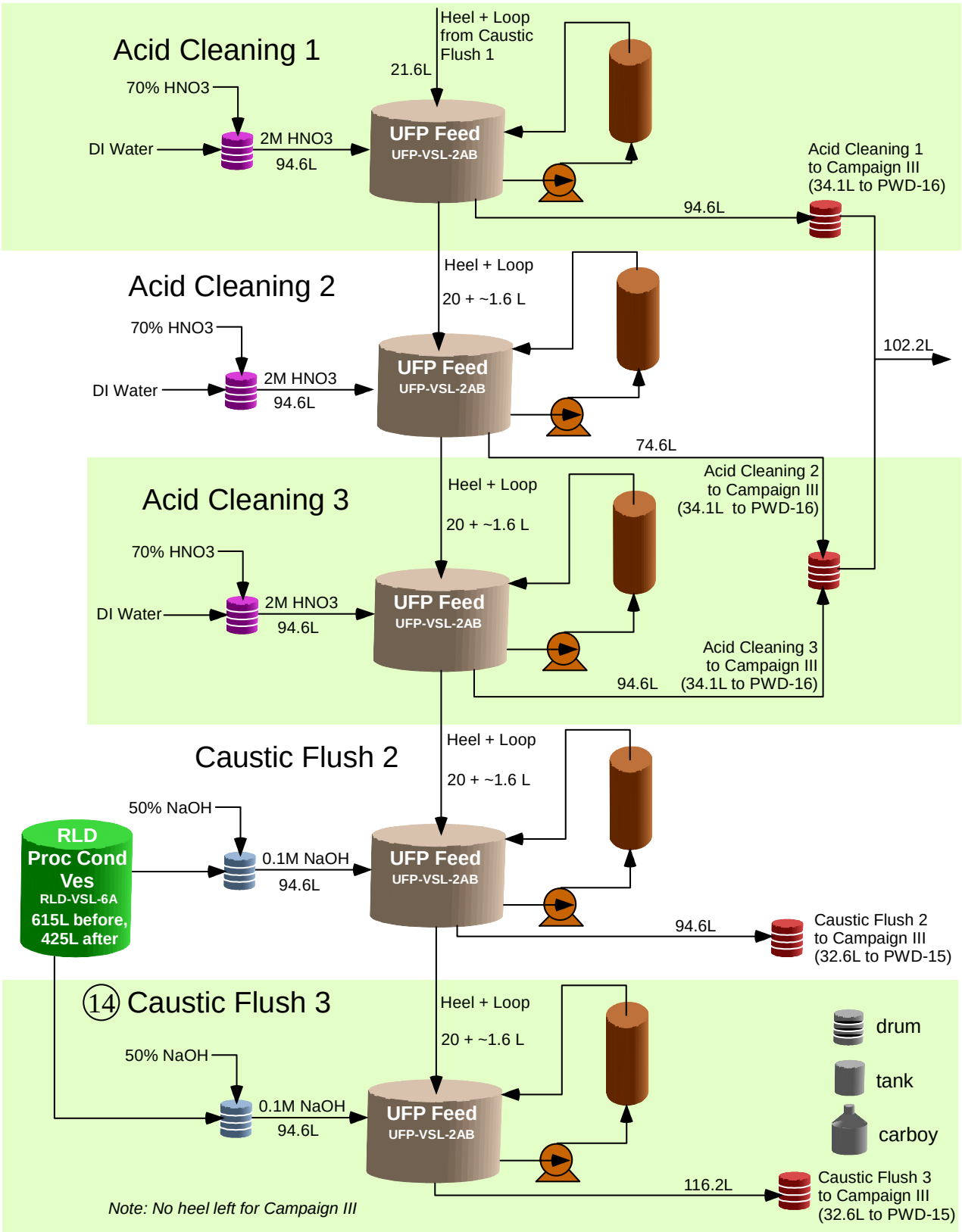


Figure 14. Schematic of Ultrafiltration Process – Page 2

Table 22. Measured Pilot-Scale UFP Feeds

	FEP Evaporator Bottoms						Ultrafilter Feed		
All values mg/L except as noted.	Slurry	Supernate	AY102 Slurry		AP101		Slurry	Slurry	Supernate
Total Solids (wt%)	28.95	NM	26.80		31.94		30.59		28.31
Undissolved Solids (wt%)	3.03	NM	11.75		0.00		3.22		0.00
Supernate Solids (wt%)	26.73	NM	17.05		31.94		28.28		28.31
Density kg/L	1.261	NM	1.240		1.279		1.276		1.250
pH	12.99	NM	NM		NM		13.64		NM
Ag	112	<0.6	624		37.3		157		<0.532
Al	6895	4640	15996	17484	7469	6932	8422	9953	7175
B	698	690	<165		<142		<148		84.9
Ba	47.7	<0.04	293	255	<1.53		68.0	46.4	<0.022
Bi	0.0565		6.93		0.0576		0.0718		<0.01
Ca	447	<0.10	1131	1500	23.0		415		2.46
Cd	7.78	<0.04	46.8		<3.9		15.2		<0.02
Ce	<127	<1.4	366		<127		<120		<0.864
Co	147	<0.16	151		<15.6		100		<0.042
Cr	237	150	632	634	179	175	293	324	163
Cs	15.3		18.7		6.02		4.54		6.25
Cs	<18.2	13.4	<17		<19.6		<17.1		5.67
Cu	16.9	0.139	77.9	81.8	<5.86		16.9	13.2	0.219
Fe	5798	<0.08	35836	35216	76.4	68.4	9493	9570	1.21
K	305	305	373		30568		19012		21100
La	60.0	<0.2	305		13.9		84.1		<0.188
Li	140	8.86	<24.8		<21.1		<21.9		1.19
Mg	104	0.0226	379	373	5.51		110	105	<0.012
Mn	1187	<0.02	7812	7638	3.00		2080	2042	0.0343
Mo	<18.2	0.479	<17		<10.6		<17.1		9.38
Na (ICPES)	118739	107000	84283		127900		113341		113000
Na (AA)	116596	114000	91760		129179		116371		118125
Na average	117668	110500	88021		128540		114856		115563
Na (M)	5.12	4.80	3.83		5.59		4.99		5.02
Nd	106	<1.8	847		<72.9		240		<0.406
Ni	1146	0.357	1151		357		295		0.285
P	1121	1100	1748	1600	269		766	743	803

Table 22 continued

	FEP Evaporator Bottoms						Ultrafilter Feed		
All values mg/L except as noted.	Slurry	Supernate	AY102 Slurry		AP101		Slurry	Slurry	Supernate
Pb	223	<1.6	1662	1593	<156		475	419	1.77
Pr	30.3	NM	170		0.0223		34.1		<0.01
Rb	1.26	NM	4.60		6.06		4.16		5.12
S	908	790	892	899	1599	1426	1340	1128	1140
Si	1992	37.9	11016		329		3247		56.7
Sr	86.9	0.402	279	292	<1.18		60.2	83.0	<0.436
W	<90.8	90.0	<84.7		<97.7		<85.7		38.8
Y	8.97	<0.01	50.8		0.0728		10.1		<0.01
Zn	46.1	1.86	81.3		5.95		28.6		3.04
Zr	85.7	0.0820	484		<5.86		125		0.613
bromide		53.0	69.4		<128		<53.6		<10
chloride		609	165		1530		1242		1175
fluoride		145	43.4		28.0		81.7		33.5
formate		408	389		1380		1108		1170
nitrate		119000	319		105000		93914		85600
nitrite		3740	4228		33400		51678		24050
oxalate		1180	9213		1550		4440		740
phosphate		4240	3807		1150		2412		2430
sulfate		1960	1860		3740		3483		5280
acetate		NA	415		1727		1314		1210
citric acid		NA	<81.8		<104		<241		<100
formate		NA	264		1432		1072		941
unbound hydroxide		6103	NM		NM		38930		NM
total organic carbon		1000	NM		NM		3280		3005
carbonate		9500	NM		NM		40600		31350

Table 23. Comparison of Measured and Calculated UFP Feed Concentrations

		INPUTS					ULTRAFILTER FEED			
		FEP Bottoms Slurry	FEP Bottoms Supernate	AY102 Slurry	AY102 Supernate	AP101	Slurry Calculated	Slurry Measured	Slurry Supernate Calculated	Slurry Supernate Measured
Total Solids wt%		28.95	26.73	26.80	17.00	31.94	30.39	30.59	28.12	28.31
Undissolved Solids wt%		3.03	0.00	11.75	0.00	0.00	3.13	3.22	0.00	0.00
Supernate Solids wt%		26.73	26.73	17.05	17.00	31.94	28.14	28.28	28.12	28.31
Density kg/L		1.261	1.246	1.240	1.168	1.279	1.280	1.276	1.259	1.250
Concentration in mg/L. < indicates no data or value below detection limit.	Ag	112	<	624	<	37.3	190	157	24.7	<
	Al	6895	4640	16740	8030	7200	9573	9187	7161	7175
	B	698	690		<	<	78.5	<	77.2	84.9
	Ba	47.7	<	274	<	<	72.5	57.2	<	<
	Ca	447	<	1316	1.09	23.0	388	415	15.5	2.46
	Cd	7.78	<	46.8	<	<	12.3	15.2	<	<
	Co	147	<	151	<	<	53.7	100	<	<
	Cr	237	150	633	147	177	297	309	168	163
	Cu	16.9	0.139	79.9	<	<	21.5	15.0	0.0156	0.219
	Fe	5798	<	35526	0.191	72.4	9406	9532	47.9	1.21
	K	305	305	373	358	30568	20057	19012	20342	21100
	La	60.0	<	305	<	13.9	90.6	84.1	9.20	<
	Li	140	8.86	<	<	<	15.7	<	0.992	1.19
	Mg	104	0.0226	376	<	5.51	107	107	3.65	<
	Mn	1187	<	7725	<	3.00	2029	2061	1.98	0.0343
	Na	117668	110500	88021	73575	128540	118613	114856	114620	115563
	Nd	106	<	847	<	<	220	240	<	<
	Ni	1146	0.357	1151	0.602	357	644	295	236	0.285
	P	1121	1100	1674	1366	269	711	754	620	803
	Pb	223	<	1628	<	<	424	447	<	1.77
	S	908	790	895	628	1512	1308	1234	1236	1140
	Si	1992	37.9	11016	19.1	329	3138	3247	226	56.7
	Sr	86.9	0.402	286	0.204	<	79.8	71.6	0.0927	0.0691
	Zn	46.1	1.86	81.3	<	5.95	29.0	28.6	4.15	3.04
	Zr	85.7	0.0820	484	<	<	128	125	0.00918	0.613
bromide		NM	53.0	69.4	50.0	<	23.0	<	17.6	<
chloride			609	165	170	1530	1385	1242	1403	1175
fluoride			145	43.4	44.0	28.0	50.3	81.7	50.2	33.5
formate			408	389	290	1380	1292	1108	1281	1170
nitrate			119000	319	361	105000	101022	81154	102257	85600
nitrite			3740	4228	4790	33400	29310	25775	29802	24050
oxalate			1180	9213	2810	1550	3683	4440	2101	740
phosphate			4240	3807	4010	1150	2369	2412	2386	2430
sulfate			1960	1860	2225	3740	3795	3483	3905	5280

Replicate values from microwave and sodium peroxide fusion dissolutions are shown for some of the analyses. The actual total volume of products was 916L of permeate and 117L of concentrated slurry, for a total of 1,033L versus the recorded total (from the feed tanks) of 1037L, which is an error of only 0.4%[†].

Using the input compositions and volumes, the compositions of the combined feed slurry and the supernate from this slurry were calculated. As already mentioned, those input data and the calculated values are shown in Table 23. For most of the more abundant species (>5000 mg/L, or >0.5%), the calculated values matched the measured values well. Exceptions are the nitrate and nitrite, which had higher than expected error. This comparison shows that most of the data are sufficiently accurate so that the composition of the pilot-scale UFP feed can be predicted from the individual components.

2.7.2 Simulant Handling (Author – Williams)

Before testing began the simulants were prepared, which would be needed to create recycle streams from the UFP. Preparations of the simulated waste feed were then performed so as to have the accepted proportions of the constituents as per the OLI/ESP model (see Table 3).

After the dewatering portion of pilot-scale UFP testing, the slurry was adjusted in order to have a target solids concentration of 20 wt% undissolved solids (UDS) before washing began, as required by

[†] Note on pilot-scale UFP volumes: The measured total volumes of concentrated slurry and permeate, based on different assumptions, are shown in the footnote table below. The initial amount of feed, based on the amounts of the simulants and the FEP bottoms, was about 1038L. The final slurry volume was measured from the tank level and the permeate was measured from the total of the drum masses. Applying estimated uncertainties to these measurements, the final permeate volume range was calculated as shown. The volume of samples are added back into the totals. The effect of the slurry sample removal was accounted for by adding back the amount of permeate that would have been produced from the samples to the measured permeate. The volume of concentrated slurry from the samples was ignored (<0.2L). The average calculated amount of permeate was then 916L, while the total slurry + permeate average was 1033L, which is within 0.5% of the initial estimated amount. Subtracting off the amount of permeate used to dilute the slurry back to ~20 wt% UDS (21L), the final volume of permeate available to be sent to IX was then 881-909L. The estimated amount of permeate actually transferred to the IX system was 870L, and the amount of permeate treated in the IX was about 864L.

Footnote Table: Measured Product Volumes

	Total (L)	Concentrated Slurry (~23.5 wt% UDS) Volume (L)	Permeate Collected (kg)	Permeate Volume Collected (L)	Permeate Volume "Lost" Due to Samples (L)	Permeate + Samples (L)	Slurry + Permeate (L)
Method:	Summation of feeds (AY102, AP101, FEP Bottoms)	Tank Volume	Mass of Drums	Mass of Drums (density = 1.2455±0.0035)	Permeate Samples + Permeate in Slurry Samples	Summation	Summation
	1038 ± 10 (1%)* 1028 1048	117 ± 2 (~2%)* 115 119	1136 ± 11 (1%)* 1125 1147	911.5 ± 11.5 900 923	4.5 ± 0.5 4 5	916 ± 12 904 928	1033 ± 14 1019 1047

* estimated

the Test Specification (Longwell, 2003). The UFP produced 117 L of concentrated slurry at ~24 wt% UDS and approximately 916 L of permeate. Therefore, some of the 24 wt% slurry was removed and permeate was added back to the slurry to maintain the slurry volume at 117 L while attaining 20 wt% UDS. This section describes how the simulants were made and adjusted at the experimental site.

2.7.2.1 Preparing for UFP Recycle Streams

Refer to Fig. 3 (recycle streams) and Figs. 13 and 14 (UFP unit operation) to better understand the following descriptions of feed preparations and use.

In preparation to create the UFP wash-water recycle stream on 15 April 2004, two 55-gallon drums, labeled "Campaign 2-UFP First or Second Wash," were each filled with 141.3 liters of FEP condensate into which were added 226 grams of 50 wt% NaOH to attain a caustic concentration of 0.01 M NaOH[†]. The loop flush recycle stream, that would be made in Campaign II for use in Campaign III, was made in one carboy labeled "PWD-VSL-33" and it was filled with 8.6 liters of FEP condensate. This carboy would receive 4.5 liters of washed HLW slurry after washing. The UFP "Heel" sludge recycle stream was created in another carboy by adding 12.5 liters of FEP condensate. The rinse water recycle was created in three 55-gallon drums, labeled "Campaign 2-0.1M NaOH for UFP Caustic Flush 1, 2 or 3." Each was filled with 94.6 liters of FEP condensate, which was made caustic to a concentration of 0.1 M NaOH by adding 766.8 grams of 50 wt% NaOH into each. The final UFP recycle stream was created in three 55-gallon drums labeled "Campaign 2-UFP Acid Cleaning 1, 2 or 3." Each drum was filled with 94.6 liters of DI water, which was made acidic to a concentration of 2 M HNO_3, by adding 17 kg of 70% HNO_3.

2.7.2.2 Preparing UFP Feed

In preparation for pilot-scale UFP unit operation, AP101 simulated waste, which was prepared by Optima, was mixed with the FEP Evaporator Bottoms and AY102 waste simulant in the UFP Primary Mixing Tank. This tank represented the plant tank UFP-VSL-1AB. Three major components of the AY102 simulant were also made by Optima, but those components were joined, and its final preparation was made, at the test location in a separate mixing tank on 14 April in order to have just the right mix.

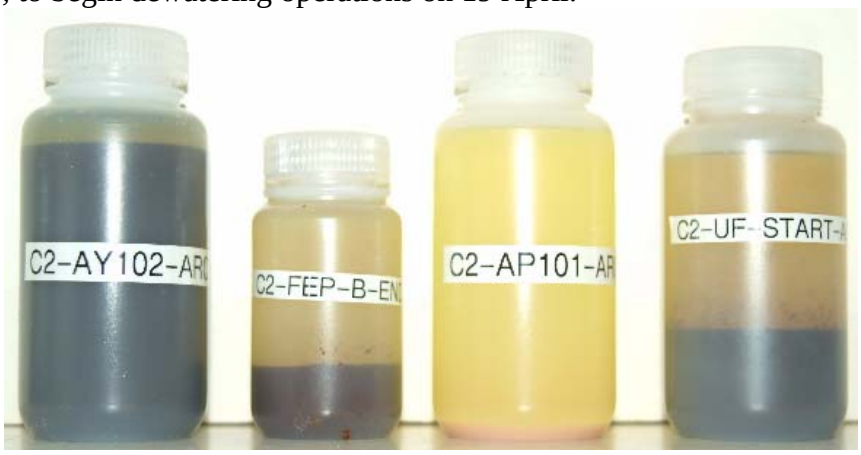
[†] The concentration of 0.01 M NaOH was nominal. The real target was to have a pH of at least 12. Due to the high acid content of the EDL water supply, the initial addition of 113 grams of the 50 wt% NaOH to the 141 liters of water still indicated a pH below 12. To be safe the amount of caustic was doubled to 226 grams which theoretically gave a concentration of 0.02 M NaOH and a pH = 12.3. After the addition to the recycle stream it measured pH >12.

The final adjustment included the following:

Material	Mass Added (g)
Wet Additions	
AY102 Supernate Simulant by Optima	68,500
Precipitated Sludge Solids by Optima	238,200
NAS, sodium aluminosilicate (wet) by Optima	27,950
Dry Additions	
$Al(OH)_3$	5,661
Al_2O_3	2,015.2
Calcium Phosphate Tribasic	135.0
SiO_2	3,655
$RbNO_3$	0.46
Total	346,116.66

After samples were taken, AY102 simulant in excess of the target volume of 66.7 gallons was removed. That volume was indicated by the OLI/ESP model for Campaign II and is shown at the top of Table 8. With AY102 ready, the final UFP feed preparation could be completed. The 66.7 gallons (320.6 kg) of AY102 simulant was transferred to the UFP Primary Mixing Tank. To this slurry, 147.4 kg of the 184 kg FEP bottoms made in the pilot-scale FEP were transferred to the UFP Primary Mixing Tank on 16 April. The last addition was 860.9 kg of AP101 simulant, which was also completed on 16 April. The total feed in the UFP Primary Mixing Tank was 1,328.9 kg before samples were removed for analysis. Figure 15 shows each of the constituents that went into making the UFP feed and the final feed mixture.

After the UFP Primary Mixing Tank contents had settled over the weekend of 17 to 18 April, 15.8 liters of supernatant was decanted from the tank surface on 19 April and was used to fill the permeate system of the pilot-scale UFP test facility on start up. Subsequently, the UFP Primary Mixing Tank, Fig. 16, was mixed for one hour and samples taken before initiating the transfer to the UFP Slurry Reservoir, Fig. 17, to begin dewatering operations on 19 April.



(a) (b) (c) (d)

Figure 15. Simulants of (a) AY102, (b) FEP Bottoms, (c) AP101, and (d) UFP feed which is a mixture of (a), (b), and (c) – These are Samples after Solids Had Settled

Figure 16. UFP Primary Mixing Tank (Volume ~ 1000 liters) which represents the RPP-WTP UFP Preparation Feed Tank

Figure 17. UFP Slurry Reservoir (Volume ~ 100 liters) which represents the RPP-WTP UFP Feed Tank

2.7.2.3 Final UFP Products

The slurry produced by the UFP filter was concentrated to approximately 24 wt% UDS by 22 April. To bring the fixed-volume batch of slurry back to washing target of 20 wt% UDS, 27.91 kg of slurry were removed and 19.6 liters (or 24.6 kg) of permeate were added. After the newly diluted slurry was well mixed, samples were taken. The concentrated slurry remaining in the UFP test rig was then washed in two phases using the nominal 0.01 M NaOH wash water from drums labeled "Campaign 2-UFP First or Second Wash" on 23 April. The permeate from slurry washing was collected in 55-gallon drums for use in Campaign III as Wash Permeate recycle. The washed HLW concentrated slurry had a density of 1.22 gm/ml. An amount of 4.5 liters of concentrated slurry were added to the carboy labeled "PWD-VSL-33" to be held for Campaign III as Loop Flush recycle. An additional amount of 4.13 liters of concentrated slurry were added to the carboy labeled "UFP Heel," to be added back into the UFP test rig to represent a heel.

The remaining material, about 100 liters, was transferred to a 55-gallon drum labeled "Campaign 2 Concentrated Washed HLW Slurry" for shipment to VSL on 26 April for its eventual vitrification. The permeate produced by the UFP was placed into either of two drums labeled "Campaign 2-CsIX Permeate Feed" and transported to a CIX Simulant Supply Tank. About 863 liters of permeate was transferred to the CIX Simulant Supply Tank on 23 April.

On 26 April the filter rinse-clean-rinse sequence began. The carboy labeled "UFP Heel" was returned to the empty slurry reservoir as well as the contents from drum marked "Caustic Flush 1" to rinse the UFP flow loop. The resulting volume was 134 liters of material. This volume was larger than the expected 117 liters. This indicated that there was already a substantial heel remaining in the flow loop (of approximately 22 liters of material) rather than the expected heel amount of 5 liters. After the first rinse, all of the contents of the slurry reservoir were pumped to a drum labeled "Campaign 2-Caustic Flush 1 to Campaign 3 (PWD-VSL-15)" and later stored for Campaign III. An amount of 20 liters were returned to the slurry reservoir to represent the next "UFP Heel. . This cycle repeated itself for all the Acid Cleanings 1, 2, 3 and Caustic Flush 2 and 3, that is, 20 liters of each of the preceding rinse/cleanings, simulated heel material, were mixed with the next batch of cleaning or rinsing. The cleaning and rinses were completed on 27 April. The used cleaning and rinsing solutions were stored in drums labeled "Campaign 2-Acid Cleaning 1 or 2 & 3 to Campaign 3 (PWD-VSL-16)" and "Campaign 2-Caustic Flush 2 or 3 to Campaign 3 (PWD-VSL-15)" for Campaign III, respectively.

2.7.3 Pilot UFP Operation and Equipment (Author – Fowley)

The test rig for the Semi-Integrated Pilot Plant (SIPP) is a pilot scale representation of the Ultrafiltration Process (UFP) of the River Protection Project (RPP) Waste & Immobilization Treatment Plant (WTP). The UFP will remove and concentrate solids from combined simulated waste feed streams. The solids are removed to protect downstream ion exchange (IX) beds and to meet the specifications for LAW product. The UFP will also minimize storage requirements for HLW and enhance HLW vitrification efficiency.

The UFP filter unit, see Figs. 18, 19, and 20, was manufactured by the Mott Metallurgical Corporation to meet RPP-WTP specifications (Townson, 2002, Longwell, 2003), as follows:

- 7 filter tubes with each having an inside diameter of 0.5-inch
- 90-inch porous length for each filter tube and made of stainless steel
- Nominal rated 0.1 micron filter element

The pilot-scale test rig was designed to have the following:

- Maximum axial velocity through filter tubes of 4.6 m/s (15 ft/s)
- Maximum transmembrane pressure (TMP) of 60 psid
- Maximum axial velocity to be achievable at the maximum TMP
- Instrumentation to monitor the axial velocity, the permeate flow rate, the TMP, and the slurry temperature
- All materials to be compatible with the high-caustic simulants and the 2 M nitric acid cleaning solution

All filter specifications were met or exceeded.

Figure 18. Entire 90-inch Length of the Filter-tube Bundle

Figure 19. Close-up of the Tubes' Surfaces and Bulkhead Stabilizing Plate

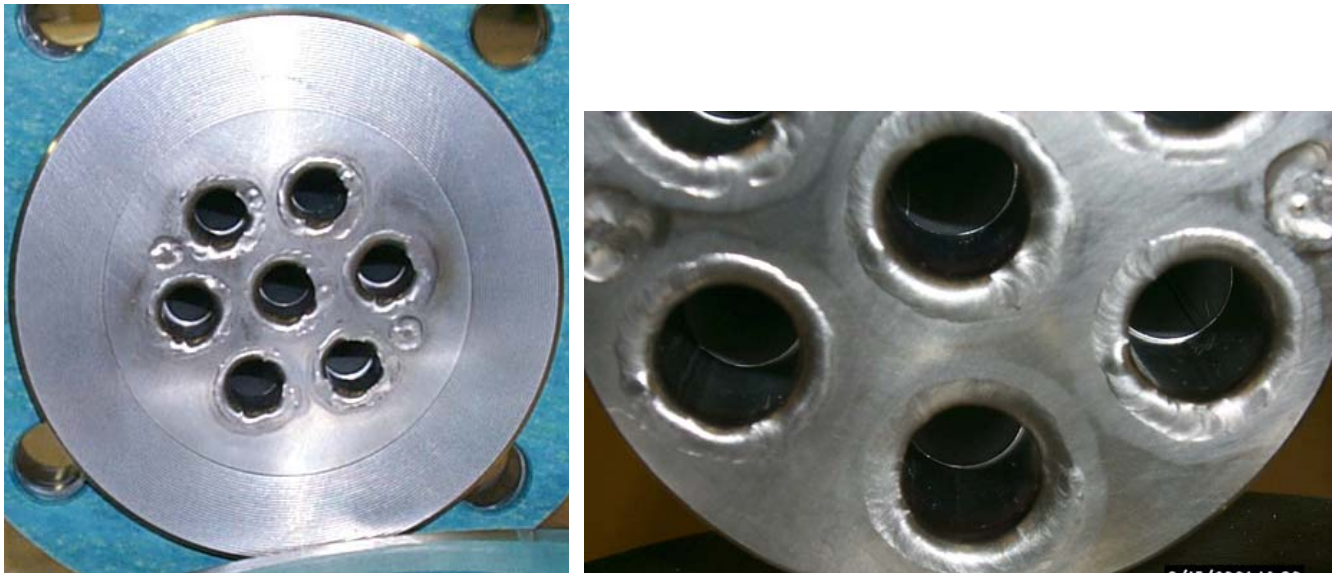


Figure 20. The Exit (Left) and Entrance (Right) Tube Sheets of the Filter Tube Bundle

The filter was prototypic in most of its features. The tubes were symmetric and made from porous stainless steel sintered material with a nominal pore size of 0.1 micron. The porous tube length was 90 inches, the tube inside diameter was 0.488 inches, and the outside diameter was 0.654 inches[†]. Tests were conducted at an axial slurry velocity of 11 to 12 ft/s, and a TMP of approximately 40 psid.

The filter was not prototypic in three features: it only had 7 tubes instead of 241 tubes, it was mounted vertical instead of horizontal, and while the backpulse system functioned prototypically, the system design must be different in its dynamic hydraulic response because of scaling. In general, filter performance data from the pilot test rig was assumed to well represent those that will be obtained in the full-scale unit.

2.7.3.1 Test Matrix

Table 24 shows the Campaign II UFP test matrix. The test number ordering has been maintained and sequentially adjusted from Campaign I (Duignan, et al., 2004). Several tests were eliminated prior to Campaign I and between Campaign I and II, which produced numerical gaps between several of the test numbers.

[†] These inside and outside diameters are averages obtained from the many measurements made on the tube before testing began. The tubes ordered from the Mott Corporation were to have a 0.5-inch inside diameter and a 0.75-inch outside diameter to match the then current design of the WTP UFP filters.

Table 24. Campaign II UFP Test Matrix[7]

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
2.00A	Pre-test baseline A[1]	10	11	25	20
2.00B	Pre-test baseline B[1]	20	11	25	20
2.00C	Pre-test baseline C[1]	30	11	25	20
2.03A	Dewater first half of slurry[2]	40	12	25	948
2.03B	Dewater second half of slurry[2]	40	12	25	2452
Wash 1	Slurry wash 1[3]	40	12	25	379
Wash 2	Slurry wash 2[3]	40	12	25	246
2.18A	Caustic rinse 1[4]	20	11	25	30
2.18B	Acid clean 1[5]	40	11	25	90
2.18C	Acid clean 2[5]	40	11	25	90
2.18D	Acid clean 3[5]	40	11	25	90
2.19A	Caustic rinse 2[4]	20	11	25	30
2.19B	Caustic rinse 3[4]	20	11	25	30
2.21A	Post-test baseline A[6]	10	11	25	20
2.21B	Post-test baseline B[6]	20	11	25	20
2.21C	Post-test baseline C[6]	30	11	25	20

Notes:
1. The pre-test baseline tests were conducted with de-ionized, filtered (0.1 µm) water made caustic to 0.1 M NaOH.
2. The slurry was dewatered to 20 wt% undissolved solids or greater.
3. The slurry was washed with 0.01 M NaOH solution made from FEP condensate.
4. The caustic rinse consisted of 0.1 M NaOH solution made from FEP condensate.
5. The acid clean consisted of 2 M HNO_3 solution.
6. The post-test baseline tests were conducted with FEP condensate made caustic to 0.1 M NaOH.
7. Flow parameters: TMP, Velocity, and Temperature, were required by the test specification (Townson, 2002)

Recycle streams are included in the SIPP UFP (to a limited extent) to mimic actual WTP operation. The caustic wash solutions and caustic rinse solutions were made from Campaign II FEP condensate. The permeate from the slurry washing and the spent solution from the rinsing and cleaning of the filter unit were recycled as part of the Campaign III FEP feed.

All UF testing activities were performed using an approved field procedure (Duignan, 2004). The field procedure described generic activities regarding the operation of the test rig (filling and draining the test rig, dewatering, backpulsing, sampling, etc.). Work guidances were used for daily operation of the test rig. The work guidances referenced the field procedure and specified the order of activities for completing a test number or series of test numbers in the test matrix. Pertinent test information such as observation, non-critical calculations, chronological events, etc. was recorded in the laboratory notebook (Fowley, 2004). All documents for this test activity are maintained by the Engineered

Equipment and Systems (EES) Department Document Control System per EES procedure L9.1-2006 in Job Folder # EES-23041.

2.7.3.2 Test Equipment

A schematic diagram of the cross-flow filter test rig and support equipment is shown in Figure 21. AY102 simulant was mixed in the Secondary Mixing Tank and then pumped to the Primary Mixing Tank, which contained the AP101 supernatant and the FEP Evaporator concentrate. Both tanks were mechanically agitated and had product recirculation loops to provide sufficient agitation during the mixing process. Sample lines were available in the recirculation lines to take representative samples for analysis.

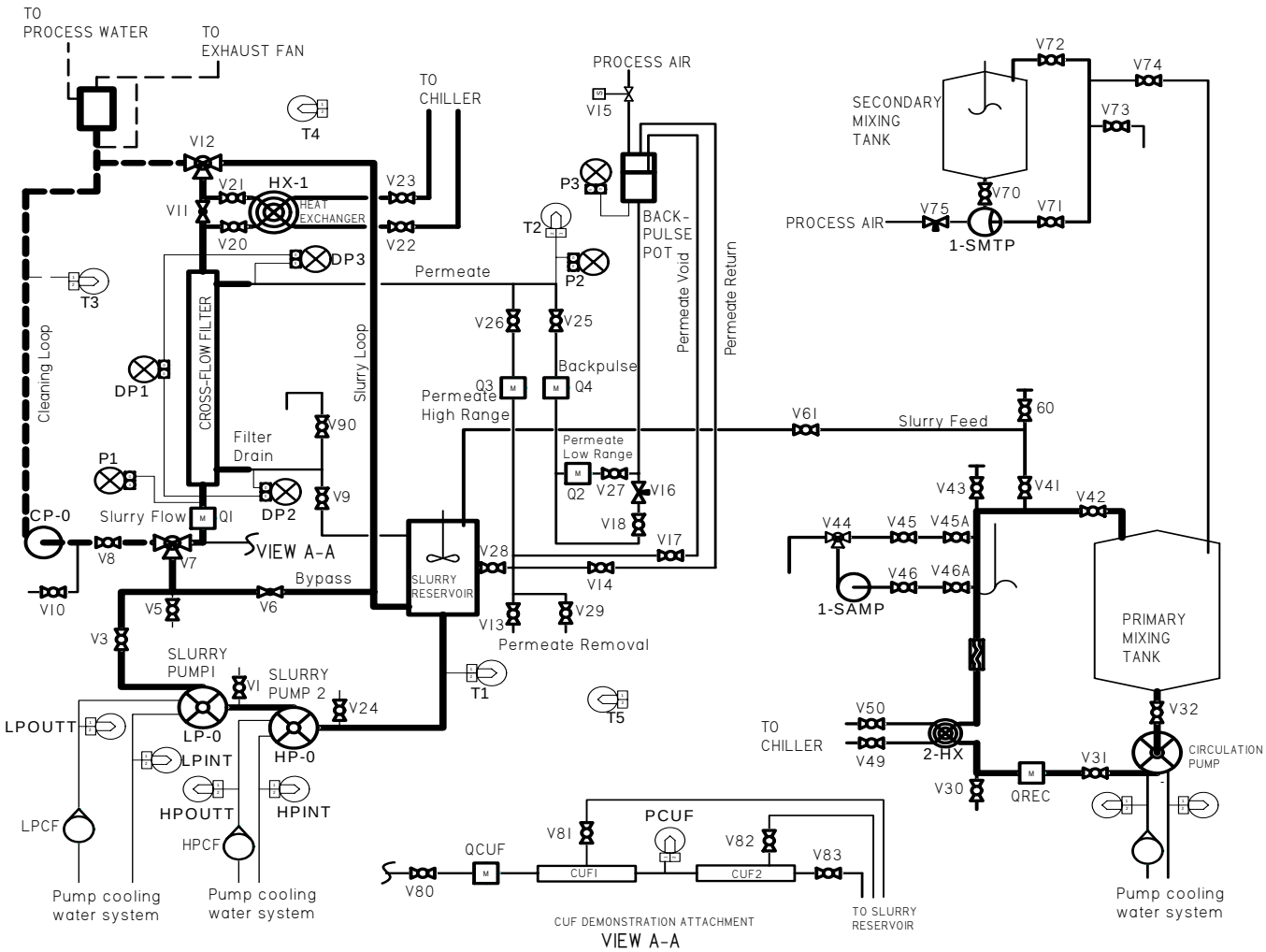


Figure 21. Campaign II Ultrafiltration Test Rig

The slurry in the Primary Mixing Tank was transferred to the test rig Slurry Reservoir using a bypass in the recirculation line on the Primary Mixing Tank. Once a batch of slurry was transferred to the Slurry Reservoir the test rig pumping system would circulate the slurry through the filter. The test rig pumping system consisted of two 10-hp Galigher® slurry pumps in series. The impeller and impeller

housing were lined with EPDM to be compatible with both the high caustic slurry and the 2 M nitric acid cleaning solution.

The stainless steel test rig is composed of three basic flow loops; the slurry loop, the ***permeate*** loop, and the cleaning loop (not used for SIPP and not described in this report). The slurry loop is the primary flow path and contains the cross-flow filter. The slurry loop valves may be positioned to bypass the cross-flow filter. The ***permeate*** loop starts at the filter housing, contains a backpulse pot and ends at the slurry reservoir. The backpulse pot and associated tubing provides a pulse of ***permeate*** flow in the reverse direction to knock off built-up slurry cake on the inside of the filter tubes. A more detailed description of the test rig is documented in (Duignan, 2000a, Duignan 2000b, Duignan 2003a) and will be provided in the SIPP final report.

2.7.3.3 Measurement Uncertainty

The derivation of measurement uncertainty will not be shown in this report, but will be included in the final report, which will incorporate results from all four campaigns. The uncertainties listed here are based on past work done on the same equipment under similar circumstances and similar individual instrument uncertainties (Duignan 2003a). The uncertainties listed here are to illustrate the expected magnitude of principal parameters measured throughout this test. The measurement uncertainties (at the 95% confidence level) for the important calculated quantities are:

Slurry Velocity in a Filter Tube	=	± 6 %
TMP	=	± 2 %
Temperature Corrected Permeate Flux	=	± 6 %

For analytical results included herein, the measurement uncertainty varies and sometimes can be large. Uncertainties for data obtained from outside organizations, i.e., Analytical Development Section (ADS), the Mobile Laboratory of Savannah River National laboratory (SRNL), or the Aiken County Technical laboratory (ACTL) are beyond the scope of this task but they are assumed to be no larger than ±15% of any result shown. For properties measured in the EDL, the following uncertainties on a reading were obtained through calibration:

Slurry or Liquid Density =	± 0.5%
Liquid Viscosity =	± 0.5 %
Turbidity =	± 0.1 NTU

2.7.4 Pilot UFP Discussion of Results

2.7.4.1 Experimental Observations(Author – Fowley)

2.7.4.1.1 <u>Slurry Concentration (Dewatering)</u>

Dewatering started Monday, 19 April. The simulant in the Primary Mixing Tank was not agitated during the weekend before the 19th so that solids would settle out and allow supernate to be drawn from the top of the mixture. After the supernate was removed, the simulant was thoroughly agitated for one hour prior to transfer to the test rig. The supernate was added back to the test rig prior to the

initiation of dewatering to account for the volume of permeate necessary to fill the permeate loop. Doing so would assure the correct solids weight % of the simulant in the test rig after the slurry and permeate loops were primed and ready.

Per the test matrix, the dewatering was conducted in two stages. The delineation between the stages was approximately one-half of the expected permeate removed from the simulant (461 liters). A hold period, a minimum of 12 hours, was inserted between the stages to purposely extend the dewatering process, making it more comparable with the duration of the dewatering process of the RPP-WTP plant, during which some waste instabilities could cause changes, e.g., precipitation. The first stage was completed on 20 April, the second stage was completed on 22 April. The hold period turned out to be 20 hours. The entire dewatering process, including the hold, and downtime for sampling, took approximately 77 hours. Excluding the hold, and sampling downtime, dewatering took 53 hours and 8 minutes. (This 77-hour period is approximately one half of the dewatering time that WTP will take, which was estimated to be 138 hours, as shown in Table A9 in Appendix A. However, any UFP-feed reactions are expected to occur during first half of the dewatering period.)

Approximately 916 L of permeate was collected during dewatering. 21 L of permeate were added back to the slurry to achieve the correct weight % solids for the following slurry washing test. The remaining permeate was used in the Campaign II Ion Exchange process.

Figure 22 shows the adjusted permeate flux for the entire slurry dewatering process. The flux is adjusted for temperature, as required by the RPP-WTP test specification to account for the effect of viscosity. The adjustment equation is:

$$\text{Adjusted Flux} = \text{Flux (gpm/ft}^2\text{)} \times \exp(2500 \times ((1/(273+T))-(1/298)))$$

where T = slurry/permeate temperature in degrees Celsius

Dewatering started with a backpulse. Another backpulse was conducted at approximately 11.5 hours into the first stage of dewatering. Per procedure a backpulse was conducted when the permeate flux dropped below 0.015 gpm/ft^2. When dewatering resumed after the backpulse the permeate flux was higher (>0.030 gpm/ft^2) but quickly (~18 minutes) returned to the pre-backpulse flux. Because of the poor recovery, a backpulse was not repeated for the remainder of the dewatering.

The majority of the data scatter shown in Figure 22 (and in Figure 23) was caused by process disruptions: backpulsing, sampling and exchanging the permeate collection drums. Slurry and permeate samples were drawn approximately every two hours. The permeate sample was taken from a sample port in the permeate loop. Prior to sampling, permeate was recirculated back to the slurry reservoir. This action changed the hydraulic resistance of the permeate loop and affected the flux measurement. Exchanging the permeate drums also required switching the permeate loop to recirculation mode.

Samples of concentrated slurry and permeate were taken during the dewatering process in accordance with the sample matrix, Appendix D. Samples were taken at three periods during each dewatering stage (at approximately 154 liters, 307 liter, and 461 liters of permeate removed). Permeate density, viscosity, and turbidity, as well as slurry density, were measured in the EDL soon after the samples

were taken. Separate permeate and slurry samples were sent to ACTL for measurements of density, yield stress, consistency, and weight % solids [total solids (TS), undissolved solids (UDS), dissolved solids (DS), and suspended solids (SS)] analysis.

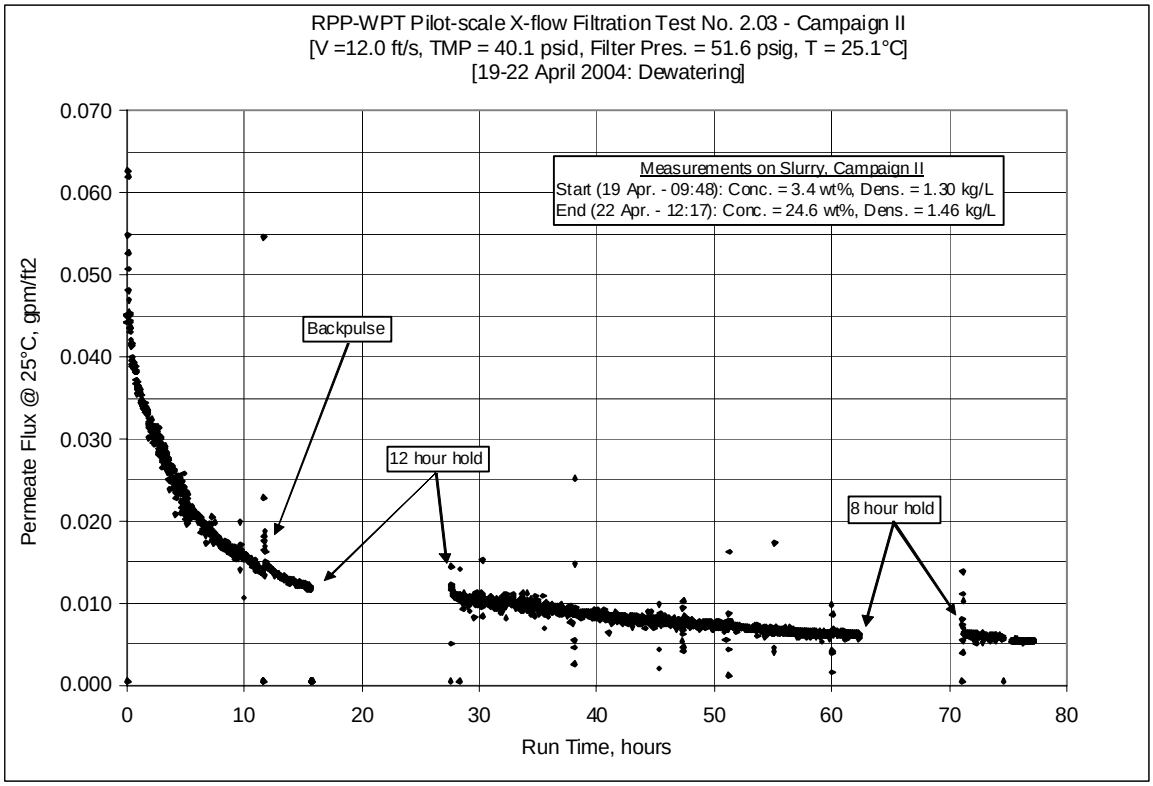


Figure 22. Dewatering of UF Feed, Permeate Flux vs. Run Time

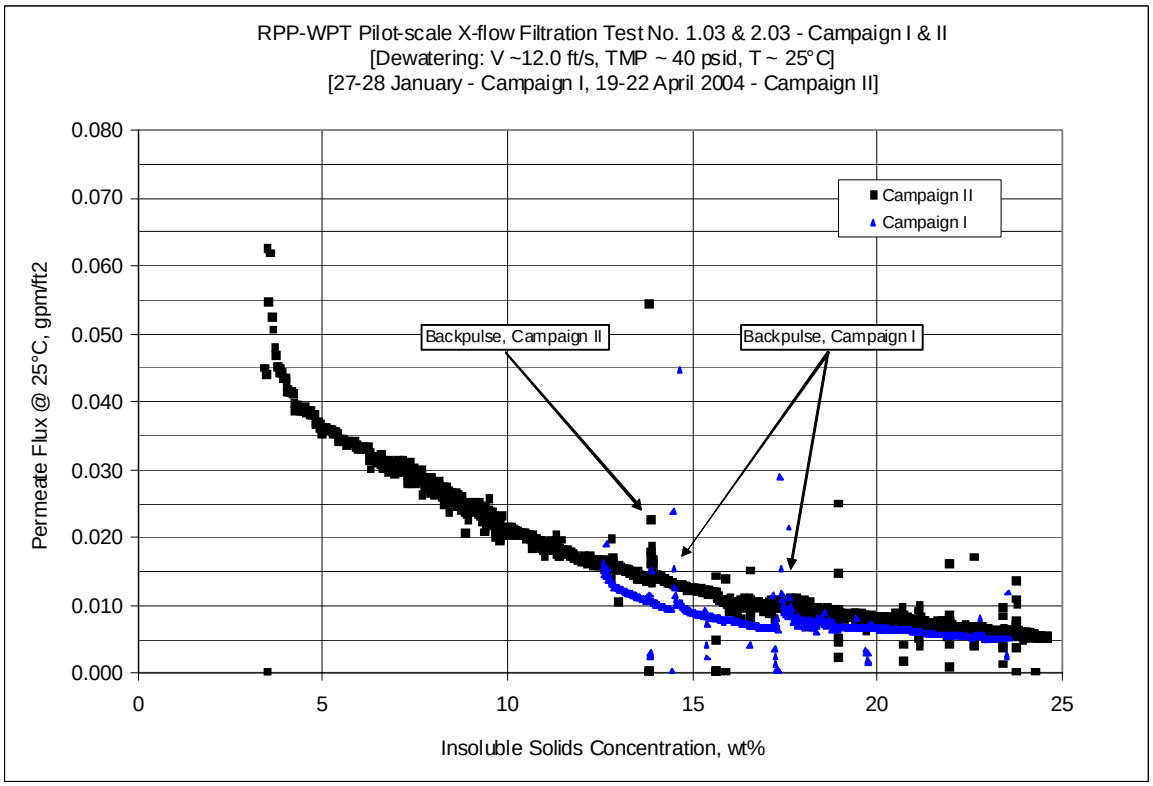


Figure 23. Dewatering of UF Feed, Permeate Flux vs. Concentration

Another way to visualize the dewatering process is to track permeate flux against the concentration of UDS. Figure 23 shows the adjusted permeate flux versus UDS concentration. These concentration data, shown in the figure, were derived by interpolating between the six slurry samples results acquired during dewatering and based on the mass of permeate removed over time (see Section 2.7.4.2.6). For comparison, the dewatering data from Campaign I are also shown in Fig. 23. The simulant for Campaign I contained only AY102 and was 12.5 wt% at the beginning of dewatering. Note that the data trends are similar for both Campaign I and II. This consistent performance indicates that; 1) the UFP unit was successfully cleaned after Campaign I, 2) filter performance can be predictable, and 3) the addition of AP101 and FEP bottoms to the AY102 had little effect on filter performance. As indicated on the chart, two backpulses were performed in the Campaign. Poor recovery was evident in both campaigns.

The RPP-WTP operation will concentrate the waste in the UFP unit to approximately 17 wt% UDS, therefore all of the campaigns of SIPP have a target of 20 wt% UDS to obtain information at an upper bound. However, there is little filter data at the higher concentrations so the Test Specification for this filter work indicated a concentration of 25 wt% UDS as the target if obtainable. The dewatering test was stopped after 53 hours and 8 minutes when a rough estimate[†] of concentration indicated 25 wt% UDS. The actual ending value was 24.6 wt% UDS.

Table 25 shows rheological and other physical data of the slurry and permeate during the dewatering.

[†] Real time concentration analysis was not available and only the initial samples taken on the previous day were used to extrapolate to estimate the 25 wt% UDS.

Table 25. Measured Rheological and Other Data during Dewatering of Slurry

Target Volume of Permeate Produced	Cumulative Weight of Permeate Produced	Slurry[1]				Permeate[2]			
		Density	TS	UDS	Consistency	Density	Viscosity[3]	Temp	Turbidity
L	Kg	gm/mL	wt%	wt%	mPa-s	gm/mL	mPa-s	ºC	NTU
0	0	1.28	30.6	3.2	4.74	n/a	n/a	n/a	n/a
Day1 153.7	179.00	1.29	33.4	7.0	n/a	1.25	2.56	22	0.22
307.4	358.05	1.32	35.8	11.2	n/a	1.25	2.52	22	0.22
461.2	576.50	1.36	38.7	14.9	n/a	1.25	2.59	23	0.20
Day 2 153.7	768.50	1.38	42.0	19.5	n/a	1.25	2.37	25	0.23
307.4	960.50	1.40	43.1	21.3	n/a	1.25	2.37	25	0.23
461.2	1136.05	1.47	45.4	23.5	22.89	1.25	2.45	24	0.25

Notes:
1 Data from ACTL.
2 Data from EDL.
3 Viscosity measurement of permeate prior to start of dewatering by ACTL was 3.01 mPa-s. EDL used a Cannon-Fenske viscometer, ACTL used a Haake Rheometer.

As expected, the density, TS, UDS and consistency of the slurry increased during dewatering. The consistency increased by a factor of 5, while the wt% of UDS increased by a factor of 7. Density increased 15% and wt% TS increased 5%. The permeate rheology showed that the density and viscosity remained constant throughout the process (the viscosity variations are due to temperature). The turbidity measurements of the permeate were significantly lower than the test specification threshold of 2 NTU and, therefore, was considered free of solids.

To determine if post-precipitation occurs in the separated waste, supernatant samples were taken of permeate at the end of first and second dewatering tests and were set aside, at ambient temperature, to periodically monitor turbidity with time. That is, turbidity was measured when the sample was first taken and at different days over a two week period. Table 26 shows the results

Table 26. Periodic Turbidity Measurements of Dewatering Permeate

Date	Turbidity			
	Sample from the First dewatering		Sampler from the Second dewatering	
	Day	(NTU)	Day	(NTU)
4/20/04	1	0.200	-	-
4/22/04	3	0.245	1	0.250
4/23/04	4	0.300	2	0.375
4/26/04	7	0.300	5	0.475
5/3/04	14	0.375	12	0.560

While the sample remained visually clear the increasing turbidity indicates that there was some precipitation, but even after two weeks the measurement was well below the 2 NTU threshold of significant solids. Further chemical analyses of the permeate and the slurry are provided in section 2.7.4.2.

2.7.4.1.2 Slurry Washing

One important aspect of the UFP unit operation was the investigation of the effects of washing the concentrated slurry. In WTP, the filtration batch size was set at 21,550 gallons. Once the UFP slurry is concentrated, it is washed twice with 21,770 gallons (this represents the volume of one permeate storage tank) using 22 mini-batches of 1,000-gallon each. To mimic plant operation (noting that the Campaign II pilot-scale batch size was 116.6 liters) the batch of wash solution was 116.6 L x 21,770/21,550 = 117.8 L, making each mini-batch of wash solution ~ 5.4 liters. The pilot-scale process for each mini-batch of wash was to add 5.4 L of wash solution (0.01 M NaOH) and then dewater until 5.4 L of permeate was removed. This was repeated 21 more times to complete one wash cycle, and then the wash cycle was repeated, for a total of 44 mini-batches of wash solution. The two washes occurred on separate but consecutive days. Figure 24 shows the first washing results.

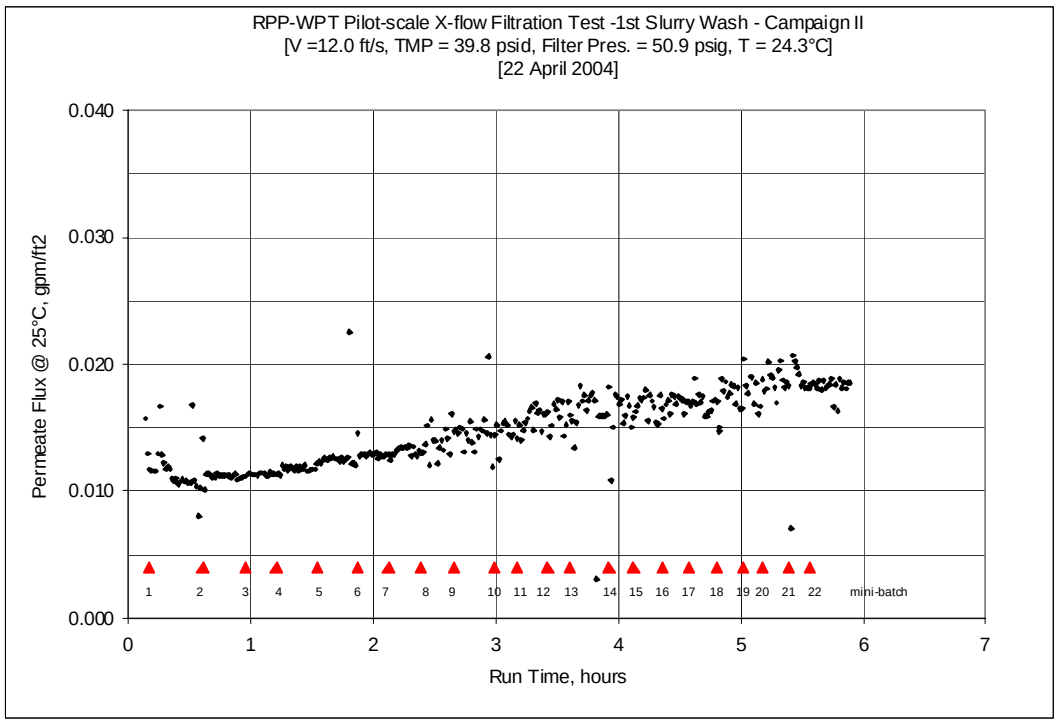


Figure 24. 1st Washing of Concentrated Slurry with 22 Wash Additions (or mini-batches)

As wash solution was added to the concentrated simulant, the adjusted flux slowly increased from 0.011 to 0.018 gpm/ft^2 during the first wash cycle (64% increase). The flux increase in Campaign I was a comparable 53%. Figure 25 shows that during the second washing cycle, the adjusted flux continued to increase but at a much slower rate, from approximately 0.020 to 0.025 gpm/ft^2 (25% increase). The flux increase in Campaign I was 32%. In both Campaign I and II, the adjusted flux

increased from the end of the first day of washing to the beginning of the second day of washing, while the test rig was idle. This increase was 11% in Campaign II and 8% in Campaign I. It is believed that some solids, which were entrained in the filter media, continued to dissolve in the residual wash solution during this idle time, creating an improved flux when the test rig was restarted. The permeate flux, for both Campaigns I and II, increased by a factor of 2 over the entire washing process as the soluble solids were washed out and replaced with water causing the density and viscosity of the supernate to decrease.

The adjusted flux data in the first wash started steady but became more erratic, with the transition somewhere around 2.5 hours (8th mini-batch). Interestingly enough, this is approximately the same point in the first wash of Campaign I where the flux data became erratic. A similar trend is seen in the second wash (Figure 25) with the transition somewhere at 1.5 hours (31st mini-batch). This initial, steady behavior of the data, was not seen in the second wash of Campaign I.

The flux measurement is based on the permeate flow rate. The erratic behavior is seen in the permeate flow rate data and a similar behavior is seen in the gauge pressure data at the backpulse pot (P3), which was part of the filtrate loop (see Fig. 21). The data scatter of the P3 reading may be systematic of the pilot-scale UFP and caused by air (or gas) entering the filtrate loop. Pockets of gas were seen in the filtrate discharge line (entering the filtrate collection drum) during slurry washing and also during the lower fluxes of dewatering. However, the magnitude of the data scatter at the lower fluxes of dewatering was not as great as the magnitude of the scatter during slurry washing. The gas pockets probably affected the hydraulic resistance of the permeate loop enough to cause the erratic behavior of the P3 reading and the filtrate flow rate. The backpulse pot and a significant portion of the filtrate loop are pressurized during the preparation of a backpulse. During this period there was no evidence of a leak in the filtrate loop.

Note that at the end of the first wash (directly after the 22nd mini-wash) the flux measurement becomes relatively stable. The significance of this point is that the permeate is re-routed from the collection drum back to the slurry reservoir (recirculation mode). This could further indicate that the effect is systematic of the pilot-scale UFP.

There is also the possibility that the erratic permeate flow rate is due to the inability of the magnetic flow meter to acquire a steady signal in the permeate. The ions necessary to produce a signal were being continuously depleted by the wash solution (primarily DIF water). This would not, however, explain the steady behavior during the first half of the second wash. The erratic behavior of the flux measurement is, at this time, inexplicable and will be investigated further during subsequent campaigns.

Rheological data from the first and second slurry washes are shown in Fig. 26. The consistency decreases slightly during the washings and the yield stress increases slightly. The wt% TS decreases and the wt% UDS slightly increases as dissolved solids are washed away or precipitate.

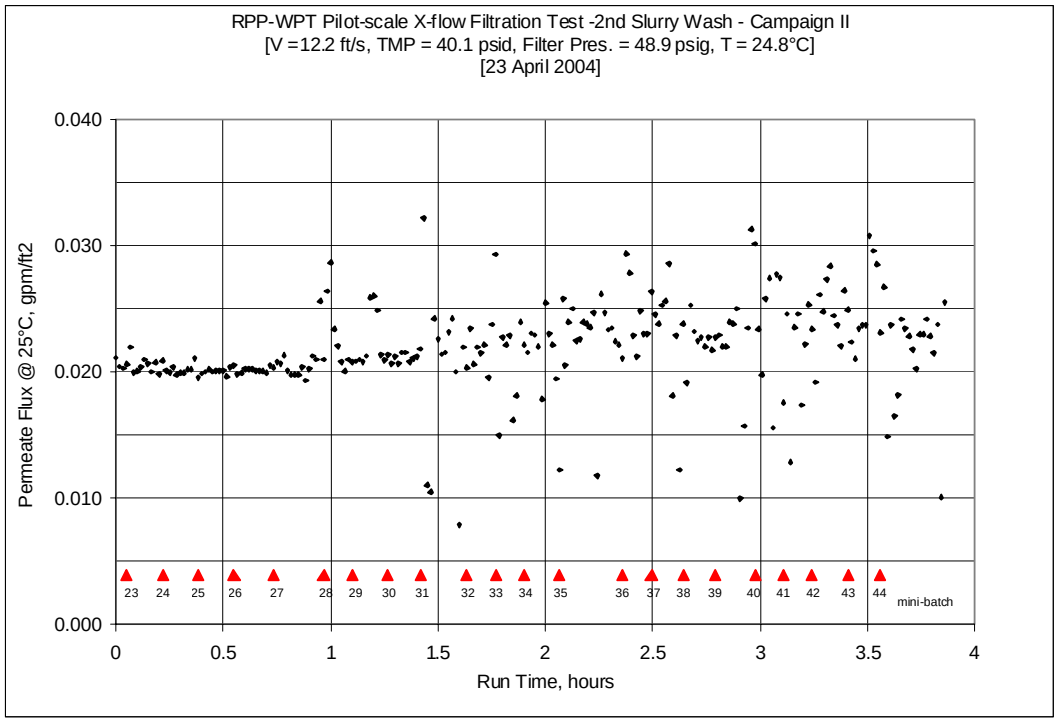


Figure 25. 2nd Washing of Concentrated Slurry with 22 Wash Additions (or mini-batches)

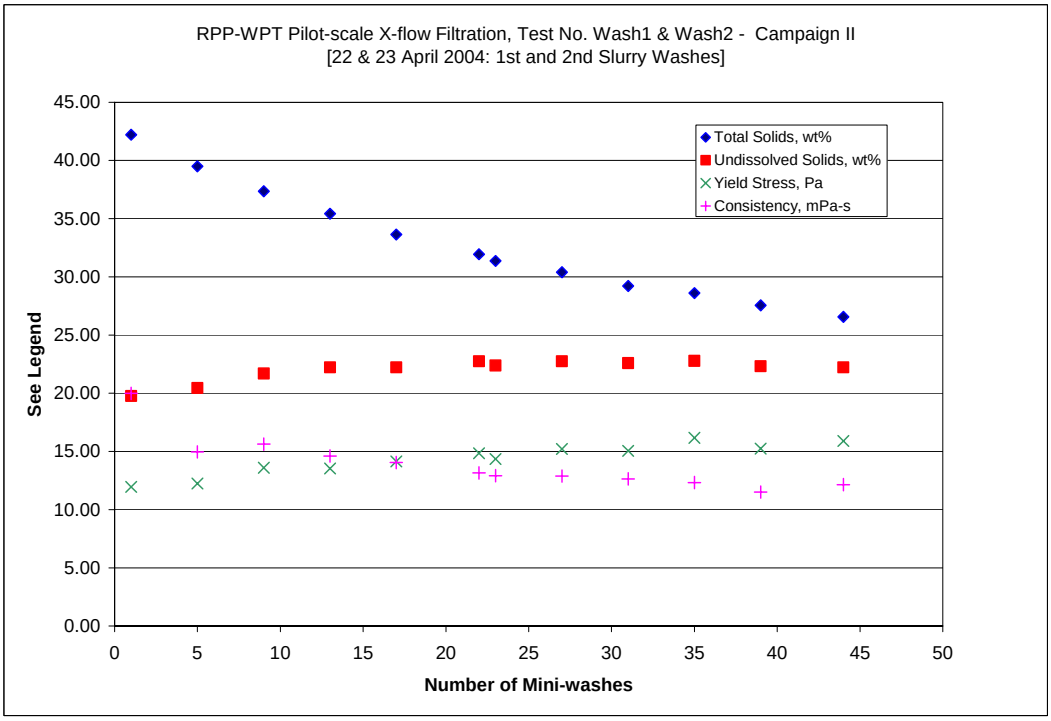


Figure 26. Solids and Rheological Data throughout Simulant Washing

Throughout the washing, permeate samples were taken at approximately every 4th washing (see the Sampling Plan in Appendix D). These numbers are important because while both slurry and permeate samples were taken at the same time, they are not matched samples. The permeate flux was very low. It took approximately 30 minutes for permeate created at the filter to flow to the sampling point. By knowing the delay time then the slurry and permeate samples can be appropriately matched.

As already mentioned in the simulant handling section, the wash permeate was collected in drums for use as Campaign III FEP feed. The washed slurry was removed from the test rig and stored in a drum. The washed slurry would eventually be vitrified in the Vitreous State Laboratory (VSL) at Catholic University of America located in Washington DC.

2.7.4.1.3 Filter Rinsing and Cleaning

Following slurry washing, the slurry was removed and the process of rinsing and cleaning the filter and test rig began, as shown schematically in Figs. 13 and 14. Rinsing and cleaning involve pumping a mild caustic rinsing solution through the test rig, followed by three acid cleaning solutions, followed by two more mild caustic rinsing solutions. The sequence of the solutions and durations are provided below:

- 0.1 M NaOH for 30 minutes
- 2.0 M HNO_3 for 90 minutes
- 2.0 M HNO_3 for 90 minutes
- 2.0 M HNO_3 for 90 minutes
- 0.1 M NaOH for 30 minutes
- 0.1 M NaOH for 30 minutes

Each solution was drained from the test rig prior to the addition of the next solution. The rinse solutions were made using condensate from the FEP Evaporator. The acid solutions were made from deionized and filtered (DIF) water.

As with any piping system, a heel remained in the system after it was drained. During rinsing and cleaning the heel consisted of the previous solution (see Figs. 13 and 14). For each of the rinsing and cleaning steps, it was necessary and important to have a heel, representative of what is expected in the full-scale plant, since it affects the chemistry of each subsequent solution. Therefore, a quantity of the previous solution was added to each solution to represent a heel that would be left in the RPP-WTP filter system. The heel for the first caustic rinse consisted of a mixture of washed slurry (4.1 L) and mild caustic solution (12.5 L), representing the filter-loop rinse (see the Caustic Flush 1 section of Fig. 13). It was estimated that an actual heel of 5 L of washed slurry remained in the test rig after slurry washing, yielding a total of 9.1 L of washed slurry and 12.5 L of mild caustic solution (21.6 L total) to represent the RPP-WTP heel. The heel for each subsequent solution consisted of 20 liters of the spent, previous solution (see Fig. 14). The actual heel of rinsing or cleaning solution left in the test rig was estimated at 1.6 L, yielding a total heel of 21.6 L.

After the washed slurry was removed from the test rig, it was noticed that the volume removed was lower than the expected value. Likewise, after the first rinse solution was put into the test rig, the resulting volume (as indicated by the slurry reservoir) was greater than expected. This implied that the

test rig retained more slurry as a heel than expected. With the available information, the actual heel of washed slurry was estimated to be 22 L, instead of 5 L. (See the last paragraph of Section 2.7.2.3.)

The adjusted permeate flux for the first caustic rinse is shown in Fig. 27. A backpulse preceded the first mild caustic rinse. The slowly diminishing flux indicates that the filter cake removed by the backpulse was rebuilt with residual slurry during the rinse period. A similar trend was seen in the first slurry wash of Campaign I. Figure 30 (a) shows a settled sample of the first rinse solution (pH~13). Note the large amount of UDS. The concentration of the undissolved solids was approximately 5 wt%. Further chemical analyses of the rinse (and cleaning) solutions are provided in section 2.7.4.2.

The first caustic rinse solution was removed from the test rig after the 30 minute rinsing step. An amount of 20 L was returned to the slurry reservoir for the representative heel and the rest was stored in a drum for use as Campaign III FEP feed.

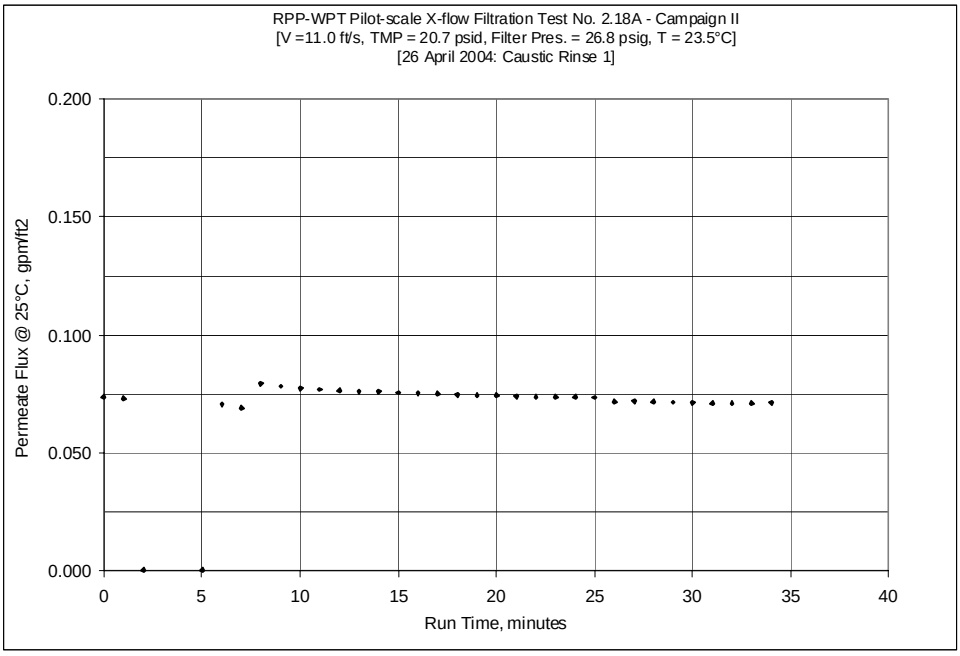


Figure 27. 1st Caustic Rinse of the Ultrafilter

Three acid cleanings followed the first caustic rinse. Figure 28 shows the adjusted filter flux results for all three acid cleanings. A backpulse preceded each cleaning, which accounts for the higher initial flux at the beginning of each cleaning. The time gaps between the cleanings represent the times necessary to remove the old cleaning solution from the test rig and add a new cleaning solution. The flux improved during each cleaning as solids were dissolved by the acid.

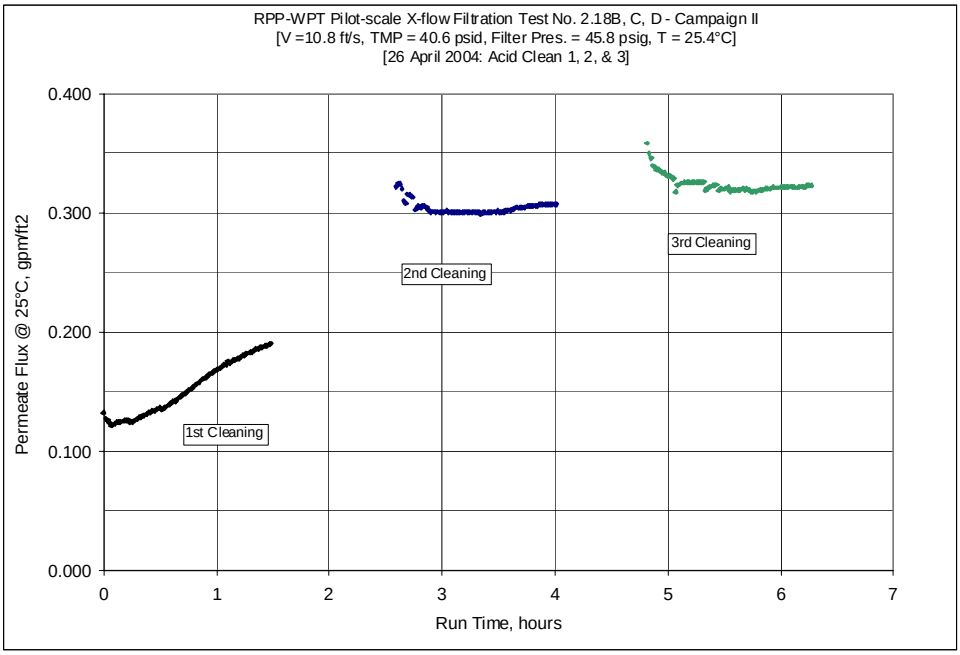


Figure 28. Acid Cleaning of the Ultrafilter

The flux also improved between cleanings, which implies two things: 1) that residual acid solution in and on the filter media continued to dissolve solids and 2) backpulsing prior to cleaning removed stuck-on or lodged material.

Figures 30 (b), (c), and (d) are photographs of the spent acid cleaning solutions. All of the cleaning solutions have a pH<1. Note that the three acid cleaning solutions are stained with the first solution containing small amounts of brown sludge and a whitish solid. The stained color diminishes from the first to the third cleaning, but does not completely disappear. The whitish solids were minimal in the second spent cleaning solution and not apparent in the third. Table 27 shows that the TS wt% of the acid cleaning solutions was relatively significant in the first cleaning solution, but was greatly reduced by the third cleaning. The UDS wt% of the cleaning solutions was insignificant.

The acid cleaning flux results from Campaign I were, in many ways, different from the Campaign II results. 1) The first cleaning flux from Campaign I decreased during the first 60 minutes after which it increased for over a 30-minute period; in Campaign II this flux increased over the entire 90-minute period, with only an initially short decrease. This was attributed to significant amounts of suspended solids generated during the Campaign I cleaning. The solids were evident in a sample of the spent solution as white cloudy substance. This substance was significantly reduced in the Campaign II spent solution. 2) The flux of the entire acid cleaning for Campaign I never reached, or approached, a maximum. At the end of the third cleaning the flux was still increasing, implying that further cleaning was necessary. In Campaign II, the flux appears to approach a maximum. The flux was increasing slightly in the third cleaning, but probably not enough to warrant further cleaning.

The acid cleaning solutions were removed from the test rig after each 90-minute cleaning. An amount of 20 L of spent cleaning solution from each step was retained for the representative heel, and the rest of the solutions were stored in drums for use as Campaign III FEP feed.

The acid cleanings were followed by two mild caustic rinses. Figure 29 shows the adjusted flux of the last two rinses and reveals that the permeate flux of the second caustic rinse (or the first rinse after acid cleaning) was notably less than that of the third acid cleaning. This trend was seen in Campaign I and was attributed to the caustic solution precipitating solids from the acid heel. (See Tables 27 and 38 for compositions found in the Campaign II rinsing and cleaning solutions.) Further, the volume and concentration of the acid heel was enough to make the second caustic rinse acidic (pH~1). Morever, the volume and concentration of the second cautic rinse heel was also enough to maintain the third caustic rinse acidic (pH~1.2). The temperature adjusted flux during the third caustic rinse continued to decline as more solids precipitated from the pH~1.2 solution. At the end of the last rinse the flux had dropped to 0.14 gpm/ft^2. However, note that this flux was still more than an order of magnitude higher than the average dewatering flux of 0.011 gpm/ft^2.

The second caustic rinse solution (first post-clean caustic rinse) was removed from the test rig after the 30 minute rinsing step. An amount of 20 L was returned to the slurry reservoir for the representative heel and the rest was stored in a drum for use as Campaign III FEP feed. The third caustic rinse solution (second post-clean caustic rinse) was left in the test rig and was used for the post-test baseline test. After the baseline test the caustic solution was removed from the test rig and stored in a drum for use as Campaign III FEP feed. The rinsing solutions are shown in Fig. 30 (e) and (f) and they appear to be relatively clear solutions with minimal staining, (f) being most clear. Table 27 indicates the the wt% TS and wt% UDS increased slightly.

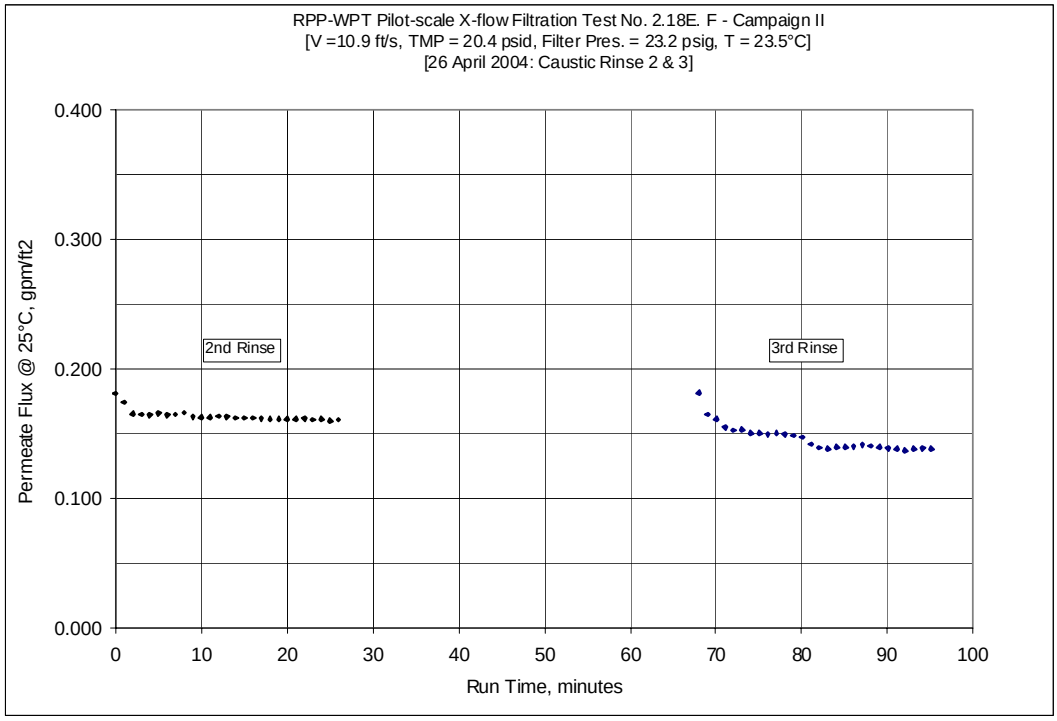


Figure 29. 2nd and 3rd Rinses of the Ultrafilter

(a) (b) (c) (d) (e) (f)

Figure 30. Caustic Rinse and Acid Cleaning Samples

(a) pre-clean caustic rinse, pH~13, (b) first 2 M nitric cleaning, pH~1, (c) second 2 M nitric cleaning, pH~1, (d) third 2 M nitric cleaning, pH~1, (e) first post-clean caustic rinse, pH~1, (f) second post-clean caustic rinse, pH~1.2

Table 27. Measured Total Solids (TS) and Undissolved Solids (UDS) Concentrations of the Spent Rinse and Cleaning Solutions

Step	**TS**	**UDS**
	wt%	wt%
First Caustic Rinse 0.1 M NaOH	7.46	5.09
First Acid Cleaning 2.0 M HNO_3	2.36	0.12
Second Acid Cleaning 2.0 M HNO_3	0.67	0.00
Third Acid Cleaning 2.0 M HNO_3	0.13	0.00
Second Caustic Rinse 0.1 M NaOH	0.66	0.13
Third Caustic Rinse 0.1 M NaOH	0.81	0.13

2.7.4.1.4 <u>Filter Baselining</u>

A baseline test was conducted after the test rig was rinsed and cleaned, using the mild caustic rinse solution (0.1 M NaOH) from the third rinse step. The post-test baseline test data had a lower flux than the pre-test baseline test data (Fig. 31), indicating that the filter was not completely free of solids in the filter media. This has been the case in previous cross-flow filtration tests (Duignan, 2003a). Although lower, the adjusted permeate flux for the post-test baseline was still more than an order of magnitude higher than the adjusted flux during dewatering of the waste simulant.

It is believed that the pre-test flux is always better than the post-test flux because the filter is submerged in a mild caustic solution for an extended period of time prior to each campaign. The filter is submerged in a mild caustic solution between campaigns to keep the filter wet and to prevent the growth of algae. The mild caustic solution may continue to dissolve solids lodged in the filter media, allowing them to migrate out. The longer the filter is submerged in the solution, the better the flux.

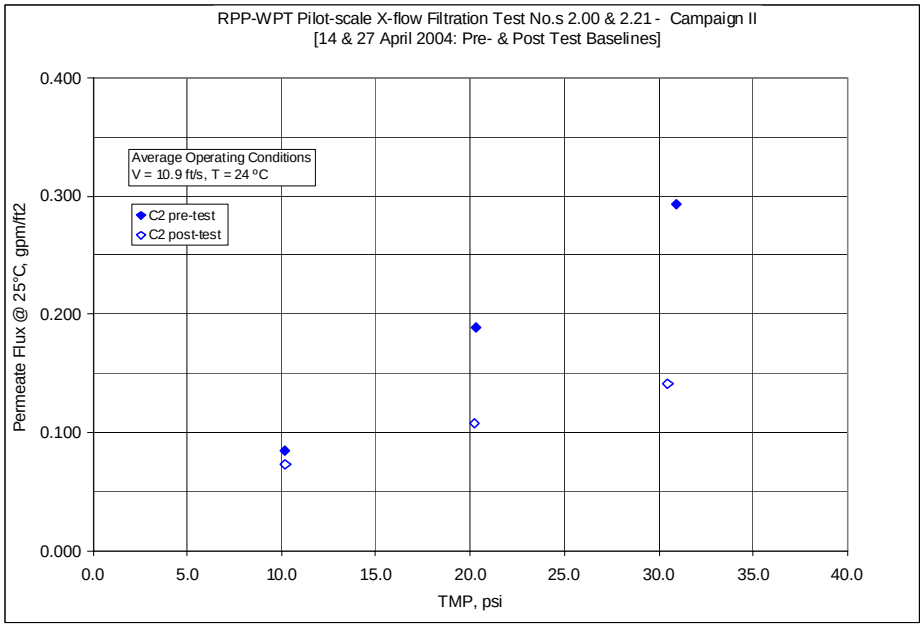


Figure 31. Pre- and Post-Test Baselines for Campaign II

Figure 32 compares the pre-and post-test baseline tests from Campaign I and II. Prior to Campaign I, the filter was submerged in a mild caustic for approximately 1 year. Prior to Campaign II, the filter was submerged in mild caustic for approximately a little over 2 months.

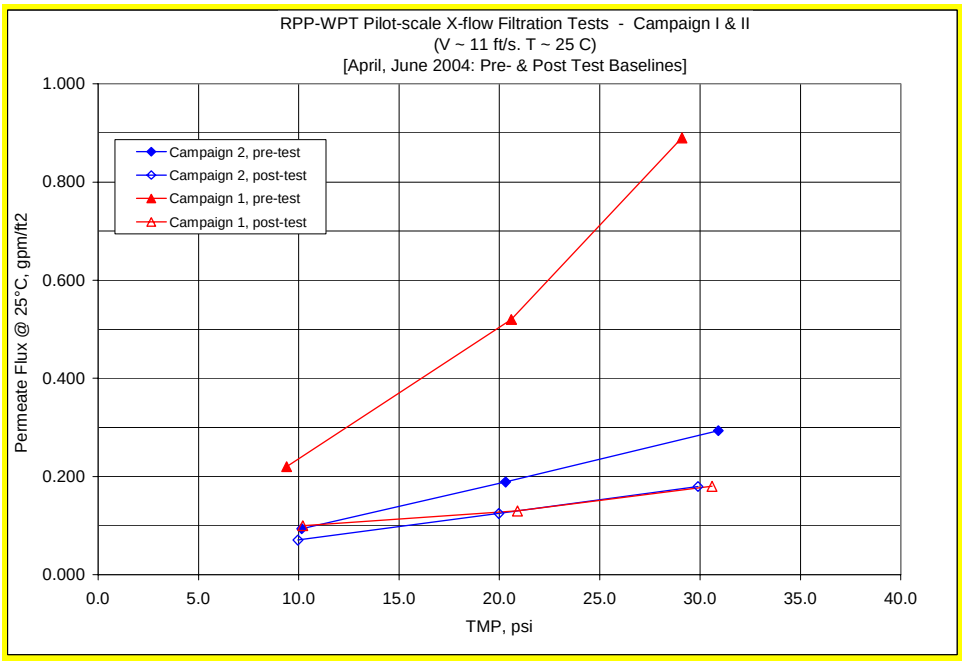


Figure 32. Comparison of Pre- and Post-Test Baselines, Campaign I and II

The pre-test flux of Campaign I is noticeably greater than that of Campaign II, implying that the time that the filter is submerged in a mild caustic solution between campaigns may affect the pre-test flux.

The post-test baselines are comparable, with the Campaign II baseline data having slightly less flux than the Campaign I data. At this point it is difficult to determine whether the reduced flux is a trend.

2.7.4.2 UFP Waste Products – Chemical Analysis (Author – Zamecnik)

In this section, parts of the chemical analysis discussion on the pilot-scale UFP waste stream products will repeat some of the material discussed in Section 2.7.4.1. In many cases the repetition is unavoidable, but it also facilitates better understanding of the many aspects of the UFP unit operation.

2.7.4.2.1 Dewatering

Table 28 compares the composition of UFP feed slurry to those calculated and measured values of the slurry after it was dewatered from 3 wt% UDS to 24 wt% UDS. The calculation of the concentrated slurry composition was based on the total feed volume of 1033L and a final concentrated slurry volume of 117L. The calculation was done using the equation below:

$$C_C = \frac{C_F \times V_F - C_P \times V_P}{V_C}$$

where C_C = Concentrated Slurry Composition (mg/L)
C_F = Feed Slurry (mg/L)
V_F = Feed Volume (L)
C_P = Permeate Composition (mg/L)
V_P = Permeate Volume (L)
V_C = Concentrated Slurry Volume (L)

Most of the calculated and measured compositions of mainly insoluble species values agreed well (Fe, La, Mg, Mn, Nd, Ni, Pb, Si, Sr, Zn, Zr). The corresponding agreement for the soluble species is not as good as for the insoluble species. The partly soluble Al values agreed well, but the predicted Cr value was higher than the measured values. The values for K, Na, P (phosphate), S (sulfate), chloride, nitrate, and nitrite all had larger differences. For many of these soluble species, the concentration of the species in the slurry was very close to the composition in the supernate, so the numerator in the equation above was greatly affected by the uncertainty in the compositions (it was a small difference between large numbers, relatively). Some values could not be calculated because the input values were below detection limit values. For Rb and Cs, the predicted values were less than zero due to their concentrations in the supernate and slurry being similar.

Table 28. Measured and Calculated Concentrated UFP Slurry Compositions

All concentrations in mg/L unless otherwise noted	Feed Slurry	Concentrated Slurry Measured	Concentrated Slurry Calculated		Feed Slurry	Concentrated Slurry Measured	Concentrated Slurry Calculated
Total Solids wt%	30.6	45.4	45.3	Nd	240	2014	2038
Undissolved Solids wt%	3.22	23.5	24.0	Ni	295	2705	2502
Supernate Solids wt%	28.3	28.6	28.0	P	766 743	941 1033	701
Density kg/L	1.28	1.47	1.47	Pb	475 419	3998 3719	3782
Ag	157	1455	1334	Pr	34.1	420	289
Al	8422 9953	23079 28518	24272	Rb	4.16	2.48	<0
B	<148	<222		S	1340 1128	1357 1177	1938
Ba	68.0 46.4	631 673	486	Si	3247	20640 25872	27169
Ca	415	2661 2940	3505	Sr	60.2 83.0	623 703	608
Cd	15.2	89.7	129	Y	10.1	129	85.9
Ce	<120	810		Zn	28.6	231 213	220
Co	100	<22.2	851	Zr	125	1070 1120	1060
Cr	293 324	1147 1123	1403	bromide	<53.6	<42.6	
Cs	4.54	4.37	<0	chloride	1242	1085	1747
Cu	16.9 13.2	187 207	126	fluoride	81.7	76.4	448
Fe	9493 9570	82614 81291	80985	formate	1108	1029	533
K	19012	19110	17677	nitrate	93914	73059	52974
La	84.1	703	715	nitrite	51678	20727	16705
Li	<21.9	133 134		oxalate	4440	34986	32562
Mg	110 105	956 922	911	phosphate	2412	1573	2272
Mn	2080 2042	18228 17934	17510	sulfate	3483	3058	5050
Mo	<17.1	<27.8		total organic carbon	3280	8780	483
Na	113341	131168 134505	109559	carbonate	40600	24600	94315

Compositions of the supernate from the feed slurry, the Ultrafiltration permeate, and the IX product are shown in Table 29. Except for Cs, and possibly K, the concentration of each species should be the same, so comparison of the values for each species gives a measure of the uncertainty in the analyses. For the major species, the variation in the average, as given by two standard deviations, was generally less than 10%.

Table 29. Measured Composition of Permeate and Supernate from UFP Feed Slurry

	Supernate from Feed Slurry	Permeate	Ion Exchange Product	Average	2 × Std Dev
total solids (wt%)	28.31	28.15	27.93	28.13*	0.19
density (kg/L)	1.250	1.243	1.247	1.247	0.003
Ag	<0.53	<0.6	<0.6	<0.53	
Al	7300	7050	7190	7180	125
B	82.6	87.1	79.5	83.1	3.9
Ba	<0.022	<0.04	<0.044	<0.022	
Bi	<0.01	<0.01	<0.01	<0.01	
Ca	2.46	<0.06	0.382	1.42	1.47
Cd	<0.02	<0.04	<0.04	<0.02	
Ce	<0.86	<1.4	<17.28	<0.86	
Co	<0.042	<0.16	<0.086	<0.042	
Cr	161	165	160	162	2
Cs (AA)	5.67	7.38		NC	
Cs (ICPMS)	6.25	5.91	0.00301	NC	
Cu	0.0649	0.373	0.279	0.239	0.158
Fe	0.646	1.76	1.33	1.25	0.56
K	21000	21200	18900	20367	1274
La	<0.188	<0.2	<0.376	<0.188	
Li	1.23	1.15	1.07	1.15	0.08
Mg	<0.012	<0.01	<0.026	<0.01	
Mn	0.0397	0.0288	<0.034	0.0343	0.0077
Mo	9.38	9.31	9.74	9.47	0.23
Na (ICPES)	111000	119000	110000	113333	4933
Na (AA)	122000	106500	109000	112500	8322
Na average	116500	112750	109500	112917	3503
Na (M)	5.07	4.90	4.76	4.91	0.15
Nd	<0.406	<1.8	<0.812	<0.406	
Ni	0.194	0.376	0.302	0.291	0.092

	Supernate from Feed Slurry	Permeate	Ion Exchange Product	Average	2 × Std Dev
P	805	800	775	793	16.0
Pb	1.86	1.68	15.3	6	0.13
Pr	<0.01	<0.01	<0.01	<0.01	
Rb	5.12	4.93	4.86	4.97	0.13
S	1080	1200	1152	1144	60
Si	59.3	54.2	57.0	57	2.6
Sr	<0.436	0.0691	0.0715	0.0703	0.0017
Ti	0.0685	0.0887	<0.116	0.0786	0.0143
W	38.8	50.3	NM	44.5	8.1
Y	<0.01	<0.01	<0.01	<0.01	
Zn	3.03	3.05	3.05	3.04	0.01
Zr	0.363	0.863	0.514	0.580	0.257
bromide	<10	<10	<100	<10	
chloride	1140	1210	1090	1147	60
fluoride	38.0	29.0	48.0	38	9.5
formate	1120	1220	1020	1120	100
nitrate	85900	85300	74400	81867	6473
nitrite	22900	25200	22400	23500	1493
oxalate	733	746	690	723	29
phosphate	2390	2470	2210	2357	133
sulfate	3170	3390	2860	3140	266
acetate	1210	1280	1280	1257	40
citric acid	<100	<100	<100	<100	
formate	941	1010	1020	990	43
unbound hydroxide	NM	NM	2346	2346	
total organic carbon	4010	2000	NM	3005	1421
carbonate	23950	38750	NM	31350	10465

All values mg/L unless otherwise noted * including additional permeate samples gives average of 28.06

Permeate samples were observed regularly over one month to determine if any post-filtration precipitation occurred. No significant precipitation was found to occur, even after three months. (See a one-month evaluation of the turbidity in Table 26.) This observation is contrary to what was observed in Campaign I. The AY102 simulant permeate showed some precipitation of solids after two months, but no precipitation at one month. Since the precipitated solids from Campaign I were not described in the Campaign I interim report (Duignan, et al., 2004), they are described here. Figure 33 shows an XRD spectrum of the precipitated solids. The crystalline solids found were aluminum hydroxide, sodium carbonate, and a zeolite, which are typical of solids precipitated from the AY102 simulant upon standing for extended periods of time. Post-filtration precipitation with the AY102 simulant does not necessarily indicate precipitation will occur with the actual waste; this and other simulants appear to be slightly unstable with respect to precipitation of aluminum species. Also, the AY102 simulant, being saturated in carbonate, is subject to precipitation of carbonates if the temperature is reduced for a period of time.

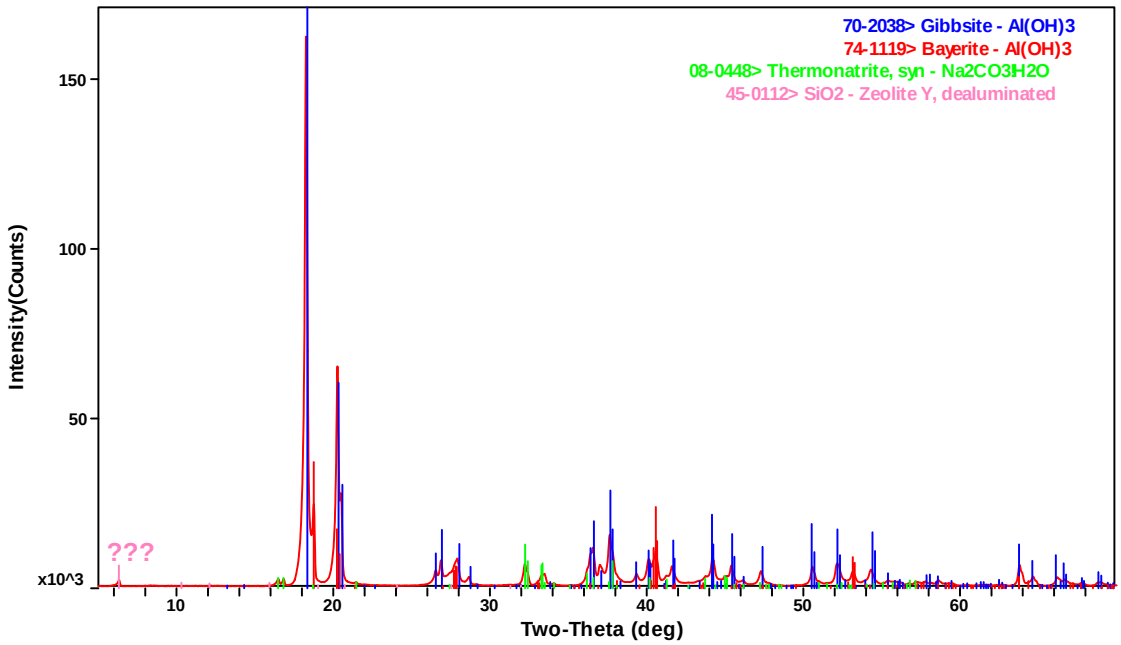


Figure 33. XRD Spectrum of Solids Precipitated from Campaign I Ultrafilter Permeate

Upon completion of slurry concentration, the final undissolved solids (UDS) content was measured from multiple samples and found to range from 23.5 to 24.7 wt% UDS, versus the target of 20.0 wt%. The target was exceeded because the amount of solids in the Ultrafiltration slurry feed was greater than the model (Barnes, 2004) prediction, so the endpoint was also higher. The target values were calculated from the OLI model in which the FEP bottoms, AY102 and AP101, were mixed. Compared to the actual material, the AY102 slurry was assumed to have slightly less undissolved solids, while the FEP bottoms stream also had less solids.

In the model, the FEP bottoms stream was close to neutral in pH compared to the actual bottoms at pH~13. The lower pH, used in the model, resulted in some of the carbonate in the FEP feed being lost as CO_2, which resulted in lower solids in the FEP bottoms. Also due to the pH, some

of the partially soluble species (carbonate, oxalate) in the AY102 portion of the feed were predicted to dissolve upon mixing. However, the actual FEP feed streams were pH adjusted so that the combined pH was >12, which resulted in more solids in the FEP bottoms and actual ultrafilter feed than in the model. Table 30 compares the model predictions with the actual measured values.

Table 30. Comparison of OLI Model and Measured UFP Solids Contents

MODEL	AY102	AP101	FEP Bottoms	UF Feed (Model)	UF Feed (Calc)*	UF Concentrate	UF Permeate
Total Solids (wt%)	26.31	32.85	29.88	30.95	30.97	43.38	29.22
Undissolved Solids (wt%)	11.50	0.01	2.18	2.45	2.97	20.00	0
Supernate Solids (wt%)	16.73	32.84	28.32	29.22	28.85	29.22	29.22
Slurry Density (kg/L)	1.236	1.278	1.252	1.264	1.285	1.376	1.250
MEASURED					**(Calc)**		
Total Solids (wt%)	26.80	31.94	28.95	30.59	30.36	45.37	28.13
Undissolved Solids (wt%)	11.75	~0	3.03	3.22	3.19	23.51	0
Supernate Solids (wt%)	17.05	31.94	26.73	28.28	28.07	28.58	28.13
Slurry Density (kg/L)	1.276	1.279	1.261	1.276	1.279	1.470	1.247

* Calculated assuming no dissolution of any undissolved solids in feeds

Given the *measured* AY102, AP101 and FEP bottoms compositions, the calculated UF feed undissolved solids was 3.19 wt% versus the actual 3.22 wt%, which is very good agreement. The UF feed composition calculated from the *model* inputs, assuming no dissolution occurs upon mixing, was 2.97 wt% UDS versus the model value of 2.45 wt% where dissolution occurred. When this difference of 0.52 wt% of solids in the slurry is added to the permeate as soluble solids, the permeate dissolved solids content increases from 28.1 to 29.2 wt%, exactly as shown in the model.

The model and measured solids and chemical compositions of these streams (the concentrated UF slurry, UF permeate, and the washed slurry) are given in Table 31. The model predictions for the AY102 slurry were calculated for a UDS of 11.50 wt%, while the actual material was 11.75 wt%. Mostly, undissolved species such as Fe, Ca, Ba, Ag, Mg, Nd, Ni, Pb, and Si were about 25% higher in the actual slurry than in the predictions. The discrepancies are caused by the input data assumptions made for the OLI model. The composition data that the model needs to represent consist of elemental and carbon analyses for the solids phase of the waste and elemental, anion, and carbon (inorganic, organic) analyses for the supernate portion. Some information was also available about the undissolved “anions” in the solids (such as phosphate, sulfate). Unbound hydroxide and total base measurements were also available. Note that the carbon and the hydroxide/ base analyses can have significant uncertainty. Matching the composition data and balancing the charge is relatively easy for the supernate phase, but is significantly more difficult for the solids phase. Different assumptions can be made about what form each of the metals (cations) exists as in the solids.

Table 31. Comparison of Model and Measured UFP-Stream Compositions

All concentrations in mg/L unless otherwise noted	AY102		AP101		FEP Bottoms		UF Feed		UF Conc. Slurry		UF Permeate		UF Washed Slurry	
	Model	Campaign 2	Model	Campaign 2	Model	Campaign 2	Model	Campaign 2	Model	Campaign 2	Model	Campaign 2	Model	Campaign 2
Total Solids (wt%)	26.31	26.80	32.85	31.94	29.88	28.95	30.95	30.59	43.38	45.37	29.22	28.13	24.82	26.56
Undissolved Solids (wt%)	11.50	11.75	0.01	0 - 0.29	2.18	3.03	2.45	3.22	20.00	23.51	0	0	21.42	22.22
Supernate Solids (wt%)	16.73	17.05	32.84	31.94	28.32	26.73	29.22	28.28	29.22	28.58	29.22	28.13	4.33	5.59
Slurry Density (kg/L)	1.236	1.276	1.278	1.279	1.252	1.261	1.264	1.276	1.376	1.470	1.250	1.247	1.159	1.214
Supernate Density (kg/L)	1.169	1.170	1.278	NA	1.231	NA	1.250	1.250	1.250	1.247	1.250	1.247	1.036	1.124
Ag	491	624	0	37	0.007	112	119	157	1055	1455	0.7	<0.5	1068	976
Al	16252	16740	7816	7469	1719	6895	9187	9187	21696	25799	7603	7180	17131	15472
B	9	<165	16	<142	10	698	14	<148	12	<222	14	83	0.8	<182
Ba	177	274	0.324	<1.5	3	48	43	57	378	652	1.0	<0.02	380	481
Ca	970	1316	8	23	274	447	271	415	2385	2800	3.1	1.4	2408	2360
Ce	248	366	0	<127	210	NA	83	<120	74	810	84	<1	5	603
Cr	548	633	170	179	585	237	307	309	274	1135	312	162	19	724
Cs	6.3	18.7	0	6.0	6.7		2.3	4.5	2.0		2.3	5.9	0.14	
Cu	68	80	1.6	<6	67	16.9	25	15	22	197	25	0.2	1.5	149
Fe	27922	35526	2.5	76	73	5798	6792	9532	58830	81953	204	1.2	59460	61160
K	429	373	31176	30568	5211	305	20820	19012	18580	19110	21103	20367	1272	3859
Li	86	<25	0.3	<21	92	140	31	<22	28	134	32	1	1.9	105
Mg	256	376	0	6	49	104	68	107	601	939	0	<0.01	609	697
Mn	38	7725	0	3	1	1187	9	2061	8.2	18081	9	0.03	2.8	13531
Na	83976	88021	128777	128540	112614	117668	115997	114856	124774	132837	114885	112917	24694	33256
Nd	361	847	0	<73	0	106	88	240	780	2014	0	<0.4	790	1396
Ni	914	1151	14	357	0.3	1146	231	295	2040	2705	2	0.3	2065	2039
P	2117	1674	496	269	1839	1121	1037	754	1076	987	1032	793	295	339
Pb	1278	1628	15	<156	1366	223	470	447	420	3859	477	6	29	2937
S	806	895	1339	1599	932	908	1164	1234	1118	1267	1170	1144	159	593
Si	8418	11016	137	329	360	1992	2173	3247	18330	23256	127	57	18483	17727
Sr	226	286	0	<1	0.07	87	55	72	489	663	0.05	0.07	495	519
W	162	<85	25	<98	173		74	<86	66	<139	75	45	4.54	<101
Zn	59	81	6	6	301	46	51	29	45	222	52	3.0	3.1	169
Zr	998	484	0	<6	7	86	243	125	1972	1095	24	1	1978	831
bromide	124	69	0	<128	133	53	45	<54	40	<43	45	<10	2.74	<28
chloride	159	165	1624	1957	13486	609	2572	1211	2296	1085	2607	1147	157	99
fluoride	225	43	50	36	379	145	135	75	121	76	137	38	8.3	19
nitrate	218	319	86614	134295	112967	119000	68449	81154	61086	73059	69381	58600	4181	7875
nitrite	6512	4228	49090	42719	10708	3740	34477	25775	30768	20727	34946	28133	2106	2315
oxalate	10321	9213	1754	1982	16370	1180	5443	4253	27199	34986	2688	723	11762	15749
sulfate	2416	1860	4012	4783	2793	1960	3487	3381	3349	3058	3504	3140	477	338
carbonate	73317	NA	29970		47667	9500	42420	40600	41631	24600	42520	31350	7574	5100
unbound hydroxide	6962	NA	36457		444	6103	23726	38930	23726		23726	2346	1952	

The simple example in Table 32 shows how the predicted concentration of Fe could be higher or lower than what really results when the simulant slurry is made. In this example, assume that the actual form of Fe in the solid is FeOOH (Case 1) and that Na and carbonate are present as sodium carbonate.

Table 32. Hypothetical Material & Charge Balance on Solid Phase

Case 1 Species	Species Concentration mg/kg	Species Concentration mmol/kg	Compound	Compound Concentration mg/kg	Species Concentration Normalized to 100% mg/kg	Charge mmol/kg	
Fe^{+3}	198070	3546.7	FeOOH	315134	198070	3546.7	"$FeO^{+}OH^{-}$"
Na^{+}	297105	12923.4	Na_2CO_3	684866	297105	12923.4	
CO_3^{-2}	387761	6461.7			387761	-12923.4	
OH^{-}	60319	3546.7			60319	-3546.7	
O	56744	3546.7			56744		
Total	1000000			1000000		0	
				100.0%			
Case 2 Species	Species Concentration mg/kg	Species Concentration mmol/kg	Compound	Compound Concentration mg/kg	Species Concentration Normalized to 100% mg/kg	Charge mmol/kg	
Fe^{+3}	198070	3546.7	Fe_2O_3	283187	204607	0	Fe_2O_3 has
Na^{+}	297105	12923.4	Na_2CO_3	684866	306910	12923.4	no charge
CO_3^{-2}	387761	6461.7			400557	-12923.4	
OH^{-}	0	0.0			0	0.0	
O	85117	5320.0			87926		
Total	968053			968053		0	
				96.8%			
Case 3 Species	Species Concentration mg/kg	Species Concentration mmol/kg	Compound	Compound Concentration mg/kg	Species Concentration Normalized to 100% mg/kg	Charge mmol/kg	
Fe^{+3}	198070	3546.7	$Fe(OH)_3$	379028	186175	10639.97	
Na^{+}	297105	12923.4	Na_2CO_3	684866	279262	12923.4	
CO_3^{-2}	387761	6461.7			364473	-12923.4	
OH^{-}	180958	10640.0			170090	-10640.0	
Total	1063894			1063894		0	
				106.4%			

The "Species Concentrations" have been specified so that the total amount of solids is 100%. If Fe is assumed to be present as Fe_2O_3 rather than FeOOH (Case 2), then the sum of the solids is less than 100%; normalizing the concentrations is required to make the total 100%. Similarly, if the Fe is assumed to be present as $Fe(OH)_3$ (Case 3), then the total mass is greater than 100%. The equivalences between these forms are shown below:

$$2\,Fe(OH)_3 \rightleftharpoons 2\left[FeO(OH)\bullet H_2O\right] \rightleftharpoons 2\,FeO(OH) + 2\,H_2O \rightleftharpoons Fe_2O_3 + 3\,H_2O \rightleftharpoons Fe_2O_3\bullet 3H_2O$$

Note that the presence of hydroxide in the solids is assumed for the FeOOH and $Fe(OH)_3$ cases. In actual analyses, the amount of "bound" hydroxide is not known very accurately, so it essentially becomes a variable in the material and charge balance. In the OLI model for the solids, all of the metals present were assumed to be associated with a corresponding anion (as in Case 3). None was assumed to be present as an oxide such as Fe_2O_3 or a partial oxide such as FeOOH, so the total predicted mass for a given set of species concentrations was higher than if oxides were assumed. Therefore, to get a particular amount of undissolved solids in the model, the amount of elements needed was smaller than if the metal oxides were assumed. For the actual waste, it appears that some portion of the metals were present as oxides; for the simulant, some of the solids were added as oxides (e.g., Al_2O_3, SiO_2). The result of these differences was that at the target undissolved solids concentration, the concentrations of the undissolved elements in the actual AY102 simulant was higher than the predicted concentrations.

The higher solids in the actual FEP bottoms is also reflected in the elemental analyses. The predominantly undissolved species Al, Fe, Mn, Ni, and Si are significantly higher than the model values. Note that Mn was inadvertently left out of the OLI model. The oxalate and carbonate values do not agree well, probably due to inaccurate measurements. The potassium in the model was significantly higher than in the actual bottoms product.

2.7.4.2.2 Washing the Concentrated Slurry

Because the final concentrated slurry was at greater than 20 wt% UDS, the 117L of slurry was diluted by first removing a calculated amount of slurry and then adding back permeate. Table 33 shows the amounts of slurry removed and permeate added and the predicted and actual diluted slurry solids contents. The slurry was actually diluted back to approximately 19.6 to 21.5 wt%.

Table 33. Dilution of Concentrated Slurry Back to Approximately 20 wt% Undissolved Solids

	Over-Concentrated Slurry	Slurry Removed	Permeate Added	Final Measured	Final Predicted
Total Solids (wt%)	44.94 – 45.80	45.37	28.06	42.13 – 42.93	42.1 – 42.9
Undissolved Solids (wt%)	23.50 – 24.66	23.50 – 24.66	0	19.56 – 21.49	19.9 – 20.5
Supernate Solids* (wt%)	28.06	28.06	28.06	28.06	28.06
Density (kg/L)	1.470	1.470	1.244	1.410	1.394
Volume (L)	117±4	~19.0	~19.6	121	117±4
Mass (kg)	172	27.9	24.6	168	NC

* average of multiple samples used

After the dilution, the slurry was washed with 22 discrete additions of ~5.37L of 0.01M NaOH ("wash water"), followed by an additional 22 similar washes. The total amount of wash water used was about 236.2L. Leaching of the solids with NaOH was not performed per WTP instructions. Table 34 summarizes the composition of the washed slurry after 22 and 44 washes and also shows the composite composition of the permeate from the first and second 22 washes. The soluble species are reduced to about 10% of their concentrations in the unwashed slurry.

Table 34. Measured Compositions of Concentrated & Washed Slurry and Wash Permeates

All values mg/L unless otherwise noted	Concentrated Slurry (diluted to ~20wt% UDS)	Washed Slurry - 22 Washes	Washed Slurry - 44 Washes	First 22 Washes Permeate Composite	Second 22 Washes Permeate Composite	Washed Slurry / Concentrated Slurry (%)
Total Solids (wt%)	42.86	31.94	26.56	20.66	8.89	
Undissolved Solids (wt%)	20.56	22.75	22.22	0	0	
Supernate Solids (wt%)	28.06	11.90	5.59	20.66	8.89	19.9
Density (kg/L)	1.432	1.23	1.21	1.177	1.071	
Ag	1212	1158	976	<0.6	<0.6	80.5
Al	22661	18773	15472	4950	1850	68.3
B	14.6	<144	<182	63.0	20.0	
Ba	543	556	481	<0.04	<0.04	88.6
Bi	<0.01	<0.01	<0.01	<0.01	<0.01	
Ca	2332	2337	2360	<0.06	<0.06	101.2
Cd	86.4	87.4	73.5	<0.04	<0.04	85.1
Ce	674	536	603	<1.4	<1.4	89.5
Co	0	<17.8	<16.1	<0.16	<0.16	
Cr	972	855	724	120	50.0	74.5
Cs (ICPMS)	4.62	0.213	<0.01	4.01	1.41	
Cs (AA)	1.23	<22.2	<20.3	5.43	1.69	
Cu	164	158	149	0.190	<0.06	90.9
Fe	68240	65829	66743	0.979	0.185	97.8
K (AA)	19460	7080	3859	12000	4000	19.8
La	585	500	468	<0.2	<0.2	80.0
Li	111	107	105	1.48	1.71	94.6
Mg	782	754	697	<0.01	<0.01	89.1
Mn	15056	14479	14805	<0.02	<0.02	98.3
Mo	1.56	<22.2	<20.3	6.88	2.35	
Na	129132	57914	33019	73700	30400	25.6
Na (AA)	129819	57792	33493	77000	27800	25.8
Na average	129476	57853	33256	75350	29100	25.7
Na M	5.63	2.52	1.45	3.28	1.27	
Nd	1677	1404	1396	<1.8	<1.8	83.2
Ni	2252	2172	2039	0.217	0.145	90.5
P	956	418	339	540	140	35.5
Pb	3213	3153	3240	1.70	<1.6	100.8
Pr	349	364	375	<0.01	<0.01	107.4
Rb	2.89	1.64	<0.01	3.30	1.13	
S	1256	598	593	840	290	47.2
Si	19374	18767	17727	41.8	22.1	91.5
Sr	552	559	519	0.0475	0.0174	94.0
W	8.41	<107	<101	40.0	10.0	
Y	108	110	113	<0.01	<0.01	104.6
Zn	185	184	169	1.43	0.0818	91.4
Zr	912	837	831	0.436	0.0872	91.1

Table 34 continued

	Concentrated Slurry	Washed Slurry - 22 Washes	Washed Slurry - 44 Washes	First 22 Washes Permeate Composite	Second 22 Washes Permeate Composite	Washed Slurry / Concentrated Slurry (%)
bromide	<42.6	<46.6	<27.9	<10	<10	
chloride	1106	347	99.4	878	284	9.0
fluoride	68.5	28.2	19.0	26.0	<2	27.7
formate	1061	421	154	949	236	14.5
nitrate	75107	24049	7875	74000	19100	10.5
nitrite	21475	7313	2315	19800	5480	10.8
oxalate	29257	25399	15749	2030	6060	53.8
phosphate	1723	488	150	1700	430	8.7
sulfate	3113	1050	338	2430	803	10.9
acetate	1099			825	257	
citric acid				<100	<100	
formate	930			654	268	
total organic carbon	7646		6070	4390	2680	
carbonate	26968		5100	12850	10100	18.9

Figure 34 shows the total, undissolved, and supernate solids weight percent and the density of the slurry as a function of the volume of wash water used, normalized to the UFP slurry batch. The total and supernate solids decrease as the soluble salts are removed, while the UDS increase slightly and the density stays fairly constant at about 1.20-1.25 kg/L.

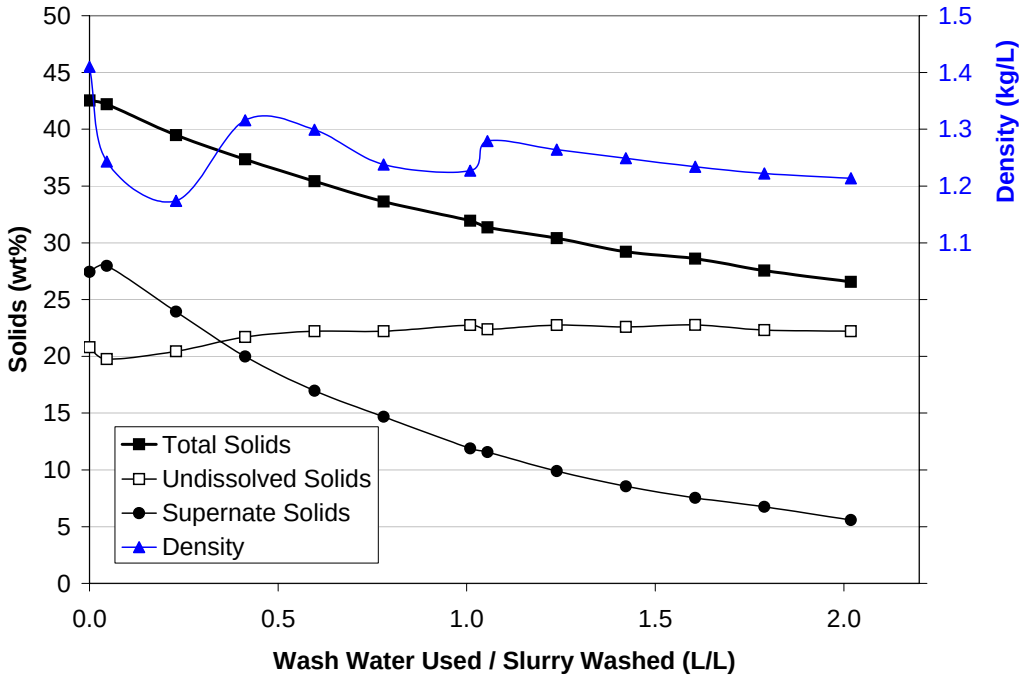


Figure 34. Solids Content and Density of Slurry During Washing

The permeate total solids and density are shown in Fig. 35. The data for Figs. 34 and 35 are summarized in Table 35, along with rheological data and data for the Campaign.

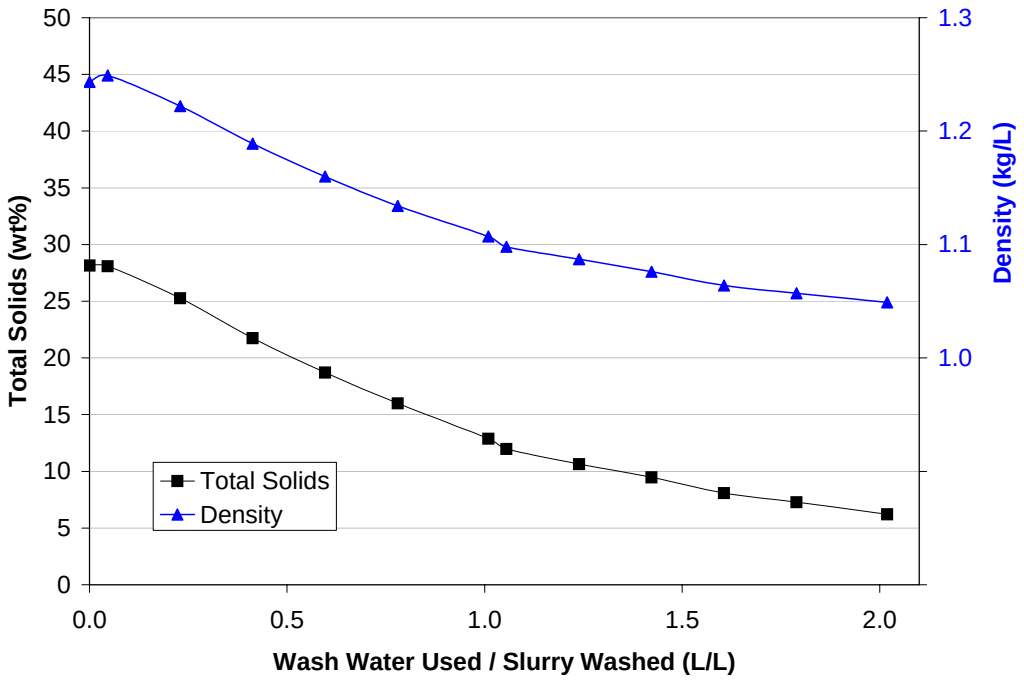


Figure 35. Total Solids and Density of Permeate During Washing

Table 35. Measured Solids, Density, and Rheological Data for Ultrafiltration

Sample	Total Solids (wt%)	Undissolved Solids (wt%)	Supernate Solids (wt%)	Density (kg/L)	Yield Stress (Pa)	Consistency (mPa·s)
CAMPAIGN I						
Starting Slurry	27.35	12.53	16.94	1.269	4.85	13.38
During Concentration	29.21	14.63	17.08	1.279	10.42	12.75
During Concentration	30.98	16.80	17.04	1.302	15.11	15.05
During Concentration	32.92	19.06	17.12	1.326	22.43	17.55
During Concentration	34.72	21.26	17.09	1.333	30.88	19.58
During Concentration	36.30	23.12	17.14	1.367	35.48	20.90
Concentrated	36.71	23.60	17.16	1.351	34.38	23.38
Concentrated	36.97	23.72	17.37	1.371	34.63	24.00
Concentrated	37.04	23.83	17.34	1.350	35.43	24.13
After Steady-State Matrix	36.91	23.90	17.10	1.271	25.28	25.55
Diluted back to ~20%	33.19	19.63	16.87	1.329	8.53	19.05
After Wash 1	32.52	19.42	16.26	1.319	8.65	18.20
After Wash 5	30.46	20.10	12.97	1.284	9.23	16.03
After Wash 9	28.54	20.16	10.50	1.254	9.45	15.48
After Wash 13	27.03	20.11	8.66	1.220	10.15	14.13
After Wash 17	25.88	20.02	7.33	1.206	10.23	13.53
After Wash 22	24.78	20.12	5.83	1.165	10.38	12.63
After Wash 23	24.45	19.95	5.62	1.210	10.13	12.33
After Wash 27	23.90	20.31	4.50	1.157	10.45	11.75
After Wash 31	23.09	20.12	3.72	1.187	10.30	11.28
After Wash 35	22.74	20.42	2.92	1.163	9.90	10.50
After Wash 39	22.34	20.50	2.31	1.125	NA	NA
After Wash 44	21.99	20.55	1.81	1.183	8.15	8.95
CAMPAIGN II						
Starting Slurry	30.59	3.22	28.28	1.276	0.00	4.74
Concentrated	45.37	23.51	28.58	1.470	26.60	22.89
Diluted back to ~20%	42.53	20.50	27.71	1.410	NA	NA
After Wash 1	42.20	19.76	27.97	1.243	11.95	19.98
After Wash 5	39.49	20.45	23.93	1.174	12.26	14.96
After Wash 9	37.35	21.70	19.99	1.316	13.60	15.63
After Wash 13	35.42	22.22	16.97	1.299	13.53	14.60
After Wash 17	33.64	22.22	14.68	1.238	14.14	14.05
After Wash 22	31.94	22.75	11.90	1.227	14.84	13.16
After Wash 23	31.36	22.38	11.57	1.279	14.35	12.91
After Wash 27	30.40	22.75	9.90	1.264	15.22	12.88
After Wash 31	29.21	22.59	8.55	1.249	15.05	12.65
After Wash 35	28.60	22.78	7.54	1.234	16.17	12.32
After Wash 39	27.56	22.31	6.76	1.222	15.24	11.51
After Wash 44	26.56	22.22	5.59	1.214	15.90	12.14

2.7.4.2.2.1 Rheology Behavior During UFP Operation

The average yield stress and consistency (average of up and down curves) during filtration for Campaigns I and II are shown in Fig. 36 and Fig. 37, respectively. The scales for both figures are the same, for comparison. The Campaign I data in Fig. 36 show that the yield stress increased from about 5 Pa to 35 Pa during concentrating (❶ to ❷). The consistency also

increased from about 13 mPa·s to 25 mPa·s. The slurry was concentrated from about 27 wt% total solids and 12.5 wt% UDS up to ~37 wt% total solids and 24 wt% UDS.

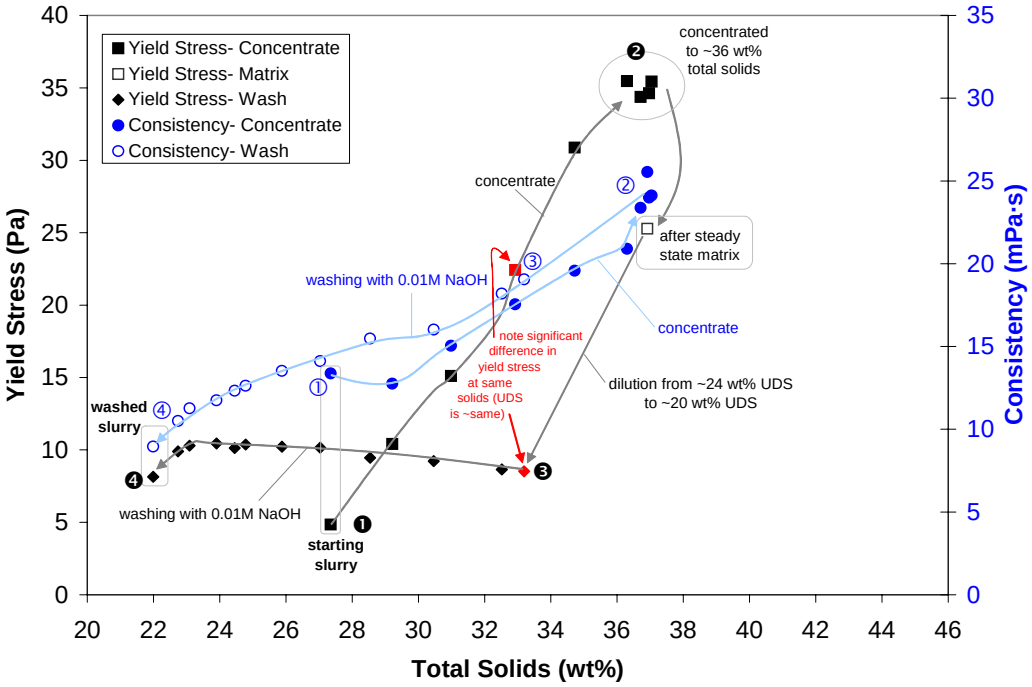


Figure 36. Yield Stress versus Total Solids for Campaign I Filtration

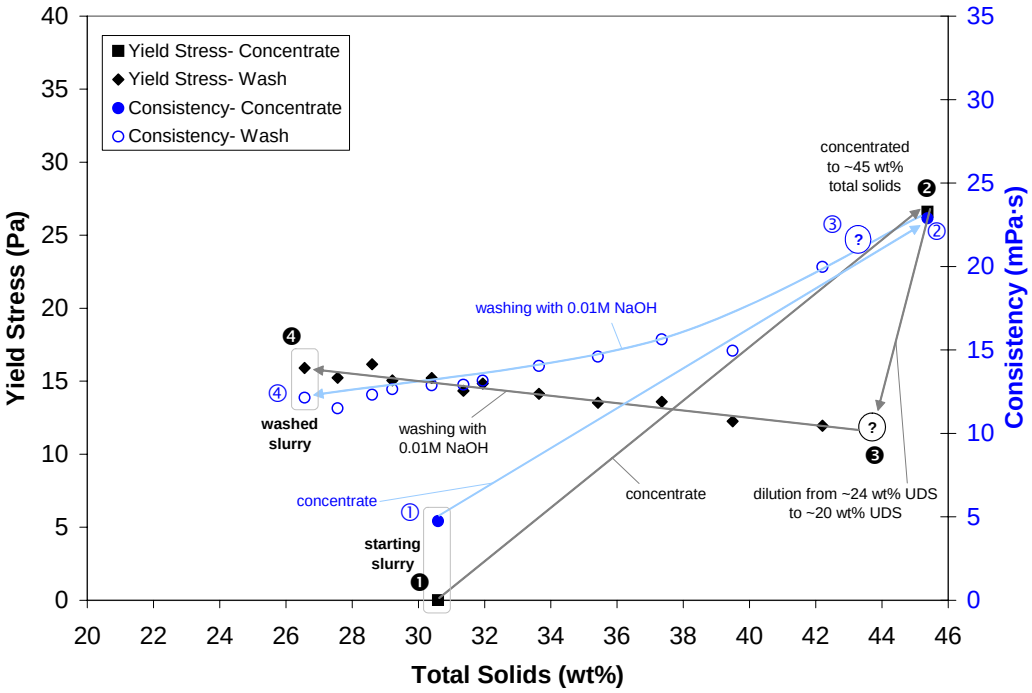


Figure 37. Yield Stress versus Total Solids for Campaign II Filtration

At this time, the steady-state matrix of filtration conditions was run over the course of about eight hours (Duignan et al., 2004). At the end of this time, the yield stress had decreased to about 25 Pa, while the consistency remained about the same, indicating a possible change in particle size or morphology. The slurry was then diluted back with permeate to about 20 wt% UDS since it had been over-concentrated to about 24 wt% UDS (to ❸). This dilution significantly reduced the yield stress to about 8 Pa and slightly reduced the consistency to about 20 mPa·s. Note that the yield stress of the diluted slurry at about 20 wt% UDS and 33 wt% total solids is much lower than the yield stress found at the same solids loadings during concentrating up to ~24 wt%. This difference may be due to the apparent difference in particle size or morphology noted above.

Washing initially increased the yield stress slightly, then dropped it to about the same value as at the beginning of washing (❸ to ❹). During washing, the consistency dropped from ~20 mPa·s to 9 mPa·s. These data show that the consistency is a function of both the dissolved and undissolved solids contents, while the yield stress is mostly a function of the undissolved solids content.

The Campaign II concentrating step started at a much lower UDS concentration. The total solids was similar to Campaign I, 31 wt%, but the UDS was only 3.3 wt%. This dilute slurry was Newtonian. Concentration to 45 wt% total solids and ~24 wt% UDS increased the consistency from about 5 mPa·s to 23 mPa·s and the yield stress from zero to about 23 Pa (❶ to ❷). The Campaign II yield stress of the concentrated slurry, 23 Pa, was less than the Campaign I value of 35 Pa, but was about the same as the Campaign I value after the steady state matrix was performed. The steady-state matrix was not performed in Campaign II.

Dilution with permeate (❷ to ❸) again reduced the yield stress significantly, going from 23 Pa to about 10 Pa (the rheology of the diluted sample was not measured; the likely properties are indicated by the ? on the graph). The consistency did not drop appreciably. Again, it appears that there was a change in particle morphology or size that resulted in a different yield stress after dilution.

Washing increased the yield stress from about 10 to 16 Pa and reduced the consistency from 23 mPa·s to about 11 mPa·s (❸ to ❹). The final washed slurry for Campaign II had both higher yield stress and consistency than for Campaign I.

2.7.4.2.2.2 Chemical Composition After Washing

The results of washing the solids in Campaigns I and II are shown in Table 36. For both campaigns, the compositions of the solids washed are approximately the same since neither the recycle streams, nor the AP101, in Campaign II, contributed significantly to the total solids. These data are compared to previous work done on AY102 simulants at SRNL (Zamecnik, et al., 2003), on the SRNL AY102 radioactive sample (Coleman, 2003), the SRNL radioactive sample processed in the radioactive CUF filter (Poirier, 2003), and literature references (Lumetta, 1996; Brooks, 1997). These reference data are for a combination of washing, leaching, and re-washing, so the results should not be expected to agree since leaching was not done in the SIPP.

Table 36. Chemical Compositions After Leaching & Washing – Percent Retained in Slurry

	Values Based on Slurry Analyses							Values Based on Permeate Analyses					Literature	
	Leached & Washed					Washed Only		Leached & Washed			Washed Only		Leached & Washed	
	SRNL Simulants	SRNL Rad Sample (Characterization Sample)	SRNL Rad Sample (Characterization Sample, Normalized to Fe=100)	SRNL Rad Sample (CUF)	SRNL Rad Sample (CUF, Normalized to Fe=100)	**SIPP Campaign 1**	**SIPP Campaign 2**	SRNL Simulants	SRNL Rad Sample (Characterization Sample)	SRNL Rad Sample (CUF)	**SIPP Campaign 1**	**SIPP Campaign 2**	Brooks	Lumetta
Al	31	54	61	56	63	**72**	**68**	53	64	60	**74**	**70**	69	53
Cr	54-71	74	83	80	90	**87**	**77**	62	90	87	**85**	**82**	51	68
Na	9-28	28	31	37	42	**20**	**26**	16	48	18	**13**	**19**		39
K							**20**					**17**		
carbonate						**10**	**19**					**14**		
nitrate						**4**	**12**				**7**	**0**		
nitrite						**5**	**10**				**0**	**0**		
fluoride						**14**	**28**				**0**	**62**		
oxalate						**11**	**54**				**24**	**72**		
P	8-11	45	51	42	47	**46**	**35**	46	64	50	**36**	**28**	65	32
phosphate						**13**	**9**				**0**	**0**		
S	28-51	42	47			**31**	**47**	73	51		**32**	**9**		
sulfate						**5**	**11**				**14**	**0**		
Fe	100	89	100	89	100	**98**	**98**	100	99.2	100	**100**	**100**	100	100
Mn	91-100	89	100	73	82	**100**	**98**	100		100	**100**	**100**	>99	>98
Pb	58-100	96	100	94	100	**92**	**100**	99.6		100	**100**	**100**	91-92	94
Ba	100	76	85			**100**	**89**	100		64	**100**	**100**	>98	>98
Ca	80-97	94	100	73	82	**99**	**100**	100		100	**100**	**100**	>96	>95
Cd	100	74	83	56	63	**100**	**85**	100		100	**100**	**100**	>90	>86
Cu	60-100			100	100	**100**	**91**	100	100	98	**100**	**100**	82-84	
Mg	100	88	99	72	81	**98**	**89**	100		100	**100**	**100**	>95	>89
Nd						**75**	**83**				**100**	**100**		
Ni	100	90	100	89	100	**100**	**91**	100			**100**	**100**	99	>98
Si	75-82			97	100	**93**	**92**	98.7	99	99.4	**100**	**100**		91
Sr	94	98	100			**93**	**94**	100		99.6	**100**	**100**	>83	>76
Zn	54-100	56	63	86	97		**91**	99.8		93	**100**	**99**		>65
Zr	100	81	91			**96**	**91**	99.8			**100**	**100**	95-97	99
total mass	46-55					**59**	**53**		52			**43**		

The data presented show the percent retained of the given species in the slurry, calculated both from the permeate (permeate) analyses and the leached or leached/washed slurry compositions.

$$\text{\% Retained (slurry basis)} = \frac{\text{Amount in Leached/Washed Slurry}}{\text{Amount in Initial Slurry}}$$

$$\text{\% Retained (permeate basis)} = \frac{\text{Amount in Initial Slurry - Amount in Permeate}}{\text{Amount in Initial Slurry}}$$

The retention based on the permeate analyses is more accurate since it does not rely on quantifying the amounts in two slurry samples that require dissolutions to be analyzed. The permeate analyses are much more straightforward. For the SRNL radioactive samples, the retention based on the slurry analyses only showed low values for metals such as iron that were retained at 100% based on the permeate analyses. These data were normalized to an iron retention of 100%, as shown in the table.

For the SIPP work, transition metals (Fe, Mn, Pb, Cd, Cu, Mg, Ni, Si, Zn, Zr), rare earth (Nd), and alkaline earth metals (Ca, Ba, Sr), had amounts retained that were generally greater than 90%, with many such as iron at or near 100%. Most of these results are slightly or somewhat higher than the reference results, which makes sense since no leaching was performed. The more easily washed and leached species were Al, Cr, Na, K, and the anions, which include phosphate and sulfate. The amounts retained for Al and Cr in the SIPP were higher than the previous results that included leaching, as expected. The Na retained was similar to the previous simulant work, but again lower than the radioactive sample work. The lower simulant values indicate that the simulants do not contain as much insoluble Na as the actual waste. Undissolved sodium is present as the carbonate, oxalate, and aluminosilicate in the simulant. Some of the carbonate and oxalate and all of the aluminosilicate is expected to remain.

The aluminum in the simulant is present as an aluminate ion or its hydrate, gibbsite $Al(OH)_3$, alumina Al_2O_3, and amorphous aluminosilicate $NaAlSiO_4$ (simplified formula). Without leaching, only the aluminate is expected to be washed out. Some of the chromium was also washed out; chromium is present both as undissolved hydroxide or oxalate and as soluble chromate. Potassium showed washing behavior similar to Na as expected. The soluble anions (nitrate, nitrite) were essentially all washed out. The fluoride values are inconclusive since the uncertainty in the concentrations was high due to the low concentration. Both oxalate and carbonate were retained at percentages similar to Na, except for the oxalate results for Campaigns II which are higher than expected. The data are not sufficiently conclusive to determine if this is an effect of the recycle stream.

The retention of phosphorus was similar to the reference work. All of the phosphate in the simulant was as added as phosphates; some was added to the metals precipitation to produce metal phosphates and some was added as hydroxyapatite $Ca_{10}(PO_4)_6(OH)_2$, which is very insoluble. The phosphate analysis, which is done by ion chromatography, is a measure of the soluble phosphate. The phosphate analyses showed little or no soluble phosphate in the washed sample, so the P found should be due to the hydroxyapatite. Sulfur was added as sulfate to the

simulant, and based on the sulfate retention being less than the sulfur S retention, it appears that relatively insoluble sulfates were formed in the simulant (possibly $PbSO_4$, $BaSO_4$ or similar). The total mass retention in the SIPP work was similar to that in the simulant studies; no total mass data for the SRNL radioactive work was available. Figure 38 shows the Percent Retained in the slurry values for each species, plotted in a way that the values can be visually compared.

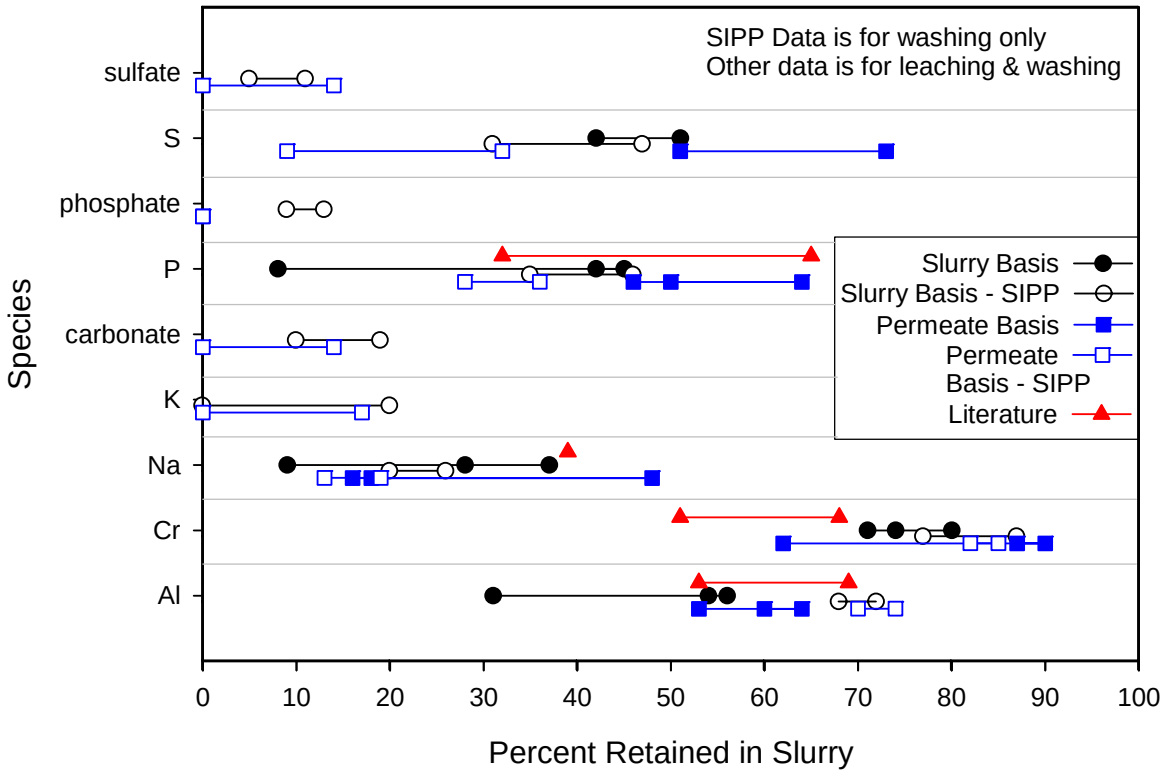


Figure 38. Graphic Representation of Leaching & Washing Data

2.7.4.2.2.3 Slurry Washing Model

A simple washing model was also used to model the washing data from Campaign II. Forty-four washes were simulated for the given starting concentrations. The amount of insoluble species was adjusted to match the measured data. Figure 39 shows the predicted concentrations of total solids, undissolved solids, and supernate solids along with the measured values. The agreement is generally good. The total solids and UDS values predicted are slightly higher than the measured values, but this may be due to the final volume of washed slurry being slightly greater than the initial volume, that is, more dilute. Figure 40 shows the predicted and measured concentrations of Na, Al, Cr, and nitrate that occurred during washing. Figure 41 repeats the data shown in Fig. 40 to highlight just sodium due to its importance to glass formulation. To match the data, the amounts of unwashed (~insoluble) Na, Al, and Cr were set to the values shown in Table 37.

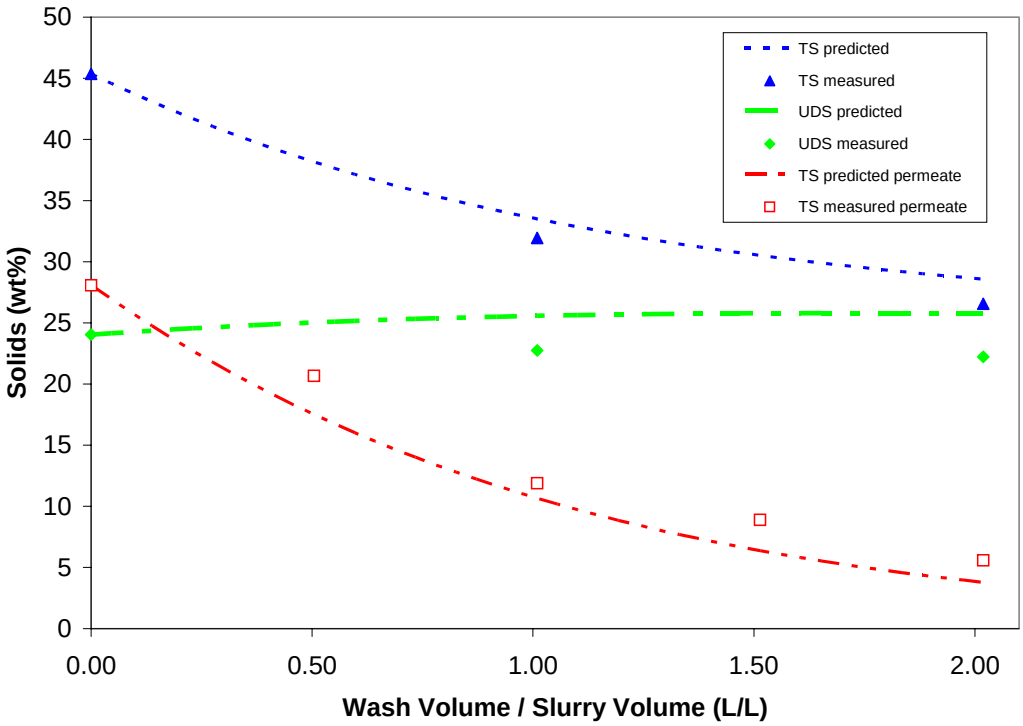


Figure 39. Measured and Predicted Solids Compositions in Washed Slurry and Permeate

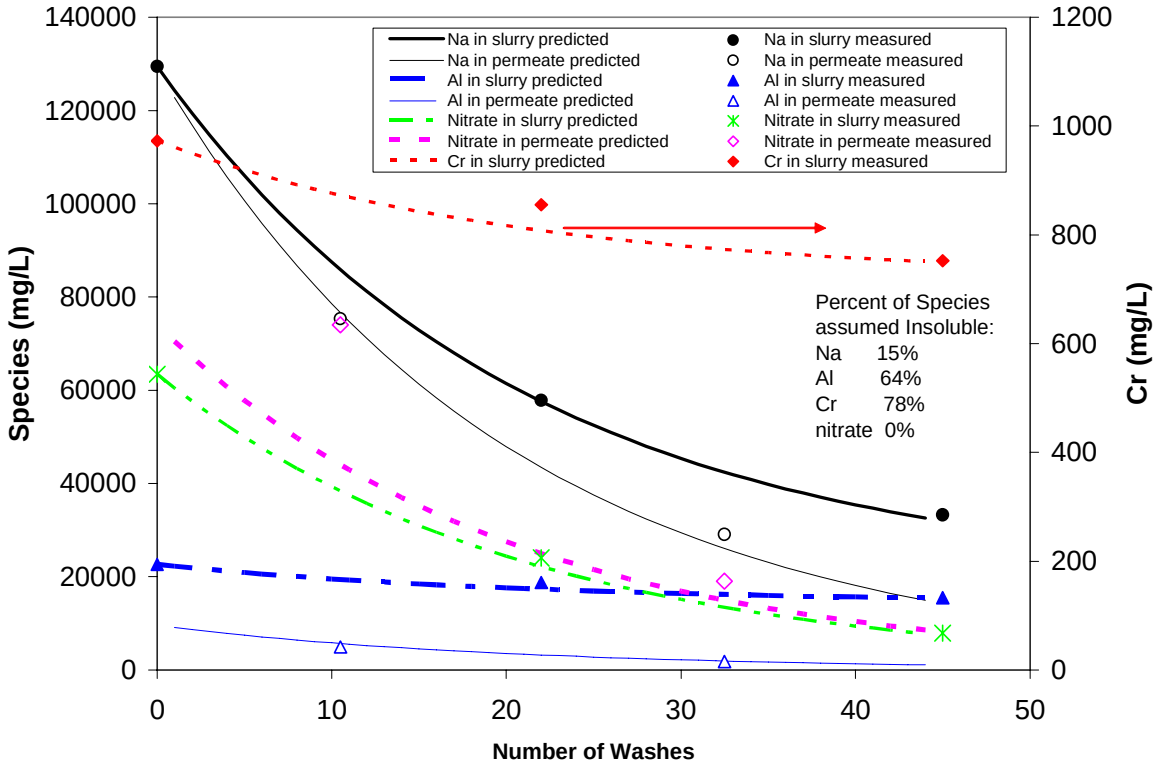


Figure 40. Measured and Predicted Compositions of Selected Species in Washed Slurry and Permeate

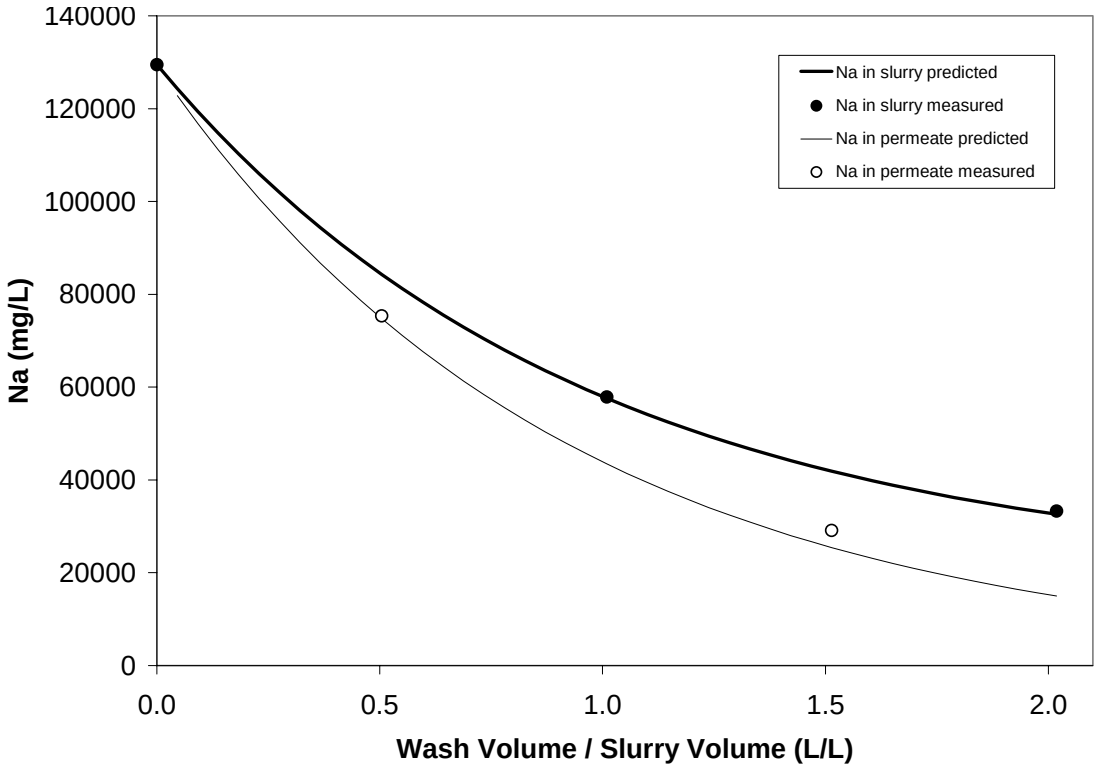


Figure 41. Measured and Predicted Compositions of Just the Sodium in Washed Slurry and Permeate shown in Fig. 40

Table 37. Percent of Several Insoluble Species in Slurry

	Percent Retained	
Species	Model	From Permeate Analysis
Al	64	70
Cr	78	82
Na	15	19

2.7.4.2.3 Filter Rinsing and Cleaning

Upon completion of the slurry washing, the filtration unit was drained and then cleaned. Table 38 shows the composition of the rinsing and cleaning solutions. Since the composition of the cleaning solutions from Campaign I were not reported in the interim report of that campaign, they are tabulated in Table 39. The composition of Campaigns I and II solutions are compared in Table 40. Part of each of these solutions became a recycle stream for the next campaign. The first caustic flush in Campaign I was more concentrated than the Campaign II flush, and both were more concentrated than the target UDS of approximately 1.8 wt%. The Campaign I recycles were discussed in the FEP Evaporator section. The caustic flush 1 recycle from Campaign II was higher in solids than the target because the amount of slurry remaining in the UF equipment was greater than expected. The volume of slurry remaining in the filter loop after draining (referred to as holdup) had been estimated at ~5L, based on previous work with the system, but the actual amount turned out to be about 22L, so the amount of solids left in the system was significantly higher than expected. The first caustic flush was simulated in the following way. First, the filter loop rinse was simulated by adding about 12.5L of RLD condensate. Four liters of the concentrated slurry were then added, and then 94.6L of the 0.1M NaOH rinse solution was added. If the Ultrafiltration system holdup had been 5L, the resulting solids concentration would have been about 1.8 wt% UDS. However, with about 22L holdup, the calculated solids is 5.2 wt% UDS, which agrees well with the measured 5.09 wt%. Therefore, the ~22L holdup volume is accurate.

Table 38. Campaign II – Measured Composition of Filter Rinsing and Cleaning Solutions

All units mg/L unless as noted	Caustic Flush 1	Caustic Flush 1	Acid Cleaning 1	Acid Cleaning 1	Acid Cleaning 2	Acid Cleaning 2	Acid Cleaning 3	Caustic Flush 2	Caustic Flush 3
Total Solids (wt%)		7.46		2.36		0.67	0.13	0.66	0.81
Undissolved Solids (wt%)		5.09		0.12		0.00	0.00	0.13	0.13
Supernate Solids (wt%)		2.50		2.24		0.67	0.13	0.53	0.68
Density (kg/L)		1.057		1.051		1.055	1.055	1.016	1.004
Elements from:	Dissolution	Filtered	Dissolution	Filtered	Dissolution	Filtered	Filtered	Filtered	Filtered
Ag	135	<0.532	183	2.03	102	0.770	1.69	0.676	<0.6
Al	3615	404	686	476	168	129	36.9	12.0	3.60
B	NM	3.01	NM	8.73	NM	1.82	<0.984	<0.18	<0.18
Ba	123	<0.022	21.7	22.4	6.27	5.58	1.60	0.536	0.164
Ca	366	2.62	<5.15	98.3	<4.43	30.6	9.38	8.33	7.03
Cd	21	<0.02	3.64	3.70	<1.48	0.918	0.280	0.0758	<0.04
Ce	<124	<0.864	<120	26.6	<63.3	6.73	1.69	<17.28	<17.28
Co	<14.2	<0.042	<13.7	<0.042	<3.17	<0.042	<0.042	<0.086	0.102
Cr	180	12.9	35.0	34.0	6.71	8.70	2.61	0.928	0.271
Cs	<17.6	NM	<17.1	0.100	NM	<0.1	<0.1	0.135	<0.1
Cu	38	<0.03	8.07	6.13	<2.22	1.66	0.496	0.135	<0.06
Fe	14766	<0.074	2596	2490	656	655	181	63.4	18.4
K	1068	NM	254	272	NM	79.3	20.9	7.66	3.01
La	<17.7	<0.188	<17.1	21.2	<302	5.68	1.58	<0.376	<0.376
Li	<35.2	2.11	<34.2	4.07	<13.8	1.09	0.318	<0.19	<0.19
Mg	164	0.0271	30.0	29.3	<7.02	8.80	2.72	2.03	1.49
Mn	3198	<0.018	552	533	4.88	141	39.2	13.3	3.93
Mo	<17.7	<1.78	<17.1	<1.78	142	<1.78	<0.3	<0.356	<0.356
Na (ICPES)	10411	5860	2533	2480	<132	730	213	1320	1820
Na (AA)	10570	NM	2470	2570	NM	766	201	1380	1930
Na average	10491	NC	2501	2525	NC	748	207	1350	1875
Na (M)	0.456	0.255	0.109	0.110	NC	0.0325	0.009	0.0587	0.0815
Nd	<159	<0.406	<154	61.8	621	16.3	4.50	2.01	<0.812
Ni	489	<0.1	91.4	83.7	<30.1	21.3	6.23	2.12	0.703
P	<142	19.3	<137	6.25	21.9	3.82	1.49	<1.246	<1.246
Pb	698	<1.7	<137	121	<45.6	29.5	8.82	2.82	<1.6
S	<175	43.5	<170	16.4	<124	5.01	2.50	<2.078	<2.078
Si	3319	18.6	<1240	247	<76	89.3	26.3	18.4	15.4
Sr	114	0.0184	20.6	21.7	<1400	5.84	1.65	<0.87	<0.87
Zn	39	<0.05	5.04	7.00	<3.69	2.18	0.617	0.261	0.102
Zr	202	<0.112	25.5	12.9	20.1	6.59	2.25	<0.16	<0.16

Table 38 continued

	Caustic Flush 1 Filtered	Acid Cleaning 1 Filtered	Acid Cleaning 2 Filtered	Acid Cleaning 3 Filtered	Caustic Flush 2 Filtered	Caustic Flush 3 Filtered
bromide	<10				<10	<10
chloride	37.0				<2	<2
fluoride	7.40				<2	<2
formate	57.1				<10	<10
nitrate	9217				31100	8900
nitrite	774				<10	<10
oxalate	4545				<10	<10
phosphate	60.2				<10	<10
sulfate	116				<5	<5
Total Acid (M)		1.20	1.61	1.74	0.449	0.0623

Table 39. Campaign I – Measured Composition of Filter Rinsing and Cleaning Solutions

All values mg/L except as noted	Caustic Flush 1	Acid Cleaning 1		Acid Cleaning 2	Acid Cleaning 3	Acid Cleaning Composite	Caustic Flush 2	Caustic Flush 3	Caustic Flushes 2+3 Composite
Total Solids wt%	9.71	1.07		0.18	0.05	0.43	0.83	0.76	0.75
Undissolved Solids wt%	8.27	0.09		0	0	0.09	0	0	0
Supernate Solids wt%	1.57	0.98		0.18	0.05	0.34	0.83	0.760	0.75
Density kg/L	1.075	1.056		1.062	1.063	1.060	1.009	1.003	1.006
pH	12.7						0.80	11.2	1.04
Elements from:	Dissolution	Permeate	Dissolution of Filtered Solids	Permeate	Permeate	Dissolution			Dissolution
Ag	441	12.8	2280	2.82	0.73	22.3			<15
Al	6477	256	38600	42.0	8.00	320			<25
B	53.8	4.00		<1	<0.12	0			0
Ba	205	11.4	20	1.73	0.32	9.54			<1
Ca	994	37.7	28	6.14	0.16	33.9			<1
Cd	26.9	1.35	19	0.239	0.041	2.12			<1
Ce	231	11.6	<660	1.82	<1.4	<35			<35
Co	32.3	0.377	<75	<0.16	<0.16	<4.2			<4
Cr	324	16.0	156	3.00	1.00	15.9			<2
Cs	0.683				0.12	0.127			
Cu	53.8	2.40	<30	0.505	0.11	2.12			<1
Fe	23220	1050	2920	200	40.0	1082			9
K (AA)	42.1	5.00		1.00	0.17	<7.5			<7.4
La	195	8.91	<95	1.60	0.26	7.42			<5
Li	<35.5	<0.4	<190	<0.4	<0.4	<9.5			<10
Mg	247	10.9	151	2.02	0.38	10.6			0.25
Mn	5139	219	142	42.0	8.00	225			2
Mo	<17.2	<0.2	<95	<0.2	<0.2	5.30			<5
Na (ICPES)	9976	1230	832	224	41.0	1315			2110
Na (AA)	9772	1200		206	40.2	1251			2070
Na (average)	9874	1215		215	41	1283			2090
Na (M)	0.353	0.032		0.0054	0.0011	0.034			0.09
Nd	558	25.6	<845	4.65	<1.8	<44.5			<45
Ni	766	33.0	289	6.00	1.00	37.1			3
P	377	17.0	11300	5.00	2.00	<40.3			<40
Pb	1091	47.0	<750	9.00	<1.6	<40.3			<40
S	280	8.47	1160	<2	<2	<49.8			<50
Si	7552	98.0	236000	20.0	5.00	931			722
Sr	199	9.00	3	4.00	1.0	8.48			<1
Zn	194	3.61	33	0.643	0.094	2.12			1
Zr	321	0.246	15647	1.83	0.97	13.8			1

Table 39 continued	Caustic Flush 1	Acid Cleaning 1	Acid Cleaning 2	Acid Cleaning 3	Acid Cleaning Composite	Caustic Flush 2	Caustic Flush 3	Caustic Flushes 2+3 Composite
	Permeate							Permeate
bromide	<79							<100
chloride	12.0							<20
fluoride	7.00							<20
formate	11.0							<100
nitrate	23.0							12500
nitrite	198							<100
oxalate	1400							<100
phosphate	328							<100
sulfate	98.0							<50
Total Acid M		1.56	1.95	1.98				

Table 40. Comparison of Campaigns I & II Cleaning Solutions

All values mgL except as noted	Caustic Flush 1		Acid Cleaning 1		Acid Cleaning 2		Acid Cleaning 3		Caustic Flush 2		Caustic Flush 3	
Campaign:	II	I	II	I	II	I	II	I	II	I	I	II
Total Solids (wt%)	7.46	9.71	2.36	1.07	0.67	0.18	0.13	0.05	0.66	0.83	0.76	0.81
Undissolved Solids (wt%)	5.09	8.27	0.12	0.09	0	0	0	0	0.13	0	0	0.13
Supernate Solids (wt%)	2.50	1.57	2.24	0.98	0.67	0.18	0.13	0.05	0.53	0.83	0.76	0.68
Density (kg/L)	1.057	1.075	1.051	1.056	1.055	1.062	1.055	1.063	1.016	1.009	1.003	1.004
Elements from:	Dissolution		Permeate		Permeate		Permeate		Permeate	Dissolution		Filtered
Ag	135	441	2.03	12.8	0.77	2.82	1.69	0.73	0.68	<15		<0.6
Al	3615	6477	476	256	129	42.0	36.9	8.00	12.0	<25		3.60
B		53.8	8.73	4.00	1.82	<1	<0.98	<0.12	<0.18			<0.18
Ba	123	205	22.4	11.4	5.58	1.73	1.60	0.32	0.54	<1		0.16
Ca	366	994	98.3	37.7	30.6	6.14	9.38	0.16	8.33	<1		7.03
Cd	21.0	26.9	3.70	1.35	0.92	0.24	0.28	0.04	0.08	<1		<0.04
Ce	<124	231	26.6	11.6	6.73	1.82	1.69	<1.4	<17	<35		<17.3
Co	<14.2	32.3	<0.04	0.38	<0.04	<0.16	<0.04	<0.16	<0.09	<4		0.10
Cr	180	324	34.0	16.0	8.70	3.00	2.61	1.00	0.93	<2		0.27
Cs	<17.6	0.68	0.10		<0.1		<0.1	0.12	0.14			<0.1
Cu	38.0	53.8	6.13	2.40	1.66	0.50	0.50	0.11	0.14	<1		<0.06
Fe	14766	23220	2490	1050	655	200	181	40.0	63.4	9.00		18.4
K	1068	42.1	272	5.00	79.3	1.00	20.9	0.17	7.66	<7.4		3.01
La	<17.7	195	21.2	8.91	5.68	1.60	1.58	0.26	<0.38	<5		<0.37
Li	<35.2	<35.5	4.07	<0.4	1.09	<0.4	0.32	<0.4	<0.19	<10		<0.19
Mg	164	247	29.3	10.9	8.80	2.02	2.72	0.38	2.03	0.250		1.49
Mn	3198	5139	533	219	141	42.0	39.2	8.00	13.3	2.00		3.93
Mo	<17.7	<17.2	<1.78	<0.2	<1.78	<0.2	<0.3	<0.2	<0.36	<5		<0.35
Na average	10491	9874	2525	1215	748	215	207	41.0	1350	2090		1875
Nd	<159	558	61.8	25.6	16.3	4.65	4.50	<1.8	2.01	<45		<0.81
Ni	489	766	83.7	33.0	21.3	6.00	6.23	1.00	2.12	3.00		0.70
P	<142	377	6.25	17.0	3.82	5.00	1.49	2.00	<1.25	<40		<1.24
Pb	698	1091	121	47.0	29.5	9.00	8.82	<1.6	2.82	<40		<1.6
S	<175	280	16.4	8.47	5.01	<2	2.50	<2	<2.08	<50		<2.08
Si	3319	7552	247	98.0	89.3	20.0	26.3	5.00	18.4	722		15.4
Sr	114	199	21.7	9.00	5.84	4.00	1.65	1.00	<0.87	<1		<0.87
Zn	39.0	194	7.00	3.61	2.18	0.64	0.62	0.09	0.26	1.00		0.102
Zr	202	321	12.9	0.24	6.59	1.83	2.25	0.97	<0.16	1.00		<0.16
Total Acid (M)			1.20	1.56	1.61	1.95	1.74	1.98	0.45			0.06

Figure 42 and Fig. 43 are pictures of the cleaning solutions from Campaigns I and II, respectively. The first caustic flush contained the majority of the undissolved solids. The UDS in the acid cleaning solutions is expected to be low since the acid dissolved many of the undissolved species. The Campaign II acid cleaning solution 1 contained more brown (sludge) undissolved solids than the Campaign I solution; both contained fluffy whitish solids. The Campaign I material had very little color, while the Campaign II solution had some yellowish color. Figure 44 shows an XRD spectrum of solids filtered from the Campaign I solution. The major components are an alumina (corundum), silica (quartz), and what was identified as diaoyudaoite ($NaAl_{11}O_{17}$). Table 41 shows the approximate composition of the filtered solids. This composition was determined by dissolving a filter paper with the solids and a filter paper that had contacted the liquid portion only. The concentrations in the liquid only filter paper were subtracted off as a blank. The main components in the elemental analysis agreed with the XRD analysis: Al and Si. Little Na was found, while Ag, Fe, P, S, and Zr were found in relatively significant amounts.

Table 41. Measured Composition of the Filtered Solids

Element	Sample - Blank (mg/kg)	Sample - Blank (mmol/kg)
Ag	2280	21.1
Al	38600	1431
Ba	20.0	0.146
Ca	28.0	0.699
Cd	19.0	0.169
Cr	156	3.00
Fe	2920	52.3
Mg	151	6.21
Mn	142	2.58
Na	832	36.2
Ni	289	4.92
P	11300	365
S	1160	36.2
Si	236000	8403
Sr	3.00	0.0342
Ti	108	2.25
Zn	33.0	0.505
Zr	15647	172

The Campaign I and II first acid cleaning solutions contained about the same concentration of undissolved solids, but the Campaign II material contained about twice the dissolved solids than the Campaign I solution, which is consistent with the fact that the Campaign II solution contained more undissolved solids than the Campaign I slurry. The small UDS values of around 0.13 in acid solutions 2 and 3 are so close to zero that the presence of undissolved solids is not conclusive. Visibly, there were slight solids in both second cleaning solutions, and no visible solids in the third cleaning solutions.

(a) (b) (c) (d) (e) (f)

(a)	first caustic rinse	pH~13	significant solids rinsed from system
(b)	first 2 M nitric cleaning	pH<1	white-gray solids (~0.1 wt%, vol% much higher)
(c)	second 2 M nitric cleaning	pH<1	slight white-gray solids
(d)	third 2 M nitric cleaning	pH<1	clear solution
(e)	second caustic rinse	pH~0.8	clear solution
(f)	third caustic rinse	pH~11.2	small amount of brownish solids

(b-f) have non-colored supernate

Figure 42. Campaign I Ultrafilter Rinsing and Cleaning Solutions

(a) (b) (c) (d) (e) (f)

(a)	first caustic rinse	pH~13	significant solids rinsed from system
(b)	first 2 M nitric cleaning	pH<1	white-gray solids (~0.1 wt%, vol% much higher)
(c)	second 2 M nitric cleaning	pH<1	slight white-gray solids
(d)	third 2 M nitric cleaning	pH<1	clear solution
(e)	second caustic rinse	pH<1	clear solution
(f)	third caustic rinse	pH~1.2	clear solution

(a-e) have yellowish supernate

Figure 43. Campaign II Ultrafiltration Rinsing and Cleaning Solutions (Fig. 30 repeated)

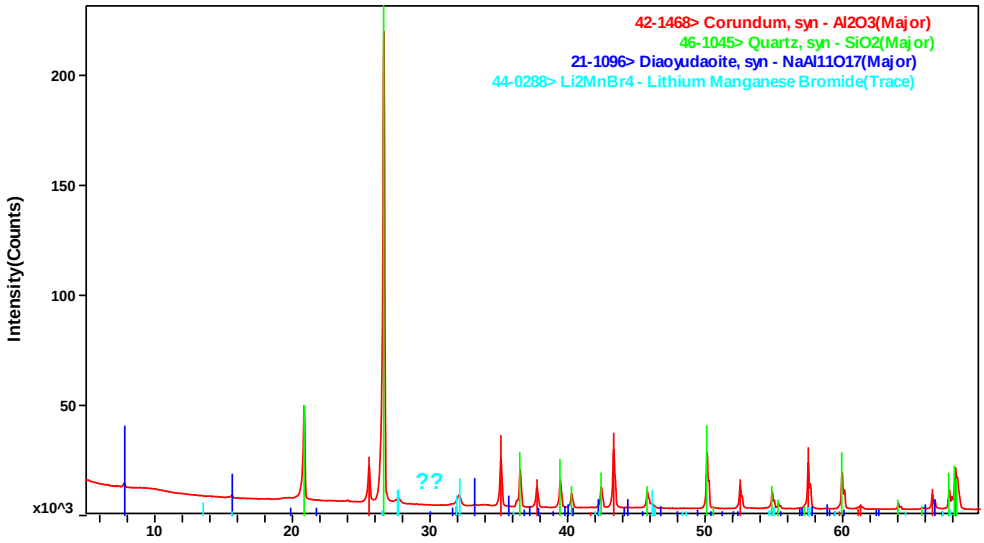


Figure 44. XRD Spectrum of Solids from Campaign I First Nitric Acid Cleaning Solution

The third caustic rinse in Campaign I contained a small amount of brownish solids, which appear to possibly be precipitated iron. This precipitation on the third caustic rinse has been observed in previous RPP Filtration Work. The Campaign II third rinse did not contain these solids. In Campaign II, the third caustic rinse had a total *acid* concentration of 0.0623M, or a pH of about 1.2. It appears that because the pH remained acidic, precipitation such as that seen in Campaign I was not seen in Campaign II. It was expected that this sample would be slightly caustic with a pH of around 12, as was seen in Campaign I. The cleaning steps were conducted with prototypic ratios of cleaning solution to heel, so the low final pH was a surprise. Use of a 0.2M NaOH, or a larger quantity of 0.1 M NaOH, may be prudent for the last rinse so that the final rinsing heel is caustic. The acidic heel has the potential to cause unwanted reactions with the next batch of waste feed (this was not studied as no heel was left between campaigns).

2.7.4.2.4 <u>Particle Size Distribution of Ultrafiltration Samples</u>

Particle size distributions of both Campaign I and II samples were measured with a Microtrac S3000 particle size analyzer. Figure 45 shows the particle size distributions of Campaign I slurry for the following conditions: initial (feed), after concentrating, after running a steady-state matrix (SSM) of processing conditions (additional processing), and after over-concentration (additional processing). The slurry was initially unimodal, but became bimodal during processing. Further processing continued to reduce the particle size. Note that the Campaign I slurry is AY102 simulant only.

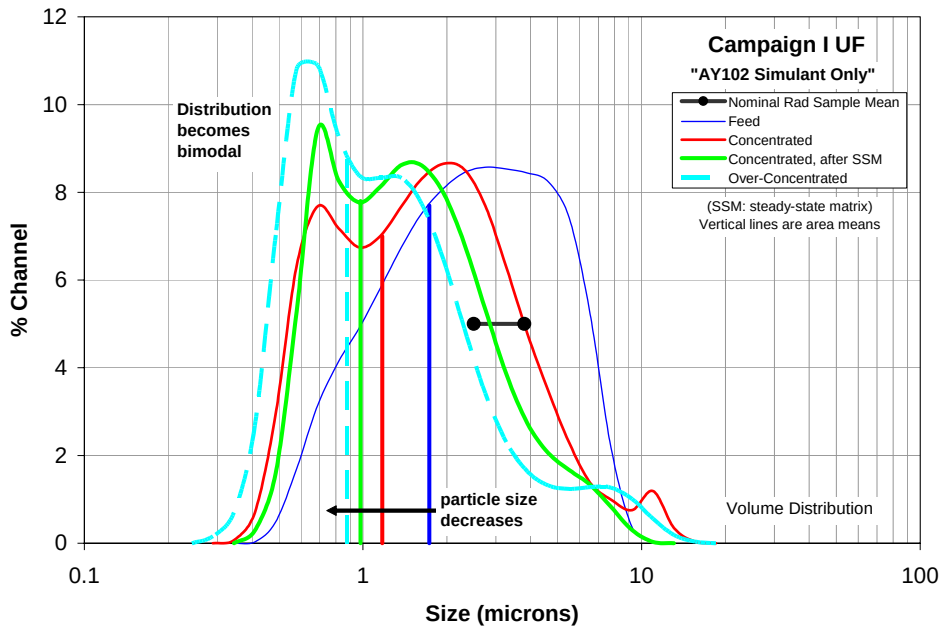


Figure 45. Particle Size Distribution of Campaign I AY102 Simulant

The changes in particle size distribution due to slurry washing are shown in Fig. 46. The area mean particle size does not change, but the distribution changes such that the relative amount of the smaller particles (~0.7µm) decreases and the larger particles (~1.5µm) increases.

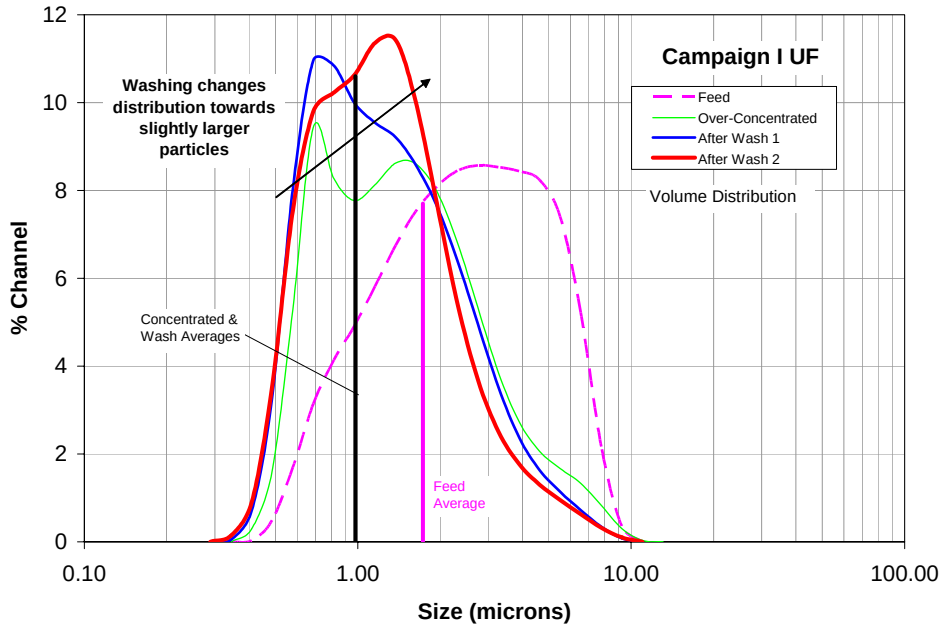


Figure 46. Particle Size Distribution of Washed Campaign I Slurry

The Ultrafiltration feed particle size distributions are compared in Fig. 47. The Campaign II feed has a bimodal distribution compared to the Campaign I unimodal distribution. The area mean particle sizes are comparable. Figure 48 shows that washing the Campaign II slurry reduced the area mean particle size slightly.

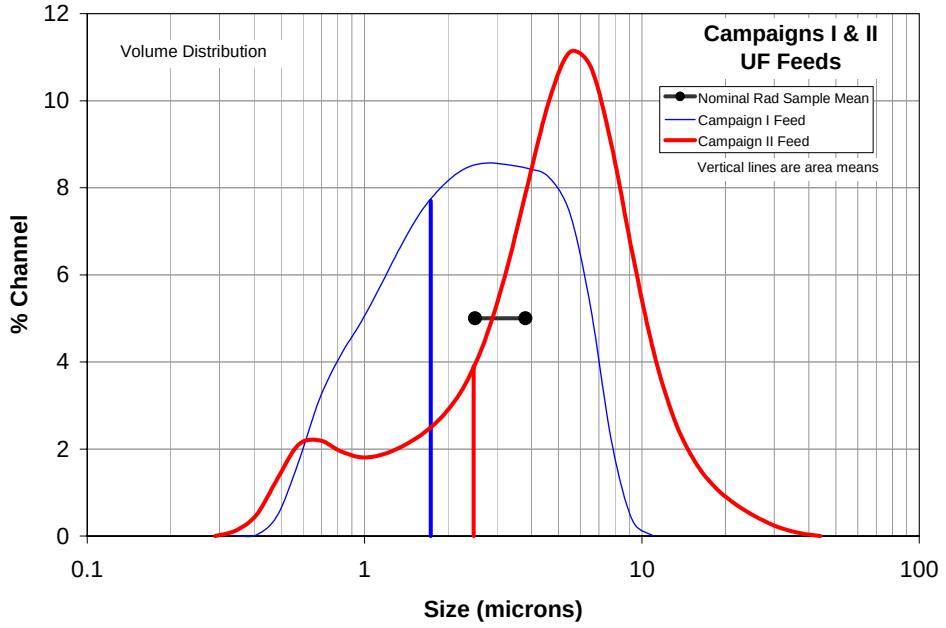


Figure 47. Comparison of Ultrafiltration Feed Particle Size Distributions

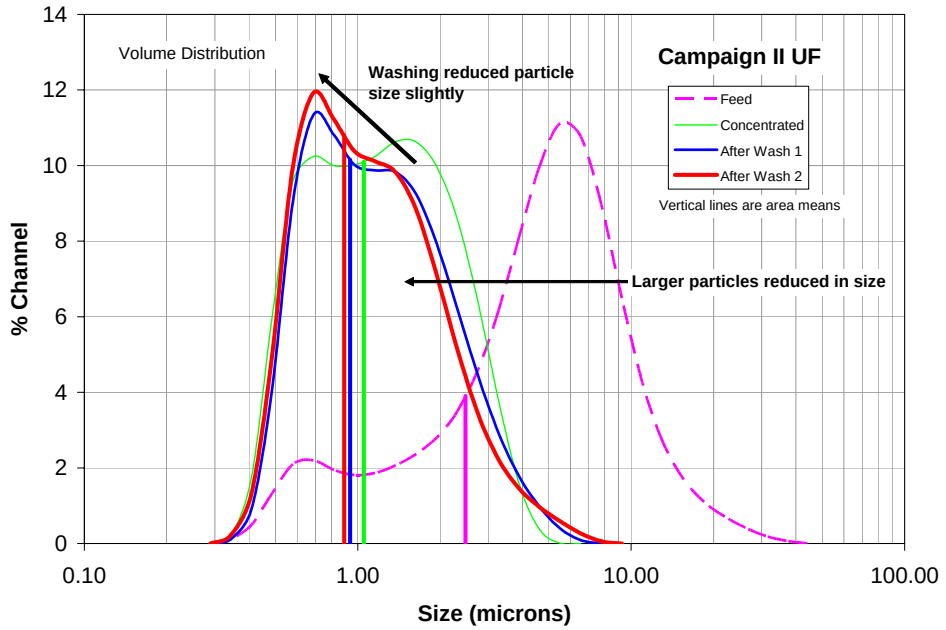


Figure 48. Particle Size Distribution of Washed Campaign II Slurry

2.7.4.2.5 Fate of Antifoam in the UFP System

The fate of the Dow-Corning Q2-3183A antifoam, added to the FEP feed, was monitored by measuring the concentration of the antifoam in the FEP evaporator bottoms, the washed HLW slurry, the permeate to the IX system, the wash permeate, and the cleaning solutions. A schematic of the fate of the antifoam in the UFP process is given in Fig. 49. The initial amount of antifoam added in the FEP evaporator was 278 g into the pilot-scale FEP volume of 147.7 L of feed, which was calculated to give a final bottoms concentration of 1,887 mg/L. (As mentioned in section 2.6.2, this amount of antifoam was based on the 1500 ppm that WTP plans to utilize.) However, from an initial sample Dow Corning measured the concentration at 4060 mg/L, which indicated the amount of antifoam was 598 g. Since the 278 g and 147.7 L were known quantities, the much larger mass based on the measured higher concentration indicate the difficulty in properly measuring the antifoam concentration. After all the feed was evaporated to the target density, the resulting bottoms slurry should still have had the initial 278 grams of antifoam. Once again, the Dow Corning measurement, from a bottoms sample, indicated the concentration was 6,025 mg/L, which implies a mass of 890 grams of antifoam. This is clearly much greater than the amount fed. Even after mixing the FEP bottoms with AY102 and AP101 to make the UFP feed and dewatering and washing the mixture, the washed slurry sample indicated a concentration of 3,105 mg/L of antifoam, which translate to a mass of 368 g. This is impossible since the starting value was 278 g. As noted in the FEP discussion, these values are being rechecked with Dow Corning. Even with these high uncertain measurements, an estimate of how much antifoam remained in the washed slurry can be made. The permeate created in the UFP had an antifoam concentration of "trace < 25 mg/L", which means it was detected but was not quantifiable at the 25 mg/L minimum detection. Therefore, the maximum amount that could have been present in the permeate was 23 g. It is concluded (based on the measured values, assuming any error affects all the same) that at least 92%[†] of the antifoam remains in the slurry. The wash permeate composite had no detectable antifoam present. The cleaning solutions were not analyzed, but analysis of the Campaign III FEP evaporator feed, which contains these recycles, is pending.

[†] (278 g – 23 g) / 278 g x 100 ~ 92%

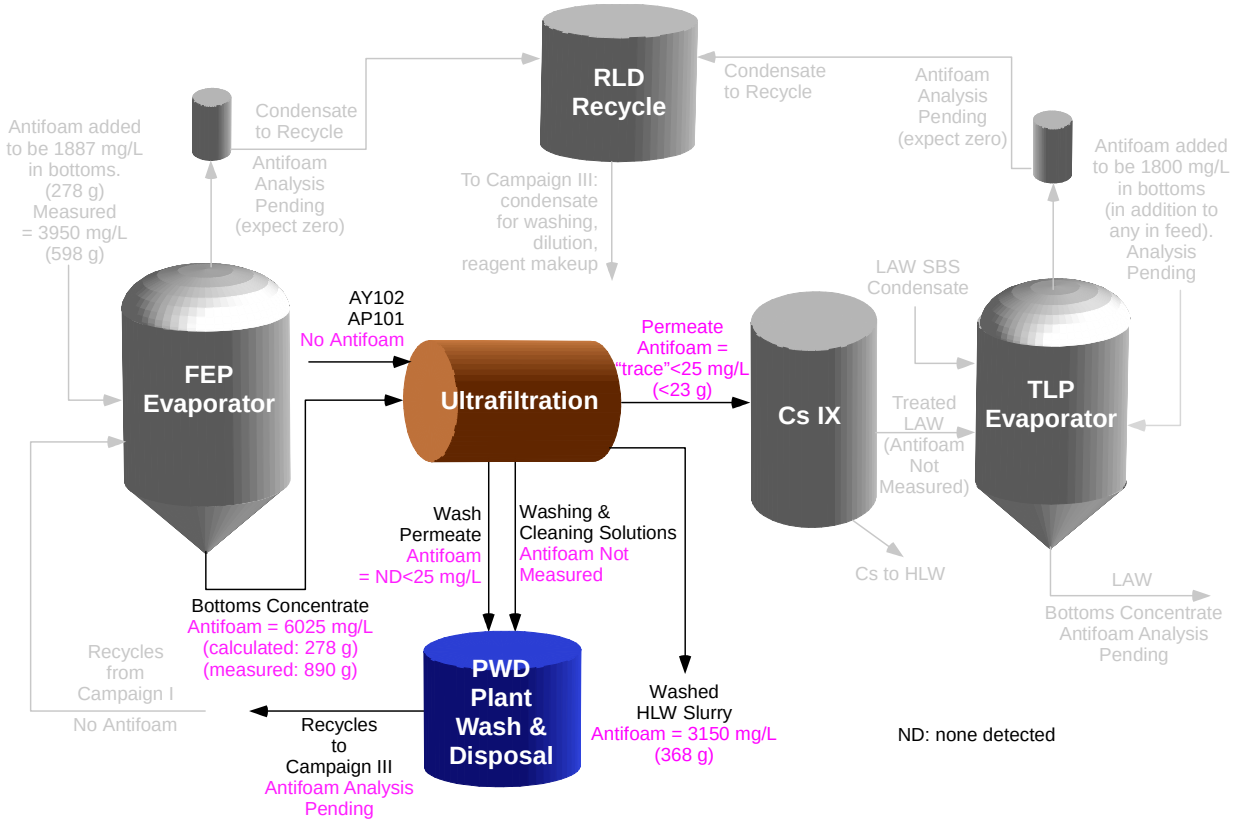


Figure 49. Schematic of Antifoam Fate in the SIPP - UFP

2.7.4.2.6 <u>Modeling of Pilot-scale UFP Permeate Flux for the simulated AY102/AP101 HLW</u>

The data taken during the concentration of the feed slurry was analyzed to determine the average flux during concentration and to correlate the flux versus the undissolved solids concentration. Figure 50 shows the flux plotted versus the elapsed processing time, where the elapsed processing time is defined as the actual time during which the slurry was undergoing concentration; down times for sampling, hold periods, or other pauses were subtracted out. The flux was calculated as the instantaneous flux from the measured permeate flowrate. The data were fit to the polynomial curve shown in Fig. 50. The total area under this curve was used to approximate the amount of permeate that was generated. This integration gave 936L of permeate compared to the measured 916L that was determined from the weights of the permeate drums. This difference is about 2%. Figure 51 shows the measured permeate volume versus elapsed processing time, including the point at which 20 wt% UDS was achieved. A polynomial curve was fitted to these data.

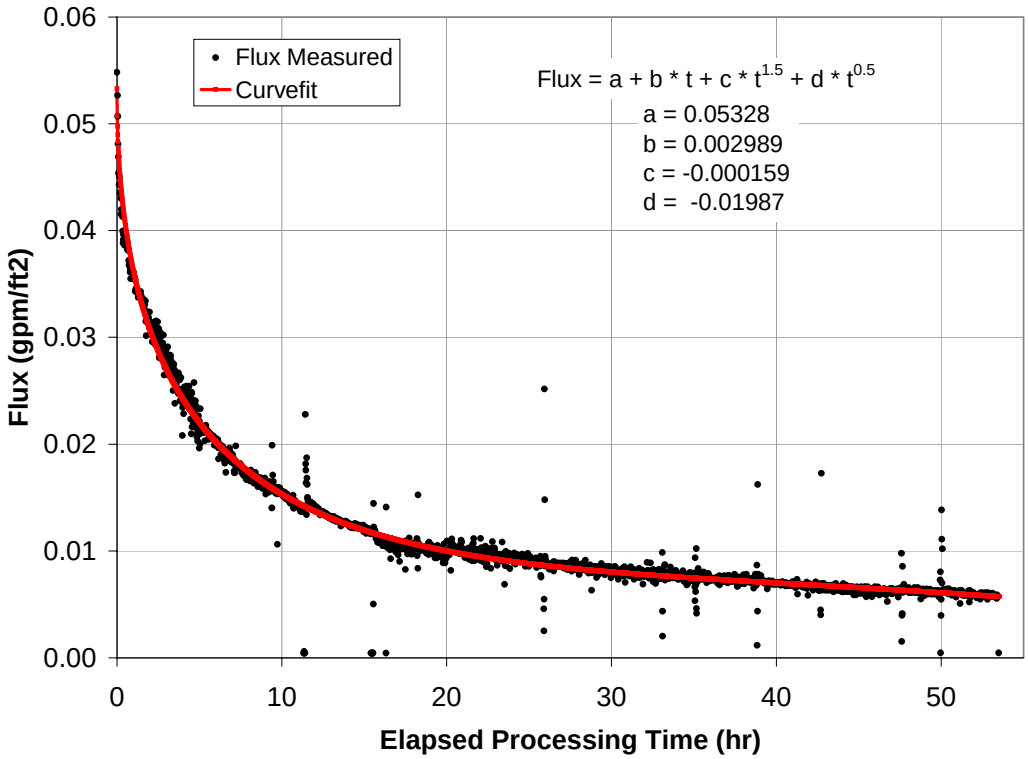


Figure 50. Fit of Flux vs. Elapsed Processing Time for the Simulated AY102/AP101 HLW

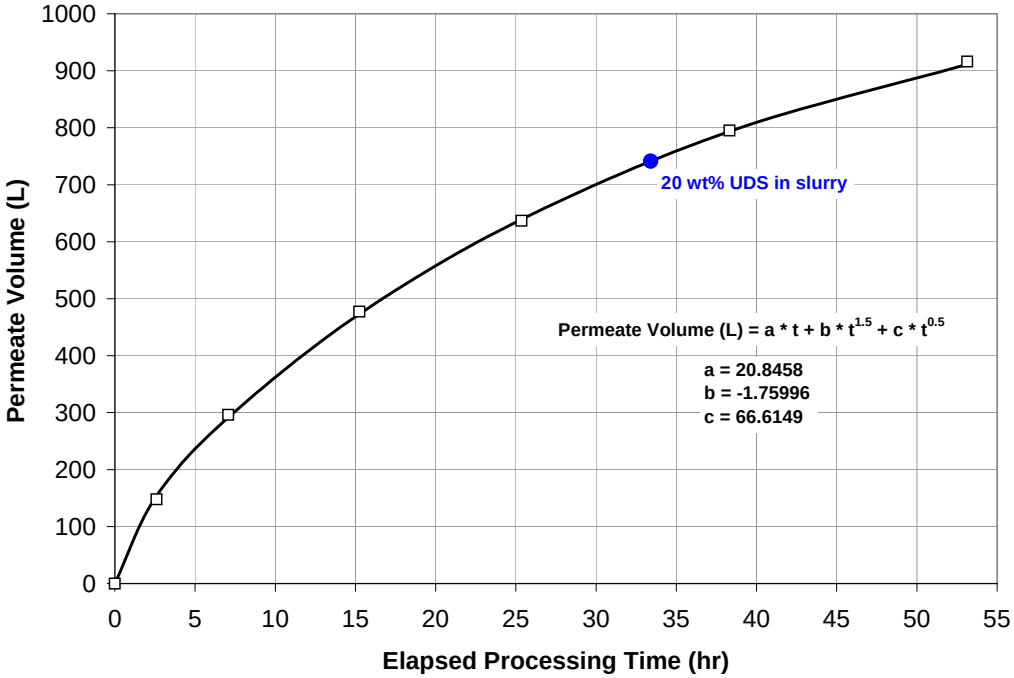


Figure 51. Permeate Volume vs. Elapsed Processing Time for the Simulated AY102/AP101 HLW

Using the measurements of undissolved solids taken during concentrating, the UDS was correlated to the elapsed processing time, as shown in Fig. 52. Again, a polynomial fit was used.

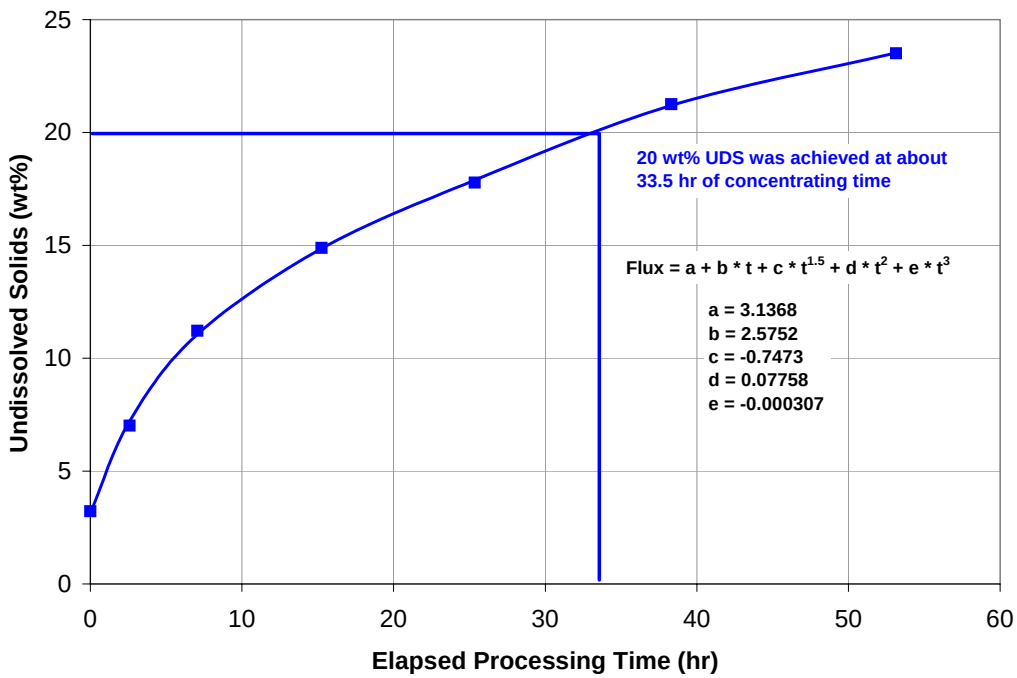


Figure 52. Undissolved Solids vs. Processing Time for the simulated AY102/AP101 HLW

The permeate flux and UDS concentration were obtained at each time step from correlating equations of Figs 50 and 52, and plotted in Fig. 53. The polynomial chosen <u>should not be used</u> for a UDS of less than 4 wt%, nor above 24 wt%. Basically, the section of the curve, which follows the data, is when the UDS concentration is increasing after the majority of the filter cake has been formed. However, on start up UDS concentration is increasing very slowly while the flux decreases very rapidly. This rapid flux decrease is primarily due to the filter being challenged. That is, the clean filter builds up a filter cake and during that initial period the empirical curve was not fit to the measured filter flux decline. The data were fit in this way so that the curve could be extrapolated back towards zero UDS and not predict the higher initial fluxes. Moreover, the fitted equation for this figure is only applicable up to 24 wt% UDS, since no data were available at higher concentrations. Figure 54 shows the integrated time averaged[†] flux at any UDS. This is the average flux from the initial UDS of ~3 wt% to the UDS on the x-axis; e.g., at 10 wt%, the average flux over the time period from 3 wt% to 10 wt% would be about 0.029 gpm/ft^2, while at 20%, it would be about 0.014 gpm/ft^2. This graph allows the true time-averaged flux to be found from a graph that does not have time as an axis. Note that since the UDS versus time curve is not linear,

[†] Note that the integrated time-averaged permeate flux shown in Fig. 54 is not the instantaneous flux, as shown in Fig. 53. For example, the averaged flux at 10 wt% UDS in Fig. 54 is 0.03 gpm/ft^{2}and represents average flux up to that point in TIME and does not include later fluxes, after that time, therefore, the average must be larger that the instantaneous flux at the same point. At 10 wt% UDS the instantaneous flux is 0.02 gpms/ft^2, as seen in Fig. 53.

the average flux is not the area under the curve in a plot of flux versus UDS. Figure 54 shows the non-linearity of the permeate flux vs. elapsed processing time on a separate scale.

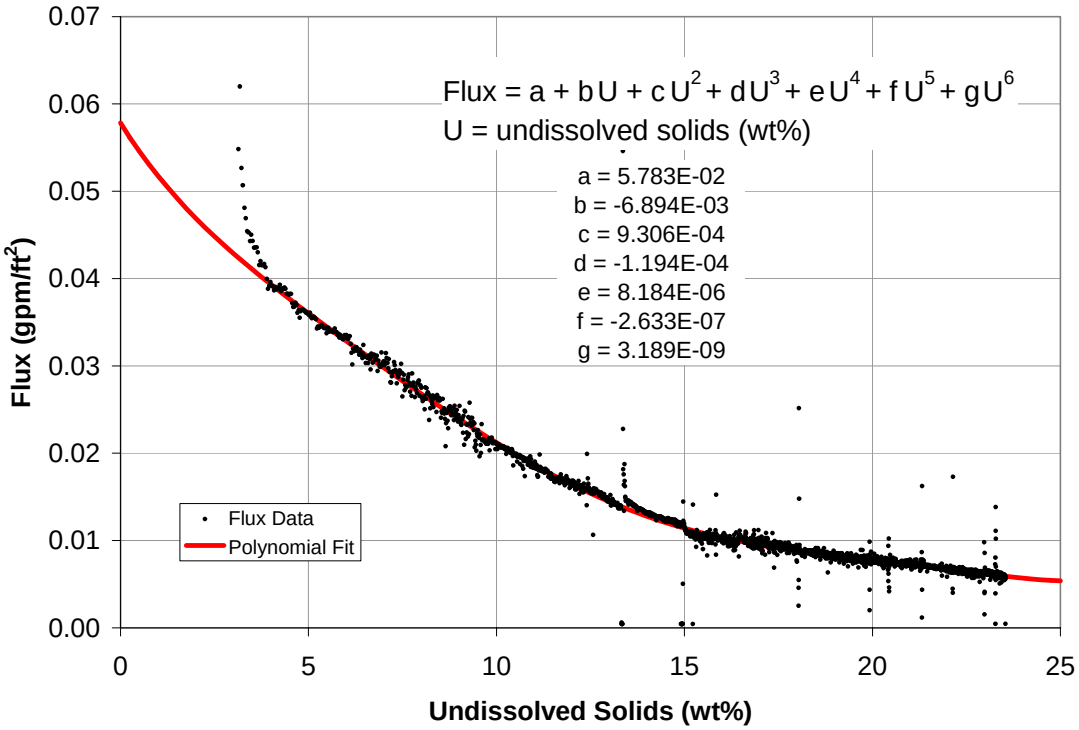


Figure 53. Fit of Flux versus Undissolved Solids for the simulated AY102/AP101 HLW

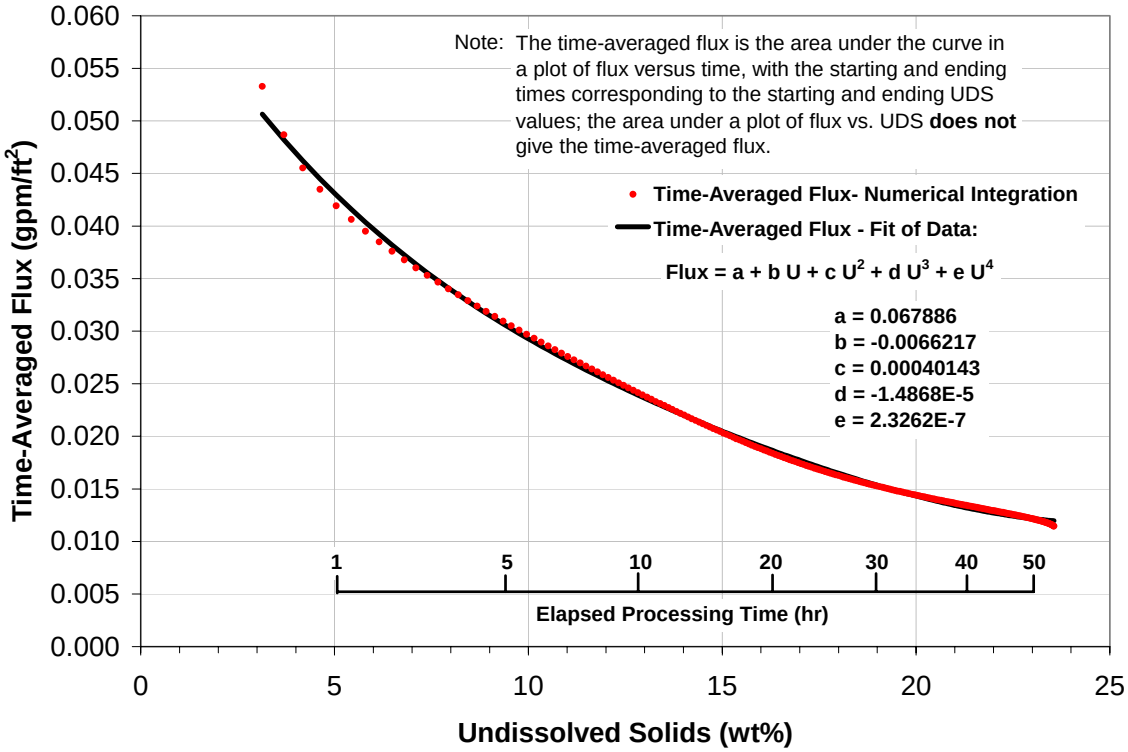


Figure 54. Time-Averaged Flux vs. Undissolved Solids for the simulated AY102/AP101 HLW

2.7.5 Pilot UFP Conclusions

2.7.5.1 Experimental Observations (Author – Fowley)

A summary of the overall conclusions are as follows:

- The average permeate flux when dewatering from ~4 to ~24 wt% was 0.011 gpm/ft^2.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower 0.5 NTU, indicating that the permeate was practically free of solids.
- The turbidity of the permeate from dewatering increased with time (days), indicating that solids were precipitating out of solution.
- Submerging the filter in a mild caustic solution over an extended period of time may improve flux. Likewise, it is probable that submerging the filter in a mild acid solution over an extended period of time will also improve flux.

2.7.5.2 Waste Products Observations (Author – Zamecnik)

- UFP produced permeate showed no tendency for post-filtration precipitation. (However, AY102-only permeate from Campaign I did post-precipitate after 2 months.)
- OLI/ESP models of the AY102 sludge need to incorporate oxides, e.g., Al_2O_3, and hydrates, e.g., FeOOH, in order to close mass and charge balances.
- Washing of concentrated slurry raised its yield stress from about 10 to 15 Pa, but lowered the consistency from about 23 to 13 mPa·s.
- Campaign I data indicated that the yield stress of unwashed slurry is reduced upon extended pumping.
- Washing data matched previous SRNL and literature leaching and washing data for soluble washable species (see Table 36).
- Use of a more concentrated NaOH solution for the third caustic flush during filter cleaning may be warranted since the pH of the spent third wash was acidic.
- At least 96% of the antifoam remained in the HLW sludge slurry after filtration.

2.8 *PILOT CESIUM ION EXCHANGE* (AUTHORS – STEIMKE &WILLIAMS)

The Cesium Ion Exchange Process, or CIX, is the third separation technology unit operation in the RPP-WTP Pretreatment Facility that a waste will see on start up. This is true for SIPP since the chosen waste type, Envelope A/D, is not subjected to precipitation before filtration. The SIPP CIX operation removes cesium from a mixture of the liquid LAW stream coming from the UFP before it is sent to the TLP for further evaporation and eventual vitrification.

The ion exchange resin used in this test was SuperLig®644, which is designed to remove cesium from caustic radioactive waste that is 5 molar concentration in sodium. It is manufactured by IBC Advanced Technologies. Pilot scale testing of this resin was first performed in the Engineering Development Laboratory in the year 2000 (Fowley et al., 2004). The testing was intended to be primarily that of the chemical performance of the resin on a pilot scale (more than one liter of resin); however, the pressure drop across the resin beds was unexpectedly high. Testing for the next three years was redirected to the hydraulic performance of the resin. The hydraulic issues were resolved to the satisfaction of RPP-WTP (River Protection Program - Waste & Immobilization Treatment Plant) (Fowley et al., 2004). In 2003, Test Exception 24590-WTP-TEF-RT-03-069 called for resumed chemical testing of SuperLig®644 resin at a pilot-scale for six chemical cycles. A cycle is the process whereby the Cesium Ion Exchange (CIX) unit operation treats enough LAW solution until the lead CIX column accumulates enough cesium to need regeneration, then it is regenerated. Later, the goals of the testing were modified to include Integrated Testing and the number of ion exchange cycles were reduced to four. This is an interim report on the first two cycles of testing.

For the actual RPP-WTP a cycle would entail the treating of a minimum of 100 Bed Volumes (BV) [BV = a resin bed volume of 415 gallons (1571 liters), under nominal operating conditions, which is subject to change] until the lead column of the three-column ion exchanger will contain enough accumulated cesium to require its regeneration. That lead column is then taken off-line to be regenerated while a waiting fourth column is valved-in for the CIX to continue further LAW

treatment. That fourth column, containing reconditioned resin, is put in the last position (called the polishing position) of the three-column CIX unit and the column that had been in the second position (referred to the lag position) becomes the new lead column, and so forth. The pilot-scale CIX unit operation, of the SIPP task, only had two columns, the lead and lag positions. The pilot operation consisted of a treatment with approximately double the RPP-WTP minimum bed volumes, i.e., 200 BV (pilot-scale BV = 2.34 liters) of simulated LAW, which was then followed by the regeneration of the lead column. A new cycle begins with the newly regenerated lead column in the lag position. Each of the SIPP campaigns consists of two CIX cycles. For Campaign II the pilot-scale CIX unit operation performed cycles 1 and 2. There were no CIX operations during Campaign I, since it only dealt with pilot-scale Ultrafiltration Process (UFP) operations.

This section of the interim report will explain the pilot CIX unit operation that was done as part of Campaign II testing. The process started with the preparation of the feed product, which is the permeate created in the UFP. An explanation of the chemical makeup of the feed stream will be followed by a short description on how feed was handled just before CIX operation and then how the waste stream was handled during and after ion exchange. That section will be followed by a discussion of the physical equipment and how the test was run. Finally, the results will be discussed and conclusions made.

2.8.1 Chemical Description of the Pilot-Scale CIX Feed Stream

The feed for the pilot-scale CIX unit operation is the permeate produced by simulant waste dewatering in the pilot-scale UFP unit operation. The chemical make-up of that feed was described in detail in Section 2.7.4.2.1 and will not be repeated here. Refer to that section and specifically to Tables. 29, 30, 31, and 32 for information on the CIX feed (simulated LAW) stream.

2.8.2 Simulant Handling (Author – Williams)

2.8.2.1 Initial Preparations

Before beginning the CIX test, the solutions to be used to regenerate the lead column were made ready, as shown in the CIX portion of the Fig. 2 schematic. Those solutions were:

1. 0.1 M NaOH – Displaced the LAW in IX column
2. Deionized Water – Pre-elution rinse – Displaced the 0.1 M NaOH from IX column
3. 0.5 M HNO_3 – Elution – Displaced water and strips Cs ions from resin
4. Deionized Water – Post-elution rinse – Displaced acid from column
5. 0.25 M NaOH – Displaced water and regenerated the resin

The regeneration caustic, 0.25M NaOH, needed a volume of 47.8 liters and it was made from deionized water and 50 wt% NaOH. Then it was stored in the Caustic Supply Tank on 26 April 2004. A large quantity of displacement caustic solution, 0.1 M NaOH, had previously been made and it was stored in carboy labeled “Campaign 2-CsIX 0.1M NaOH Displace Sol.” From this carboy 28.7 liters were removed and made ready for Campaign II on 28 April. To strip the ion-

exchange resin of Cs ions, 70.1 liters of 0.5M HNO_3 were made from deionized water and 70% HNO_3 and was placed in the Eluent Supply Tank on 28 April.

2.8.2.2 Handling of Pilot-scale CIX feed LAW Simulant

The simulant supply that was produced during pilot-scale UFP operation was split into two equal parts for Cycle 1 and 2 of CIX operations. Cycle 1 processed about 182 Bed Volumes (BV) (427 liters) of simulant. This first part of the simulant was processed on 3 May (which would then become TLP Evaporator feed) had a measured density of 1.247 kg/L and produced 532.2 kg of material. About one liter of the treated material was provided for a bench top TLP Evaporator operation to ensure that the process produced the desired product. Cycle 2 processed about 186 BV (436 liters) of simulant and produced 543.9 kg of treated simulant at 1.247 kg/L on 7 May. Thus a total of 1076 kg of treated simulant was transferred to the pilot-scale TLP Evaporator Feed Tank from CIX operations.

2.8.2.3 Handling CIX Regeneration and Campaign III CIX Recycle Streams

During the two CIX cycles of Campaign II, the plan was to collect separately the simulant and the five solutions, used in the regeneration process, by moving the column discharge hose from one collection container to another, at the appropriate time. The appropriate time was to be determined by monitoring the pH and the conductivity of the discharge stream. This method proved unexpectedly difficult to implement, and in response, Campaign III discharge hose moves will be based on a plug-flow calculation with no mixing or chemical reaction of when a solution front would reach the column outlet. In hindsight, some Campaign II hose moves were made at appropriate times, while others were not, as explained in the Results Section 2.8.5.

Because of the small volumes of the CIX columns, most of the volumes of the regeneration process solutions were insufficient for SIPP recycle needs. As previously mentioned, the CIX columns were designed for Cs chemical testing and not to support SIPP overall testing. The different scales of testing (SIPP vs. chemical testing) meant that the volume of other CIX recycle streams generally had to be increased with simulants to meet SIPP needs

2.8.3 Pilot CIX Equipment (Author – Steimke)

Figure 55 is a picture of the two columns during Cycle 1 Regeneration and Fig. 56 is a schematic of the two ion exchange columns and peripheral equipment. The design is also documented in WSRC drawing EES-23041-R4-001. Each column had a liquid filled length of 23.75” (or a internal volume of 9.24 liters ~ 4 BV). The following hardware is positioned inside the column with the following elevations with respect to the wedge screen (also known as: V-wire screen) that supports the resin and note that the total liquid filled length of each column is 23.75”, i.e., 16.75”-(-7.00”).

Elevation	Column Hardware Description
16.75”	Top of liquid filled space
16.00”	Flow distributor with six perforated arms
14.75”	Perforated PVC plate with thirty seven 3/64” holes
13.25”	Perforated stainless steel plate with 3/32” holes on a 5/32” triangular pitch
0”	Wedge screen with 0.010” slots to support resin
-2.0”	Perforated stainless steel plate with 3/32” holes on a 5/32” triangular pitch
-3.50”	Perforated PVC plate with thirty seven 3/64” holes
-7.00”	Bottom of the liquid filled space

The purpose of the flow distributor and the two plates below it was to generate a more gradual transition of density when relatively dense simulant was introduced to the top of the column on top of lighter liquid. The purpose of the wedge screen was to support the resin while resisting plugging. The purpose of the bottom two plates was to generate a more uniform flow field in the event upflow operations were needed, however, the normal flow direction was down.

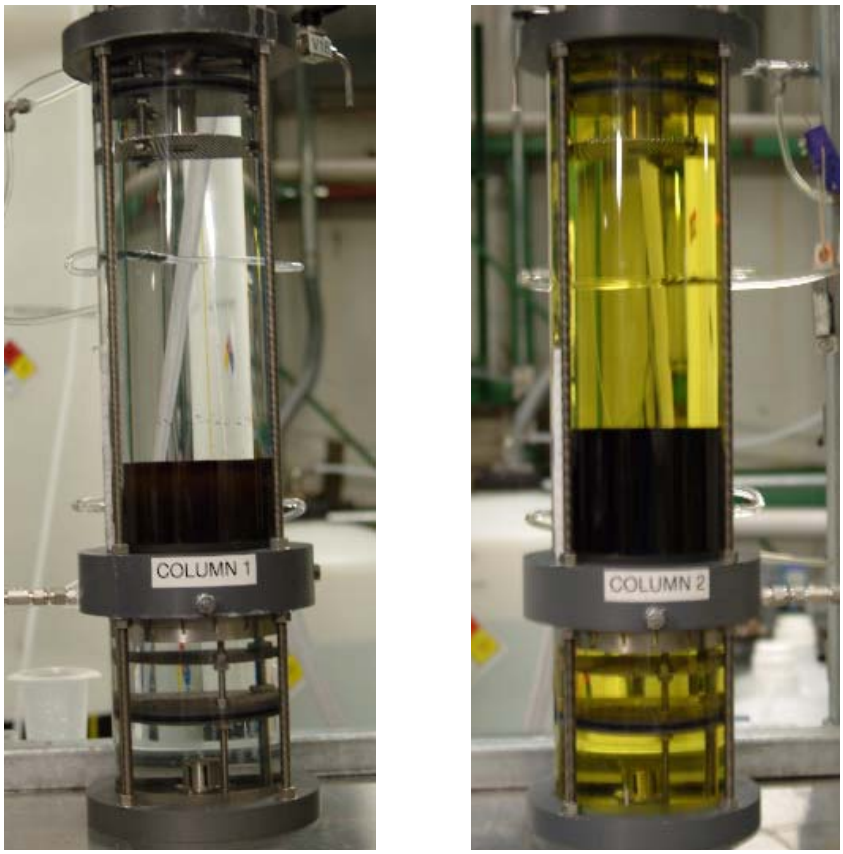


Figure 55. Pilot-scale CIX columns: The left column (COLUMN 1) is undergoing resin regeneration during Cycle 1 operation

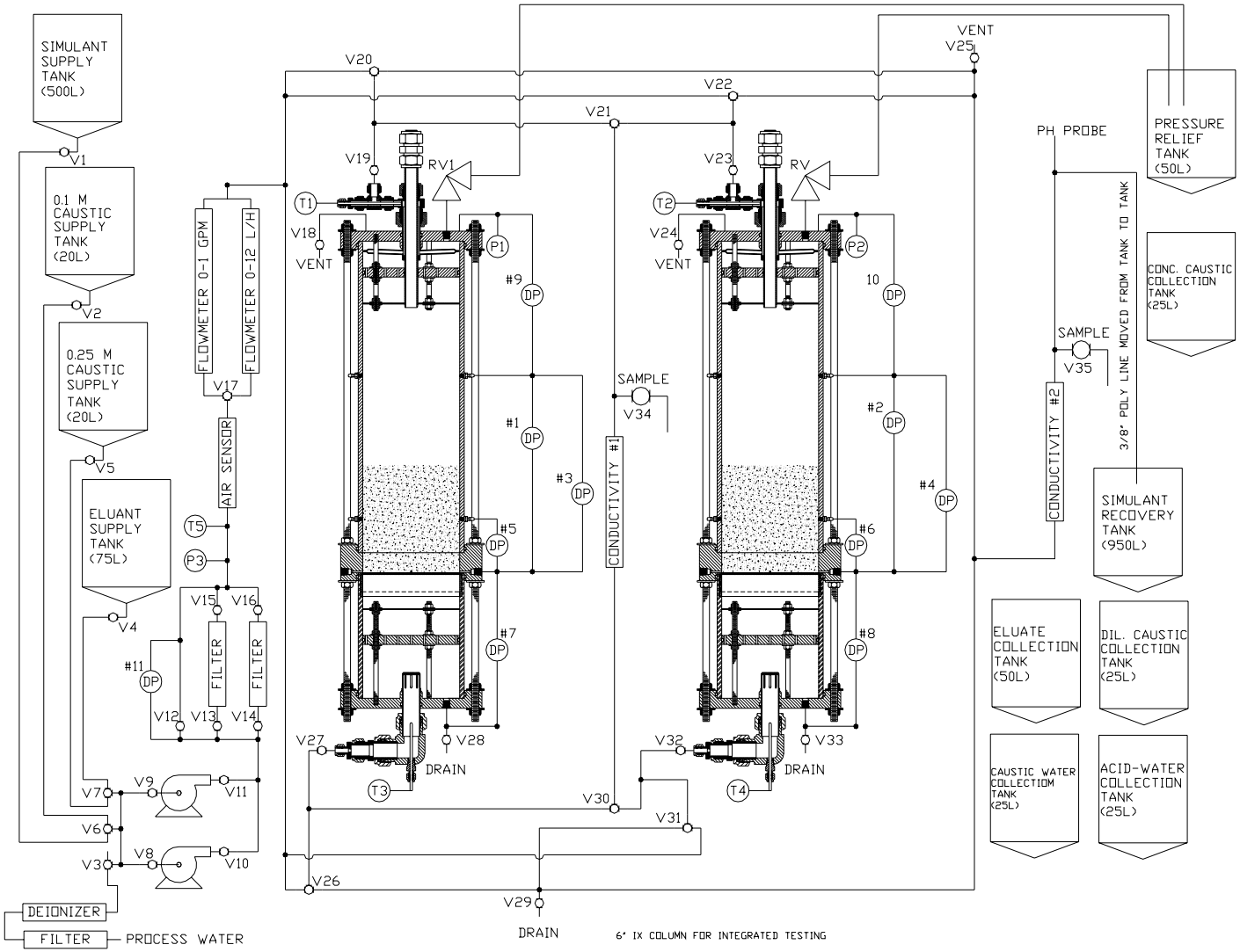


Figure 56. Schematic of Ion Exchange Facility for Integrated Testing

By opening the proper valve, feed could be drawn from one of five supply tanks, which contained either: LAW simulant, displacement 0.1 M NaOH solution, deionized water for rinsing, eluent 0.5 M nitric acid solution, or regeneration 0.25 M NaOH solution. The solutions were pumped by one or two gear pumps connected in parallel. Most of the time only one pump was sufficient, but two-pump operation was required for upflow. The facility contained two flowmeters in parallel, a high-range flowmeter for upflow with a range of 0 – 1 gpm (227 L/hr) and a low-range flowmeter for normal operation with a range of 0 – 0.05 gpm (12 L/hr). Valves allowed upflow or downflow through one column or two columns in series. The effluent line from the columns contained a pH probe, a conductivity probe and a thermocouple. A hose connected to the effluent line was placed in the appropriate collection jug for every step of the cycle. There were six collection jugs, one for each of the six steps of a CIX cycle.

2.8.4 Pilot CIX Operation (Author – Steimke)

2.8.4.1. Summarized Test Procedure

After construction of the test facility, shakedown was performed to check for leaks, to exercise all equipment and valve lineups, and to exercise safety equipment and circuitry. With the hardware ready, resin was deposited in the columns and both beds were hydraulically preconditioned with a downflow of 0.25 M NaOH for thirty minutes at a velocity of 15 cm/min. This was followed by chemical testing.

Each cycle of chemical testing had the following six chemical steps, all in downflow: LAW simulant, 0.1 M NaOH displacement solution, deionized water, 0.5 M nitric acid eluent solution, deionized water, and 0.25 M NaOH regeneration solution. The total volume of LAW simulant used for each cycle was about 200 BV (to reiterate 1 BV = 2.34 liters for SIPP) and the simulant was always passed through both ion exchange columns in series. All steps, other than the simulant step, were conducted through one column only, which was the lead column for the simulant step. The 0.1 M NaOH step and the subsequent deionized water step (pre-elution rinse) were conducted at a target flowrate of 3 BV/hr for one hour. The volume used for the elution step was 15 BV. (Cycle 1 had a flowrate of 1.0 BV/hr and a duration of 15 hours. Cycle 2 had a flowrate of 0.5 BV/hr and a duration of 30 hours). The post-elution rinse was run at a target flowrate of 1.4 BV/hr for 2.25 hours. Finally, the regeneration step was run at a target flowrate of 3 BV/hr for 2 hours. The lengths of the various steps differed from the target lengths by no more than three minutes.

The six different chemical solutions were collected in separate containers by moving the discharge hose from the columns. In Campaign II, for Cycles 1 and 2, the plan was to move the hose based on observing the change in the pH and/or conductivity probes. As previously mentioned, this method proved to be difficult to implement, therefore, in Campaign III, for Cycles 3 and 4, the timing for moving the hose to a different container will be based on a plug flow calculation of when the liquid front would reach the column discharge.

There was a two-week period between the end of Cycle 2, part of Campaign II testing, and the start of Cycle 3, part of Campaign III testing. At the end of Cycle 2, the lag column was Column 1 and it contained simulant and the lead column, Column 2, which was regenerated, contained 0.25 M NaOH. At the request of RPP-WTP, both columns were displaced with 0.1 M NaOH and the resin soaked in that solution until the start of Cycle 3 for Campaign III testing.

2.8.4.2. Test Matrix Highlights

The entire CIX test matrix is shown in Tables 10 and 11 and all simulant samples taken are listed in Appendix D, but for convenience some key parameters are listed below:

1. Cycles 1 and 2 had a simulant target flowrate of 3 BV/hr.
2. Cycles 1 and 2 had eluent target flowrates of 1 BV/hr and 0.5 BV/hr, respectively.
3. Columns 1 and 2 were the lead columns for Cycles 1 and Cycles 2, respectively.

The two cycles were run on the following dates in 2004.

Cycle	Start date	Finish date
1	26 April	4 May
2	4 May	12 May

2.8.4.3. Data Acquisition and Safety Circuitry

A Dell computer with LabVIEW™ software was used to acquire data, control the flowrate, and shut down the flow if any measured pressure exceeded the setpoint of 20 psig. There was also a pressure relief valve set at 45 psig connected to the top of each of the two columns. The discharge line of the pressure relief valves was a hose leading to a jug. There was also a spill detector with a sensor placed below the columns on the floor of the containment for the facility. Any spill would disconnect power to the pumps. There was also an air detector in the line leading from the solution supply tanks to the pump. Any air in the line would disconnect power from the pumps. A manual bypass switch was used to start the pump/s when there was initially air in the line. The air detector was used because oxygen can damage the wet resin, particularly when it is in a caustic state.

2.8.4.4. Resin Pre-Treatment, Deposition in Columns and Pre-Conditioning

SuperLig®644 resin was taken from the 250-Gallon Batch (C-01-11-05-02-35-60). The resin was chemically pre-treated by washing with water, treating it in 0.5 M nitric acid, washing with water, treating it with 0.25 M sodium hydroxide and washing it with deionized water. The pre-treated resin was then wet sieved under a nitrogen atmosphere to remove particles finer than 40 mesh. The resin was mixed with 0.25 M NaOH solution to form a 30% by volume slurry. With a pump connected to the bottom of the columns, the slurry was drawn into and through each column, one at a time, at a velocity of 14 cm/min (0.58 gpm) to deposit the resin beds. The initial resin deposition resulted in a

crater about 1 inch deep in both columns. An upflow for two minutes at 13 cm/min was used to level the tops of the two resin beds. This was followed by hydraulic pre-conditioning of both beds for 30 minutes with a flowrate of 15 cm/min of 0.25 M NaOH solution. At this time, both beds had a resin height of 6.25".

2.8.5 Pilot CIX Discussion of Results (Author – Steimke)

Two ion exchange columns were designed and constructed, as previously shown in Figs. 55 and 56. The columns had an inside diameter of 5.5 inches and a nominal resin height of 6 inches[†], giving a height to diameter ratio of 1.1. Other hardware included pumps, tanks, flowmeters, pressure transducers, other instruments, and a data acquisition system (DAS).

The facility was used to run four ion exchange cycles (two for Campaign II and two for Campaign III), where a cycle consists of six chemical steps. For Cycles 1 and 2 respectively, 427 liters and 436 liters or 182 bed volumes (BV) and 186 BV of simulated high level waste was pumped through the two beds connected in series. For Cycle 1, Column 1 was the lead column and Column 2 was the lag column. The column positions were reversed for Cycle 2. For Cycles 1 and 2, the lead ion exchange bed removed 99.6 ± 0.2 % of the cesium. For Cycles 1 and 2, the lead and lag ion exchange beds together removed 99.9 ± 0.2 % of the cesium. During operation, the pressure drop was measured for both resin beds. The maximum pressure drop occurred during the simulant flow step. For Cycles 1 and 2, Column 1 resin bed pressure drops were 0.6 and 0.5 inches of water, respectively. For Cycles 1 and 2, Column 2 resin bed pressure drops were 0.6 and 0.7 inches of water, respectively. The uncertainty in all four pressure drops was ± 0.1 inch of water; therefore, the pressure drop differences between columns were insignificant. Subsequently, a cesium mass balance was performed. The cesium masses in and out of the columns agreed within the accuracy of ICP-MS (inductively coupled plasma mass spectroscopy) for measuring relatively low concentrations of cesium in 5-molar sodium solutions. During elution of each of the lead columns fifteen bed volumes of 0.5 M nitric acid were used. After only the first three BV, about 90% of the cesium was eluted from the bed.

2.8.5.1 Hydraulic Observations

Table 42 summarizes some important hydraulic results from the Campaign II. Note, that the simulant had a density of 1.25 kg/L.

[†] The actual resin height is not fixed. As explained in the following sections, and shown in Table 42, the height resin in the columns changes from pre-conditioned height of 6.25 inches, when the columns are initially filled, to as short as 5.4 inches after multiple resin regenerations.

Table 42. Hydraulic Summary

Cycle	Simulant DP Col. 1 Inches H2O	Simulant DP Col. 2 Inches H2O	Resin height in simulant, Col. 1, (inches)	Resin height in simulant, Col. 2, (inches)	Simulant superficial velocity, Col. 1, (cm/hr)	Simulant superficial velocity, Col. 2, (cm/hr)
1	0.6 (Lead)	0.5 (Lag)	5.6	5.8	46	46
2	0.6 (Lag)	0.7 (Lead)	5.4	5.7	46	46

Figure 57 plots the flowrates during Cycle 1 for all six solutions used. The large fluctuations in the measured flowrate for the two water rinses is an instrument artifact because the deionized water used lacked sufficient ions for the magnetic flowmeter to achieve a steady reading. However, the readings were checked with a volumetric cylinder that showed the measured average flow to be correct. Figures 58 and 59 plot the pressure drops across the lead and lag column resin beds during Cycle 1. There were duplicate measurements of the pressure drop across the entire resin bed and one measurement of the pressure drop across the bottom 3 inches of the resin bed. The duplicate pressure drop measurements agree. The highest pressure drops are for the simulant step and the pressure drop across the bottom 3 inches about half of the total pressure drop, as expected. The total pressure drop across the bed for simulant was about 0.6 inch of water. By way of comparison, the 24-inch Column Test (Fowley et al., 2004) had a pressure drop for Cycle 1 of 16 inches of water for a resin height that was four times as great and a superficial velocity that was seven times as great (5 cm/min vs. 0.75 cm/min). The 24-inch Test pressure drop was 27 times as large, which agrees well with the factors of four and seven.

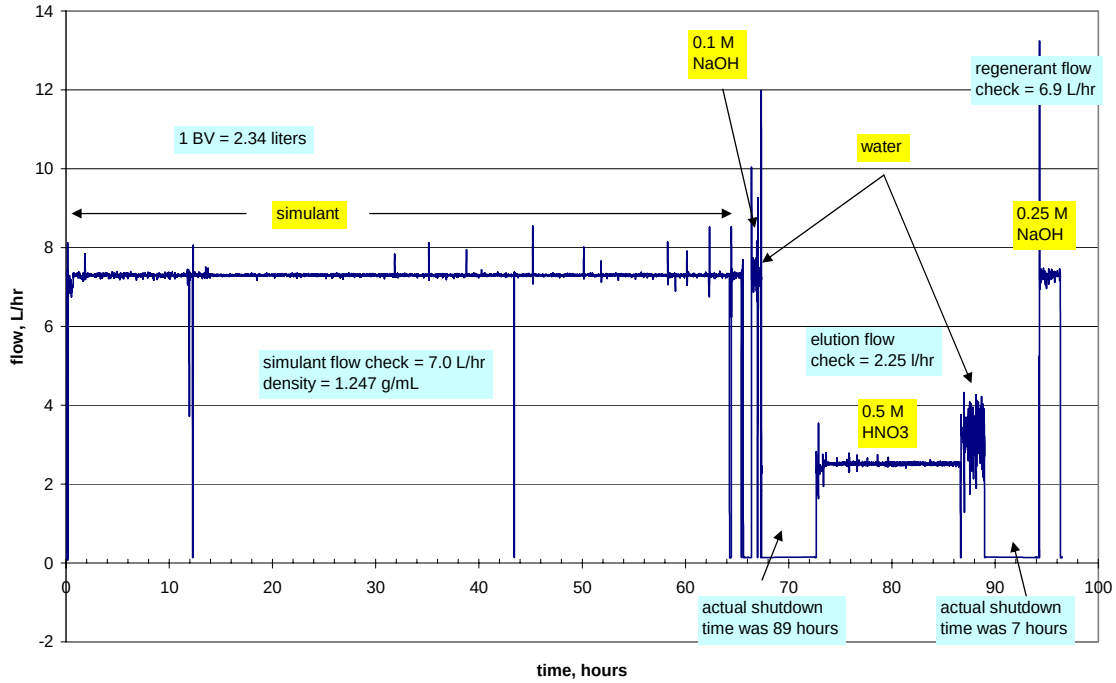


Figure 57. Flowrate During Cycle 1

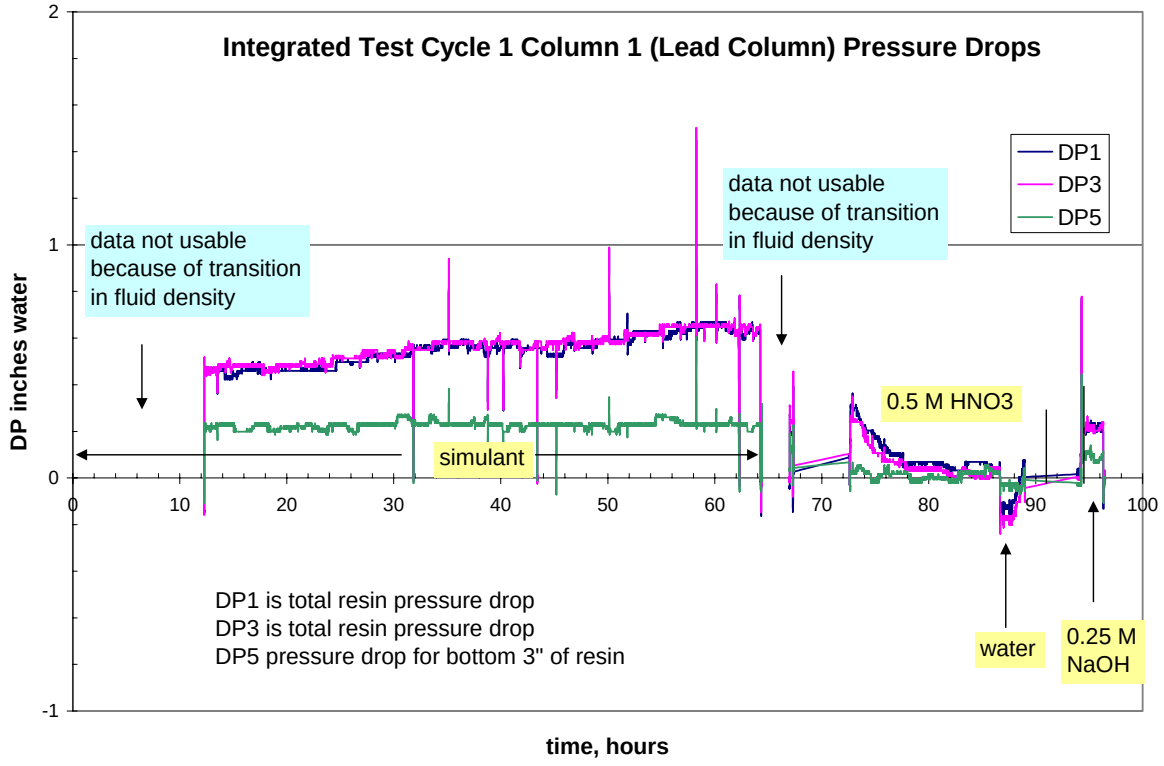


Figure 58. Pressure Drop Across Resin Bed for Lead Column and Cycle 1

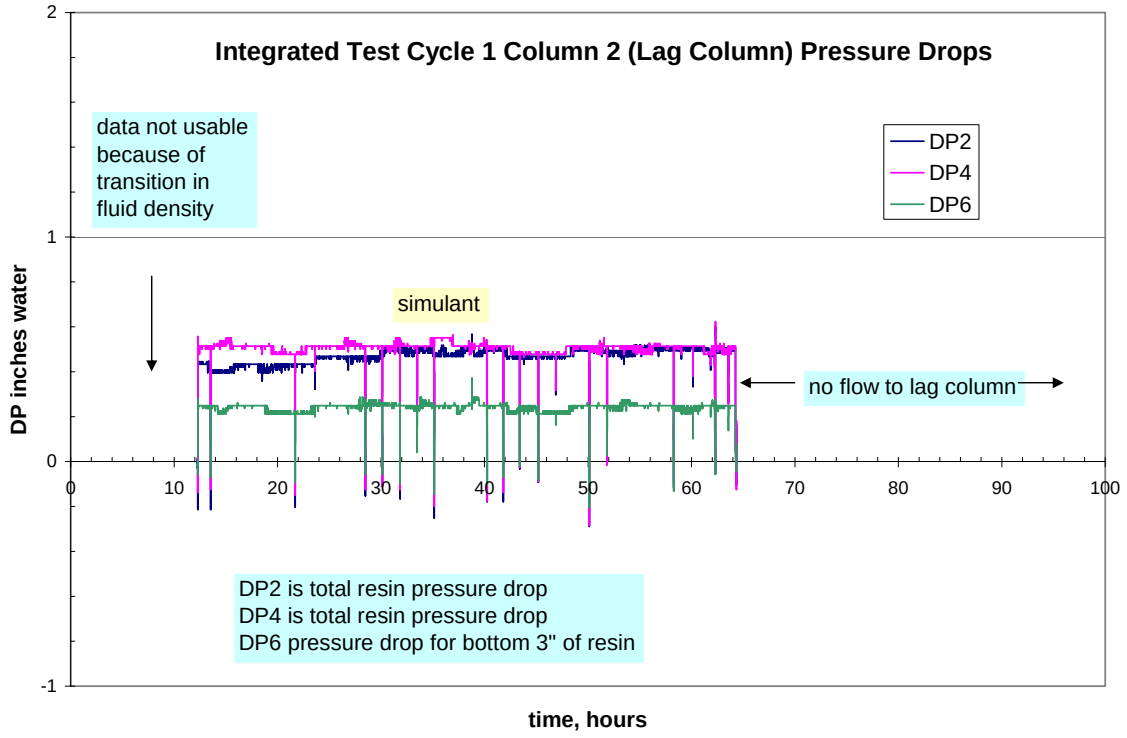


Figure 59. Pressure Drop Across Resin Bed for Lag Column and Cycle 1

Resin bed heights during Cycle 1 are plotted in Fig. 60. The plot shows the expected variation with the smallest resin bed height during the elution step.

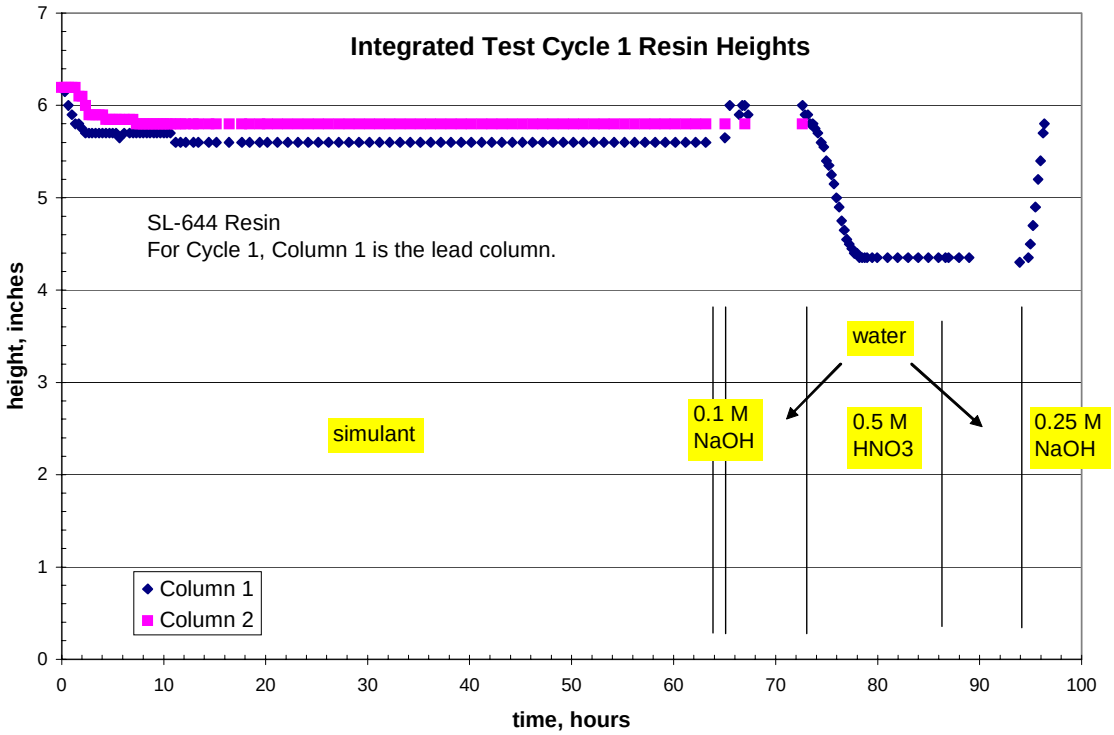


Figure 60. Resin Bed Height During Cycle 1

As mentioned in Section 2.8.2.3, during column regeneration, the pH and conductivity of the simulant exiting the lag column, or other solutions exiting the lead (only) column, were measured to determine the transition between solutions and also to give an indication of mixing and reaction of the different solutions in the column. To determine steady readings of the two probes, they were inserted in beakers of different solutions. The readings are listed in Table 43, which shows distinctly different values for each of the solutions. The theoretical pH of the two caustic solutions, 13.0 and 13.4, is higher than indicated in Table 43 because the pH probe was designed to have a range from 0 – 11.

Table 43. Probe Responses for Standard Solutions

solution	conductivity	pH
0.1 M NaOH	35	11.1
0.25 M NaOH	76	10.9
0.5 M HNO3	250	0.42

Plots of pH and conductivity as a function of cumulative liquid volume for Cycle 1 are plotted in Figures 61 and 62.

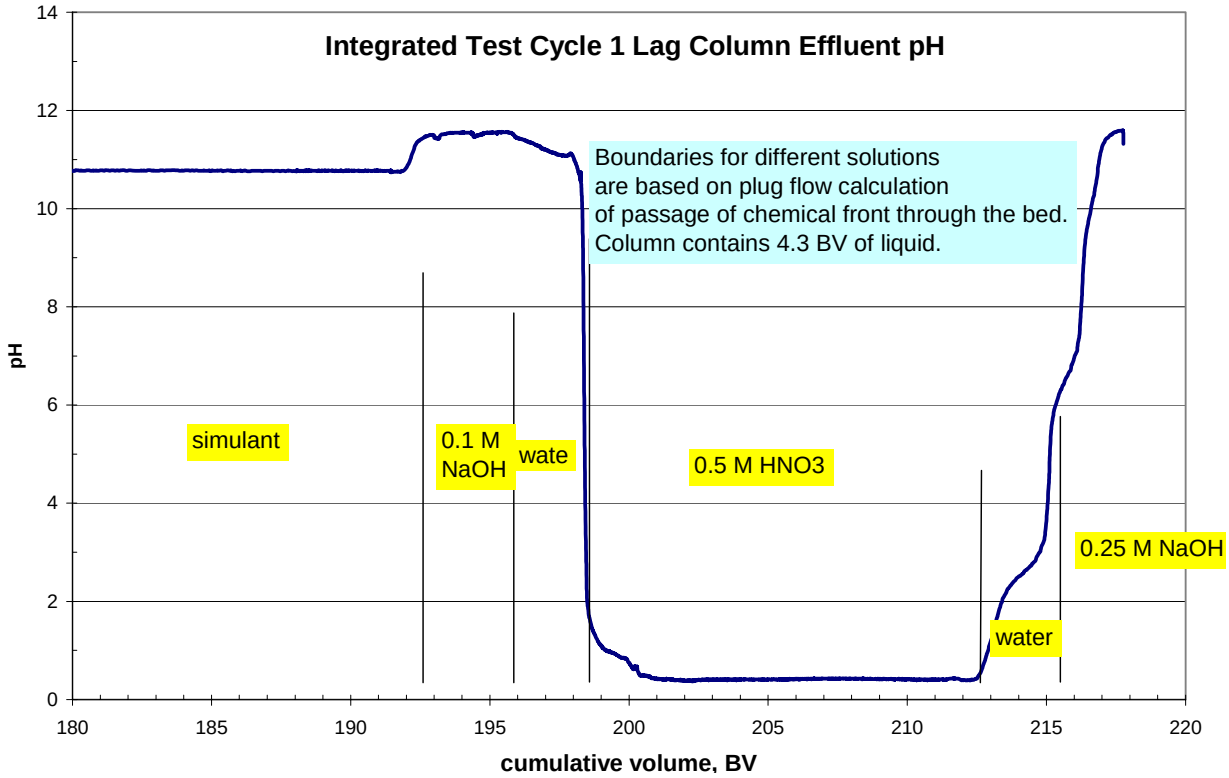


Figure 61. Effluent pH During Cycle 1

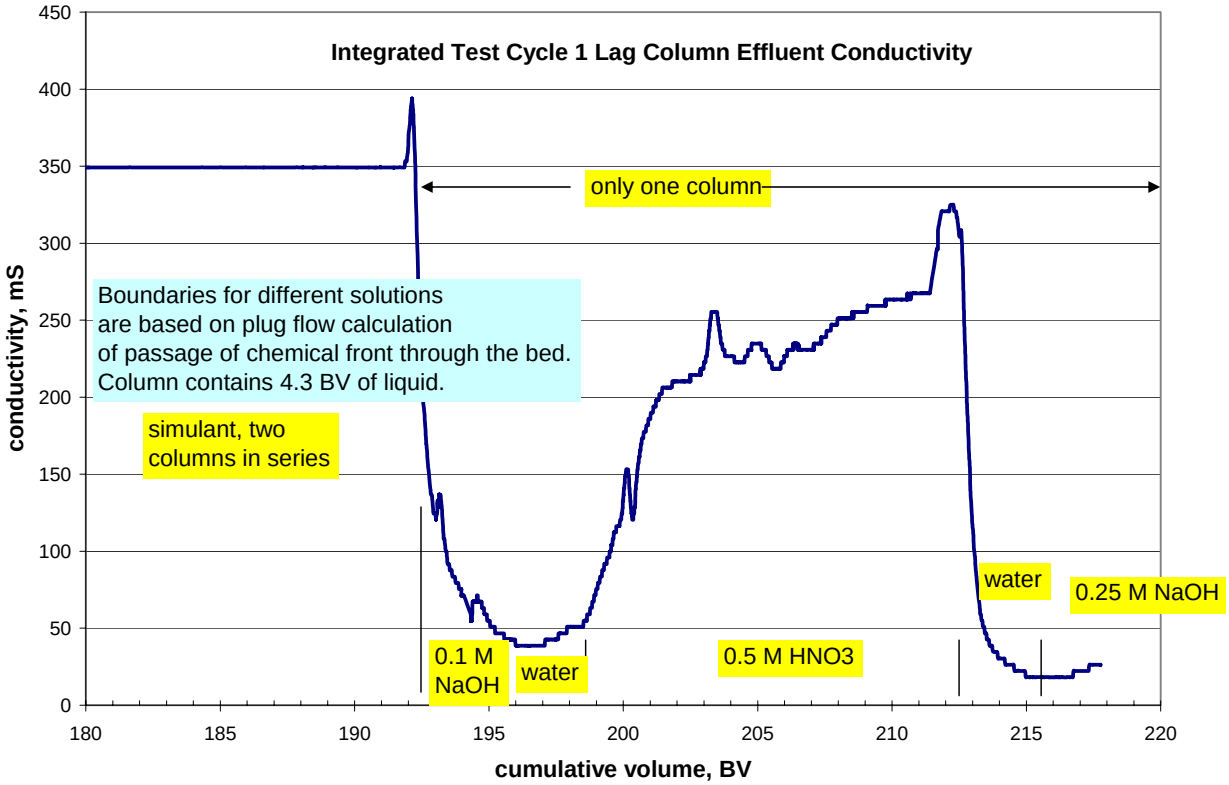


Figure 62. Effluent Conductivity During Cycle 1

During testing, the pH and conductivity readings of the effluent streams did not always reach the steady state values of the standard solutions listed in Table 43. Also, during some transitions from one solution to the next solution mixing that occurred made the demarcation between each of the solutions difficult to discern. This was especially true between the 0.1 M NaOH/water and water/0.25 M NaOH interfaces, as seen in Figs. 61 and 62 for Cycle 1. Furthermore, SIPP was required by RPP-WTP to use prototypic volumes of each of the solutions, see Table 44, even though the SIP IX columns had proportionately more liquid freeboard than the latest WTP design. Because of the volumes used to transition from one to another solution were smaller than the internal volume of the columns, and because mixing occurred between the different density solutions, three solutions (0.1 M NaOH, pre-elution rinse water, and post-elution rinse water) did not have sufficient volume to fully displace the preceding solution.

Table 44. Comparison of the Volume for Each of the CIX Regeneration Process Solutions to the Internal Volume of Pilot-scale CIX Column

Process solution	Volume pumped into column, BV	Internal volume of SIPP IX column, BV
0.1 M NaOH	3	4
Deionized water	3	4
0.5 M HNO3	15	4
Deionized water	3	4
0.25 M NaOH	6	4

2.8.5.2 CIX Chemical Observations

2.8.5.2.1 <u>Cesium RPP-WTP Breakthrough Criterion</u>

When SIPP was in its planning stages during the Summer of 2003 (Duignan, 2003c), the breakthough criterion was defined as when the cesium concentration of the LAW exiting the lead column increased to 50% of that of the incoming feed stream. For Campaign II, the prototypic 5 M sodium feed stream had a concentration of 5,900 μg/L of cesium (See Tables 29 or 31). This implied measuring cesium concentrations of at least 2,950 μg/L. Such concentrations are not a problem to measure, and in fact subsequent tests submitted to the SRNL Analytical Laboratory, using an ICP-MS technique, demonstrated a minimum detection limit of 20 μg/L. Even more sensitive measurements could be made if it were not for the high concentration of sodium, which requires heavy dilution of the sample. This ability was discussed during the pre-Campaign II test meeting held at SRNL on 23 March 2004 with the RPP-WTP customer. However, eleven days before SIPP Campaign II testing began, on 1 April 2004, the RPP-WTP customer informed SRNL that a new criterion (Toth, 2003) was to be used, which required the detection of the 0.3 Ci/m^3 of Cs-137 from the CIX polishing column. Since SIPP had only lead and

lag columns, then this criterion was to be applied to the lag column (Sundar, 2004). As given in Table 2 of Toth (2003), 0.3 Ci/m^3 is equivalent to 3.7E-8 M in cesium or 5.2 µg/L. This magnitude of cesium presented a challenge to measure and, as described in the following section, was not overcome when tests with spiked samples were made. While cesium concentrations were reported down to 5 µg/L, the uncertainty was large and lag column results may be more qualitative, than quantitative.

2.8.5.2.2 Measurement Uncertainty

The purpose of the resin is to remove cesium from LAW solutions that contain a mixture of constituents and that are 5 M in sodium. Evaluation of the effectiveness of the resin requires the measurement of cesium concentration under challenging conditions, that is, with a high concentration of sodium. The Analytical Development Section (ADS) of SRNL claims an accuracy of ±20% of the stated value. ADS accuracy includes the sum of bias and random error of two standard deviations. Because of the large sodium concentration, we decided to check that accuracy using spiked samples that were 5 M in sodium. The results are shown in Fig. 63.

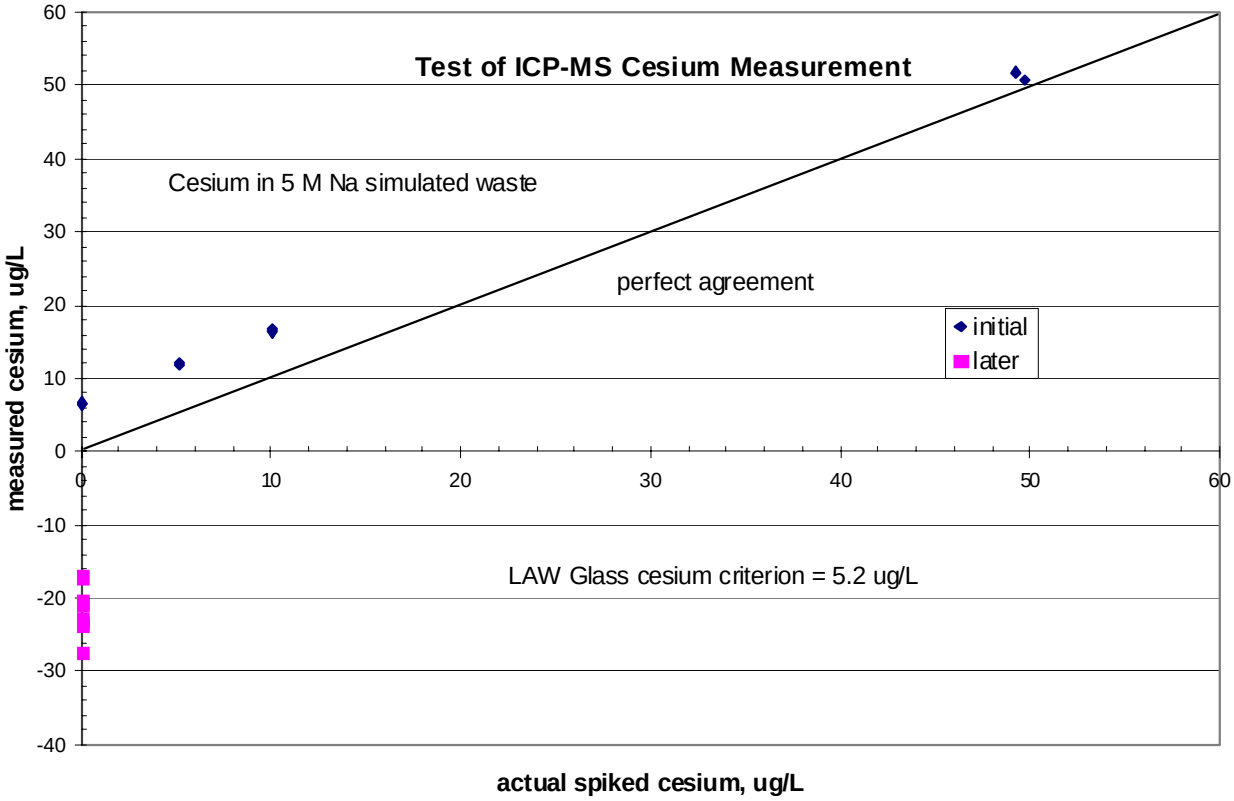


Figure 63. Test of Ability of ICP-MS to Measure Cesium

The initial results were encouraging and indicated a bias of less than 10 µg/L of cesium concentration for very low concentrations and less than 10% random error for concentrations of 50 µg/L. Unfortunately, some later samples were analyzed to have

negative concentrations as low as -27 µg/L. Of course, negative concentrations are physically impossible, but provide useful information about the uncertainty of the measurement. Since both positive and negative measurements errors were detected, it was decided to not use the concept of bias; that is, the entire error was considered to be random. Note that, even a random error of ±10 µg/L would be insufficient to meet the new, more stringent, CIX criterion.

Previous measurements (Steimke, 2002), not plotted in Figure 63, for concentrations greater than 7000 µg/L confirmed a 2σ random error of ± 10% for higher concentrations. Therefore, a conservative estimate for the random error of cesium concentration measurements for this data set is: ± (10% reading + 30 µg/L). Thus, for this data set, the minimum detection limit for cesium in 5 molar sodium solution is 30 µg/L. This random error must be kept in mind when evaluating such low concentrations. After we analyze data from Cycles 3 and 4 we will be able to reassess the magnitude of random error.

2.8.5.2.3 <u>Cesium Removal Effectiveness</u>

Simulant enters the lead column where more than 99% of the cesium is removed and then enters the lag column, where more cesium is removed. Figure 64 shows the cesium concentration exiting the lead column in Cycles 1 and 2, as a function of bed volumes passed.

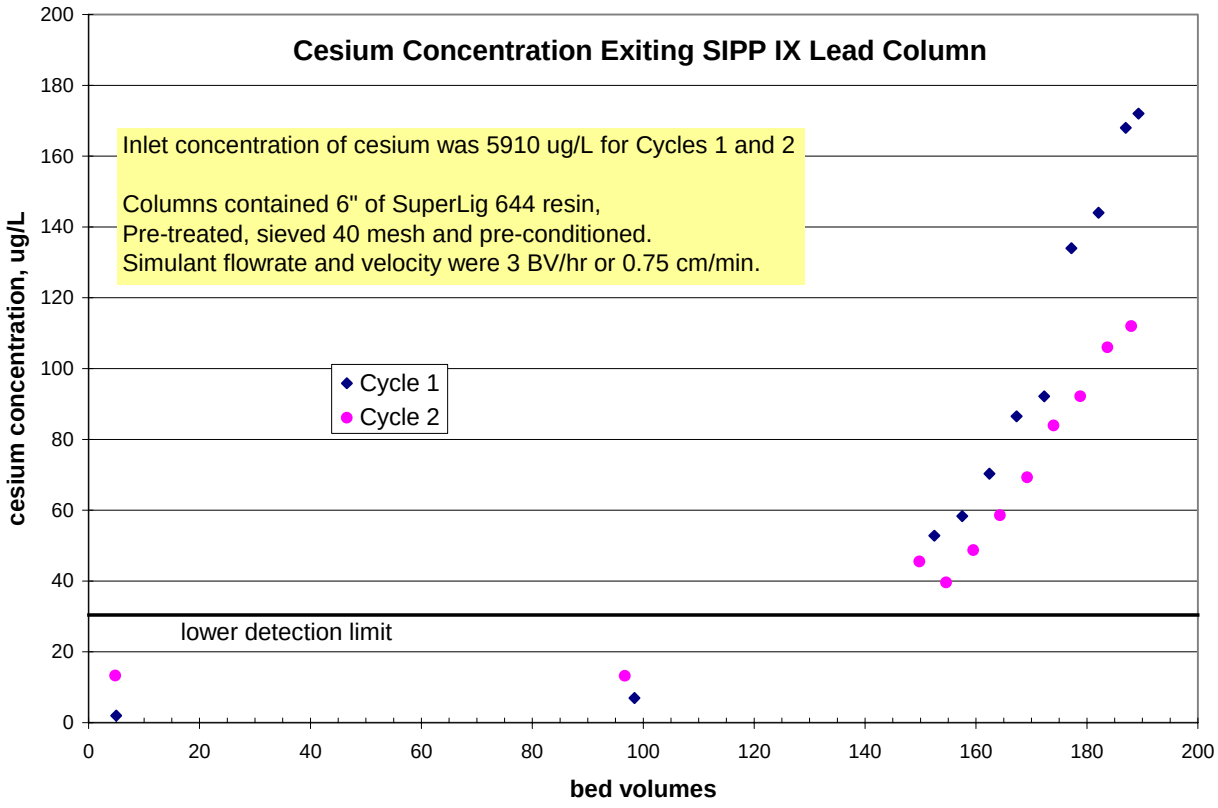


Figure 64. Cesium Concentration in Simulant Exiting Lead Column

Initially, the cesium concentration was low, or perhaps really zero when considering analytical uncertainty, and then increased. Note that the effluent concentration in Column 1 (Cycle 1 lead column) increased sooner than in Column 2 (Cycle 2 lead column). As a possible explanation, both columns had the same volume of resin, but Column 2 may have had more mass, and therefore more capacity for removing cesium. In filling the columns with resin the requirement was to fill both columns to the same height using the same procedure, but it was possible that each column had slightly different packings, leading to slightly different masses. The Work Instruction for this activity calls for measurement of resin mass on a dry basis for both columns at the end of SIPP testing, i.e. after the Cycle 4 test. For both cycles the final effluent concentration did not exceed 3% of the inlet simulant feed concentration after processing at least 180 BV of simulant feed.

Figure 65 shows the cesium concentration exiting the lag column. Considering the uncertainty in the analytical measurement of cesium, all of the measurements may really be zero. Thus, given the measurement uncertainty and minimum detection limit, it is not possible to determine if the pilot scale IX unit operation met the RPP-WTP criterion for acceptance, i.e., less than 5.2 µg/L of cesium from the lag column. However, Fig. 64 clearly shows that at 180 BV the lead column was still well within the old criterion, i.e., 175 µg/L / 5900 µg/L = 0.03 or 3%, which is much less than the 50% breakthrough point.

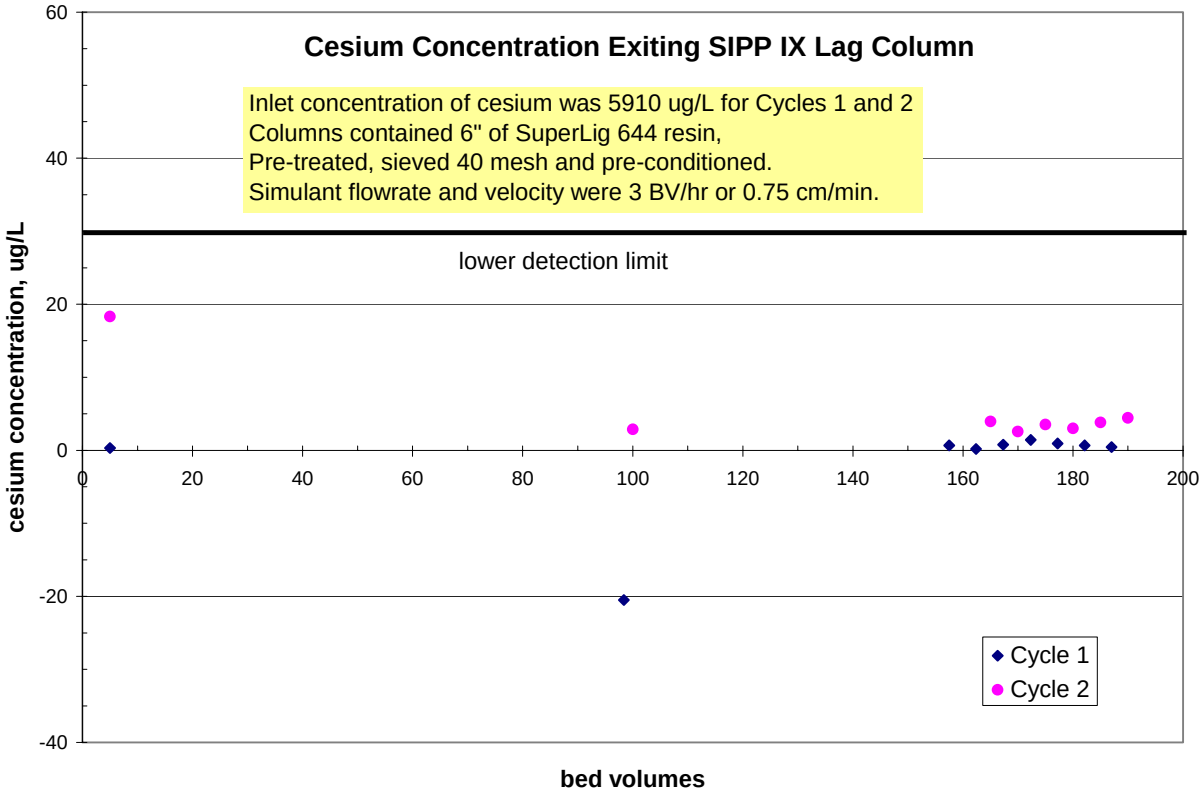


Figure 65. Cesium Concentration Exiting Lag Column

2.8.5.2.4 Cesium Mass Balance

In the CIX unit operation, cesium enters the two IX columns dissolved in simulant and leaves the columns in simulant at a much lower concentration and also in eluate and other solutions. The total cesium mass in should equal the total cesium mass out plus any accumulation. For these IX columns, accumulation should be small. To perform this calculation, the LAW feed and receipt tanks were calibrated for volume. The mass balances for Cycles 1 and 2 are shown in Table 45.

The rows of the table labeled "fresh simulant in" and "Cycle 1 spent" refer to inputs of cesium to the columns. The latter entry is the last simulant exiting the column during Cycle 1, which was set aside following WTP instructions and added to the simulant supply tank for Cycle 2. The rows labeled "simulant out" through "regenerant" are cesium outputs. The row labeled "final simulant" was the last simulant exiting the column and was collected separately from the rest of the simulant.

The volumes of simulant listed were measured using calibrated marks on the side of the simulant supply tank. Most of the rest of the volumes were computed using the measured flowrate and the elapsed time. Some of the volumes were computed from the mass of a solution and the measured density. The row labeled "0.1 M NaOH" for Cycle 2 includes pre-elution rinse and some of the eluate because the column discharge hose was moved too late. The row labeled "eluate" for Cycle 2 contains only the last part of the eluate.

The mass of cesium in a tank or jug is equal to the measured cesium concentration in the tank or jug multiplied by the volume. The biggest source of uncertainty in the mass of cesium was the uncertainty in the concentration. Total uncertainty for a particular solution was computed as the root sum square of the contributions from uncertainty in volume and uncertainty in concentration. The uncertainty of the simulant volume was ± 3 liters and ± 1 liter for all other solutions. The uncertainty in total mass of cesium in or cesium out was also computed using root sum square. Table 45 shows that the mass of cesium agreed with mass of cesium out, to within the stated uncertainty.

Table 45. Mass Balances for Cycles 1 and 2

Cycle 1 Solution	volume*, liters	cesium conc., mg/L	ADS #	cesium mass, mg	mass uncert-ainty, mg		Cycle 2 Solution	volume*, liters	cesium conc., mg/L	ADS #	cesium mass, mg	mass uncert-ainty, mg
fresh simulant in	428	5.91	7820	2529	284		fresh simulant in	437	5.91	7820	2583	289
							Cycle 1 spent	9.4	0.12	8198	1	0
							total Cs in				2584	289
simulant out	408	0.0213	9494	9	2		simulant out	427	0.00897	9495	4	1
final simulant	9.4	0.12	8198	1	1		final simulant	20	0.102	8358	2	1
0.1 M NaOH	12.2	0.344	8509	4	1		0.1 M NaOH	44.5	50.6	8359	2252	277
pre-elution rinse	0.7	70.8	8497	50	76		pre-elution rinse	0	0	8515	0	0
eluate	31.5	87.2	8200	2747	363		eluate	6.8	2.47	8360	17	4
post-elution rinse	7.5	0.887	8201	7	2		post-elution rinse	5.2	0	8361	0	0
regenerant	4	0.0336	8510	0	0		regenerant	11	0.0109	8362	0	0
total Cs out				2817	371		total Cs out				2274	277

* Volumetric measurement uncertainty for simulant is ± 3 liters and ± 1 liter for all other solutions

An additional check on the cesium mass out was available for Cycle 1, i.e., the mass of cesium in the eluate was measured a second way. During Cycle 1 testing, samples were periodically taken during elution with the 0.5 M nitric acid solution to measure how much cesium would be stripped from the column with time. That is, the cesium concentration spikes just after the front of acid reaches the bottom of the column, followed by a sharply decreasing concentration. Figures 66 and 67 plot the cesium concentrations of eluate samples discharging from Column 1. The Trapezoidal Rule and Simpson's Rule were used to numerically integrate the data in Fig. 66. In principal, these integrals should give the same mass of cesium as the mixed sample, but with more uncertainty because both Simpson's Rule and the Trapezoidal Rule are approximations. Simpson's Rule was applied two different ways. Recall that the equation for Simpson's Rule is:

$$\int (x)dx = h/3\ (f(x_0) + 4f(x_1) + 2f(x_2) + 4f(x_3) + \ \ldots. + 4f(x_{n-1}) + (f(x_n))$$

where h is the difference in x between adjacent points. First, Simpson's Rule was applied to the data in Figure 66. Then, an additional point with concentration equal to zero was added to the beginning of the data set and another was added at the end of the data set. Then Simpson's Rule was applied again. The two applications of Simpson's Rule give different results depending on whether the data point with the largest concentration is multiplied by two or four. The results for cesium mass in the eluate follow.

Trapezoidal Rule	2,911 mg
Simpson's Rule #1	2,679 mg
Simpson's Rule #2	3,136 mg

Therefore, these three masses are consistent with cesium mass in the mixed eluate 2,747 ±294 mg.

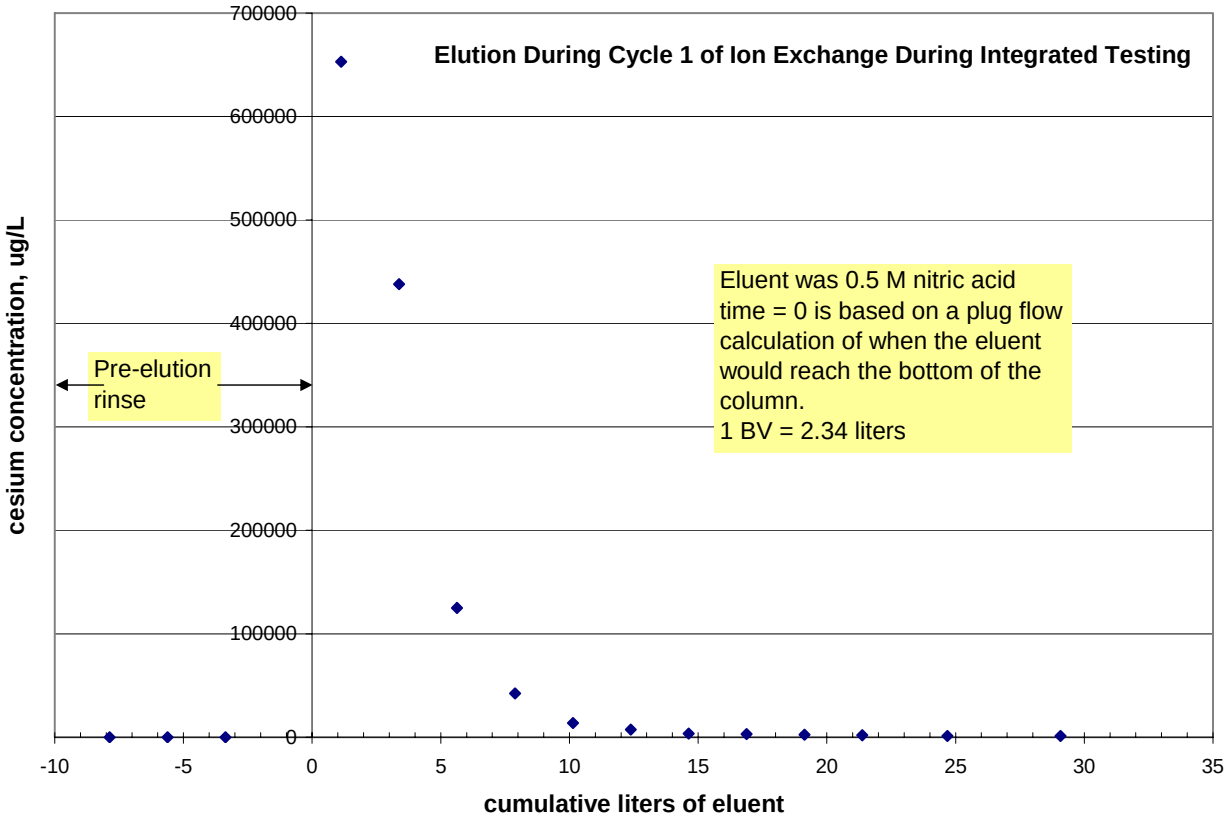


Figure 66. Elution Plot, Linear

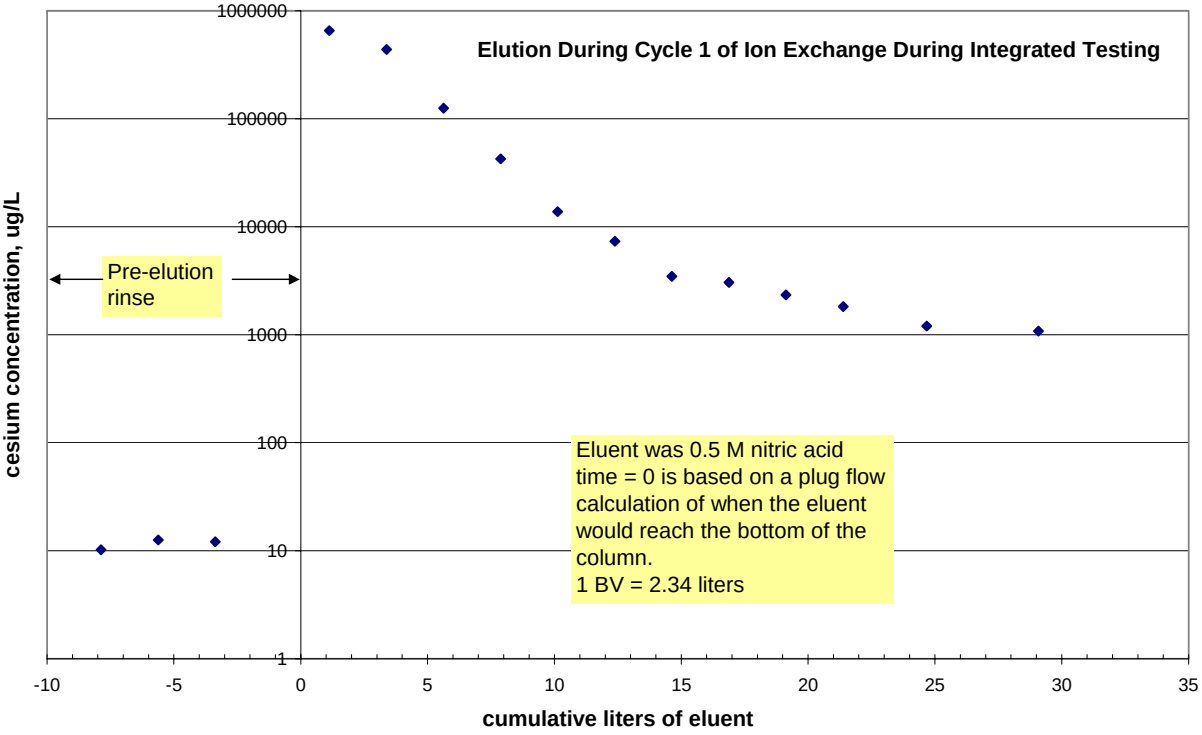


Figure 67. Elution Plot, Logarithmic

2.8.6 Pilot CIX Conclusions (Author – Steimke)

- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of waste was treated. In fact, as shown in Fig. 51, in the worst case, Cycle 1, even after 180 BV of treated waste only the lead column exit cesium concentration was only 3% of the feed waste.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical ability to measure very low cesium concentrations in five molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of waste was treated.
- The masses of cesium in and out of the resin beds for Cycles 1 and 2 balanced to within measurement uncertainty.
- Pressure drops throughout the two cycles were low and the resin beds permeabilities were about the same as were measured for the 24-inch Test (Fowley et al, 2004).

2.9 *PILOT TREATED LAW EVAPORATOR* (AUTHORS – ADAMSON, WILLIAMS & ZAMECNIK)

The Treated LAW Evaporator Process, or TLP, is the last separation technology unit operation in the RPP-WTP Pretreatment Facility that a waste will see on start up. With respect to SIPP, it will be the last separation operation in line because it evaporates the treated LAW products that comes from the pilot CIX unit operation. This treated LAW product is then mixed with recycle streams to produce a feed stream for the TLP unit operation.

This section will explain the pilot TLP unit operation that was done as part of Campaign II testing. The process started with the preparation of the TLP feed product in a predetermined fashion, see Table 4. That chemical explanation of the feed stream formation will be followed by a short description on how feed formation was handled just before TLP operation and then how the waste stream was handled during and after its concentration. The following section will discuss the physical equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made.

2.9.1 Chemical Description of the Pilot TLP Feed Stream (Author – Zamecnik)

The TLP evaporator feeds consisted of the Ion Exchange product (Treated LAW) and the LAW SBS Condensate supplied by VSL. The compositions of these two feeds and the combined feed composition are listed in Table 46. Note that the calculated feed composition is the total composition including undissolved solids, whereas the measured feed composition is exclusive of solids. The insoluble metals Fe, Mg, and Zr are found to be higher in the calculated (total) value than in the supernate-only measurement, as expected. The undissolved solids content of the feed was only about 0.09 wt%. At this level, the UDS measurement is subject to significant error, which could be as high as ±100%. However, there were visible solids in the feed.

Table 46. Measured Composition of TLP Feeds

		IX Product	LAW SBS	TLP Feed Calculated	TLP Feed Measured
Total Solids (wt%)		27.93	0.26	16.30	16.24
Undissolved Solids (wt%)		0.00	0.17	0.07	0.09
Supernate Solids (wt%)		27.93	0.09	16.24	16.16
Density (kg/L)		1.247	1.002	1.131	1.136
Dissolution/Prep		None	Dissolution	Total	Supernate
Elements/Anions	Ag	<0.6	<4.01		<0.6
in mg/L	Al	7190	7.75	3782	3770
	B	79.5	136	106	91.7
	Ba	<0.04	<0.27		<0.04
	Ca	0.38	<0.40	0.20	2.22
	Cd	<0.04	<0.27		<0.04
	Ce	<17.3	<10.2		<17.3
	Co	<0.09	<1.07		<0.086
	Cr	160	5.42	86.7	89.8
	Cs	0.0025	0.075	0.037	0.17
	Cu	0.28	<0.40	0.15	0.16
	Fe	1.33	12.0	*6.41*	*0.558*
	K	18900	127	9992	9530
	La	<0.38	<1.33		<0.38
	Li	1.07	11.9	6.19	4.65
	Mg	<0.03	3.67	*1.74*	*<0.026*
	Mn	<0.03	<0.12		<0.034
	Mo	9.74	<1.33	5.12	5.44
	Na	110000	605	58094	59000
	Na (AA)	109000	607	57569	62400
	Nd	<0.81	<11.9		<0.81
	Ni	0.302	0.35	0.33	0.28
	P	775	<10.7	407	403
	Pb	15.3	<10.7	8.02	8.09
	Rb	4.72		2.48	2.73
	Re	0.572	7.19	3.71	9.41
	S	1152	80.3	644	667
	Si	57.0	22.5	40.6	41.7
	Sr	0.072	<0.072	0.038	0.016
	Ti	<0.12	1.18	*0.56*	*<0.12*
	Zn	3.05	1.32	2.23	12.6
	Zr	0.51	1.32	*0.90*	*<0.16*
bromide		<100	<88.6	879	<100
chloride		1090	646	96.6	753
fluoride		48.0	150	552	70.0
formate		1020	34.0	39164	626
nitrate		74400	139	13032	42600
nitrite		22400	2657	363	13500
oxalate		690	<88.6	1161	389
phosphate		2210	<88.6	1617	1290
sulfate		2860	240	973	1720
ammonium			2050	1233	998
unbound hydroxide		2346			1081
carbonate					20150
total organic carbon					1360

2.9.2 Simulant Handling (Author – Williams)

To make feed for the pilot-scale TLP, on 05/10/04 the 1,075 kg of treated simulant processed through the CIX were mixed with 800.1 kg of LAW SBS Quencher from VSL, a recycle stream. For Campaign II, no 0.25 M NaOH recycle stream from the CIX was used as per the Test Specification (Longwell, 2003). However, the mixing was done only intermittently as the ammonia smell was quite strong. Additional ventilation was employed for all operations subsequent to LAW SBS Quencher addition due to strong ammonia smell. Samples were pulled for analysis during and following TLP Evaporator operations to measure the ammonia concentration. Figure 68 (a) and (b) shows both the feed to the evaporator and the resulting bottoms after concentration. Figure 68 (c) show the bottom of the TLP Bottoms sample bottle, i.e., Fig. 68 (b), to highlight color and small amount of undissolved solids.

(a) TLP Feed (b) TLP Bottoms (c) Bottom view of Fig. TLP1 (b)

Figure 68. Simulated TLP Feed and Resulting Bottoms Concentrate

Upon startup, on 12 May, 2004 of TLP operations, a total of 309 g of DOW Corning Q2-3183A Antifoam was added directly into the evaporator in three batches of 103 g each in a 10:1 ratio with DIF water. The dilution was necessary to fully incorporate the antifoam because of its thick consistency. Despite having fewer recycle streams, the total volume of the TLP feed was larger than that for the FEP. Considering that the concentration target was different from the FEP bottoms, then the final concentrated TLP volume would be much larger than that for the FEP, in fact it was approximately 3.5 times larger. This meant that a steady-state evaporated concentration would be attained before exhausting the feed. Once the target slurry concentration was realized, then the TLP bottoms would have to be removed while more feed was being sent into the TLP at a rate that would keep the antifoam concentration at the target level of 1500 ppm. Of course, removing concentrated slurry meant removing its antifoam too. Therefore, antifoam had to be reintroduced periodically to maintain its concentration constant. Additional

amounts of antifoam were added in batches and after approximately each 76 liters of TLP bottoms were removed, 154 grams of antifoam were added.

A total of 713 kg of TLP Evaporator bottoms were produced at 8M Na and placed in three drums labeled "Campaign II LAW Concentrated Slurry (Drum 1 of 3, 2 of 3, and 3 of 3)" for shipment to VSL on 13 May. After Campaign II was complete, the condensate collected from both the TLP and FEP operations were combined. This mixing is how WTP will handle its condensate streams, which will then be made available to produce wash and caustic solutions. For SIPP the combined condensate streams will be used for Campaign III wash and caustic solutions.

2.9.3 Pilot TLP Equipment (Author – Adamson)

One of the requirements for SIPP as per the Test Specification (Longwell, 2003) was to utilize and modify existing equipment in the Engineering Development Laboratory of SRNL. To that end only one pilot-scale evaporator was constructed to be used for both FEP and TLP testing because the design of those RPP-WTP Pretreatment Facility evaporators is the same. The task plan for those two evaporators for SIPP did not require simultaneous operation, therefore, once one unit operation test completed the test rig could be made ready for the subsequent test. As such, the description of the pilot-scale TLP is the same as for the pilot-scale FEP and therefore will not be repeated here. Please refer to equipment description for the FEP in section 2.6.3.

2.9.4 Pilot TLP Operation (Author – Adamson)

Prior to the TLP evaporation campaign, the evaporator system was cleaned and inspected. The evaporator system was cleaned and then operated with water for approximately two hours to make sure it was completely free of material from its last use. Subsequently, a turbidity test was conducted on the spent water in the system to ensure the system was clean and it had a value of 0.95 NTU, which indicated it was free of measurable solids.

The TLP evaporator was operated using Work Instructions, I-EDL-132 "SIPP Treated LAW Process (TLP) Evaporation Test". Manually recorded information was recorded in pilot-scale TLP notebook (Adamson, 2004).

The pilot-scale TLP started with 1,638.8 liters (432.9 gallons) of simulated treated LAW feed. It took approximately 12 hours to boil off 1,115.7 liters (394.7 gallons) of water from the feed that had an initial feed density of 1.14 kg/L to obtain the target density of 1.395 kg/L at 25° C. The total volume of the TLP Campaign II concentrated product was 523.1 liters (138.2 gallons).

The average boil off rate (condensate) for the TLP campaign was 1.58 L/min (0.42 GPM), which compared well to the design boil-off target rate of the RPP Pilot-scale Evaporator system of 1.5 L/min (0.40 GPM).

Evaporation of the TLP simulant feed occurred at approximately 55°C under -13 psig vacuum (1.65 psia), since the atmospheric pressure was approximately 14.65 psia during the campaign. However, due to periodic removals of the TLP concentrate, followed by additions of cooler simulant feed, there were fluctuations in the evaporator pot temperature and pressure. The time histories of those fluctuations are shown in Figs. 69 and 70, respectively.

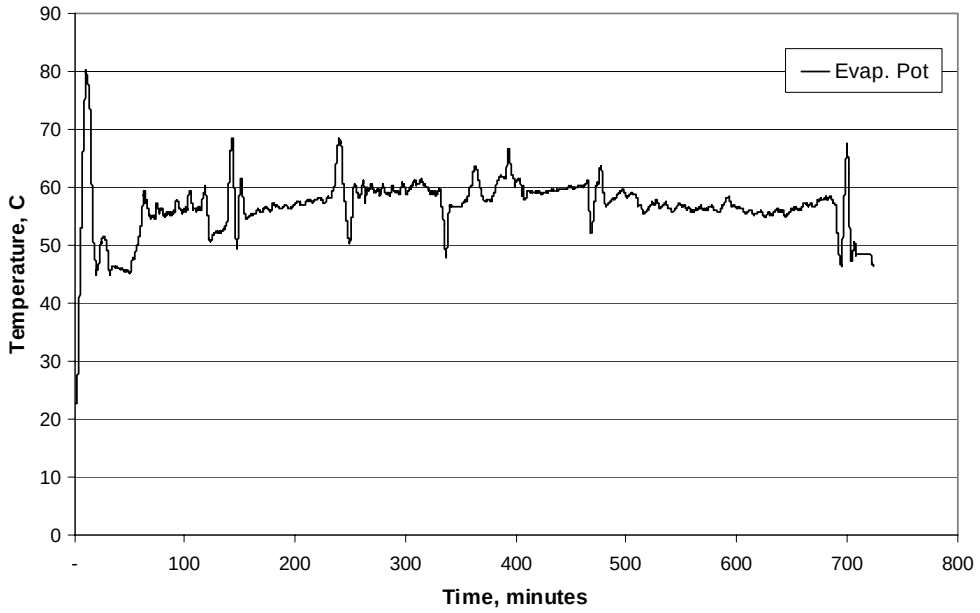


Figure 69. TLP Evaporator Pot Temperature History

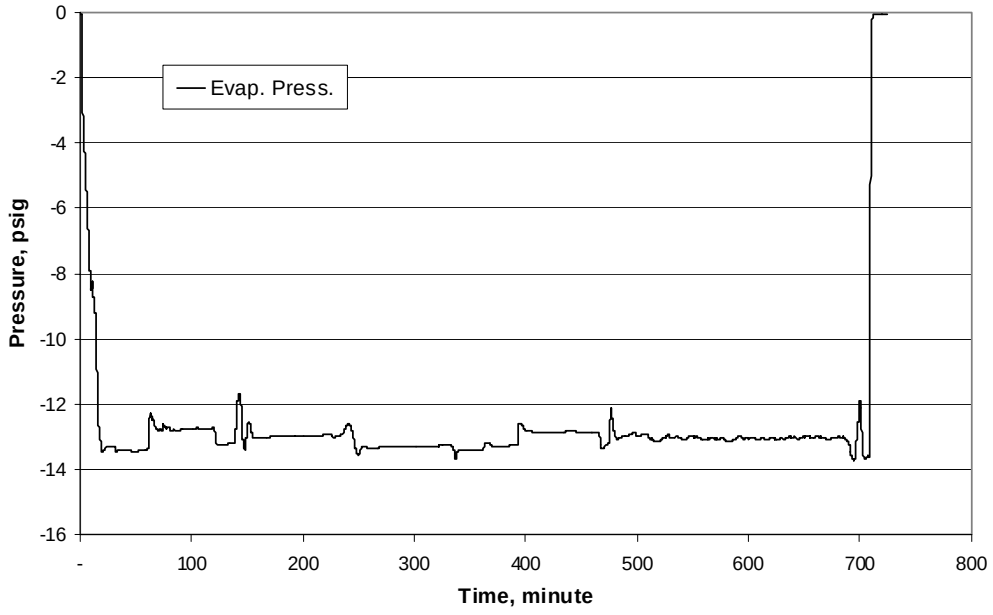


Figure 70. TLP Evaporator Pot Pressure History

The TLP simulant was re-circulated through the reboiler and evaporator system at approximately 85 gpm as shown in Fig. 71 below. The recirculation of the simulant was continuous for the duration of the campaign.

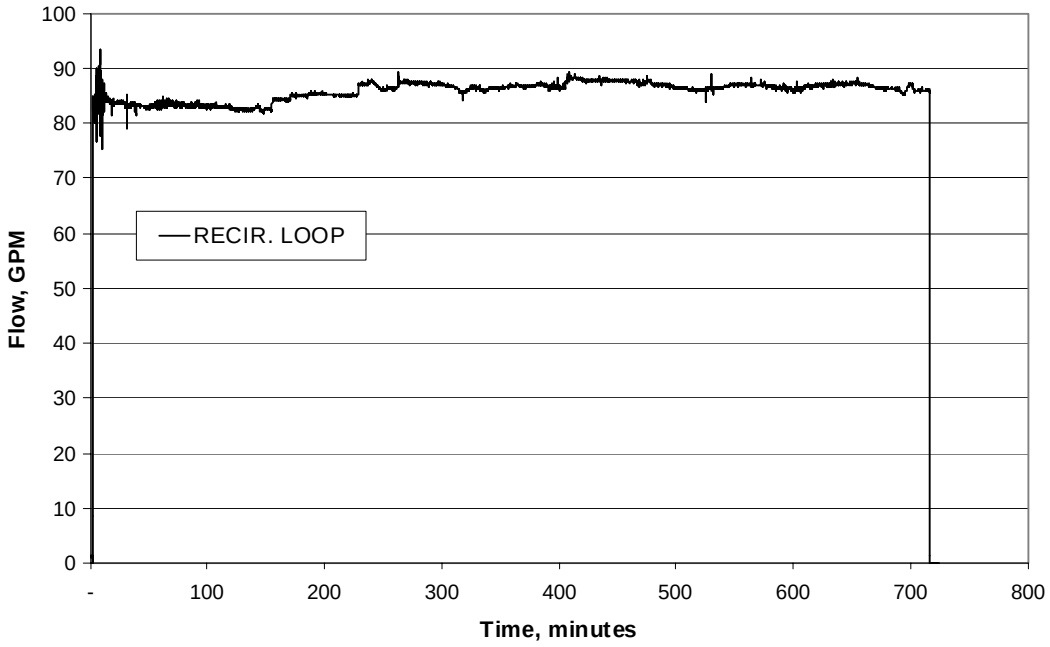


Figure 71. TLP Simulant Recirculation Flow in Evaporator System

A total of 926.4 grams of Q2 antifoam was added to the simulant during the TLP campaign II evaporation process. A dilute mixture of antifoam was pulled into the system via vacuum through valve CL-BV13 at the bottom of the evaporator pot. Because the antifoam chemical was relatively thick, the manufacturer recommends diluting it with DI water to a mixture of 10:1 before use. Initially 309 grams of Q2 were added to the simulant and then, as concentrate was removed additional Q2 was added, in four subsequent equal batches of 154 grams as concentrated bottoms was removed. While the goal was an antifoam concentration of 1500 ppm the final concentration ended up being 1300 ppm because of the pilot-scale TLP batch operation. That is, the experiment started at 1500 ppm, with a fixed evaporator volume of approximately 150 liters, and stayed that way until the feed, within the evaporator, reached the target density of 1.36 kg/L at 50°C. In this phase, the feed rate matched the evaporation rate. Once at density, the batch mode operation began with slowly allowing feed to enter the evaporator slightly faster than the evaporation rate to maintain the density while allowing the evaporator volume to increase to approximately 225 liters. At this point the antifoam concentration dropped to 1500 ppm x (150/225) = 1000 ppm. No increased foaming was noted and previous work (Qureshi et al., 2004) has shown that antifoam beyond 300 ppm is not effective. Once at 225 liters, then 75 liters of bottoms were removed to begin the next batch. This process continued until all the feed was consumed. However, a further drop in antifoam concentration was not desired, therefore enough antifoam was added so that the next 75 liters of concentrated feed would also have a 1500 ppm concentration. When

the process was finished the antifoam concentration of the composite product was 1300 ppm, based on the 926 grams of antifoam in 523 liters (711 kg) of bottoms produced. During the entire evaporation period very little foaming was witnessed.

To evaluate the pilot-scale TLP unit operation, samples from primary condensate, secondary condensate, and evaporator bottoms were pulled every 200 liters of simulant feed pumped into the evaporator. Along with those samples, other, more frequent samples, were pulled of the evaporator bottoms to check the density of the concentrate to determine when the target slurry density was attained. The density was checked using a density meter (Anton Paar, DMA 4500) and verified using a 200 ml calibrated flask and a scale (M&TE: DWB-514). All density measurements were recorded in the lab notebook.

After all the feed was evaporated the remaining bottoms in the pilot-scale TLP were removed and added to the concentrate previously removed. As already mentioned the final volume of concentrate produced was 523.1 liters (138.2 gallons), which was put into three 55-gal drums. As the drums were being filled from the evaporator, hot samples (at 50°C) were taken to measure the densities to verify that the target bottoms density of 1.36 g/ml was being maintained. Table 47 shows the average values of those density measurements, as well as the volume and mass of each drum's contents. The table also includes values for the initial feed simulant at 25°C.

Table 47. TLP Simulant and Concentrate

TLP Simulant	**Volume, liter (gallon)**	**Density (±0.01 kg/L)**	**Weight (kg)**
TLP Feed Simulant	1,638.8 (432.9)	1.14*	1,875.1
Drum # 1 concentrate	155.4L (41.1)	1.36**	211.4
Drum # 2 concentrate	154.3L (40.8)	1.37**	211.4
Drum # 3 concentrate	213.4L (56.4)	1.36**	290.2

* Temperature at 25° C.
** Temperature at 50° C. Also note that the target concentrate (bottoms) density of 1.36 kg/L was at the evaporator pressure of 1 psia. While the densities for the concentrate going to the drums were measured at the correct temperature, the pressure was atmospheric, i.e., 14.65 psia. However, because of the very small compressibility of liquids, the effect of pressure on the slurry density is not significant in values given above.

A total of 1,115.7 liters (294.7 gal) of clean condensate (water) was removed from the simulant via evaporation to obtain 523.1 liters (138.2 gal) of concentrate with a density of 1.36 kg/L at 50° C or 1.39 kg/L at 25° C. The concentrate was stored for uses at the Vitreous State Laboratory (VSL) of Catholic University of America in Washington, D.C. for further testing/processing in the pilot-scale LAW melter for the RPP Project.

2.9.5 Pilot TLP Discussion of Results (Author – Adamson)

2.9.5.1 Experimental Observations

The SIPP TLP evaporation Campaign II was conducted on Wednesday, May 12, 2004 in SRNL's Engineering Development Laboratory. A total of 1,638.8 liters of TLP simulant feed was concentrated down to about 523.1 liters in a continuous run. The evaporation process was completed without any glitch or equipment failure. However, the Demister® instrumentation had to be purged during the campaign due to moisture in the lines causing inaccurate readings.

Essentially no foaming was witnessed during the TLP campaign, however frothing was seen throughout the campaign as shown in Fig. 72. The picture depicts the simulant boiling inside the acrylic section of the evaporator pot. Makeup antifoam was added but visual inspection would suggest that antifoam was not required to prevent foaming during the TLP evaporation process.

Figure 72. TLP Simulant Boiling in Clear Acrylic Section of Evaporator

2.9.5.2 TLP Waste Products

The TLP evaporator product and the predicted composition are shown in Table 48. The values for the various streams agree reasonably well, but a number of the concentrations found for the dissolution sample were significantly off from what was expected, and therefore were not shown here. This sample is being reanalyzed and results will be reported in the final SIPP report.

Figure 73 shows the measured total solids, undissolved solids, and density of the evaporator bottoms plotted versus the approximate amount of feed added. A material balance model was applied to the evaporator, and the results are shown as the solid lines. There was significant scatter in the solids measurements, and the final mass of concentrated bottoms plus condensate calculated was about 22 kg lower than the feed amount. This minor discrepancy may be due to a change in total volume upon

evaporation – that is, if the condensate were 1,138 L vs. the calculated 1,116 L, the balance would be close. These data do not indicate any precipitation of additional solids beyond the amount present in the feed. Analyses of the Dow Corning Q2-3183A antifoam are pending.

Table 48. Measured TLP Products

All values mg/L except as noted	Bottoms (Calculated)	Bottoms (Measured)	Bottoms (Supernate)	Condensate
Total Solids wt%	40.54	41.30		0
Undissolved Solids wt%	0.23	0.31		0
Supernate Solids wt%	40.40	41.12		0
Density kg/L	1.426	1.384		1.000
Dissolution/Prep		Dissolution	Supernate	None
Ag		<10.3	<0.6	<0.6
Al	11815		11500	<0.86
B	287		274	3.31
Ba		<0.76	<0.04	<0.04
Ca	6.95		3.56	<0.12
Cd		<0.69	<0.04	<0.04
Ce		<12	<17.3	<17.3
Co		<1.52	<0.09	<0.08
Cr	281	181	266	4.90
Cs	0.52	0.49	0.38	0.110
Cu	0.51	<1.0	0.53	<0.06
Fe	20.1	28.1	1.39	<0.15
K	29866		33100	0.346
La		<6.4	<0.38	<0.37
Li	14.6	13.9	13.0	0.702
Mg	5.46	5.66	<0.03	0.037
Mn		<0.62	<0.03	<0.03
Mo	17.0	13.9	15.3	<0.35
Na	184897	167464	174000	303
Na (AA)	195552		202000	17.4
Na M	8.04 - 8.50	7.28	7.57 - 8.78	
Nd		<3.39	<0.81	<0.19
Ni	0.86	<14	0.77	<0.81
P	1262	2.43	795	<0.12
Pb	25.4		24.0	<1.24
Rb	8.56	0.296	7.35	<0.01
Re	29.5	1.12	28.0	<0.02
S	2091		1906	<1.6
Si	131		157	<2.07
Sr	0.051		0.081	29.5
Ti	0.001	0.235	0.34	<0.01
Zn	39.6	43.5	37.8	<0.1
Zr	2.82	4.35	1.04	<0.16
		(diluted slurry)	(supernate)	
chloride	2360	3418	2520	<20
fluoride	219	70.6	39.0	<20
formate	1962	2394	1620	<100
nitrate	133502		125000	<100
nitrite	42307		40100	<100
oxalate	1219	1661	1150	<100
phosphate	4043	4290	2410	<100
sulfate	5390	7598	5120	<50
ammonium	3128	<138	<100	467
carbonate	63147	74736	60000	105
total organic carbon	4262	5951	2800	34.3

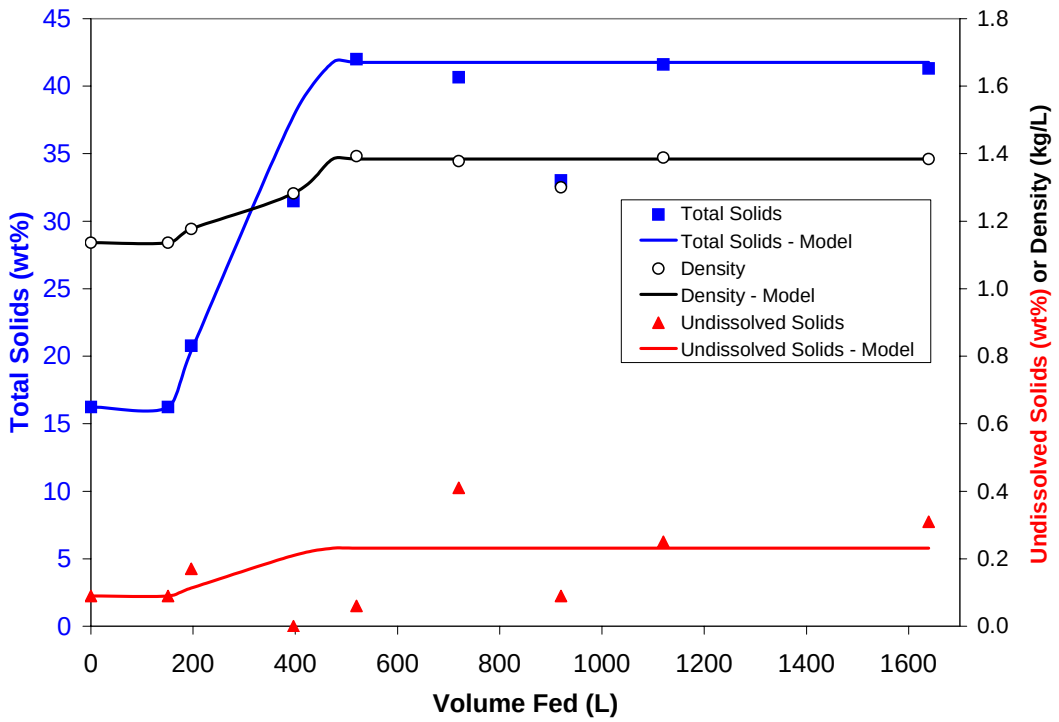


Figure 73. Material Balance on TLP Evaporator of Cumulative Volume Fed

2.9.6 Pilot TLP Conclusions

2.9.6.1 Experimental Observations (Author – Adamson)

• The Pilot-scale evaporator operated well for the TLP evaporation Campaign II via concentrating the TLP simulant from an initial density of 1.14 kg/L to 1.395 kg/L at 25° C (1.360 kg/L at 50° C).

• No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.

• The two Demisters in series operated well with no significant differential pressure build-up across the Demisters during the TLP campaign II. However, condensation had to be purged from the instrumentation lines during the campaign.

2.9.6.2 Waste Products Observations (Author – Zamecnik)

• The composition of the products from the TLP matched what was expected from the mass balance.

• No precipitation of additional solids beyond those in the feed was noted.

2.10 *GLASS PRODUCTION BASED ON SIPP RESULTS* (AUTHOR - ZAMECNIK)

2.10.1 Extrapolated Glass Production Rates

Using the UFP flux data discussed in Section 2.7, the production rates of HLW and LAW glass were estimated. Rates were also estimated by "extrapolation" to different feed compositions. For the Campaign II UFP feed processed, the rates of HLW and LAW glass production were calculated assuming the following:

1. The concentration step in ultrafiltration is the rate limiting step in the production of glass.
2. ILAW glass Na_2O loading of 14 wt%.
3. IHLW glass Fe_2O_3 loading of 12.5 wt% (limiting condition). (Calloway, 2004)
4. WTP production rate is scaled to the SIPP production rate by the ratio of the filter surface areas (710 ft^2 / 6.7 ft^2).
5. Flux vs. time and flux vs. UDS curve-fits shown previously are used (see Figs 50 and 53).
6. Average flux is determined by integrating the area under the flux vs. time curve (see Fig 54).
7. Endpoint UDS = 20 wt%.
8. All dissolved Na that goes to ILAW is "waste" Na.
9. WTP filter area of 710 ft^2 (no reduction in area assumed).

The "extrapolated" glass production rates were determined by calculating the blending of different quantities of the FEP Bottoms, AY102 slurry, and AP101 together. Here it was assumed that the flux curves at these calculated compositions would be the same as the measured curves, i.e., the flux curves are only dependent on the undissolved solids content and not on the actual chemical composition of the feed slurry. This assumption is reasonable <u>so long as the relative amounts of the three components are not changed significantly from the actual amounts tested</u>. For these extrapolated situations, the composition of the FEP Bottoms was assumed to be the same even though the recycle streams would actually have slightly different compositions since the UFP feed composition would be slightly different.

For assumption No. 8, above, "waste" Na (sodium) was defined as any Na in the actual wastes, plus any Na added during washing (0.01M NaOH) and leaching (which was not done in SIPP). Any other Na added was "non-waste" and was not counted towards the ILAW rate. However, in the calculations done for the SIPP (see Appendix A), this distinction was ignored since the only Na additions were small amounts of NaOH added to the recycle streams to maintain the pH>12. These amounts were so small that their effect on the Na concentration in the feed was smaller than the uncertainty in the measurement of the Na.

Table 49 gives the glass production rates for several situations. The "Predicted Feed" column gives the production rates for the feed composition predicted from the mixing of the two simulated waste feed streams with the concentrated recycle stream, i.e., FEP

bottoms. The "Actual Feed" column contains the results from using the actual measured feed composition obtain from samples after the entire mixture was made. The glass rates for these two cases are essentially the same. The target glass rates were 6 MTG/d of IHLW and 80 MTG/d of ILAW (Longwell, 2003), but the actual rates at WTP scale were about 6.6 MTG/d of IHLW and 59.8 MTG/d of ILAW. The target rates were not reached because the ratio of undissolved solids (or Fe) to supernate (or dissolved Na) was too high. The target ILAW/IHLW ratio was 13.3, but the experimentally obtained ratio turned out to be 9.1.

Table 49. Glass Production Rates Based on Ultrafilter Throughput

Process Stream	Property	Predicted Feed[3]	Actual Feed[4]	ILAW/IHLW[5] = 80/6 (13.3)	IHLW[6] = 6 MTG/d	ILAW/IHLW = 80/6, flux adjusted so ILAW[7] = 80 MTG/d
FEP Bottoms	Volume %	11.1	11.1	9.5	10.2	9.6
AY102	Volume %	24.3	24.3	17.6	22.2	17.7
AP101	Volume %	64.6	64.6	72.2	67.7	72.7
Feed	UDS (wt%)	3.13	3.22	2.32	2.85	2.32
	Fe (mg/L)	9315	9532	6900	8510	6890
	Na (mg/L)	117500	114900	120300	118500	120300
Concentrated	UDS (wt%)	20	20	20	20	20
Slurry	Fe (mg/L)	64700	66500	64600	64800	64600
Supernate/Permeate	Na (mg/L)	111900	114600	116100	113300	116100
	(M)	4.86	4.98	5.05	4.93	5.05
Avg. UFP Flux	gpm/ft^2	0.0144	0.0144	0.0148	0.0146	0.0185
ILAW Glass[1]	MTG/d[8]	60.1	61.3	64.2	61.4	80.0
IHLW Glass[2]	MTG/d	6.6	6.8	4.8	6.0	6.0
ILAW/IHLW	ratio	9.1	9.1	13.33	10.2	13.33

1. ILAW glass rate based on 14 wt% Na_2O loading
2. IHLW glass rate based on 12.5 wt% Fe_2O_3 loading
3. Feed composition predicted from blending of FEP bottoms, AY102, and AP101
4. Actual ultrafilter feed composition used
5. Feed blend adjusted to meet this ratio (feed calculated)
6. Feed blend adjusted to meet this value (feed calculated)
7. See 5 + flux adjusted to make rates (calculated model flux not used)
8. MTG/d = metric tons glass / day (tonnes/day)

The "ILAW/IHLW" column, in Table 49, shows the predicted production rates if the feeds had been mixed such that the ILAW/IHLW ratio was 13.3. To achieve this ratio, more AP101 and less AY102 were required, while the FEP Bottoms amount stayed about the same. The UDS solids content of the feed was lowered to 2.33 wt% in this blending scheme. The glass rate ratio was met, but both glass rates would still be less than the targets, indicating that these rates cannot be met at the specified operating conditions. In the "IHLW" column, the blend was recalculated to force the IHLW rate to be 6.0 MTG/d. The resulting ILAW rate was slightly higher than calculated for the predicted feed. For both of these calculated rates, the average permeate flux is slightly higher due to starting at lower UDS concentration.

The last column of Table 49 shows the blending required to meet the ILAW/IHLW ratio of 13.3. The glass rates require the same blending as column 3. Only a higher UFP flux

is required. Note that the flux shown is higher than predicted from the experimental data. This is the flux that would be required to meet the rates, if it could be achieved.

2.10.2 Increasing Glass Production Rates

In the SIPP, the feed slurry to Ultrafiltration was concentrated to greater than 20 wt% UDS. As the UDS concentration gets higher, the filtration flux decreases. Even at an endpoint of 20 wt% UDS, the average flux is not high enough to make the glass rate goals. Two potential ways to improve the rate were proposed:

1. Decrease the undissolved solids concentration endpoint (e.g., 17 or 15 wt%).
2. Increase the filtration temperature.

Decreasing the UDS endpoint has the effect of increasing the average flux, since time spent operating at lower flux is eliminated. A lower UDS endpoint will always result in a higher average UFP flux. Starting at a lower UDS also has the effect of increasing the average flux, but this is not a variable that can be changed if the ILAW/IHLW ratio is to be maintained. (The flux would be very high if only LAW with no solids were processed.) Figure 74 shows curves describing the production rates of ILAW and IHLW as a function of the endpoint UDS at a constant processing temperature of 25°C. The target rates of 6 MTG/d IHLW and 80 MTG/d ILAW are met when the endpoint UDS is 16.7 wt%; the flux is 0.0185 gpm/ft^2. Note that this is the concentration at the end of the concentration step, not the concentration at the end of the washing step.

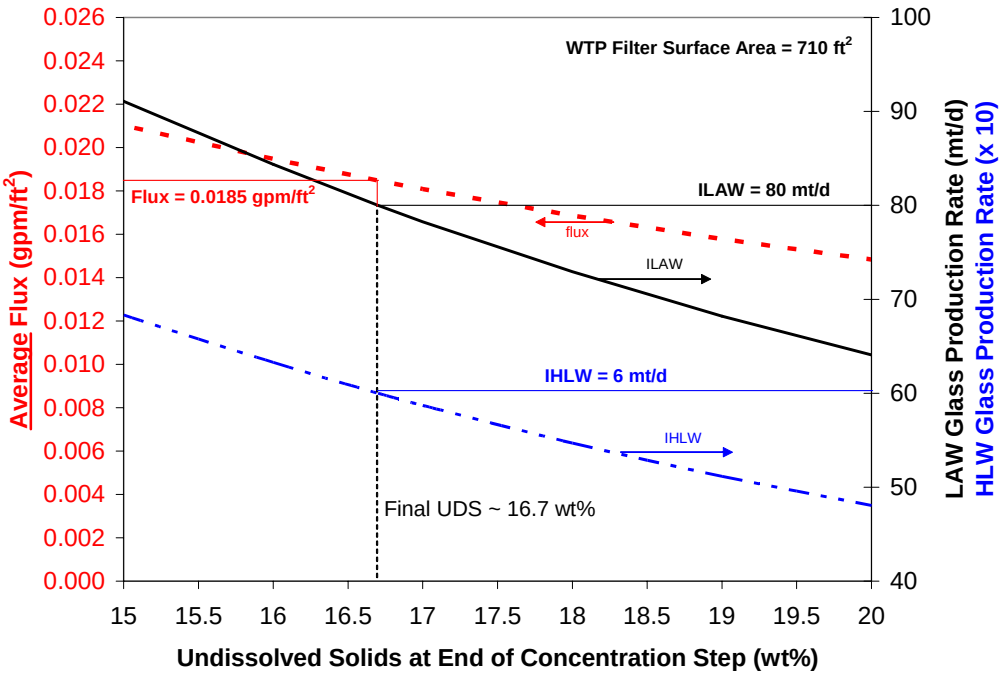


Figure 74. Average Flux to Achieve Rates versus Undissolved Solids

The concentration at the end of the washing step (i.e., the feed to the melter) can be higher than that at the end of the concentrating step (20%, for example) because the rate at which the washed slurry is produced is significantly higher than the rate at which the unwashed slurry is concentrated (LAW production). That is, the flux during washing is high enough that 20 wt% can be achieved even if it was not achieved during the concentrating step. Therefore, concentrating to lower UDS will not necessarily have the effect of producing a more dilute feed to the HLW melter system. Concentrating to lower UDS does result in producing less LAW feed per unit of UF feed and does result in slightly more LAW (supernate) being recycled to the Plant Wash and Disposal (PWD) System.

Figure 75 shows the predicted effect of increasing the temperature during filtration. The increase in flux due to temperature was predicted using the following WTP-supplied equation[†]:

$$\text{Flux @T} = \text{Flux @25}^{o}\text{C} \times \exp\left[2500\left(\frac{1}{298} - \frac{1}{T+273}\right)\right]$$

The minimum flux of 0.0185 gpm/ft^2 is predicted at a temperature of about 33°C. Figure 76 shows the combination of temperatures and ending UDS concentrations that result in predicted glass production rates meeting the target criteria.

[†] A cautionary note: The "supplied" equation is required by the RPP-WTP Test Specification as a "temperature correction (that) corrects flux back to an equivalent flux at 25°C and accounts for changes in fluid viscosity and surface tension." This correction has been applied to the filter data in this task, as well as all other past RPP-WTP filter tests, e.g., Duignan, 2000a, 2000b, 2003a, and Duignan et al., 2004. It is important to note that, the Test Specification also required filter testing to be carried out at 25°C ± 5°C, therefore the flux in that limited temperature range would only incur a correction of at most ±15%. In general, most data were measured within the range of 25°C ± 2°C, which means the correction was at most 6%, therefore any error in the correction itself was assumed small. This assumption may not be valid as the flux temperature differs substantially from 25°C. How well the supplied equation actually "corrects" for viscous and surface tension is not known and may be substantially in error. Applying the equation at temperatures substantially different than 25°C is not recommended unless it is verified. Its use here was only to illustrate the effect of temperature changes on flux. That is, the listed flux magnitudes may contain substantial error and should not be used for actual design

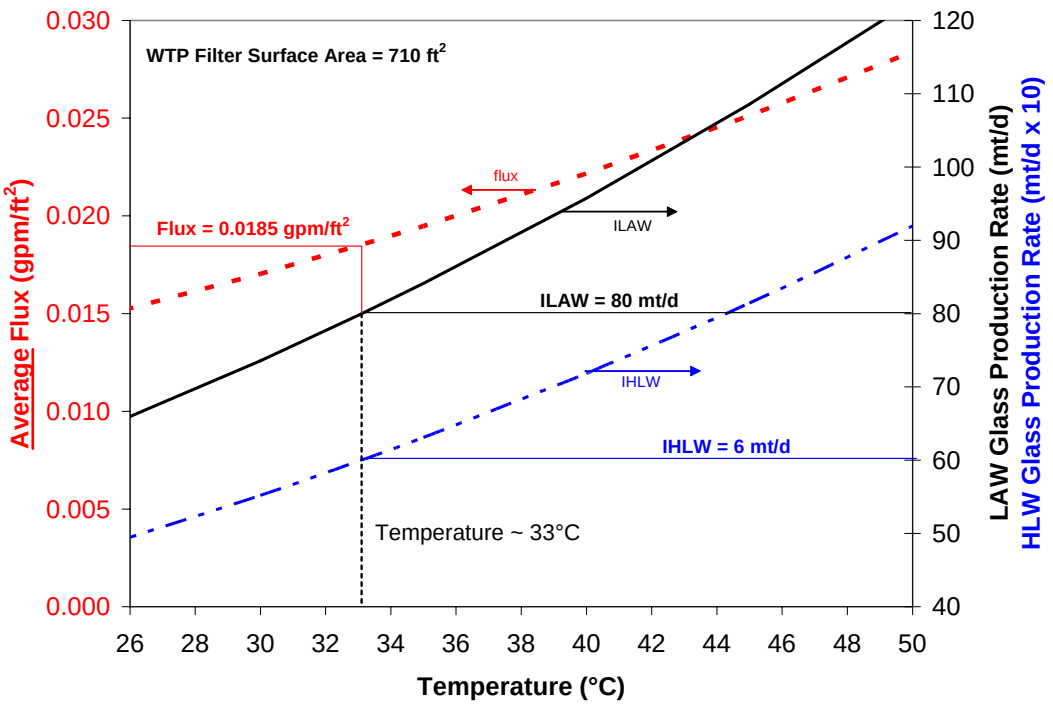


Figure 75. Average Flux to Achieve Rates versus Temperature

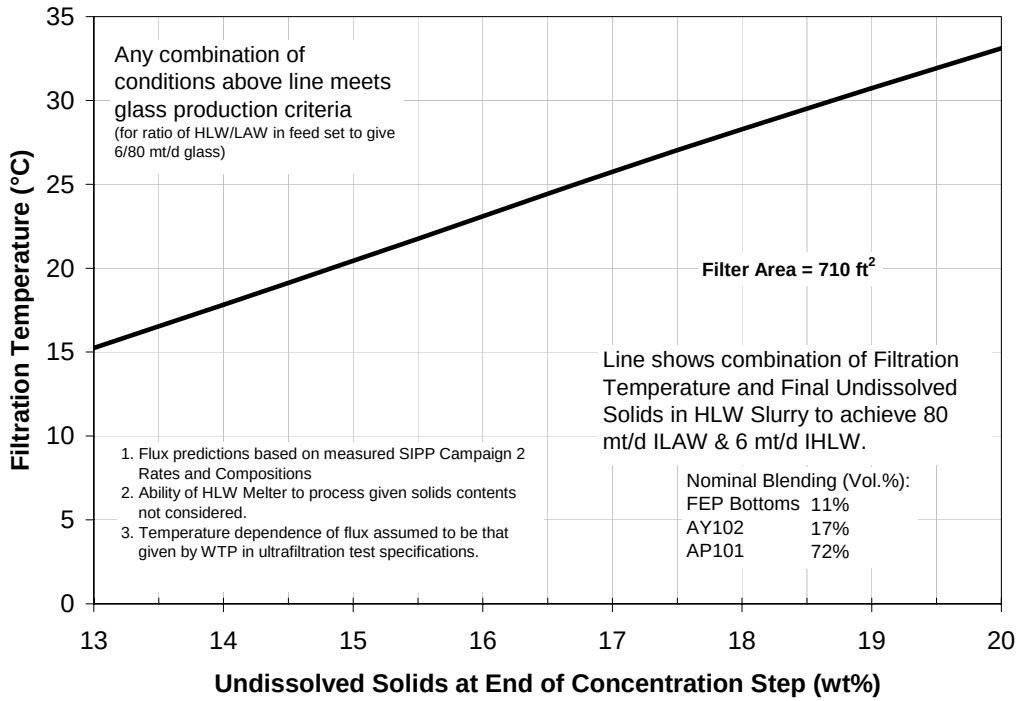


Figure 76. Predicted Combination of Filtration Temperature and Undissolved Solids Endpoint to Meet Glass Production Targets

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3.0 CONCLUSIONS

3.1 PILOT-SCALE FEP UNIT OPERATION

- Entire evaporation process proceeded as designed.
- A total of 1,125 liters of feed was concentrated 147 liters.
- Evaporator operated at a vacuum of 1 psia (6.9 kPa) and at ~ 50°C.
- The average evaporation rate was approximately 0.43 gpm (1.5 lpm).
- No significant foaming was observed prior to the addition of antifoam agent.
- During the evaporation process, the froth height remained around 1 ft (0.3 m).
- At start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad.
- The composition of the FEP feed was predictable by mass balance of the individual feed streams.
- Dissolved metals concentrations paralleled the ratios in the AY102 simulant present in the recycles.
- Most of the oxalate present in the feed was precipitated beginning when approximately 53% of the feed had been evaporated. The oxalate appears to have precipitated as the salt $Na_2C_2O_4$.

3.2 PILOT-SCALE UFP UNIT OPERATION

- The average permeate flux when dewatering from ~4 to ~24 wt% was 0.011 gpm/ft^2.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 0.5 NTU, indicating that the permeate was free of significant solids.
- The turbidity of the permeate from dewatering increased with time, indicating that solids were precipitating out of solution, but after 14 days the turbidity was still only 0.56 NTU with now visible solids (see Table 26). However, the AY102-only permeate from Campaign I did post-precipitate after 2 months.
- Washing of concentrated slurry raised its yield stress from about 10 to 15 Pa, but lowered the consistency from about 23 to 13 mPa·s.
- Campaign I data indicated that the yield stress of unwashed slurry is reduced with extended pumping.
- Washing data matched previous SRNL and literature leaching and washing data for soluble washable species (see Table 36).
- Use of a more concentrated NaOH solution for the third caustic flush during filter cleaning may be warranted since the pH of the spent third wash was acidic.
- At least 92% of the antifoam remained in the HLW sludge slurry after filtration.

3.3 PILOT-SCALE CIX UNIT OPERATION

- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five-molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of waste were treated.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical ability to measure very low cesium concentrations in five-molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of waste were treated.
- The masses of cesium in and out of the resin beds for Cycles 1 and 2 balanced to within measurement uncertainty.
- Pressure drops throughout the two cycles were low and the resin beds permeabilities were approximately the same as were measured for the 24-inch Test (Fowley et al, 2004).

3.4 PILOT-SCALE TLP UNIT OPERATION

- The Pilot-scale evaporator operated well for the TLP evaporation in concentrating the TLP simulant from an initial density of 1.14 kg/L to 1.395 kg/L at 25° C (1.360 kg/L at 50° C).
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m).
- The two Demisters in series operated well with no significant differential pressure build-up across the Demisters during the TLP campaign II. However, condensation had to be purged from the instrumentation lines during the campaign.
- The composition of the products from the TLP matched what was expected from the mass balance.
- No precipitation of additional solids beyond those in the feed was noted.

4.0 FUTURE WORK

As per the SIPP test specification (Longwell, 2003), the work discussed in this interim report is for Campaign II, which was only the second of four campaigns. Further work to be included in the immediate task will be the testing of a different filter media, made by GKN. See the second footnote on page 16. Other work that could follow may include the testing of other simulated wastes, UFP filter cleaning, small and pilot-scale comparisons, etc. However, details on any future work will be reported in the final report, which follows the completion of Campaign IV and the issuance of the Campaign III report. The final report will mention any future work outside of the current task, which may be the result of information elicited from the SIPP task.

As per the SIPP test specification (Longwell, 2003), the work discussed in this interim report is for Campaign II, which was only the second of four campaigns. Further work to be included the immediate task will be the testing of a different filter media, made by GKN. See the second footnote on page 24.

Given the specific scope of the SIPP (i.e., demonstrating pretreatment performance and the influences of recycle streams using AY102/C106 and AP101 simulants) several key findings of the SIPP workshop (Edwards, 2003) were deferred to future programs or tasks. These items are:

- Preliminary calculations indicate the SIPP will produce only enough HLW glass to turnover one DM-100 melter volume. Similar R&D efforts conducted for DOE (e.g., Integrated DWPF Melter System, IDMS) typically produced sufficient glass to turnover the melter at a minimum of three volumes. This typically allows the melter system to achieve steady state operations with respect to glass composition, and production rates.

- The transition of various Hanford waste feeds (e.g. mixing of Envelope D heels with Envelope C supernate) through an integrated system is not being tested by the SIPP. Future programs or tasks should consider testing additional sludge compositions in an integrated system. Similar R&D efforts conducted for DOE (e.g. IDMS, DWPF Cold Commissioning, and Duratek LAW Pilot Melter) tested a variety of waste chemistries and conducted testing that demonstrated these facilities could operate successfully during waste transitions.

Additionally, since only one Envelope D simulant (AY102/C106) has been tested in the SIPP, the filtration flux at a pilot scale with other wastes (e.g. AZ101, AZ102, C104, and single-shell tank sludges) is unknown and likely to be different than the filtration flux measured with in the SIPP. Because bench-top cross-flow filter fluxes, using AY102/C106 Hanford waste, are higher than pilot-scale filter fluxes using AY102/C106 simulant (see Fig. 32 in Section 2.12 of Duignan et al., 2004), it is recommended that additional pilot-scale filtration tests be conducted to determine the filter flux with other Hanford sludges. Furthermore, since it will not be practical or cost effective to conduct

pilot-scale testing using all known sludge types, a correlation between bench-top radioactive filter experiments and pilot-scale data should be developed to predict the filter flux of future WTP sludge batches.

Leaching of aluminum or oxidative leaching of other metals (e.g. Cr) was not tested by the SIPP. Leaching was determined to be unnecessary for the AY102/C106 tank composition (Calloway, 2004). However, other Hanford wastes require leaching of aluminum and other metals to reduce the number of HLW canisters produced from a given waste type. While aluminum leaching and oxidative leaching of Cr have been demonstrated in the laboratory, pilot-scale demonstration is needed to assess the actual efficiency of these processes. Additionally, post precipitation of solids after high temperature leaching and subsequent cooling down could become a significant issue in these processes and should be assessed at a pilot scale.

Since Campaigns III and IV data have not been completely evaluated at this point in time, other recommendations for future work maybe included in these reports.

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Appendix A: Computational Model (AUTHOR – BARNES)

The volumes of AY-102 and AP-101 simulant required for the four SIPP campaigns were estimated by modeling each campaign as a steady-state process using the software package, OLI/ESP version 6.6. In addition, the minimum SIPP flow rates/fluxes necessary to prove a production rate of 80 metric tons glass per day (MTG/d) for LAW glass and 6 MTG/d HLW glass were estimated based on Campaign IV stream compositions and flow rates and the SIPP unit operation scale factors relative to the current WTP design basis. The OLI/ESP PUBLIC databook, in addition to the private databooks CARBONAT, HNO3DB, SILICA, and ZEOLITE were used to generate the chemistry model (Zamecnik, 2004) for these simulations.

The model for Campaign I simulated the concentration and wash steps of simulant AY-102 (Zamecnik et al., 2004) waste feed only, while the model for Campaigns II-IV, using a blend of simulant AY-102 and AP-101 (Russell et al., 2003) waste feed. Campaigns II-IV simulated most of the pre-treatment process including the FEP evaporator, ultra-filtration, slurry wash, cesium ion-exchange column recycles, and the TLP evaporator. The estimated SIPP volumes for each campaign were based on producing 140L of washed sludge from Campaign I and the ratio of AP-101:AY-102 waste feed predicted to give a glass production ratio of 80/6 MTG/d LAW/HLW glass for each of the Campaigns II-IV.

The structures of the models for Campaigns II-IV are identical. Each of the three campaigns represent an iteration towards steady-state of the ultra-filtration and Cs-IX recycle streams, with the predicted output recycle from one campaign being used as the input recycle to the subsequent campaign. The difference in the predicted volumetric recycle flows between campaigns III and IV was less than 0.09%, indicating the campaign IV output recycle had essentially reached steady-state.

The major assumptions used in the model are discussed in the first section below, followed by the criteria used to determine several stream flow rates. Then the model structure is described with the help of simplified flow diagrams; detailed block diagrams are used to describe certain portions of the model. Finally, the modeling results of Campaigns I and IV are given, along with estimates of the minimum SIPP flow/flux rates and process times necessary to prove rate based on the results of Campaign IV. A complete OLI/ESP listing of the properties and composition of key streams for Campaigns I and IV are given in Appendix A of Barnes (2004).

A.1. MODEL ASSUMPTIONS

Although the WTP pre-treatment process will have two FEP evaporator/ultra-filtration trains, only one train was included in the model. The current design basis allows only one train to operate in the concentration mode (concentrating the waste feed blend to

18,000 gals. at 20wt% UDS while generating permeate for the Cs IX column) at any one time. Because this is the rate-limiting mode for this process, train "A" will complete its treat-clean mode and the stand idle while train "B" completes its concentration mode (the treat-clean mode consists of washing the 18,000 gal batch of 20wt% UDS slurry, heel and treated sludge transfers, and filter cleaning). At no time will both trains perform the same function simultaneously. Therefore, a single train must be capable of sustaining a production rate of 80 MTG/d LAW glass when in the concentration mode, or 6 MTG/d HLW glass when in the treat and clean mode.

LAW glass production rate was based on 14wt% loading of Na_2O (Lee et al., 2003a) derived from "waste" sodium only, i.e. sodium from waste feed alone ("waste" sodium is defined to include sodium addition from the leach step, however, this step was not included in these particular models). The amount of sodium in the LAW stream considered to be "waste" sodium was calculated as the difference between the sodium in the waste feed streams and the sodium sent to HLP in the washed sludge (all sodium to HLP is assumed to be waste sodium). This is conservative, the calculated LAW glass rate would be higher for identical flow rates if some or all of the sodium going to the HLP were considered to be non-waste sodium, resulting in a corresponding increase in the amount of "waste" sodium to the LAW glass. The total amount of sodium sent to the LAW (or HLP) process is the same in either case.

HLW glass production was based on 12.5wt% loading of Fe_2O_3. This was the first metal oxide to meet contract minimum, all other metal oxides and combinations thereof fell below the contract minimums (Lee et al., 2003b).

While the Cs-IX column recycle streams generated during the elution and resin regeneration sequence are modeled, the removal of Cs from the UF permeate by the column is not. This results in Cs being sent to the TLP evaporator that, in practice, would be removed from the stream and sent to the Cs eluate pot (the pot is not part of the SIPP) and eventually the HLP system. However, the concentration of Cs is small and felt to have no significant effect on the TLP bottoms with respect to the properties of interest, i.e. flow rates, density, precipitated solids, etc. No other pre-treatment process of the model is affected by this approximation.

With the exception of the filter loop, no approximations of tank heels or line volumes were included in the models. This is not likely to affect the relative feed rates of AY-102 and AP-101 a great deal; it would take a very large heel to impact the chemistry of a stream so dramatically as to shift the split of output to the LAW and HLP systems. But the lack of heels does increase the apparent efficiency of the process. Any treated sludge or Cs-IX effluent that is recycled due to heels and line volumes reduces the plant efficiency and glass production rates. Heels will also generate more recycle per unit of glass as compared to the model predictions. But because these recycles are largely dilute caustic, the only major impact is likely to be an increased load to the evaporators and increased condensate per unit of glass.

A.2. BASES FOR MODEL INPUT/RECYCLE STREAM FLOW RATES AND COMPOSITIONS

In general, the models of each campaign are steady-state approximations of the pre-treatment process and do not introduce any dynamics. The exception is the iteration on the ultra-filtration and Cs-IX recycle stream as it changes value between Campaigns II, III, and IV (reflected in the difference between the fixed input UF and Cs-IX recycles, and the calculated output UF and Cs-IX recycles). All input streams for one particular campaign (HLW and LAW SBS, vessel vent system, recycle inputs from the previous campaign) are set to an average flow rate and do not reflect the cyclic nature of inputs that will exist under actual plant conditions. These average flow rates are based on either the glass production rate, slurry batch size, or the Cs-IX effluent batch size, and the calculations are described in the following paragraphs. The corresponding flows are listed in Tables. A1, A2, and A3.

HLW and LAW SBS recycles generated from actual Duratek melter runs are to be used in the SIPP campaigns. The analytical compositions of these streams were used as input to the model, while the flow rates were based on the most recent ACM model available at the time (dated 11/04/2003 11:42:35am, for streams RDL62 and RDL21 for HLW and LAW SBS, respectively). Because the ACM model HLW glass production rate was 5.4 MTG/d, the given HLW SBS flow rate was adjusted by a ratio of 6:5.4 to represent a flow corresponding to 6 MTG/d. The vessel vent system (PVP04 and PVP06 combined) and the HLW canister decon. (HDH06) stream compositions and flow rates were also based on the ACM model, and the stream compositions given in the ACM model were approximated as a 0.15M NaOH – 0.3M NaNO3 stream for the canister decon., and a 0.1M NaOH stream for the combined PVP04-06 vessel vent system streams. The vessel vent system flow rate is fixed as tank ventilation is not affected by the glass production rates. The flow rates for these streams are listed in Table A1.

Table A1. Campaigns II-IV Input Recycle Flow Rates as a Function of Glass Production Rate

Stream	Flow Rate - relative to 80/6 MTG/d LAW/HLW glass production	Destination
HLW SBS (based on HLW glass)	2.79 gpm	FEP evaporator
LAW SBS (based on LAW glass)	12.2 gpm	TLP evaporator
PVP04 and PVP06 (vessel vent system - fixed rate)	3.23 gpm	FEP evaporator
Canister decon. (based on HLW glass)	1.68 gpm	FEP evaporator

The filter is cleaned once for every 18,000 gal batch of 20wt% UDS concentrated slurry, produced using three – 5,250 gal flushes of 2M HNO3, and three – 5,250 gal flushes of 0.01M NaOH (Lee et al., 2003c). These acid and caustic rinse streams are each modeled using an average volumetric flow ratio relative to the slurry of 3*5,250/18,000, or 0.875. Following the transfer of treated sludge to the HLP, 700 gals. of sludge remains in the filter loop, which gets pushed to the FEP recycle. This is modeled using an average volumetric flow ratio relative to the slurry of 700/18,000. This same ratio is used for the

0.01M NaOH caustic rinse remaining in the filter loop after cleaning, this volume gets pushed to the Cs-IX at the start of the concentration step. These streams are listed in Table 2.

Table A2. Input/Recycle Stream Flow Rates as a Function of the 20wt% UDS Concentrated Slurry Flow Rate
(slurry batch size of 18,000 gals)

Stream	Volume - relative to 18,000 gals. slurry (volumetric fraction relative to slurry)	Destination
Washed Sludge (in filter loop prior to cleaning)	700 gals. (0.03889)	FEP evaporator
Acid Cleaning (2M HNO_3)	3*5,250 gals. (0.8750)	FEP evaporator
Caustic Rinse (0.01M NaOH)	(3*5,250 - 700)gals. (0.8361)	FEP evaporator
Caustic Rinse (0.01M NaOH, remaining in filter loop prior to concentration of blended waste feed.	700 gals. (0.03889)	Cs-IX column

The Cs-IX effluent batch size is 30,000 gals (Lee et al., 2003d). During the elution cycle, one column volume (CV = 1,200 gals.) of 0.1M NaOH is used to displace the feed, followed by one CV of pre-elution DI water. Both of these streams are recycled to the FEP Evaporator and modeled using a flow ratio relative to the Cs-IX effluent of 1,200/30,000. The acid elution and post-elution DI rinse streams are sent to the Cs eluate pot which is not part of the SIPP, so these streams are not relevant to these models. Finally, the resin is regenerated with 2,500 gals. 0.25M NaOH, 1,300 gals of which is recycled to the FEP Evaporator, while the 1,200 gals. remaining in the column is pushed to the TLP Evaporator by the incoming feed. These streams are modeled using a flow ratio relative to the Cs-IX effluent of 1,300/30,000 and 1,200/30,000 for the FEP and TLP streams, respectively, and are listed in Table A3.

Table A3. Input/Recycle Stream Flow Rates as a Function of the Cs-IX Effluent Flow Rate
(effluent batch size of 30,000 gals, column volume of 1,200gals, liquid bed volume of 300 gals.)

Stream	Volume - relative to 30,000 gals. effluent (volumetric fraction relative to effluent)	Destination
0.1M NaOH used as feed displacement	1,200 gals. (0.040)	FEP evaporator
DI water – pre-elution rinse	1,200 gals. (0.040)	FEP evaporator
0.25M NaOH resin regeneration	1,300 gals. (0.043)	FEP evaporator
0.25M NaOH resin regeneration	1,200 gals. (0.040)	TLP evaporator

A.3. MODEL FLOW-DIAGRAMS

A simplified flow diagram of the model for Campaign I is shown in Fig. 1, and a simplified flow diagram of the model for Campaigns II-IV is shown in Fig. 2. The model for Campaigns II-IV consisted of 294 OLI/ESP blocks (mixer, filter, etc.), of which 220 were used to represent the 44 wash steps. To simplify the block-diagram and yet convey a sense of the model's functionality, only the block diagrams detailing a single wash step (Fig. A3) and the FEP evaporator – waste feed blend concentration sequence (Fig. A4) were included here. Feed-Back and/or "Manipulate" controllers were used to set the input stream flow rates described above. Note that an OLI/ESP feed-back controller is not capable of reading the density of a stream directly, instead, it can calculate the g/m3

of a collection of up to 100 species; 84 were used to define the permeate density and are listed (using the OLI/ESP naming convention) in Table A4.

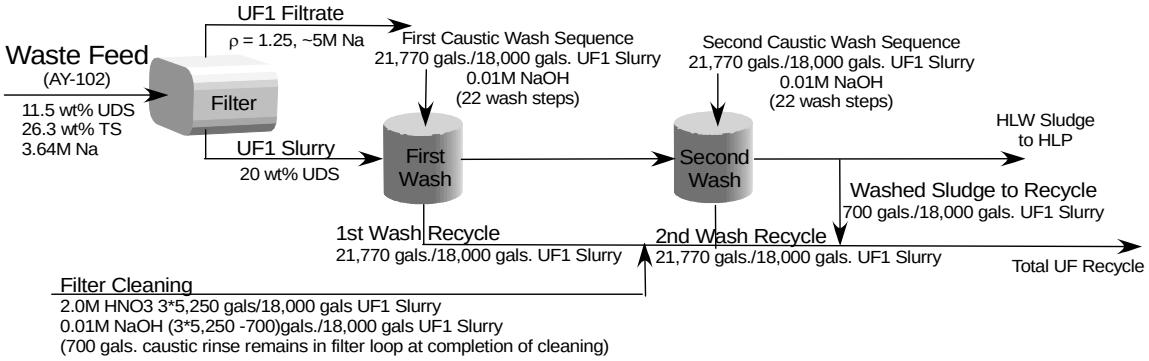

Figure A1. Simplified Flow-Diagram of Campaign I

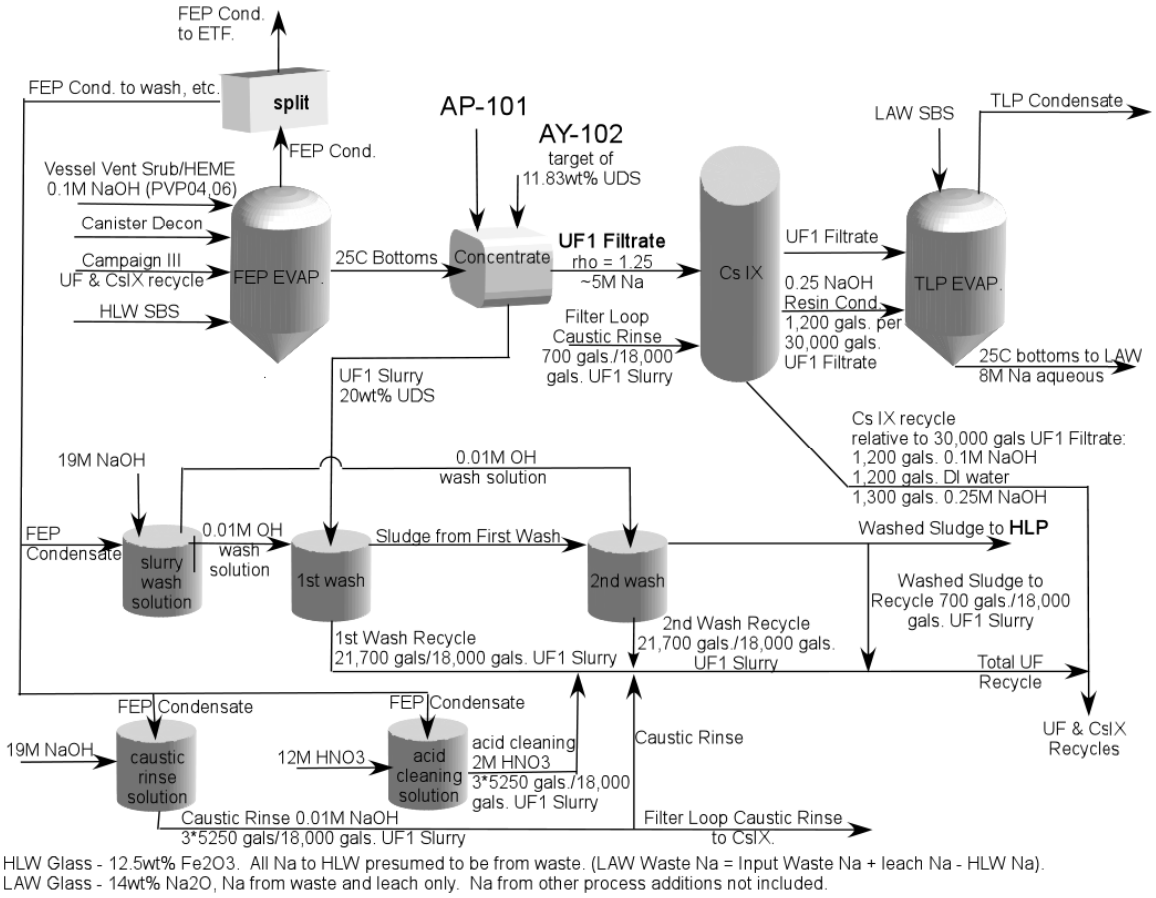

Figure A2. Simplified Flow-Diagram of Campaigns II-IV

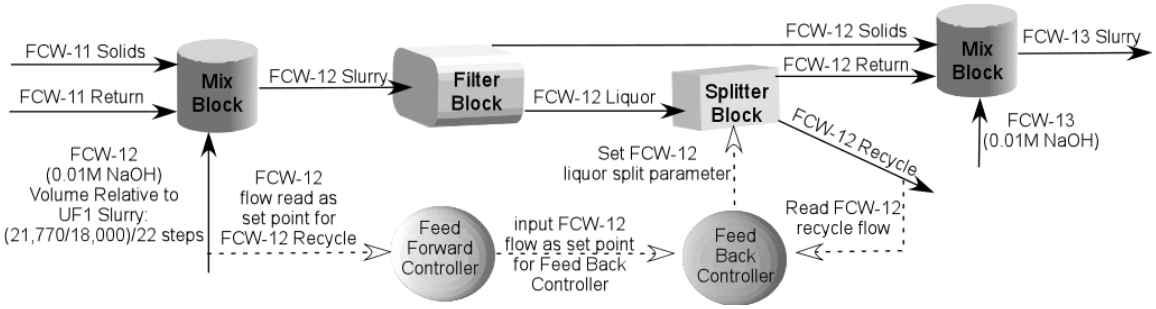

Figure A3. Example Wash Step – Step 12 of First Wash Sequence
(Sets volumetric flow of "FCW-12 Recycle" equal to "FCW-12)

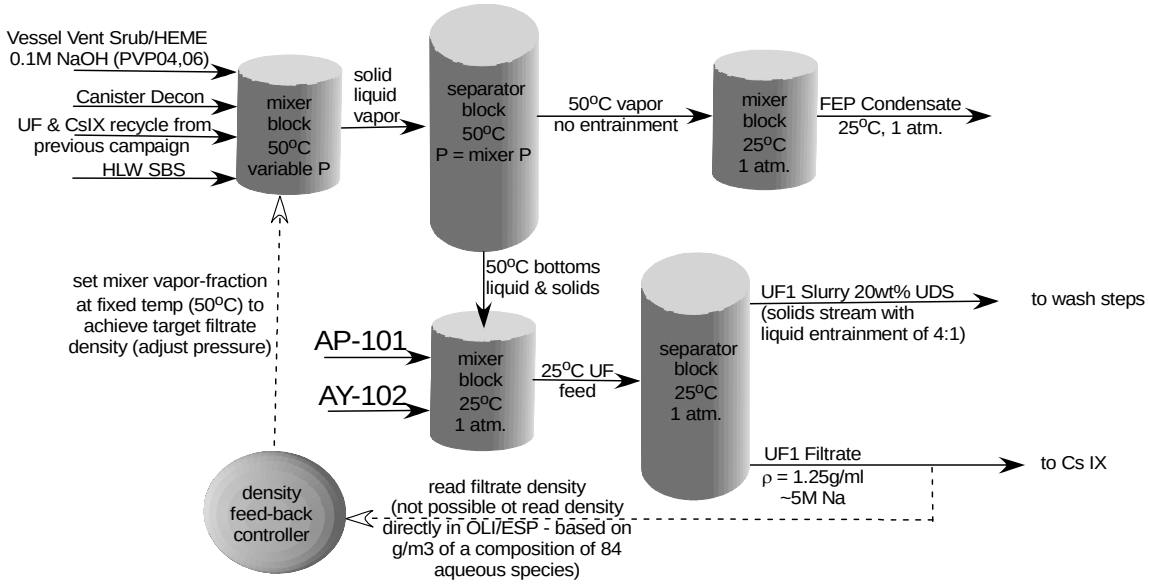

Figure A4. OLI/ESP Representation of FEP Evaporator and Slurry Concentration

Table A4. OLI/ESP Species used to Estimate Aqueous Phase Density
A suffix of AQ indicates an aqueous phase molecule; a suffix of ION indicates an aqueous phase anion/cation.

H2O	BOH3AQ	CAC2O4AQ	CACO3AQ	CAH2SIO4AQ
CEOH3AQ	CSCLAQ	CSNO3AQ	FEIIIOH3AQ	KACETAQ
KCLAQ	KCOOHAQ	KNO3AQ	LIACETAQ	LIH2BO3AQ
LIOHAQ	NAACETAQ	NAALOH4AQ	NABOH4AQ	NABRAQ
NACOOHAQ	NAFAQ	NAHCO3AQ	NAHSIO3AQ	NANO3AQ
BACO3AQ	OHION	AGCL3ION	AGCL4ION	AGOH2ION
ALACETION	ALOH4ION	ALSIO3OHION	B2OOH5ION	B4O5OH4ION
BAION	BAOHION	BOH4ION	BRION	CAH2BO3ION
CAION	CANO3ION	CAOHION	CAPO4ION	CEOH4ION
CLION	CO3ION	COOHION	CRIIC2O42ION	CRIIIION
CRO4ION	CSION	CUOH3ION	CUOH4ION	FEIIIOH4ION
FION	H2SIO4ION	H3SIO4ION	HCO3ION	HPBO2ION
HPO4ION	KION	KSO4ION	LIION	LISO4ION
MNOH3ION	MNOH4ION	NA2FION	NACO3ION	NAION
NASO4ION	NIOH3ION	NO2ION	NO3ION	ACETATEION
OXALATION	PO4ION	RUIIIOH2ION	SO4ION	SROHION
WO4ION	ZNOH3ION	ZNOH4ION	ZROH5ION	

The structures of the models for Campaigns II-IV are identical. The campaigns are related to each other through the UF and Cs-IX recycles, with the recycle generated from one campaign being used directly, with no modifications, as input recycle to the subsequent campaign. The waste feed rates for each of these campaigns was adjusted to give the 80/6 MTG/d LAW/HLW glass ratio. The model for Campaign I was unique. The AY-102 waste feed flow rate was completely arbitrary, only the relative flow rates (acid cleaning flow, etc.) were of importance. Before using it as input to Campaign II, the (arbitrary) Campaign I UF recycle flow rate had to be adjusted to some approximation of a steady-state flow corresponding to the 80/6 MTG/d production rates of Campaigns II-IV. The was done by assuming that the amount of UF recycle generated in Campaign II would only be a function the AY-102 waste feed, and not of the AP-101 waste feed. Then the ratio of generated UF recycle to AY-102 for campaign II could be calculated by using the same ratio of UF recycle to AY-102 from Campaign I (input UF recycle-II = AY-102-II x (output UF recycle-I)/(AY-102-I)). This turned out to be satisfactory since the difference between the Campaign III and IV recycle volumetric flow rates was less than 0.09%.

A.4. MODEL RESULTS

Campaign I was intended to serve only as a filtration baseline for the remaining campaigns and does not represent the pre-treatment process, no comparisons between the model flow rates and glass production rates were done here. The simulation results for key streams from Campaign I are summarized in Tables. A5 and A6. A complete OLI/ESP listing of the properties and composition of key streams for Campaign I is given in Appendix A of Barnes (2004).

Table A5. Composition of Key Streams from the Model of Campaign I

mg/L solution @25C	Waste Feed (AY-102)	UF1 Filtrate to Cs-IX	UF1 Slurry 20wt% UDS	1st Wash Recycle	2nd Wash Recycle	Total UF Recycle	Sludge to HLP
K	427.34	458.61	402.00	245.68	64.18	89.97	27.65
Na	83620.84	80851.08	85865.68	45663.74	13618.32	17675.21	14929.21
Ba	175.81	1.29	317.26	1.06	0.85	0.55	319.25
Ca	965.97	3.44	1746.09	3.65	2.69	1.84	1762.15
Zn	58.36	62.63	54.90	33.55	8.77	12.29	3.78
Cu	67.23	72.15	63.24	38.65	6.63	13.15	8.60
Mg	254.97	0.00	461.62	0.01	0.03	0.01	467.88
Pb	1272.50	1365.61	1197.03	731.56	191.11	267.91	82.33
Al	16182.77	2062.48	27627.02	862.61	163.30	297.89	26746.65
Mn	37.42	2.54	65.69	0.55	0.09	0.18	65.81
Fe	27804.11	45.56	50301.99	18.77	3.76	6.54	50961.18
Ni	910.21	0.41	1647.59	0.17	0.03	0.06	1669.83
F	224.30	240.71	210.99	128.95	33.69	47.22	14.51
Cl	157.97	169.53	148.60	90.82	23.72	33.26	10.22
Br	123.67	132.72	116.34	71.10	18.57	26.04	8.00
Li	85.34	91.59	80.28	49.06	12.82	17.97	5.52
C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P	2108.50	2179.93	2050.60	1085.24	157.47	360.84	555.23
S	803.08	818.09	790.90	438.34	114.64	160.57	123.83
Cr	545.25	585.15	512.91	313.46	81.89	114.80	35.28
Si	8382.35	28.08	15153.32	17.72	9.28	7.84	15327.15
Sr	225.34	0.03	407.96	0.03	0.02	0.01	413.47
B	8.96	9.62	8.43	5.15	1.35	1.89	0.58
Cs	6.23	6.68	5.86	3.58	0.94	1.31	0.40
W	161.10	172.89	151.55	92.62	24.19	33.92	10.42
Ce	246.65	264.70	232.02	135.31	6.71	41.24	61.10
Nd	359.53	0.00	650.93	0.00	0.00	0.00	659.82
Zr	993.32	7.39	1792.40	3.75	0.98	1.37	1811.08
Ag	488.67	0.02	884.71	0.00	0.00	0.00	896.79
Ru	87.20	93.58	82.03	50.13	13.10	18.36	5.64
density (g/L)	1231	1169	1281	1098	1029	1041	1137
wt% UDS	11.50	-	20.00	0.09	0.00	0.19	21.39

Table A6. Solids Composition of Key Streams from the Model of Campaign I

Solids (wt% of total UDS)	AY-102 WASTE FEED	20wt% UDS UF1 SLURRY	1st WASH SEQUENCE	2nd WASH SEQUENCE	TOTAL UF Cs-IX RECYCLE	SLUDGE to HLP
Ba(SO4)	0.2097	0.2097	0.0022	0.0107	0.0134	0.2227
Fe(OH)3	37.5385	37.5385	0.2297	0.7329	-	40.1081
Al(OH)3	15.0762	15.0762	14.4437	65.3800	-	16.7198
Mn(OH)2	0.0401	0.0401	0.0297	0.1011	-	0.0438
Ni(OH)2	1.0149	1.0149	0.0017	0.0055	-	1.0842
AGg2(CO3)	0.4413	0.4413	0.0001	0.0002	-	0.4714
Sr(CO3)	0.2683	0.2683	-	-	-	0.2865
ZrO2	0.9416	0.9416	0.0069	0.0319	0.0933	1.0060
Mg(OH)2	0.4322	0.4322	0.0003	0.0273	-	0.4616
NASGEL.15.5H2O	34.8581	34.8581	0.1099	-	-	37.2011
Na2(C2O4)	6.9956	6.9956	85.1755	-	-	-
Ca(CO3)	1.6988	1.6988	-	-	-	1.1021
Nd(PO4).2H2O	0.4848	0.4848	-	-	-	0.5179
Ca(C2O4).1H2O	-	-	-	-	0.2793	-
Ce(PO4)	-	-	-	24.7292	3.3897	0.0416
Pb3(PO4)2	-	-	-	-	16.2916	-
NaAl(CO3)(OH)2	-	-	-	-	79.9325	-
Cu(OH)2	-	-	-	8.9813	-	0.0043
Ca3(PO4)2	-	-	-	-	-	0.7291

Campaigns II and III were intermediary steps towards the UF and Cs-IX recycle stream state-state flows of Campaign IV. As such, only the model results of Campaign IV are reported here and used to estimate the SIPP minimum flux/flow rates necessary to prove rate. These minimum rates, along with the estimated SIPP process volumes are used estimate the corresponding maximum SIPP run times as described below.

In the case of the FEP and TLP evaporators, the overhead flows predicted by the model for the 80/6 MTG/d glass production rates were scaled by a factor 0.l3 (Table A7) to estimate the minimum SIPP overhead flows needed to prove rate.

The minimum LAW permeate flux rate necessary for the SIPP to prove rate was calculated by dividing the flow rate of the LAW permeate (going to the Cs-IX) predicted by the model for the 80/6 MTG/d glass production rates by the design basis filter area of 590 ft^2 (Table A7).

The flux rate for the wash permeate was calculated in a similar manner. However, as described earlier, the concentration mode is the rate-limiting step. One train will have completed the treat-clean mode and remain idle while the other finishes the concentration mode, assuming identical flux rates for the LAW and wash permeates. Instead of using identical fluxes, the calculation for the minimum wash permeate flux rate applied this idle time toward a lower wash permeate flux rate, resulting in equal process times for the

concentration and treat-clean modes. The flux rate was calculated as volume of wash permeate produced by one treat-clean sequence (the washing of 18,000 gals. 20wt% UDS slurry) was divided by the filter area and the time required for one concentration mode, less the time needed for filter cleaning, sludge and heel transfers (i.e. the time available for washing before the train must begin sludge transfer and cleaning in preparation for the next concentration mode).

Table A7. Design Basis and SIPP Capacities

Unit Operation	Design Basis	SIPP	Scale Factor
FEP/TLP Evaporator Cond. Capacity	30 gpm	0.39 gpm	0.13
Ultra-filtration Area	590 ft^2	6.7ft^2	based only on flux rate

These minimum SIPP flux/flow rates where then used to calculate the time required to process the SIPP volumes estimated by the model at these rates. These volumes were based on producing 140L of 20wt% UDS slurry in Campaign I. All flows predicted by the Campaign I model were scaled by the ratio of 140L / (model flow of the 20wt% UDS slurry) to estimate the volumes produced by Campaign I of the SIPP. The calculated volume of the Campaign I SIPP UF recycle (which is also the input UF Recycle for the Campaign II SIPP) was then used to scale the flows predicted by the Campaign II model by the ratio of (Campaign I SIPP UF recycle) / (Campaign II model UF Recycle input). This was done for Campaigns III and IV in the same manner, and is depicted schematically in Fig. A5.

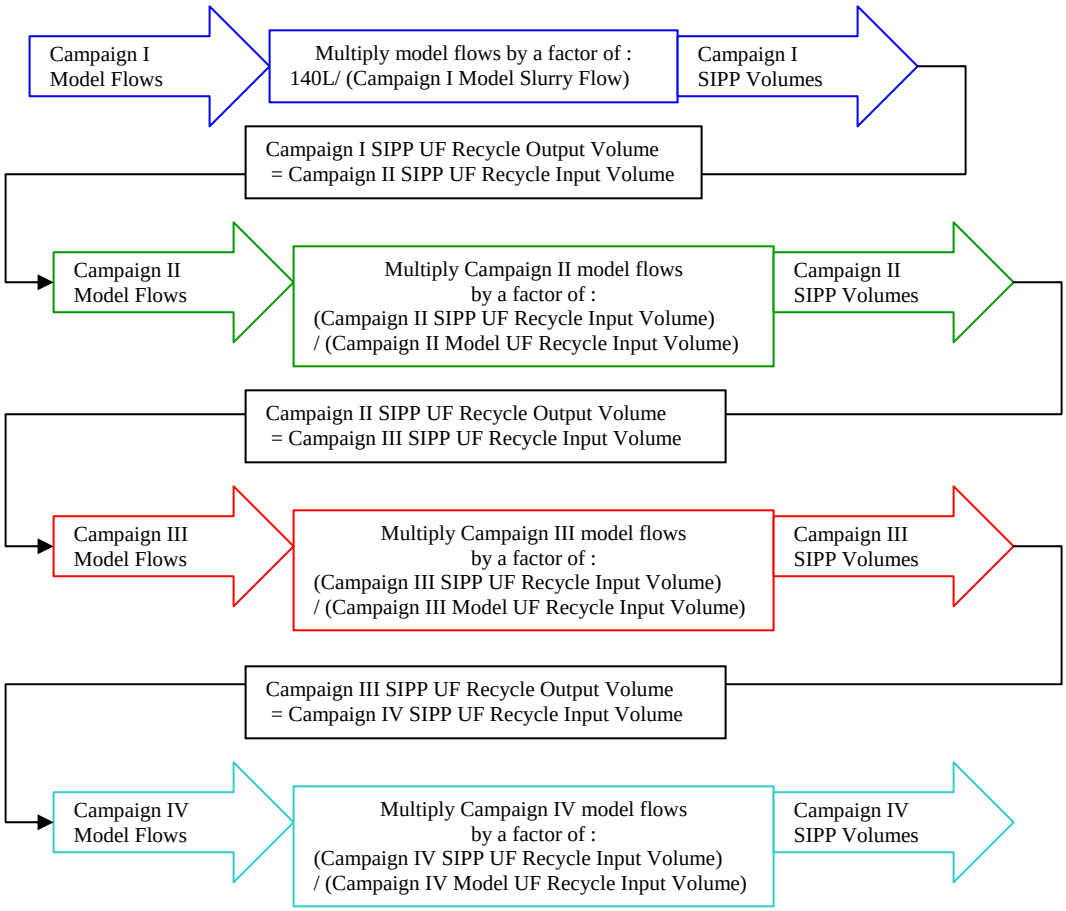

Figure A5. Algorithm for Estimation of SIPP Volumes based on Model Flow Rates

The model flow rates and corresponding SIPP volumes for Campaign IV are listed in Table A8. Table A9 shows the estimated Campaign IV SIPP run time based on values in Tables. A7 and A8. The Cs column will not be operated prototypically, but in a manner to determine the break-through curve, so an estimated run-time for the Cs-IX was not included. Also, it is not possible to scale the filter cleaning or the sludge transfer times; the duration for these operations for the SIPP were set at the design basis with the understanding that they will have to be adjusted based on the actual SIPP time for these operations. Finally, these times are only estimates based on the model compositions, the actual Campaign IV SIPP stream compositions, flow, and flux rates will be used to prove or disprove the glass production rates. The model predictions of the composition for key streams of Campaign IV are given in Tables A10 and A11. A complete OLI/ESP listing of the properties and composition of key streams for Campaign IV is given in Appendix B of Barnes (2004).

Table A8. Campaign IV SIPP Volumes and Model Flow Rates

stream name	SIPP Campaign IV Volumes (liters)	Model Flow Rates for 80/6 MTG/d LAW/HLW glass (gpm)
AY102	241.39	3.545
AP101	672.10	9.870
RECYCLE (previous campaign)	602.79	8.852
HLW SBS	189.94	2.789
PVP04/06 (Vessel Vent System)	219.98	3.230
HLW DECON	114.26	1.678
FEP CONDENSATE	984.86	14.462
FEP COOLED BOTTOMS	144.93	2.128
UF1 FILTRATE to CIX	943.65	13.857
UF1 SLURRY 20wt% UDS	116.09	1.705
TOTAL CAUSTIC WASH	280.81	4.124
HLW SLURRY to HLP	109.98	1.615
TOTAL ACID CLEANING	101.59	1.492
TOTAL CAUSTIC RINSE	101.54	1.491
CAUSTIC RINSE TO FEP EVAP	97.03	1.425
CIX DI WATER	37.75	0.554
CIX CAUSTIC RINSE	37.75	0.554
CIX 0.25M NAOH FEP RECYCLE	40.89	0.600
CIX 0.25M NAOH TLP	37.75	0.554
TOTAL UF & CIX RECYCLE	602.27	8.844
LAW SBS	830.20	12.191
TLP CONDENSATE	1224.90	17.987
TLP COOLED BOTTOMS	598.10	8.783

.

Table A9. Estimated Filtration Batch Cycle Times Necessary to Make WTP Glass Production Rate of 80/6 MTG/d LAW/HLW

Filtration Step (hrs.)	WTP Batch (18,000 gals.) Cycle Time (hrs.) Design Basis (0.03 gpm/ft2)	WTP Batch (18,000 gals.) Cycle Time (hrs.) Minimum Required Filtration Rates: 0.0235 and 0.00808 gpm/ft2 for the concentration and wash modes respectively	SIPP Batch Cycle Time (hrs.) Design Filtration Rate (0.03 gpm/ft^2)	SIPP Batch Cycle Time (hrs) Minimum Required Filtration Rates: 0.0235 and 0.00808 gpm/ft2 for the concentration and wash modes respectively
1st concentration	137.8	176.0	20.7	26.4
LAW subtotal	**137.8**	**176.0**	**20.7**	**26.4**
1st wash	20.5	76.1	3.1	11.4
2nd wash	20.5	76.1	3.1	11.4
filter cleaning	19.8	19.8	19.8	19.8
sludge heel return	2.0	2.0	2.0	2.0
sludge trans. to HLP	2.0	2.0	2.0	2.0
idle time	73.0	0.0	10.9	0.0
Treat & Clean subtotal	**137.8**	**176.0**	**40.9**	**46.6**
Total Batch Time	***275.5***	***352.0***	***61.6***	***73.0***

Table A10. Composition of Key Streams from Campaign IV Model

mg/L solution @ 25C	AP101	AY102	Input UF&CIX Recycle	FEP Bottoms	UF Blended Feed	UF Filtrate to Cs-IX	UF Slurry 20wt% UDS	1st Wash Sequence	2nd Wash Sequence	Output UF&CIX Recycle	HLW Sludge to HLP	TLP Bottoms
K	31175.6	429.2	3560.4	18546.8	22406.3	22704.3	19983.4	12231.6	3190.6	3602.8	1363.9	37357.0
Na	128776.8	83976.2	20822.7	104317.9	115067.1	113992.0	123803.0	62862.6	22113.6	20864.0	21965.4	184149.6
Ba	0.3	176.6	3.2	13.4	42.3	1.0	377.4	0.9	0.8	3.2	380.7	1.6
Ca	7.7	970.1	19.3	288.6	265.3	2.9	2398.4	2.9	2.6	19.3	2425.9	5.3
Zn	5.6	58.6	7.5	218.9	46.8	47.4	41.8	25.6	6.7	7.5	2.9	80.3
Cu	1.6	67.5	3.0	12.4	18.1	18.3	16.1	9.9	2.6	2.9	1.1	28.9
Mg		256.1	4.5	57.2	66.1	0.0	603.8	0.0	0.0	4.6	612.5	1.2
Pb	14.9	1277.9	54.9	228.3	331.8	336.2	295.9	181.1	47.2	53.3	20.2	530.4
Al	7816.2	16251.5	1025.8	4424.2	9264.0	7717.1	21838.3	3334.5	580.5	1040.9	17351.1	12177.4
Mn		37.6	1.1	4.4	9.2	9.3	8.2	4.2	0.2	1.1	2.8	14.7
Fe	2.5	27922.2	463.1	1957.6	6629.5	202.9	58869.4	77.0	13.0	463.6	59598.9	320.1
Ni	13.7	914.1	15.6	64.8	225.8	1.8	2046.2	0.7	0.1	15.6	2074.4	2.9
F	59.8	225.3	18.6	185.8	114.6	116.2	102.2	62.6	16.3	18.4	7.0	955.8
Cl	1623.7	158.6	436.8	12291.8	2747.0	2783.5	2449.9	1499.6	391.2	441.7	167.2	5904.9
Br		124.2	5.2	21.5	31.2	31.6	27.9	17.1	4.4	5.0	1.9	49.9
Li	0.3	85.7	3.6	15.0	21.8	22.1	19.4	11.9	3.1	3.5	1.3	36.9
P	495.9	2117.5	128.1	533.0	869.7	862.6	927.0	409.4	123.0	126.2	287.6	1361.0
S	1339.2	806.5	183.1	851.0	1149.4	1154.9	1104.4	622.3	162.5	184.0	158.2	2059.8
Cr	170.2	547.6	41.7	173.3	256.4	259.8	228.6	139.9	36.5	41.2	15.6	409.9
Si	136.5	8418.0	152.7	886.5	2125.3	125.3	18382.6	48.0	16.0	152.8	18566.4	265.4
Sr		226.3	3.7	15.4	53.7	0.1	489.4	0.1	0.1	3.7	496.2	0.1
B	16.0	9.0	2.1	8.9	13.4	13.6	12.0	7.3	1.9	2.2	0.8	1172.8
Cs		6.3	0.3	1.1	1.6	1.6	1.4	0.9	0.2	0.3	0.1	2.5
W	24.6	161.8	9.5	39.4	57.9	58.6	51.6	31.6	8.2	9.3	3.5	92.5
Ce		247.7	10.2	42.6	62.2	63.1	55.5	34.0	8.9	10.0	3.8	99.5
Nd		361.1	5.9	24.5	85.6	0.0	781.3	0.0	0.0	5.9	792.5	1.0
Zr		997.5	18.3	76.2	237.6	24.1	1973.1	12.5	3.1	18.4	1982.1	38.1
Ag		490.7	8.0	33.2	116.3	0.8	1055.0	0.1	0.0	8.0	1069.9	2.7
Ru		87.6	3.6	15.2	22.0	22.3	19.6	12.0	3.1	3.5	1.3	35.2
density (g/L)	1278	1236	1053	1253	1264	1250	1375	1142	1051	1053	1153	1398
wt% UDS	0.01	11.50	0.60	2.45	2.38	0.00	20.00	0.12	0.00	0.57	21.64	0.05

Table A11. Solids Composition of Key Streams from the Model of Campaign IV

wt% of total UDS	AP101	AY102	Input UF & CIX Recycle	FEP Bottoms	UF Blended Feed	20wt% UDS UF1 Slurry	1st Wash Sequence	2nd Wash Sequence	UF&CIX Recycle	HLP Sludge	TLP Bottoms
Fe(OH)3	-	37.54	14.10	12.10	40.83	40.83	0.97	1.24	14.65	45.71	-
Al(OH)3	-	15.08	9.43	29.19	-	-	35.77	98.35	15.81	2.15	-
Ni(OH)2	12.60	1.01	0.39	0.33	1.17	1.17	0.01	0.01	0.41	1.31	-
Ag2(CO3)	-	0.44	0.16	-	0.49	0.49	0.01	0.00	0.17	0.55	-
ZrO2	-	0.94	0.39	0.33	0.96	0.96	0.01	0.04	0.41	1.07	-
Mg(OH)2	-	0.43	-	0.45	0.53	0.53	0.00	0.01	-	0.59	0.42
NASGEL.15.5H2O	-	34.86	14.02	16.74	39.22	39.22	2.19	-	14.57	43.91	-
Nd(PO4).2H2O	-	0.48	0.18	0.15	0.54	0.54	0.00	-	0.19	0.61	0.28
Na2(C2O4)	77.69	7.00	-	38.21	13.55	13.55	61.05	-	-	-	97.91
Ba(SO4)	-	0.21	0.07	0.07	0.23	0.23	-	0.14	0.08	0.26	0.08
Ca(CO3)	9.71	1.70	0.32	2.33	2.18	2.18	-	-	0.57	-	-
Mn(OH)2	-	0.04	-	0.02	-	-	-	0.19	-	0.00	-
Sr(CO3)	-	0.27	0.10	0.08	0.30	0.30	-	0.01	0.10	0.34	0.01
Cu(OH)2	-	-	0.06	-	-	-	-	-	0.06	-	-
Zn(OH)2	-	-	0.13	-	-	-	-	-	0.13	-	-
Ca3(PO4)2	-	-	0.37	-	-	-	-	0.02	0.15	0.09	-
Ce(PO4)	-	-	0.27	-	-	-	-	-	0.28	-	-
Pb3(PO4)2	-	-	1.13	-	-	-	-	-	1.14	-	-
NaAl(CO3)(OH)2	-	-	58.86	-	-	-	-	-	51.30	-	-
CaF2	-	-	-	-	-	-	-	-	-	-	1.30
Ca(C2O4).1H2O	-	-	-	-	-	-	-	-	-	3.41	-

A.5. MODEL RESULTS

Analytical results of the stream compositions from the SIPP Campaign II run indicate a higher glass production rate than estimated by the model of about 15%. This difference is due to the adjustment made to the solids portion of the simulant recipe used in the model. While it is not necessary, even undesirable, to base the solids portion of a simulant recipe on a charge balanced analysis, the model requires all input streams to be neutral. The simulant solids recipe had an excess of cations and hydroxide was added to achieve a charge balance for the model input. This led to an inconsistency between the charge balance and the concentration of the constituent species, adding hydroxide caused the mass basis to go from 1000 kg to 1138 kg (i.e. the solids composition was given in moles/1000kg dry solids). The simulant recipe was still in development at the time of the model runs, and instead of modifying the ratio of the solids species to achieve the correct mass basis, the composition was used as given. The result was to dilute the metals concentration in the solids of the model relative to that of the final simulant composition.

A.6. REFERENCES FOR APPENDIX A

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Lee, E., *et al. Flowsheet Bases, Assumptions, and Requirements*. 24590-WTP-RPT-PT-02-005, Rev. 1, pp 2.3-1 - 2.3.6, Ultra-Filtration Assumptions, Washington Group International, Richland, WA, 2003c

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Appendix B: WTP Discussion on Pretreatment Facility Waste Processing Residence Times

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SUBJECT: PLANT RESIDENCE TIME DISCUSSION

<<PT Flow Diagram Rev 1b.vsd>> <<PT Tank Vol_App B.doc>>

Attached *(they have been removed)* above are the handouts from the discussion this afternoon. Four different holdup times were discussed during the meeting.

Note: The defined production rates for SIPP are 6.0 MT IHLW/day and 80 MT ILAW/day. Steady-state flowrates defined below are from the WTP Steady State Flowsheet.

I. Holdup Time For Permeate After Ultrafiltration.

Two permeate vessel tank volumes (21,800 each) plus the CXP Feed Vessel available volume (78,000 batch -25,000 contingency) are used for a total available holdup volume of 96,600 gallons. At a steady-state permeate flowrate of 14.8 gpm, the residence time is 96,600/(14.8*60) = 109 hours (~4 1/2 days).

II. Holdup Time For Blended Feed With Concentrated Recycles Prior To Ultrafiltration.

Two UFP Preparation vessel tank volumes (48,300 each) are used for a total available holdup volume of 96,600 gallons. At a steady-state feed to UFP Feed vessels of 16.3 gpm, the residence time is 96,600/(16.3*60) = 99 hours (~4 days). This value is overly conservative and the residence time of blending the concentrated recycles with the blended feed is dependent on the dynamic nature of recycle generation, feed blending, and the processing of feed form the preparation vessel to the feed vessel. If the online UFP Feed vessel is considered full and the UF Prep vessels are both filled with blended feed and concentrated recycle, then the residence time of ~4 days will result. Further consideration suggests that the residence time using one UFP Preparation vessel tank volume should be used. This would give a residence time of 48,300/(16.3*60) = 49 hours (~2 days). Use the second value.

III. Holdup Time for Blended Recycles (HLW-SBS with UFP recycles) Prior to Evaporation.

Two evaporator feed tanks with an available volume of (50,000 batch - 10,000 contingency) are used for a total available holdup volume of 80,000 gallons. At a steady-state evaporator feed flowrate of 18.5 gpm, the residence time is 80,000/(18.5*60) = 72 hours (~3 days).

IV. Holdup Time For Recycles in the Evaporator.

One evaporator with a holdup volume of ~5500 gallons is used. At a steady-state concentrate flowrate of 1.8 gpm, the residence time is 5500/(1.8*60) = 51 hours (~2 days). It was noted that without the leaching process, there is no recycle leachate. Inclusion of the leaching recycle reduces the residence time in the evaporator because the concentrate flowrate is higher.

Comments are welcome.

Dave Harty
Pretreatment Process Operations, 371-3360

Appendix C: Anti-Foam Subcontractor Analysis

The information contained on the following two pages of this appendix is a portion of the data to be analyzed by Dow Corning for samples of simulated waste processed during Campaign II.

Notes:

1. The unit shown in the Dow Corning results, "by wt in ppm," **is wrong**. The actual unit is mg/L.
2. No accuracy is stated in the Dow Corning document, but the results may be in error by as much as 50% because of the difficulty in isolating the analyte that implies the presence of antifoam.
3. As stated above, only a portion of the SIPP samples sent for analysis was complete at the time this report was issued. Those from the CIX and TLP operations were outstanding, however, those results may not be important because more than 99% of the antifoam, introduced in the FEP feed, was shown to have stayed with the slurry after UFP dewatering. That is, the concentrated UFP slurry had 1260 mg/L of antifoam (sample:C2-UF-W2-22-Antf) and the permeate removed had less than 10 mg/L (sample:C2-1X-Feed-Antf). Since the CIX and the TLP only processed the permeate waste stream, then the small amount of antifoam carried through may not have been measurable.

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Analytical Solutions Report

Customer:	**Savannah River National Laboratory**
Contact:	**Jack Zamecnik**
E-Mail:	**john.zamecnik@srs.gov**
Phone:	**803-725-4535**

Report No.:	**19763**
Quote Reference:	**Description of SRNL Pilot System Samples.pdf**
Sample Receipt Date:	**07/22/2004**
Report Sent Date:	**08/10/04**
Customer Reference:	**AC37127T**

Description of Request:

Feasibility to determine if Fourier Transform Infrared Spectroscopy (FTIR) can be used to quantify silicone in processed initial, diluted, sludge and liquid samples with and without Q2-3183A. If interferences are not present calibration curves will be generated for each material to quantify Q2-3183A.

Sample Description:

Sample Identifier:	Comments:
C2-FEP-B-END-ANTF	Concentrated FEP Bottoms; should contain
C2-FEP-B-Start-ANTF	FEP Evaporator Feed Slurry
C2-FEP-B-Start-Blank	FEP Evaporator Feed Slurry; does not contain antifoam
C2-IX-Feed-ANTF	Ultrafilteration Permeate
C2-UF-W2-22-ANTF	Concentrated wash slurry; matches undissolved solids content, but soluble salt composition is different
C2-WPE-CMP-ANTF	wash water
IX-Feed-Blank	Ultrafilteration Permeate; made from AY102+AP101 simulants filtered)
Q2-3183A control	Will arrive week of 7/26; provided by DC
UF-Wash-Slurry-Blank (C1)	Concentrated wash slurry; blank
WPE-Blank (C1)	wash water; blank

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Results:

The feasibility study was successful. Silicone can be measured down to 10 ppm in the process samples using the developed extraction method. The n-Heptane solvent spectrum was subtracted from each sample and standard spectrum. Peak height absorbances of the Si-Methyl band near 1260 cm^{-1} were measured using the baseline technique. Calculations were performed using information from the standards and samples. The silicone concentrations are listed in the following table.

Sample Reference Description	Silicone, by wt in ppm
WPE-Blank (C1)	none detected < 10
1X-Feed-Blank	none detected < 10
C2-FEP-B-Start-Blank	none detected < 10
UF-Wash-Slurry-Blank (C1)	none detected < 10
C2-WPE-CMP Antf	none detected < 10
C2-1X-Feed-Antf	trace < 10
C2-FEP-B-Start-Antf	1580
C2-FEP-B-End-Antf	2410
C2-UF-W2-22-Antf	1260

Experimental:

10.0 grams of each blank and antifoam sample were added to a ½ ounce glass vial. All nine samples were diluted with 2.0 ml of HPLC grade n-Heptane solvent. The vials were capped, agitated on a wrist action shaker for 15 minutes, and centrifuged at 3000 rpms for 15 minutes. Fourier Transform Infrared (FTIR) spectrum was collected on the heptane solvent in a 0.2 mm fixed pathlength sealed liquid cell using a Thermo Nicolet Magna 750 FTIR spectrometer. The clear heptane extractables from the blank and antifoam samples were subsequently added to the sealed liquid cell and FTIR spectra were acquired. Five standards of polydimethylsiloxane were prepared in HPLC grade n-Heptane solvent. FTIR spectra were collected on these standard solutions as well. The cell was flushed with n-Heptane and dried with a low flow of nitrogen gas between each sample and standard.

Statement of Accuracy and Precision:

Precision and accuracy have not been determined for this analysis.

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Appendix D: Campaign II Sampling Matrix

The following 12 pages of this appendix contain a list of all the samples taken during Campaign II. Because of the large number of samples and the importance to document those that were taken, the tables have been put in a form, which is condensed. However, the tables are readable and their placement here should be useful to those wanting to better understand the data discussed in the body of this report. Because of the length of each list of samples with their corresponding test made, the original Excel speadsheet pages have been split in two and contain:

1. The top of each appendix page lists the specifics of each sample as to name, where in the test matrix it was taken, sample size, if it was expedited for fast processing, and if the sample needed special handing, like when solids had to be dissolved.

2. The bottom of each appendix page lists the specific analytic measurement history on the corresponding sample. The sample name is repeated to relate the history to the sample indicated in the top half.

Notes on the following Sample Tables

Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		ICC	Ion chrom. cations
ICPES	includes all elements present that can be analyzed by ICPES		IEC	Ion exclusion chrom.
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	AA	atomic absorption
	supernates	Cs, Rb	TS	total solids wt%
ICA	Ion chrom - anions	normal suite	UDS	undissolved solids wt%

Explanation of analyses:

DENS	density
RHEO	rheology
PSD	particle size distribution by Microtrac
XRD	X-ray diffraction - on filtered solids and blank ONLY IF SOLIDS PRESENT
TBOH	total base, free hydroxide, other base

DISMW: microwave acid dissolution
DISPER: sodium peroxide fusion / HCL uptake dissolution

Samples Taken During Pilot-Scale Recycle Blending

				Approx. Volume (L)	Sample	comment	Time Dependent Sample?	Sample Prep
RECYCLE BLENDING			Campaign I UF Wash Water	338.8	Previously analyzed: C1-WPE1 & C1-WPE2			
			HLW SBS	190.8	Previously analyzed: HLW-SBS-QUENCHER			
			HLW Vessel Vent (PVP)	220.7	Synthetic - no analysis			
			HLW Canister Decon	114.7	Synthetic - no analysis			
			Campaign I Caustic Flushes	117.0	Previously analyzed			
			Campaign I UF Acid Cleanings	122.6	Previously analyzed			
			Campaign I UF Loop Flushes (PWD-33)	13.10	see below			
			Campaign I Cs IX Recycle: Pre-Elution Rinse Water		NA			
			Campaign I Cs IX Recycle: 0.1M NaOH Displacement Solution		NA			
			COMBINED RECYCLES	1117.7	see below			
			(does not include NaOH to neutralize HNO3)					
		PWD	Generation of Synthetic Recycles					
			HLW Canister Decon					
			DI water	111.1				
			NaOH 50wt% (L)	0.860				
			NaNO3 (kg)	2.77				
			HLW Vessel Vent (PVP)					
			DI water	219.5				
			NaOH 50wt% (L)	1.14				
			Combined Canister Decon + PVP	335	C2-PWD-HLWRECS			
			UF Loop Flush		C2-PWD-LOOP-IN-ACTL			
			Add 0.01M NaOH to a carboy	8.6				
			Add Campaign I UF washed sludge product (20 wt%)	4.5				
			Sum	13.1				
			Combining of Recycles					
		PWD-44			C2-PWD-44-ACTL			
			Add HLW Canister Decon + PVP water to a tank	330.6	C2-PWD-44-ARC			
			Add HLW Canister Decon + PVP 50wt% NaOH	2.00				
			Add HLW Canister Decon NaNO3 (kg)	2.77				
			Add HLW SBS to tank with mixing	190.8				
			Add UF Loop Flushes (PWD-33) with mixing	13.1				
			Sum	539.3				
		PWD-15			C2-PWD-15-ACTL			
			Add Campaign I Wash Permeate to a tank (use 2nd drum,~0.05M OH)	169.4	C2-PWD-15-ARC			
			Add from Campaign I Caustic Flush Drum 1 with mixing	3.3				
			Add from Campaign I Caustic Flush Drum 2 with mixing	56.9				
			Add from Campaign I Caustic Flush Drum 3 with mixing	56.9				
			Sum	286.5				
		PWD-16			C2-PWD-16-ACTL			
			Add Campaign I Wash Permeate to a tank (use 1st drum,~0.1M OH)	169.4	C2-PWD-16-ARC			
			Add NaOH 50wt% (L)	10.5				
			Add from Campaign I Nitric Acid Cleaning Drum 1 with mixing	37.4				
			Add from Campaign I Nitric Acid Cleaning Drum 2 with mixing	42.5				
			Add from Campaign I Nitric Acid Cleaning Drum 3 with mixing	42.5				
			Sum	302.4				
		Combine Recycles in (FEP Feed) Tank			C2-FEP-FEED-ACTL			
			Add PWD-44 to tank with mixing	539.3	C2-FEP-FEED-WET			
			Add PWD-15 to tank with mixing	286.5	C2-FEP-FEED-MW			DISMW
			Add PWD-16 to tank with mixing	302.4	C2-FEP-FEED-PER			DISPER
			Sum	1128.2	C2-FEP-FEED-ARC			

Analytical Measurements On Samples Taken During Pilot-ScaleRecycle Blending

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
RECYCLE BLENDING			Campaign I UF Wash Water															
			HLW SBS															
			HLW Vessel Vent (PVP)															
			HLW Canister Decon															
			Campaign I Caustic Flushes															
			Campaign I UF Acid Cleanings															
			Campaign I UF Loop Flushes (PWD-33)															
			Campaign I Cs IX Recycle: Pre-Elution Rinse Water															
			Campaign I Cs IX Recycle: 0.1M NaOH Displacement Solution															
			COMBINED RECYCLES															
			(does not include NaOH to neutralize HNO3)															
		PWD	Generation of Synthetic Recycles															
			HLW Canister Decon															
			DI water															
			NaOH 50wt% (L)															
			NaNO3 (kg)															
			HLW Vessel Vent (PVP)															
			DI water															
			NaOH 50wt% (L)															
			Combined Canister Decon + PVP															
			UF Loop Flush								TS	UDS	DENS					
			Add 0.01M NaOH to a carboy															
			Add Campaign I UF washed sludge product (20 wt%)															
			Sum															
			Combining of Recycles															
		PWD-44		pH							TS	UDS	DENS					
			Add HLW Canister Decon + PVP water to a tank															
			Add HLW Canister Decon + PVP 50wt% NaOH															
			Add HLW Canister Decon NaNO3 (kg)															
			Add HLW SBS to tank with mixing															
			Add UF Loop Flushes (PWD-33) with mixing															
			Sum															
		PWD-15		pH							TS	UDS	DENS					
			Add Campaign I Wash Permeate to a tank (use 2nd drum,~0.05M OH)															
			Add from Campaign I Caustic Flush Drum 1 with mixing															
			Add from Campaign I Caustic Flush Drum 2 with mixing															
			Add from Campaign I Caustic Flush Drum 3 with mixing															
			Sum															
		PWD-16		pH							TS	UDS	DENS					
			Add Campaign I Wash Permeate to a tank (use 1st drum,~0.1M OH)															
			Add NaOH 50wt% (L)															
			Add from Campaign I Nitric Acid Cleaning Drum 1 with mixing															
			Add from Campaign I Nitric Acid Cleaning Drum 2 with mixing															
			Add from Campaign I Nitric Acid Cleaning Drum 3 with mixing															
			Sum															
		Combine Recycles in (FEP Feed) Tank		pH							TS	UDS	DENS					
			Add PWD-44 to tank with mixing				ICA										TBOH	
			Add PWD-15 to tank with mixing		ICPES	ICPMS				AA								
			Add PWD-16 to tank with mixing		ICPES													
			Sum															

Samples Taken During Pilot-Scale FEP Testing

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
FEP EVAPORATOR			Starting Volume	1128.2				
		Bottoms	After all antifoam additions		C2-FEP-B-START-ACTL			
					C2-FEP-B-START-ANTF			
					C2-FEP-B-START-ARC			
		Bottoms	At ~200 L evaporated		C2-FEP-B-200-ACTL			
					C2-FEP-B-200-WET			
					C2-FEP-B-200-ARC			
		Primary Condensate			C2-FEP-PC-200-ARC			
		Secondary Condensate			C2-FEP-SC-200-ARC			
		Bottoms	At ~400 L evaporated		C2-FEP-B-400-ACTL			
					C2-FEP-B-400-ARC			
		Primary Condensate			C2-FEP-PC-400-ARC			
		Secondary Condensate			C2-FEP-SC-400-ARC			
		Bottoms	At ~600 L evaporated		C2-FEP-B-600-ACTL			
					C2-FEP-B-600-ARC			
		Primary Condensate			C2-FEP-PC-600-ARC			
		Secondary Condensate			C2-FEP-SC-600-ARC			
		Bottoms	At ~800 L evaporated		C2-FEP-B-800-ACTL			
					C2-FEP-B-800-ARC			
		Primary Condensate			C2-FEP-PC-800-ARC			
		Secondary Condensate			C2-FEP-SC-800-ARC			
	RUSH	Bottoms	Evaporation completed		C2-FEP-B-END-SOL		RUSH	
					C2-FEP-B-END-ACTL			
					C2-FEP-B-END-WET			
	RUSH				C2-FEP-B-END-SUP		RUSH	SPECIAL
					C2-FEP-B-END-MW			DISMW
					C2-FEP-B-END-PER			DISPER
					C2-FEP-B-END-ANTF			
					C2-FEP-B-END-ARC			
		Primary Condensate	Evaporation completed		C2-FEP-PC-END-ARC			
		Secondary Condensate			C2-FEP-SC-END-ARC			
	COMBINE ALL FEP CONDENSATES							
		Combined FEP Condensate = RLD Condensate		1012.3	C2-RLD-FROM-FEP-ADS			
					C2-RLD-FROM-FEP-ACTL			
					C2-RLD-FROM-FEP-ARC			

Analytical Measurements On Samples Taken During Pilot-Scale FEP Testing

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
FEP EVAPORATOR			Starting Volume															
		Bottoms	After all antifoam additions								TS	UDS	DENS	RHEO				
		Bottoms	At ~200 L evaporated								TS	UDS	DENS					
					ICPES		ICA			AA								
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~400 L evaporated								TS	UDS	DENS					
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~600 L evaporated								TS	UDS	DENS					
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~800 L evaporated								TS	UDS	DENS					
		Primary Condensate																
		Secondary Condensate																
	RUSH	Bottoms	Evaporation completed	pH							**TS**	**UDS**	DENS					
											TS	UDS	DENS	RHEO				
							ICA								PSD		TBOH	
	RUSH				ICPES					**AA**								
					ICPES	ICPMS				AA								
					ICPES													
		Primary Condensate	Evaporation completed															
		Secondary Condensate																
	COMBINE ALL FEP CONDENSATES																	
		Combined FEP Condensate = RLD Condensate			ICPES	ICPMS	ICA			AA								
				pH							TS	UDS	DENS					

Samples Taken During Pilot-Scale UFP Testing

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
ULTRAFILTRATION		UFP	FEP Bottoms (L)	115.8	see above for sample			
	RUSH		AY102 before Supernate Addition		C2-AY102-SOL-NOSUP		RUSH	
	RUSH		AY102 (L)	252.5	C2-AY102-SOL		RUSH	
					C2-AY102-WET			
					C2-AY102-MW			DISMW
					C2-AY102-PER			DISPER
	RUSH				C2-AY102-SUP		RUSH	SPECIAL
					C2-AY102-ARC			
			AP101 (L)	671.5	C2-AP101-ACTL			
					C2-AP101-WET			
					C2-AP101-MW			DISMW
					C2-AP101-PER			DISPER
					C2-AP101-ARC			
			UFP Heel		-			
			COMBINED UFP FEEDS	1039.8	-			
	CONCENTRATE		Starting volume (L)	1039.8				
			Fill feed tank to:	140	`			
		UFP Feed	before start of run		C2-UF-START-AS-ACTL			
					C2-UF-START-AS-MW			DISMW
					C2-UF-START-AS-PER			DISPER
					C2-UF-START-AS-WET			
					C2-UF-START-SUP-ACTL			SPECIAL
					C2-UF-START-SUP-ADS			SPECIAL
					C2-UF-START-ARC			
			Total time to concentrate (hr)	30.1				
	1st 1/2 of Batch		Time for first half batch (hr)	15.1				
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	153.7	C2-UF-CON1-154		RUSH	
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	307.4	C2-UF-CON1-307		RUSH	
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	461.2	C2-UF-CON1-461		RUSH	
	Note: EDL to measure	Permeate Sample	at ~ this vol permeate removed (L)	153.7	C2-PE-CON1-154-XRD	only if solids	Y	
	turbidity throughout				C2-PE-CON1-154-XRD-BLK	blank		
	filtration.	Permeate Sample	at ~ this vol permeate removed (L)	307.4	C2-PE-CON1-307-XRD	only if solids	Y	
					C2-PE-CON1-307-XRD-BLK	blank		
		Permeate Sample	at ~ this vol permeate removed (L)	461.2	C2-PE-CON1-461-XRD	only if solids	Y	
					C2-PE-CON1-461-XRD-BLK	blank		
					C2-PE-CON1-461-ACTL			
	Hold		Hold for 12 hr					

Analytical Measurements On Samples Taken During Pilot-Scale UFP Testing

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
ULTRAFILTRATION		UFP	FEP Bottoms (L)															
	RUSH		AY102 before Supernate Addition								TS	UDS						
	RUSH		AY102 (L)								TS	UDS	DENS					
							ICA			IEC								
					ICPES	ICPMS				AA								
					ICPES													
	RUSH					ICPMS												
			AP101 (L)								TS	UDS	DENS					
							ICA			IEC								
					ICPES	ICPMS				AA								
					ICPES													
			UFP Heel															
			COMBINED UFP FEEDS															
	CONCENTRATE		Starting volume (L)															
			Fill feed tank to:															
		UFP Feed	before start of run	pH							TS	UDS	DENS	RHEO				
					ICPES	ICPMS				AA								
					ICPES													
							ICA		IEC						PSD		TBOH	
											TS		DENS	RHEO				
					ICPES	ICPMS	ICA		IEC	AA								
			Total time to concentrate (hr)															
	1st 1/2 of Batch		Time for first half batch (hr)															
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)								TS	UDS	DENS					
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)								TS	UDS	DENS					
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)								TS	UDS	DENS					
	Note: EDL to measure	Permeate Sample	at ~ this vol permeate removed (L)													XRD		
	turbidity throughout															XRD		
	filtration.	Permeate Sample	at ~ this vol permeate removed (L)													XRD		
																XRD		
		Permeate Sample	at ~ this vol permeate removed (L)													XRD		
																XRD		
											TS	UDS	DENS					
	Hold		Hold for 12 hr															

Samples Taken During Pilot-Scale UFP Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
	2nd 1/2 of Batch		Time for second half batch (hr)	15.1				
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	153.7	C2-UF-CON2-154	RUSH		
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)	307.4	C2-UF-CON2-307	RUSH		
		Concentrate Sample	all permeate removed, @ 20wt% solids	461.2	C2-UF-CON2-461-MW			DISMW
					C2-UF-CON2-461-PER			DISPER
					C2-UF-CON2-461-WET			
	RUSH				C2-UF-CON2-461-SOL	RUSH		
					C2-UF-CON2-461-ACTL			
					C2-UF-CON2-461-ARC			
		Permeate Sample	at ~ this vol permeate removed (L)	153.7	C2-PE-CON2-154-XRD	only if solids	Y	
					C2-PE-CON2-154-XRD-BLK	blank		
		Permeate Sample	at ~ this vol permeate removed (L)	307.4	C2-PE-CON2-307-XRD	only if solids	Y	
					C2-PE-CON2-307-XRD-BLK	blank		
		Permeate Sample	all permeate removed, @ 20wt% solids	461.2	C2-PE-CON2-461-XRD	only if solids	Y	
					C2-PE-CON2-461-XRD-BLK	blank		
	CONCENTRATION	Concentrate	volume in feed tank (L)	117.0				
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE		C2-IX-FEED-ADS			
		to IX	total volume of permeate (L)	922.3	C2-IX-FEED-ACTL			
					C2-IX-FEED-ANTF			
					C2-IX-FEED-XRD	only if solids	Y	
					C2-IX-FEED-XRD-BLK	blank		
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE IF NECESSARY							
	RUSH				C2-UF-CON2-ADJ	RUSH		
	FIRST WASH		RLD Wash water (L)	114.7				
WASHING		Concentrate Sample	after addition #	1	C2-UF-W1-1			
		Concentrate Sample	after addition #	5	C2-UF-W1-5			
		Concentrate Sample	after addition #	9	C2-UF-W1-9			
		Concentrate Sample	after addition #	13	C2-UF-W1-13			
		Concentrate Sample	after addition #	17	C2-UF-W1-17			
		Concentrate Sample	after addition # (last)	22	C2-UF-W1-22-MW			DISMW
					C2-UF-W1-22-PER			DISPER
					C2-UF-W1-22-WET			
					C2-UF-W1-22-ACTL			
					C2-UF-W1-22-ARC			
		Wash Permeate	after addition #	1	C2-WPE1-1-ACTL			
					C2-WPE1-1-XRD	only if solids	Y	
					C2-WPE1-1-XRD-BLK	blank		
		Wash Permeate	after addition #	5	C2-WPE1-5-ACTL			
					C2-WPE1-5-XRD	only if solids	Y	
					C2-WPE1-5-XRD-BLK	blank		
		Wash Permeate	after addition #	9	C2-WPE1-9-ACTL			
					C2-WPE1-9-XRD	only if solids	Y	
					C2-WPE1-9-XRD-BLK	blank		
		Wash Permeate	after addition #	13	C2-WPE1-13-ACTL			
					C2-WPE1-13-XRD	only if solids	Y	
					C2-WPE1-13-XRD-BLK	blank		
		Wash Permeate	after addition #	17	C2-WPE1-17-ACTL			
					C2-WPE1-17-XRD	only if solids	Y	
					C2-WPE1-17-XRD-BLK	blank		

Analytical Measurements On Samples Taken During Pilot-Scale UFP Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
	2nd 1/2 of Batch		Time for second half batch (hr)															
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)								TS	UDS	DENS					
	RUSH	Concentrate Sample	at ~ this vol permeate removed (L)								TS	UDS	DENS					
		Concentrate Sample	all permeate removed, @ 20wt% solids		ICPES	ICPMS				AA								
					ICPES													
							ICA		IEC						PSD			
	RUSH										TS	UDS						
											TS	UDS	DENS	RHEO				
		Permeate Sample	at ~ this vol permeate removed (L)													XRD		
																XRD		
		Permeate Sample	at ~ this vol permeate removed (L)													XRD		
																XRD		
		Permeate Sample	all permeate removed, @ 20wt% solids													XRD		
																XRD		
	CONCENTRATION	Concentrate	volume in feed tank (L)															
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE		ICPES	ICPMS	ICA		IEC	AA								
		to IX	total volume of permeate (L)								TS	UDS	DENS	RHEO				
																XRD		
																XRD		
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE IF NECESSARY																	
	RUSH										TS	UDS	DENS					
	FIRST WASH		RLD Wash water (L)															
WASHING		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition # (last)		ICPES	ICPMS				AA								
					ICPES													
							ICA								PSD			
											TS	UDS	DENS	RHEO				
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #															
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		

Samples Taken During Pilot-Scale UFP Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
		Wash Permeate	after addition #	22	C2-WPE1-22-ACTL			
					C2-WPE1-22-XRD	only if solids	Y	
					C2-WPE1-22-XRD-BLK	blank		
		Wash Permeate	~40 minutes after last sample	END	C2-WPE1-END-ACTL			
			(system running with permeate in recycle)		C2-WPE1-END-XRD	only if solids	Y	
					C2-WPE1-END-XRD-BLK	blank		
		Wash Permeate	composite of 1st wash permeate		C2-WPE1-CMP-ADS			
					C2-WPE1-CMP-ACTL			
					C2-WPE1-CMP-XRD	only if solids	Y	
					C2-WPE1-CMP-XRD-BLK	blank		
	END 1ST WASH	Concentrate		140.0				
	2ND WASH		RLD Wash water (L)	114.7				
		Concentrate Sample	after addition #	1	C2-UF-W2-1			
		Concentrate Sample	after addition #	5	C2-UF-W2-5			
		Concentrate Sample	after addition #	9	C2-UF-W2-9			
		Concentrate Sample	after addition #	13	C2-UF-W2-13			
		Concentrate Sample	after addition #	17	C2-UF-W2-17			
		Concentrate Sample	after addition # (last)	22	C2-UF-W2-22-MW			DISMW
		(to HLW)			C2-UF-W2-22-PER			DISPER
					C2-UF-W2-22-WET			
	RUSH				C2-UF-W2-22-SOL	RUSH		
					C2-UF-W2-22-ACTL			
					C2-UF-W2-22-ANTF			
					C2-UF-W2-22-ARC			
		Wash Permeate	after addition #	1	C2-WPE2-1-ACTL			
					C2-WPE2-1-XRD	only if solids	Y	
					C2-WPE2-1-XRD-BLK	blank		
		Wash Permeate	after addition #	5	C2-WPE2-5-ACTL			
					C2-WPE2-5-XRD	only if solids	Y	
					C2-WPE2-5-XRD-BLK	blank		
		Wash Permeate	after addition #	9	C2-WPE2-9-ACTL			
					C2-WPE2-9-XRD	only if solids	Y	
					C2-WPE2-9-XRD-BLK	blank		
		Wash Permeate	after addition #	13	C2-WPE2-13-ACTL			
					C2-WPE2-13-XRD	only if solids	Y	
					C2-WPE2-13-XRD-BLK	blank		
		Wash Permeate	after addition #	17	C2-WPE2-17-ACTL			
					C2-WPE2-17-XRD	only if solids	Y	
					C2-WPE2-17-XRD-BLK	blank		
		Wash Permeate	after addition #	22	C2-WPE2-22-ACTL			
					C2-WPE2-22-XRD	only if solids	Y	
					C2-WPE2-22-XRD-BLK	blank		
		Wash Permeate	~40 minutes after last sample	END	C2-WPE2-END-ACTL			
			(system running with permeate in recycle)		C2-WPE2-END-XRD	only if solids	Y	
					C2-WPE2-END-XRD-BLK	blank		
		Wash Permeate	composite of 2nd wash permeate		C2-WPE2-CMP-ADS			
					C2-WPE2-CMP-ACTL			
					C2-WPE2-CMP-XRD	only if solids	Y	
					C2-WPE2-CMP-XRD-BLK	blank		
	END 2ND WASH							
		Concentrate	volume washed concentrate	110.9				

Analytical Measurements On Samples Taken During Pilot-Scale UFP Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	~40 minutes after last sample								TS							
			(system running with permeate in recycle)													XRD		
																XRD		
		Wash Permeate	composite of 1st wash permeate		ICPES	ICPMS	ICA		IEC	AA								
											TS							
																XRD		
																XRD		
	END 1ST WASH	Concentrate																
	2ND WASH		RLD Wash water (L)															
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition #								TS	UDS	DENS	RHEO				
		Concentrate Sample	after addition # (last)		ICPES	ICPMS				AA								
		(to HLW)			ICPES													
							ICA								PSD			
	RUSH										TS	UDS						
											TS	UDS	DENS	RHEO				
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	after addition #								TS							
																XRD		
																XRD		
		Wash Permeate	~40 minutes after last sample								TS							
			(system running with permeate in recycle)													XRD		
																XRD		
		Wash Permeate	composite of 2nd wash permeate		ICPES	ICPMS	ICA		IEC	AA								
											TS							
																XRD		
																XRD		
	END 2ND WASH																	
		Concentrate	volume washed concentrate															

Samples Taken During Pilot-Scale UFP Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
CLEANING								
	Loop Flush	"Flush" UF Feed Loop- offline			C2-LOOP-TO-C3			
		RLD Condensate	volume needed	8.59				
		Concentrated Slurry	volume needed	4.51				
		Save for Campaign III						
	UF Caustic Flush 1	Flush UF System						
		Caustic Flushing Solution						
		RLD Dilution Water	volume needed for 3 flushes	94.1				
		NaOH	add to 0.1 M (L 50 wt%)	0.490				
CLEANING		Simulated Heel + Filter Loop Residue						
		RLD Dilution Water	volume needed	12.5				
		Concentrated Slurry	volume needed	4.1				
		Caustic Flush 1	after flushing		C2-CAU-1-ACTL			
					C2-CAU-2-WET			SPECIAL
					C2-CAU-1-MW			DISMW
					C2-CAU-1-ARC			
	HNO3 Cleaning	2 M HNO3 cleaning						
		Caustic Flush Heel	volume needed	20.00				
		HNO3 Reagent						
			RLD Dilution Water	247.5				
			HNO3 (70 wt%)	36.3				
			RLD Dilution Water + HNO3 total for 3 cleanings	283.8				
	Cleaning #1	Acid Cleaning 1	after cleaning	114.6	C2-NIT-1-ACTL			
					C2-NIT-1-WET			SPECIAL
					C2-NIT-1-MW			DISMW
					C2-NIT-1-PPT	collect solids		
					C2-NIT-1-PPT-BLK	blank		
					C2-NIT-1-ARC			
		Cleaning Heel	volume needed	20.00				
	Cleaning #2	Acid Cleaning 2	after cleaning	114.6	C2-NIT-2-ACTL			
					C2-NIT-2-WET			SPECIAL
					C2-NIT-2-MW	only if solids		DISMW
					C2-NIT-2-ARC-A			
					C2-NIT-2-ARC-B			
		Cleaning Heel	volume needed (L)	20.00				
	Cleaning #3	Acid Cleaning 3	after cleaning (L)	114.6	C2-NIT-3-ACTL			
					C2-NIT-3-WET			SPECIAL
					C2-NIT-3-MW	only if solids		DISMW
					C2-NIT-3-ARC-A			
					C2-NIT-3-ARC-B			
		Cleaning Heel	volume needed (L)	20.00				
	UF Caustic Flushes 2&3	Flush UF System						
		Caustic Flushing Solution						
		RLD Dilution Water	volume needed for 3 flushes (L)	94.1				
		NaOH	add to 0.1 M (L 50 wt%)	0.490				
		Flush water	after Flush	114.6	C2-CAU-2-ACTL			
					C2-CAU-2-WET	SPECIAL		
					C2-CAU-2-ARC-A			
					C2-CAU-2-ARC-B			
		Flush 2 Heel	volume needed (L)	20.00				

Analytical Measurements On Samples Taken During Pilot-Scale UFP Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
CLEANING																		
	Loop Flush	"Flush" UF Feed Loop- offline									TS	UDS	DENS					
		RLD Condensate	volume needed															
		Concentrated Slurry	volume needed															
		Save for Campaign III																
	UF Caustic Flush 1	Flush UF System																
		Caustic Flushing Solution																
		RLD Dilution Water	volume needed for 3 flushes															
		NaOH	add to 0.1 M (L 50 wt%)															
CLEANING		Simulated Heel + Filter Loop Residue																
		RLD Dilution Water	volume needed															
		Concentrated Slurry	volume needed															
		Caustic Flush 1	after flushing	pH							TS	UDS	DENS					
					ICPES		ICA			AA								
					ICPES					AA								
	HNO3 Cleaning	2 M HNO3 cleaning																
		Caustic Flush Heel	volume needed															
		HNO3 Reagent																
			RLD Dilution Water															
			HNO3 (70 wt%)															
			RLD Dilution Water + HNO3 total for 3 cleanings															
	Cleaning #1	Acid Cleaning 1	after cleaning								TS	UDS	DENS					
					ICPES					AA								TACID
					ICPES					AA								
																XRD		
																XRD		
		Cleaning Heel	volume needed															
	Cleaning #2	Acid Cleaning 2	after cleaning								TS	UDS	DENS					
					ICPES					AA								TACID
					ICPES													
		Cleaning Heel	volume needed (L)															
	Cleaning #3	Acid Cleaning 3	after cleaning (L)								TS	UDS	DENS					
					ICPES					AA								TACID
					ICPES													
		Cleaning Heel	volume needed (L)															
	UF Caustic Flushes 2&3	Flush UF System																
		Caustic Flushing Solution																
		RLD Dilution Water	volume needed for 3 flushes (L)															
		NaOH	add to 0.1 M (L 50 wt%)															
		Flush water	after Flush	pH							TS	UDS	DENS					
					ICPES		ICA			AA								TACID
		Flush 2 Heel	volume needed (L)															

Samples Taken During Pilot-Scale UFP Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
		Caustic Flushing Solution						
		RLD Dilution Water	**volume needed for 3 flushes (L)**	**94.1**				
		NaOH	**add to 0.1 M (L 50 wt%)**	**0.490**				
		Flush water	**after Flush**	**114.6**	C2-CAUU-3-ACTL			
					C2-CAUU-3-WET	SPECIAL		
					C2-CAUU-3-ARC-A			
					C2-CAUU-3-ARC-B			
		Drain System- Leave no Heel						

Analytical Measurements On Samples Taken During Pilot-Scale UFP Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
		Caustic Flushing Solution																
		RLD Dilution Water	**volume needed for 3 flushes (L)**															
		NaOH	**add to 0.1 M (L 50 wt%)**															
		Flush water	**after Flush**	pH							TS	UDS	DENS					
					ICPES		ICA			AA							TBOH	
		Drain System- Leave no Heel																

Samples Taken During Pilot-Scale CIX Testing

ION EXCHANGE		ION EXCHANGE						
	RUSH	Cycle 1	Lead Column @ BV = 5		C2-IX-CY1-LEAD-5		RUSH	
			Lead Column @ BV = 10		C2-IX-CY1-LEAD-10			
			Lead Column @ BV = 15		C2-IX-CY1-LEAD-15			
			Lead Column @ BV = 20		C2-IX-CY1-LEAD-20			
			Lead Column @ BV = 25		C2-IX-CY1-LEAD-25			
			Lead Column @ BV = 30		C2-IX-CY1-LEAD-30			
			Lead Column @ BV = 35		C2-IX-CY1-LEAD-35			
			Lead Column @ BV = 40		C2-IX-CY1-LEAD-40			
			Lead Column @ BV = 45		C2-IX-CY1-LEAD-45			
			Lead Column @ BV = 50		C2-IX-CY1-LEAD-50			
			Lead Column @ BV = 55		C2-IX-CY1-LEAD-55			
			Lead Column @ BV = 60		C2-IX-CY1-LEAD-60			
			Lead Column @ BV = 65		C2-IX-CY1-LEAD-65			
			Lead Column @ BV = 70		C2-IX-CY1-LEAD-70			
			Lead Column @ BV = 75		C2-IX-CY1-LEAD-75			
			Lead Column @ BV = 80		C2-IX-CY1-LEAD-80			
			Lead Column @ BV = 85		C2-IX-CY1-LEAD-85			
			Lead Column @ BV = 90		C2-IX-CY1-LEAD-90			
			Lead Column @ BV = 95		C2-IX-CY1-LEAD-95			
	RUSH		Lead Column @ BV = 100		C2-IX-CY1-LEAD-100		RUSH	
			Lead Column @ BV = 105		C2-IX-CY1-LEAD-105			
			Lead Column @ BV = 110		C2-IX-CY1-LEAD-110			
			Lead Column @ BV = 115		C2-IX-CY1-LEAD-115			
			Lead Column @ BV = 120		C2-IX-CY1-LEAD-120			
			Lead Column @ BV = 125		C2-IX-CY1-LEAD-125			
			Lead Column @ BV = 130		C2-IX-CY1-LEAD-130			
			Lead Column @ BV = 135		C2-IX-CY1-LEAD-135			
			Lead Column @ BV = 140		C2-IX-CY1-LEAD-140			
			Lead Column @ BV = 145		C2-IX-CY1-LEAD-145			
			Lead Column @ BV = 150		C2-IX-CY1-LEAD-150			
	RUSH		Lead Column @ BV = 155		C2-IX-CY1-LEAD-155			
	RUSH		Lead Column @ BV = 160		C2-IX-CY1-LEAD-160			
	RUSH		Lead Column @ BV = 165		C2-IX-CY1-LEAD-165			
	RUSH		Lead Column @ BV = 170		C2-IX-CY1-LEAD-170			
	RUSH		Lead Column @ BV = 175		C2-IX-CY1-LEAD-175		RUSH	
	RUSH		Lead Column @ BV = 180		C2-IX-CY1-LEAD-180		RUSH	
	RUSH		Lead Column @ BV = 185		C2-IX-CY1-LEAD-185		RUSH	
	RUSH		Lead Column @ BV = 190		C2-IX-CY1-LEAD-190		RUSH	
	RUSH		BLANK		C2-IX-CY1-LEAD-176		RUSH	
			Lead Column @ BV = END		C2-IX-CY1-LEAD-END		RUSH	

Analytical Measurements On Samples Taken During Pilot-Scale CIX Testing

ION EXCHANGE		ION EXCHANGE															
	RUSH	Cycle 1	Lead Column @ BV = 5			ICPMS											
			Lead Column @ BV = 10														
			Lead Column @ BV = 15														
			Lead Column @ BV = 20														
			Lead Column @ BV = 25														
			Lead Column @ BV = 30														
			Lead Column @ BV = 35														
			Lead Column @ BV = 40														
			Lead Column @ BV = 45														
			Lead Column @ BV = 50														
			Lead Column @ BV = 55														
			Lead Column @ BV = 60														
			Lead Column @ BV = 65														
			Lead Column @ BV = 70														
			Lead Column @ BV = 75														
			Lead Column @ BV = 80														
			Lead Column @ BV = 85														
			Lead Column @ BV = 90														
			Lead Column @ BV = 95														
	RUSH		Lead Column @ BV = 100			ICPMS											
			Lead Column @ BV = 105														
			Lead Column @ BV = 110														
			Lead Column @ BV = 115														
			Lead Column @ BV = 120														
			Lead Column @ BV = 125														
			Lead Column @ BV = 130														
			Lead Column @ BV = 135														
			Lead Column @ BV = 140														
			Lead Column @ BV = 145														
			Lead Column @ BV = 150														
	RUSH		Lead Column @ BV = 155			ICPMS											
	RUSH		Lead Column @ BV = 160			ICPMS											
	RUSH		Lead Column @ BV = 165			ICPMS											
	RUSH		Lead Column @ BV = 170			ICPMS											
	RUSH		Lead Column @ BV = 175			ICPMS											
	RUSH		Lead Column @ BV = 180			ICPMS											
	RUSH		Lead Column @ BV = 185			ICPMS											
	RUSH		Lead Column @ BV = 190			ICPMS											
	RUSH		BLANK			ICPMS											
			Lead Column @ BV = END			ICPMS											

Samples Taken During Pilot-Scale CIX Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
ION	RUSH	Cycle 1	Lag Column @ BV = 5		C2-IX-CY1-LAG-5		RUSH	
EXCHANGE			Lag Column @ BV = 10		C2-IX-CY1-LAG-10			
			Lag Column @ BV = 15		C2-IX-CY1-LAG-15			
			Lag Column @ BV = 20		C2-IX-CY1-LAG-20			
			Lag Column @ BV = 25		C2-IX-CY1-LAG-25			
			Lag Column @ BV = 30		C2-IX-CY1-LAG-30			
			Lag Column @ BV = 35		C2-IX-CY1-LAG-35			
			Lag Column @ BV = 40		C2-IX-CY1-LAG-40			
			Lag Column @ BV = 45		C2-IX-CY1-LAG-45			
			Lag Column @ BV = 50		C2-IX-CY1-LAG-50			
			Lag Column @ BV = 55		C2-IX-CY1-LAG-55			
			Lag Column @ BV = 60		C2-IX-CY1-LAG-60			
			Lag Column @ BV = 65		C2-IX-CY1-LAG-65			
			Lag Column @ BV = 70		C2-IX-CY1-LAG-70			
			Lag Column @ BV = 75		C2-IX-CY1-LAG-75			
			Lag Column @ BV = 80		C2-IX-CY1-LAG-80			
			Lag Column @ BV = 85		C2-IX-CY1-LAG-85			
			Lag Column @ BV = 90		C2-IX-CY1-LAG-90			
			Lag Column @ BV = 95		C2-IX-CY1-LAG-95			
	RUSH		Lag Column @ BV = 100		C2-IX-CY1-LAG-100		RUSH	
			Lag Column @ BV = 105		C2-IX-CY1-LAG-105			
			Lag Column @ BV = 110		C2-IX-CY1-LAG-110			
			Lag Column @ BV = 115		C2-IX-CY1-LAG-115			
			Lag Column @ BV = 120		C2-IX-CY1-LAG-120			
			Lag Column @ BV = 125		C2-IX-CY1-LAG-125			
			Lag Column @ BV = 130		C2-IX-CY1-LAG-130			
			Lag Column @ BV = 135		C2-IX-CY1-LAG-135			
			Lag Column @ BV = 140		C2-IX-CY1-LAG-140			
			Lag Column @ BV = 145		C2-IX-CY1-LAG-145			
			Lag Column @ BV = 150		C2-IX-CY1-LAG-150			
	RUSH		Lag Column @ BV = 155		C2-IX-CY1-LAG-155			
	RUSH		Lag Column @ BV = 160		C2-IX-CY1-LAG-160			
	RUSH		Lag Column @ BV = 165		C2-IX-CY1-LAG-165			
	RUSH		Lag Column @ BV = 170		C2-IX-CY1-LAG-170			
	RUSH		Lag Column @ BV = 175		C2-IX-CY1-LAG-175			
	RUSH		Lag Column @ BV = 180		C2-IX-CY1-LAG-180			
	RUSH		Lag Column @ BV = 185		C2-IX-CY1-LAG-185		RUSH	
	RUSH		Lag Column @ BV = 190		C2-IX-CY2-LAG-190		RUSH	
	RUSH		Lag Column @ BV = END		C2-IX-CY1-LAG-END		RUSH	
	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)				C2-IX-CY1-LAW-FROM-DIS			
	Displacement Solution Displaced by Addition of Pre-elution Rinse (to C3 Recycle))				C2-IX-CY1-DIS-FROM-PRER			
		Pre-Elution Rinse Displaced by Eluant			C2-IX-CY1-PRER-FROM-ELU			
			HNO3 Eluate (to HLW)		C2-IX-CY1-HLWELUATE			
		Post Elution Rinse Displaced by Regeneration Solution			C2-IX-CY1-POER-FROM-REG			
		0.25M NaOH Regeneration Effluent (to C3 Recycle)			C2-IX-CY1-REG			

Analytical Measurements On Samples Taken During Pilot-Scale CIX Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
ION	RUSH	Cycle 1	Lag Column @ BV = 5			ICPMS												
EXCHANGE			Lag Column @ BV = 10															
			Lag Column @ BV = 15															
			Lag Column @ BV = 20															
			Lag Column @ BV = 25															
			Lag Column @ BV = 30															
			Lag Column @ BV = 35															
			Lag Column @ BV = 40															
			Lag Column @ BV = 45															
			Lag Column @ BV = 50															
			Lag Column @ BV = 55															
			Lag Column @ BV = 60															
			Lag Column @ BV = 65															
			Lag Column @ BV = 70															
			Lag Column @ BV = 75															
			Lag Column @ BV = 80															
			Lag Column @ BV = 85															
			Lag Column @ BV = 90															
			Lag Column @ BV = 95															
	RUSH		Lag Column @ BV = 100			ICPMS												
			Lag Column @ BV = 105															
			Lag Column @ BV = 110															
			Lag Column @ BV = 115															
			Lag Column @ BV = 120															
			Lag Column @ BV = 125															
			Lag Column @ BV = 130															
			Lag Column @ BV = 135															
			Lag Column @ BV = 140															
			Lag Column @ BV = 145															
			Lag Column @ BV = 150															
	RUSH		Lag Column @ BV = 155			ICPMS												
	RUSH		Lag Column @ BV = 160			ICPMS												
	RUSH		Lag Column @ BV = 165			ICPMS												
	RUSH		Lag Column @ BV = 170			ICPMS												
	RUSH		Lag Column @ BV = 175			ICPMS												
	RUSH		Lag Column @ BV = 180			ICPMS												
	RUSH		Lag Column @ BV = 185			ICPMS												
	RUSH		Lag Column @ BV = 190			ICPMS												
	RUSH		Lag Column @ BV = END			ICPMS												
	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)				ICPES	ICPMS				AA							TBOH	
	Displacement Solution Displaced by Addition of Pre-elution Rinse (to C3 Recycle))				ICPES	ICPMS				AA							TBOH	
		Pre-Elution Rinse Displaced by Eluant																
			HNO3 Eluate (to HLW)		ICPES	ICPMS				AA								TACID
		Post Elution Rinse Displaced by Regeneration Solution			ICPES	ICPMS				AA								TACID
		0.25M NaOH Regeneration Effluent (to C3 Recycle)			ICPES	ICPMS				AA							TBOH	

Samples Taken During Pilot-Scale CIX Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
ION	RUSH	Cycle 2	Lead Column @ BV = 5		C2-IX-CY2-LEAD-5		RUSH	
EXCHANGE			Lead Column @ BV = 10		C2-IX-CY2-LEAD-10			
			Lead Column @ BV = 15		C2-IX-CY2-LEAD-15			
			Lead Column @ BV = 20		C2-IX-CY2-LEAD-20			
			Lead Column @ BV = 25		C2-IX-CY2-LEAD-25			
			Lead Column @ BV = 30		C2-IX-CY2-LEAD-30			
			Lead Column @ BV = 35		C2-IX-CY2-LEAD-35			
			Lead Column @ BV = 40		C2-IX-CY2-LEAD-40			
			Lead Column @ BV = 45		C2-IX-CY2-LEAD-45			
			Lead Column @ BV = 50		C2-IX-CY2-LEAD-50			
			Lead Column @ BV = 55		C2-IX-CY2-LEAD-55			
			Lead Column @ BV = 60		C2-IX-CY2-LEAD-60			
			Lead Column @ BV = 65		C2-IX-CY2-LEAD-65			
			Lead Column @ BV = 70		C2-IX-CY2-LEAD-70			
			Lead Column @ BV = 75		C2-IX-CY2-LEAD-75			
			Lead Column @ BV = 80		C2-IX-CY2-LEAD-80			
			Lead Column @ BV = 85		C2-IX-CY2-LEAD-85			
			Lead Column @ BV = 90		C2-IX-CY2-LEAD-90			
			Lead Column @ BV = 95		C2-IX-CY2-LEAD-95			
	RUSH		Lead Column @ BV = 100		C2-IX-CY2-LEAD-100		RUSH	
			Lead Column @ BV = 105		C2-IX-CY2-LEAD-105			
			Lead Column @ BV = 110		C2-IX-CY2-LEAD-110			
			Lead Column @ BV = 115		C2-IX-CY2-LEAD-115			
			Lead Column @ BV = 120		C2-IX-CY2-LEAD-120			
			Lead Column @ BV = 125		C2-IX-CY2-LEAD-125			
			Lead Column @ BV = 130		C2-IX-CY2-LEAD-130			
			Lead Column @ BV = 135		C2-IX-CY2-LEAD-135			
			Lead Column @ BV = 140		C2-IX-CY2-LEAD-140			
			Lead Column @ BV = 145		C2-IX-CY2-LEAD-145			
			Lead Column @ BV = 150		C2-IX-CY2-LEAD-150			
	RUSH		Lead Column @ BV = 155		C2-IX-CY2-LEAD-155			
	RUSH		Lead Column @ BV = 160		C2-IX-CY2-LEAD-160			
	RUSH		Lead Column @ BV = 165		C2-IX-CY2-LEAD-165			
	RUSH		Lead Column @ BV = 170		C2-IX-CY2-LEAD-170			
	RUSH		Lead Column @ BV = 175		C2-IX-CY2-LEAD-175		RUSH	
	RUSH		Lead Column @ BV = 180		C2-IX-CY2-LEAD-180		RUSH	
	RUSH		Lead Column @ BV = 185		C2-IX-CY2-LEAD-185		RUSH	
	RUSH		Lead Column @ BV = 190		C2-IX-CY2-LEAD-190		RUSH	
	RUSH		Lead Column @ BV = END		C2-IX-CY2-LEAD-END		RUSH	

Analytical Measurements On Samples Taken During Pilot-Scale CIX Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
ION	RUSH	Cycle 2	Lead Column @ BV = 5			ICPMS												
EXCHANGE			Lead Column @ BV = 10															
			Lead Column @ BV = 15															
			Lead Column @ BV = 20															
			Lead Column @ BV = 25															
			Lead Column @ BV = 30															
			Lead Column @ BV = 35															
			Lead Column @ BV = 40															
			Lead Column @ BV = 45															
			Lead Column @ BV = 50															
			Lead Column @ BV = 55															
			Lead Column @ BV = 60															
			Lead Column @ BV = 65															
			Lead Column @ BV = 70															
			Lead Column @ BV = 75															
			Lead Column @ BV = 80															
			Lead Column @ BV = 85															
			Lead Column @ BV = 90															
			Lead Column @ BV = 95															
	RUSH		Lead Column @ BV = 100			ICPMS												
			Lead Column @ BV = 105															
			Lead Column @ BV = 110															
			Lead Column @ BV = 115															
			Lead Column @ BV = 120															
			Lead Column @ BV = 125															
			Lead Column @ BV = 130															
			Lead Column @ BV = 135															
			Lead Column @ BV = 140															
			Lead Column @ BV = 145															
			Lead Column @ BV = 150															
	RUSH		Lead Column @ BV = 155			ICPMS												
	RUSH		Lead Column @ BV = 160			ICPMS												
	RUSH		Lead Column @ BV = 165			ICPMS												
	RUSH		Lead Column @ BV = 170			ICPMS												
	RUSH		Lead Column @ BV = 175			ICPMS												
	RUSH		Lead Column @ BV = 180			ICPMS												
	RUSH		Lead Column @ BV = 185			ICPMS												
	RUSH		Lead Column @ BV = 190			ICPMS												
	RUSH		Lead Column @ BV = END			ICPMS												

Samples Taken During Pilot-Scale CIX Testing (continued)

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
ION	RUSH	Cycle 2	Lag Column @ BV = 5		C2-IX-CY2-LAG-5		RUSH	
EXCHANGE			Lag Column @ BV = 10		C2-IX-CY2-LAG-10			
			Lag Column @ BV = 15		C2-IX-CY2-LAG-15			
			Lag Column @ BV = 20		C2-IX-CY2-LAG-20			
			Lag Column @ BV = 25		C2-IX-CY2-LAG-25			
			Lag Column @ BV = 30		C2-IX-CY2-LAG-30			
			Lag Column @ BV = 35		C2-IX-CY2-LAG-35			
			Lag Column @ BV = 40		C2-IX-CY2-LAG-40			
			Lag Column @ BV = 45		C2-IX-CY2-LAG-45			
			Lag Column @ BV = 50		C2-IX-CY2-LAG-50			
			Lag Column @ BV = 55		C2-IX-CY2-LAG-55			
			Lag Column @ BV = 60		C2-IX-CY2-LAG-60			
			Lag Column @ BV = 65		C2-IX-CY2-LAG-65			
			Lag Column @ BV = 70		C2-IX-CY2-LAG-70			
			Lag Column @ BV = 75		C2-IX-CY2-LAG-75			
			Lag Column @ BV = 80		C2-IX-CY2-LAG-80			
			Lag Column @ BV = 85		C2-IX-CY2-LAG-85			
			Lag Column @ BV = 90		C2-IX-CY2-LAG-90			
			Lag Column @ BV = 95		C2-IX-CY2-LAG-95			
	RUSH		Lag Column @ BV = 100		C2-IX-CY2-LAG-100		RUSH	
			Lag Column @ BV = 105		C2-IX-CY2-LAG-105			
			Lag Column @ BV = 110		C2-IX-CY2-LAG-110			
			Lag Column @ BV = 115		C2-IX-CY2-LAG-115			
			Lag Column @ BV = 120		C2-IX-CY2-LAG-120			
			Lag Column @ BV = 125		C2-IX-CY2-LAG-125			
			Lag Column @ BV = 130		C2-IX-CY2-LAG-130			
			Lag Column @ BV = 135		C2-IX-CY2-LAG-135			
			Lag Column @ BV = 140		C2-IX-CY2-LAG-140			
			Lag Column @ BV = 145		C2-IX-CY2-LAG-145			
			Lag Column @ BV = 150		C2-IX-CY2-LAG-150			
	RUSH		Lag Column @ BV = 155		C2-IX-CY2-LAG-155			
	RUSH		Lag Column @ BV = 160		C2-IX-CY2-LAG-160			
	RUSH		Lag Column @ BV = 165		C2-IX-CY2-LAG-165			
	RUSH		Lag Column @ BV = 170		C2-IX-CY2-LAG-170			
	RUSH		Lag Column @ BV = 175		C2-IX-CY2-LAG-175			
	RUSH		Lag Column @ BV = 180		C2-IX-CY2-LAG-180			
	RUSH		Lag Column @ BV = 185		C2-IX-CY2-LAG-185		RUSH	
	RUSH		Lag Column @ BV = 190		C2-IX-CY2-LAG-190		RUSH	
	RUSH		Lag Column @ BV = END		C2-IX-CY2-LAG-END		RUSH	
	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)				C2-IX-CY2-LAW-FROM-DIS			
	Displacement Solution Displaced by Addition of Pre-elution Rinse (to C3 Recycle))				C2-IX-CY2-DIS-FROM-PRER			
		Pre-Elution Rinse Displaced by Eluant			C2-IX-CY2-PRER-FROM-ELU			
			HNO3 Eluate (to HLW)		C2-IX-CY2-HLWELUATE			
		Post Elution Rinse Displaced by Regeneration Solution			C2-IX-CY2-POER-FROM-REG			
		0.25M NaOH Regeneration Effluent (to C3 Recycle)			C2-IX-CY2-REG			
	IX PRODUCTS	IX Product to TLP		922.3	C2-IX-PROD-ACTL			
					C2-IX-PROD-WET			
					C2-IX-PROD-ANTF			
					C2-IX-PROD-ARC			
		Pre-elution Rinse Water Composite		28.7	Analyze in Campaign III			
		0.1M NaOH Displacement Solution Composite		28.7	Analyze in Campaign III			
		0.25M NaOH Regeneration Solution Composite		43.0	Analyze in Campaign III			

Analytical Measurements On Samples Taken During Pilot-Scale CIX Testing (continued)

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
ION	RUSH	Cycle 2	Lag Column @ BV = 5			ICPMS												
EXCHANGE			Lag Column @ BV = 10															
			Lag Column @ BV = 15															
			Lag Column @ BV = 20															
			Lag Column @ BV = 25															
			Lag Column @ BV = 30															
			Lag Column @ BV = 35															
			Lag Column @ BV = 40															
			Lag Column @ BV = 45															
			Lag Column @ BV = 50															
			Lag Column @ BV = 55															
			Lag Column @ BV = 60															
			Lag Column @ BV = 65															
			Lag Column @ BV = 70															
			Lag Column @ BV = 75															
			Lag Column @ BV = 80															
			Lag Column @ BV = 85															
			Lag Column @ BV = 90															
			Lag Column @ BV = 95															
	RUSH		Lag Column @ BV = 100			ICPMS												
			Lag Column @ BV = 105															
			Lag Column @ BV = 110															
			Lag Column @ BV = 115															
			Lag Column @ BV = 120															
			Lag Column @ BV = 125															
			Lag Column @ BV = 130															
			Lag Column @ BV = 135															
			Lag Column @ BV = 140															
			Lag Column @ BV = 145															
			Lag Column @ BV = 150															
	RUSH		Lag Column @ BV = 155			ICPMS												
	RUSH		Lag Column @ BV = 160			ICPMS												
	RUSH		Lag Column @ BV = 165			ICPMS												
	RUSH		Lag Column @ BV = 170			ICPMS												
	RUSH		Lag Column @ BV = 175			ICPMS												
	RUSH		Lag Column @ BV = 180			ICPMS												
	RUSH		Lag Column @ BV = 185			ICPMS												
	RUSH		Lag Column @ BV = 190			ICPMS												
	RUSH		Lag Column @ BV = END			ICPMS												
	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)				ICPES	ICPMS				AA							TBOH	
	Displacement Solution Displaced by Addition of Pre-elution Rinse (to C3 Recycle))				ICPES	ICPMS				AA							TBOH	
		Pre-Elution Rinse Displaced by Eluant																
			HNO3 Eluate (to HLW)		ICPES	ICPMS				AA								TACID
		Post Elution Rinse Displaced by Regeneration Solution			ICPES	ICPMS				AA								TACID
		0.25M NaOH Regeneration Effluent (to C3 Recycle)			ICPES	ICPMS				AA							TBOH	
	IX PRODUCTS	IX Product to TLP									TS	UDS	DENS	RHEO				
					ICPES	ICPMS	ICA		IEC	AA							TBOH	
		Pre-elution Rinse Water Composite																
		0.1M NaOH Displacement Solution Composite																
		0.25M NaOH Regeneration Solution Composite																

Samples Taken During Pilot-Scale TLP Testing

				Approx. Volume (L)	Sample	comment	Time Dep Sample?	Sample Prep
TLP EVAPORATOR		LAW Feed (IX product)		922.3				
		LAW SBS		833.2				
		IX 0.25M NaOH Regeneration Solution from Campaign I						
	EVAPORATE	Evaporator Feed Mixture		1755.5	C2-TLP-FEED-ACTL			
					C2-TLP-FEED-ADS			
					C2-TLP-FEED-ARC			
					C2-TLP-FEED-XRD	only if solids	Y	
					C2-TLP-FEED-XRD-BLK	blank		
		Bottoms	After all antifoam additions		C2-TLP-B-START-ACTL			
					C2-TLP-B-START-ANTF			
					C2-TLP-B-START-ARC			
		Bottoms	At ~200 L evaporated		C2-TLP-B-200-ACTL			
					C2-TLP-B-200-XRD	only if solids	Y	
					C2-TLP-B-200-XRD-BLK	blank		
		Primary Condensate			C2-TLP-PC-200-ARC			
		Secondary Condensate			C2-TLP-SC-200-ARC			
		Bottoms	At ~400 L evaporated		C2-TLP-B-400-ACTL			
					C2-TLP-B-400-XRD	only if solids	Y	
					C2-TLP-B-400-XRD-BLK	blank		
		Primary Condensate			C2-TLP-PC-400-ARC			
		Secondary Condensate			C2-TLP-SC-400-ARC			
		Bottoms	At ~600 L evaporated		C2-TLP-B-600-ACTL			
					C2-TLP-B-600-XRD	only if solids	Y	
					C2-TLP-B-600-XRD-BLK	blank		
		Primary Condensate			C2-TLP-PC-600-ARC			
		Secondary Condensate			C2-TLP-SC-600-ARC			
		Bottoms	At ~800 L evaporated		C2-TLP-B-800-ACTL			
					C2-TLP-B-800-XRD	only if solids	Y	
					C2-TLP-B-800-XRD-BLK	blank		
		Primary Condensate			C2-TLP-PC-800-ARC			
		Secondary Condensate			C2-TLP-SC-800-ARC			
		Bottoms	At ~800 L evaporated		C2-TLP-B-1000-ACTL			
					C2-TLP-B-1000-XRD	only if solids	Y	
					C2-TLP-B-1000-XRD-BLK	blank		
		Primary Condensate			C2-TLP-PC-1000-ARC			
		Secondary Condensate			C2-TLP-SC-1000-ARC			
		Bottoms	Evaporation completed	589.4	C2-TLP-B-END-ACTL			
					C2-TLP-B-END-SUP	SPECIAL		
					C2-TLP-B-END-MW	only if solids		DISMW
					C2-TLP-B-END-PSD	only if solids		
					C2-TLP-B-END-ANTF			
					C2-TLP-B-END-ARC			
					C2-TLP-B-END-XRD	only if solids	Y	
					C2-TLP-B-END-XRD-BLK	blank		
		Primary Condensate	Evaporation almost completed		C2-TLP-PC-END-ARC			
		Secondary Condensate			C2-TLP-SC-END-ARC			
	COMBINE TLP CONDENSATES							
		Combined TLP Condensate = RLD Condensate		1166.1	C2-RLD-FROM-TLP-ADS			
		(Primary + Secondary)			C2-RLD-FROM-TLP-ACTL			
					C2-RLD-FROM-TLP-ARC			
	COMBINE FEP & TLP CONDENSATES							
		Combined FEP + TLP Condensate = RLD Condensate			C2-RLD-TOTAL-ADS			
					C2-RLD-TOTAL-ACTL			
					C2-RLD-TOTAL-ARC			

Analytical Measurements On Samples Taken During Pilot-Scale TLP Testing

				pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TBOH	TACID
TLP EVAPORATOR		LAW Feed (IX product)																
		LAW SBS																
		IX 0.25M NaOH Regeneration Solution from Campaign I																
	EVAPORATE	Evaporator Feed Mixture									TS	UDS	DENS					
					ICPES	ICPMS	ICA	ICC	IEC	AA							TBOH	
																XRD		
																XRD		
		Bottoms	After all antifoam additions								TS	UDS	DENS	RHEO				
		Bottoms	At ~200 L evaporated								TS	UDS	DENS					
																XRD		
																XRD		
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~400 L evaporated								TS	UDS	DENS					
																XRD		
																XRD		
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~600 L evaporated								TS	UDS	DENS					
																XRD		
																XRD		
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~800 L evaporated								TS	UDS	DENS					
																XRD		
																XRD		
		Primary Condensate																
		Secondary Condensate																
		Bottoms	At ~800 L evaporated								TS	UDS	DENS					
																XRD		
																XRD		
		Primary Condensate																
		Secondary Condensate																
		Bottoms	Evaporation completed								TS	UDS	DENS	RHEO				
					ICPES		ICA	ICC	IEC	AA							TBOH	
					ICPES	ICPMS				AA								
															PSD			
																XRD		
																XRD		
		Primary Condensate	Evaporation almost completed															
		Secondary Condensate																
	COMBINE TLP CONDENSATES																	
		Combined TLP Condensate = RLD Condensate			ICPES		ICA	ICC	IEC	AA								
		(Primary + Secondary)		pH							TS	UDS	DENS					
	COMBINE FEP & TLP CONDENSATES																	
		Combined FEP + TLP Condensate = RLD Condensate			ICPES		ICA	ICC	IEC	AA								
				pH							TS	UDS	DENS					

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Appendix Section: I-3

Interim Report: RPP-WTP Semi-Integrated Pilot Plant – Campaign III

[For Information Only]

INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT CAMPAIGN III

November 2004

SAVANNAH RIVER NATIONAL LABORATORY

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NUCLEAR INFORMATION

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Date: 11/15/04

ADDITIONAL APPROVAL, IF APPLICABLE:

Official: R&T Manager, RPP Hanford

Date: 1/26/05

Westinghouse Savannah River Company
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Retention: **Permanent**

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Test Specifications:
24590-PTF-TSP-RT-02-015, Rev. 0, 15 Nov. 2002
24590-PTF-TSP-RT-03-002, Rev. 0, 05 Jun. 2003
24590-PTF-TSP-RT-01-003, Rev. 0, 20 Nov. 2001 (CIX chemical testing only)
Test Plans: WSRC-TR-2003-00338, Rev. 0, 04 Aug. 2003 (or SRT-RPP-2003-000165) and WSRC-TR-2001-00340, Rev. 0, 06 Feb. 2002 (or SRT-RPP-2001-000116) (CIX chemical testing only)
Test Exceptions: All of the following test exceptions only affect the CIX chemical testing sub-task: WSRC-TR-2001-00340
24590-WTP-TEF-RT-02-025, Rev. 0, 20 May 2002
24590-WTP-TEF-RT-02-046, Rev. 0, 01 Aug. 2002
24590-WTP-TEF-RT-03-004, Rev. 0, 07 Feb. 2003
24590-WTP-TEF-RT-03-037, Rev. 0, 30 Jul. 2003
24590-WTP-TEF-RT-03-037, Rev. 1, 17 Sept. 2003
24590-WTP-TEF-RT-03-054, Rev. 0, 17 Sept. 2003
24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003
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Test Scoping Statements: S-48 & S-134

INTERIM REPORT: RPP-WTP SEMI-INTEGRATED PILOT PLANT - CAMPAIGN III

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NOMENCLATURE

AA	Atomic absorption (spectroscopy)
ACTL	Aiken County Technology Laboratory
ADS	Analytical Development Section (part of WSRC/SRNL)
AP101	DOE Hanford Site Tanks 241-AP-101 simulated waste
AN102	DOE Hanford Site Tank 241-AN-102
AN107	DOE Hanford Site Tank 241-AN-107
AY102	DOE Hanford Site Combined Tanks 241-AY-102 and 241-C-106
BNI	Bechtel National, Inc.
CIX	Cesium Ion Exchange (Process) (part of the RPP-WTP Pretreatment Facility)
CFD	Computational Fluid Dynamics
CUF	Cells Unit Filter (bench-top cross-flow filter used with both radioactively cold and hot wastes)
°C	Degree Centigrade (or Celsius)
D	Diameter
DIF	Deionized and Filtered (0.1 micron) Water
DOE	United States Department of Energy
dP	Differential Pressure
DS	See Solids
EDL	Engineering Development Laboratory (part of WSRC/SRNL)
EPDM	Ethylene Propylene Diene Monomer
FEP	(Waste) Feed Evaporation Process (part of the RPP-WTP Pretreatment Facility)
ft	Foot
gm	Gram
gpm	Gallons per Minute
HLP	High Level (Activity Waste) Process
HLW	High Level (Activity) Waste
hr	Hour
i.d. or ID	Inside Diameter
IC	Ion Chromatography
ICPES	Inductively coupled plasma emission spectroscopy
ICPMS	Inductively coupled plasma mass spectrometry
IHLW	Immobilized high level waste (glass)
ILAW	Immobilized low activity waste (glass)
in.	Inch
IX	Ion Exchange
hr	Hour
l or L	Liter
LAW	Low (Level) Activity Waste
m	Meter
M	Molar (mol/L)
Mg	Milligram
min	Minute
ml or mL	Milliliter
mm	Millimeter
MTG/d	Metric tons glass/day
NAS	Sodium Aluminosilicate

nominal	The word "nominal" for a filter rating is a vague term. Its meaning is manufacturer dependent. Further, a "nominal" rating does not give an exact size to a filter medium, but rather an approximation to the expected performance of a filter. In the case of Mott, a nominal rated 0.1-μm filter means that approximately 95% of particles greater than 0.1 μm will not pass the filter.
NTU	Nephelometric Turbidity Unit
o.d. or OD	Outside Diameter
OLI/ESP	Modeling software which is part of Environmental Simulation Program software package used in developing the SIPP task
Pa	Pascal
PSD	Particle Size Distribution
psi	Pounds Per Square Inch
psig	Pounds Force Per Square Inch Gauge
psid	Pounds Force Per Square Inch Difference
PWD	Plant Wash and Disposal (System)
QA	Quality Assurance
RLD	Radioactive Liquid (Waste) Disposal (System)
RPP	River Protection Project (at the DOE Hanford Site)
s or sec	Time: Second
SBS	Submerged Bed Scrubber – source of LAW and HLW melter recycle streams
SIPP	Semi-Integrated Pilot Plant
SRNL	Savannah River National Laboratory (part of WSRC)

Solids

TS = Total Solids = Mass percent of all solids in a stable slurry whether dissolved or not
UDS = Undissolved Solids = Mass percent of solids in a stable slurry that are not dissolved
DS = Dissolved Solids = TS - UDS = Mass percent of solids in a stable slurry that are dissolved
SS = Soluble Solids = (TS - UDS) / (100% - UDS) x 100% = Mass percent of solids in only the supernate portion of a stable slurry

SS	See Solids
SSM	Steady-State Matrix (Applies to Campaign I only – see Fig. 33)
Std Dev	Standard Deviation
Supernate	Supernatant
TLP	Treated (Feed) LAW Process (part of the RPP-WTP Pretreatment Facility)
TS	See Solids
TMP	Transmembrane Pressure (the average pressure drop across the thickness of the filter medium – perpendicular to the slurry flow.)
TRU	Transuranic
UDS	See Solids
UF	Ultrafiltration
UFP	Ultrafiltration Process (part of the RPP-WTP Pretreatment Facility)
V	Velocity of the slurry flow along the length of the filter tubes
VSL	Vitreous State Laboratory (of Catholic University of America, Wash. DC)
WGI	Washington Group International
WTP	Waste & Immobilization Treatment Plant
WSRC	Westinghouse Savannah River Company
XRD	X-ray diffraction

Also note: Within this report, supernate refers to the liquid (undissolved solids-free) portion of a slurry sample. When referring to the ultrafiltration process, the permeate is synonymous with the slurry supernate; either term can thus be used, but permeate will be the preferred term herein. For the evaporation operations, the liquid fraction of the slurry feed or bottoms product will be called the supernate.

ABSTRACT

Campaign III, the third step towards the Semi Integrated Pilot Plant (SIPP) task, conducted by the Savannah River National Laboratory (SRNL) at the Savannah River Site, was to take the several recycle streams produced in Campaign II, the second step of the task, and combine them with other simulated recycle and chosen waste streams. (Campaign II was fed recycles from Campaign I.) The combined stream was processed in a fashion that mimicked the pretreatment operations of the DOE River Protection Project – Waste Treatment and Immobilization Plant (RPP-WTP). The SIPP task is considered semi-integrated because it only deals with the pretreatment operations of the RPP-WTP. That is, the pilot plant starts by receiving waste from the tank farm and ends when waste is processed to the point of being sent for vitrification. The resulting pretreated LAW and HLW simulants produced by the SIPP are shipped to VSL (Vitreous State Laboratory)[†] for vitrification in pilot WTP melters.

Within the SIPP task these steps are referred to as Campaigns and there are four Campaigns in all. Campaign I, which is completely different than other campaigns, subjected a simulant of Hanford Tank 241-AY-102/C-106 (AY102) waste to cross-flow ultrafiltration only and in that process several important recycle streams were produced as a result of washing the simulant and cleaning the cross-flow filter. These streams were fed to subsequent campaigns and that work was the subject of the issued Campaign I interim report (Duignan et al., 2004a). The streams created in Campaign I were used for Campaign II, and during Campaign II more of the same recycle streams were produced, with the addition of recycle streams created during the pilot-scale ion exchange unit operation (Duignan et al., 2004b)

The operation of each of the subsequent campaigns, i.e., II, III, and IV, while different from Campaign I, are very similar to each other, and can be best understood as the process of operating a series of Pretreatment Unit Operations in a somewhat prototypic manner. That is, while Campaign I studied the operation of a single, albeit important, Pretreatment Unit Operation, i.e., Ultrafiltration, all subsequent campaigns are to study the four major unit operations that make-up the RPP-WTP Pretreatment Facility. They are: Waste Feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and the Treated LAW Evaporation Process (TLP). Each of the campaigns operate basically as a separate subtask, but as with Campaign I, the recycle streams produced in one campaign feed into the subsequent campaign. Therefore, all four campaigns are chemically connected through these recycle streams, which carry over effects of the preceding campaign.

The results of Campaign III operations are the subject of this third interim report. The reports are called interim because they are limited to the results obtained from a single campaign (or past campaigns) and further limited to only highlights of that single campaign. A final report will follow Campaign IV and its intent is to comprehensively

[†] Part of the Catholic University of America

cover the overall task activities, as well as the full database accumulated and the equipment used during the yearlong SIPP task.

SIPP is a limited version of the plant's pretreatment facility in that it tests pilot-scale unit operations of FEP, UFP, CIX, and TLP only. However, an integral part of SIPP is to produce the many recycle streams that must also be processed with stored tank farm waste. That is, it is very important to know the impact that the recycle streams will have on the operation of the several unit operations so as to better model the plant's overall pretreatment throughput, leading to a production rate of stabilized waste.

Like the Campaign II report, this report will begin with a summary of the overall operation of the task done during Campaign III to understand the layout of this report. This summary is then followed with highlights of the test results.

With input and review from Hanford, SRNL developed a steady-state OLI/ESP model of the RPP-WTP Pretreatment Facility operation. That model's principal role was to determine the amounts of simulated wastes needed for each of the four unit operations. In general, it did well, but was found to be off by approximately 15% in predicted SIPP volumes due to unknowns in the undissolved solids of the several simulants. (For a detailed discussion of model predictions differences see the Campaign II Interim Report, Duignan et al., 2004b; Section 2.7.4.2.1).

Campaign III conclusions are:

FEP Evaporation

- A total of about 1112 kg of FEP feed, at a density of 1.04 g/ml and 0.6 M Na, was concentrated down to 170 kg, at a density of 1.26 g/ml and 4.3 M Na.
- The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C) and the entire evaporation process proceeded as designed.
- The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water and for this campaign the average evaporation rate was 0.52 gpm.
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.
- During start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.
- As seen in Campaign II, a large portion of the dissolved oxalate in the feed was precipitated, probably as sodium oxalate.
- The oxalate concentration in the FEP feed in Campaign III was less than that in Campaign II, which is consistent with the higher oxalate concentration in the Campaign I slurry.
- About 25-40% of the dissolved Al in the feed to the FEP evaporator precipitated during mixing of the recycles, assumed to occur because of localized regions of low pH. Vigorous mixing when joining caustic and acidic recycle streams in the Plant Wash and Disposal System would help to minimize Al precipitation.

- The fraction of dissolved aluminum in Campaign III FEP concentrate (bottoms) was less than in Campaign II, resulting in more undissolved Al fed to the UFP.

UFP

- The average temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average temperature-adjusted permeate flux when dewatering from ~4 to 20 wt% UDS was 0.014 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 17 wt% UDS was 0.018 gpm/ft^2.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 0.5 NTU. The Test Specification indicated a solids-free threshold of 2 NTU, therefore the measured values indicated the permeate was free of significant undissolved solids.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The composition of the undissolved solid species in the washed sludges in Campaigns I-III were similar, as expected. The supernate portion species Na and K were higher in concentration in Campaigns II and III than in Campaign I due to the presence of the AP101 simulant.
- The aluminum concentration in the washed slurry in Campaign III was higher than in Campaign II due to there being more undissolved aluminum in the FEP concentrate.
- Because of higher undissolved aluminum in the FEP concentrate, the Campaign III permeate from the concentration step (IX feed) had less aluminum than in Campaign II.
- Ammonium in the first 0.01M NaOH UFP wash of Campaign III was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Most of the ammonium in the second wash was not retained.

CIX

- Pressure drops for the four cycles were low and the resin bed permeability was approximately the same as were measured for the 24-Inch Column Test (Fowley et al, 2004).
- The pressure drop across the columns for flow of simulant generally increased during the four cycles. [0.5 to 1.3 in. H_20]
- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five-molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of simulated waste were treated.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical difficulty of measuring very low cesium concentrations in five-molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of simulated waste were treated. This fact was known before the start of testing.
- The fraction of the original cesium that was removed by the lead column decreased from 99.6% for Cycle 1 (in Campaign II) to 98.2% for Cycle 4 (in Campaign III).

- The masses of cesium in and out of the resin beds for all four cycles balanced to within measurement uncertainty.

TLP Evaporation

- The pilot-scale TLP evaporator operated as designed and concentrated TLP feed simulant from a density of 1.135 Kg/L at 20°C and a sodium concentration of 2.4 M, to a final density of 1.365 Kg/L at 20°C and a sodium concentration of 7.1 M.
- A small amount of foaming was observed before and after the addition of antifoam agent to the evaporator. During the evaporation process, the foaming/froth height remained around 1 ft (0.3 m) or less for the duration of the campaign. That is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.
- The two Demisters in series operated well with no significant differential pressure build-up across the Demisters and there were no noticeable solids on the lower Demister after the 11-hour test.
- The composition of the products from the TLP matched what was expected from the mass balance.
- The concentration of aluminum in the TLP product was less than the result of Campaign II since the UF permeate contained less dissolved aluminum.
- No precipitation of additional solids beyond those in the feed was noted.

1.0 TESTING SUMMARY

1.1 OBJECTIVES

Campaign III, one of four planned campaigns for the SIPP task, is the second test that includes all four WTP Pretreatment Facility unit operations, along with the incorporation of recycle waste streams. However, it is the first test to include recycle streams from the ion exchange unit operation to the large mixture of streams. For completeness, the objectives listed below are all those given in the RPP-WTP Test Specification (Longwell, 2003). However, only the body of work approved in the WSRC Technical Task and Quality Assurance Plan (Duignan, 2003c) is required to satisfy this task. Objectives not met because they were not agreed to in the Task Plan are so noted. With minor changes these Objectives and Discussion are similar to those given in the Campaign II report (Duignan, 2004b).

Overall Test Objectives	Objective Met (Y/N)	Discussion
1. Modify the design and operation of the existing pretreatment pilot facilities to extent necessary to mimic the WTP Pretreatment Facilities.	Y	Each of the four unit operations that comprise the SIPP test were either modified or built to meet planned operation.
2. Operate the (pilot) integrated facilities using simulated AY102 (Envelope A/D) and AP101 (Envelope A) waste feeds.	Y	Campaign III involved the use of simulated AY102, AP101, and recycle streams.
3. Collect chemical and physical property data to be defined in the test plan then refine and validate the thermodynamic model(s) developed by SRNL.	Y	Sufficient property data were obtained to satisfy project needs as is evidenced by the customer approval of the Campaign III sample plan (Appendix B) before testing began.
4. Demonstrate pretreatment production rates required to produce 80 metric tons per day of LAW glass and 5.4 metric tons of HLW glass. These are contract defined "expected" production throughputs for 5-day sprint runs listed in Table C.6-5.1 of the contract (DOE 2003). These required flow rates will be determined before testing begins by application of the appropriate scale factors to the unit operations that represent an equivalence of pretreatment throughput to meet maximum glass production.	N	The unit production rates were measured but the targets were not met. The SIPP task was limited to four separate unit operations that comprise the principal operations of the RPP-WTP Pretreatment Facility. The pilot FEP and TLP evaporation units exceeded the plant-modeled rate of 0.395 gpm. The pilot CIX was subjected to a test exception (described in Section 1.2), which changed this objective. As shown in Campaign II, the pilot ultrafiltration permeate rate during Campaign III dewatering from 3.2 to 20 wt% UDS was 0.014 gpm/ft^2. This rate is below the target rate of 0.02 gpm/ft^2, but is representative of the filter process since a similar flux rate was obtained for Campaign I, with no recycle streams, and Campaigns II and III, which included several recycle streams.

FEP/TLP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the Waste Feed Evaporator and the Treated LAW Evaporator using simulants derived from the integrated operation of the pretreatment pilot plant.	Y	Feeds for both the FEP and TLP evaporators included derived simulants or recycle streams produced during SIPP operations.
2. Recycle secondary waste generated from the ultrafiltration pilot operations and the ion exchange unit operation to the evaporators.	Y	Recycle streams from the ultrafiltration pilot operation from Campaign II were fed to the FEP evaporator.
3. Operate the pilot evaporator using simulated HLW Submerged Bed Scrubber solution, simulated Pretreatment Caustic Scrubbers, ion exchange recycle solutions, and ultrafiltration recycles generated from pilot operations.	Y	Campaign III used all the streams indicated.
4. Operate the pilot evaporator using simulated LAW Submerged Bed Scrubber solution and ion exchange treated feed to produce LAW feed solution.	Y	See the preceding response.
5. Compare the results (solubility, chemical, and physical properties, which will be indicated in the test plan) developed on the pilot scale with results developed by experiments conducted at the bench scale.	N	However, any extant bench-scale data will be used for such comparisons in the final report.
6. Determine the chemical and physical properties of simulants evaporated at the pilot scale as a function of sodium concentration and temperature.	N	The approved task plan did not require these property-vs.-temperature evaluations. However, densities and sodium concentrations were measured and included in this report.
7. Evaluate the selected antifoam reagent performance in the evaporators.	Y	Antifoam was added to both evaporators and those results are discussed herein.
8. Evaluate the effect of in-leakage on air emissions.	N	This work was not included in the approved task plan due to cost.
9. Determine the chemical and physical properties of concentrated recycle and waste blends, which will be indicated in the test plan, to be sent for precipitation/ultrafiltration.	Y	The concentrated bottoms streams were analyzed and discussed herein.
10. Operate the pilot evaporator unit assuming a full-scale WTP Pretreatment process flow rate of 80 metric tons of LAW glass per day and 5.4 metric tons of HLW glass per day (herein written as 80/5.4 MTG/d).	Y	Both evaporators were run at a rate of better than the plant rate of 0.395 gpm, which was based on a production rate of 80/6 MTG/d (Calloway, 2004).

UFP Test Objectives	Objective Met (Y/N)	Discussion
1. Operate with prototypical wash/leach/wash/steps using simulated AY102 and AP101 and concentrated evaporator recycles.	Y	The approved task plan made the leach step optional, pending RPP-WTP guidance. Before testing began RPP-WTP decided against doing the leach step. All other objectives were met.
2. Operate with prototypical/recommended Ultrafiltration cleaning method.	Y	RPP-WTP recommended continued use of 2 M nitric acid for cleaning, which was done.
3. Determine the chemical and physical properties of the concentrated solids, washed solids, leached solids, and final solids product derived from each campaign.	Y	Properties of the concentrates were measured. However no leaching was performed as requested by the RPP-WTP customer.
4. Determine the chemical and physical properties of permeate, recycles, and cleaning solutions, which will be indicated in the test plan, derived from each campaign.	Y	Properties of those streams were measured and discussed herein.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	N	No bench scale experiments were done to study the effects of recycles.
6. Provide pump data (pump curves) for the high solid content slurries.	N	This requirement was not included in the approved task plan.
7. Demonstrate operation of the Ultrafiltration unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	See response 4 to the Overall Test Objectives, above.
8. Evaluate the downstream effects of antifoam reagent. Determine the fate of the reagent by tracking its concentration through the integrated pilot.	N	The effect on filter flux seemed to be insignificant, but it is discussed herein along with that data used to track the antifoam.

CIX Test Objectives	Objective Met (Y/N)	Discussion
1. Operate the pilot ion exchange unit using ultrafiltration permeate produced using simulated AY102 and AP101.	Y	This was done along with the bottoms produced by evaporating the several recycle streams.
2. Operate the pilot ion exchange unit assuming a full-scale WTP Pretreatment process flow rate corresponding to production of 80/5.4 MTG/d.	N	Test Exception 24590-WTP-TEF-RT-03-069 required the pilot CIX show prototypic cesium removal. This required matching the Plant's treated waste residence time in the resin and not the full-scale flow rate. Therefore, this objective could not be met.
3. Demonstrate ion exchange column operating parameters using the recommended ion exchange resin.	Y	The currently planned resin, SuperLig®644 was employed.

CIX Test Objectives	Objective Met (Y/N)	Discussion
4. Determine the chemical and physical properties, which will be indicated in the test plan, of all ion exchange effluents.	N	Only Lead and Lag column effluents were measured for Cs concentrations to minimize cost since Campaign II had already made the complete set of measurements.
5. Compare the results developed on the pilot scale with results developed by experiments conducted at the bench scale to assess the effect of recycles.	N	No bench scale experiments were done to study the effects of recycles.
6. Determine the chemical and physical properties, which will be indicated in the test plan, of blended ion exchange secondary wastes (pre-elution rinse and spent regenerant) that are recycled back to the waste feed evaporation system.	N	See response to Item No. 4 of CIX Test Objectives.
7. Determine the chemical and physical properties of ion exchange eluates, which will be indicated in the test plan.	N	See response to Item No. 4 of CIX Test Objectives.
8. Evaluate the potential effects of the evaporator antifoam reagent on ion exchange performance.	Y	The effect on ion exchanger seemed to be insignificant, based on good cesium removal.

1.2 TEST EXCEPTIONS

List Test Exceptions	Describe Test Exceptions
1. 24590-WTP-TEF-RT-02-025, Rev. 0, 20 May 2002	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
2. 24590-WTP-TEF-RT-02-046, Rev. 0, 01 Aug. 2002	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
3. 24590-WTP-TEF-RT-03-004, Rev. 0, 07 Feb. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
4. 24590-WTP-TEF-RT-03-037, Rev. 0, 30 Jul. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
5. 24590-WTP-TEF-RT-03-037, Rev. 1, 17 Sept. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
6. 24590-WTP-TEF-RT-03-054, Rev. 0, 17 Sept. 2003	See the description for Test Exception No. 24590-WTP-TEF-RT-03-069, which is No. 7 in this list.
7. 24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003	As of the completion of Campaign III there was no test exception to the SIPP task plan (Duignan et al., 2004). All of the listed test exceptions, 1 though 7, affect only a task plan dealing solely with ion exchange operation (Steimke, 2002). For completeness, all the test exceptions were listed but only this seventh test exception impacts SIPP test. As with all the other pilot unit operations, the pilot-scale CIX was to operate in a fashion to demonstrate the rate of glass production. However, RPP-WTP thought it was more important to demonstrate cesium removal efficiency. Since prototypic column flow rates and

	prototypic resin residence time must be different for other than full-scale sizes. The pilot unit was not used at a LAW flow rate that would demonstrate glass production rates. This seventh test exception describes how the pilot scale IX columns would operate to demonstrate cesium removal. That removal efficiency is what is discussed herein.

1.3 RESULTS AND PERFORMANCE AGAINST SUCCESS CRITERIA

List Success Criteria	Explain How the Tests Did or Did Not Meet the Success Criteria
1. The integrated operation of the pretreatment process produces vitrification feed streams similar in chemical composition to those produced in bench scale experiments.	Bench scale experiments were not part of the SIPP scope. However, the SIPP task did produce both LAW and HLW feed streams with simulated waste and recycle streams that were processed in the same manner expected for the RPP-WTP Pretreatment Facility. The chemical composition obtained is that which is expected for the full-scale facility and therefore this criterion was met.
2. The integrated pretreatment process demonstrates a scaled throughput of 80 MTG/d of LAW and 5.4 MTG/d of HLW.	This success criterion was partially met in that both the pilot FEP and TLP operated at, or above the evaporation rate (0.395 gpm) necessary to meet the stated glass production rates. The pilot UFP realized a dewatering filter flux rate of 0.014 gpm/ft^2. This value is below the rate needed meet the glass production rates, but is representative of rate obtained from bench scale test with actual waste. The pilot CIX rate purposely did not meet the full-scale plant rate as explained in Test Exception No 7 above.

1.4 QUALITY REQUIREMENTS

This work was conducted in accordance with the RPP-WTP QA requirements specified for work conducted by SRNL as identified in DOE IWO M0SRLE60. SRNL has provided matrices to WTP, demonstrating compliance of the SRNL QA program with the requirements specified by WTP. Specific information regarding the compliance of the SRNL QA program with RW-0333P, Revision 10, NQA-1 1989, Part 1, Basic and Supplementary Requirements and NQA-2a 1990, Subpart 2.7 is contained in these matrices.

1.5 R&T TEST CONDITIONS

List R&T Test Conditions	Were Test Conditions Followed?
1. SRNL shall prepare a specific test plan containing detailed information needed to implement (the) test specification. The test plan shall also include, as appropriate, references to documents that drive test documentation requirements to assure data integrity and reproducibility. This would include such items as detailed test procedures, instrument calibration, methods of data gathering, etc. The test plan shall indicate what methodologies will be employed to verify or validate data produced during testing activities. A draft test plan shall be submitted to WTP R & T for review and comment. Comments labeled "Mandatory" by the reviewer require a disposition. The changes in the test plan shall be provided electronically and clearly identified by redline/strikeout or highlighting to facilitate the review process. The final test plan must be approved by a WTP R & T representative prior to performing work.	As required, a test plan was developed (Duignan, 2003c) to meet the test specification. All analytes that could not meet the listed criterion were indicated in the task plan and approved before testing began. Documents that were available before and when the test plan was completed were referenced therein, but those that were not, e.g. procedures, calibration, will be references as they become available in the subsequent task reports. The test plan was submitted to WTP R&T for review and approval. All reviewers' comments were addressed and dispositioned, after which the report was approved by WTP R&T prior to testing, thus it became the principal document to carry out testing.
2. Volumetric waste-to-recycle ratios will be calculated using appropriate WTP's Aspen Custom Modeler (ACM) Model runs as a basis for the combined feed stream. The block diagram to be used for this work is depicted in Fig. 1. Simulant AY102 feed rate will be established based on the requirement for scaled 6 MTG/d HLW production, and AP101 feed rate will be based on the additional requirement to produce scaled 80 MTG/d LAW production. Tankage required for execution of the work will be provided and incorporated as required by [SRNL]. Prior to initiation of the test campaigns, the system will be simulated using the OLI Environmental Simulation Program (ESP) models developed in previous completed evaporation tasks. The expanded waste feed evaporation model, which includes ultrafiltration and recycles, along with the treated feed evaporation model will simulate the pilot operations under minimum (48/3.2 MTG/d) and expected (80/5.4 MTG/d) operating conditions. Output of the models will then be compared to above referenced ACM model runs and the data obtained during the pilot operations. Results of this modeling effort will be discussed with WTP R&T personnel and approval of the path forward obtained **PRIOR TO START** of testing.	As required, SRNL developed an OLI model based on several sources, including ACM and sources for ACM prior to any SIPP testing. The modeling results were compared to ACM results by both SRNL and RPP-WTP personnel. The OLI results were scaled to SIPP operation to assist in completing a test plan and to determine waste stream and recycle stream volumetric needs. The model was also used to determine scaled flow rates of each of the four unit operation in order to know what operation rate were necessary to meet full-scale plant glass production rates of 80 MTG/d from LAW and 5.4 MTG/d from HLW. Those model results are discussed in Duignan et al., (2004b) and Barnes (2004).

List R&T Test Conditions	Were Test Conditions Followed?
3. The LAW and HLW SBS recycles will be simulants generated from VSL/Duratek pilot melter testing.	Both submerged bed scrubber (SBS) recycle streams were obtained from VSL and used in Campaign III testing.
4. The simulant waste feeds will be based on approved formulations developed under the WTP's waste simulant program participated in by SRNL.	The simulated waste feed AY102 was developed and validated by SRNL (Zamecnik, et al., 2004). It was filter tested at the bench scale against an actual waste sample. The formulation was approved by WTP R&T before its use. The formulation for the simulated feed AP101 was developed by Battelle (Russell et al., 2003) and approved by WTP R&T. All other waste streams used for SIPP are either recycle streams or derived from recycle streams.
5. Generation of initial ultrafiltration recycles will be accomplished by performing the work specified in *AY102 Simulant Pilot Scale Ultrafiltration and Washing Test*, 24590-PTF-TSP-RT-02-015 (Townson, 2002).	The production of these recycle streams was done during Campaign I (Duignan et al., 2004a).
6. An exception to the test matrix defined in (the Campaign I test) specification 24590-PTF-TSP-RT-02-015 will be to not perform certain tests specified in Appendix A, Table 1.1 (of that specification). The tests that will not be performed are (listed in the SIPP Test Specification, Longwell, 2003.)	This condition only applied to Campaign I operation, which had pilot-scale UFP test runs at steady-state UDS concentration. It was not applicable to subsequent campaigns.

1.6 SIMULANT USE

Many simulated waste streams were either used or produced during Campaign III testing. Those include Hanford tank farm stored wastes, i.e., tank 241-AY-102/C-106, herein referred to as AY102, and tank 241-AP-101, herein referred to as AP101. During the process of making glass many recycle streams will be generated and processed. Those include streams from the: HLW and LAW Submerged Bed Scrubbers, Vessel Vent System, HLW Glass Canister Decontamination process, FEP and TLP condensate solutions, UFP wash permeate, UFP rinse solutions, UFP acid cleaning solutions, UFP loop flush solutions, CIX caustic LAW displacement solutions, CIX post elution rinse solutions, and CIX caustic regeneration solutions. These streams are discussed throughout this report.

1.7 DISCREPANCIES AND FOLLOW-ON TESTS

No discrepancies occurred during testing, but there will be follow-on work. This test, referred to as Campaign III, is the third of four Campaigns, which make up an overall task referred to as Semi Integrated Pilot Plant (SIPP) (Duignan, 2003c).

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2.0 DISCUSSION

2.1 INTRODUCTION

Bechtel National, Inc. (BNI) has been contracted by the Department of Energy (DOE) to design a Waste Treatment and Immobilization Plant (WTP) to stabilize liquid radioactive wastes that are stored at the Hanford Site as part of the River Protection Project (RPP). Because of its experience with radioactive waste stabilization, the Savannah River National Laboratory (SRNL) of the Westinghouse Savannah River Company (WSRC) is working with BNI and Washington Group International (WGI), to help design and test certain parts of the waste treatment facility. A major part of the waste stabilization process is the pretreatment of the wastes before vitrification, which will occur in the Pretreatment Facility where both HLW and LAW product streams will be handled. SRNL has constructed a Semi Integrated Pilot Plant (SIPP), which imitates important unit operations of the pretreatment process. However, since the actual pilot-scale vitrification is not handled by SRNL, the pilot plant is referred to as semi integrated. After SIPP pretreats the waste streams into vitrification feed streams, they will be shipped to the Vitreous State Laboratory (VSL) of Catholic University of America to complete the entire process.

The subject of this report is the testing of one phase, called Campaign III, of all of the four principal unit operations that comprise the RPP-WTP Pretreatment Facility, i.e., Waste Feed Evaporation Process (FEP), Ultrafiltration Process (UFP), Cesium Ion Exchange Process (CIX), and Treated LAW Evaporation Process (TLP). The operation and results of each of these unit operations are explained herein.

This technical baseline research and development work was initiated by a WGI test specification (Longwell, 2003) to test simulated radioactive wastes in pilot scale pretreatment unit operations in the Engineering Development Laboratory (EDL) of SRNL. This report deals with the third phase of a four-campaign task, and it is the second campaign to use all four unit operations. The first phase, Campaign I, was at one time a completely separate task (Townson, 2002) to filter a specific waste. Subsequently, that first campaign was incorporated into the SIPP task to eliminate duplication of effort and to produce several important recycle streams. While, Campaign I was limited to a single unit operation, ultrafiltration, and a single waste stream, i.e., AY102, the process of operating the filter unit allowed the production of many of the important recycle streams needed to carry out the more comprehensive phases, i.e., Campaigns II, III, and IV. After the filter dewatered the single waste stream, the slurry was washed to produce one recycle stream. Then the filter unit was flushed, cleaned, and rinsed, thus creating other important recycle streams. Besides producing recycles, the Campaign I single-waste filter results were then used to compare with filter results obtained after mixing that waste stream with others, i.e., AP101 and the many recycle streams. A further benefit to limiting Campaign I to a single waste stream was that the filter results could be compared to the pilot filter tests done with other single waste streams, (see Duignan, 2000a, Duignan, 2000b, Duignan, 2003a).

This report will discuss the four pilot unit operations during Campaign III. There were many individuals involved and the information for each section was provided primarily by each of the principal investigators. They are:

Simulant development and sample analyses – John R. Zamecnik
Simulant and sample handling – Michael R. Williams
FEP operation – Zafar H. Qureshi
UFP operation – Mark D. Fowley
CIX operation – John L. Steimke
TLP operation – Duane J. Adamson

A summary of EDL task activities is as follows:

WGI Test Specification for UF Test Received – December 2002
WGI Test Specification for SIPP Received – June 2003
WSRC Task Technical & Quality Assurance Plan Approved – August 2003
Test Procedure Approved – October 2003
Received AY102/C106 Simulant – January 2004
Campaign I – 26 January to 12 February 2004
Campaign II – 12 April to 14 May 2004
Campaign III – 7 June to 9 July 2004
Campaign IV – 2 to 6 August 2004 (Pretreatment of GKN filter)
Campaign IV – 9 to 26 August 2004 (only SIPP FEP and UFP operations were tested)

2.2 THE PLAN

Initial planning for the Semi Integrated Pilot Plant (SIPP) was to decide what to study. One of the first decisions was to limit the task to the RPP-WTP Pretreatment Facility since pilot melter facilities already existed at another site[†]. This is the reason that this task is referred to as "Semi Integrated," i.e., to indicate that vitrification is not part of the pilot operations at the Savannah River National Laboratory (SRNL). The next step was to decide which simulant(s) to test. Since the waste types at Hanford were broadly classified as envelopes A, B, C, and D (Eibling and Nash, 2001), therefore three campaigns were planned, one for each envelope, except D. Envelope D is basically a sludge, which would not be processed alone, but would be mixed with some of the other envelopes. As such, each campaign would process a chosen simulated waste through the principal unit processes of the Pretreatment Facility. Those units are the Feed (Waste) Evaporator Process (FEP), Ultrafiltration Process (UFP), Cesium Exchange (Process) (CIX), the Treated LAW Evaporation Process (TLP), and for Envelope C-types wastes, the Strontium-Transuranics (Sr/TRU) Precipitation Process.

Having a task that would test a range of possible waste types was a good comprehensive approach; however, to obtain meaningful operational data for the plant it was not just a

[†] The Vitreous State Laboratory at Catholic University of America in Washington, DC.

matter of processing each of the different wastes once through each of the unit process. Steady-state operation of the Pretreatment Facility would also have to include all the recycle waste streams. That is, in the process of separating the wastes into necessary components for further processing, other waste streams are produced. A few of those streams are: waste washings, filter cleaning and rinsing solutions, CIX regeneration solutions, HLW canister decontamination solutions, vessel vent solutions, submerged bed scrubber solutions from both the HLW and LAW vitrification facilities, etc. In steady state these recycle streams will be recycled to different locations in the Pretreatment Facility. Those streams need to be included to simulate the actual plant operation. This means that each of the campaigns would have to run many times until the effects of the recycle streams stabilized so that steady-state operation is realized. After reevaluating the task needs, available funds and time, it was clear that the scope had to be reduced. It would be limited to processing a key waste stream with all the recycle streams and then processed enough times that steady-state operation would be attained. Focus was then directed to the wastes that the plant would use for commissioning, i.e., 241-AY-102/C-106, herein referred to as AY102, and 241-AP-101, herein referred to as AP101. The first waste is the result of two waste tanks that have already been mixed together, AY-102 and C-106 and is classified as an Envelope A/D mixture. The second waste, AP101, is an Envelope A waste. With this waste, all of the principal WTP Pretreatment Processes would be tested except the Sr/TRU Process because it did not include an Envelope C-type waste.

The SIPP task was dedicated to perform integrated processing of one selected waste stream combination that included recycle streams produced during the processing of waste through the four pilot-scale unit operations. As such, the testing of an "integrated" process is integrated in the sense of capturing the salient chemical processes, that is, it is important to note that the SIPP is not integrated with respect to time. The operation of the Pretreatment Facility is complex in both chemistry and time, but the many interconnected systems and supporting processes that will exist in the plant to allow the four main unit operation to function were not included in SIPP because of schedule and expense. Just the scaling issues alone, for an entire Pretreatment facility, would have been an almost impossible task to accomplish. In short, running the four principal unit operations with simulated waste and recycle streams as chemically close as to what will result in the plant was accepted as the most efficient use of the time and money available. Time of operation was limited to the operation of each individual unit operation only, and not to their temporal interdependence on the supporting Pretreatment Facility operations, e.g. vessel fillings, waste testing and adjusting, waste transfers, line flushings, etc. However, prototypical hold times (see Appendix A) between the four unit operations were included to provide sufficient time for precipitation of slow forming salts, e.g., Sodium Aluminosilicate and $NaF_7(PO_4)_2$.

To reiterate, the SIPP task is the operation of four individual and separate pilot-scale unit operations, each successively processing a single waste stream combination, which is chemically connected through the feedback of recycle streams. The plan is described in the RPP-WTP test specification (Longwell, 2003) and in the WSRC technical task plan (Duignan, 2003c). The task's original series of three campaigns was maintained, but

instead of processing different waste types, only one type was used. Each successive campaign introduced recycle streams produced from the preceding stream. To feed the first campaign an extra, initial, campaign was added. This addition was actually an already planned ultrafiltration test (Townson, 2002). That test became known as Campaign I and it only processed a simulant of AY102. In this way the filtration results of Campaign I served three purposes: 1. To generate a filtration data set for a single-waste type that could be compared to past single-waste filtration tests, 2. to become a baseline for filtration of AY102 in order to determine how additions of AP101 and recycles to that waste affect filtration, and 3. to produce a series of recycle streams to feed to Campaign II. The last reason was very important to SIPP because the UFP produces several important recycle streams, i.e., slurry washing permeate, sludge loop flushing, loop acid cleaning, and loop caustic rinsings. Campaign I was performed in January and February of 2004 and the results were published in Duignan et al., 2004a and Campaign II was performed in April and May of 2004 and the results were published in Duignan et al., 2004b. A summary of all the campaigns is as follows:

Campaign I	UFP only with simulant of AY102.
Campaign II	All four unit operations with simulant of AY102 + AP101 + recycle streams (normally the CIX also has recycle streams but since Campaign I did not test the CIX they were not included in Campaign II).
Campaign III[†]	All four unit operations with simulant of AY102 + AP101 + 2nd generation recycle streams (but with 1st generation CIX recycle streams).
Campaign IV[‡]	Two unit operations (FEP and UFP) with simulant of AY102 + AP101 + 3rd generation recycle streams (but with 2nd generation CIX recycle streams).

As shown in the preceding Section 1.1, in "Test Objectives," there were many objectives; the details of which will not be repeated here, but will be discussed in the appropriate later sections. However, the major goals were to better understand how each of the four pilot-scale unit operations processes waste[*], to study how the processes change with successively complex recycle streams, and to produce throughput data to benchmark computer codes being developed by Bechtel and others, and to predict and plan for, plant operation.

Figure 1 is a schematic of the overall SIPP operation. It is broken into the four unit operations and indicates both the salient chemical and time steps. The operations are listed in a chronological order, at least with respect to the SIPP test, with the top (FEP) section being first. Of course the plant will be much more complex. A very short summary of the overall operation is as follows:

[†] This report deals specifically with Campaign III results.

[‡] As of May 2004 RPP-WTP informed SRNL to change the scope of Campaign IV to test a new filter made by GKN, which was chosen instead of the Mott for the RPP-WTP Pretreatment Facility Ultrafiltration Process. The number of the unit operations was reduced from four to two for Campaign IV, those being the pilot-scale FEP and UFP, so that GKN performance could be compared to the Mott.

[*] For example, the recycle streams for this campaign, Campaign III, contained chemicals carried over from Campaigns I and II.

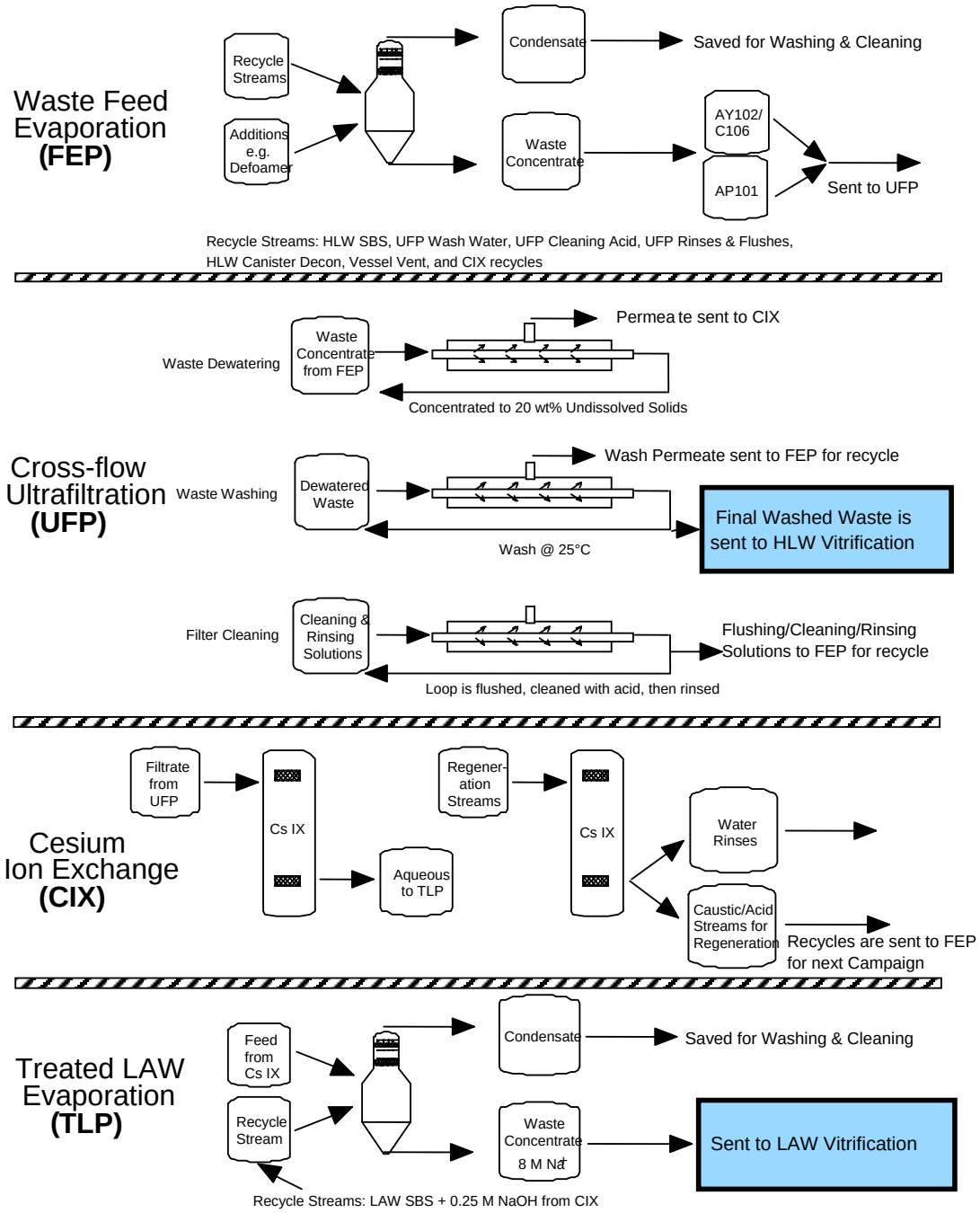

Figure 1. Schematic of the overall task operation taken from the task plan

1. FEP evaporates a combined mixture of recycles.
2. UFP filters a combined mixture of the FEP concentrated product and waste from the tank farm until the mixture reaches a target concentration. The UFP produces two streams: the permeate which is sent to the CIX for LAW processing, and the concentrated slurry. That slurry is then washed to remove many of the soluble solids after which it is sent to the HLW melter facility. The slurry washing and subsequent UFP filter cleaning produces a series of recycle streams that are sent back to the FEP for processing.
3. CIX takes the permeate from the UFP and removes most of the soluble, but radioactive, cesium. When the resin in the lead IX column is regenerated, recycle streams are created which are either sent back to the FEP or forward to the TLP for processing.
4. TLP takes the CIX product, which still has very low levels of radiation, and evaporates most of the water before it is sent to the LAW melter facility.

The evaporation of the many combined recycle streams in the FEP will be operated in a continuous sense, in that after it fills the UFP preparation tank for one filter train (there will be two UFPs), it will feed the preparation tank for the other filter train. However, the FEP must ultimately be a batch operation because it will be receiving waste from recycle tanks (PWD = Plant Wash and Disposal System) that will be batched through the FEP only after the feed is adjusted for pH and tested for acceptance.

When the UFP feed and preparation tanks are full and ready for processing, the filtration can commence. This process is also batch, but the feed tank must be continuously fed with new feed as dewatering is ongoing. The feed tank will have a base volume of 21,550 gallons into which approximately 1000 gallons will be transferred from the preparation tank. Each time the feed tank level drops to 21,550 gallons another batch of 1000 gallons will be transferred until the dewatered slurry reaches its target solids concentration. For this task, the target was 20 wt% undissolved solids. This dewatering process is shown in the UFP section of Fig. 1 as the top filtration loop. The middle loop illustrates the washing and leaching of the final concentrated slurry batch. (Note: For SIPP, the leaching process was not performed as requested by RPP-WTP (Calloway, 2004)). After the concentrated waste is washed, it is then sent to the HLW melter for further processing, but for the SIPP, the washed slurry is simply drummed to be shipped for processing in a pilot HLW melter. With the loop de-inventoried, the final loop shows that the UFP undergoes caustic rinsing and acid cleaning, in preparation for the next batch.

For the plant, the CIX does not necessarily have to wait for the entire filtration process to end. There are several filter permeate tanks to feed the CIX and they receive permeate from each of the two filter trains. However, for SIPP the CIX can begin after a fixed amount of permeate is produced from the UFP, which is approximately 200 bed volumes. A bed volume is the volume of space occupied in an IX column by the resin, including the interstitial spaces among the resin particles. The plant will process a minimum of 100 bed volumes (~ 30,000 gallons) of permeate before an IX column needs regeneration.

Originally, the SIPP IX was to demonstrate the design throughput rate of treated waste, like the other pilot unit operations, but it was thought more important[†] to use it for chemical testing to show cesium removal efficiency. This meant the important parameter would be a prototypic residence time for permeate in the resin, or 3 bed volumes per hour. For the 6-inch diameter pilot-scale column, this resulted in a very low flow rate of ~0.031 gpm, which is more than two orders of magnitude slower than the plant design flow rate of 15 gpm and approximately one order of magnitude slower than scaled flow rate of ~0.2 gpm. SIPP used 200 bed volumes because several past tests had indicated that the resin may last longer than the original plant design of 100 bed volumes. It was very important to show how long the resin truly lasts before needing to regenerate it. The third section of Fig. 1 shows two columns because of the two processes that occur within CIX: the first process is the removal of cesium, the second process is a series of steps to regenerate the resin.

The final section of Fig. 1 shows the TLP operation. The CIX product is mostly water and the TLP removes it while concentrating the sodium up to 8 M. This is the last step before the treated LAW stream is sent to the LAW melter facility.

Along the way, several recycle streams are created in the UFP and the CIX, as well as from other sources, like the submerged bed scrubber quencher streams from both the HLW and LAW melter facilities. These recycle streams are then fed back in the process, which then repeat. For the SIPP, this repeating results in the subsequent campaigns.

2.3 THE COMPUTATIONAL MODEL

A full explanation of the computation assistance obtained at the beginning of SIPP has already been described in detail elsewhere (Duignan et al., 2004b and Barnes, 2004) and will not be repeated here. However, it is important to know how the computational modeling was used for this task to understand its role for Campaign III. The model served two purposes: 1. To determine how much slurry to use and, 2. To estimate the mix ratio of feeds (simulated wastes and recycle streams) for each of the unit operations. The Test Specification (Longwell, 2003) requested that the WTP Aspen Custom Modeler (ACM) Model be used to obtain the bases for the combined feed streams, i.e., the feed mix ratios. With the feed stream obtained in this manner an OLI Environmental Simulation Program (OLI/ESP) was used to determine the steady-state operation for each unit operation in each of the campaigns.

In concept, the operation of the SIPP is straightforward, but determining the exact simulant needs was quite complicated because of the differing scales of each pilot-scale unit operation and because of the chemical interaction among the recycle streams from all the campaigns. A very important part in developing the test matrix of the task plan was knowing how much simulant to use and how should all the different waste and recycle streams be mixed together. That need was satisfied by computationally predicting SIPP streams for all four campaigns. As an added benefit, once the model was made, it would

[†] Test Exception No. 24590-WTP-TEF-RT-03-069, Rev. 0, 14 Nov. 2003

be possible to evaluate changes in simulant volumes and mixing ratios to determine if the entire SIPP process comes to steady state. Steady state could be shown, at least chemically, by demonstrating that the products produced in SIPP change insignificantly from one campaign to the next.

Table 1 shows the results of the OLI/ESP model that includes WTP accepted mixture ratios for combined feed streams from the ACM model. The principal value in the entire figure is the initial "batch" size of the UFP feed tank. In Table 1 this batch size for the SIPP is shown in red as 140 liters and is listed as "UF1 SLURRY (batch at 20 wt% UDS)." This waste volume is very significant because for this pilot-scale task it represents the batch size of HLW sent for HLW vitrification. When this batch is dewatered to some predetermined concentration of undissolved solids (it was 20 wt% for SIPP), then the permeate produced during dewatering will be the batch size of LAW sent for LAW vitrification.

Table 1. Feeds and products for planning SIPP developed for OLI/ESP computer model

WTP Process	Stream Type	Stream Name	Campaign (in Liters)			
			I	II	III	IV
FEP	Feed Recycle Streams	UFP & CIX RECYCLEs (previous campaign)	N/A	583.1	602.8	602.8
		HLW (Submerged Bed Scrubber)	N/A	190.6	190.6	189.9
		PVP (Vessel Vent System)	N/A	220.7	220.7	220.0
		HLW DECON	N/A	114.6	114.7	114.3
	Products Produced	FEP CONDENSATE (to be process wash)	N/A	996.0	980.6	984.9
		FEP COOLED BOTTOMS (UFP feed)	N/A	114.4	150.8	144.9
UFP Feeds	Feed	AY102 WASTE (at 12 wt% UDS)	253.5	252.4	242.2	241.4
	Feed	AP101 WASTE (at ~ 8 M Na^+)	N/A	671.3	674.4	672.1
UFP	Products Produced	UF1 FILTRATE (routed to CIX, then TLP)	113.5	922.3	952.2	943.7
		UF1 SLURRY (batch at 20 wt% UDS)	140	116.8	116.4	116.1
	Batch Waste Washing	FEP COND WASH (0.01 M NaOH)		281.1	281.5	280.7
		19 M NaOH (to adjust FEP COND)		1.8	0.2	0.2
		TOTAL CAUSTIC WASH	338.6	282.5	281.6	280.8
	Filter Rinsing & Cleaning	FEP COND ACID (2 M HNO3)		86.1	85.8	85.6
		12 M HNO3 (to adjust FEP COND)		17.0	17.0	16.9
		TOTAL ACID CLEANING	122.5	102.2	101.9	101.6
		FEP CONDENSATE TO CAUSTIC RINSE		101.8	101.5	101.2
		19 M NaOH (to adjust FEP COND)		0.5	0.5	0.5
		TOTAL CAUSTIC RINSE (0.1 M NaOH)		102.2	101.8	101.5
		TOTAL CAUSTIC RINSE (for FEP recycle))	117.1	97.6	97.3	97.0
	Final Filter Products	HLW SLURRY (to HLW melter)	138.1	110.8	110.3	110.0
		TOTAL FEP RECYCLE (for next campaign)	583.1	602.8	604.8	602.3
CIX	Column Regeneration Products Produced	CIX 0.1 M NaOH RINSE (for FEP recycle)	N/A	36.9	38.1	37.8
		CIX DI WATER (for FEP recycle)		36.9	38.1	37.8
		CIX 0.25 M NaOH (for FEP recycle)	N/A	40.0	41.3	40.9
		CIX 0.25 M NaOH (for TLP recycle)	N/A	36.9	38.1	37.8
TLP	Feeds wFiltrate	LAW SBS (Submerged Bed Scrubber)	N/A	833.0	832.9	830.2
	Products Produced	TLP CONDENSATE (to be process wash)	N/A	1214.1	1231.4	1224.9
		TLP COOLED BOTTOMS (to LAW melter)	N/A	589.3	603.4	598.1

This SIPP batch of 140 liters[†] for Campaign I was arbitrarily chosen, but once chosen all other volumes were the result of SIPP processing. The choice was made by using existing test facilities, where the pilot UFP could contain 140 liters and still have enough room to feed in more slurry until dewatering is complete. Knowing this batch size, using the feed stream ratios from the ACM model, and the chemical makeup of the base waste slurry, i.e., AY102/C106 and AP101, the OLI/ESP model could then be iterated among all of the campaigns to result in the numbers shown in Table 1. Note that the batch size of 140 liters, with 20 wt% undissolved solids, changes from Campaign I to a value of approximately 116 liters (with 20 wt% undissolved solids) for all the other campaigns, and as such, the 116-liter volume was taken as equivalent to the full scale UFP batch[‡] size in those campaigns. The difference between the batch size for Campaign I (140 L) and the subsequent campaigns (116 L) was not well understood when the task was planned but because the sophisticated OLI/ESP software includes all the steady-state chemistry of the processed wastes, which included dozens of compounds, it was assumed that differences in the starting waste slurries resulted in this "discrepancy." That is, Campaign I only processed a single waste, AY102, while the other campaigns included also AP101 and the concentrated recycle streams from the FEP. The inputs for the known waste chemistries, of the starting feeds, were checked many times to verify accuracy, therefore the difference was assumed to be real. In any case, the purpose of the model was to be used as a tool to plan the task and procure needed quantities of simulant, therefore further investigations on the (~15%) difference[*] were not thought necessary. The simulated waste products were procured with enough safety margin to cover any problems if, for instance, shortages occurred during experimentation.

As shown in Figure 1, once the UFP is finished concentrating, the waste is washed with approximately 0.01 M NaOH. The plant will hold the slurry volume constant and feed in two volumes of the caustic solution, each volume approximately equal to the volume of slurry, before sending the waste to the HLW Vitrification Facility. While the plant will hold the UFP volume constant, the model resulted in slightly smaller volumes, see the line in Table 1 entitled, "HLW Slurry (to HLW melter)." due to computational requirements. These are the simulated processed feeds for HLW vitrification. The other highlighted lines in Table 1 are: "AY102 WASTE (at 12 wt% UDS)," which was the amount of feed AY102 simulant needed; "AP101 WASTE (at ~ 8 M Na)," which was the amount of feed AP101 simulant needed; "UFP & CIX RECYCLEs (previous campaign)," which was the portion of recycle streams carried over from the previous

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[†] For WTP this batch size was 18,000 gallons when this task began, but it currently stands at 21,550 gallons. In fact, for Campaign I operation, the 18,000-gallons size was valid and used for scaling purposes, but with Campaign II and all subsequent campaigns the latter volume was used.

[‡] Same as the above footnote

[*] In fact, the actual discrepancy was not understood until after Campaign III was complete and analysis of the SIPP data was underway. The problem turned out to be something that could not be easily resolved a priori because of the OLI/ESP. For the software package to converge on a solution the anion and cation charges of ALL simulant analytes must balance. Unfortunately, the simulated wastes streams contained many unknown complex undissolved solids compounds for which ion charge balances had to be assumed. Those assumptions caused the resulting volumetric difference once a slurry was concentrated to 20 wt% undissolved solids. This is a clear example of the current limitations of computational models and the need for benchmarking to experimental results of complex interactions.

campaign to be mixed with other recycle streams that did not come directly from one of the four unit operations; finally, the last line contains the volumes of LAW that are treated through all four unit operations and are ready as feed for LAW vitrification.

Another feature included in Table 1, but not obvious, is the feed proportions used for each unit operation, which were supplied by the ACM model. For each of the campaigns, the proportions are slightly different, but not significantly so. The feed for the FEP was made up from only recycle streams and the volumetric proportion of each of the streams used is shown in Table 2.

While the proportions in Table 2 are close to the recycle stream values in the planning table shown as Table 1, they will not be exactly the same because of last minute changes, round off numbers, and uncertainties in some of the streams.

Table 2. Percent contribution for each of the recycle streams to the total FEP feed

List of Recycle Streams Used for SIPP and Verified by WTP	Percentage of Recycle to FEP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) HLW SBS	n/a	17.1%	17.5%	17.4%
(2) Vessel Vent	n/a	19.7%	20.3%	20.2%
(3) HLW Can. Decon	n/a	10.3%	10.5%	10.5%
(4) UFP Recycle (0.01 M NaOH)	n/a	30.3%	21.7%	21.6%
(5) UFP Recycle (0.1 M NaOH)	n/a	10.5%	9.0%	8.9%
(6) UFP Recycle (2 M HNO3)	n/a	11.0%	9.4%	9.4%
(7) UFP Recycle (3 Loop Flushes)	n/a	1.2%	1.2%	1.2%
(8) CIX Recycle (0.1 M NaOH)	n/a	0.0%	3.4%	3.5%
(9) CIX Recycle (DI Water)	n/a	0.0%	3.4%	3.5%
(10) CIX Recycle (0.25 M NaOH)	n/a	0.0%	3.7%	3.8%
Total Feed to the FEP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made by an outside vendor: VSL***
(2) and (3) were made for each campaign
(4) to (10) were products of unit operations
* Campaign I only used a single simulated waste with no recycles in a single unit operation, i.e., UFP.
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

There were many routes to operating the UFP, but for SIPP, and initial plant operation, it was thought prudent to only use the FEP to process recycle streams and the UFP would

be the starting point for tank farm wastes. One major benefit of this method was that it minimizes undissolved solids in the FEP and thus hopefully minimizes condenser fouling that would affect operational efficiency. This means that the feed for the UFP had three waste sources, one of which came from the FEP after the recycle streams were concentrated to a target density. The other two were mentioned above. Their individual contributions to the UFP feed are shown in Table 3.

Table 3. Percent contribution for each of the UFP feed streams

Feed Streams Used for SIPP in the UFP and Verified by WTP	Percentage of Streams to UFP <------Campaign Number------>			
	I*	II	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) FEP Bottoms	0%	11.1%	14.3%	13.8%
(2) AY-102/C-106	100%	24.3%	22.6%	22.8%
(3) AP-101	0%	64.6%	63.1%	63.4%
Total Feed to the UFP	100%	100%	100%	100%

Notes:
Source of Streams: (1) was concentrated from recycles in the FEP
(2) outside vendor, but finalized in EDL**
(3) came from an outside vendor
* Campaign I only used a single simulated waste.
** EDL = Engineering Development Laboratory of the Savannah River National Laboratory of the Westinghouse Savannah River Company where SIPP pilot-scale testing was performed.

As with the recycle percentages in Table 2, the percentages in Table 3 are slightly different than what is shown in Table 1. Those differences are mostly attributed to volumes actually created during experimentation. The computational volumes were not expected to be exact and while the values in Table 3, were (Campaigns I, II, and III) or are to be (Campaign IV) used for SIPP, the actual plant mixture may still be different as its design continues to evolve.

One product of the pilot-scale UFP is the permeate produced during dewatering. This waste stream is then sent on to the CIX in its preparation for LAW vitrification. As this task evolved, the pilot-scale CIX operation was disassociated from measuring volumetric throughput to measure glass production, because WTP thought it more important to understand the cesium removal efficiency of the chosen resin, SuperLig®644. This requirement made the amount of permeate important, since cesium removal was to be studied. It was necessary to have 400 “bed volumes” of feed for each campaign, excluding Campaign I. A bed volume is the space occupied in an ion exchange column by settled resin. For the pilot-scale CIX that volume was approximately 2.3 liters, making the produced number of bed volumes 401, 414, and 410 for Campaigns II, III, and IV, respectively. This can be seen in the Table 1 line entitled, “UF1 FILTRATE (routed to CIX, then TLP).”

Finally, the proportions of different feeds for the pilot-scale TLP were needed. Those are shown in Table 4.

Table 4. Percent contribution for each of the TLP feed streams

Feed Streams Used for SIPP in the TLP and Verified by WTP	Waste Stream Vol. % to TLP <------Campaign Number------>			
	I*	II**	III	IV
	Vol. %	Vol. %	Vol. %	Vol. %
(1) LAW SBS (from LAW melter)	n/a	47.4%	45.7%	45.8%
(2) 0.25 M NaOH (recycle from CIX)	n/a	0.0%	2.1%	2.1%
(3) Treated LAW from CIX	n/a	52.6%	52.2%	52.1%
Total Feed to the TLP	n/a	100%	100%	100%

Notes:
Source of Streams: (1) was made by an outside vendor: VSL***
(2) comes from a regenerated IX column
(3) comes from CIX after Cs is removed
* Campaign I did employ the pilot-scale TLP
** Since Campaign I was only a filter operation, therefore, no CIX recycle streams were produced for Campaign II, as indicated by the RPP-WTP Test Specification (Longwell, 2003).
*** VSL = Vitreous State Lab. of Catholic University of America

As with Tables 2 and 3, the percentages in Table 4 differ slightly than those from Table 1 because of limitations in the model, but all the values were sufficient to plan and begin testing.

2.4 THE OVERALL SIPP TEST MATRIX

To allow the reader to understand how Campaign III was done without having to refer to any of the other SIPP reports, a portion of the overall test plan explanation is repeated here from the Campaign II report. With the plan in place and the planning results from the computational model, an overall test matrix was established. The following matrix was not the last word on how each of the unit operation was to run, but it was the starting point for each of the unit operations to develop individual test plans, as well as the simulant mixing and sample plans. As the task began with Campaign I (Duignan, et al., 2004a), and then on to other campaigns, the matrix continued to evolve as WTP needs changed, therefore, this test matrix may be slightly different than the individual test plans. However, it is instructive here to illustrate the overall operation of SIPP. That is, a global explanation is first given to better understand SIPP in its “integrated” form, which is then followed by discussions on each of the individual unit operations and their results.

That matrix is shown in pieces in the following series of figures:

[Note that , Table X >> Table Y means: table x indicates the wait time before using slurry in the table y unit operation.]

Table 5 (simulant aging)	>>	Table 6 (pilot FEP unit operation)
Table 7 (simulant aging)	>>	Table 8 (pilot UFP unit operation)
Table 9 (simulant aging)	>>	Table 10 (pilot CIX unit operation – first cycle)
	>>	Table 11 (pilot CIX unit operation – second cycle)
Table 12 (simulant aging)	>>	Table 13 (pilot TLP unit operation)

These nine figures are in chronological order of performance.

First, Figs. 5, 7, 9, and 12 were included to show hold-up time intervals between unit operations, especially because they were not part of the computational model, which was done at steady state. In an attempt to mimic the periods that waste "waits" before being processed in each unit operation, some prototypic times were included in SIPP.

Table 5. Hold period before pilot-scale FEP begins[†]

	Pre-FEP Hold Times (stipulated by WTP)										
	Minimum hold time between the time recycle stream mixture and beginning evaporation.			2	days						

Waste aging may affect many processing steps, for example, the post-UFP precipitation was a key issue for the ion exchange system. Using the appropriate WTP plant hold times allowed this issue to be resolved. The many reasons for specific hold times are given in Appendix A. As an example, Table 5 allows time for the mixed multiple recycle streams to age. Recycle streams are fed from several different sources to the Plant Wash and Disposal System tanks that will feed the Waste feed Evaporation Process. The recycle streams come in at different rates and then need to be adjusted for pH as the acid and alkaline streams merge in order to mitigate the precipitation of solids or gels. After the adjustment, the FEP is fed, but because of the large scale, the transfer times are not insignificant. As explained in Appendix A, the time associated in the pre-evaporation process is approximately 2 days and therefore, once the SIPP FEP feed of recycle streams is adjusted properly it is held for that number of days before evaporation begins.

For each of the unit operations, a hold time is set after the appropriate feed is made ready. In summary those simulated minimum hold times are:

After joining recycle feeds and before processing in the FEP – 2 days
After making FEP bottoms and before joining it with other UFP feeds – 2 days
After joining waste feeds and before processing in the UFP – 2 days
After producing UFP permeate and before processing in the CIX – 4.5 days
After joining treated LAW with recycle streams and before processing in the TLP – 2 days

[†] Blanks in all tables in this report are intentional.

Table 6. Pilot-scale FEP test matrix with the colored columns representing Campaign III

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
FEP	Locate Feeds	(1) HLW SBS	n/a	n/a	17.1%	50.4	17.5%	50.4	17.4%	50.2	
		(2) Vessel Vent	n/a	n/a	19.7%	58.3	20.3%	58.3	20.2%	58.1	
		(3) HLW Can. Decon	n/a	n/a	10.3%	30.3	10.5%	30.3	10.5%	30.2	
		(4) UFP Recycle (0.01 M NaOH)	n/a	n/a	30.3%	89.5	21.7%	62.4	21.6%	62	
		(5) UFP Recycle (0.1 M NaOH)	n/a	n/a	10.5%	30.9	9.0%	25.8	8.9%	25.7	
		(6) UFP Recycle (2 M HNO3)	n/a	n/a	11.0%	32.4	9.4%	27	9.4%	26.9	
		(7) UFP Recycle (3 Loop Flushes)	n/a	n/a	1.2%	3.50	1.2%	3.50	1.2%	3.50	
		(8) CIX Recycle (0.1 M NaOH)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(9) CIX Recycle (DI Water)	n/a	n/a	0.0%	0	3.4%	9.7	3.5%	10.1	
		(10) CIX Recycle (0.25 M NaOH)	n/a	n/a	0.0%	0	3.7%	10.6	3.8%	10.9	
		Total	n/a	n/a	100.0%	295.3	100.0%	287.7	100.0%	287.7	
FEP	Evaporate at	Condensate produced =		0.0	gallons	266.3	gallons	262.2	gallons	263.4	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm	Concentrate produced =		n/a	gallons	30.6	gallons	40.3	gallons	38.8	gallons
		Time to concentrate (@ 0.395 gpm) =		n/a	hours	11.2	hours	11.1	hours	11.1	hours
FEP Recycle Stream Notes:											
(1) SBS HLW recycle: This a vendor supplied stream. Use as is.											
(2) Vessel Vent recycle:Is made to match collection from VVS. Caustic is added to demineralized water to 0.1 M NaOH.											
(3) HLW Canister Decontamination recycle: Is made to match Decon Stream. The expected concentration of contaminates need to be added to model stream.											
(4) UFP Wash Water recycle: This scaled recycle washes the scaled concentrated filtered sludge. Use as is.											
(5) UFP caustic recycle: UF surface area is rinsed therefore this recycle must be adjusted to have correct concentration of sludge material.											
(6) UFP acid recycle: UF surface area is cleaned, therefore this recycle must be adjusted to have correct concentration of dissolved sludge material.											
(7) After UFP waste washing the loop will be flushed with 2,100 gallons of process water. This stream will be adjusted for the estimated sludge content expected.											
(8) CIX caustic recycle from initial step to regenerated column by replacing treated LAW with 0.1 M NaOH. Use as is.											
(9) CIX neutral recycle to remove 0.5 M HNO3 from column. Use as is.											
(10) CX caustic recycle the first portion of 0.25 M NaOH used to regenerate IX column. Use as is.											
Non-prototypicality Note:											
Many tank-to-tank transfers will be done with steam jets that will create an undetermined amount of condensed steam. These addition are neglected.											

Once the recycle streams were mixed in the planned proportions, Table 2, and the appropriate hold time was realized, then the FEP test matrix, shown in Table 6, was performed. The goal was to concentrate the feed stream so that it had a sodium molarity of 5, but the "visible" target was an evaporated slurry density of 1.266 g/cc at 50°C and 1 psia (which is 1.252 g/cc at 20°C and 1 atm). Density was used because the WTP will only be able to control concentration by measuring density.

Table 7. Hold period before pilot-scale UFP begins

	Inter-Unit Operations Hold Times (Stipulated by WTP)								
	Minimum hold time between the receipt of the FEP concentrate to the time it is mixed with waste simulants AY102/C106 + AP101					2	days		
	Minimum hold time between the time of making = FEP concentrate + AY102/C106 + AP101, and beginning dewatering.					3	days		

When feed evaporation was completed, its slurry product was held for 2 days, Table 7, before being mixed in the planned proportions, Table 3, with the simulated wastes of AY102 and AP101. Completing this mixture started another 3-day clock before starting the UFP.

While processing the waste through the UFP is complicated with several activities involving the washing of the concentrated slurry to the cleaning of the filter loop (see Table 8), the basic operation is to separate the waste feed stream into a HLW product, containing all of the undissolved solids, and its supernatant, containing most of the cesium. This was done by dewatering the feed from a concentration less than 5 wt% to 20 wt% undissolved solids. The details of the UFP operation will be discussed in the appropriate subsection of this report. One feature that is not immediately obvious is the process containing an internal hold time. Dewatering in WTP will be a relatively lengthy

process because filtration is very slow and the volumes are very large. While the waste is waiting to be processed through the UFP, it will be sitting in the feed preparation tank, which feeds the feed tank. During this process period, chemical reactions may still be occurring within the waste and crystallization or precipitation may result. In an attempt to capture these transient phenomena, a waiting period was inserted in the dewatering process of the pilot UFP. The period is a minimum 12-hour hold time, which is arbitrary, but is loosely connected to the planned plant operational time of the UFP, and was acceptable to the WTP project.

Table 8. Pilot-scale UFP test matrix with the colored columns representing Campaign III

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
UFP	Locate Feeds	FEP Bottoms	0.0%	0	11.1%	30.6	14.3%	40.3	13.8%	38.8	
		AY102/C106	100.0%	67	24.3%	66.7	22.7%	64	22.8%	63.8	
		AP101	0.0%	0	64.6%	177.4	63.1%	178.2	63.4%	177.6	
		Total	100.0%	67	100.0%	274.662	100.0%	282.4901	100.0%	280.172	
		Inhibited water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
	Filter at	Time for baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
	0.02 gpm/ft2	Starting simulant volume =	Camp I used ~75 gal	67	gallons	274.662	gallons	282.4901	gallons	280.172	gallons
	or 0.134 gpm	Time to cool to 25°C before use =	to obtain ~25 wt%	0	hours	0	hours	0	hours	0	hours
	for a 6.71 ft2	Concentrate produced at 20 wt% =		37.0	gallons	30.9	gallons	30.8	gallons	30.7	gallons
	filter area	Permeate produced =		30.0	gallons	243.8	gallons	251.7	gallons	249.5	gallons
		Total time to concentrate =		3.7	hours	30.3	hours	31.3	hours	31.0	hours
		Time for first half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Hold for 12 hours =		12	hours	12	hours	12	hours	12	hours
		Time for second half batch =		1.9	hours	15.2	hours	15.7	hours	15.5	hours
		Time for steady-state matrix =	(Campaign I only >>)	13	hours	n/a	n/a	n/a	hours	n/a	hours
	1st Wash >>	Wash water (0.01 M NaOH,) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
		Wash Notes: 1. Campaign I wash vol. = waste vol. x 21.77/18, but recent WTP change now is waste vol. x 21.77/21.55 and will be used for Campaigns II>IV.									
		2. Campaign I concentrated waste to 24 wt% UDS during dewatering therefore the UDS was reduced to 20 wt% before washing.									
		Time for initial wash =		5.6	hours	3.9	hours	3.9	hours	3.9	hours
	2nd Wash >>	Wash water (0.01 M NaOH) =		44.7	gallons	31.2	gallons	31.1	gallons	31.0	gallons
	Made 60%	Time for final wash =		3.5	hours	2.4	hours	2.4	hours	2.4	hours
	faster than the	Volume to remove for Max wt% =	(Campaign I only >>)	21	gallons	n/a	gallons	n/a	gallons	n/a	gallons
	1st Wash from	Time to concentrate =	(Campaign I only >>)	2.6	hours	n/a	gallons	n/a	gallons	n/a	gallons
	the Campaign I										
	test. That is,	**Washed Concentrate for HLW vitrification**		36.5	gallons	29.3	gallons	29.1	gallons	29.1	gallons
	0.134x1.6 =										
	0.214 gpm	Rinse water (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		2 M HNO3 cleaning solution =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to cleaning =		1.5	hours	1.5	hours	1.5	hours	1.5	hours
		Rinse 1 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Rinse 2 (0.1 M NaOH) =		25	gallons	25	gallons	25	gallons	25	gallons
		Time to rinse UF =		0.5	hour	0.5	hour	0.5	hour	0.5	hour
		Time for final water baselining =		2.0	hour	2.0	hour	2.0	hour	2.0	hour
		Total Continuous Time per Campaign =		38.4	hour	46.6	hour	47.6	hour	47.3	hour
Non-prototypicality Note:											
The 12-hour hold time between half batches during scaled dewatering is an attempt to capture some of the precipitation dynamics that will occur in the waste during concentration. However, full-scale dewatering will take hundreds of hours therefore not all dynamics will happen.											

The pilot-scale UFP produced permeate that was needed for the next step in the SIPP operation, i.e., pilot CIX. While the UFP continued to process the dewatered slurry with washing and cleaning the UFP loop with both caustic and acid flushes, the permeate sat in the pilot CIX feed tank to age at least 4.5 days, as shown in Table 9.

Table 9. Hold period before pilot-scale CIX begins

	Inter-Unit Operations Hold Time (stipulated by WTP)										
	Minimum hold time between the receipt of the UFP permeate to the time it is processed by the CIX					4.5	days				

As was done for Campaign II and then for Campaign III, it was convenient to produce the first permeate on a Monday and then to begin pilot CIX operation the following Monday. There were approximately 6.5 days between the end of the first half of permeate production, sometime after midnight of that Monday, and the planned start of the CIX. Pilot CIX operation was also broken in two parts because it was necessary to run with two complete ion exchange cycles, which allowed both IX columns to take turns as the lead or the lag column. This is the reason there are two CIX tables, i.e., Tables 10 and 11. The basic difference between them is that the lead column in the first cycle of operation, Table 10, became the lag column in the second cycle, Table 11. The permeate produced during the pilot UFP was sufficient to satisfy the CIX cycle need of 400 bed volumes of feed (~900 liters). Each cycle included the processing of 200 bed volumes of UFP permeate and then the lead column would undergo regeneration for use in the next cycle as the lag column.

The colored portion of Tables 10 and 11 highlights the work done for this report, that is, Campaign III.

Table 10. Pilot-scale CIX (1st half) test matrix with the colored columns representing Campaign III

				Campaign I		Campaign II		Campaign III		Campaign IV	
				Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes	
Process	Action	Feeds									
Cs IX	Locate Feeds	Total UFP permeate feed		n/a	n/a	243.8	gallons	251.7	gallons	249.5	gallons
		This permeate must wait at least 48 hours after being created from the UFP before being treated.									
		Both the lead and lag columns start cycle I filled with 0.25 M Na									
		Water used for eluate, water buffer, and 0.25 M Na must be made from fresh distilled water									
		Water used for 0.1 M Na solution can come from evaporation condensates									
		There will be two columns referred to as A & B									
Cs IX	Treat Waste	Cs IX Test No.				**1**		**3**		**5**	
	Simulant and	Lead>Lag Column =		n/a	n/a	A>B		A>B		A>B	
	regenerate as	Cycle I (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
	indicated	Number of BV (BV ~ 0.617 gal.) >>>	Column I.D. = 5.5 inches	n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate	Bed Height = 6.0 inches	n/a	n/a	3.0	BV/hour	3.0	BV/hour	1.5	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	68.0	hours	134.8	hours
		Regeneration									
		Column to be regenerated and eluted =				A		A		A	
		0.1 M NaOH displacement									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	1.0	BV/hour	2.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	15.0	hours	7.5	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			87.0	hours	81.6	hours	155.9	hours

Campaign III included pilot CIX cycles 3 and 4. Once again, Campaign I did not include any ion exchange work, which explains why Cycle 1 began in Campaign II and Cycle 3 began in Campaign III.

Once both cycles of a campaign are complete then both columns are filled with 0.1 M NaOH to keep the resin stable for the next campaign. This inter-campaign period would be no less than 5 weeks.

Table 11. Pilot-scale CIX (2nd half) test matrix with the colored columns representing Campaign III

Cs IX		Cs IX Test No.				**2**		**4**		**6**	
		Lead/Lag Column =		n/a	n/a	B>A		B>A		A>B	
		Cycle 2 (treat 1/2 campaign batch)		n/a	n/a	121.9	gallons	125.8	gallons	124.7	gallons
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	197.5	BV	204.0	BV	202.2	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	4.5	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	65.8	hours	45.3	hours	67.4	hours
		Regeneration									
		Column to be regenerated and eluted =				B		B		A + B	
		0.1 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	1.0	hours	1.0	hours	1.0	hours
		0.5 M HNO3 elution									
	Regeneration	Number of BV (BV ~ 0.617 gal.)		n/a	n/a	15.0	BV	15.0	BV	15.0	BV
		Flow Rate		n/a	n/a	0.5	BV/hour	1.0	BV/hour	1.0	BV/hour
		Total Hours to Treat		n/a	n/a	30.0	hours	15.0	hours	15.0	hours
		Distilled Water Buffer									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	3.0	BV	3.0	BV	3.0	BV
		Flow Rate		n/a	n/a	1.4	BV/hour	1.4	BV/hour	1.4	BV/hour
		Total Hours to Treat		n/a	n/a	2.1	hours	2.1	hours	2.1	hours
		0.25 M NaOH regeneration									
		Number of BV (BV ~ 0.617 gal.)		n/a	n/a	6.0	BV	6.0	BV	6.0	BV
		Flow Rate		n/a	n/a	3.0	BV/hour	3.0	BV/hour	3.0	BV/hour
		Total Hours to Treat		n/a	n/a	2.0	hours	2.0	hours	2.0	hours
			Total CIX Cycle Flow Time =			102.0	hours	66.5	hours	88.5	hours
			Total CIX Campaign Flow Time =			189.0	hours	148.1	hours	244.5	hour
						7.9	days	6.2	days	10.2	days
			Total Volumes for Campaigns II, III, and IV:				Totals				
				BV	Gallons		Available for				
			0.1 M NaOH	18.0	11.1		recycles	11.1			
			DI Water	36.0	22.2		→	22.2			
			0.5 M HNO3	90.0	55.5			0.0			
			0.25 M NaOH	36.0	22.2			22.2	Per Campaign		
							Total	55.5	18.5	gallons	
Non-prototypicality Note:											
Scaled CIX testing will be determining cold cesium breakthrough by using a range of BV flow rates which bound the full scale unit. However, the superficial liquid velocity of the plant is approximately 5 cm/min, which is 5 to 13 times greater than the range to be used at the pilot scale.											

The final step in the SIPP was once again to evaporate the waste. The now treated simulated LAW product from the CIX was mixed with two recycle streams shown in Table 4. After mixing, the resulting solution was held before processing, Table 12.

Table 12. Hold period before pilot-scale TLP begins

	Pre-TLP Hold Times (stipulated by WTP)										
	Minimum hold time between the time recycle and waste streams are mixed and beginning evaporation.					2	days				

The operation of the pilot TLP, Table 13 was similar to the pilot FEP, Table 6. However, in the TLP the goal was to concentrate the feed stream so that it had a sodium molarity of 8. Once again the "visible" target was an evaporated slurry density of 1.360 g/cc at 50°C and 1 psia (which is 1.395 g/cc at 20°C and 1 atm). Density was used because the WTP will only be able to control concentration by measuring density. A large difference between the pilot FEP and TLP operations was the quantity of concentrated product produced. For the FEP, the final volume of the concentrate could be completely contained within the confines of the evaporator (<50 gallons), but for the TLP the concentrated volume was approximately 3 times larger. That is, the FEP was shut down just when steady-state waste concentration was reached. For the TLP, steady-state waste concentration was reached well before the waste feed was exhausted. This meant the TLP produced a continuous waste stream after the TLP contents reached the steady-state density target. The only significant impact this difference had on operation was to the defoamer chemical added to the waste. The concentration of defoamer was to be maintained at 1500 ppm, therefore, once the TLP reached steady state and concentrated waste was being removed, defoamer was periodically added.

Table 13. Pilot-scale TLP test matrix with the colored columns representing Campaign III

			Campaign I		Campaign II		Campaign III		Campaign IV		
			Contribution Volumes		Contribution Volumes		Contribution Volumes		Contribution Volumes		
Process	Action	Feeds	%	gallons	%	gallons	%	gallons	%	gallons	
TLP	Locate Feeds	Simulant	n/a	n/a	52.6%	243.8	52.2%	251.7	52.1%	249.5	
		(Recycle 1) SBS LAW	n/a	n/a	47.4%	220.1	45.7%	220.1	45.8%	219.3	
		(Recycle 2) 0.25 M NaOH from CIX	n/a	n/a	0.0%	0	2.1%	10	2.1%	10.1	
		Total	n/a	n/a	100.0%	463.862	100.0%	481.7901	100.0%	478.872	
TLP	Evaporate at	Condensate produced =		0.0	gallons	320.8	gallons	325.3	gallons	323.6	gallons
	0.4 gpm and	Inject antifoaming agent		n/a	ppm	1500.0	ppm	1500.0	ppm	1500.0	ppm
	Concentrate	Inject air above boiling surface		n/a	cfm	TBD	cfm	TBD	cfm	TBD	cfm
	at 0.37 gpm										
		Concentrate produced for LAW vitrification		n/a	gallons	155.7	gallons	159.4	gallons	158.0	gallons
		Time to concentrate =		n/a	hours	13.5	hours	13.7	hours	13.7	hours
TLP Recycle Stream Notes											
(1) SBS LAW recycle: This a vendor supplied stream. Use as is.											
(2) Caustic IX regeneration recycle: This stream should have the appropriate concentration of caustic, I.e., 0.25 M NaOH. Use as is.											

The timetable for Campaign III is listed in Table 14. It started on the day indicated, i.e., Monday, 7 June, 2004, but since this schedule was published before the test began minor changes occurred. However, those changes were insignificant.

The only other aspect of the test not shown in all the matrix tables is the disposition of the waste products. That is, the treated waste from the TLP was drummed to be sent to VSL for LAW melter operations and the washed concentrated slurry from the UFP was drummed to be sent to VSL for HLW melter operation. The other product is all the boiled off and condensed water from both evaporation operations. Those waters were mixed together, as they will be in the plant and then a portion is reused to make rinse solutions for the UFP and displacement solution for the CIX.

Table 14. Pilot-scale schedule for Campaign III

Campaign	Start Date		Personnel Nomeclature:					Notes:	(1) Hold times are included to mimick times that				
I	26-Jan-04		da=D.Adamson, ma=M.Armstrong, db=D.Burns, vb=V.Bush,						the plant is filling/transfer between unit operations.				
II	12-Apr-04		jc=J.Corbett, md=M.Duignan, df=D.Foreman, mf=M.Fowley,						Those times begin when a mixture is FIRST made,				
III	7-Jun-04		sh=S.Hatcher, jm=J.Mills, zq=Z.Qureshi,mr=M.Restivo						therefore mixing times are also included.				
IV	23-Aug-04		ts=T.Steeper, js=J.Steimke, mw=M.Williams, jz=J.Zamecnik										
	Campaign III												
Day	Day	Unit Op	Activity	Expt	Backup	Non-E.	Backup	Unit Op	Activity	Expt	Backup	Non-E.	Backup
Mon.	7-Jun-04	FEP	Mix Recycles	jz/mw	mw/jz	df	vb						
Tues.	8-Jun-04	FEP	Admin Hold (1)										
Wed.	9-Jun-04	FEP	Evaporation	zq	da	jm	vb	UFP	Baseline	mf	md	ma	df
Thurs.	10-Jun-04	FEP	Product Transfers	zq	da	jm	vb	UFP	Admin Hold (1)				
Fri.	11-Jun-04	FEP	Clean Equipment	zq	da	jm	vb	UFP	Mix UF feeds	jz/mw	mw/jz	df	vb
Sat.	12-Jun-04							UFP	Admin Hold (1)				
Sun	13-Jun-04							UFP	Admin Hold (1)				
Mon.	14-Jun-04							UFP	Dewater	mf	md	ma	df
Tues.	15-Jun-04							UFP	Dewater	mf	md	ma	df
Wed.	16-Jun-04	CIX	Admin Hold (1)					UFP	Transfers/Wash	mf	md	ma	df
Thurs.	17-Jun-04	CIX	Admin Hold (1)					UFP	Wash	mf	md	ma	df
Fri.	18-Jun-04	CIX	Admin Hold (1)										
Sat.	19-Jun-04	CIX	Admin Hold (1)										
Sun	20-Jun-04	CIX	Admin Hold (1)										
Mon.	21-Jun-04	CIX	Treat Simulant	js	da	df	vb	UFP	Rinse/Clean	mf	md	ma	df
Tues.	22-Jun-04	CIX	Treat Simulant	js	da	df	vb	UFP	Baseline	mf	md	ma	df
Wed.	23-Jun-04	CIX	Treat Simulant	js	da	df	vb						
Thurs.	24-Jun-04	CIX	0.1 M Caustic/DI Water Flush	js	da	df	vb						
Fri.	25-Jun-04												
Sat.	26-Jun-04												
Sun	27-Jun-04												
Mon.	28-Jun-04	CIX	0.5 M HNO3	js	da	df	vb						
Tues.	29-Jun-04	CIX	DI Water Flush	js	da	df	vb						
Wed.	30-Jun-04	CIX	0.25 M NaOH Regeneration	js	da	df	vb						
Thurs.	1-Jul-04	CIX	Treat Simulant	js	da	df	vb						
Fri.	2-Jul-04	CIX	Treat Simulant	js	da	df	vb						
Sat.	3-Jul-04												
Sun	4-Jul-04												
Mon.	5-Jul-04	********** Holiday **********						********** Holiday **********					
Tues.	6-Jul-04	CIX	0.1 M Caustic/DI Water Flush	js	da	df	vb	TLP	Make Feed	jz/mw	mw/jz	df	vb
Wed.	7-Jul-04	CIX	0.5 M HNO3	js	da	df	vb	TLP	Admin Hold (1)				
Thurs.	8-Jul-04	CIX	DI Water Flush	js	da	df	vb	TLP	Evaporation	da	zq	vb	jm
Fri.	9-Jul-04	CIX	0.25 M NaOH Regeneration	js	da	df	vb	TLP	Product Transfers	da	zq	vb	jm
Mon.	12-Jul-04							TLP	Clean Equipment	da	zq	vb	jm

2.5 THE PRINCIPAL WASTE SIMULANTS: AY102 AND AP101 (AUTHOR – ZAMECNIK)

Together with the pilot-scale FEP concentrated recycle streams, the waste feed for the pilot-scale UFP contained two simulated Hanford waste streams: tank 241-AY-102/C-106 referred herein as AY102, and tank 241-AP-101, referred herein as AP101.

The composition and properties of AY102, including the distribution of species between the solid and supernate phases, has been previously described (Duignan, et al., 2004a; Zamecnik, et al., 2004). This simulant was blended at SRNL from fractions manufactured by Optima Chemical (Douglas, GA) and additional reagents, as described in the references. The AP101 simulant formulation was defined by Pacific Northwest National Laboratory (Russell, et al., 2003) and the simulant was manufactured by Optima Chemical. The measured total slurry compositions of both of these simulants are shown in Table 15.

Table 15. Measured Simulant Compositions

All values mg/L except as noted.	AY102 Slurry		AP101	
Total Solids (wt%)	26.80		31.94	
Undissolved Solids (wt%)	11.75		0.00	
Supernate Solids (wt%)	17.05		31.94	
Density kg/L	1.240		1.279	
Ag	624		37.3	
Al	15996	17484*	7469	6932*
B	<165		<142	
Ba	293	255	<1.53	
Bi	6.93		0.0576	
Ca	1131	1500	23.0	
Cd	46.8		<3.9	
Ce	366		<127	
Co	151		<15.6	
Cr	632	634	179	175
Cs	18.7		6.02	
Cs	<17		<19.6	
Cu	77.9	81.8	<5.86	
Fe	35836	35216	76.4	68.4
K	373		30568	
La	305		13.9	
Li	<24.8		<21.1	
Mg	379	373	5.51	
Mn	7812	7638	3.00	
Mo	<17		<10.6	
Na (ICPES)	84283		127900	
Na (AA)	91760		129179	
Na average	88021		128540	
Na (M)	3.83		5.59	
Nd	847		<72.9	

Table 15 - continued

All values mg/L except as noted.	AY102 Slurry		AP101	
Ni	1151		357	
P	1748	1600	269	
Pb	1662	1593	<156	
Pr	170		0.0223	
Rb	4.60		6.06	
S	892	899	1599	1426
Si	11016		329	
Sr	279	292	<1.18	
W	<84.7		<97.7	
Y	50.8		0.0728	
Zn	81.3		5.95	
Zr	484		<5.86	
bromide	69.4		<128	
chloride	165		1530	
fluoride	43.4		28.0	
formate	389		1380	
nitrate	319		105000	
nitrite	4228		33400	
oxalate	9213		1550	
phosphate	3807		1150	
sulfate	1860		3740	
acetate	415		1727	
citric acid	<81.8		<104	
formate	264		1432	

* Some rows two measurements. Those are the result of using two different dissolution methods.

2.6 PILOT WASTE FEED EVAPORATOR (AUTHORS - QURESHI, WILLIAMS & ZAMECNIK)

The Waste Feed Evaporator Process, or FEP, is the first unit operation in the RPP-WTP Pretreatment Facility that a waste (< 5 M Na) will see on start up. However, if the incoming wastes or waste blends are greater than 5 M Na, the FEP evaporators are used to concentrate WTP recycle streams for blending with the fresh tank waste. Since the AY102 and AP101 have sufficient sodium concentration, the SIPP FEP operations only included evaporation of SIPP recycles. The SIPP FEP bottoms stream was then mixed with simulated waste streams, i.e., AY102 and AP101, which would normally come from the Hanford Tank farm to produce a feed stream for the Ultrafiltration Process (UFP) unit operation.

This section will explain the pilot-scale FEP unit operation that was done as part of Campaign III testing. The process started with the preparation of the FEP feed product, which was a mixture of many recycle streams in a predetermined fashion, see Table 2. A chemical explanation of the feed (recycle) stream formation will be followed by a short description on how feed formation was handled just before FEP operation and then how the waste stream was handled during and after its concentration. The following section will discuss the physical equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made for the FEP unit operation.

2.6.1 Chemical Description of the Pilot FEP Feed Stream (Author – Zamecnik)

2.6.1.1 Generation of the Recycle Streams

The feed for the FEP was a series of recycle streams to be produced from operating the RPP-WTP Pretreatment Facility. The basis for the quantities of each recycle used was described in the Campaign II report (Duignan et al., 2004b). The condensate used (that in WTP would come from the Radioactive Liquid Waste Disposal System or RLD) to generate all of the recycles from Campaign II to Campaign III employed condensate from only the Campaign II FEP evaporator, except for two synthetic streams, which used a condensate mixture that came from combining the TLP and FEP products.

The UFP pump loop recycle was approximated by mixing 4.6L of washed concentrated slurry with 8.6L of RLD condensate from the FEP evaporator, both from Campaign II. The pump loop recycle from Campaign III to Campaign IV was made using the same proportions of Campaign III material. The residual rinse in the filter loop that would be present at the start of the first 0.1M NaOH rinse was made from ~0.1L of washed concentrated slurry and 12.5L of FEP condensate. The UFP feed tank heel prior to each rinse and acid cleaning step was targeted to give the correct undissolved solids loading. Note, in the SIPP the amount of rinse and acid used is greater, on a proportional basis, than in the WTP. To account for using more rinse or acid, a proportionally larger heel is left.

The ejector heel of 500 gal of washed concentrated slurry left after slurry washing was simulated by the approximately 22L of washed concentrated slurry that remained in the system after draining. Note that this quantity of slurry holdup was much higher than previously assumed (~4L). To this 22L of slurry, 105.2L of caustic rinse 1 (~0.1M NaOH), made from RLD condensate, was added. The resulting diluted slurry still had more solids than would be representative of the UFP tank after caustic rinse 1, so the recycle to Campaign IV needed to be diluted 1:1 with fresh caustic rinse solution. The heel from caustic rinse 1 to acid cleaning 1 was made from three quantities 1.) 10L of the diluted slurry from caustic rinse 1, 2.) the ~1.6L of this slurry retained in the system, and 3.) 10L of 0.1M NaOH caustic flush. This scheme is shown in Fig. 2. The RLD condensate was essentially water, with the only significant impurity being ammonium ion at about 458 mg/kg.

In the subsequent rinsing and cleaning steps, the ejector heel was approximated by putting back about 20L of the drained solution plus the ~1.6L retained in the system. The 21.6L of heel in each step, mixed with 94.6L of caustic rinse or acid is the same ratio as the heel + filter loop (500 + 700 gal) remaining in the WTP to the rinse amount (5250 gal); both ratios are 0.228.

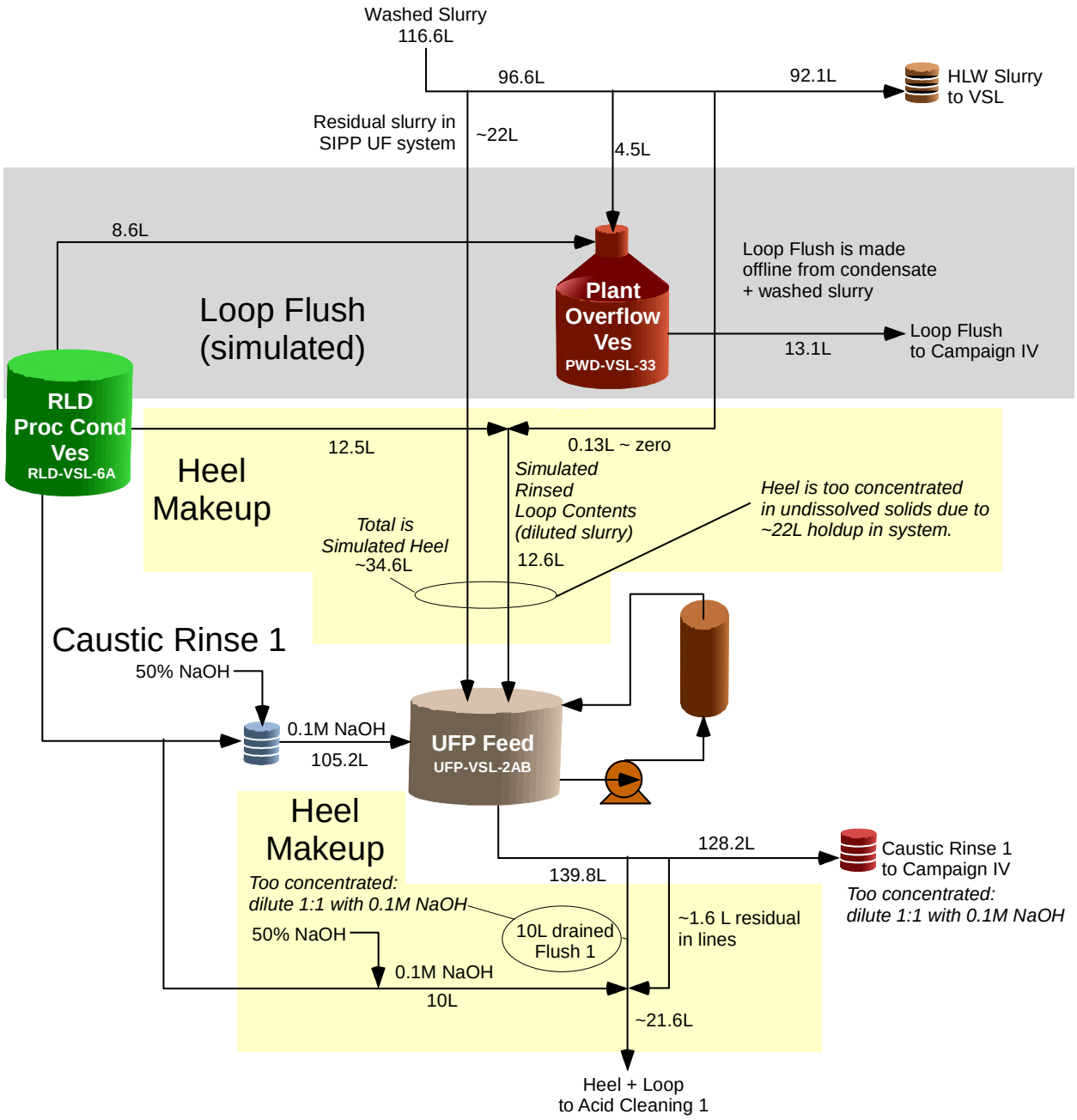

Figure 2. Generation of Caustic Rinse 1 Recycle

2.6.1.2 FEP Feed Mixing

Figure 3 shows a schematic of the FEP feed blending, and the amounts used are also shown in Table 16. The approximate actual volume of the combined feeds was 1075L versus the target of 1089L. After adding the contents of PWD-VSL-44 and -33 to the FEP Feed Tank, the UFP recycles were arbitrarily split between the PWD-VSL-15 and PWD-VSL-16 tanks. All of the recycles were generated in Campaign II or were made

from reagents when insufficient material was available. Into the PWD-15 tank was added UFP wash permeate, which was the accumulated volume of the second 22 filter washes, then 0.1M NaOH from condensate, then the three caustic rinses (i.e., 1, 2, and 3); all solutions were caustic, except for the second and third UFP rinses, which were acidic due to the acid cleaning heel. The amount of caustic rinse 1 added was less than that of rinses 2 and 3 to give closer to the correct undissolved solids in the recycle stream since the rinse 1 UDS was too high. The 21.3L of 0.1M caustic from condensate was added to approximate what would have been added if rinse 1 would have had the correct undissolved solids content. This condensate came from the Campaign II TLP operation and contained ammonium. The wash permeates (each of the two 22-mini-batch washes totaled 118 L) were to have been 141L per the OLI model[†].

Next, the Campaign II Ion Exchange recycles were added. These consisted of the displacement solution (~0.1M NaOH) that was displaced from the column by the pre-elution rinse, the post-elution rinse displaced by the regeneration solution (~water), and the 0.25M NaOH regeneration solution from the column. Because of scaling issues there were insufficient amounts of all of these recycles, so synthetic recycles were generated. The amounts of actual and synthetic recycles are shown in Fig. 3 and Table 16. Table 16 also shows the Campaign II quantities. The 36.7L of 0.1M NaOH synthetic recycle was made from the RLD condensate containing ammonium.

The final PWD-15 tank solution was predicted to be caustic and was found to be so. The recycle solutions were added in the order given above, and at no time did the bulk solution pH drop below 12.

The PWD-16 tank recycles were made from the first batch of wash permeate (comprised of the first 22 mini-washes) and the three acid cleanings. Because the mixture was sufficiently caustic; no additional NaOH addition was needed for pH adjustment. The first 22-washes permeate was used with the acid since it contained more caustic than the second 22-washes permeate, and thus less NaOH would be required to neutralize the acid. Again, the pH never dropped below 12 during mixing.

The measured solids loadings of the combined PWD-15 and -16 recycle were both slightly less than predicted from addition of the individual components. For the acid cleanings, the total solids content was estimated as the measured value plus the amount that would be due to the nitrate present; the nitrate in the HNO_3 was evaporated during the solids determination. Table 16 summarizes the amounts of each of the recycle steams.

[†] As mentioned in Section 2.3, after the modeling was done, and subsequent to completing Campaign I, the WTP UFP feed-tank batch size was increased from 18,000 gallons to 21,550 gallons. However, the criterion to determine the volume of washing water per batch was not changed, which was Volume = Volume of one Permeate Receipt tank = 21,770 gallons. This means the amount of water used to wash the batch was relatively smaller, that is, 21,770/21,550 = 1.01 instead of 21,770/18,000 = 1.209. Since the pilot-scale UFP batch size was ~117 L, then the wash volume would be 117 x 1.01 = 118L instead of 117 x 1.209 = 141L.

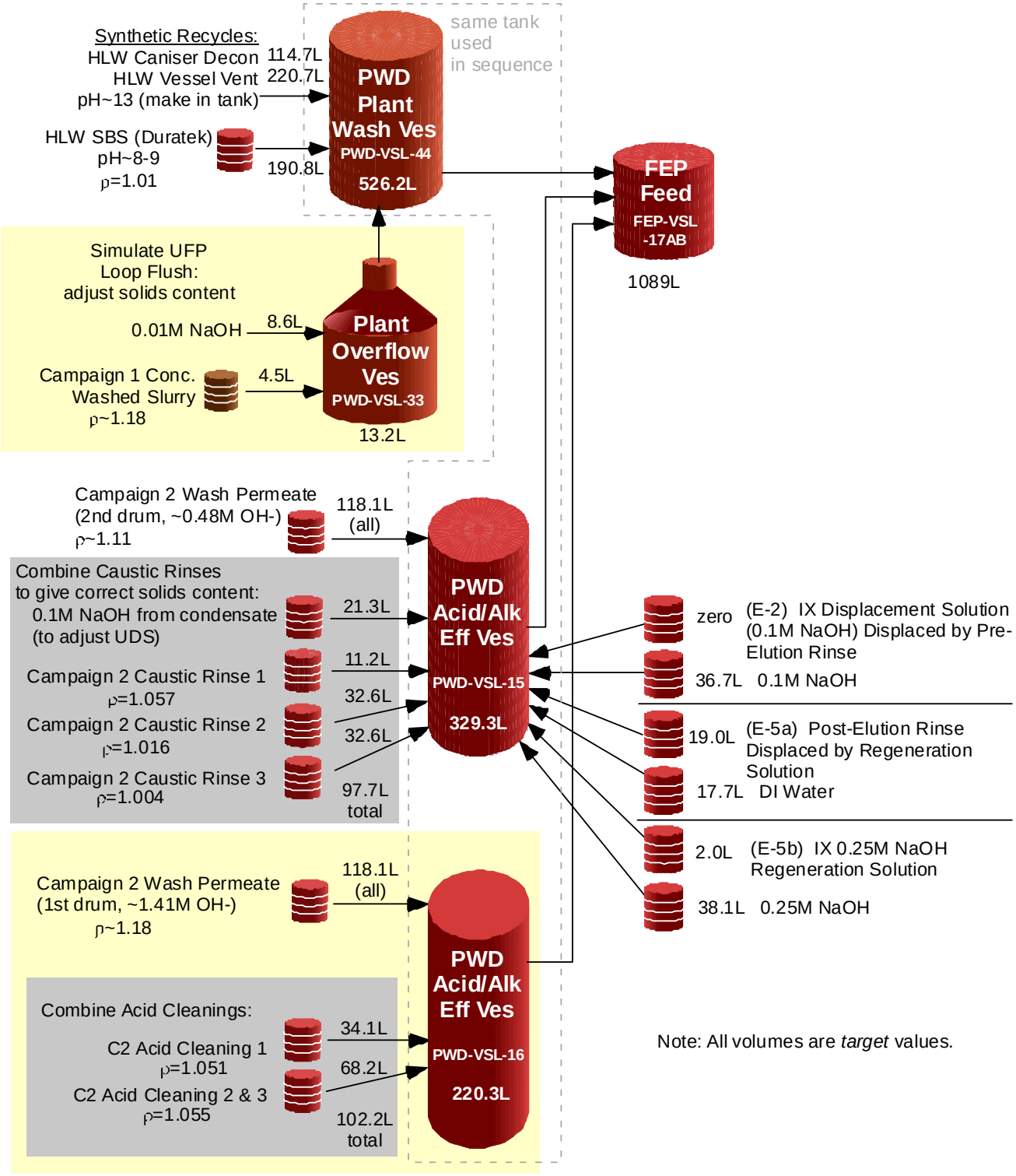

Figure 3. FEP Feed Blending of Recycle Streams

Table 16. Recycle Streams*

Stream	Campaign III Source	Campaign III Volume (L)	Campaign II Volume (L)
HLW SBS Liquid	Duratek	190.8	190.8
Vessel Vent Liquid	Synthetic	220.7	220.7
HLW Canister Decon Liquid	Synthetic	114.7	114.7
UFP Recycle – Wash Permeate	Campaign II	236.2	338.8
1st 22 Washes Permeate		118.1	169.3
2nd 22 Washes Permeate		118.1	169.3
UFP Recycle - 0.1 M NaOH Rinse	Campaign II	97.7	117.0
1st Rinse		11.2	18.2
2nd Rinse		32.6	49.5
3rd Rinse		32.6	49.5
Additional 0.1M Caustic		21.3	Not needed
UFP Recycle - 2M HNO_3 Cleaning	Campaign II	102.3	122.5
1st Cleaning		34.1	37.5
2nd Cleaning		34.1	37.5
3rd Cleaning		34.1	37.5
50 wt% caustic to adjust pH	Synthetic	Not needed	11.55
UFP Recycle - UF Loop Rinses	Campaign II	13.1	13.2
RLD condensate		8.6	8.6
Campaign II Washed Concentrated Slurry		4.5	4.6
CIX Recycles	Campaign II	113.5	0
Displacement Solution displaced by Pre-Elution Rinse		0	0
0.1M NaOH (insufficient Displacement Solution)		36.7	0
Post-Elution Rinse displaced by Regeneration Solution		19.0	0
DI Water (insufficient Post-Elution Rinse)		17.7	0
0.25M NaOH Regeneration Solution		2.0	0
0.25M NaOH (insufficient Regeneration Solution)		38.1	0
TOTAL		1089	1129

* This table does not show the recycle streams organized by order added. See Fig. 3 for this information.

The synthetic HLW recycles were made up from reagents to approximate the expected compositions. The vessel vent liquid was 0.1M NaOH, while the HLW canister decon liquid was 0.15M NaOH and 0.29M $NaNO_3$.

The composition of the recycles is shown in Tables 17 and 18. The HLW SBS recycle from VSL and the synthetic recycles have been described previously (Duignan et al., 2004b). The three simulated recycle tanks were combined to make the FEP evaporator feed. These recycles were combined in the order: PWD-44, PWD-33, PWD-15, and then PWD-16. Nothing unusual was observed when these were mixed.

Table 17. Composition of Campaign II Wash Permeate Recycles to FEP Evaporator

		Permeate from 1st 22 Washes	Permeate from 2nd 22 Washes
Total Solids	wt%	20.66	8.89
Undissolved Solids	wt%	0	0
Supernate Solids	wt%	20.66	8.89
Density	kg/L	1.177	1.071

All values in mg/kg	Permeate from 1st 22 Washes	Permeate from 2nd 22 Washes		Permeate from 1st 22 Washes	Permeate from 2nd 22 Washes
Ag	<0.51	<0.56	Ni	0.18	0.14
Al	4206	1727	P	459	131
B	53.5	18.7	Pb	1.44	<1.5
Ba	<0.03	<0.04	Rb (ICPMS)	2.80	1.06
Ca	<0.05	<0.06	S	714	271
Cd	<0.03	<0.04	Si	35.5	20.7
Ce	<1.2	<1.3	Sr	0.04	0.016
Co	<0.14	<0.15	W	34.0	9.34
Cr	102.0	46.7	Zn	1.21	0.076
Cs (AA)	4.61	1.58	Zr	0.37	0.081
Cs (ICPMS)	3.41	1.32	bromide	<8.5	<9.3
Cu	0.16	<0.06	chloride	746	265
Fe	0.83	0.173	fluoride	22.1	<1.9
K (AA)	10195	3735	formate	806	220
La	<0.17	<0.19	nitrate	62872	17834
Li	1.26	1.60	nitrite	16822	5117
Mg	<0.01	<0.01	oxalate	1725	5658
Mn	<0.02	<0.02	phosphate	1444	401
Mo	5.85	2.19	sulfate	2065	750
Na	62617	28385	acetate	701	240
Na (AA)	65421	25957	citrate	<85	<93
Nd	<1.5	<1.7	carbonate (from TIC)	10918	9430

Table 18. Measured Recycle Compositions

All units mg/kg unless otherwise noted	Caustic Rinse 1	Caustic Rinse 1	Acid Cleaning 1	Acid Cleaning 1	Acid Cleaning 2	Acid Cleaning 2	Nitric Cleaning 3	Caustic Rinse 2	Caustic Rinse 3
Volume Used (L)	11.2		34.1		34.1		34.1	32.6	32.6
Total Solids (wt%)	7.46		2.36		0.67		0.13	0.66	0.81
Undissolved Solids (wt%)	5.09		0.12					0.13	0.10
Supernate Solids (wt%)	2.50		2.24		0.67		0.13	0.53	0.71
Density (kg/L)	1.057		1.051		1.055		1.055	1.016	1.004
Sample Preparation	Dissolution	Filtered	Dissolution	Filtered	Dissolution	Filtered	Filtered	Filtered	Filtered
Ag	128	<0.50	174	1.93	96.9	0.73	1.60	0.665	<0.60
Al	3420	382	653	453	160	123	35.0	11.8	3.58
B		2.85		8.31		1.73	<0.93	<0.18	<0.18
Ba	116	<0.02	21	21.3	5.94	5.29	1.51	0.528	0.163
Ca	346	2.48	<4.9	93.5	<4.2	29.0	8.90	8.20	7.00
Cd	20	<0.02	3	3.52	<1.4	0.87	0.265	0.0746	<0.04
Ce	<117	<0.82	<114	25.3	<60	6.38	1.60	<17	<17
Co	<13.4	<0.04	<13.0	<0.04	<3.0	<0.04	<0.04	<0.08	0.102
Cr	170	12.2	33	32.3	6.36	8.24	2.47	0.913	0.270
Cs	<16.63	0.241	<16	0.095		<0.09	<0.09	0.133	<0.10
Cu	36	<0.03	8	5.84	<2.1	1.57	0.470	0.133	<0.06
Fe	13949	<0.07	2449	2369	622	621	172	62.4	18.3
K	1010	721	242	259	<286	75.2	19.8	7.54	3.00
La	<16.7	<0.18	<16.3	20.2	<13	5.38	1.49	<0.37	<0.37
Li	<33.3	1.99	<32.5	3.87	<6.6	1.03	0.302	<0.19	<0.19
Mg	155	0.026	25	27.9	4.62	8.34	2.57	2.00	1.49
Mn	3026	<0.02	525	507	135	134	37.2	13.0	3.91
Mo	<16.7	<1.7	<16.3	<1.7	<125	<1.69	<0.28	<0.35	<0.35
Na (ICPES)	9850	5544	2410	2360	589	692	202	1299	1813
Na (AA)	10000	8325	2350	2445		726	191	1358	1922
Nd	<150	<0.38	<147	58.8	<28	15.4	4.27	1.98	<0.81
Ni	463	<0.09	87	79.7	20.8	20.2	5.90	2.09	0.700
P	<134	18.3	<130	5.95	<43	3.62	1.41	<1.2	<1.2
Pb	660	<1.6	<130	115	<118	28.0	8.36	2.77	<1.6
S	<166	41.2	<162	15.6	<72	4.74	2.37	<2.0	<2.1
Si	3140	17.6	<1180	235	<1330	84.6	24.9	18.1	15.3
Sr	108	0.017	20	20.6	5.63	5.54	1.57	<0.9	<0.87

Ti	<6.7	<0.05	<53	0.284	<4.1	<0.05	<0.06	0.563	0.185
Zn	37	<0.05	5	6.66	<3.5	2.07	0.584	0.257	0.102
Zr	191	<0.11	24	12.3	19.1	6.25	2.13	<0.16	<0.16
bromide		<9.5						<10	<10
chloride		33.1						<2	<2
fluoride		6.62						<2	<2
formate		51.1						<10	<10
nitrate		8250						30610	8865
nitrite		693						<10	<10
oxalate		4068						<10	<10
phosphate		53.9						<10	<10
sulfate		104						<5	<5
Total Acid M			1.20		1.61		1.74	0.449	0.0623

2.6.2 Simulant Handling (Author – Williams)

For the following description of how the recycle FEP feed stream was made at the experimental site, see Fig. 3. A 760-liter tank was used to mix pilot-scale quantities of simulated HLW recycles that were then transferred to the pilot-scale FEP Feed Tank, which was represented by the plant tank: FEP-VSL-17AB. On 18 May 2004, pilot-scale quantities of HLW Canister Decon and HLW Vessel Vent solutions were synthesized by combining 330 liters of deionized and filtered (DIF) water with 3 kg of 50 wt% NaOH, 2.77 kg of sodium nitrate, and 192.7 kg of HLW SBS Quencher solution from VSL. At this stage, the mixing tank represented the plant tank: PWD-VSL-44. To this mixture, the contents of mock plant tank PWD-VSL-33 (Plant Overflow Vessel) were added, which contained 5.31 kg of Campaign II concentrated washed HLW slurry and 8.6 liters of Campaign II FEP condensate. After mixing the entire contents of the mock PWD-VSL-44, and -33, they were transferred to the FEP Feed Tank on 19 May, 2004. Before proceeding with the mock PWD-VSL-15 mixing, a beaker mixing recycle study of the proposed Evaporator Feed Tank contents was completed with samples from the respective recycle streams to ensure there were no unexpected consequences from the mixing sequence. The results were documented in the laboratory notebook (Williams, 2004).

On 24 May, the then empty 760-liter mixing tank was used as a plant mock PWD-VSL-15 tank and was filled with caustic recycle streams from Campaign II. To that tank, the second of two drums of wash permeate was added, drum No. RM-03-270, which contained 119.3 kg of material. Then 21.3 kg of 0.1M NaOH from condensate and the 0.1 M caustic flush recycle streams were added from three drums referred to as caustic flush 1, 2, and 3. The amounts added from drums Nos. RM-03-298, RM-03-284, and RM-03-285, were 11.8 kg, 33.1 kg, and 32.7 kg, respectively. The material remaining in the drums was returned to storage. The IX recycles were added next including 36.7 liters of 0.1M NaOH from condensate, 19.0 liters of Post-Elution Rinse displaced by Regen Solution, 17.7 liters of DI Water, 2.0 liters of 0.25M NaOH Regen Solution and 38.1 liters of 0.25M NaOH from DI Water. The target pH for this mixture was to be greater than or equal to 12, and since the pH was measured at 13 no additional NaOH was added. The contents of this mock PWD-VSL-15 mixing vessel were then added to the mixture in the FEP Feed Tank, also on 24 May.

Once again the 760-liter mixing tank was empty and this time it would represent the plant PWD-VSL-16 tank to receive the acidic recycle streams. That solution has to be adjusted to be alkaline before being joined to the caustic contents of the FEP feed tank. Specifically, the empty tank was first filled with 130.3 kg of 0.1 M NaOH wash permeate from the first of two drums of wash permeate recycle, drum No. RM-03-269. While the tank agitator was running, two drums of spent 2 M nitric acid UFP cleaning solution were added with constant stirring. From the drum (referred to as acid cleaning 1) No. RM-03-297 an amount of 35.8 kg was transferred and from RM-03-301 (referred to as acid cleaning 2 & 3) an amount of 72.0 kg was transferred. The acid/caustic mixture was transferred to the FEP Feed Tank on 25 May to start the clock on a 2-day holding period

before evaporation began. The total material mixed in the pilot-scale FEP unit operation Feed Tank, Fig. 4, and subsequently sent to the FEP Evaporator, was 1,112.2 kg.

Figure 4. Pilot-scale FEP Unit Operation Feed Tank

After evaporation started on 7 June, and during the first 30 minutes of operation, 278.4 g of Dow Corning Q2-3183A antifoam were added in three batches of 92.8 g each. Note that, per the vendor's recommendation the antifoam was diluted to a 10:1 ratio with deionized and filtered water (DIF) before the addition was made. At the end of FEP testing, a total of 170.8 kg of concentrate "FEP bottoms" were produced with a density of 1.257 gm/ml, as measured by volumetric flask at 25.5°C, and 1.259 gm/ml, as measured by densitometer at 20°C.

2.6.3 Pilot FEP Equipment (Author – Qureshi)

All evaporation campaigns were performed in the Pilot-Scale Evaporator designed and constructed for the RPP Project. The evaporator is located in the Engineering Development Laboratory of the Savannah River National Laboratory (SRNL).

Figure 5 shows the Process and Instrumentation Diagram (P&ID). The Pilot Scale Evaporator System consists of many sub-systems provided below alphabetically.

- Antifoam System
- Concentrate Loop
- Evaporator Recirculation
- Feed Loop
- House Air
- Jet Pump
- Primary Condensate
- Process Water
- Secondary Condensate
- Steam Generator
- Spray Water

Typically, each of the SIPP campaigns was to evaporate about 1,000 liters of waste simulant. The pilot-scale SIPP evaporator uses forced circulation where heat is added in the reboiler that is essentially a shell and tube heat exchange with steam on the shell side. No evaporation occurs in the reboiler due to hydrostatic pressure head. The evaporator vessel is kept under vacuum (~ 1 psia or 6.9 kPa) and the boiling temperature for water is about 104°F (40°C) at this pressure. The simulant has a boiling point elevation of about 11°F (~6°C). (Thus the entire evaporation process occurs at moderate temperatures, 100 - 120 F (44° - 49°C)). The evaporator vessel is about 27 feet (8.2 m) tall with a nominal inside diameter of 17" (0.43 m). The bottom 12 feet of the vessel is stainless steel and the top 15 feet is acrylic, see Fig. 6.

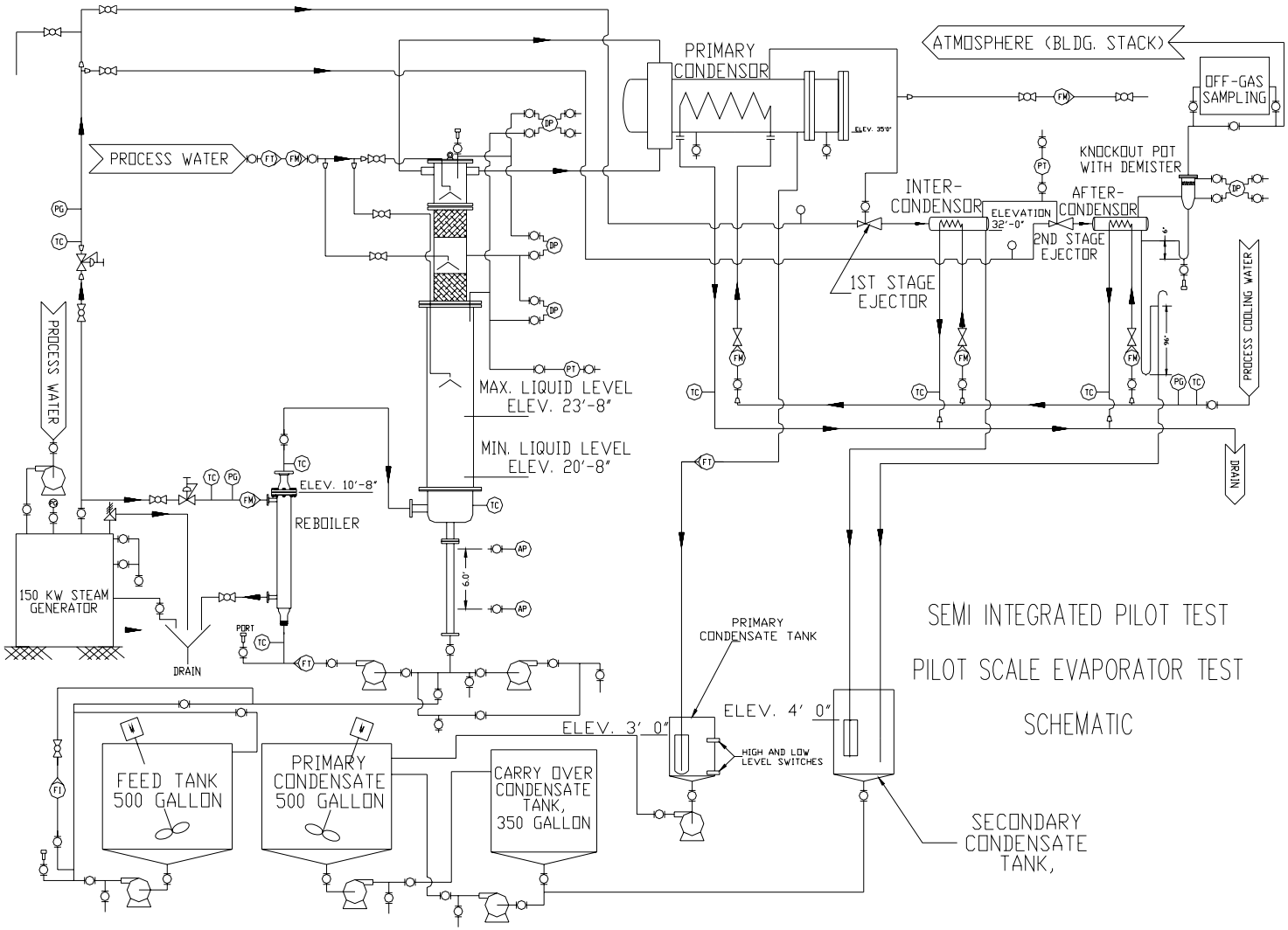

Figure 5. SIPP Pilot-Scale FEP/TLP Unit

Figure 6. SIPP Pilot-Scale FEP/TLP Unit: The bottom half of the 15-foot tall Acrylic Section with Ongoing Evaporation

Of the bottom 12 feet (3.7 m), the stainless steel vessel is only 2 feet (0.6 m) high and the remaining height of 10 feet (3 m) is taken up by a 2” (0.05 m) stainless steel pipe. The boiling surface is maintained in the lower part of the acrylic section. The minimum and maximum liquid levels in the acrylic section are 5" (0.13 m) and 40" (1.0 m), respectively, see Fig 7.

Figure 7. SIPP Pilot-Scale FEP/TLP Unit: Feed Ready for Evaporation to Commence

The designed capacity of evaporator vessel is about 40 gallons (151 liters) and a feed tank supplies the simulant to the evaporator. The evaporator is designed to evaporate 0.4 – 0.5 gpm (1.5 – 1.9 lpm) of water. Figure 8 shows the pilot-scale FEP at approximately the 30-gallons level while evaporating at approximately 0.5 gpm, before and after defoamer was added.

(a) Before Defoamer Addition

(b) After Defoamer Addition

Figure 8. SIPP Pilot-Scale FEP/TLP Unit: Evaporating

The water vapor is condensed in the primary condenser. Under steady conditions, the concentrate is removed from the recirculation line and collected in a drum. The condensate from the primary condenser is collected in the primary condensate tank. A two-stage steam driven jet pump maintains desired vacuum in the evaporator vessel. The jet pump has its own set of condensers, inter and after-condenser. A separate tank catches the condensate from the jet pump. Several sample and injection ports are provided to draw samples and inject antifoam agent as needed. All test data was acquired by a data acquisition system (DAS). Additionally, manual data and observations were recorded in the lab notebook issued for this task (Qureshi, 2004).

2.6.4 Pilot FEP Operation (Author – Qureshi)

Prior to the SIPP campaigns, the evaporator system was disassembled, cleaned, inspected and reassembled. The system was found to be free of any material defects, fouling and malfunction from previous evaporation runs. After assembly of the system the following tests were performed to ensure proper operation of the evaporator.

2.6.4.1 Experimental Facility Leak Testing

Objective – Determine if the system can hold vacuum and the air in-leakage rate is acceptable.

Test Sequence

i) Isolated the Evaporator Recirculation (ER) Loop from rest of the system by closing appropriate valves.

ii) Disconnected the First Stage Ejector line from the primary condenser and connected a vacuum pump at the primary condenser discharge.

iii) Filled water in Evaporator vessel to the maximum operating liquid level (about 40" (1.02 m)) in the lower acrylic section.

iv) Filled up the primary dip tube reservoir with water.

v) Started and operated the vacuum pump until the water level in the dip tube is about 31 feet (9.4 m) of water.

vi) Verified that there was no air bubbling into the system.

vii) Verified that the system can hold vacuum for about 30 minutes.

2.6.4.2 Evaporation Test with Water

Objective - To shake down the system and its components using water as test fluid prior to the chemical runs.

Test Sequence

i) Isolated the Reboiler and the Jet Pump from the Steam Generator.

ii) Started the Steam Generator.

iii) Filled the Feed Tank with Process Water to about 25% level (about 125 gallons (743 liters)).

iv) Using the Feed Loop pump FL-PU1, transferred water from the Feed Tank to the evaporator vessel to a level about 40” (1.02 m) in the acrylic section.

v) Filled the primary condensate and secondary condensate dip tubes with water.

vi) Started the Jet Pump Vacuum System.

vii) Started the main recirculation pump and started supplying steam to the Reboiler.

viii) Adjusted steam to the Reboiler to limit the system temperature below 140°F (60°C).

ix) Once the system pressure dropped to about 1 psia (6.9 kPa), boiled water for about 30 minutes.

x) After completing the water boiling test, turned off the steam supply to the Jet Pump and the Reboiler and shut down the Steam Generator.

2.6.4.3 SIPP-Feed Evaporation Process (FEP) Tests

Objective - To perform pilot scale tests of the Feed Evaporation Process.

This evaporation campaign used about 1112 kg of FEP Feed. The feed composition and mixing process is described in Sections 2.6.1.1 and 2.6.1.2.

The FEP Evaporation Campaign III took about 9 hours to complete. During this time period, several samples were drawn as outlined in SIPP Sample Matrix Campaign III (see Appendix B).

Test Sequence

i) Started Steam Generator and the Data Acquisition System.

ii) Ran the Feed Tank mixer for about 30 minutes.

iii) Using the Feed Loop Pump, transferred feed from the Feed Tank to the evaporator vessel to about 24” (0.61 m) level in the clear section.

iv) Filled the primary condensate and secondary condensate dip tubes with water.

v) Supplied process water to the Jet Pump condensers and started the Jet Pump.

vi) Supplied process water to the Primary Condenser to about 30 gpm (114 lpm).

vii) Started the main recirculation pump and turned on the steam to the Reboiler.

viii) Once the feed reached the saturation temperature and boiling started, maintained the liquid level in the evaporator by feeding the appropriate amount of feed using the feed pump.

ix) Recorded all the temperature, pressure and flow date via DAS. Additionally, video taped the action near the boiling surface as needed at different times

x) Antifoam agent was added to the recirculation loop at the beginning of the evaporation campaign.

xi) Drew liquid samples according the sample matrix.

xii) Continued evaporation process until the target density of 1.253 g/ml @ 25°C and 1 atm (or 1.226 g/ml @ 50°C and 1 psia) was reached. [Note: There were several types of density measurements made but the most accurate was done by a Anton Paar, DMA 4500 meter which maintains samples at 20°C. The target density at 20°C was estimated to be 1.258 g/ml and this was used during the test to determine when the FEP was properly concentrated.]

xiii) Once the evaporation campaign was complete, the steam generator was shut down and all the concentrate was transferred into a 55-gal drum.

xiv) After removing all the concentrate, filled the system with water (~30 gallons (114 liters)) and rinsed it thoroughly by running the recirculation pump.

2.6.5 Pilot FEP Discussion of Results

2.6.5.1 Experimental Observations *(Author – Qureshi)*)

The SIPP FEP Campaign III process began on Wednesday, 7 June 2004 in SRNL's Engineering Development Lab. A total of about 1,112 kg of feed was concentrated down to about 170 kg. The entire evaporation process proceeded without any glitch or equipment failure. The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water. The average evaporation rate during this campaign was around 0.52 gpm.

Table 19 provides a chronology of the evaporation campaign. Time recorded below follows a military format.

Table 19. Chronology of the Campaign III FEP operations

Time	**Event** (Evaporation occurred on 9 June 2004)	**Comments**
0600	Started Feed Mixing by pump recirculation and agitator	
0615	Started Steam Generator	
0630	Started Feed transfer to evaporator vessel	
0635	Started Jet Pump to pull vacuum in the evaporator	
0640	Pulled Feed sample	1.035 g/ml @25C
0642	Stopped Feed transfer	
0658	Started main circulation pump	
0700	Started steam supply to reboiler	
0704	Added 278.5 g of antifoam agent and 1:10 ratio DI water	Added in the recirc. loop
0722	Steady boiling taking place	Stable froth height ~ 1 ft.
0846	Pulled all samples at 400 liter total transfer	
0919	Pulled 200 ml sample for density check	1.077 g/ml @40C
1008	Pulled all samples at 600 liter total transfer	
1015	Pulled 200 ml sample for density check	1.109 g/ml @50C
1136	Pulled all samples at 800 liter total transfer	
1136	Pulled 200 ml sample for density check	1.147 g/ml @50C
1140	Pulled 10 ml sample for density check with density meter	1.164 g/ml @ 20C
1312	Pulled 10 ml sample for density check with density meter	1.188 g/ml @ 20C
1400	Transferred all feed to the evaporator	
1407	Pulled 200 ml sample for density check	1.177 g/ml @ 50C
1425	Pulled 10 ml sample for density check with density meter	1.245 g/ml @ 20C
1429	Pulled 10 ml sample for density check with density meter	1.257 g/ml @ 20C Target value reached
1430	System shut down. Pulled all end samples	
1455	Transferred all concentrate to a 55 gal drum Concentrate produced 170.1 kg	

2.6.5.2 FEP Waste Products (Author – Zamecnik)

Table 20 shows the total and dissolved (supernate) compositions of the Campaign III FEP feed and concentrated bottoms. The concentrations of the more prevalent species in the FEP streams for Campaigns II and III are compared in Table 21. Note that complete ion analyses are not available for Campaign II. The Campaign II average UDS and total solids (0.29, 3.03 wt%) are both slightly higher than the respective values for Campaign III (0.23, 2.70 wt%). Similar trends are seen in the individual undissolved species, such as Fe (4600 vs. 3910 mg/kg) or Mn (942 vs. 828 mg/kg). Most of the soluble species such as Na were lower in Campaign III than in Campaign II.

Table 20. Composition of Campaign III FEP Evaporator Streams

All units mg/kg unless otherwise noted	Feed Slurry	Feed Permeate	Concentrate Slurry	Concentrate Permeate
Total Solids (wt%)	4.93	4.71	30.75	28.82
Undissolved Solids (wt%)	0.23 (0.12-0.35)	0	2.70 (2.55-2.86)	0
Supernate Solids (wt%)	4.71	4.71	28.82	28.82
Density (kg/L)	1.035	1.038	1.255	1.231 *
Ag	13.3	0.82	54.7	4.91
Al	811	452	5255	2781
B		95.4	566	581
Ba	5.25	<0.02	24.5	<0.02
Ca	24.5	2.84	111	6.66
Cd	1.20	<0.03	6.00	<0.02
Ce	<15.4	<1.5	<115	<1.2
Co	<0.88	<0.08	<7.3	<0.07
Cr	25.4	20.4	156	126
Cs			17.3	
Cu	<1	<0.1	8.00	<0.08
Fe	635	<0.09	3910	<0.07
K	1930		11350	
La	<14	<1.4	<104	<1.1
Li	16.5	1.16	105	<0.16
Mg	13.4	<0.16	70.0	<0.13
Mn	134	<0.02	828	<0.01
Mo	<2	0.97	<15	6.08
Na	13300	13623	79400	80159
Nd	15.1	<0.50	79.2	<0.41
Ni	15.1	<0.12	128	0.72
P	65.3	54.8	444	396
Pb	31.3	<1.3	225	<1.1
Rb			7.1	
S	133	135	813	829
Si	147	9.06	1560	65.9
Sr	9.25	0.04	54.1	0.20
Ti	<2.8	<0.27	34	<0.22
Zn	<7.41	<0.71	58.0	<0.59
Zr	8.41	<0.09	53.6	<0.08
bromide	<86	<96	<96	<79
chloride	147	132	1150	1100
fluoride	<17	11.6	93.0	35.9
formate	86	78.3	732	667
nitrate	19700	17101	120000	121912
nitrite	2240	2058	14400	14422
oxalate	1070	976	3860	924
phosphate	363	303	2270	2279
sulfate	350	318	2260	2191
total inorganic carbon (TIC)		812	5630	6020
total organic carbon (TOC)		378	3920	<500
carbonate from TIC		4060	28150	30100
carbonate (titration)		4020		30600
oxalate from TOC		1379	14314	<1902

* estimated

Table 21. Comparison of Campaign II and III FEP Compositions

All units mg/kg unless otherwise noted	Campaign II Feed Slurry	Campaign II Feed Supernate	Campaign II Supernate/ Slurry wt%	Campaign II Bottoms Slurry	Campaign II Bottoms Supernate	Campaign II Supernate/ Slurry wt%	Campaign III Feed Slurry	Campaign III Feed Supernate	Campaign III Supernate/ Slurry wt%	Campaign III Bottoms Slurry	Campaign III Bottoms Supernate	Campaign III Supernate/ Slurry wt%
Total Solids (wt%)	4.72	4.44		28.95	26.73		4.93	4.71		30.75	28.82	
Undissolved Solids (wt%)	0.29	0		3.03	0		0.23	0		2.70	0	
Supernate Solids (wt%)	4.44	4.44		26.73	26.73		4.71	4.71		28.82	28.82	
Density (kg/L)	1.037	1.036		1.261	1.214		1.035	1.038		1.255	1.231	
Al	920	548	60	5470	3823	70	811	452	56	5255	2781	53
B	<141	80.2		554	568	103		95.4		566	581	103
Ca	206	1.13	1	355	<0.05	0	24.5	2.84	12	111	6.66	6
Cr	51.0	19.6	38	188	124	66	25.4	20.4	80	156	126	81
Fe	835	<0.08	0	4600	<0.07	0	635	<0.09	0	3910	<0.07	0
Mn	156	<0.02	0	942	<0.02	0	134	<0.02	0	828	<0.01	0
Na	15800	13402	85	94200	88151	94	13300	13623	102	79400	80159	101
Ni	208	0.38	0	909	0.29	0	15.1	<0.12	0	128	0.72	1
P	<160	123		889	906	102	65.3	54.8	84	444	396	89
S	219	91.9	42	720	651	90	133	135	102	813	829	102
Si	371	5.29	1	1580	31.3	2	147	9.06	6	1560	65.9	4
Sr	13.6	<0.01	0	68.9	0.332	0	9.25	0.04	0	54.1	0.20	0
chloride	83						147	132	90	1150	1100	96
fluoride	11						<17	11.6	>68	93	36	39
formate	39						86	78.3	91	732	667	91
nitrate	14465						19700	17101	87	120000	121912	102
nitrite	487						2240	2058	92	14400	14422	100
oxalate	1520				972		1070	976	91	3860	924	24
phosphate	563						363	303	83	2270	2279	100
sulfate	257						350	318	91	2260	2191	97

The final Na concentration in Campaign III was ~3.5M versus the target of ~4M at a density of 1.26 kg/L @ 25°C; the final Na in Campaign II was 3.96M. The final density in Campaign III was 1.255 kg/L, which is essentially the target value of 1.26. Species such as K, nitrate, and nitrite, were more abundant in the recycles in Campaign III due to the AP101 washed from the slurry in Campaign II.

The Al in Campaign III was less dissolved than in Campaign II. About 53-56% (feed/concentrate) was dissolved in Campaign III versus 60-70% in Campaign II. This result indicates that the distribution of the Al species in Campaign III was different than in Campaign II. Table 18 shows that the majority of the Al in the UF cleaning recycles was undissolved. The Al in the wash permeates was, of course, soluble. Based on the quantities added, roughly 50% of the Al would be assumed to be soluble, which is what was found. The exact distribution is difficult to predict from the mixing of the recycles. The total Al in the FEP streams in Campaign III were very similar to the values for Campaign II.

Table 21 also shows that only a portion of the Cr appears to be undissolved. About 80% was dissolved in Campaign III compared to 38-66% in Campaign II. However, the concentrations are low and subject to significant relative uncertainty, so this difference may not be real. The phosphorus in the Campaign III streams appears to have been only about 90% dissolved based on the ICPES analyses; all of the P appears to have been dissolved in Campaign II. However, the phosphorus calculated from the IC analyses is consistently about twice as high as the P from elemental analyses, so this observation is uncertain. A small amount (6-12%) of the calcium in Campaign III was dissolved versus virtually none for Campaign II.

Predictions of the FEP feed composition were made for both Campaign II and Campaign III. These predictions were made by mathematically combining each of the streams to the evaporator. A list of these streams was shown in Table 16. Some assumptions were made in performing these calculations:

- The total solids of NaOH synthetic streams could be approximated as the wt% of Na.
- The total solids of acid cleaning streams was the sum of the measured total solids plus the contribution of nitrate that would not be measured in acid solution by the solids analysis technique.
- The nitrate in the acid cleaning streams was the same molarity as the total acid measurement.
- Where permeate analyses were not available, the presence of no dissolved species was assumed.
- Where analyses of dissolved low-UDS samples were not available, the permeate analyses were used.

Tables 22 and 23 show the calculated and measured FEP feed compositions for Campaign II and Campaign III, respectively. For both Campaign II and Campaign III, the predicted and measured Na and nitrate agree well. Many less abundant species also agree reasonably well, and the undissolved solids predictions are good.

Table 22. Campaign II Predicted and Measured FEP Evaporator Feed Compositions

All units mg/kg unless otherwise noted	FEP Feed Total Predicted	FEP Feed Total Measured	FEP Feed Permeate Predicted	FEP Feed Permeate Measured	Permeate/ Slurry Predicted %	Permeate/ Slurry Measured %
Total Solids (wt%)	3.70	4.69	3.54			
Undissolved Solids (wt%)	0.33	0.29	0.00			
Supernate Solids (wt%)	3.38	4.41	3.54			
Density (kg/L)	1.033	1.037	1.033			
Ag	12.4	<33	0.53	0.800		
Al	918	920	736	549	80	60
B	88	<141	84.7	80.4		
Ba	5.68	5.19	0.74	<0.02		
Ca	29.8	206	2.42	1.13		
Cd	1.013	<4.0	0.060	<0.03		
Ce	5.53	<126	0.44	<1.5		
Co	0.56208	223	0.01	<0.09		
Cr	27.9	51.0	19.0	19.7	68	39
Cu	1.73	16	0.28	<0.10		
Fe	666	835	43	<0.09		
K (AA)	200	<30	199	40		
La	5.34	<12	0	<1.4		
Li	18.2	27.8	18.0	0.22		
Mg	12.6	14.1	4.79	<0.16		
Mn	144.3	156	0.6	<0.02		
Mo	0.49	<20	8.80	<0.19		
Na	16018	15800	15749	14815	98	94
Nd	12.3	<72	48.9	<0.50		
Ni	22.0	208	1.35	0.385		
P	138.4	<160	131.4	123.7		
Pb	27.2	<160	0.78	<1.3		
S	97	219	93	92	96	42
Si	323	371	70.6	5.30		
Sr	8.43	13.6	1.87	<0.01		
Ti	0.497	7.4	0.004	<0.27		
Zn	6.89	4.9	0.354	<0.72		
Zr	8.22	23.2	0.19	<0.09		
bromide	4	32	4			
chloride	73	83	73		100	
fluoride	13.7	11	13.5		99	
formate	26	39.0	26		99	
nitrate	13639	14465	13638		100	
nitrite	551	487	547		99	
oxalate	1510	1520	1482		98	
phosphate	617	563	610		99	
sulfate	268	257	266		99	
carbonate (from TIC)	1168		1136		97	
oxalate (from TOC)	254		222		87	

Table 23. Campaign III Predicted and Measured FEP Evaporator Feed Compositions

All units mg/kg unless otherwise noted	FEP Feed Total Predicted	FEP Feed Total Measured	FEP Feed Permeate Predicted	FEP Feed Permeate Measured	Permeate/ Slurry Predicted %	Permeate/ Slurry Measured %
Total Solids (wt%)	5.19	4.93		4.71		
Undissolved Solids (wt%)	0.17	0.23		0.00		
Supernate Solids (wt%)	0.00	4.71		4.71		
Density (kg/L)	1.038	1.035		1.038		
Ag	13.2	12.9	3.22	0.79		
Al	828	783	736	436	89	56
B	111		94.4	92.0		
Ba	4.01	5.07	1.24	<0.02		
Ca	13.7	23.7	4.71	2.73	34	12
Cd	0.69	1.16	0.13	<0.03		
Ce	1.29	<15	0.85	<1.4		
Co	0.003	<0.85	0.003	<0.08		
Cr	25.4	24.6	19.9	19.6	78	80
Cu	1.40	<1.0	0.41	<0.10		
Fe	473	613	103	<0.09		
K (AA)	1707	1865	1681			
La	1.51	<14	0.69	<1.3		
Li	19.3	16.0	18.4	1.12		
Mg	11.1	12.9	5.90	<0.15		
Mn	95.6	129	18.0	<0.02		
Mo	5.25	<1.9	5.25	0.93		
Na	13275	12850	13113	13129	99	102
Nd	22.2	14.6	20.8	<0.48		
Ni	14.9	14.6	2.88	<0.12		
P	73.1	63.1	72.2	52.8	99	84
Pb	17.4	30.3	4.19	<1.3		
S	140	129	140	130	99	101
Si	116	142	18.5	8.73	16	6
Sr	6.52	8.93	2.13	0.038		
Ti	0.56	<2.7	0.21	<0.26		
Zn	4.75	<7.2	0.52	<0.68		
Zr	6.37	8.12	1.12	<0.09		
bromide	0	<83	0	<93		
chloride	178	142	178	128	100	90
fluoride	10.1	<16	10.1	11.2		
formate	125	83.1	124	75.4	99	91
nitrate	21014	19034	20979	16480	100	87
nitrite	2659	2164	2650	1983	100	92
oxalate	959	1034	896	940	93	91
phosphate	391	351	391	292	100	83
sulfate	389	338	387	306	100	91
carbonate (from TIC)	2419		2399	4061	100	
oxalate (from TOC)	2781		2692	1379	100	

The total solids predicted for Campaign II are low compared to the measured amount, but are in very good agreement for Campaign III. The sulfur value measured for the slurry in Campaign II had a potentially high blank, so this value is questionable; it also does not agree with the sulfate measurement. The Campaign III anion values for the permeate are all lower than the values measured for the slurry by around 10%. (It was 17% for phosphate and there is no comparison for fluoride due to the lack of data.) Since there are no insoluble nitrite, nitrate, or formate compounds that could precipitate, we attribute the lower permeate anion values, except phosphate, to an analytical uncertainty. The analytical uncertainty of the anion analysis technique is at best ±10%, so the anion results except for phosphate, include 100% in the error bound for chloride, nitrite, oxalate, and sulfate; nitrate is within 13%. The Campaign III phosphorus and phosphate both indicate that perhaps 16% of the P was undissolved versus the prediction of no undissolved P. The Campaign II data for P are inconclusive, and no Ion Chromatography (IC) analyses were available for phosphate.

For both Campaign II and Campaign III, the measured ratio of permeate-to-slurry aluminum was lower than expected based on a simple material balance with no consideration of solubility changes. This lower ratio indicates that soluble Al in the feeds had precipitated. The higher than predicted undissolved Al indicates that 25-40% of the dissolved Al in the feeds to the FEP precipitated during feed mixing. Even though the bulk pH of the FEP feed mixtures was maintained at greater than 12, it appears that localized regions of lower pH must have resulted in precipitation of Al (possibly as gibbsite):

$$Al(OH)_4^- + HNO_3 \rightarrow Al(OH)_3 + NO_3^- + H_2O$$

This precipitated Al did not re-dissolve. Note that some formation of undissolved Al was also shown to occur in the first acid cleaning step in the UF process, but this precipitation would have already been accounted for in the recycle stream analyses, and hence, in the predictions. Therefore, the Al precipitation observed upon FEP feed mixing would be in addition to this prior precipitation.

Small-scale mixing tests done prior to Campaign III showed that rapid addition of the nitric acid recycle stream to streams with dissolved Al resulted in a gelatinous white precipitate that quickly re-dissolved upon vigorous mixing. However, the degree of re-dissolution was not determined. Therefore, even though the bulk pH was maintained where Al would not precipitate, precipitation did actually occur. Poor mixing when adding the acid stream to a caustic stream would exacerbate this situation since poor mixing would promote localized regions of lower pH. This was observed in the FEP feed preparations. No special methods were planned on how to add one recycle stream to another apart from the indicated groupings and volumes shown in Fig. 3 and explained as Simulant Handling Section 2.6.2. However, before one completed batch was added to the next the batch it was required to be well mixed. When mixing the contents of the mock WTP tank PWD-VSL-16, as shown at the bottom of Fig. 3, the first acid cleaning solution was added to the caustic UFP wash permeate. The only mixing that occurred

was from the action of joining the volumes together. As the milky white acid stream (its composition is listed in Table 18) was poured on top of the quiescent clear yellowish caustic stream (the wash permeate composition is listed in Table 17) there was an immediate reaction on the surface of the caustic, which turned the mixture brownish. This brown coloring was expected because the acid stream contained dissolved transition metals such as iron that precipitate as brownish hydroxides when the pH is changed to basic (pH ~ 12). Unfortunately, this precipitate visually masked any Al that may have also precipitated.

The batch was then mixed well and maintained mixed while the last two clear acid cleaning solutions were added. This brownish mixture was then vigorously mixed for approximately one hour before it was finally added to the FEP feed tank, as shown in Figure 3. As in the small scale, the pH of the joined mixture was maintained high enough to prevent Al precipitation in a well mixed environment, i.e., pH > 12. However, practically maintaining a batch well mixed at the same time that its level is constantly changing is not a simple task. As pockets of less-than-well-mixed solution occur there is the potential of precipitation. It is expected that this will also occur in the WTP PWD tanks and consideration should be given to providing a well-mixed environment.

The phosphorus in the FEP feed and bottoms was also measured by IC. The samples were analyzed by IC in two ways: the sample was filtered prior to analyses, resulting in the dissolved anion concentration; and the sample was diluted >100X with DI water, then analyzed to give an approximate "total" anion concentration. This "total" is the amount of an anion easily dissolvable in water, so phosphate or fluoride in fluorophosphates or other relatively insoluble compounds would not be measured by this method. Oxalate may also not be completely measured by this method if some is present as heavy metal oxalates; however, this method should dissolve alkali oxalates present due to being above saturation. (Estimation of oxalate from total organic carbon analyses was not possible due to very large inaccuracies in these results.)

The IC analyses of the total bottoms concentrate and concentrate permeate (Table 21) gave virtually the same values for all species except oxalate and fluoride, indicating that a portion of the oxalate and fluoride were undissolved. The results for phosphate are inconclusive since the IC analysis indicates 100% solubility while the P analysis suggests 11% undissolved. The feed data indicated that there may have been undissolved phosphate.

Undissolved fluoride could be present due to two sources. Relatively insoluble CaF_2 was added to the AY102 simulant in small quantities. The sodium fluorophosphate double salt $2Na_3PO_4 \cdot NaF$ has also been found to precipitate from the AY102 simulant, so it could possibly have been formed during the evaporation.

The estimated total oxalate in the Campaign III feed was about 50% less than the amount in the Campaign II feed (1070 vs. 1520 mg/kg). This difference is consistent with the recycle solution compositions; the Campaign I recycles to Campaign II contained higher

oxalate because the oxalate concentration in the Campaign I slurry was higher (oxalate in the AY102-only stream is higher than in the AY102+AP101 mixture).

The oxalate analyses show that the dissolved oxalate concentration remains essentially constant in these evaporator solutions. The values for Campaign II concentrate, and Campaign III feed and concentrate were 972, 976, and 924 mg/kg, respectively. The consistency of these values suggests that this is the approximate solubility of oxalate in these streams. Table 24 presents the material balance on undissolved solids and oxalate. The data used to calculate the increase in UDS had significant relative error; the measured UDS values were 0.12 and 0.35 wt%, which when converted to a total mass basis, is significant. The solids analysis technique is relatively inaccurate at concentrations below 1 wt%, so wide variations in measured values result from analysis of a single sample. While the final report will treat uncertainties in more detail, the solids analyses of ten Campaign III samples that were done in duplicate, and ranged from 2 to 46 wt%, had standard deviations of:

Mean σ(total solids, TS) = ± 0.11 wt%,
Mean σ(undissolved solids, UDS) = ± 0.22 wt%
Mean σ(soluble solids, SS) = ± 0.13 wt%

If the standard deviation is *assumed* to be the uncertainty in the measurements, then the UDS values for the feed are 0.12 ±0.22 and 0.35 ±0.22, which overlap.

Similar absolute uncertainty applies to the concentrate also. The amount of UDS in the feed was 1285-3849 g, while that in the concentrate was 4333-4867 g. The undissolved oxalate, when assumed to be sodium oxalate ($Na_2C_2O_4$), was 1414 g, which was obtained from difference of the dissolved sodium oxalate in the feed, 1653 g, and the dissolved sodium oxalate in the bottoms, 239 g. This amount of oxalate is reasonably close to the average increase in UDS of 2033 g, so the precipitation of sodium oxalate may account for most of the increase in undissolved solids. This same behavior was seen in Campaign II. Also, note that the calculated amount of oxalate in the concentrate is only about 50% of the amount in the feed. This discrepancy is probably due to not all of the oxalate in the concentrate dissolving in the dilution for the IC analysis.

Table 24. Mass Balance on FEP Solids

	Feed			Bottoms			Difference		
	Low	Mean	High	Low	Mean	High	Low	Mean	High
Undissolved Solids (wt%)	0.12±0.22	0.23	0.35±0.22	2.55±0.22	2.70	2.86±0.22			
Undissolved Solids (g)	1285	2567	3849	4333	4600	4867	3048	2033	1018
Total Oxalate (g)		1190			657				
Dissolved Oxalate (g)		1085			157				
Oxalate* as $Na_2C_2O_4$ (g)		1653			239			1414	

*Obtained from the dissolved oxalate in the preceding row

**** A note on Ammonium in the FEP ****

The total ammonium in the FEP feed was measured at <69 mg/kg. The calculated value, based on the two ammonium containing inputs, was 24 mg/kg, or about 26.6 g. The FEP

condensate produced (939L) contained 65 mg/kg of ammonium, or a mass of 61 g. This mass is more than twice the amount calculated in the FEP feed, but this difference is probably within the uncertainty of the measurements used for the calculation. It is also possible that some residual ammonium remained in the evaporator system from the Campaign II TLP evaporation. While the system was cleaned several time between the campaigns there may have been a hidden pocket of liquid. The measured ammonium in the FEP evaporator bottoms was <51 mg/kg which means 170 kg produced contained less than 9 g.

2.6.6 Pilot FEP Conclusions

2.6.6.1 Experimental Observations (Author – Qureshi)

During SIPP FEP Campaign III, a total of about 1112 kg of feed was concentrated down to 170 kg. The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C). The entire evaporation process proceeded as designed. The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water. The average evaporation rate during this campaign was around 0.52 gpm.

No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad. However, during start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.

The concentrate density was measured by three methods during the evaporation process. In the first method, warm concentrate (~50°C) was drawn in a 50 or 200 ml flask and weighed immediately on a scale accurate to 0.1 g. The second method employed a density meter with an accuracy of 0.001 g/ml. The density meter would cool the sample and the density was reported at 20°C; this was the density measurement used for reporting. The third method was online density measurement using two absolute pressure transducers placed 6 ft (1.82 m) apart in a vertical leg of the evaporator recirculation loop. This method resulted in large uncertainties in density measurement since two large pressure signals were subtracted, but was useful in determining when the density target was near. Thus samples were drawn periodically for density measurement by the density meter.

2.6.6.2 Waste Products Observations (Author – Zamecnik)

- As seen in Campaign II, a large portion of the dissolved oxalate in the feed was precipitated, probably as sodium oxalate.

- The oxalate concentration in the FEP feed in Campaign III was less than that in Campaign II, which is consistent with the higher oxalate concentration in the Campaign I slurry.
- About 25-40% of the dissolved Al in the feed to the FEP evaporator precipitated during mixing of the recycles, assumed to occur because of localized regions of low pH. Vigorous mixing when joining caustic and acidic recycle streams in the Plant Wash and Disposal System would help to minimize Al precipitation.
- The fraction of dissolved aluminum in Campaign III FEP concentrate (bottoms) was less than in Campaign II, resulting in more undissolved Al fed to the UFP.

2.7 PILOT ULTRAFILTRATION (AUTHORS – FOWLEY, WILLIAMS & ZAMECNIK)

The RPP-WTP Ultrafiltration Process (UFP) will remove undissolved solids (UDS) from a combined HLW and LAW feed. The solids are removed to protect downstream ion exchange (IX) beds and to meet the specifications for LAW product. In addition, the UFP will concentrate the removed solids as a slurry to minimize storage requirements for HLW and to enhance HLW vitrification efficiency.

The SIPP UFP will concentrate and remove solids from combined simulated waste feed streams. The SIPP UFP filters a mixture of FEP bottoms (which are the recycle streams concentrated in FEP) mixed with simulated wastes of AY102 and AP101 to produce two products: 1) A concentrated slurry HLW product for vitrification, and 2) A liquid LAW product for the ion exchange process. Recycle streams are included in the SIPP UFP to mimic actual WTP operation.

Table 25 shows the SIPP UFP Campaign III test matrix. The test number ordering has been maintained and sequentially adjusted from Campaign I (Duignan, et al., 2004a). Several tests were eliminated prior to Campaign I and between Campaign I and II, which produced numerical gaps between several of the test numbers.

The remainder of this section will explain the pilot UFP unit operation that was done as part of Campaign III testing. The process started with the preparation of the feed product. The chemical explanation of the feed stream formation will be followed by a short description on how feed formation was handled just before UFP operation and then how the waste stream was handled during and after its separation. The following section will discuss the physical equipment used to filter the waste and how the test was run. Finally, the results will be discussed and conclusions made.

Table 25. Campaign III UFP Test Matrix

Test No.	Test Activity	Trans-Membrane Pressure (psid)	Slurry Velocity (ft/s)	Slurry Temp. (ºC)	Run Time (min)
3.00A	Pre-test baseline A[1]	10	11	25	20
3.00B	Pre-test baseline B[1]	20	11	25	20
3.00C	Pre-test baseline C[1]	30	11	25	20
3.03A	Dewater first half of slurry[2]	40	12	25	960
3.03B	Dewater second half of slurry[2]	40	12	25	2300
Wash 1	Slurry wash 1[3]	40	12	25	379
Wash 2	Slurry wash 2[3]	40	12	25	229
3.18A	Caustic rinse 1[4]	20	11	25	30
3.18B	Acid clean 1[5]	40	11	25	90
3.18C	Acid clean 2[5]	40	11	25	90
3.18D	Acid clean 3[5]	40	11	25	90
3.19A	Caustic rinse 2[4]	20	11	25	30
3.19B	Caustic rinse 3[4]	20	11	25	30
3.21A	Post-test baseline A[6]	10	11	25	20
3.21B	Post-test baseline B[6]	20	11	25	20
3.21C	Post-test baseline C[6]	30	11	25	20

Notes:
1. The pre-test baseline tests were conducted with de-ionized, filtered (absolute 0.1 µm) water made caustic to 0.1 M NaOH.
2. The slurry was dewatered to 20 wt% undissolved solids or greater.
3. The slurry was washed with 0.01 M NaOH solution made from Campaign II RLD condensate.
4. The caustic rinse consisted of 0.1 M NaOH solution made from Campaign II RLD condensate.
5. The acid clean consisted of 2 M HNO_3 solution.
6. The post-test baseline tests were conducted with FEP condensate made caustic to 0.1 M NaOH.

2.7.1 Chemical Description of the Pilot-Scale UFP Feed Stream (Author – Zamecnik)

Figures 9 and 10 show schematically how the concentration, washing, rinsing and cleaning steps were performed for Campaign III. The pilot-scale UFP feed slurry was made by combining the FEP evaporator bottoms, AY102 slurry simulant, and AP101 supernate simulant. The feed was not extensively characterized as it was for Campaign II, because it was basically the same. Only solids and density measurements were made. However, for convenience the composition of the Campaign II feed is summarized in Table 26.

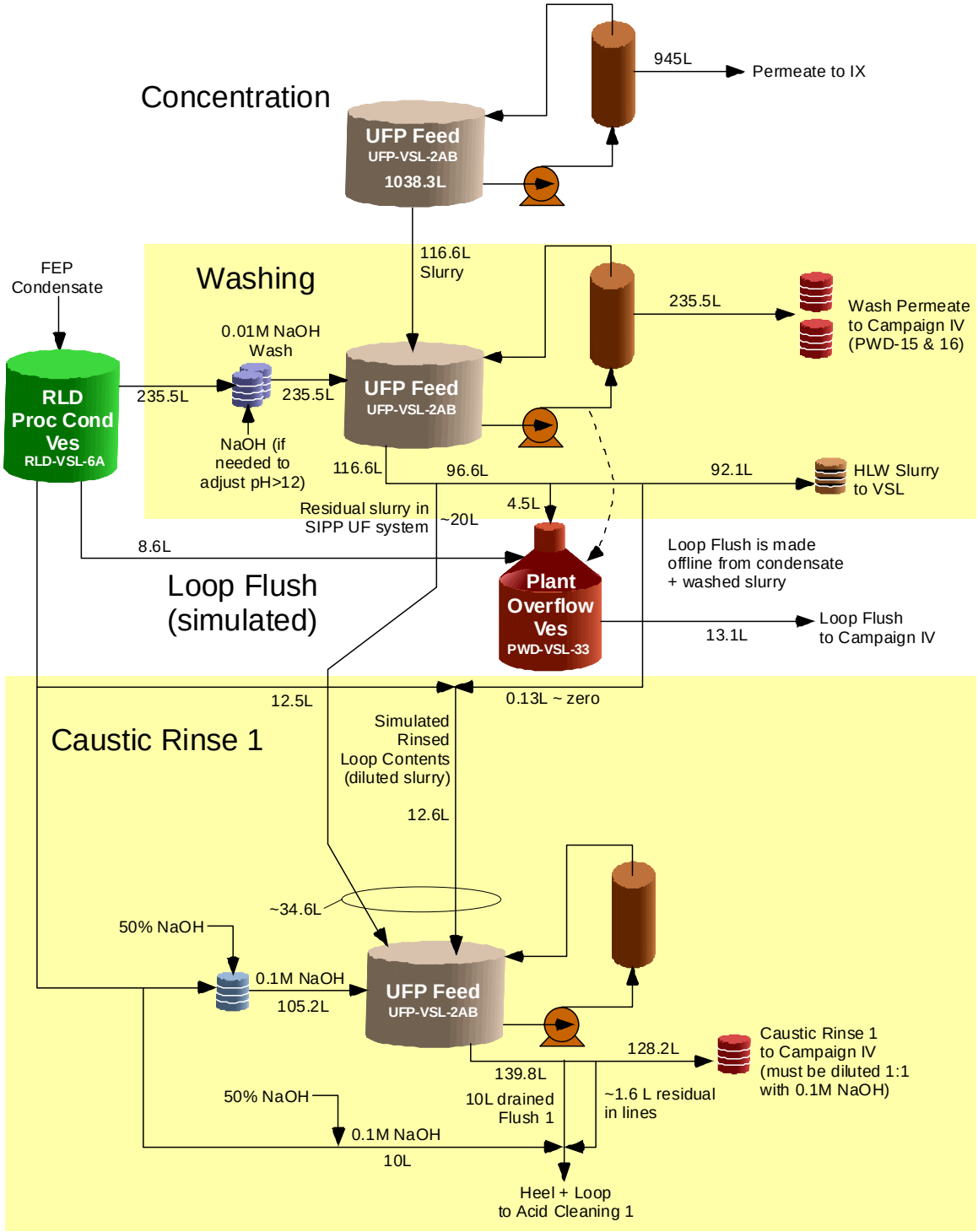

Figure 9. Schematic of Ultrafiltration Process – Page 1

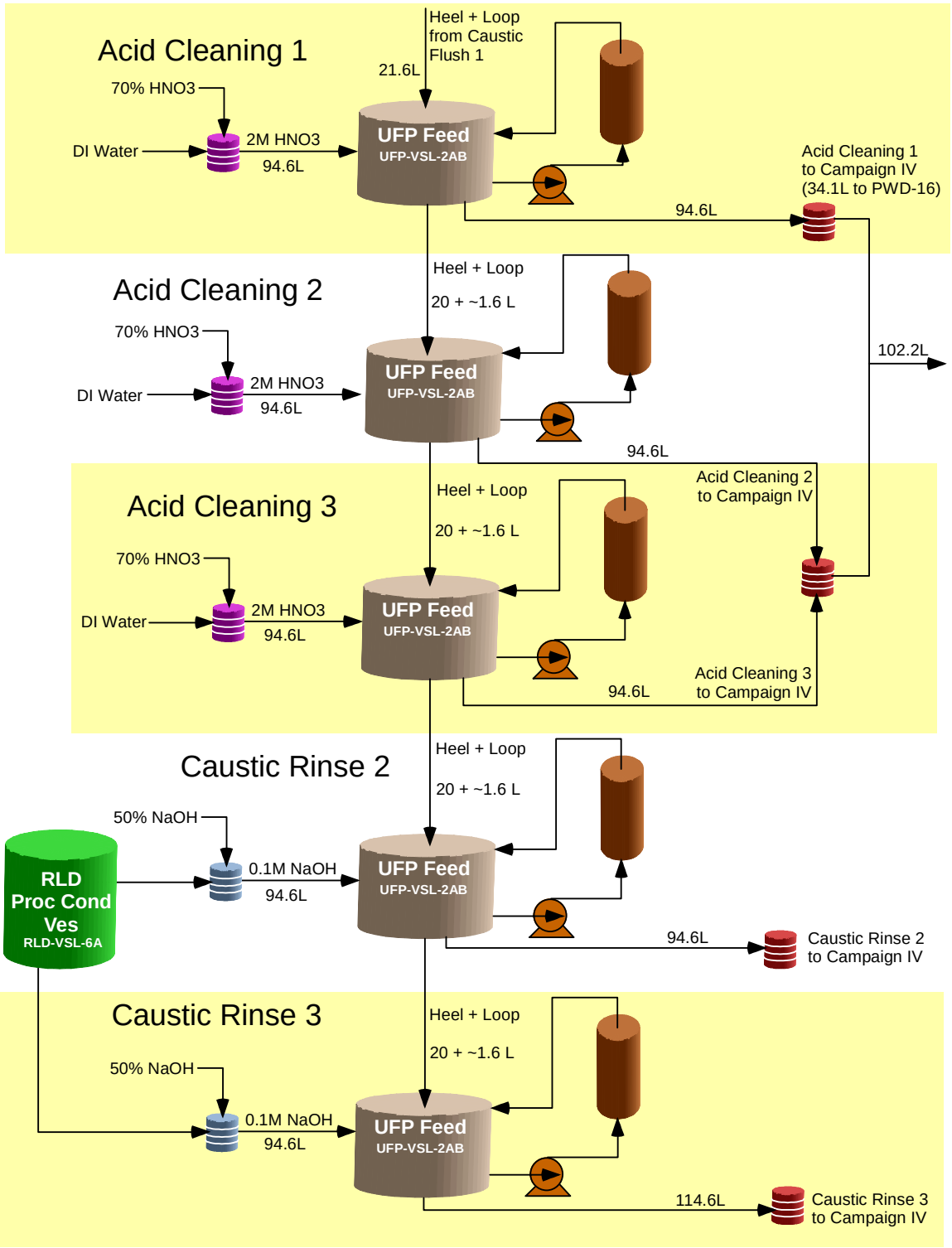

Figure 10. Schematic of Ultrafiltration Process – Page 2

Table 26. Measured Pilot-Scale UFP Feeds

	FEP Evaporator Bottoms						Ultrafilter Feed		
All values mg/L except as noted.	Slurry	Supernate	AY102 Slurry		AP101		Slurry	Slurry	Supernate
Total Solids (wt%)	28.95	NM	26.80		31.94		30.59		28.31
Undissolved Solids (wt%)	3.03	NM	11.75		0.00		3.22		0.00
Supernate Solids (wt%)	26.73	NM	17.05		31.94		28.28		28.31
Density kg/L	1.261	NM	1.240		1.279		1.276		1.250
pH	12.99	NM	NM		NM		13.64		NM
Ag	112	<0.6	624		37.3		157		<0.532
Al	6895	4640	15996	17484	7469	6932	8422	9953	7175
B	698	690	<165		<142		<148		84.9
Ba	47.7	<0.04	293	255	<1.53		68.0	46.4	<0.022
Bi	0.0565		6.93		0.0576		0.0718		<0.01
Ca	447	<0.10	1131	1500	23.0		415		2.46
Cd	7.78	<0.04	46.8		<3.9		15.2		<0.02
Ce	<127	<1.4	366		<127		<120		<0.864
Co	147	<0.16	151		<15.6		100		<0.042
Cr	237	150	632	634	179	175	293	324	163
Cs	15.3		18.7		6.02		4.54		6.25
Cs	<18.2	13.4	<17		<19.6		<17.1		5.67
Cu	16.9	0.139	77.9	81.8	<5.86		16.9	13.2	0.219
Fe	5798	<0.08	35836	35216	76.4	68.4	9493	9570	1.21
K	305	305	373		30568		19012		21100
La	60.0	<0.2	305		13.9		84.1		<0.188
Li	140	8.86	<24.8		<21.1		<21.9		1.19
Mg	104	0.0226	379	373	5.51		110	105	<0.012
Mn	1187	<0.02	7812	7638	3.00		2080	2042	0.0343
Mo	<18.2	0.479	<17		<10.6		<17.1		9.38
Na (ICPES)	118739	107000	84283		127900		113341		113000
Na (AA)	116596	114000	91760		129179		116371		118125
Na average	117668	110500	88021		128540		114856		115563
Na (M)	5.12	4.80	3.83		5.59		4.99		5.02
Nd	106	<1.8	847		<72.9		240		<0.406
Ni	1146	0.357	1151		357		295		0.285
P	1121	1100	1748	1600	269		766	743	803

Table 26 continued

	FEP Evaporator Bottoms						Ultrafilter Feed		
All values mg/L except as noted.	Slurry	Supernate	AY102 Slurry		AP101		Slurry	Slurry	Supernate
Pb	223	<1.6	1662	1593	<156		475	419	1.77
Pr	30.3	NM	170		0.0223		34.1		<0.01
Rb	1.26	NM	4.60		6.06		4.16		5.12
S	908	790	892	899	1599	1426	1340	1128	1140
Si	1992	37.9	11016		329		3247		56.7
Sr	86.9	0.402	279	292	<1.18		60.2	83.0	<0.436
W	<90.8	90.0	<84.7		<97.7		<85.7		38.8
Y	8.97	<0.01	50.8		0.0728		10.1		<0.01
Zn	46.1	1.86	81.3		5.95		28.6		3.04
Zr	85.7	0.0820	484		<5.86		125		0.613
bromide		53.0	69.4		<128		<53.6		<10
chloride		609	165		1530		1242		1175
fluoride		145	43.4		28.0		81.7		33.5
formate		408	389		1380		1108		1170
nitrate		119000	319		105000		93914		85600
nitrite		3740	4228		33400		51678		24050
oxalate		1180	9213		1550		4440		740
phosphate		4240	3807		1150		2412		2430
sulfate		1960	1860		3740		3483		5280
acetate		NA	415		1727		1314		1210
citric acid		NA	<81.8		<104		<241		<100
formate		NA	264		1432		1072		941
unbound hydroxide		6103	NM		NM		38930		NM
total organic carbon		1000	NM		NM		3280		3005
carbonate		9500	NM		NM		40600		31350

2.7.2 Simulant Handling (Author – Williams)

Before testing began the simulants were prepared, which would be needed to create recycle streams from the UFP. Preparations of the simulated waste feed were then performed so as to have the accepted proportions of the constituents as per the OLI/ESP model (see Table 3).

After the dewatering portion of pilot-scale UFP testing, the slurry was adjusted in order to have a target solids concentration of 20 wt% undissolved solids (UDS) before washing began, as required by the Test Specification (Longwell, 2003). The UFP produced 117 L of concentrated slurry at ~24 wt% UDS and approximately 915 L of permeate. Therefore, some of the 24 wt% slurry was removed and approximately 25 L of permeate were added back to the slurry to maintain the slurry volume at 117 L while attaining 20 wt% UDS. This section describes how the simulants were made and adjusted at the experimental site.

2.7.2.1 Preparing for UFP Recycle Streams

Refer to Fig. 3 (recycle streams) and Figs. 9 and 10 (UFP unit operation) to better understand the following descriptions of feed preparations and use.

In preparation to create the UFP wash-water recycle stream on 20 May 2004, two 55-gallon drums, labeled "Campaign 3-UFP First or Second Wash," were each filled with 141.3 liters of Campaign II RLD condensate into which were added 226 grams of 50 wt% NaOH to attain a caustic concentration of 0.01 M NaOH[†]. From each drum, 23.5 kg of wash solution were removed per instructions so that the proper amount was available for Campaign III UFP washing activities. The loop rinse recycle stream, which would be made in Campaign III for use in Campaign IV, was made in one carboy labeled "PWD-VSL-33" and it was filled with 8.6 liters of Campaign II RLD condensate. This carboy would receive 4.5 liters of washed HLW slurry after washing. To create the UFP "Heel" sludge recycle stream another carboy was filled with 12.5 liters of Campaign II RLD condensate to await receipt of washed slurry. To create rinse water recycle, three 55-gallon drums, labeled "Campaign 3-0.1M NaOH for UFP Caustic Rinse 1, 2 or 3," were each filled with 105.2 liters of FEP condensate in the Caustic Rinse 1 drum and 94.6 liters of FEP condensate in the Caustic Rinse 2 and 3 drums. Those drums were made to have a caustic concentration of 0.1 M NaOH by adding 852.7 grams of 50 wt% NaOH in the Caustic Rinse 1 drum and 766.8 grams of 50 wt% NaOH into each of the Caustic Rinse 2 and 3 drums. The final UFP recycle stream created was for acid cleaning. It was made by using three 55-gallon drums labeled "Campaign 3-UFP Acid Cleaning 1, 2 or 3," which were each filled with 94.6 liters of DI water. To make the acid concentration 2 M HNO_3, 17 kg of 70% HNO_3 were added into each of those drums.

[†] The concentration of 0.01 M NaOH was nominal. The real target was to have a pH of at least 12. Due to the high acid content of the EDL water supply the initial addition of 113 grams of the 50 wt% NaOH to the 141 liters of water still indicated a pH below 12. To be safe the amount of caustic was doubled to 226 grams which theoretically gave a concentration of 0.02 M NaOH and a pH = 12.3. It measured as pH >12.

2.7.2.2 Preparing UFP Feed

In preparation for pilot-scale UFP unit operation, AP101 simulated waste, which was prepared by Optima Chemical Group LLC in Douglas, Georgia, was mixed with the FEP Evaporator Bottoms and the AY102 simulated waste in the UFP Primary Mixing Tank. This tank represented the plant tank UFP-VSL-1AB. Three major components of the AY102 simulant were also made by Optima, but those components were joined, and its final preparation was made, at the test location in a separate mixing tank on 24 May in order to have just the right mix. The final adjustment is shown in Table 27:

Table 27. UFP Feed Constituents

Material	Mass Added (g)
Wet Additions	
AY102 Supernate Simulant by Optima	72,100
Precipitated Sludge Solids by Optima	238,200
NAS, sodium aluminosilicate (wet) by Optima	27,871
Dry Additions	
$Al(OH)_3$	5,661.4
Al_2O_3	2,015.2
Calcium Phosphate Tribasic	135.0
SiO_2	3,655.6
$RbNO_3$	0.46
Total	349,638.66

After samples were taken, AY102 simulant in excess of the target volume of 64 gallons was removed. That volume was indicated by the OLI/ESP model to be used for Campaign III and is shown at the top of Table 8. With AY102 ready, the final UFP feed preparation could be completed. The 64 gallons (323.9 kg) of AY102 simulant was transferred to the UFP Primary Mixing Tank. To this slurry, 171.5 kg of FEP bottoms made in the pilot-scale FEP were transferred to the UFP Primary Mixing Tank on 10 June. The last addition was 863.4 kg of AP101 simulant, which was also completed on 10 June. The total feed in the UFP Primary Mixing Tank was 1,358.8 kg before samples were removed for analysis.

After the UFP Primary Mixing Tank contents had settled over the weekend of 11 to 13 June, 15.8 liters of supernatant were decanted from the tank surface on 14 June, which were used to fill the permeate system of the pilot-scale UFP test facility on start up. Subsequently, the UFP Primary Mixing Tank, Fig. 11, was mixed for one hour and samples were taken before initiating the transfer to the UFP Slurry Reservoir, Fig. 12, to begin dewatering operations on 14 June.

Figure 11. UFP Primary Mixing Tank (Volume ~ 1000 liters) which represents the RPP-WTP UFP Preparation Feed Tank

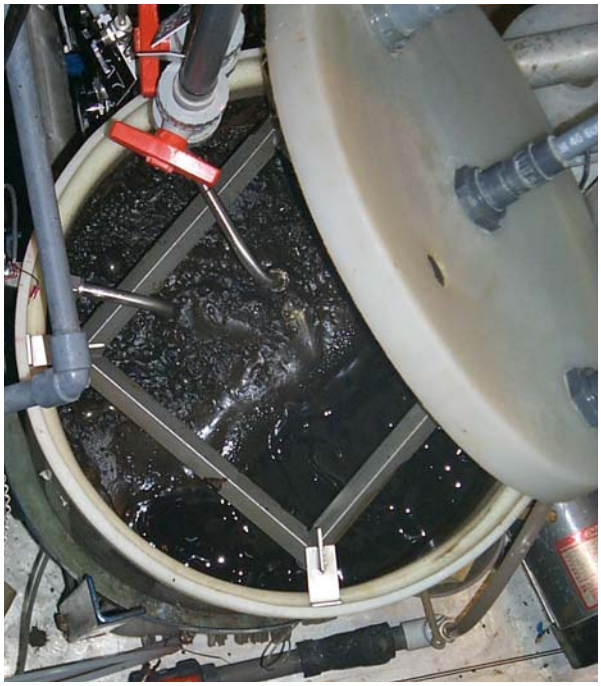

Figure 12. UFP Slurry Reservoir (Volume ~ 100 liters) which represents the RPP-WTP UFP Feed Tank

2.7.2.3 Final UFP Products

The slurry produced by the UFP filter was concentrated to greater than 24 wt% UDS by 17 June. To bring the fixed-volume batch of slurry back to washing target of 20 wt% UDS, 35.0 kg of 24-wt% slurry were removed and 24.8 liters (or 31.1 kg) of permeate were added back. After the newly constituted slurry was well mixed, samples were taken. The concentrated slurry remaining in the UFP test rig was then washed in two phases using the 0.01 M NaOH wash water from drums labeled "Campaign 3-UFP First or Second Wash" on 21 June. The water used to wash the slurry was collected in 55-gallon drums for use in Campaign IV as Wash Permeate recycle. The washed HLW concentrated slurry had a density of 1.22 gm/ml. From that slurry 4.5 liters were added to the carboy labeled "PWD-VSL-33" to be held for Campaign IV as Loop Flush recycle and 0.13 liters were added to the carboy containing 12.5 liters of condensate to be added back into the UFP test rig to represent simulated rinsed loop contents.

The remaining concentrated and washed material, about 92.1 liters, was transferred to a 55-gallon drum labeled "Campaign 3 Concentrated Washed HLW Slurry" for shipment to VSL on 21 June for its eventual vitrification. The permeate produced by the UFP was placed into either of two drums labeled "Campaign 3-CsIX Permeate Feed" and transported to a CsIX Simulant Supply Tank. About 890 liters of permeate were transferred to the CsIX Simulant Supply Tank on 17 June.

On 21 June the filter rinse-clean-rinse sequence began. The contents of the carboy labeled "UFP Heel" were returned to the empty slurry reservoir as well as the contents from the drum marked "Caustic Flush 1" to rinse the UFP flow loop. The resulting volume was 134 liters of material. This volume was larger than the expected 117 liters. This indicated that there was already a substantial heel remaining in the flow loop of approximately 20 liters of material rather than the expected heel amount of 5 liters. After rinsing, all of the contents of the slurry reservoir were pumped to a drum, except 20 liters which were pumped to the carboy labeled "UFP Heel" to make the next heel. The drum was labeled "Campaign 3-Caustic Flush 1 to Campaign 3 (PWD-VSL-15)" and stored for Campaign IV. The 20 liters of "UFP Heel" were returned to the slurry reservoir along with first acid cleaning solution. This cycle repeated itself for all the Acid Cleanings 1, 2, 3 and Caustic Flush 2 and 3, that is, 20 liters of each of the preceding rinse/cleanings, simulated heel material, were fed with the next batch of cleaning or rinsing. The cleaning and rinsings were completed on 24 June. The drum contents produced were stored in drums labeled "Campaign 3-Acid Cleaning 1 or 2 & 3 to Campaign 4 (PWD-VSL-16)" and "Campaign 3-Caustic Flush 2 or 3 to Campaign 4 (PWD-VSL-15)" for Campaign IV.

2.7.3 Pilot UFP Operation and Equipment (Author – Fowley)

The SIPP UFP filter unit (see Figs. 13, 14, and 15) was manufactured by the Mott Metallurgical Corporation to meet RPP-WTP specifications (Townson, 2002; Longwell, 2003). The filter unit had the following physical characteristics:

- 7 filter tubes with each having an inside diameter of 0.5-inch
- 90-inch porous length for each filter tube
- Stainless steel (316L) construction
- Nominal rated 0.1 micron filter element

Figure 13. Entire 90-inch Length of the Filter-tube Bundle (Upstream end in Foreground)

(a) Downstream (Exit) end of Filter Elements (b) Upstream (Entrance) end of Filter Elements

Figure 14. Closeup of the Tubes' Surfaces and Tube Sheets

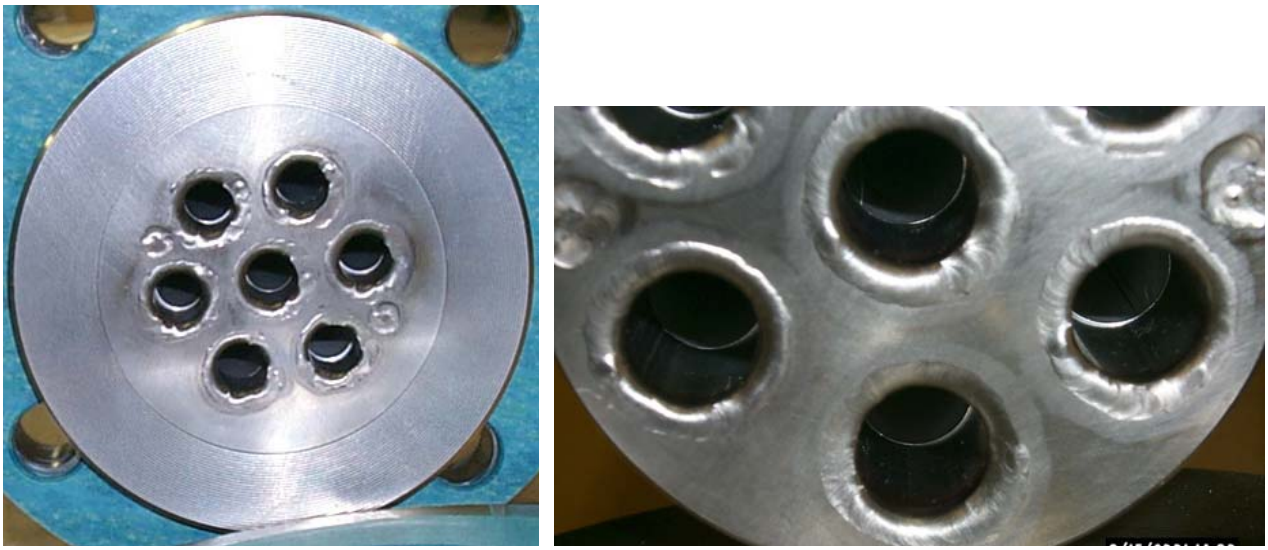

Figure 15. The Exit (Left) and Entrance (Right) Tube Sheets of the Filter Tube Bundle

The filter unit was prototypic in most of its features. The filter unit was not prototypic in three features: it only had 7 tubes instead of 241 tubes, it was mounted vertical instead of horizontal (which is considered an insignificant difference due the high velocity of the slurry), and while the backpulse system was prototypically designed, its dynamic response (momentum) must be different because of the smaller scale. In general, filter performance data from the pilot test rig were assumed to well represent those that will be obtained in the full-scale unit.

The filter unit and associated hardware represent the pilot-scale test rig. A schematic diagram of the test rig is shown in Fig. 16. The pilot-scale test rig was designed to have the following:

- Maximum axial velocity through filter tubes of 4.6 m/s (15 ft/s)
- Maximum transmembrane pressure (TMP) of 60 psid
- Maximum axial velocity to be achievable at the maximum TMP
- Instrumentation to monitor the axial velocity, the permeate flow rate, the TMP, and the slurry temperature
- All materials to be compatible with the high-caustic simulants and the 2 M nitric acid cleaning solution

All specifications were met or exceeded.

The stainless steel pilot-scale test rig is composed of three basic flow loops; the slurry loop, the permeate loop, and the cleaning loop (not used for SIPP and not described in this report). The slurry loop is the primary flow path for circulating slurries and contains the filter unit and the pumping system. The pumping system consisted of two 10-hp Galigher® slurry pumps in series. The impeller and impeller housing were lined with EPDM to be compatible with both the high caustic slurry and the 2 M nitric acid cleaning solution.

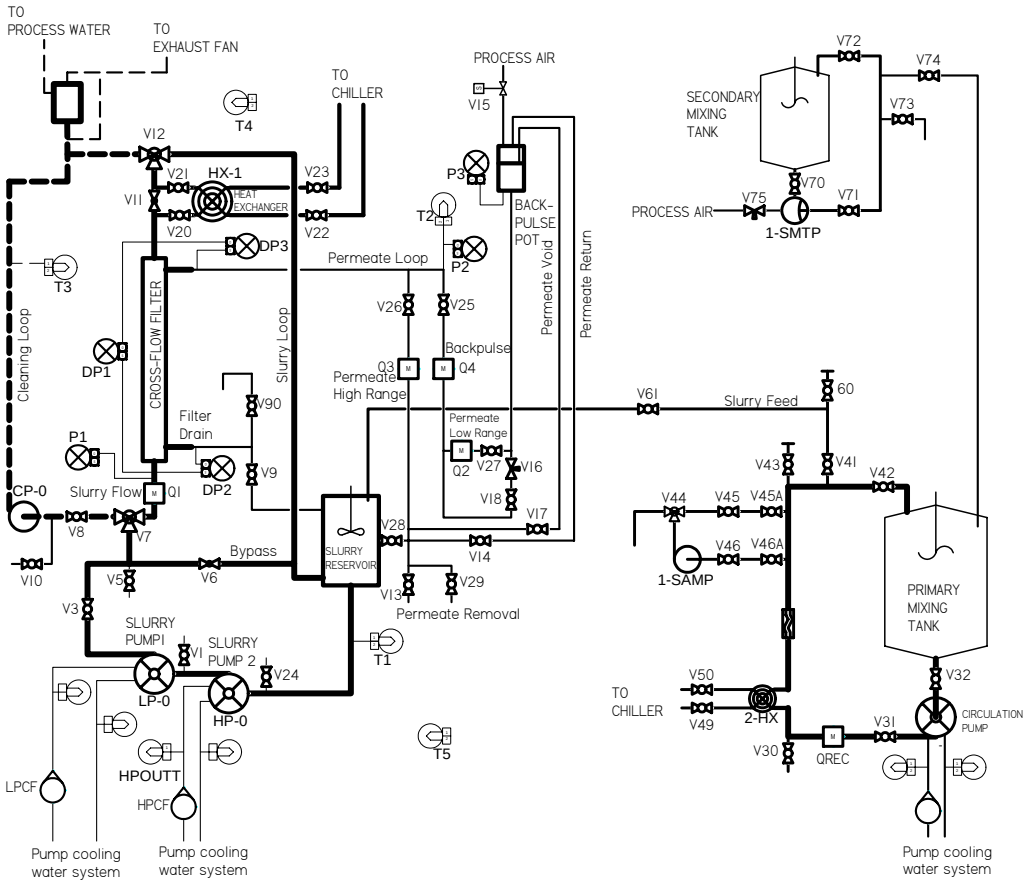

Figure 16. Campaign II Ultrafiltration Test Rig

The permeate loop starts at the filter housing, contains a backpulse pot and ends at the Slurry Reservoir. The backpulse pot and associated tubing provides a pulse of permeate flow in the reverse direction to knock off built-up slurry cake on the inside of the filter tubes. Discharge valves were located in the permeate loop near the Slurry Reservoir to facilitate the removal of permeate from the system. A more detailed description of the flow loops is documented in (Duignan, 2000a, Duignan 2000b, Duignan 2003a) and will be provided in the SIPP final report.

The Primary Mixing Tank was used to mix the combined simulated wastes during feed preparation and to transfer the mixture to the Slurry Reservoir before and during dewatering. The tank was mechanically agitated and included a product recirculation loop to provide additional mixing and facilitate the transfer to the Slurry Reservoir. A sampling system was included in the recirculation loop to acquire a representative sample.

The Secondary Mixing Tank was used to prepare and transfer the AY102 simulated waste to the Primary Mixing Tank during feed preparation. The tank was mechanically agitated and included a product recirculation loop to provide additional mixing and facilitate the transfer to the Primary Mixing Tank. A sample port was located in the recirculation loop to acquire a representative sample.

2.7.3.1 Measurement Uncertainty

The derivation of measurement uncertainty will not be shown in this report, but will be included in the final report, which will incorporate results from all four campaigns. The uncertainties listed here are based on past work done on the same equipment under similar circumstances and are listed here are to illustrate the expected magnitude of principal parameters (at the 95% confidence level).

Slurry Velocity in a Filter Tube	=	± 6 %
TMP	=	± 2 %
Temperature Corrected Permeate Flux	=	± 6 %

The magnitude of the measurement uncertainty for analytical results can fluctuate significantly depending on the analytical method and equipment. Uncertainties for data obtained from outside organizations, i.e., Analytical Development Section (ADS), the Mobile Laboratory of Savannah River National laboratory (SRNL), or the Aiken County Technical laboratory (ACTL) are beyond the scope of this task but they are assumed to be no larger than ±15% of any result shown, unless otherwise specified. For properties measured in the EDL, the following uncertainties on a reading were obtained through calibration:

Slurry or Liquid Density	=	± 0.5%
Liquid Viscosity	=	± 0.5 %
Turbidity	=	± 0.1 NTU

The density of the slurry and permeate were determined by mass and volume measurements from a calibrated platform scale and volumetric flask. The viscosity of the permeate was measured by a Cannon-Fenske viscometer. The turbidity by a turbidity meter calibrated with standards.

2.7.4 Pilot UFP Discussion of Results

2.7.4.1 *Experimental Observations* (Author – Fowley)

2.7.4.1.1 Pre-test Activities

Towards the end of Campaign II some plastic ties used to hold Slurry Reservoir tubing steady broke and entered the filter loop. Those ties did not have any noticeable effect on filter operation but prior to Campaign III the filter unit and pumping system were inspected. The filter unit was inspected in place and was quickly determined to be clear of foreign objects. The test rig was re-assembled and filled with DIF to keep the filter tubes submerged during the pump inspection. However, upon further inspection the ties were discovered in both pump housings. One of the pump impellers sustained light damage due to the fretting action of the ties. Both pump housing were removed and the impellers and liners were replaced.

The baseline tests (Test # 3.00A, B, and C) were conducted on 8 June, after the pump housings were reinstalled. The baseline tests were conducted with 0.1 M NaOH and produced permeate flux results much lower than expected (lower than the post-test baseline results of Campaign II). This behavior was not unexpected because when the test loop had been disassembled and then reassembled in the past usually the permeate filter flux would be lower. The lower flux was assumed to be the result of hidden pockets of slurry being released because by adding a small amount of nitric acid the flux would increase immediately. To re-establish a post-Campaign II water flux, the filter was cleaned with 2.0 M HNO_3 for an extended period of time, and then thoroughly flushed with DIF water (with multiple backpulses). The acid cleaning operation lasted for 3 hours on 9 June and 2 hours on 10 June, with a 15 hour idle time overnight in acid (see Fig.17). The flux improved immediately when the acid cleaning was initiated and continued to improve for the duration of the cleaning. A significant improvement occurred during the idle time. After thoroughly flushing the system the baseline tests were repeated with 0.1 M NaOH. The flux results were greatly improved. The results of both of these pre-test baselines are presented in Section 2.7.4.1.5 (Fig. 28).

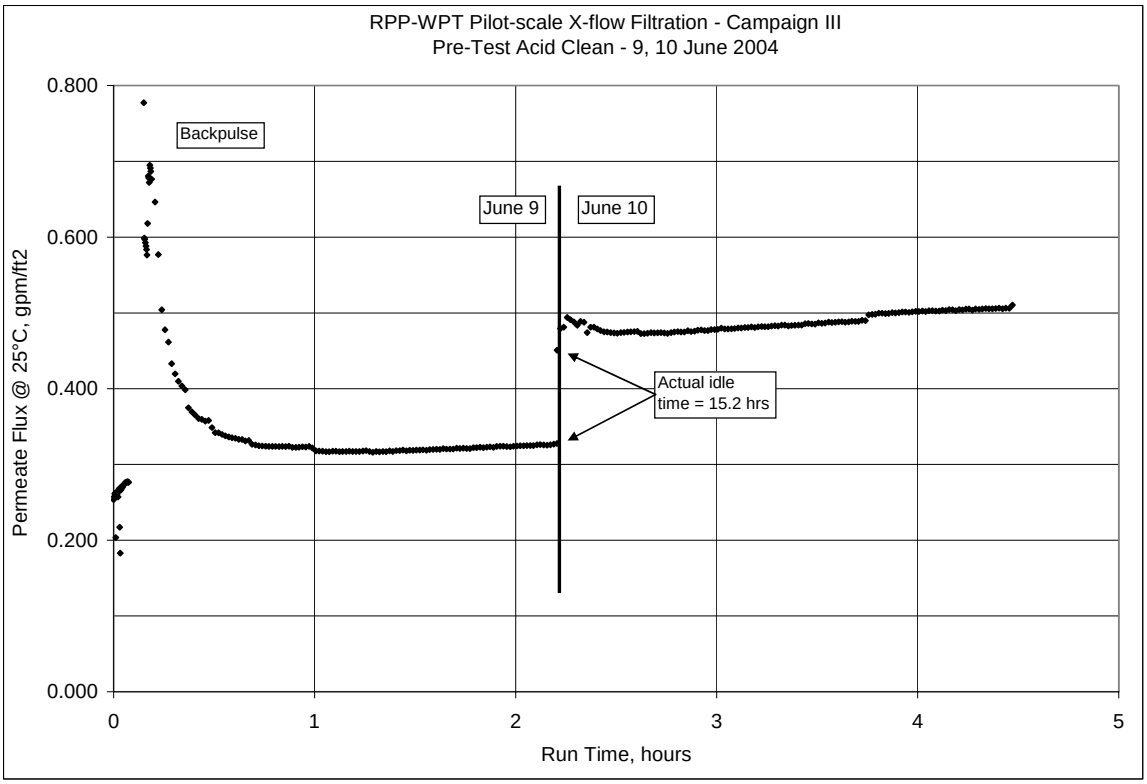

Figure 17. Pre-Test Acid Cleaning of Filter Unit, Permeate Flux vs. Run Time

2.7.4.1.2 <u>Slurry Concentration (Dewatering)</u>

Dewatering started Monday, 14 June. The waste simulant in the Primary Mixing Tank was allowed to settle over the weekend before the 14th so that supernate could be drawn from the top of the mixture. After the supernate was removed, the simulant was thoroughly agitated for one hour prior to the initial transfer of slurry to the slurry reservoir. That supernate was added to the slurry reservoir prior to the initiation of dewatering to account for the volume of permeate necessary to fill the permeate loop. Doing so assured that the solids concentration of the feed waste simulant did not change after filling the test rig so that the test rig also began with the slurry at feed conditions.

Per the test matrix, the dewatering was conducted in two stages. The delineation between the stages was approximately one-half of the expected permeate removed from the simulant (476 liters). A hold period, a minimum of 12 hours, was inserted between the stages to purposely extend the dewatering process, making it more comparable with the duration of the dewatering process of the RPP-WTP plant, to allow for waste reactions to occur, e.g., precipitation. The first stage was completed in about 16 hours and finished in the early morning of 15 June, the second stage, dewatering approximately 440 liters, was completed in about 39 hours and finished in the early morning of 17 June. The second period was much longer because by the end of the first period the permeate flux had dropped by more than a factor of 5. The entire dewatering process, including the hold,

and downtime for sampling, took approximately 67 hours. Excluding the hold, and sampling downtime, dewatering took 55 hours (Campaign II took 53 hours). (This 67-hour period is approximately one half of the dewatering time that WTP will take, which was estimated to be 138 hours, as shown in Table A9 in Appendix A of Duignan et al., 2004b. However, any UFP-feed reactions are expected to occur during first half of the dewatering period.)

A volume of about 1049 L of waste simulant was dewatered to 117 L resulting in a final concentration of 24.6 wt% UDS. The RPP-WTP operation will concentrate the waste in the UFP unit to approximately 17 wt% UDS. However, all of the campaigns of SIPP have a target of at least 20 wt% UDS. The dewatering test was stopped after 55 hours when a rough estimate† of concentration indicated 25 wt% UDS. A volume of 915 L of permeate (excluding samples) was collected in drums during dewatering. Approximately 16 L of permeate remained in the permeate loop and about 1 liter of samples (slurry) were taken during dewatering.

Figure 18 shows the adjusted permeate flux for the entire slurry dewatering process. The flux is adjusted for temperature, as required by the RPP-WTP test specification, to account for the effects of viscosity and surface tension.

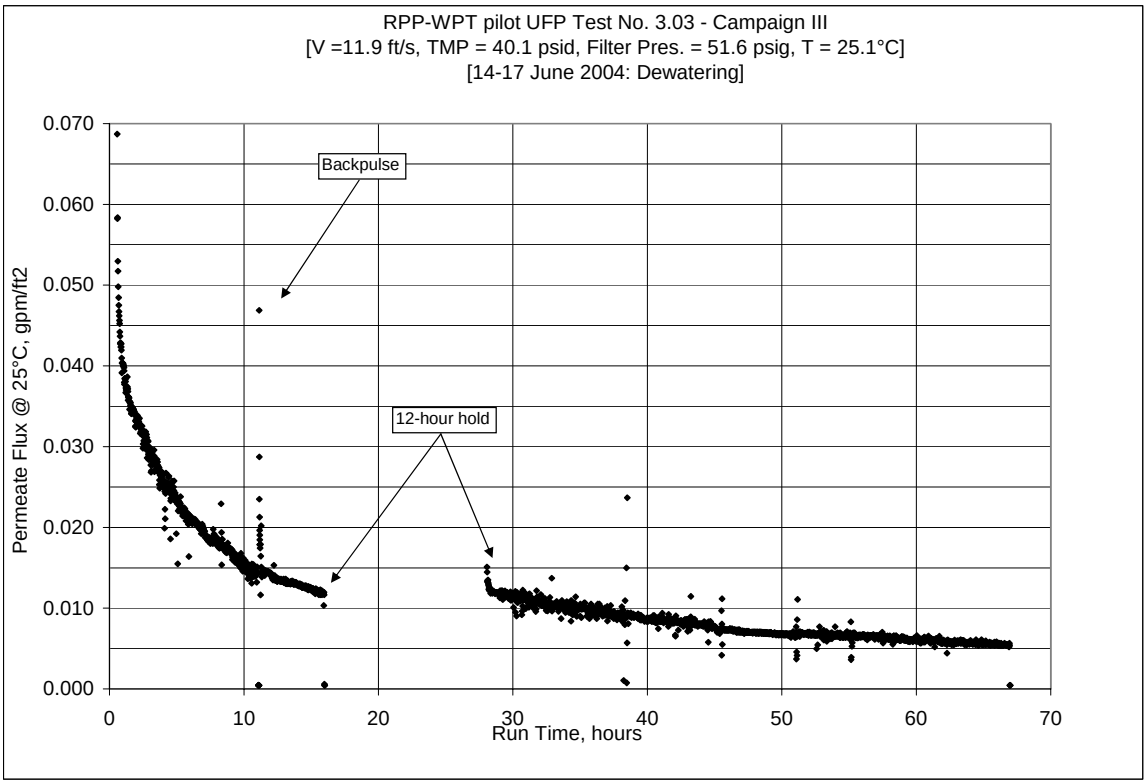

Figure 18. . Dewatering of UF Feed, Permeate Flux vs. Run Time

† Real time concentration analysis was not available and only the initial samples taken on the previous day were used to extrapolate to estimate the 25 wt% UDS.

The adjustment equation is:

$$\text{Adjusted Flux} = \text{Flux (gpm/ft}^2) * e^{(2500 \times ((1/(273+T))-(1/298)))}$$

where T = slurry/permeate temperature in degrees Celsius

Dewatering started with a backpulse. The backpulse pot and the method of backpulsing were designed to mimic plant operation. A backpulse is performed by first closing the permeate loop flow valve (V27, see Fig. 16) to stop dewatering. The backpulse pot is then partially evacuated to create a air pocket. The air pocket is pressurized to 40 psig above the pressure of the slurry loop. The backpulse valve (V18) is opened very fast (less than a second), held open for a predetermined amount of time, then closed very fast (less than a second) to force permeate back through the filter media and remove filter cake. The permeate flow valve is then opened very slowly (approximately 60 seconds) to re-establish dewatering.

Another backpulse was conducted at approximately 11.1 hours into the first stage of dewatering. Per procedure a backpulse was conducted when the permeate flux dropped below 0.015 gpm/ft^2. When dewatering resumed after the backpulse the permeate flux was higher (>0.030 gpm/ft^2) but quickly (~11 minutes) returned to the pre-backpulse flux. Because of the poor recovery, backpulsing was terminated for the remainder of the dewatering.

Samples of concentrated slurry and permeate were taken during the dewatering process in accordance to a Sampling Plan, Appendix B. Samples were taken at three periods during each dewatering stage (at approximately 159 liters, 317 liter, and 476 liters of permeate removed). Permeate density, viscosity, and turbidity, as well as slurry density, were measured in the EDL soon after the samples were taken. Separate permeate and slurry samples were sent to ACTL for measurements of density, yield stress, consistency, and weight % solids [total solids (TS), undissolved solids (UDS), dissolved solids (DS), and supernate solids (SS)].

Another way to visualize the dewatering process results is to track permeate flux against the concentration of UDS. Figure 19 shows the temperature adjusted permeate flux versus UDS concentration. These concentration data were derived from a polynomial interpolation of six slurry samples acquired during dewatering by using the mass of permeate removed over time (see Section 2.7.4.2.6 in Duignan et al., 2004b). For comparison, the dewatering data from Campaigns I and II are also shown. The data trends of Campaigns II and III are almost identical, while the data trend of Campaign I is similar. The simulant for Campaign I contained only AY102 and had 12.5 wt% UDS at the beginning of dewatering. The consistent performance of the UFP indicates that; (1) the filter unit was successfully cleaned after Campaigns I and II, (2) filter performance can be predictable, and (3) the addition of AP101 and FEP bottoms to the AY102 had little effect on filter performance. Note also, that backpulsing was performed during all campaigns and a poor flux recovery was consistent.

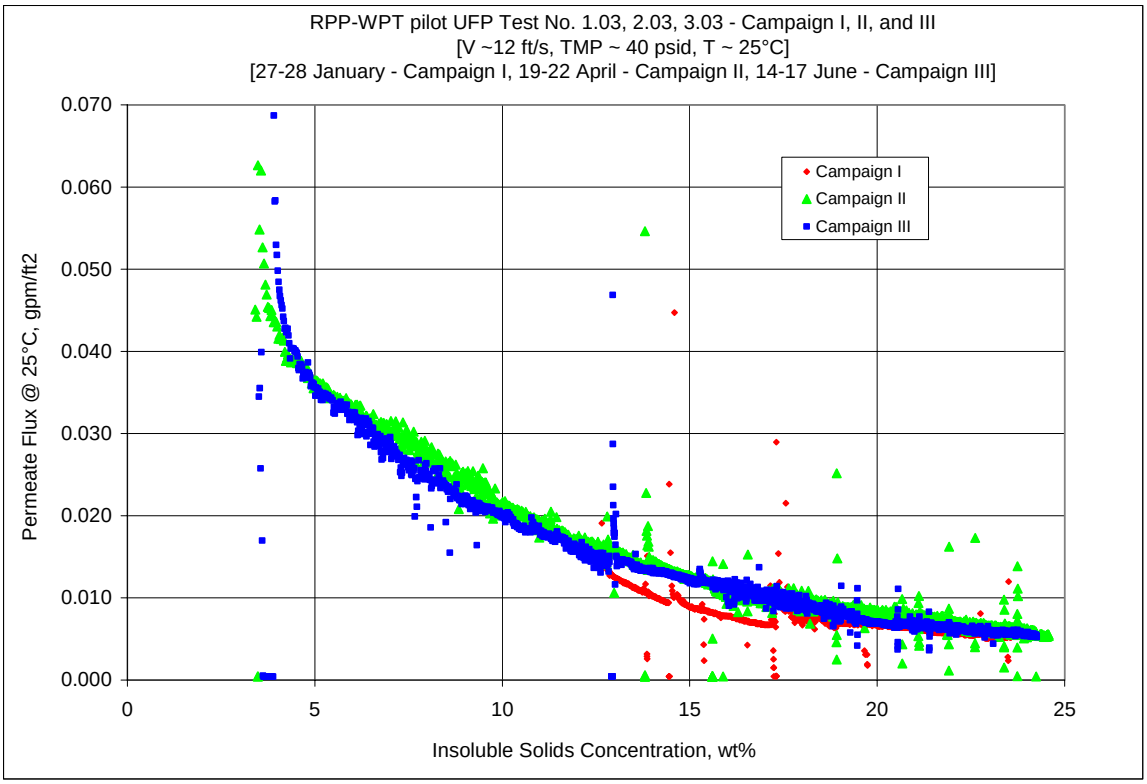

Figure 19. Dewatering of UF Feed – Campaigns I, II, and III, Permeate Flux vs. Concentration

Table 28 shows rheological and other physical data of the slurry and permeate measured at the EDL during the dewatering.

Table 28. EDL Measured Data during Dewatering of the AY102+AP101+FEP Bottoms Simulant

Target Volume of Permeate Produced (1)	Cumulative Weight of Permeate Produced	Slurry	Permeate			
		Density	Density	Viscosity	Temp	Turbidity (2)
L	Kg	gm/mL	gm/mL	mPa-s	ºC	NTU
Day1 158.7	197.10	1.30	1.24	n/a	n/a	0.24
317.3	394.10	1.33	1.25	2.15	26.5	0.27
476.0	591.10	1.36	1.25	2.25	25.7	0.34
Day 2 158.7	788.50	1.40	1.25	2.23	26.0	0.17
317.3	985.50	1.43	1.25	2.17	26.4	0.34
476.0	1141.70	1.46	1.25	2.39	23.0	0.35

(1) These were "target" and not actual volumes "produced." The actual quantity produced is indicated by the mass in the second column.
(2) The Test Specification indicated a threshold of 2 NTU. The measured values indicated the permeate was free of significant undissolved solids.

As expected, the density of the slurry increased during dewatering. The permeate density remained constant. The permeate viscosity (and permeate temperature) fluctuated slightly throughout the process (the highest viscosity is associated with the lowest temperature and vice versa). The turbidity measurements of the permeate were significantly lower than the test specification threshold of 2 NTU and, therefore, the permeate was considered free of solids.

Following dewatering, 35 kg of concentrated slurry were removed from the slurry reservoir and 31.1 kg of permeate were added back to the slurry reservoir to achieve 117 L of slurry at 20 wt % solids for the following slurry washing test. The remaining permeate was used in the Campaign III Ion Exchange process.

2.7.4.1.3 Slurry Washing

In RPP-WTP, the filtration batch size is 21,550 gallons. The concentrated slurry is washed twice with 21,770 gallons (this represents the volume of one permeate storage tank) using 22 mini-batches of approximately 1,000-gallon each. In SIPP, the pilot-scale filtration batch size is 116.8 L. To mimic RPP-WTP, the concentrated slurry was washed twice with 118.0 L using 22 mini-batches of 5.4 L each.

Figure 20 shows the temperature adjusted permeate flux of the first washing. The flux increased from approximately 0.012 to 0.017 gpm/ft^2 during the first wash cycle (42% increase).

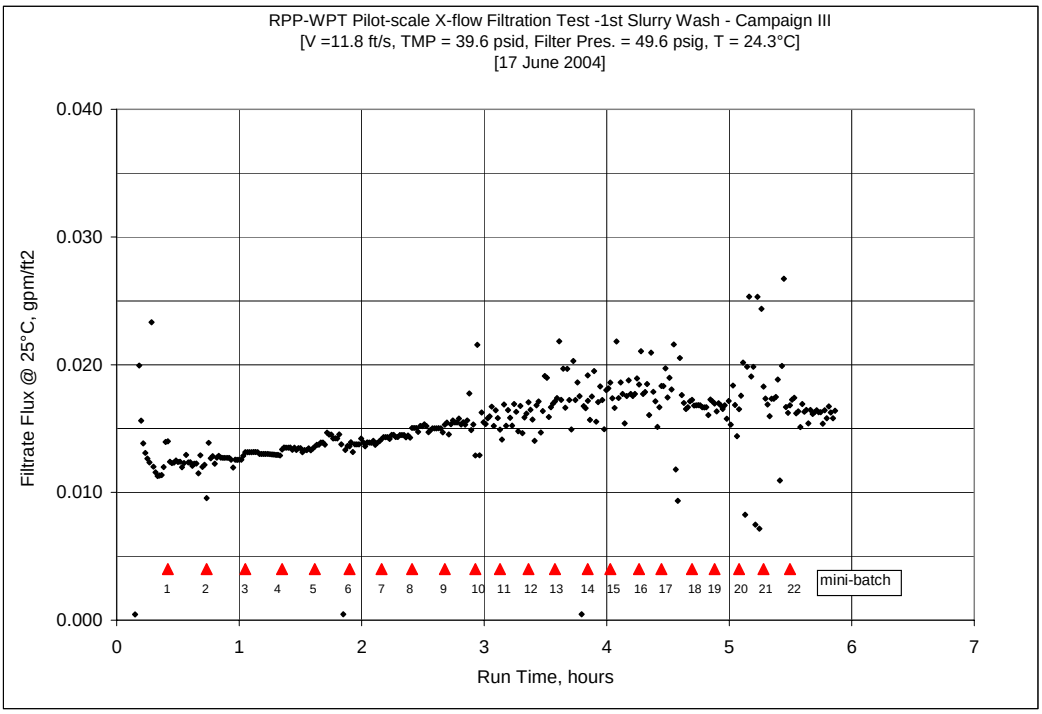

Figure 20. 1st Washing of Concentrated Slurry with 22 Wash Mini-batches

The flux increased in the first wash of Campaigns I (Duignan et al, 2004a) and II (Duignan, et al., 2004b) by 53% and 64%, respectively. Figure 21 shows that the temperature adjusted flux continued to increase during the second wash, from approximately 0.025 to 0.029 gpm/ft^2 (16% increase). The flux increased in the second wash of Campaigns I and II by 32% and 25%, respectively.

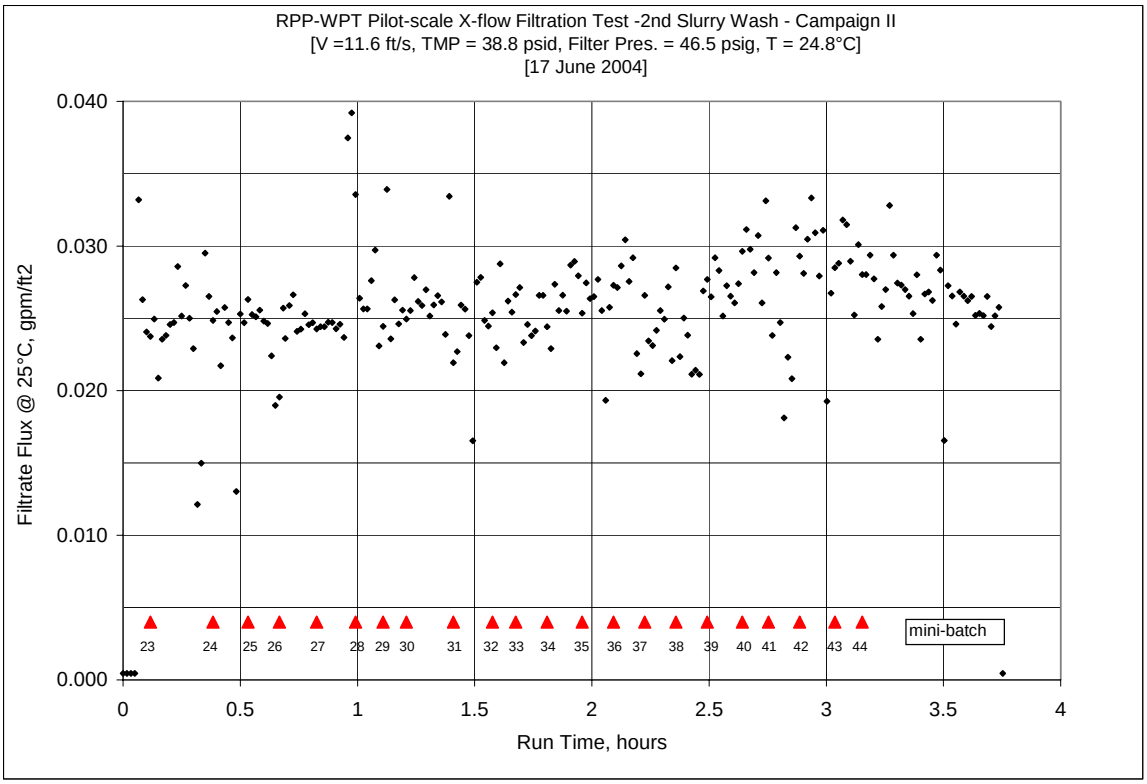

Figure 21. 2nd Washing of Concentrated Slurry with 22 Wash Mini-batches

In all of the campaigns to date, the temperature adjusted flux increased from the end of the first wash to the beginning of the second wash, while the test rig was idle. It is believed that solids entrained in the filter media continued to dissolve during this idle time, creating an improved flux when the test rig was restarted. The idle duration was 11 hours and 52 minutes in Campaign I, 10 hours and 42 minutes in Campaign II, and 1 hour and 37 minutes in Campaign III (the first and second washes of Campaigns I and II were conducted on consecutive days, the Campaign III washes were conducted on a single day). During these idle times the temperature adjusted flux increased 8% in Campaign 1, 11% in Campaign II, and 47% in Campaign III. The flux increase was considerable after the 97-minute idle time of Campaign III, but was still the same order of magnitude as in the previous campaigns. If the flux does increase between the first and second washes because of continued dissolution of solids then most of the dissolving occurs during the first hour or so.

The total increase from the beginning of the first wash to the end of the second wash was 142% for Campaign III. The total increase was 107% and 127% for Campaigns I and II

respectively. The greater total increase of Campaign III was mostly realized during the idle time between the washes.

The temperature adjusted flux data of Campaigns I, II, and III for the first and second washes are shown in Fig. 22 and in general the increasing flux trends are similar. As mentioned previously, the first and second washes of Campaigns I and II were conducted on consecutive days, whereas the two washes of Campaign III were on the same day. To facilitate comparison, the figure shows the washes of all three campaigns with the idle time between the washes of Campaigns I and II modified to match to the start of the second wash of Campaign III.

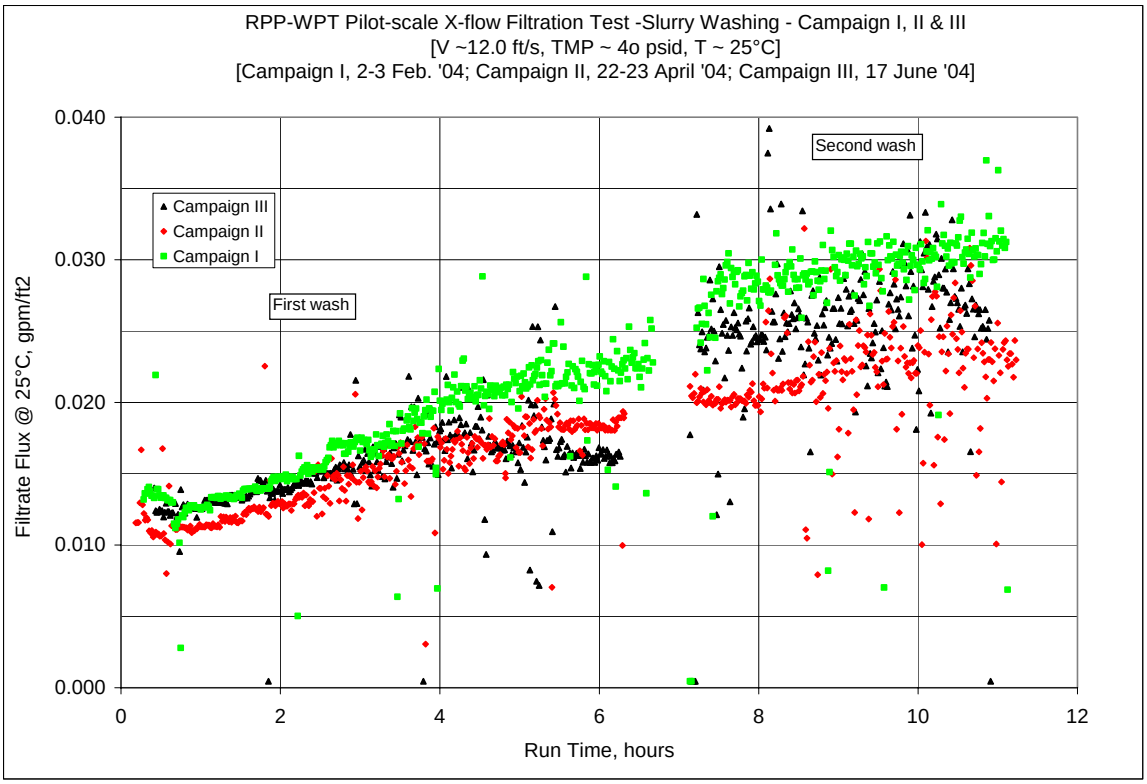

Figure 22. 1st and 2nd Washing of Concentrated Slurry, Campaigns I, II and III

Note in Fig. 20, the initial flux readings are relatively stable and become progressively unstable during the first wash, and more so in the second wash. This instability is systematic to the pilot-scale test rig only and was attributed to gas bubbles and the small-diameter tubes in the permeate loop. The bubbles were small in volume at the start of the first wash but became larger and more frequent as the wash progressed probably because of the changing permeate viscosity and surface tension. Fluctuations in the permeate flow rate were noticed to correspond with the gas bubbles seen in the section of the permeate loop discharging to the receipt drums. Similar fluctuations were noticed in the pressure measured at the backpulse pot. The permeate loop from the backpulse pot to the Slurry reservoir (including the discharge line) was polyethylene. The gas bubbles were seen in the entire section of the polyethylene line, from the backpulse pot to the discharge

line. Because of the very slow moving permeate (less than 1 ft/s in the discharge line) each time the flow was stopped for either sample taking, or to add another one of the 44 mini-washes, air that was trapped at the bottom of the line would migrate up the line. The discharge velocity was not sufficient to entrain the air once the flow was reestablished. This means the discharge system always had oscillating air bubbles that caused the indicated flux instabilities. The full-size WTP will have larger discharge pipes and higher permeate flows, which will continue to flow when a new charge of washing water is added. Such instabilities will not be as prominent, if at all.

Throughout the washing, permeate samples were taken at wash numbers 1, 5, 9, 13, 17, and 22, for both washes (see the Sampling Plan in Appendix B). These sample periods are important because while both slurry and permeate samples were taken at the same time, they are not matched samples. The permeate flux was very low and the permeate loop lengthy. It took approximately 30 minutes for permeate created at the filter to flow to the sampling point. The slurry and permeate samples can be appropriately matched by knowing the delay time. To match the slurry sample taken at the end of each wash, the test rig was operated (in permeate recirculation mode) for an additional 30 minutes. At the end of the 30 minutes a permeate sample was taken. The analysis of the slurry and permeate samples taken during the washing are presented in Section 2.7.4.2.2.

The wash permeate was collected in drums for use as Campaign IV FEP feed. The washed slurry was removed from the test rig and stored in a drum and would eventually be vitrified in the small-scale HLW melter, which is in the VSL at Catholic University of America.

2.7.4.1.4 Filter Rinsing and Cleaning

Following slurry washing, the slurry was removed and the process of rinsing and cleaning the filter began. The filter was rinsed with 0.1 M NaOH and cleaned with 2.0 M HNO_3 in the following sequence:

- 0.1 M NaOH for 30 minutes
- 2.0 M HNO_3 for 90 minutes
- 2.0 M HNO_3 for 90 minutes
- 2.0 M HNO_3 for 90 minutes
- 0.1 M NaOH for 30 minutes
- 0.1 M NaOH for 30 minutes

To match WTP planned RLD operations the rinse solutions were made using condensate from the Campaign II evaporator operations. The acid solutions were made from deionized and filtered (DIF) water.

At the end of a particular cleaning sequence step the solution was drained from the test rig and the subsequent solution was added. For each of the rinsing and cleaning steps it was necessary and important to have a heel, representative of what would be expected in the full-scale plant, since it affects the chemistry of each subsequent solution. Therefore,

a WTP scaled quantity of the previous solution was added back to each new solution to represent a heel that would be left in the RPP-WTP filter system.

The heel for the first caustic rinse consisted of a mild caustic solution (12.6 L), representing the filter-loop rinse and the residual slurry remaining in the test rig after washing (estimated to be 20 L). This produced a total heel of 32.6 L. The heel for each subsequent solution consisted of 20 liters of the spent, previous solution and the residual solution remaining in the test rig (estimated to be 1.6 L). This produced a total heel of 21.6 L.

The temperature adjusted permeate flux for the first caustic rinse is shown in Fig. 23. A backpulse preceded the first mild caustic rinse. The slowly diminishing flux indicates that the filter cake removed by the backpulse was rebuilt with residual slurry during the rinse period. A similar trend was seen in the first slurry wash of Campaign I (Duignan et al., 2004a). Fig. 27 (a) shows a settled sample of the first rinse solution (pH~13) that came from the heel. Note the large amount of UDS, which measured to be 6 wt% and similar to 5 wt% that was obtained in Campaign II (Duignan et al., 2004b). Further chemical analyses of the rinse (and cleaning) solutions are provided in Section 2.7.4.2.3.

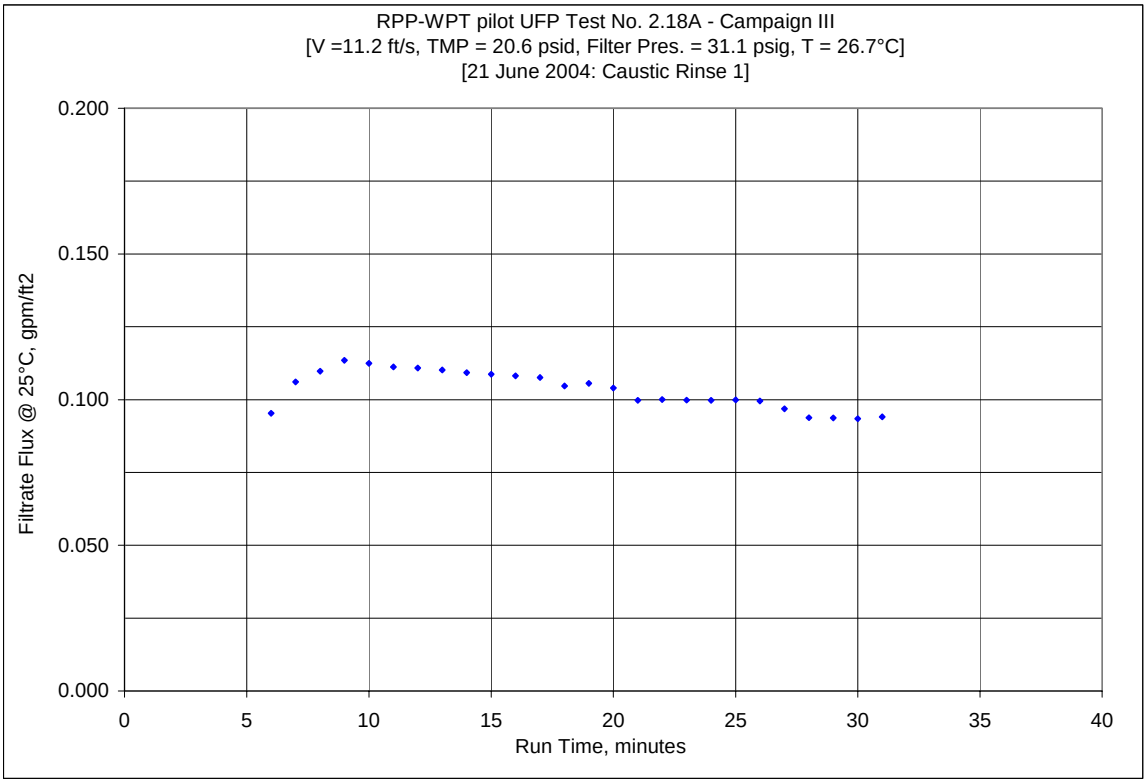

Figure 23. 1st Caustic Rinse of the Ultrafilter

Figure 24 shows the temperature adjusted filter flux results for all three acid cleanings that followed the first rinse. A backpulse preceded each cleaning, which accounts for the higher initial flux at the beginning of each cleaning. The time gaps between the cleanings

represent the times necessary to remove the old cleaning solution from the test rig and add a new cleaning solution and heel.

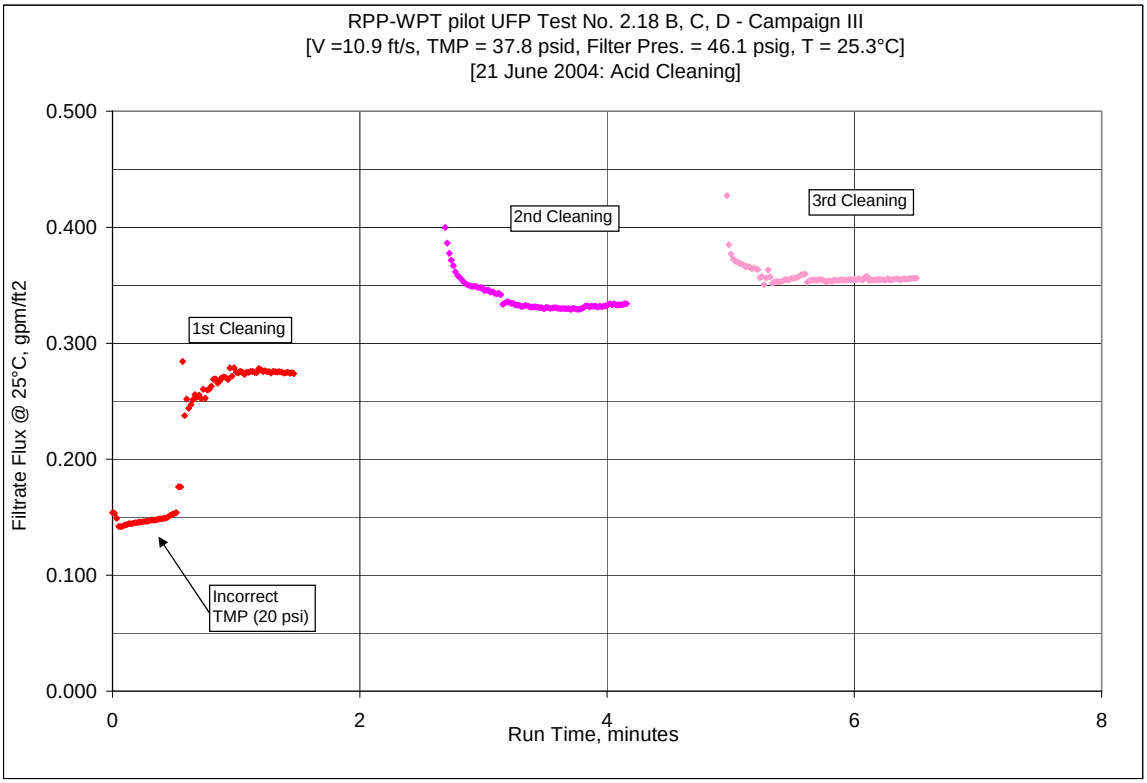

Figure 24. Acid Cleaning of the Ultrafilter

The flux also improved between cleanings, which implies two things: 1) that residual acid solution in and on the filter media continued to dissolve solids and 2) backpulsing prior to cleaning temporarily removed surface fouling.

Figure 27 (b), (c), and (d) show samples of the spent acid cleaning solutions. All of the cleaning solutions have a pH<1. Note that the first acid cleaning solution, Fig. 27 (b) is slightly stained and that there is a small amount of whitish solids on the bottom of the bottle. In Campaign II those white solids were analyzed and a spectral analysis indicated a composition of alumina, silica, and diaoyudaoite (Duignan et al., 2004b). The 2nd and 3rd acid cleaning solutions are not noticeably stained, but still have small and diminishing amounts of the whitish solid. Table 29 shows that the weight percents of total solids of the acid cleaning solutions were relatively moderate in the first cleaning solution, but were greatly reduced by the third cleaning. The weight percents of undissolved solids of the cleaning solutions were insignificant, indicating that the solids had dissolved in the acid.

The acid cleanings steps were followed by two mild caustic rinses. Figure 25 shows the temperature adjusted flux of the last two rinses and reveals that the permeate flux of the second caustic rinse (or the first rinse after acid cleaning) was notably less than that of the

third acid cleaning. This is a common trend seen in all filter cleanings, e.g., Campaign I and II, and was attributed to the caustic solution precipitating solids from the acid heel. The volume and concentration of the acid heel was enough to make the second caustic rinse acidic (0.4 molar acid). Furthermore, the volume and concentration of the second caustic rinse heel was also enough to make the third caustic rinse slightly acidic (0.04 molar acid). The temperature adjusted flux during the third caustic rinse continued to decline as more solids precipitated from the more-neutral solution. At the end of the last rinse the flux had dropped to 0.17 gpm/ft^2, which is still more than an order of magnitude higher than the average dewatering flux of 0.011 gpm/ft^2. Samples of the rinse solutions are shown in Fig. 27 (e) and (f) and they appear to be relatively clear.

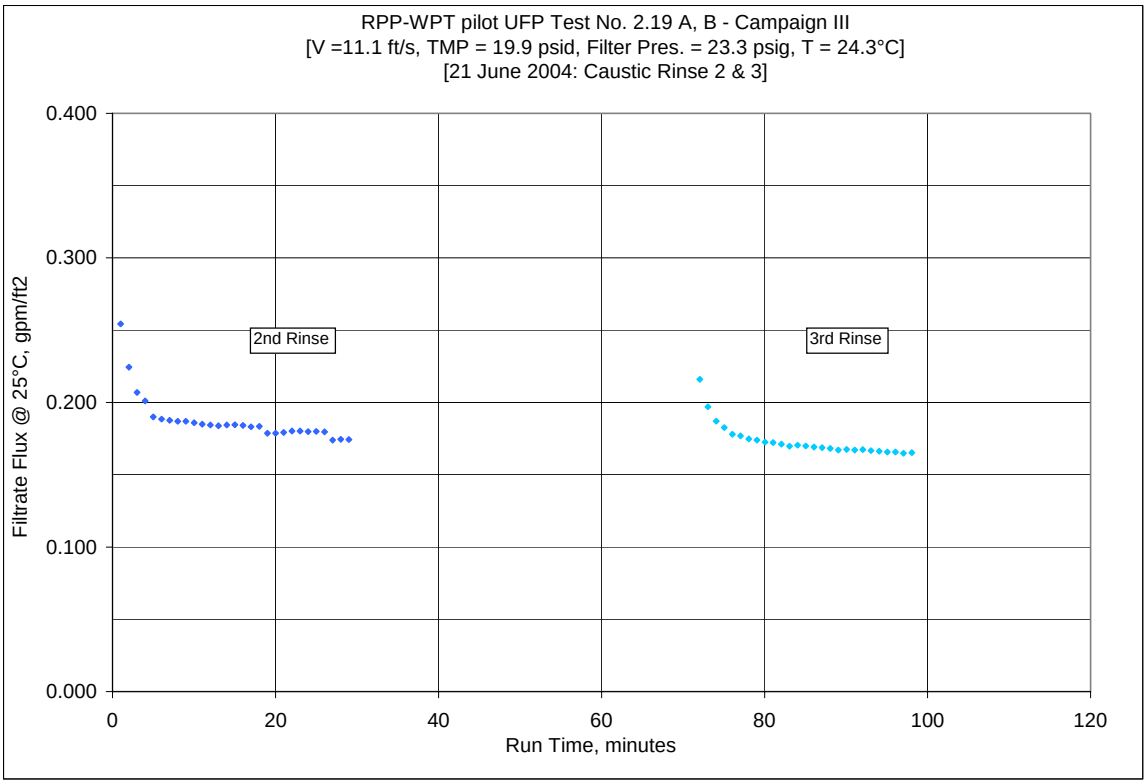

Figure 25. 2nd and 3rd Rinses of the Ultrafilter

The third caustic rinse solution was left in the test rig and, as per the WTP planned operation, was used for the post-test baseline test. After the baseline test the caustic solution was removed from the test rig and stored in a drum for use as Campaign IV FEP feed.

Figure 26 shows the permeate flux of the entire rinse and clean process for Campaigns I, II, and III. The Campaign II and III data are very similar in trend and magnitude. The Campaign I trend is different during the acid cleanings but similar during caustic rinses. As noted previously, the slurry of Campaign I was AY102 only, where the slurry of Campaigns II and III was a mixture of AY102, AP101 and FEP bottoms. Furthermore, the issue of tank heels was not resolved until after Campaign I was complete, therefore

the heels were different. Despite the differences, after all acid cleanings and caustic rinses the ending "clean filter" fluxes for all campaigns was 0.15 gpm/ft^2 ± 0.02 gpm/ft^2.

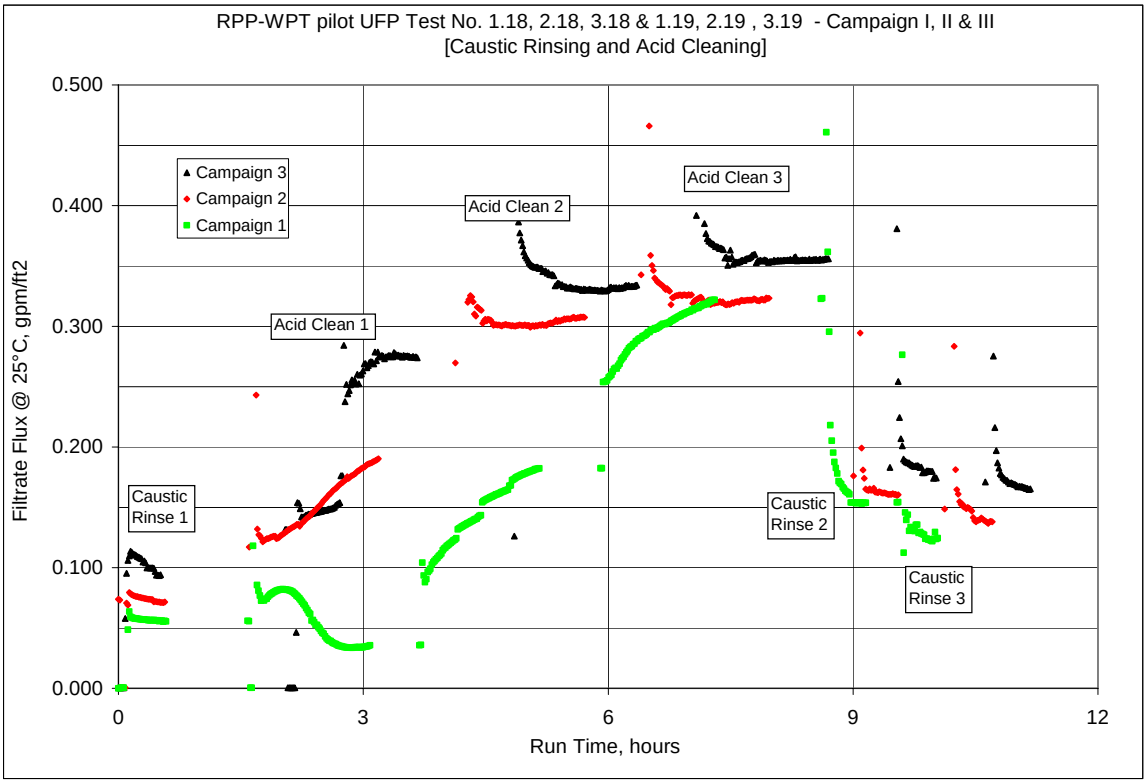

Figure 26. Filter Rinse and Clean, Campaigns I, II, and III

(a) (b) (c) (d) (e) (f)

Figure 27. Caustic Rinse and Acid Cleaning Samples

(a) pre-clean caustic rinse, pH~13, (b) first 2 M nitric cleaning, pH~1, (c) second 2 M nitric cleaning, pH~1, (d) third 2 M nitric cleaning, pH~1, (e) first post-clean caustic rinse, pH~1, (f) second post-clean caustic rinse, pH~1.2

Table 29. Total Solids (TS) and Undissolved Solids (UDS) Concentrations of the Spent Rinse and Cleaning Solutions

Step	TS	UDS
	wt%	wt%
First Caustic Rinse 0.1 M NaOH	6.25	4.27
First Acid Cleaning 2.0 M HNO_3	1.50	0.12
Second Acid Cleaning 2.0 M HNO_3	0.48	0.07
Third Acid Cleaning 2.0 M HNO_3	0.10	0.00
Second Caustic Rinse 0.1 M NaOH	0.75	0.12
Third Caustic Rinse 0.1 M NaOH	0.86	0.03

2.7.4.1.5 Filter Baselining

As was explained in Section 2.7.4.1.1, pretest maintenance work on the pilot-scale UFP pumps was needed before Campaign III and when pre-test baseline water test was done the flux was low. See the closed-diamond data in Fig. 28. This was not unexpected because work on the test rig always seems to affect filter flux, therefore, the filter was cleaned with nitric acid and then the pre-test baseline was repeated. The closed-square data in Fig. 28 shows the improved flux, which was even higher than the post-test baseline data from Campaign II, see the closed-triangle data.

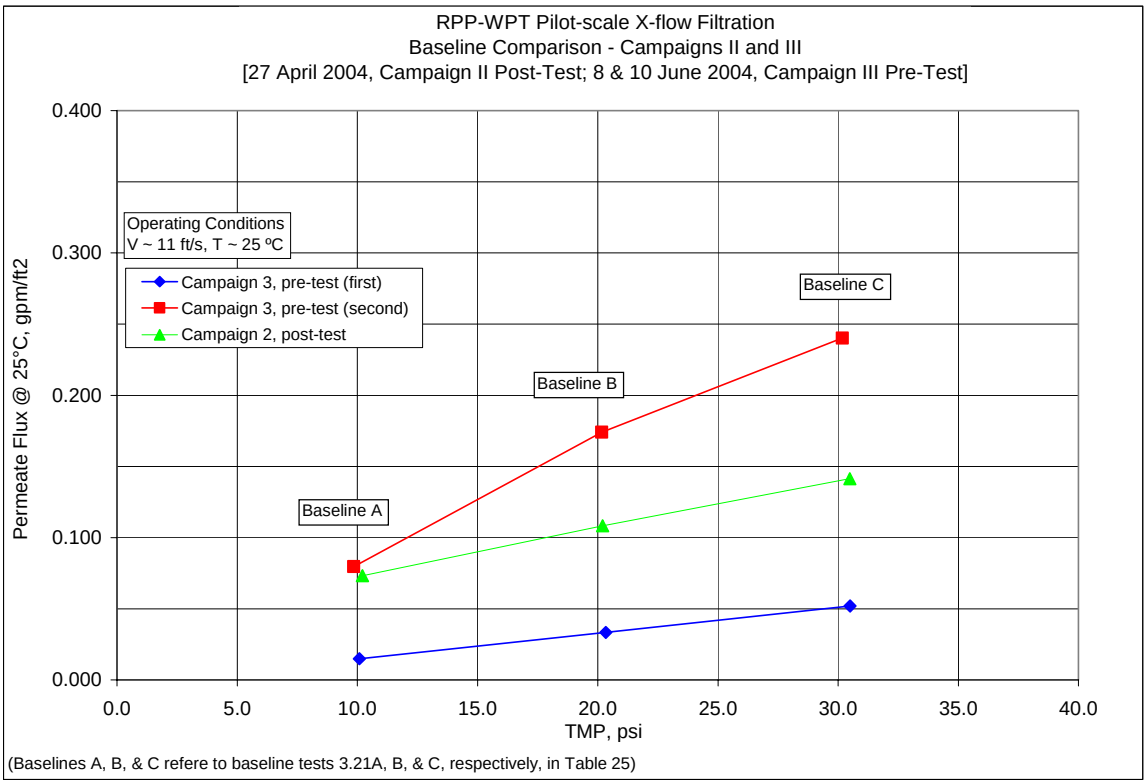

Figure 28. Baselines, Campaign II Post-test and Campaign III Pre-test

The low flux of the initial pre-test baseline is assumed to be caused by one of, or a combination of, the following events: 1) air was entrained in the filter media during the filter inspection, 2) the filter was plugged by solids that were encrusted on the interior of, or trapped within dead zones of the slurry loop and loosened during the pump repair, or 3) solids were pushed farther into the filter media when the system was restarted after the pump repair.

The filter inspection prior to Campaign III was completed in approximately 30 minutes, after which the filter unit was re-assembled and submerged. It is unlikely that the filter media became dry during this short period. Furthermore, as was seen in Fig. 17 of Section 2.7.4.1.1, the immediate increase in the flux and the response to the backpulsing implies that events 2) and/or 3) may have been responsible for the low flux.

A post-test baseline was conducted after the test rig was rinsed and cleaned (tests # 3.18 & 3.19 in Table 25), using the mild caustic rinse solution (0.1 M NaOH) from the third rinse step. The post-test baseline had a lower temperature adjusted flux than the second pre-test baseline, indicating that the filter media was not completely free of solids. However, this has been the case in previous cross-flow filtration tests (e.g., Duignan, 2003a). Although the post-test was lower than the pre-test baseline flux, the temperature adjusted flux for the post-test baseline was still significantly higher than the adjusted flux during dewatering of the waste simulant (0.011 gpm/ft^2).

As previously noted in the Campaign II report (Duignan et al., 2004b), the final <u>caustic</u> rinse, which is used for filter baselining purposes to determine cleaning effectiveness, was not caustic, but borderline acidic because of the heel material. That is, one effect of the tank heel, which is carried over through each of the cleaning steps, was maintaining the final rinses marginally acidic. Because of this effect the post-test baseline was repeated in a fresh 0.1 M NaOH and without adding in any heel. This extra rinse was used to see if the rinses were truly caustic, and without undissolved solids, how it would affect the baseline flux. The concern was that once the rinse turned caustic the filter flux would be significantly impacted by further precipitating dissolved solids. However, the post-"post-test"-baseline test, with a truly caustic rinse, did not significantly affect filter flux. Compare the two post-test data curves in Fig. 29. That is, the truly caustic data begin slightly <u>below</u> the final rinse (but acidic) data, but at TMP = 30 psid the results are identical. This lack of significance was reinforced in Campaign II. In that campaign a similar post-"post-test"-baseline test was done and those data were slightly <u>above</u> the final Campaign II caustic rinse. It appears that the final caustic rinse, even though it was slightly acidic, does result in a stable baseline filter flux.

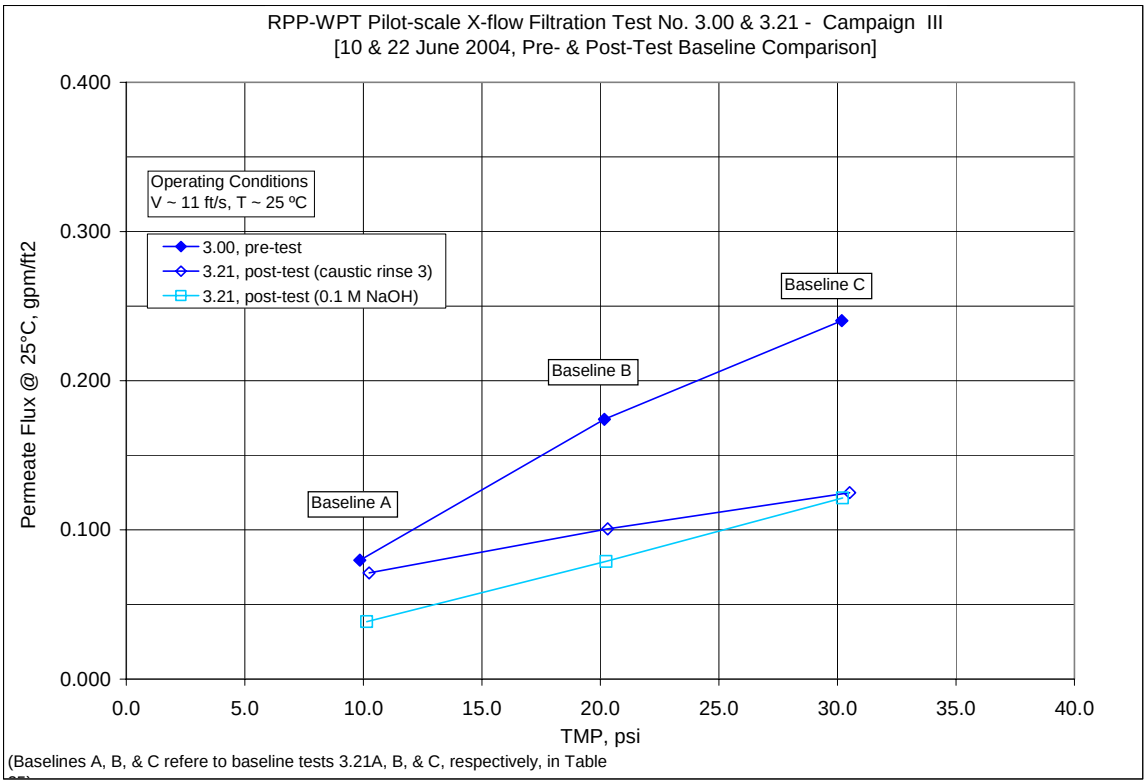

Figure 29. Pre- and Post-Test Baselines for Campaign III

One of the unavoidable non-prototypic aspects of SIPP was the time interval between each of the Campaigns. The Pretreatment Facility of WTP will operate continuously, therefore, the filter elements will be ready for use for the next batch of slurry as soon as it is cleaned and the UFP feed tank is full. For SIPP, the preparations for each Campaign led to intervals of approximately: 8 weeks between Campaigns I and II, 3 weeks between Campaigns II and III, and 4 weeks between Campaigns III and IV; as seen in the "summary of EDL activities" at the end of Section 2.1 of this report. However, because of the SIPP intervals it was possible to see the effect soaking the filter elements soaked in inhibited water (0.1 M NaOH) for finite lengths of time. To date, three campaigns have been completed, therefore, Fig. 30 compares the pre-and post-test baseline tests from Campaign I, II, and III. The pre-test flux data of Campaign I are noticeably greater than that of Campaign II and III. It is believed that the pre-test flux of Campaign I is greater because the filter was submerged in 0.1 M NaOH for an extended period of time prior to Campaign I (approximately 1 year), whereas prior to Campaign II and III, the filter was submerged in the mild caustic for the shorter time intervals just mention above. The mild caustic solution may continue to dissolve solids lodged in the filter media, allowing them to migrate out.

The pre-test baselines of Campaigns II and III are comparable. In addition, the post-test baselines of Campaigns I, II, and III are comparable, but lower than the pre-test values. The lower flux of the post-test baselines indicates that the filter was not cleaned to the pre-test condition, i.e., some solids remained in the filter media. However, the similarity of the flux data from the Campaigns I, II, and III dewatering tests (see Fig. 19) indicate that the differences seen in the baseline results are not an accurate predictor of dewatering flux.

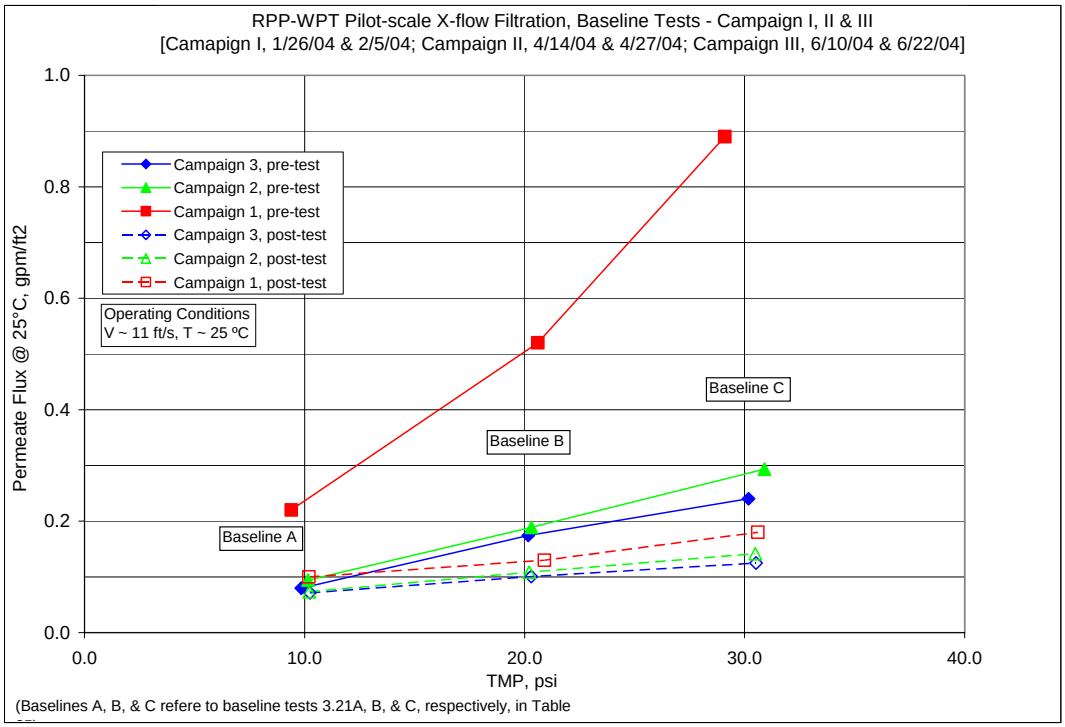

Figure 30. Comparison of Pre- and Post-Test Baselines, Campaign I, II, and III

2.7.4.2 UFP Waste Products – Chemical Analysis (Author – Zamecnik)

This section gives more in-depth chemical analyses for the results just presented in the preceding section, Section 2.7.4.1. In some cases the repetition is unavoidable, but it also facilitates better understanding of the many aspects of the UFP unit operation.

2.7.4.2.1 <u>Dewatering</u>

The total and undissolved solids contents during dewatering of the slurry are given in Table 30 as a function of the amount of permeate removed. The undissolved solids (UDS) value is calculated from the measured total and supernate solids. The table shows both the value calculated from the measured supernate solids for each sample and the value calculated from the mean supernate solids. The supernate solids content of any sample should be the same, so the variations shown are due to measurement error.

Table 30. Campaign III Solids Content of Slurry During Ultrafiltration

Permeate Removed (L)	Total Solids (wt%)	Undissolved Solids (wt%)	Undissolved Solids (use Mean SS) (wt%)	Supernate Solids (SS) (wt%)	Density (kg/L)
0	30.54	3.23	3.18	28.22	1.273
158	33.54	7.51	7.36	28.14	1.270
316	36.39	11.31	11.33	28.28	1.345
474	38.95	14.79	14.90	28.35	1.377
632	41.51	18.52	18.47	28.22	1.408
790	43.44	21.02	21.16	28.39	1.366
915	46.03	24.59	24.74	28.44	1.457
Diluted	42.71	20.37	20.14	28.06	1.423
			Permeate (IX Feed):	28.26	1.248
			Supernate Solids Mean:	28.26	

Upon completion of concentrating the slurry, the final undissolved solids (UDS) content was 24.6 to 24.7 wt% versus the target of 20 wt%[†]. Because the final concentrated slurry was at greater than 20 wt% UDS, the batch of ~117L of slurry was diluted by first removing a calculated amount of slurry and then adding back permeate. The slurry was actually diluted back to between 20.1 to 20.4 wt% UDS.

Table 31 shows the concentrations of the dewatered simulated waste and permeate just before washing for Campaigns I, II, and III (the Campaign III composition is calculated). Note that one of the most significant differences between Campaign II and Campaign III is the Al concentrations. For the permeate, most of the other major species had similar concentrations in Campaign II and Campaign III (K, Na, nitrite, nitrate, phosphate, sulfate). The major undissolved species in the Campaign II and Campaign III slurries were also of similar concentration (Ca, Fe, Mn, Pb, Si, Cr, Nd). The Na and K are higher in Campaign II and Campaign III, than in Campaign I, due to the contribution of the AP101 simulant. Recall that the Campaign I simulant was just of AY102/C106, without the additions of either AP101 nor the recycle streams.

[†] As mentioned the Abstract, and discussed in detail in the Campaign II report (Duignan et al., 2004b), the OLI/ESP model was slightly off in predicting target values because of the difficulties in handling the complex chemical combinations of the simulated wastes. To produce the target amount of permeate during dewatering [see Table 1, Row "UF1 Filtrate (routed to CIX, than TLP)] all of the UFP feed had to be processed, which resulted in the solids content of the UFP concentrate to be 24.6 wt% UDS. However, the Test Specification (Longwell, 2003) required washing to be done on a UFP product at 20 wt% UDS and therefore, the concentrate was diluted to that value.

Table 31. Concentrated Slurry and Permeate Compositions

	----------Slurry----------			----------Permeate----------		
Campaign:	I	II	III*	I	II	III
Total Solids (wt%)	36.91	45.37	46.27	17.09	28.15	28.27
Undissolved Solids (wt%)	23.90	23.51	24.90	0	0	0
Supernate Solids (wt%)	17.09	28.58	28.46	17.09	28.15	28.27
Density (kg/L)	1.357	1.470	1.448	1.168	1.243	1.248
All units mg/kg Ag	1037	990	1070	<0.51	<0.48	0.761
unless stated otherwise Al	19117	17550	22158	7252	5670	5136
B	188	<151		<0.10	70.1	85.7
Ba	477	444	409	<0.03	<0.03	<1.3
Ca	2280	1905	2046	1.73	<0.05	<3.6
Cd	63.5	70.6	71.6	<0.03	<0.03	<0.04
Ce	516	551	513	<1.2	<1.1	<1.0
Co	59.0	<15	212	<0.14	<0.13	<0.11
Cr	845	772	799	128	132	139
Cu	129	134	120	<0.05	0.30	<0.03
Fe	58417	55750	53984	0.16	1.42	1.36
K	330	13000	20885	297	17051	16346
La	407	478	477	<0.17	<0.16	0.849
Li	0	90.9	91.8	<0.34	0.93	1.72
Mg	617	639	618	<0.01	<0.01	<0.24
Mn	12650	12300	11669	<0.02	0.02	<0.02
Na	60800	89230	109462	60017	90483	88141
Nd	1288	1370	1267	<1.5	<1.4	<1.5
Ni	1750	1840	3135	0.58	0.303	0.247
P	1263	672	103	1190	643	554
Pb	2793	2625	2507	<1.4	1.35	<0.36
S	680	862	1857	539	965	905
Si	17983	15821	17999	17.0	43.6	42.1
Sr	500	451	454	0.24	0.06	0.162
Ti	22.0	10.9	66.4	<0.05	0.07	0.10
Zn	458	151	178	<0.03	2.45	2.37
Zr	797	745	722	<0.05	0.69	1.43
bromide	33.3	<29	97.5	48.8	<8.0	<80
chloride	98.0	738	45.9	163	973	1082
fluoride	39.0	52.0	18.4	38.5	23.3	44.9
formate	168	700	467	299	981	1066
nitrate	224	49700	37079	336	68606	72917
nitrite	3107	14100	10559	3827	20268	23077
oxalate	14133	23800	18351	2748	600	658
phosphate	2693	1070	846	2877	1987	1963
sulfate	1427	2080	209	2106	2727	2853
total inorganic carbon (TIC)	15133	3347	3456	12586	6233	6859
total organic carbon (TOC)	15300	5973	13734	2483	1609	801
total carbon (TC)	30433	9320	17190	15068	7842	7660
carbonate from TIC	75667	16735	17279	62928	31166	34295
free hydroxide						19343

* calculated; anion & soluble element values subject to more uncertainty than other species

2.7.4.2.2 Washing the Concentrated Slurry

After diluting the dewatered slurry to 20 wt% UDS, it was washed with 22 discrete additions of ~5.35L of approximately 0.01M NaOH, followed by an additional 22 similar washes. The target total amount of wash water used was about 2 x 118L = 236L. (See the footnote in Section 2.6.1.2. FEP Feed Mixing). Table 32 summarizes the composition of the washed slurry after all 44 washes. Table 33 shows limited characterization of the permeate composites from the first and second 22 washes and compares these same analyses to Campaign I and II values. The Campaign II and III values for solids and density are similar, as expected. The total base values are different because the recycle compositions (FEP concentrate) to Campaign II and III were different.

The compositions of the Campaign II and III washed slurries, shown in Table 32, were expected to be essentially the same since the starting slurries were expected to have similar compositions. The majority of the undissolved components for both campaigns came from the AY102 simulant, with a smaller (and comparable amount) from the FEP evaporator bottoms. A trace amount of solids also came from the AP101 simulant for both campaigns. Examination of the data in Table 32 shows that the compositions are indeed similar, with the exception of aluminum, which was higher than expected in Campaign III.

The soluble species (Na, anions) were all lower in Campaign III than in Campaign II. This difference was due to the lower concentrations of these in the FEP concentrate. The amounts of AY102 slurry and AP101 simulant used in Campaign III were approximately the same as in Campaign II.

Because the amount of aluminum was higher than expected, mass balance calculations were performed to check if these higher values were reasonable. Note that to reduce costs, elemental and ion analyses of the ultrafilter feed and concentrate were not performed, so these compositions must be estimated. Table 34 shows the material balance compositions in tabular form. For several species, values shown in italics are from Campaign II and are shown for comparison. The measured FEP concentrate values were added to the estimated AY102 and AP101 streams. The estimates used were the analyses from the previous campaigns, but no significant differences were expected since the same materials were used. The sum of these streams was the “UF Slurry-Start”. The amount of permeate generated was then mathematically subtracted from this slurry to give the “UF Slurry-Concentrated” stream. The calculated UDS and total solids content matched the measured values well. The permeate composition used here was from measured values. Note that for soluble species, this subtraction introduces significant error in the calculated concentrated slurry composition, so these values are not good as the predictions of the undissolved species.

Table 32. Comparison of Campaigns I-III Washed Slurry Compositions

	Campaign I			Campaign II			Campaign III		
Total Solids (wt%)	21.99			26.56			26.72		
Undissolved Solids (wt%)	20.55			22.22			22.05		
Supernate Solids (wt%)	1.81			5.59			5.99		
Density (kg/L)	1.183			1.214			1.192		
Dissolution: Elements by ICPES mg/kg:	Micro-wave	Sodium Peroxide Fusion	Mean or Best	Micro-wave	Sodium Peroxide Fusion	Mean or Best	Micro -wave	Sodium Peroxide Fusion	Mean or Best
Ag		970	970		804	804		904	904
Al	12000	15500	13750	12400	13100	12750	16800	19300	18050
All units mg/kg B		130	130		<150	<150		149	149
unless otherwise noted Ba	419	460	440	408	384	396	450	410	430
Ca	1880	2240	2060	1890	2000	1945	1810	2070	1940
Cd	70.0	70.0	70.0	74.2	47.0	60.6	72.0	51.0	61.5
Ce	166	620	393	123	497	310	427	518	473
Co	13.0	30.0	21.5	<13	<45	<13	<8.4	<8.0	<8
Cr	689	700	695	620	573	597	583	567	575
Cu	123	130	127	133	113	123	128	119	124
Fe	52400	52000	52200	55000	45800	50400	50800	48900	49850
K	84.0		84.0	3859		3859	3490	3890	3690
La	152	460	306	128	386	257	378	421	400
Li	<33	<40	<33	95	78	87	76.0	104	90
Mg	554	550	552	640	509	575	565	555	560
Mn	11700	11600	11650	12200	10100	11150	11300	10900	11100
Mo	<16	<20	<16	<17	<25	<16	19.0	<17	0.90
Na	14000		14000	28300		28300	25500		25500
Nd	500	1270	885	372	1150	761	1180		1180
Ni	1720		1720	1680		1680	1600		1600
P	822	470	646	240	319	280	370	337	354
Pb	2320	2390	2355	2670	2170	2420	2900	2790	2845
S	186	270	228	194	489	342	151	284	218
Si	14900	15600	15250	17200	14600	15900	11670	16600	14135
Sr	405	450	428	446	410	428	374	420	397
Ti	9.0	10.0	9.5	14.8	11.0	12.9	<27	<24	<24
Zn	118	180	149	145	133	139	151	150	151
Zr	697	330	514	718	652	685	693	690	692

Soluble Ions:		Undissolved Sample	
bromide	<78	<27.9	51.3
chloride	8.00	99.4	69.5
fluoride	6.00	19.0	17.4
formate	<78	154	106
nitrate	12.0	7875	6457
nitrite	172	2315	1714
oxalate	1450	15749	11010
phosphate	397	150	137
sulfate	80.0	338	237

Carbon:		Total Sample	
total inorganic carbon (TIC)	1630	1020	886
total organic carbon (TOC)	2250	6070	3129
carbonate (from TIC)	8150	5100	4429
oxalate (from TOC)	8250	22245	11456

Table 33. Comparison of Wash Permeate Composites from Campaigns I-III

	Campaign III		Campaign II		Campaign I	
	1st 22 Washes	2nd 22 Washes	1st 22 Washes	2nd 22 Washes	1st 22 Washes	2nd 22 Washes
Total Solids wt%	20.83	8.80	20.66	8.89	10.94	3.73
Undissolved Solids wt%	0.24	0	0	0	0	0
Supernate Solids wt%	20.64	8.80	20.66	8.89	10.94	3.73
Density kg/L	1.176	1.070	1.177	1.071		
ammonium	<200	1270				
Total Base M	0.79	0.62	1.41	0.48		

The concentrated stream composition was then diluted to 20.4 wt% UDS, as was done during processing. The "UF Slurry-Diluted to ~20wt%" stream was then adjusted to approximately represent the washing steps. An empirical "wash factor" was defined:

$$\text{wash factor} = \frac{\text{concentration of species in washed slurry (mg/L)}}{\text{concentration of species in unwashed slurry (mg/L)}}$$

Note that this factor is based on the mg/L concentrations and not mg/kg. The data used for these factors were from Campaign II. The essentially insoluble species such as Fe have factors near unity as expected. The agreement between the calculated and measured washed slurry compositions is reasonably good. The calculated Al value is lower than the measured value, but it is still higher than the Campaign II value. Therefore, the higher Al values for the Campaign III concentrated and washed slurries are deemed to be correct. Note that the Al is higher in the washed slurry even though the total Al in the feed is about the same. The implication of this result is that more Al goes to the HLW stream in Campaign III than in Campaign II. Also, this higher amount of undissolved Al is consistent with the higher amount in the FEP concentrate.

Table 34. Estimation of Slurry Concentrations for Campaign III (*Values in italics are for Campaign II*)

All values mg/kg unless otherwise noted	FEP Concentrate (measured)	AY102 Slurry (estimated)	AP101 (estimated)	UF Slurry - Start (calculated)	UF Slurry - Concentrated (calculated)	UF Slurry - Diluted to ~20wt% (calculated)	Permeate (measured)	UF Slurry - Washed (calculated)	UF Slurry - Washed (measured)	Wash Factor
Total Solids (wt%)	30.75	26.68	31.94	30.59	46.27	42.99	28.27	26.46	26.72	
Undissolved Solids (wt%)	2.70	11.91	0.25	3.21	24.90	20.37	0.00	22.05	22.05	
Supernate Solids (wt%)	28.82	16.77	31.77	28.28	28.46	28.41	28.27	5.65	5.99	0.20
Density (kg/L)	1.255	1.256	1.279	1.273	1.448	1.407	1.248	1.212	1.192	
Volume (L)	133	238	662	1032	117	117	915	117	117	
Ag	55	497	29.2	139	1070	876	0.761	891	904	0.81
Al	5255	13328	5629	7334	22158	19060	5136	16288	18050	0.68
	5470			*7200*	*17550*	*15824*	*5672*		*12745*	
B	566	0	0	72.0	0	15.6	85.7	4.90	149	0.25
Ba	24.5	218	0	52.8	417	341	<1.3	381	430	0.89
Ca	111	1048	18.0	264	2070	1693	<3.6	2128	1940	1.00
Cd	6.00	37.3	0	9.24	71.8	58.8	<0.04	62.8	61.5	0.85
Ce	<115	291	0	66.3	520	426	<1.0	476	473	0.89
Co	<7.3	120	0	27.4	213	174	<0.11	219	<8.0	1.00
Cr	156	504	138	224	799	679	139	657	575	0.77
Cu	8.00	63.6	0	15.5	120	98.3	<0.03	112	124	0.91
Fe	3910	28285	56.6	6971	53984	44161	1.36	54387	49850	0.98
	4600			*7470*	*55750*	*47654*	*1.41*		*54978*	
K	11350	297	23900	16932	20885	20059	16346	4302	3890	0.20
	242			*14900*	*13000*	*13589*	*17056*		*3179*	
La	<104	243	10.9	62.3	477	390	0.85	392	400	0.80
Li	105	0	0	13.4	91.8	75.4	1.72	89.1	90.0	0.94
Mg	70.0	299	4.31	79.8	620	507	<0.24	567	560	0.89
Mn	828	6150	2.35	1507	11669	9546	<0.02	11756	11100	0.98
Na	79400	70080	100500	90894	109462	105582	88141	29439	25500	0.26
	93350			*90012*	*90365*	*90656*			*27694*	
Nd	79.2	674	0	164	1277	1044	<1.5	1089	1180	0.83

Table 34 continued **All values mg/kg unless otherwise noted**	FEP Concentrate (measured)	AY102 Slurry (estimated)	AP101 (estimated)	UF Slurry - Start (calculated)	UF Slurry - Concentrated (calculated)	UF Slurry - Diluted to ~20wt% (calculated)	Permeate (measured)	UF Slurry - Washed (calculated)	UF Slurry - Washed (measured)	Wash Factor
Ni	128	916	279	405	3135	2564	0.25	2932	1600	0.91
P	444	1333	210	495	103	185	554	81.3	354	0.35
Pb	225	1296	0	324	2509	2053	<0.36	2580	2845	1.00
Re	3.98	0	0	0.506	3.92	3.21		1.01	<8.6	0.25
S	813	713	1182	1028	1857	1684	905	995	218	0.47
Si	1560	8771	257	2360	17999	14731	42.1	17032	14135	0.92
	1580			*2545*	*15820*	*13529*	*43.6*		*14602*	
Sr	54.1	228	0	58.7	454	371	0.16	438	397	0.94
Ti	34.0	7.96	3.91	8.66	66.4	54.3	0.10	62.1	<24	0.91
Zn	58.0	64.5	4.69	25.1	178	146	2.37	167	151	0.91
Zr	53.6	385	0	94.5	722	591	1.43	676	692	0.91
bromide	<96	55.3	0	12.6	97.5	65.1	<80	0	<51	
chloride	1150	131	1196	948	45.9	234	1082	22.6	69.5	0.09
fluoride	93.0	34.6	21.9	33.8	18.4	23.2	44.9	8.16	17.4	0.28
formate	732	310	1079	860	467	576	1066	92.6	106	0.15
nitrate	120000	254	82095	68290	37079	43600	72917	5611	6457	0.12
	94370			*63600*	*47900*	*51750*	*68624*		*6487*	
nitrite	14400	3367	26114	19447	10559	12837	23077	1377	1714	0.10
	2966			*20200*	*14100*	*14996*	*20274*		*1907*	
oxalate	3860	7335	1212	2942	18351	15132	658	10269	11010	0.54
				3545	*23800*	*20619*	*600*		*12750*	
phosphate	2270	3031	899	1559	846	1050	1963	119	137	0.09
sulfate	2260	1481	2924	2511	209	690	2853	95.4	237	0.11
total inorganic carbon (TIC)	5630	11863	4655	6420	3456	4075	6859	973	886	0.19
total organic carbon (TOC)	3920	3981	1653	2471	13734	11380	801	11299	3129	0.79
total carbon	9550	15844	6308	8891	17190	15455	7660	12272	4015	
carbonate from TIC	28150	59315	23276	32098	17279	20375	34295	4865	4429	0.19
oxalate from TOC	14314	14571	5973	8990	50400	41748	2851	41447	11465	0.79

**** A note on Ammonium in the UFP (Compare to note at the end of Section 2.6.5) ****

The ammonium concentrations in several of the process streams were measured. Figure 31 shows the streams, the concentrations, and the amount in grams in each stream.

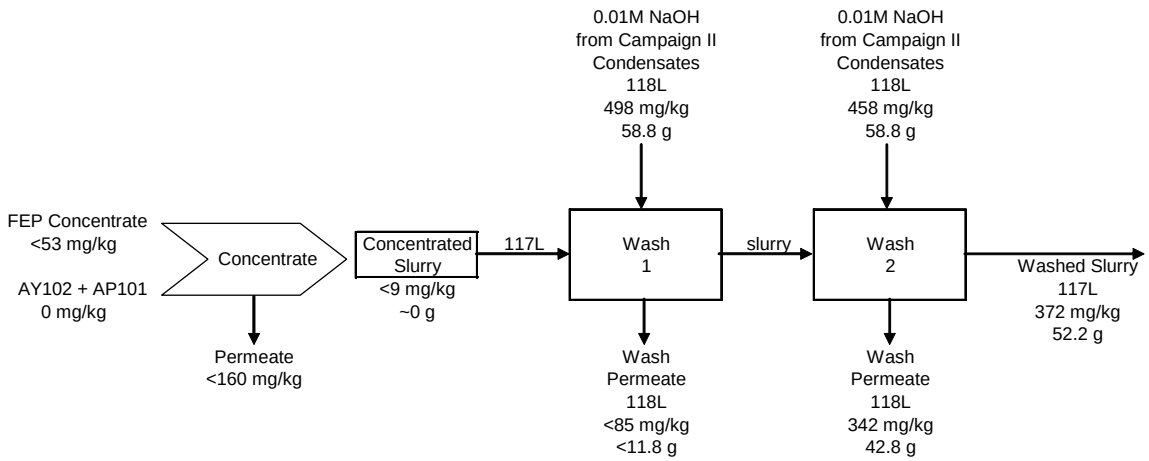

Figure 31. Tracking ammonium through the pilot-scale UFP operation for Campaign III

The combined amount of ammonium in the 2nd wash permeate and washed slurry stream is about 80% of the inlet total that is all from the 0.01M NaOH, which is reasonable closure of the material balance since the ammonium analysis in the presence of high Na is difficult. Surprisingly, no detectable ammonium was found in the first wash permeate, so it was retained in the slurry. The washing process is essentially a dilution of the supernate portion of the slurry, so we expected that about 60% of the ammonium would have been in the wash permeate (118L wash, ~100 L supernate). That this did not occur indicates that some component in the slurry had an affinity for ammonium. Most of the second wash permeate ammonium remained in the wash permeate, indicating that little, if any, ammonium was retained by the slurry.

2.7.4.2.3 Filter Rinsing and Cleaning

Upon completion of the slurry washing, the filtration unit was drained and then cleaned. These cleaning steps are shown in Figs. 9 and 10. Compared to Campaign II, for Campaign III only limited analyses of the rinsing and cleaning solutions were performed. Table 35 shows the solids content and acid or base content of the rinsing and cleaning solutions. These values are compared to the values from Campaigns I and II. Elemental and anion analyses for the Campaigns I and II streams were reported in the Campaign II report.

Table 35. Filter Cleaning Solutions

	Caustic Rinse 1			Acid Cleaning 1[a]			Acid Cleaning 2		
Campaign:	I	II	III	I	II	III	I	II	III
Total Solids (wt%)	9.71	7.46	6.26	1.07	2.36	1.50	0.18	0.67	0.48
Undissolved Solids (wt%)	8.27	5.09	4.26	0.09	0.12	0.12	0.00	0.00	0.08
Supernate Solids (wt%)	1.57	2.50	2.08	0.98	2.24	1.38	0.18	0.67	0.41
Density (kg/L)	1.075	1.057	1.046	1.056	1.051	1.046	1.062	1.055	1.055
Total or Free[b] Base (M)	0.0450[b]	NM	0.201						
or Total Acid (M)				1.56	1.20	1.10	1.95	1.61	1.63

	Acid Cleaning 3			Caustic Rinse 2			Caustic Rinse 3		
Campaign:	I	II	III	I	II	III	I	II	III
Total Solids (wt%)	0.05	0.13	0.10	0.83	0.66	0.75	0.76	0.81	0.86
Undissolved Solids (wt%)	0	0	0	0.00	0.13	0.12	0 [c]	0.13	0.03
Supernate Solids (wt%)	0.05	0.13	0.10	0.83	0.53	0.63	0.76	0.68	0.83
Density (kg/L)	1.063	1.055	1.057	1.009	1.016	1.017	1.003	1.004	1.005
Total Base (M)							0.002 [b]		
or Total Acid (M)	1.98	1.74	1.78	0.158	0.449	0.420		0.0623	0.0393

[a] acid cleaning solutions total and undissolved solids contents do not include nitrate from nitric acid (evaporates during measurement)
[b] estimated from pH
[c] solids visible, but not quantifiable
NM: not measured

The solids content of the Caustic Rinse 1 solution was decreased from Campaign I to Campaign III as the remaining slurry heel amount was adjusted to be closer to the correct amount. Each of the acid cleaning solutions was relatively similar, but overall, the Campaign I solutions had less total solids than the Campaign II and III solutions. This difference is attributed to the Campaign II and III final washed slurries having a higher total solids content due to the presence of more dissolved solids (see Table 30). The acid content during cleaning in Campaign I was also higher due to using smaller heels between cleaning steps. The Campaign I heels were each about 10.5-12 L, whereas in the remaining campaigns, the heels were approximately 22L. No undissolved solids were found in any of the acid cleaning 3 solutions, but small amounts were measured in the subsequent caustic rinse steps. As previously described in the Campaign II report (Duignan et al., 2004b), the solids found in Campaign II were identified by XRD as gibbsite, silica, and a sodium aluminate compound.

2.7.4.2.4 <u>Particle Size Distribution</u>

For Campaign III operation slurry particle size was not measured. Due to the very similar filter performance of Campaigns II and III, the particle morphology was assumed to be similar, too. Slurry particles were measured analyzed and for both Campaigns I and II and were discussed in the Campaign II report (Duignan et al., 2000b). In summary, by a volume distribution the mean particle sizes for UFP simulated feed ranged from approximately 1.5 microns (Campaign I) to 2.5 microns (Campaign II). This is comparable to the particle sizes in the actual AY102/C106 waste, which range from 2.5 to 4 microns. After dewatering, for both Campaigns, the mean size of the particles reduced to close to 1 micron. After washing the changes to the particle sizes were insignificant.

2.7.5 Pilot UFP Conclusions

2.7.5.1 Experimental Observations (Author – Fowley)

A summary of the overall conclusions are as follows:

- The average temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average temperature-adjusted permeate flux when dewatering from ~4 to 20 wt% UDS was 0.014 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 17 wt% UDS was 0.018 gpm/ft^2.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower than 0.5 NTU. The Test Specification indicated a solids-free threshold of 2 NTU, therefore the measured values indicated the permeate was free of significant undissolved solids.
- Submerging the filter in a 0.1 M NaOH solution over an extended period of time may improve flux since the water flux always improved after the filter was stored in the solution for periods of 6 weeks or more between tests.

2.7.5.2 Waste Products Observations (Author – Zamecnik)

- The composition of the undissolved solid species in the washed sludges in Campaigns I-III was similar, as expected. The supernate portion species Na and K were higher in concentration in Campaigns II and III than in Campaign I due to the presence of the AP101 simulant.
- The aluminum concentration in the washed slurry in Campaign III was higher than in Campaign II due to there being more undissolved aluminum in the FEP concentrate.
- Because of higher undissolved aluminum in the FEP concentrate, the Campaign III permeate from the concentration step (IX feed) had less aluminum than in Campaign II.
- Ammonium in the first 0.01M NaOH UFP wash of Campaign III was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Most of the ammonium in the second wash was not retained.

2.8 PILOT CESIUM ION EXCHANGE (AUTHORS – STEIMKE & WILLIAMS)

The Cesium Ion Exchange Process, or CIX, is the third separation technology unit operation in the RPP-WTP Pretreatment Facility that the waste stream will pass through on start-up. This is true for SIPP because the chosen waste type, Envelope A/D, is not subjected to precipitation before filtration. The SIPP CIX operation removes cesium from a mixture of the liquid LAW stream coming from the UFP before it is sent to the TLP for further evaporation and eventual vitrification.

The ion exchange resin used in this test was SuperLig®644, which is designed to remove cesium from caustic radioactive waste that is at a 5-molar concentration in sodium. It is manufactured by IBC Advanced Technologies. Pilot scale testing of this resin was first performed in the Engineering Development Laboratory in the year 2000 (Fowley et al., 2004). That earlier testing was intended to be focused primarily on the chemical performance of the resin on a pilot scale (more than one liter of resin); however, the pressure drop across the resin beds was unexpectedly high. Testing for the next three years was redirected to the hydraulic performance of the resin. The hydraulic issues were resolved to the satisfaction of RPP-WTP (Fowley et al., 2004).

In 2003, Test Exception 24590-WTP-TEF-RT-03-069 called for resumed chemical testing of SuperLig®644 resin at a pilot-scale for six chemical cycles, which would be incorporated into the four campaigns of the SIPP task (Duignan, 2003c). A cycle is the process whereby the Cesium Ion Exchange unit operation treats LAW solution until the lead IX column accumulates enough cesium to require regeneration, then it is regenerated. Later, the goals of the SIPP task were modified that reduced the number of ion exchange cycles to four; Cycles 1 and 2 would be done in Campaign II and Cycles 3 and 4 in Campaign III. There were no CIX operations during Campaign I of SIPP. This report includes all four cycles of testing, but with primary emphasis on the last two cycles because the Campaign II interim report (Duignan et al., 2004b) has already described the first two cycles.

For the actual RPP-WTP a cycle would entail the treatment of a minimum of 100 Bed Volumes (BV = a resin bed volume of 415 gallons (1571 liters) under normal operating conditions, which is subject to change) until the lead column of the three-column ion exchanger will contain enough accumulated cesium to require its regeneration. That lead column is then taken off line to be regenerated while a waiting fourth column is valved-in for the CIX to continue further LAW treatment. That fourth column, containing reconditioned resin, is put in the last position (called the polishing position) of the three-column CIX unit and the column that had been in the second position (referred to the lag position) becomes the new lead column, and so forth. The pilot scale CIX unit operation, of the SIPP task, had only two columns, the lead and lag positions. The pilot operation consisted of the treatment with approximately 190 BV (BV = 2.34 liters) of simulated LAW, which was then followed by the regeneration of the lead column. A new cycle begins with the newly regenerated lead column in the lag position.

This section will explain the pilot CIX unit operation that was performed as part of Campaign III testing along with the previous reported Campaign II (Duignan et al., 2004b) results for comparison. The process started with the preparation of the feed product, which is permeate created by the UFP. An explanation of the chemical makeup of the feed stream will be followed by a short description on how feed was handled just before CIX operation and then how the waste stream was handled during and after ion exchange. That section will be followed by a discussion of the experimental hardware and how the test was run. Finally, the results will be discussed and conclusions made.

2.8.1 Chemical Description of the Pilot-Scale CIX Feed Stream

The feed for the pilot-scale CIX unit operation was the permeate produced by simulant waste dewatering in the pilot-scale UFP unit operation. The chemical make-up of that feed was described in detail in Section 2.7.4.2.1 and will not be repeated here. Refer to that section and specifically to Tables 30 and 31 for information on the CIX feed (simulated LAW) stream.

2.8.2 Simulant Handling (Author – Williams)

2.8.2.1 Initial Preparations

Before beginning the CIX test, the solutions to be used to regenerate the lead column were made ready. Those solutions were:

1.	0.1 M NaOH	Displaced the LAW in IX column while maintaining high pH to prevent precipitation
2.	Deionized Water	Pre-elution rinse – Displaced the 0.1 M NaOH from IX column
3.	0.5 M HNO_3	Eluent – Displaced water and stripped Cs ions from resin by replacing them with hydrogen ions. Note: eluent is pumped into the column and eluate flows out of the column
4.	Deionized Water	Post-elution rinse – Displaced acid eluate from column
5.	0.25 M NaOH	Displaced water and regenerated the resin by replacing hydrogen ions with sodium ions

The regeneration caustic, 0.25 M NaOH, required a volume of 47.8 liters and it was made from DIF water and 50 wt% NaOH. Then it was stored in the Caustic Supply Tank before 25 May 2004. A large quantity of displacement caustic solution, 0.1 M NaOH was made with condensate and it was stored in a carboy labeled “Campaign 3-0.1 M NaOH for CsIX.” From this carboy 28.7 liters were removed and made ready for Campaign III before 2 June by adding it to the 0.1 M Caustic Supply Tank. To strip the ion-exchange (IX) resin of Cs ions, 70.1 liters of 0.5 M HNO_3 was made from deionized water and 70% HNO_3 and was placed in the Eluent Supply Tank before 2 June.

2.8.2.2 Handling of Pilot-scale CIX Feed LAW Simulant

The Simulant Supply that was produced during pilot-scale UFP operation was split into two equal parts for Cycle 3 and 4 of CIX operations. Both cycles processed 194 Bed Volumes (BV) (~453 liters) of fresh simulant. The treated simulant was transferred to the pilot-scale TLP Evaporator Feed Tank from CIX operations.

2.8.2.3 Handling CIX Regeneration and Campaign III CIX Recycle Streams

The flow rate and duration of each of the chemical streams, was set by communication from RPP-WTP. The different chemical effluents from the column/s were collected in different containers, either jugs or tanks. There is a transit time for a fluid to pass through a column or columns, depending on flow rate. For Campaign III, the effluent hose was moved from one container to another after the transit time had elapsed, where the transit time was based on a plug flow calculation through the columns.

2.8.3 Pilot CIX Equipment **(Author – Steimke)**

2.8.3.1 IX Resin Columns

Figure 32 is a picture of the two columns during Cycle 3 Regeneration and Fig. 33 is a schematic of the two ion exchange columns and peripheral equipment. The design is also documented in WSRC drawing EES-23041-R4-001.

Two ion exchange columns were designed and constructed for the SIPP task. The columns had an inside diameter of 5.5 inches and a target resin height of 6 inches[†], giving a height to diameter ratio of 1.1, the same ratio as for the WTP columns. Other hardware included pumps, tanks, flowmeters, pressure transducers, other instruments and a data acquisition system (DAS).

The hardware listed below was positioned inside the column with the following elevations with respect to the wedge screen (also known as: V-wire screen), that supported the resin. Note that the total liquid filled length of each column was 23.75”, i.e., 16.75”- (-7.00”), which is equivalent to an internal volume of 9.24 liters ~ 4 BV.

[†] The actual resin height is not fixed. As explained in the following sections, and shown in Table 38, the height resin in the columns changes from 6.25 inches, when the columns are initially filled, to as short as 5.4 inches after multiple resin regenerations.

Figure 32. Pilot-scale CIX columns: The left column (COLUMN 1) is undergoing resin regeneration during Cycle 3 operation

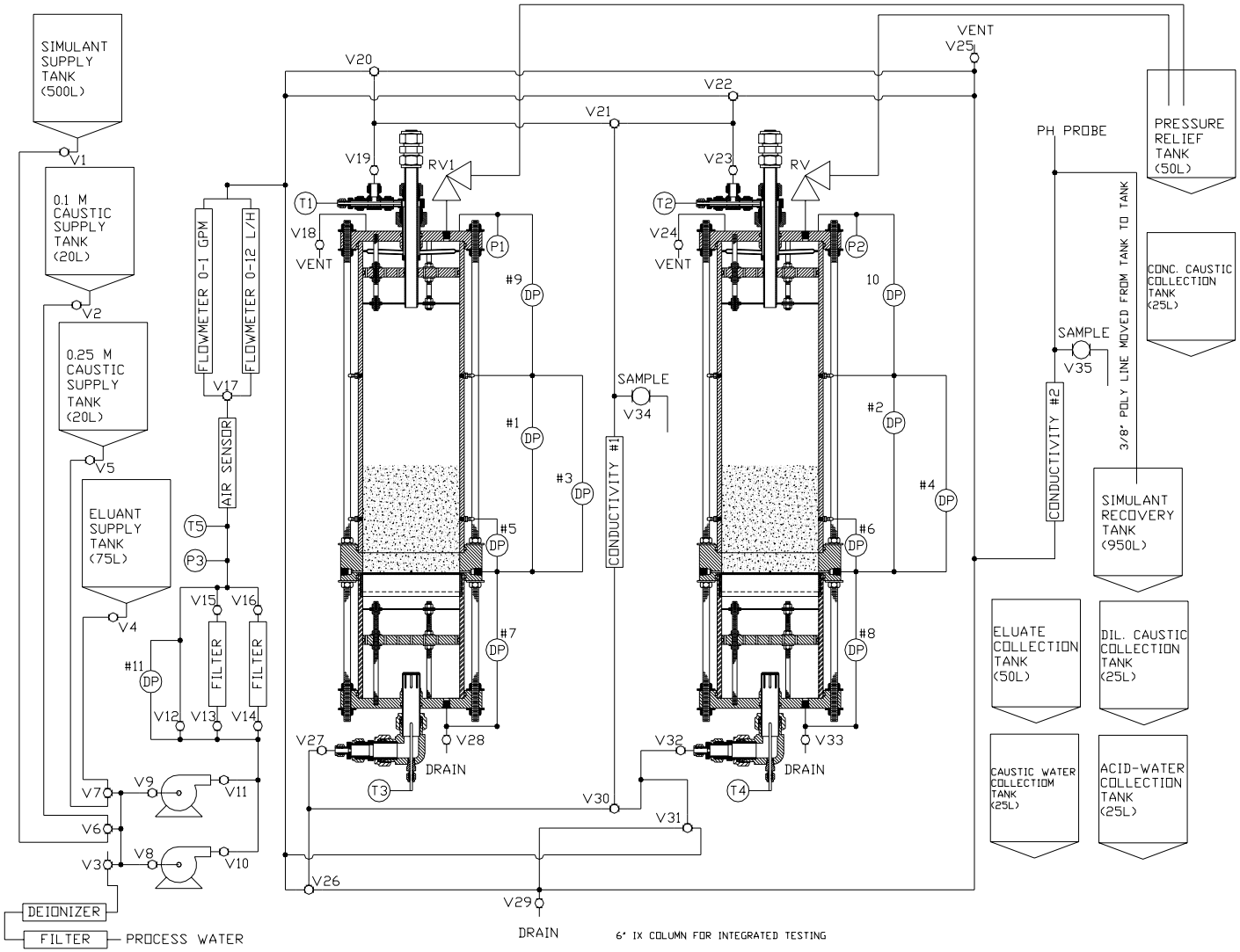

Figure 33. Schematic of Ion Exchange Facility for Integrated Testing

Elevation	Column Hardware Description
16.75”	Top of liquid filled space
16.00”	Flow distributor with six perforated arms
14.75”	Perforated PVC plate with thirty seven 3/64” holes
13.25”	Perforated stainless steel plate with 3/32” holes on a 5/32” triangular pitch
0”	Wedge screen (Vee wire screen) with 0.010” slots to support resin
-2.0”	Perforated stainless steel plate with 3/32” holes on a 5/32” triangular pitch
-3.50”	Perforated PVC plate with thirty seven 3/64” holes
-7.00”	Bottom of the liquid filled space

The purpose of the flow distributor and the two plates below it was to generate a more gradual transition of density when relatively dense simulant was introduced to the top of the column on top of lighter liquid. The purpose of the wedge screen was to support the resin while resisting plugging. The purpose of the bottom two plates was to generate a more uniform flow field in the event upflow operations were needed, however, the normal flow direction was down.

By opening the proper valve, feed could be drawn from one of five supply tanks, which contained either: LAW simulant, displacement 0.1 M NaOH solution, DIF water for rinsing, eluent 0.5 M nitric acid solution, or regeneration 0.25 M NaOH solution. The solutions were pumped by one or two gear pumps connected in parallel. Most of the time only one pump was sufficient, but two-pump operation was required for upflow. The facility contained two flowmeters in parallel, a high range flowmeter for upflow with a range of 0 - 1 gpm and a low range flowmeter for normal operation with a range of 0 - 12 L/hr (0 - 0.053 gpm). Valves allowed upflow or downflow through one column or two columns in series. The effluent line from the columns contained a pH probe, a conductivity probe and a thermocouple. A hose connected to the effluent line was placed in the appropriate collection jug for every step of the cycle. There were six collection jugs, one for each of the six steps of the cycle.

2.8.3.2 The Data Acquisition and Safety Circuitry

A Dell computer with LabVIEW™ software was used to acquire data, control the flow rate, and shut down the flow if any measured pressure exceeded the setpoint of 20 psig. There was also a pressure relief valve set at 45 psig connected to the top of each of the two columns. The discharge line of the pressure relief valves was a hose leading to a jug. There was also a spill detector with a sensor placed below the columns on the floor of the containment for the facility. Any spill would disconnect power to the pumps. There was also an air detector in the line leading from the solution supply tanks to the pump. Any air in the line would disconnect power from the pumps. A manual bypass switch was used to start the pump/s when there was initially air in the line. The air detector was used because oxygen can damage the wet resin, particularly when it is in a caustic state.

2.8.3.3 The Resin

To prepare the CIX resin, SuperLig®644, for use, it was taken from the 250-Gallon Batch (C-01-11-05-02-35-60). The resin was chemically pre-treated by washing with water, treating it in 0.5 M nitric acid, washing with water, treating it with 0.25 M sodium hydroxide and washing it with water. The pre-treated resin was then wet sieved under a nitrogen atmosphere to remove particles finer than 40 mesh.

The resin was added to the columns in the following way. A feed tank with an agitator was temporarily connected to the top of a column. The column was completely filled with 0.25 M NaOH solution, the feed tank was partially filled. The valve in the feed line between the tank and column was closed. Resin was added to the feed tank to form a 30% by volume slurry and the agitator was energized. The bottom of the column was connected to pump suction. Pump discharge was connected to a waste container. The valve in the feed line was opened and the pump was simultaneously energized to create a downward velocity of 14 cm/min (a flow rate equal to 0.58 gpm) which deposited a resin bed with the target average resin height of 6 inches. However, the initial resin deposition resulted in a crater about 1 inch deep in both columns. An upflow for two minutes at 13 cm/min was used to level the top of the resin beds. This process was repeated with the second resin bed. This was followed by pre-conditioning of both beds for thirty minutes with a flow rate of 15 cm/min of 0.25 M NaOH solution. At this time, both beds had a resin height of 6.25 inches. The columns were then ready for SIPP operation.

2.8.4 Pilot CIX Operation (Author – Steimke)

2.8.4.1 Chemical Testing

Each cycle of chemical testing had the following six chemical steps all in downflow: 1) LAW simulant, 2) 0.1 M NaOH displacement solution, 3) deionized water, 4) 0.5 M nitric acid eluent solution, 5) deionized water, and 6) 0.25 M NaOH regeneration solution. The total volume of LAW simulant used for each cycle was about 190 BV and simulant was always passed through both ion exchange columns connected in series. To reiterate, one BV was equal to 2.34 liters. All steps other than the simulant step were conducted through one column only. The 0.1 M NaOH step and the subsequent deionized water step (pre-elution rinse) were conducted at a flow rate of 3 BV/hr for one hour. The volume used for the elution step was 15 BV. The post-elution rinse was run at a flow rate of 1.4 BV/hr for 2.25 hours. The regeneration step was run at a flow rate of 3 BV/hr for 2 hours. (See Table 10 for Cycle 3 and Table 11 for Cycle 4.)

The six different chemical solutions were collected in separate jugs or tanks by moving the discharge hose of the columns. In Campaign II, for Cycles 1 and 2, the plan was to move the hose based on observing the change in the pH and/or conductivity probes. This proved to be difficult to implement. Therefore, in Campaign III, for Cycles 3 and 4, the

timing for moving the hose to a different container was based on a plug flow calculation of when the liquid front would reach the column discharge.

There was a 39-day period between the end of Cycle 2, part of Campaign II testing, and the start of Cycle 3, part of Campaign III testing. At the end of Cycle 2, the lag column was Column 1 and it contained simulant and the lead column, Column 2, which was regenerated, contained 0.25 M NaOH. At the request of RPP-WTP, both columns were displaced with 0.1 M NaOH and the resin soaked in that solution until the start of Cycle 3 for Campaign III testing. At the conclusion of all testing, the contents of both columns were displaced with 0.1 M NaOH solution.

2.8.4.2 Test Matrix Highlights

The entire CIX test matrix is shown in Tables 10 and 11 with each cycle operation occurring on the dates listed in Table 36. For convenience some key parameters are listed below for Campaigns II and III:

- Cycles 1, 2 and 3 had a simulant flow rate of 3 BV/hr. The simulant flow rate for Cycle 4 was 4.5 BV/hr.
- Cycles 1 and 4 had an eluent flow rate of 1 BV/hr. The eluent flow rates for Cycle 2 and 3 were 0.5 BV/hr and 2.0 BV/hr, respectively.
- Column 1 was the lead column for Cycles 1 and 3. Column 2 was the lead column for Cycles 2 and 4.

Table 36. Cycle Dates of Operation

Cycle	Start date	Finish date
1	4/26	5/4
2	5/4	5/12
3	6/21	6/29
4	6/29	7/7

2.8.5 Pilot CIX Discussion of Results (Author – Steimke)

2.8.5.1 General Results

This section presents an overview of the results. The following sections give the detailed results.

The IX facility was used to run four ion exchange cycles, where a cycle consisted of six chemical steps. Table 37 lists the volumes of fresh LAW simulant that were pumped through the two beds connected in series. At 2.34 liters per bed volume, these volumes translate to about 190 BV. In addition, the final 9 liters of simulant that were pumped into the lead column, Column 1, for Cycles 1 and 3, were added to the fresh simulant in the simulant supply tank for use in Cycles 2 and 4 to mimic WTP operation.

Table 37. Highlights of the Pilot-Scale CIX Cs removal efficiency

Cycle	Fresh simulant volume, L	Fresh simulant volume, BV	Percent cesium removal by lead column	Percent cesium removal by both columns
1	428	183	99.6	greater than 99.9
2	437	187	99.7	greater than 99.9
3	453	194	98.5	greater than 99.8
4	453	194	98.2	greater than 99.7

The lead column removed the great majority of the cesium and the lag column removed most of the remaining cesium. Note that the percentage of cesium removed by the lead and lag columns decreased over the course of four cycles. The values in the last column are stated to be "greater than" the amount listed because of the measurement uncertainty discussed in Section 2.8.5.3.1.

During ion exchange operation, the axial pressure drop was measured for both resin beds. The maximum pressure drop occurred during the simulant step, because the simulant has about three times the viscosity of the other solutions. Pressure drops generally increased over the four cycles. The axial pressure drop across the bottom 3" of the resin column was also measured. That pressure drop was close to half of the total pressure drop for 6" of resin. This implies a resin bed with uniform permeability and no significant cracking or fissuring.

A cesium mass balance was performed for all four cycles. The cesium masses in and out of the columns agreed within the accuracy of the ICP-MS (inductively coupled plasma mass spectroscopy) used for measuring cesium in 5 molar sodium solution. During elution of each of the lead columns fifteen bed volumes of 0.5 M nitric acid were used. After only the first three BV, about 90% of the cesium was eluted from the bed.

2.8.5.2 Hydraulic Observations

Table 38 summarizes some important hydraulic results from Campaign III (Cycles 3 and 4), but also includes the results from Campaign II (Cycles 1 and 2) so the complete set of cycles can be compared. Note, that the simulant had a density of 1.25 g/mL.

Table 38. Hydraulic Summary

Cycle	Simulant ΔP Col. 1 (in. H_2O)	Simulant ΔP Col. 2 (in. H_2O)	Resin height in simulant, Col. 1, (inches)	Resin height in simulant, Col. 2, (inches)	Simulant superficial velocity, Col. 1, (cm/hr)	Simulant superficial velocity, Col. 2, (cm/hr)
1	0.6 (Lead)	0.5 (Lag)	5.6	5.8	46	46
2	0.6 (Lag)	0.7 (Lead)	5.4	5.7	46	46
3	1.0 (Lead)	0.7 (Lag)	5.6	5.9	46	46
4	1.2 (Lag)	1.3 (Lead)	5.7	5.8	69	69

Figure 34 plots the flow rates during Cycle 1, typical results, for all six solutions used. The large fluctuations in flow rate for the two water rinses occurred because the deionized water used lacked sufficient ions for the magnetic flowmeter to achieve a steady reading. However, flow checks using a volumetric cylinder and stopwatch showed that the average flow reading was correct. Figures 35 and 36 plot the axial pressure drops across the lead and lag column resin beds during Cycle 1. There were duplicate measurements of the pressure drop across the entire resin bed and one measurement of the axial pressure drop across the bottom 3 inches of the resin bed. The duplicate pressure drop measurements agree. The highest pressure drops were for the simulant step because of its higher viscosity. The pressure drop across the bottom 3 inches was about half of the total pressure drop, as expected. The total axial pressure drop across the bed for simulant was about 0.6 inches of water. By way of comparison, the 24-Inch Column Test (All-In Test) (Fowley et al., 2004) had an axial pressure drop for Cycle 1 of 16 inches of water for a resin height that was four times as great and a superficial velocity that was seven times as great (5 cm/min vs. 0.75 cm/min). That is, the 24-Inch Column Test axial pressure drop was 27 times as large, which agrees well with the product of the resin height ratio (4) and the velocity ratio (7).

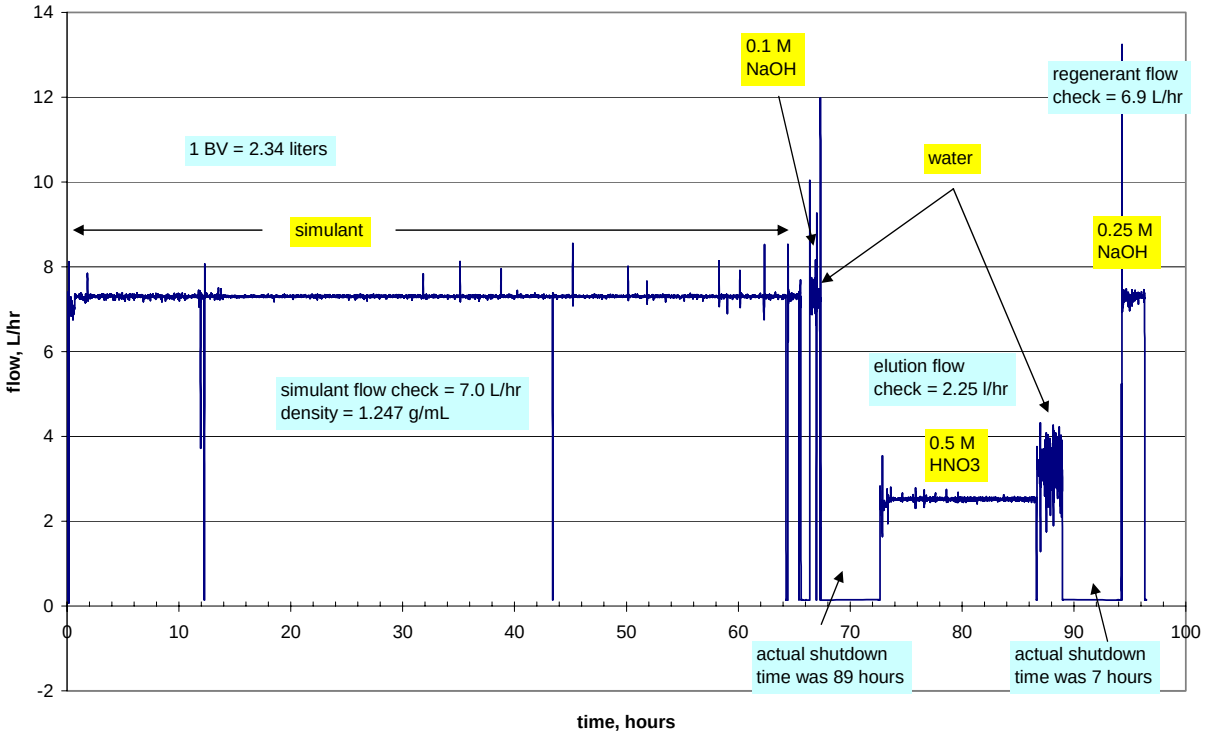

Figure 34. Flow rate During Cycle 1

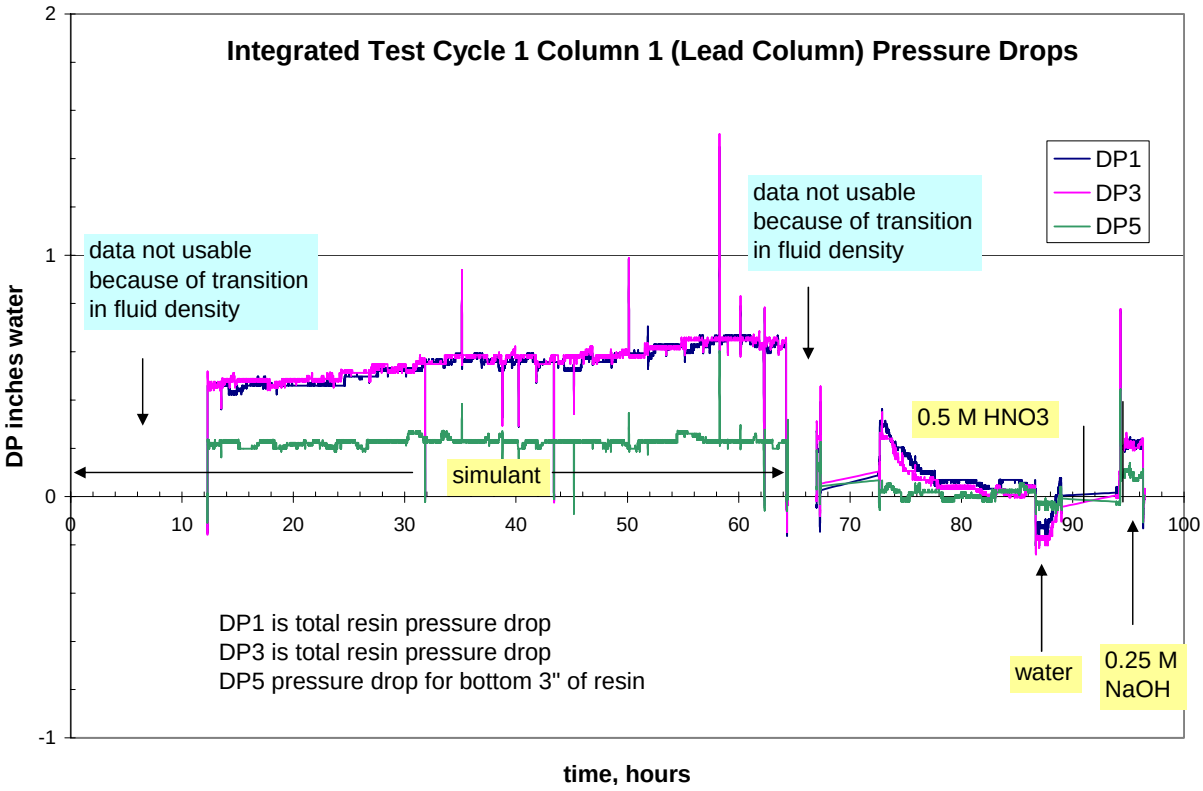

Figure 35. Pressure Drop Across Resin Bed for Lead Column and Cycle 1

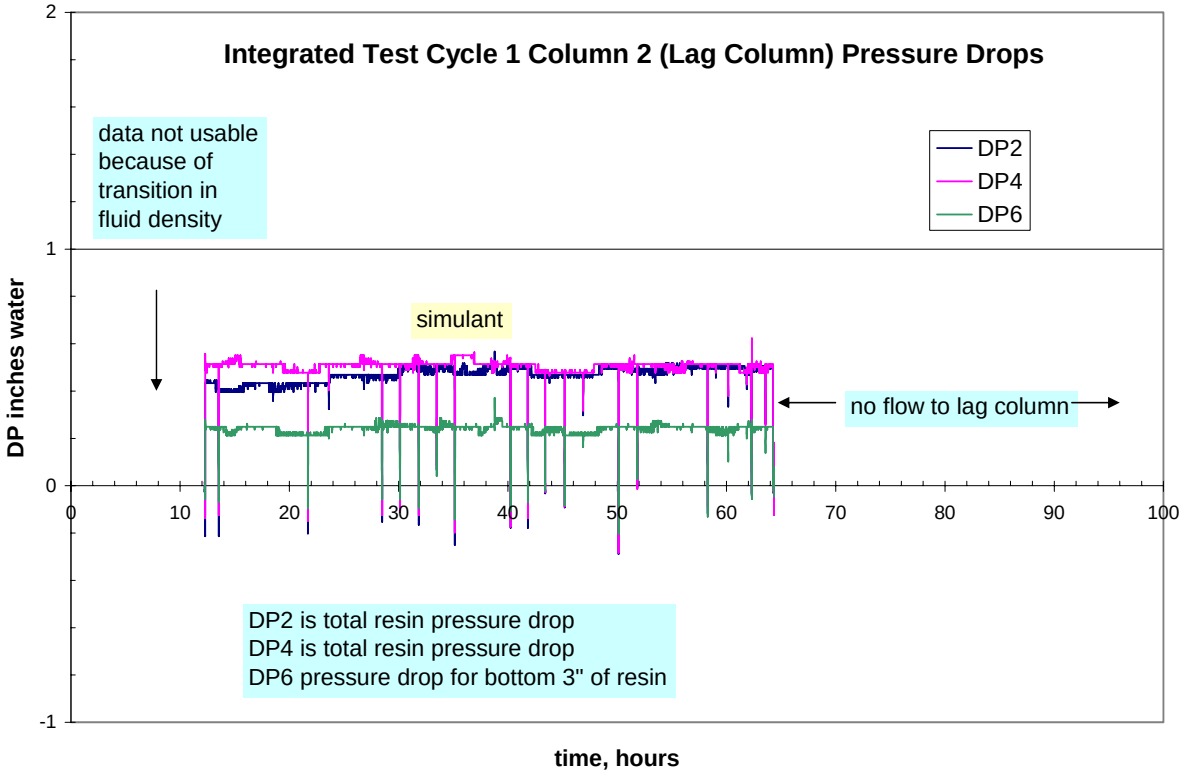

Figure 36. Pressure Drop Across Resin Bed for Lag Column and Cycle 1

Resin bed heights during Cycle 1 are plotted in Fig. 37. The plot shows the expected variation with the smallest resin bed height during the elution step.

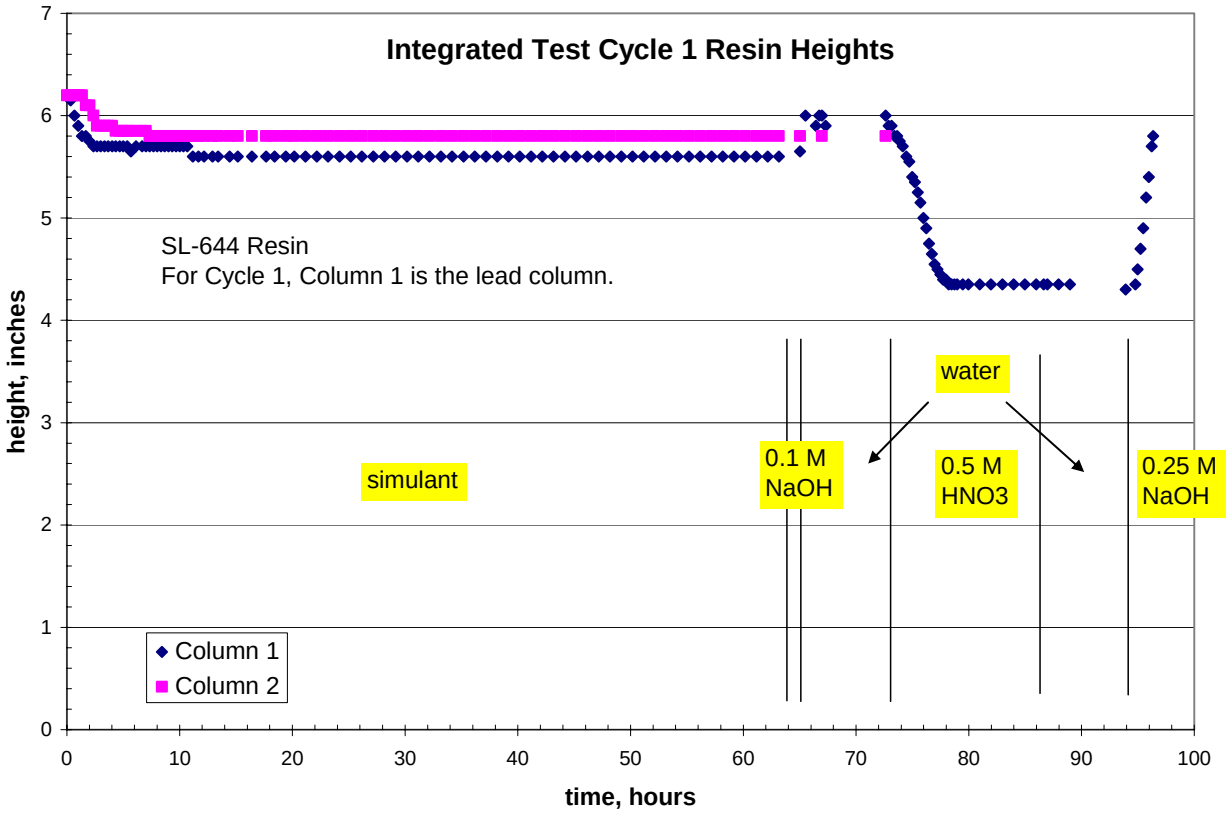

Figure 37. Resin Bed Height During Cycle 1

Table 39 lists the volumes of the different solutions. Note that some of the volumes are less than the internal volume of the column.

Table 39. Comparison of the Volume for Each of the CIX Regeneration Process Solutions to the Internal Volume of Pilot-scale CIX Column

Regeneration Process Solution	Volume Introduced into Column	Internal Internal Volume of the pilot-scale CIX column
	BV	BV
0.1 M NaOH	3	4
Water	3	4
0.5 M HNO3	15	4
Water	3	4
0.25 M NaOH	6	4

Figures 38 and 39 show the measured pH and conductivity of the column effluent as a function of bed volume for Cycle 1. The X axis for these plots is cumulative volume reaching the exit of the column expressed in BV. The pH plot has the expected shape, with one exception. The particular pH probe used was designed to have a range from zero to 12; we did not find a pH probe with a wider range that would also withstand long immersion in our solutions. Therefore, the probe read about 12 for solutions with pH that high and higher. The timing for changes in pH agrees well with the times computed using a plug flow calculation for when a new solution would reach the column exit. During the regeneration step with 0.25 M NaOH, the pH increased to almost 12, implying that the caustic wave had broken through the column.

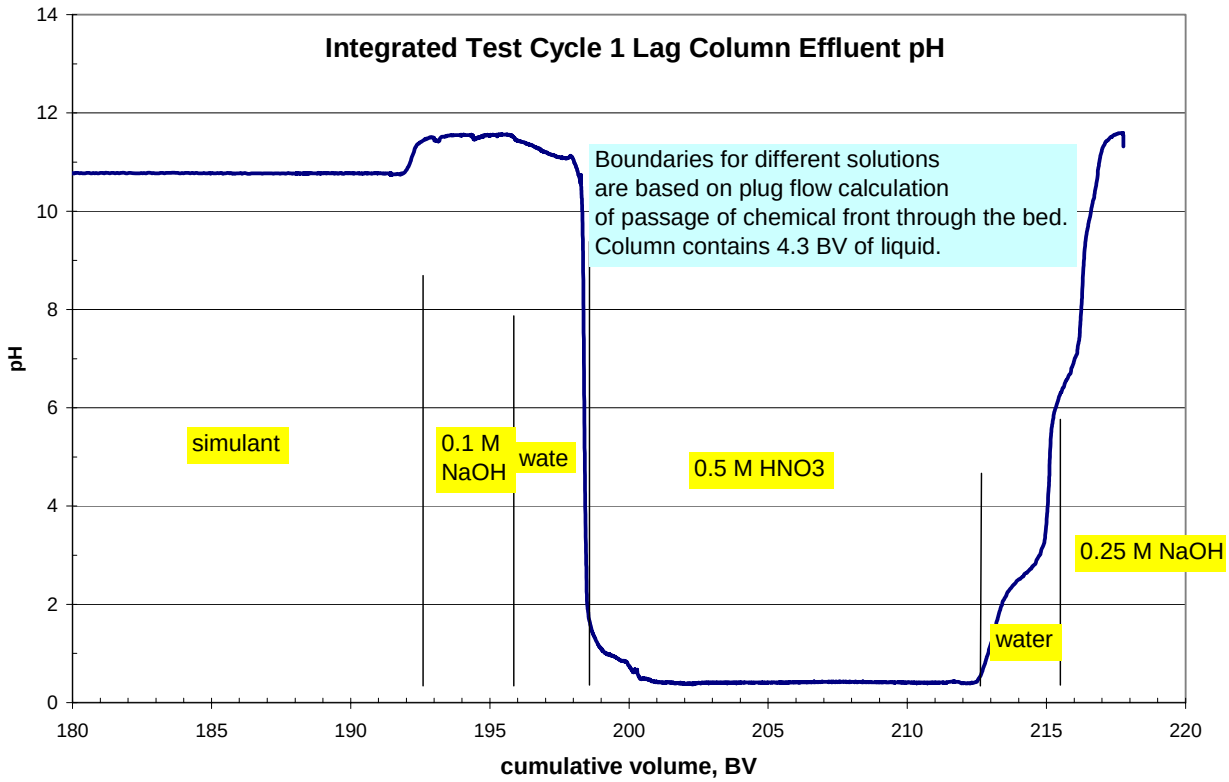

Figure 38. Effluent pH During Cycle 1

The conductivity probe reading, plotted in Fig. 39, told a somewhat different story than the pH probe. The conductivity plot has a noisier appearance than the pH plot because electrical conductivity is roughly proportional to ionic concentration and pH is proportional to the logarithm of hydrogen ion concentration. There are definite spikes in the measured conductivity at the simulant and 0.1 M NaOH transition and also at the acid and water transition. Conductivity of an aqueous solution increases with temperature. These spikes may have occurred as a result of heat of mixing. After acid is introduced to the column, most of the change in conductivity occurs in the first 3 to 5 BV. However, the conductivity appears to be changing slowly during the remaining period that acid flows through the column, which indicates that the resin may continue to consume small amounts of acid. When 0.25 M NaOH is introduced to the column, the conductivity

reading never increased very much. This implies that nearly all of the sodium ions in the NaOH solution are loaded on the resin and nearly all of the hydroxide ions react with residual hydrogen ions on the resin to form water.

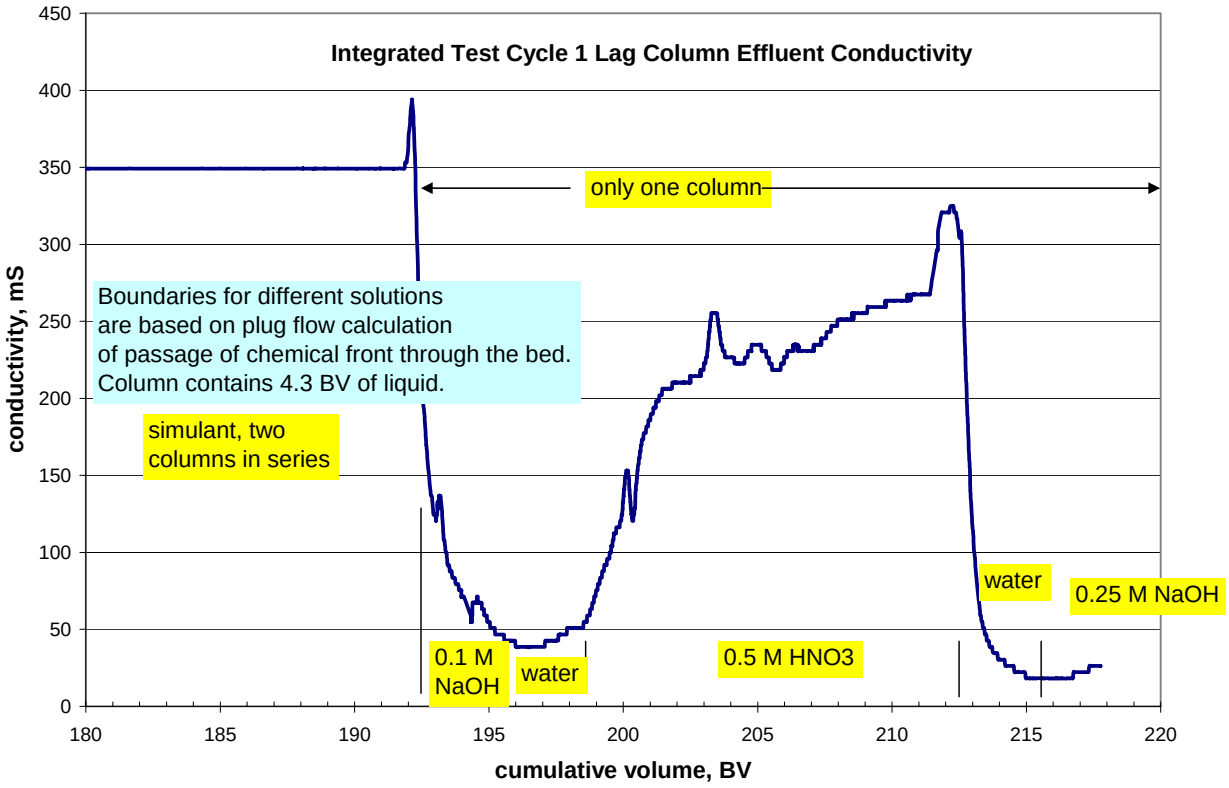

Figure 39. Effluent Conductivity During Cycle 1

Table 40 shows the response of the conductivity probe and pH probe when inserted into beakers of the various solutions. This table can be used to estimate how closely the transient conductivity and pH approached the steady-state values.

Table 40. Probe Responses for Standard Solutions

solution	conductivity	pH
DI water	<5	5 to 9
0.1 M NaOH	35	11.1
0.25 M NaOH	76	10.9
0.5 M HNO3	250	0.42

2.8.5.3 CIX Chemical Observations

2.8.5.3.1 Measurement Uncertainty

The purpose of the resin is to remove cesium from LAW solutions that contain a mixture of constituents and are 5 M in sodium. Evaluation of the effectiveness of the resin requires the measurement of cesium concentration under challenging conditions, that is, with a high concentration of sodium. The samples must be heavily diluted to reduce sodium concentration to a manageable level, which also dilutes cesium. The Analytical Development Section (ADS) of SRNL claimed an accuracy of ±20% of the stated value for these cesium measurements. Because of the large sodium concentration the accuracy was checked using spiked samples a well as blanks that were 5 M in sodium. The results are shown in Fig. 40.

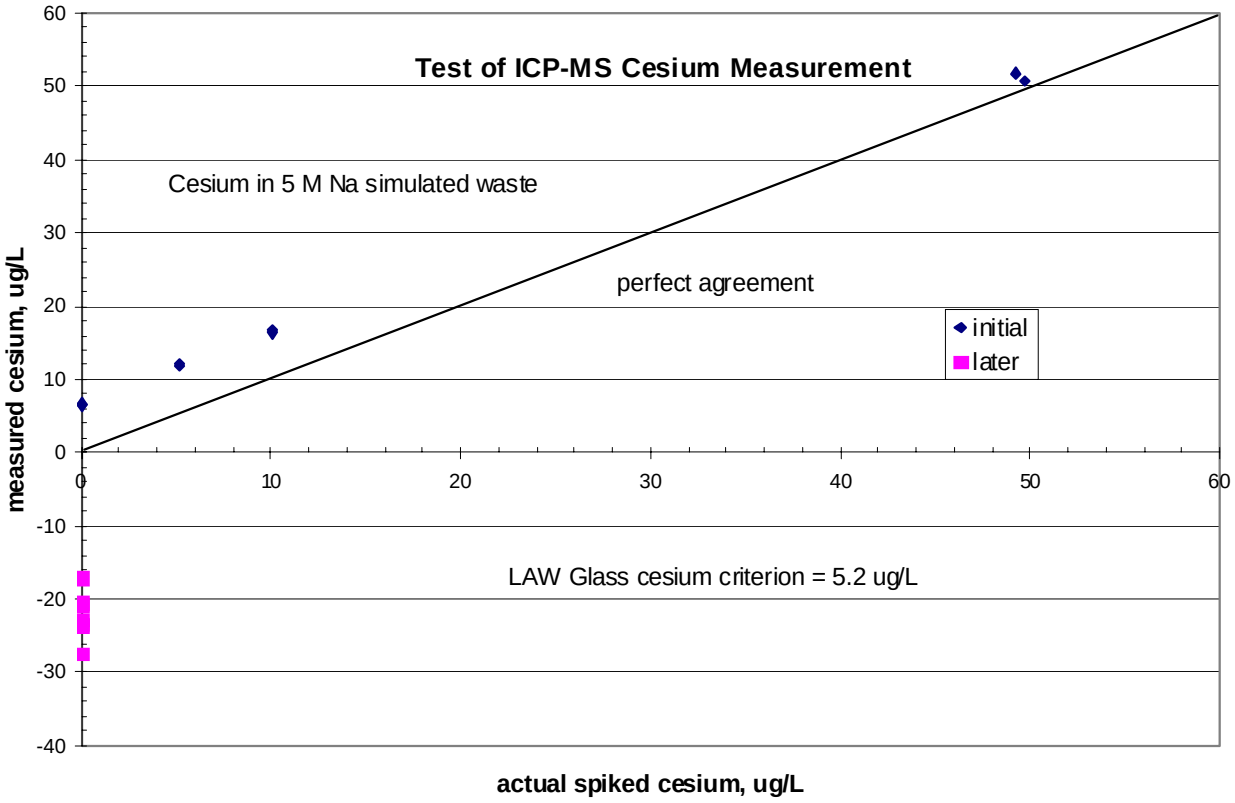

Figure 40. Test of Ability of ICP-MS to Measure Cesium

The initial results were encouraging and indicated a bias of less than 10 µg/L of cesium concentration for very low concentrations and less than 10% uncertainty for concentrations of 50 µg/L. Based on the initial results it appeared possible to correct for the bias. Unfortunately, later samples were analyzed to have negative concentrations as low as -27 µg/L. Of course, negative concentrations are physically impossible, but provide useful information about the accuracy of the measurement. Therefore, no effort was made to correct for bias and measurement uncertainty was treated as random. Previous measurements (Steimke, 2002), not plotted, for concentrations greater than 7000 µg/L confirmed a measurement uncertainty of ± 10% for higher concentrations. Therefore, the estimate for the uncertainty of cesium concentration measurements in this program is: ± (10% reading + 30 µg/L), which is expressed for 95% confidence limits.

It should be noted that, even the originally indicated bias of 10 µg/L was insufficient to meet SIPP needs. Before SIPP began, the original criterion for when a Lead column would need regeneration was when the cesium concentration of the exiting LAW stream from the lead column would exceed one-half the incoming concentration, i.e., 50% breakthrough. For Campaign III, the simulated LAW feed cesium concentration was 7760 µg/L (see Cs concentration of the UF (fresh) permeate in Table 42), therefore, detecting a concentration 3880 µg/L accurately would have been no problem. However, that criterion changed to a much more stringent one. The new criterion is based on when the exiting stream of a Lag column would contain a concentration of greater than 5.2 µg/L of cesium. Unfortunately, while some ADS cesium measurements appear to detect concentrations to better than 5 µg/L, as already stated, the actual ADS uncertainty is estimated to be ± (10% of a reading + 30 µg/L of cesium), implying that the detection limit for cesium is 30 ug/L. This relatively large uncertainty must be kept in mind when evaluating such low concentrations. However, changes in cesium concentration throughout a cycle are expected to indicate when the cesium concentration is increasing in the exiting Lag column stream.

2.8.5.3.2 <u>Cesium Removal Effectiveness</u>

Simulant is pumped through the lead column where most of the cesium is removed and then enters the lag column, where additional cesium is removed. Figure 41 shows the cesium concentration exiting the lead column for the four cycles, as a function of bed volumes passed.

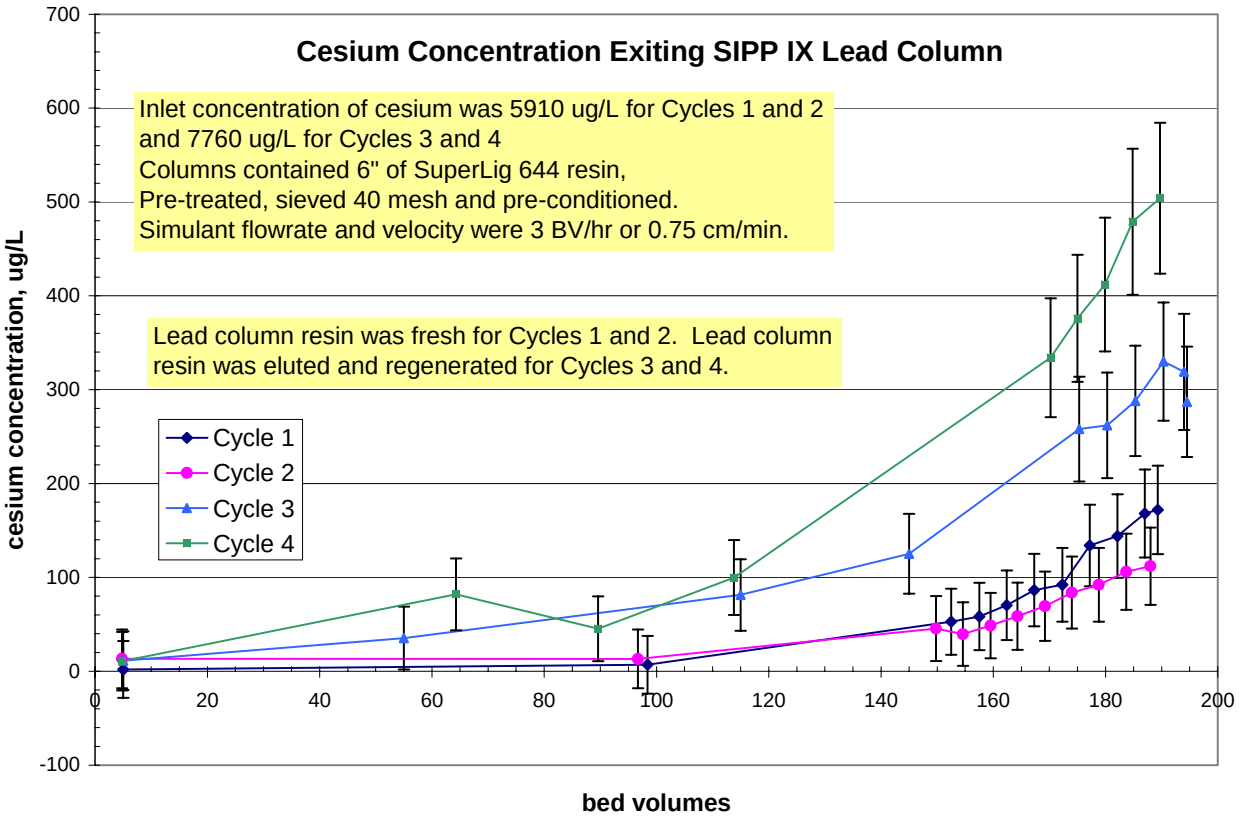

Figure 41. Cesium Concentration in Simulant Exiting Lead Column

Initially, the cesium concentration was low, or perhaps really zero when considering analytical uncertainty, and then increased. There is a general trend to more cesium escaping the lead column with additional cycles. Note that the lead column resin is fresh for Cycles 1 and 2 and has been eluted and regenerated for Cycles 3 and 4. For all four cycles the final effluent cesium concentration was less than 7% of the inlet simulant feed concentration.

Figure 42 shows the cesium concentration exiting the lag column. Considering the uncertainty in the analytical measurement of cesium, all of the measurements may really be zero. However, the measurement uncertainty does not allow determination of whether the RPP-WTP criterion, i.e., cesium concentration less than 5.2 µg/L from the lag column, is satisfied. The concentration measured for one sample, the sample collected at 175 BV for Cycle 4 was not plotted because it was so much higher than for the other samples. This sample was analyzed twice for cesium concentration and the results were 1190 µg/L and 1630 µg/L. Note that the lead column resin is fresh for Cycle 1 and has been eluted and regenerated for Cycles 2, 3, and 4.

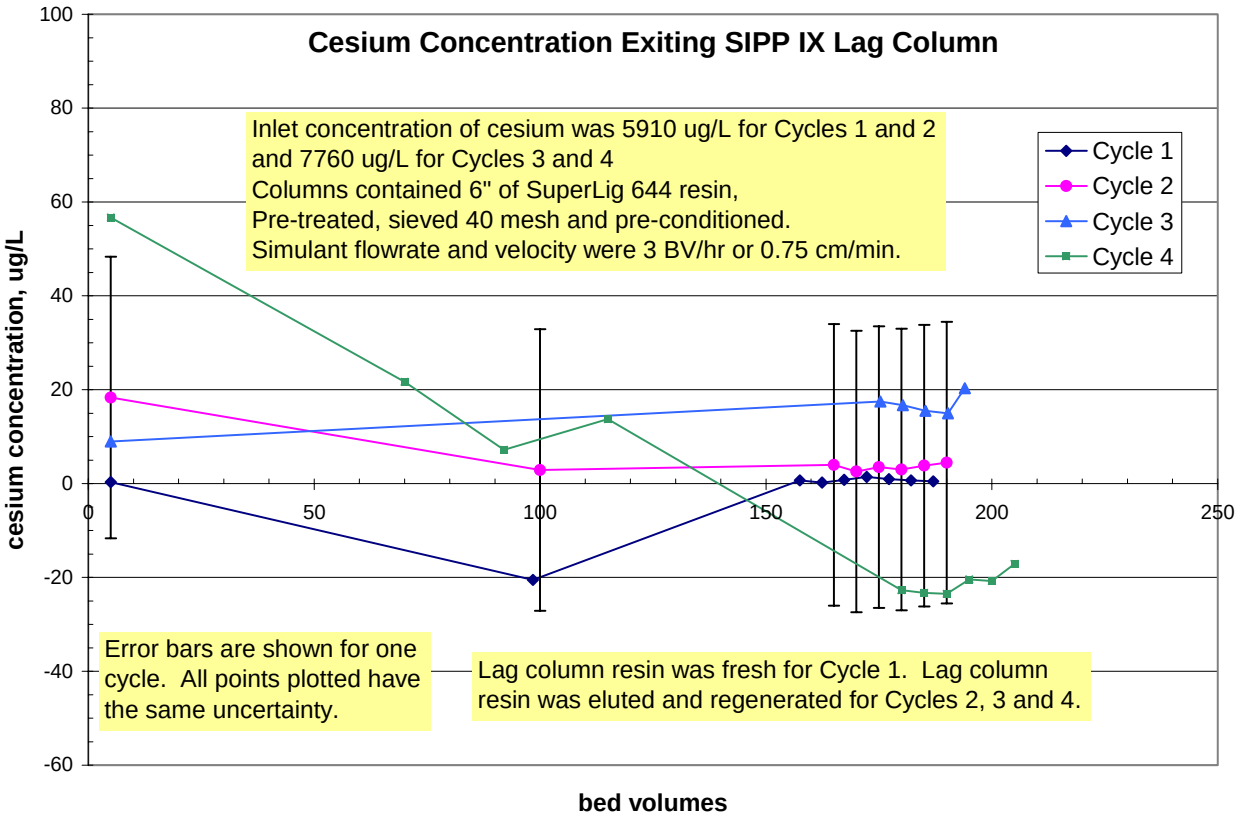

Figure 42. Cesium Concentration Exiting Lag Column

2.8.5.3.3 <u>Elutions of Resin Beds</u>

In all four cycles the lead column was eluted with 0.5 M nitric acid followed by regeneration with 0.25 M NaOH. For Cycles 1, 3, and 4 samples were collected of the eluate at regular intervals. Cesium concentrations are plotted in Figs. 43 and 44 as a function of cumulative flow.

Zero volume refers to the time when a plug flow calculation indicated that acid first reached the outlet of the column. There is no obvious difference in the elution profiles for Cycles 1, 3, and 4. Note that the concentration of cesium peaks when the front of acid reaches the outlet of the column. Also note that the great majority of the cesium is removed by the first 5 BV of eluent.

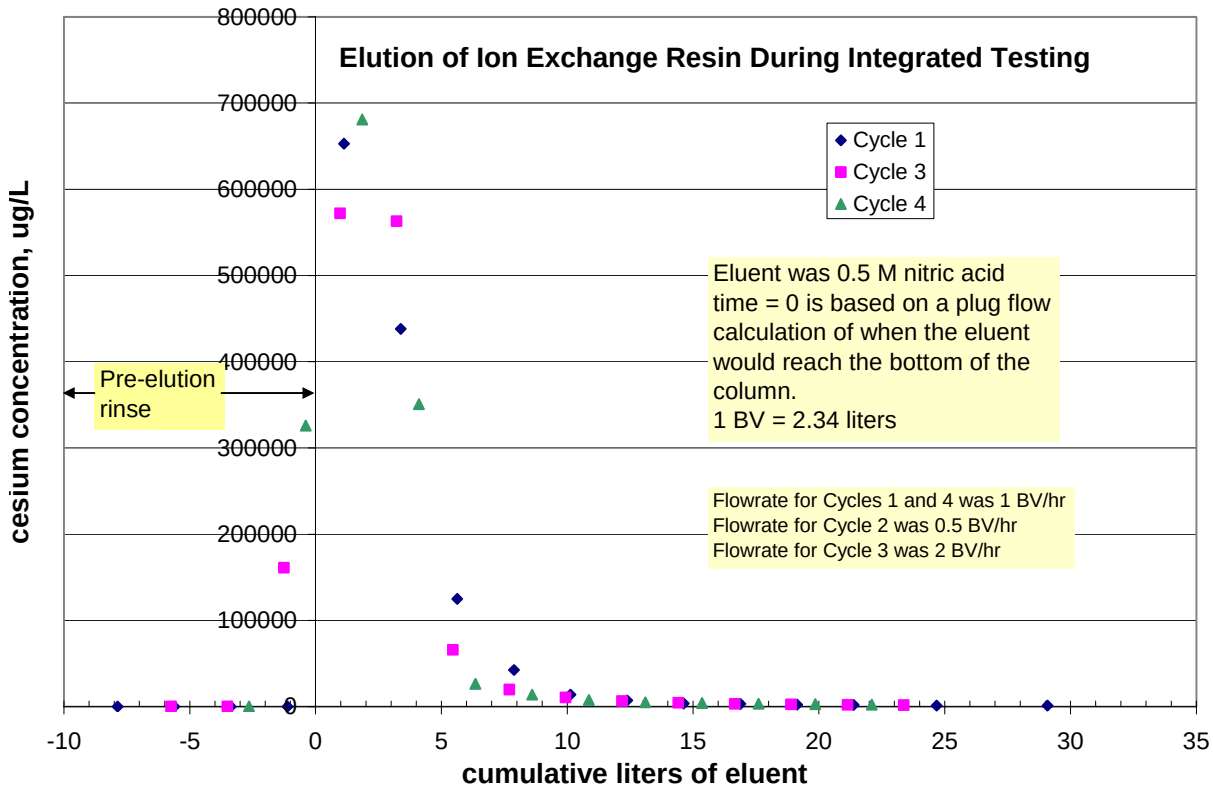

Figure 43. Elution Plot, Linear

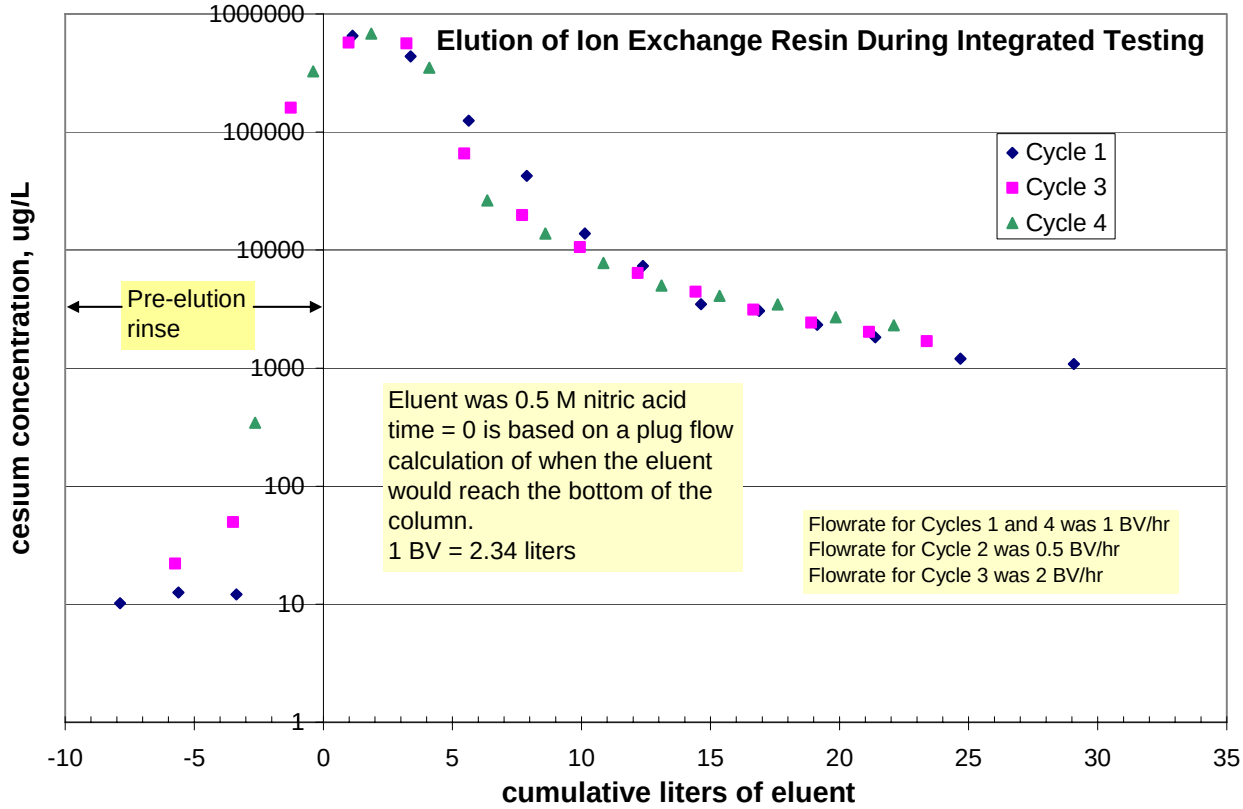

Figure 44. Elution Plot, Logarithmic

2.8.5.3.4 Cesium Mass Balance

In the CIX unit operation, cesium enters the two IX columns dissolved in simulant and leaves the columns in simulant at a much lower concentration and also in eluate and other solutions. The cesium mass entering should equal the cesium mass leaving plus any accumulation. The accumulation or cesium inventory change on the resin was assumed to be small, as is implied by Table 37. To perform this calculation, the LAW feed and receipt tanks were calibrated for volume and the results are discussed below. For some solutions the volume was calculated based on the average calibrated flow rate and the elapsed time. Mass balances are listed in Tables 41 and 42. For all four cycles the cesium mass in agrees with the cesium mass out to within measurement uncertainty, which is expressed for 95% confidence limits. As previously mentioned in Section 2.8.5.3.1, the uncertainty of measuring cesium concentration was ±(10% of reading + 30 µg/L). The uncertainty in measuring volume was ±3 liters for simulant and ±1 liter for the other solutions. The mass of cesium in a solution is equal to the cesium concentration multiplied by the solution volume. The cesium mass out was the sum of the masses for the various solutions. The uncertainty on the cesium mass out was computed as the root sum square of the uncertainties for the various solutions.

Table 41. Mass Balances for Cycles 1 and 2

Cycle 1 Solution	volume liters	cesium conc., mg/L	ADS Sample No.	cesium mass, mg	mass uncert-ainty, mg	Cycle 2 Solution	volume liters	cesium conc., mg/L	ADS Sample No.	cesium mass, mg	mass uncert-ainty, mg
fresh simulant in	428	5.91	207820	**2529**	**± 284**	fresh simulant in	437	5.91	207820	2583	± 289
						Cycle 1 spent simulant	9.4	0.12	208198	1	± 0
						total Cs in				**2584**	**± 289**
simulant out	408	0.0213	209494	9	± 2	simulant out	427	0.00897	209495	4	± 1
final simulant	9.4	0.12	208198	1	± 1	final simulant	20	0.102	208358	2	± 1
0.1 M NaOH	12.2	0.344	208509	4	± 1	0.1 M NaOH	44.5	50.6	208359	2252	± 277
pre-elution rinse	0.7	70.8	208497	50	± 76	pre-elution rinse	0	0	208515	0	± 0
eluate	31.5	87.2	208200	2747	± 363	eluate	6.8	2.47	208360	17	± 4
post-elution rinse	7.5	0.887	208201	7	± 2	post-elution rinse	5.2	0	208361	0	± 0
regenerant	4	0.0336	208510	0	± 0	regenerant	11	0.0109	208362	0	± 0
total Cs out				**2817**	**± 371**	total Cs out				**2274**	**± 277**

Table 42. Mass Balances for Cycles 3 and 4

Cycle 3 solution	volume liters	cesium conc., mg/L	ADS Sample No.	cesium mass, mg	mass uncert-ainty, mg		Cycle 4 solution	volume liters	cesium conc., mg/L	ADS Sample No.	cesium mass, mg	mass uncert-ainty, mg
fresh simulant in	453	7.76	209229	**3515**	**± 388**		fresh simulant in	453	7.76	209229	3515	± 388
Cycle 2 spent simulant (1)							Cycle 3 spent simulant	9	0.363	211124	3	± 0
							total Cs mass in				**3519**	**± 388**
simulant out	434	0.0237	209496	10	± 14		simulant out	439	0	209497	0	± 13
final simulant	9.4	0.363	211124	3	± 1		final simulant	19.3	0	211130	0	± 1
0.1 M NaOH	7.7	41.3	211125	318	± 73		0.1 M NaOH	8.8	0	211131	0	± 0
pre-elution rinse	7.1	39.8	211126	283	± 68		pre-elution rinse	7.3	16.6	211132	121	± 29
eluate	31.3	87.3	211127	2732	± 361		eluate	33.4	91.9	211133	3069	± 400
post-elution rinse	7.8	0.694	211128	5	± 1		post-elution rinse	7.7	0.456	211134	4	± 1
regenerant	13.8	2.23	211129	31	6		regenerant	13.2	0.352	211135	5	± 1
total Cs out				**3383**	**± 375**		total Cs out				3199	**± 401**

(1) The small volume of Cycle 2 spent simulant obtained during Cycle 2 regeneration is included fresh simulant. There was no separate concentration measurement made. That is, the 3515 mg of Cs in the fresh simulant includes the few milligrams of Cs from the Cycle 2 spent simulant.

As a consistency check on the outlet cesium, the total cesium in the composite eluate and the composite pre-elution rinse was compared with the integral of the data plotted in Figure 43. In principal, the integral should give the same mass as the composite samples. The integral was calculated numerically using three methods, the Trapezoidal Rule and two variations of Simpson's Rule. The Trapezoidal Rule approximates the integral as a series of trapezoids. The area of each trapezoid is computed as the length of the base of the trapezoid multiplied by the average height. Simpson's Rule approximates segments of the data as parabolas. Simpson's Rule was applied two different ways. Recall that the equation for Simpson's Rule is:

$$\int (x)dx = h/3\ (f(x_0) + 4f(x_1) + 2f(x_2) + 4f(x_3) + \ \ldots. + 4f(x_{n-1}) + (f(x_n))$$

where h is the difference in x between adjacent points. First, Simpson's Rule was applied to the data in Fig. 43. Then, two additional points with concentration equal to zero were added to the beginning and end of the data set. Then Simpson's Rule was applied again. The two applications of Simpson's Rule give different results depending on whether the data point with the largest concentration is multiplied by two or four. The results for cesium mass in the eluate are shown in Table 43. No results are listed for Cycle 2 because no periodic eluate samples were collected during Cycle 2. The masses of cesium calculated using numerical integration agree reasonably well with the masses determined using composite samples.

Table 43. Mass of Eluate Cesium as a function of Integration Method

Cycle number	Trapezoidal Rule, mg Cs	Simpson's Rule a, mg Cs	Simpson's Rule b, mg Cs	Cs from composite, mg
1	2911	2679	3136	2797
3	3164	3090	3236	3015
4	3203	3188	3217	3190

2.8.6 Pilot CIX Conclusions (Author – Steimke)

- Pressure drops for the four cycles were low and the resin bed permeability was approximately the same as were measured for the 24-Inch Column Test (Fowley et al, 2004).
- The pressure drop across the columns for flow of simulant generally increased during the four cycles. [0.5 to 1.3 in. H_20, Table 38]
- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of simulated waste were treated. In fact, as shown in Fig. 41, in the worst case, Cycle 4, even after 190 BV of treated waste only the lead column exit cesium concentration was less than 7% of the feed waste.

- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical difficulty of measuring very low cesium concentrations in five molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of simulated waste were treated. This fact was known before the start of testing.
- The fraction of the original cesium that was removed by the lead column decreased from 99.6% for Cycle 1 (in Campaign II) to 98.2% for Cycle 4 (in Campaign III). (Table 37).
- The masses of cesium in and out of the resin beds for all four cycles balanced to within measurement uncertainty.

2.9 PILOT TREATED LAW EVAPORATOR (AUTHORS – ADAMSON, WILLIAMS & ZAMECNIK)

The Treated LAW Evaporator Process, or TLP, is the last separation technology unit operation in the RPP-WTP Pretreatment Facility that a waste will see on start up. With respect to SIPP, it will be the last separation operation in line because it evaporates the treated LAW products that come from the pilot CIX unit operation. This treated LAW product is then mixed with recycle streams to produce a feed stream for the TLP unit operation.

This section will explain the pilot TLP unit operation that was done as part of Campaign III testing. The process started with the preparation of the TLP feed product in a predetermined fashion, see Table 4. That chemical explanation of the feed stream formation will be followed by a short description on how feed formation was handled just before TLP operation and then how the waste stream was handled during and after its concentration. The following sections will discuss the physical equipment used to evaporate the waste and how the test was run. Finally, the results will be discussed and conclusions made.

2.9.1 Chemical Description of the Pilot TLP Feed Stream (Author – Zamecnik)

The TLP evaporator feeds consisted of the Ion Exchange product (Treated LAW), the LAW SBS condensate supplied by VSL, and IX regeneration solution displaced by feed. The compositions of the IX feed (similar to IX product except for Cs) and the LAW SBS Condensate are given in Table 44. The regeneration solution consisted of 20.5L of actual regeneration solution plus 17.3L of simulated regeneration solution; both were essentially 0.25M NaOH. The calculated and measured TLP Feed compositions are also shown in Table 44. The composition of the IX product was not measured (except for Cs). The values in this table show that the measured TLP feed composition was slightly more dilute than expected from the calculation. A possible reason for this difference is that the IX product was likely slightly more dilute than the IX feed; this was also found to be true for Campaign II.

Table 44. Measured Composition of TLP Feeds

All values mg/kg unless otherwise noted	Ion Exchange Feed	LAW SBS Condensate	Feed Calculated	Feed Measured
Total Solids (wt%)	28.29	0.26	16.32	16.23 to 16.24
Undissolved Solids (wt%)	0.00	0.17	0.07	0.07 to 0.15
Supernate Solids (wt%)	28.29	0.09	16.26	16.10 to 16.18
Density (kg/L)	1.248	1.002	1.130	1.134
Ag	0.76	<3.9	0.44	<50
Al	5136	7.53	2947	2900
B	85.7	132	103	
Ba	<1.3	<0.26	0	<2.0
Ca	<3.6	<0.39	0	<6.6
Cd	<0.04	<0.26	0	<2.4
Ce	<1.0	<10	0	<128
Co	<0.11	<1.0	0	<7.3
Cr	139	5.26	81.6	82.8
Cu	<0.03	<0.39	0	<8.3
Fe	1.36	11.7	5.55	15.0
K	16346	123	9420	
La	0.85	<1.3	0.49	<116
Li	1.72	11.5	5.68	1.00
Mg	<0.24	3.56	1.45	<14
Mn	<0.02	<0.12	0	<1.5
Mo	8.65	<1.3	4.96	<17
Na	88141	587	50874	47684
Nd	<1.5	<12	0	<43
Ni	0.25	0.34	0.28	<10
P	554	<10	317	371
Pb	<0.36	<10	0	<114
Re		21.8	8.88	
S	905	78.0	551	502
Si	42.1	21.8	33.0	0
Sr	0.16	<0.07	0.09	8.00
Ti	0.10	1.15	0.53	<23
Zn	2.37	1.29	1.88	<61
Zr	1.43	1.29	1.35	<8.0
bromide	<80	<86	0	<61
chloride	1082	626	875	795
fluoride	44.9	146	85.1	56.0
formate	1066	32.9	624	521
nitrate	72917	135	41852	37200
nitrite	23077	2575	14278	12300
oxalate	658	<86	377	374
phosphate	1963	<86	1125	1220
sulfate	2853	233	1730	1570
ammonium	<80	990	827	785

2.9.2 Simulant Handling (Author – Williams)

To make feed for the pilot-scale TLP, on 6 July 2004 the 1,132 kg of treated simulant processed through the CIX were mixed with 805.0 kg of LAW SBS Quencher from VSL, a recycle stream. For Campaign III, 21.4 kg of 0.25 M NaOH Regen Solution from Campaign II CIX was added to 17.8 kg of 0.25M NaOH made with DI water and used as per the Test Specification (Longwell, 2003). However, the mixing was done only intermittently as the ammonia smell was quite strong. Additional ventilation was employed for all operations subsequent to LAW SBS Quencher addition due to strong ammonia smell. Samples were pulled for analysis during and following TLP Evaporator operations to measure the ammonia concentration (see Table 46).

Upon startup, on 8 July, 2004 of TLP operations, a total of 309 g of DOW Corning Q2-3183A Antifoam was added directly into the evaporator in three batches of 103 g each in a 10:1 ratio with DIF water. The dilution was necessary to fully incorporate the antifoam because of its thick consistency. Despite having fewer recycle streams, the total volume of the TLP feed was larger than that for the FEP. Considering that the concentration target was different from the FEP bottoms, then the final concentrated TLP volume would be much larger than that for the FEP, in fact it was approximately 3.5 times larger. This meant that a steady-state evaporated concentration would be attained before exhausting the feed. Once the target slurry concentration was realized, then the TLP bottoms would have to be removed while more feed was being sent into the TLP at a rate that would keep the antifoam concentration at the target level of 1500 ppm. Of course, removing concentrated slurry meant removing its antifoam too. Therefore, antifoam had to be reintroduced periodically to maintain its concentration constant. Additional amounts of antifoam were added in batches and after approximately each 95 liters of TLP bottoms were removed, 192.5 grams of antifoam were added.

A total of 775.4 kg of TLP Evaporator bottoms were produced and placed in three drums labeled “Campaign III LAW Concentrated Slurry (Drum 1 of 3, 2 of 3, and 3 of 3)” for shipment to VSL on 9 July 2004. After Campaign III was complete, the condensate collected from both the TLP and FEP operations were combined as RLD (as already explained in the first paragraph Section 2.6.1.1 of the FEP). This mixing is how WTP will handle its condensate streams, which will then be made available to produce wash and caustic solutions. For SIPP the combined condensate streams will be used for Campaign IV wash and caustic solutions.

2.9.3 Pilot TLP Equipment (Author – Adamson)

One of the requirements for SIPP as per the Test Specification (Longwell, 2003) was to utilize and modify existing equipment in the Engineering Development Laboratory of SRNL. To that end only one pilot-scale evaporator was constructed to be used for both FEP and Treated LAW Process (TLP) testing, because the design of those RPP-WTP Pretreatment Facility evaporators is the same. The plan for the use of those two

evaporators during SIPP testing did not require simultaneous operation, therefore, once one unit operation test completed the test rig could be made ready for the subsequent unit operation. As such, the description of the pilot-scale TLP is the same as for the pilot-scale FEP and therefore will not be repeated here. Please refer to equipment description for the FEP in section 2.6.3.

2.9.4 Pilot TLP Operation (Author – Adamson)

Prior to the TLP evaporation campaign, the evaporator system was cleaned, rinsed and inspected. Clean water was then added to the evaporator pot and the system was operated for approximately two hours. The spent water was visually clear with a pH of 7.

The TLP evaporator was operated using Work Instructions, I-EDL-132 "SIPP Treated LAW Process (TLP) Evaporation Test." Manually recorded information was recorded in notebook (Adamson, 2004).

The TLP evaporation of Campaign III took place on 8 July 2004. It took approximately 11 hours to boil off 1,138.1 liters of water (condensate) from the TLP simulant feed (initial feed density = 1.135 kg/L) to obtain an average density of 1.365 kg/L at 20° C. The total volume of the TLP Campaign III concentrated product was 567.5 liters (149.9 gal).

The average condensate boil off rate for the TLP campaign III was 1.72 L/min (0.45 gpm). The design boil off target of the RPP Pilot-scale Evaporator system is 1.5 L/min (0.40 gpm).

Evaporation of the TLP simulant feed occurred at approximately 57°C under -12.80 psig vacuum (1.71 psia). The atmospheric pressure was approximately 14.51 psia during the campaign. However, due to pulling off the TLP concentrate and adding the cooler simulant feed, there were small fluctuations in the evaporator pot temperature and pressure as depicted in Figs. 45 and 46.

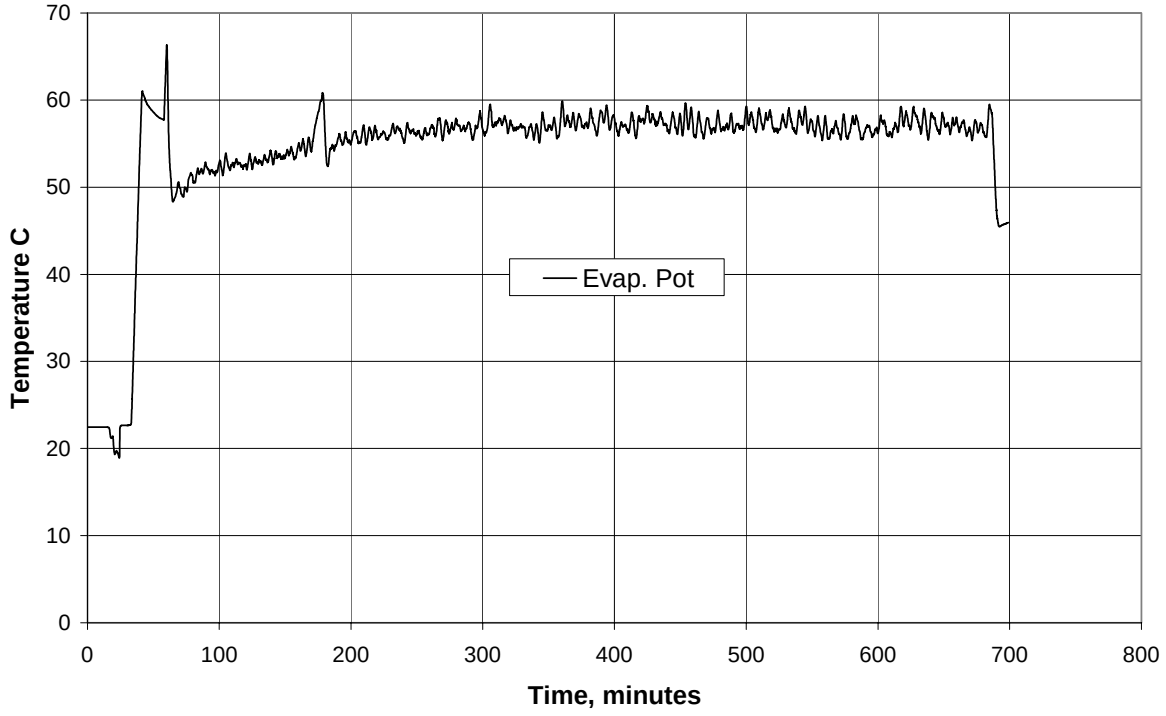

Figure 45. TLP Evaporator Pot Temperature during Campaign III

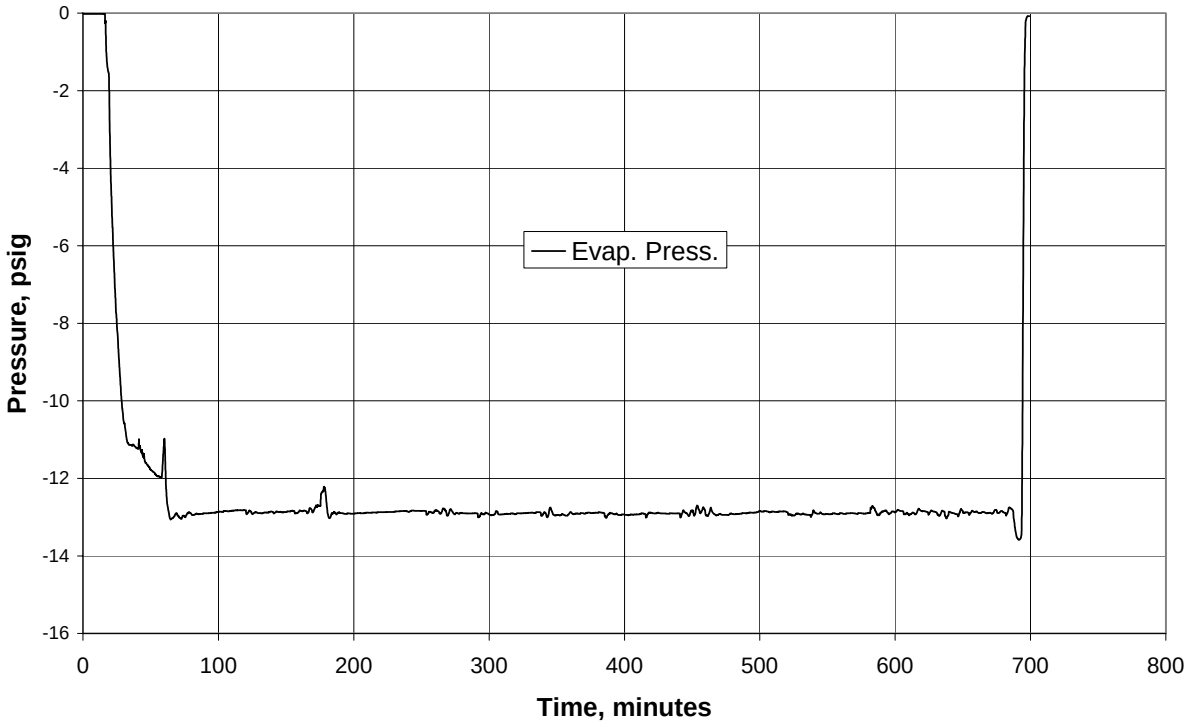

Figure 46. TLP Evaporator Pot Pressure during Campaign III

The TLP simulant was re-circulated through the reboiler and evaporator system, see Fig. 5, at approximately 89 gpm, as shown in Fig. 47. The recirculation of the simulant was continuous for the duration of the campaign. Also recirculation continued when removing the concentrate from the evaporator system.

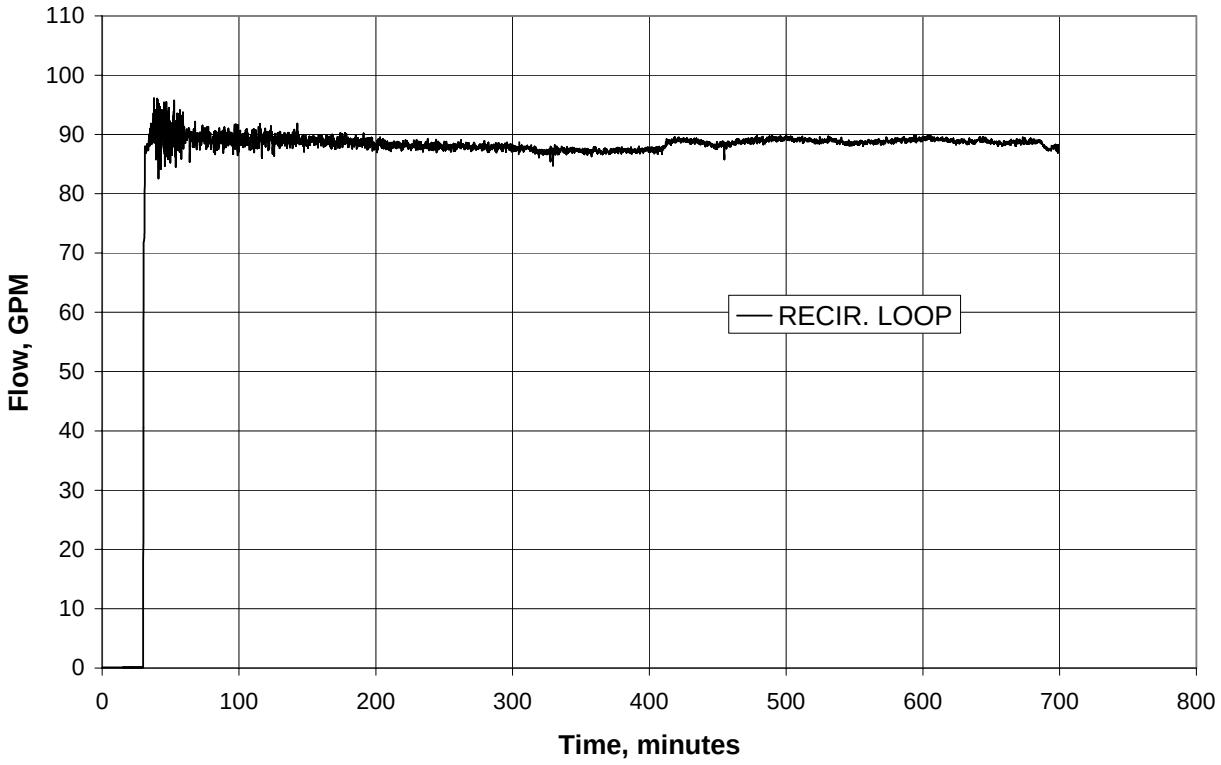

Figure 47. TLP Simulant Recirculation during Campaign III

A total of 888 grams of Q2 antifoam was added to the simulant during the TLP campaign III evaporation process. A dilute mixture of antifoam was pulled into the system via vacuum through valve CL-BV13 at the bottom of the evaporator pot. Because the antifoam chemical was relatively thick, the manufacturer recommends diluting it with DI water to a mixture of 10:1 before use. Initially 309 grams of Q2 were added to the simulant and then, as concentrate was removed additional Q2 was added, in three subsequent equal batches of 193 grams, as concentrated bottoms was removed. While the goal was an antifoam concentration of 1500 ppm the final concentration ended up being 1150 ppm, because of the pilot-scale TLP batch operation. That is, the experiment started at 1500 ppm, with a fixed evaporator volume of approximately 150 liters, and stayed that way until the feed, within the evaporator, reached the target density of 1.365 kg/L at 50°C. In this phase, the feed rate matched the evaporation rate. Once at the target density, the batch mode operation began with slowly allowing feed to enter the evaporator slightly faster than the evaporation rate to maintain the density while allowing the evaporator volume to increase to approximately 225 liters. At this point the antifoam concentration dropped to 1500 ppm x (150/225) = 1000 ppm. No increase in foaming was noted and previous work (Qureshi et al., 2004) has shown that antifoam greater than

300 ppm is not effective. Once at 225 liters, then 95 liters of bottoms were removed to begin the next batch. This process continued until all the feed was consumed. However, a further drop in antifoam concentration was not desired, therefore enough antifoam was added so that the next 95 liters of concentrated feed would also have a 1500 ppm concentration. Moreover, no antifoam was added to the final batch of feed because it was small, less than 40 liter. When the process was finished the antifoam concentration of the composite product was 1150 ppm, based on the 888 grams of antifoam in 567.5 liters (772 kg) of bottoms produced. During the entire evaporation period very little foaming was witnessed.

Samples from primary condensate, secondary condensate, and evaporator bottoms were pulled every 200 liters of simulant feed pumped into the evaporator. Other samples were pulled more often to check the density of the evaporator bottoms. The density was checked using a density meter (Anton Paar, DMA 4500) and measurements were recorded in the lab notebook (Adamson, 2004).

The supplied TLP simulant feed for evaporation had a volume of 1,706.6 liters with a density of 1.135 kg/L at 20° C. The simulant was concentrated down to three drums. Table 45 gives the volume, density and weight of the TLP simulant and the three drums of concentrate.

Table 45. TLP Simulant and Concentrate

TLP Simulant	Volume	Density*	Weight
TLP Supplied Simulant	1,706.6L (450.8 gal)	1.135 kg/L	1,937 kg
Drum # 1 concentrate (#03-254)	194.1L (51.3 gal)	1.362 kg/L	264.4 kg
Drum # 2 concentrate (#03-257)	193.3L (51.0 gal)	1.366 kg/L	264.0 kg
Drum # 3 concentrate (#03-255)	180.1L (47.7 gal)	1.370 kg/L	247.4 kg

* Temperature at 20°C

A total of 1,139.1 liters (300.9 gal) of clean condensate (water) was removed from the simulant via evaporation to obtain 567.5 liters (149.9 gal) of concentrate with an average density of 1.365 kg/L at 20° C for the three drums. The concentrate was transported to the Vitreous State Laboratory for further testing/processing for the RPP Project.

2.9.5 Pilot TLP Discussion of Results

2.9.5.1 TLP Experimental Observations ***(Author – Adamson)***

The SIPP TLP evaporation Campaign III was conducted on Wednesday, 8 July, 2004 in SRNL's Engineering Development Laboratory. A total of 1,706.6 liters of TLP simulant feed was concentrated down to 567.5 liters in a continuous run. The evaporation process was completed without any glitch or equipment failure. However, as with TLP Campaign II, the Demister® instrumentation had to be purged during the campaign due to moisture in the lines causing inaccurate readings.

As shown in Fig. 48, a small amount of foaming and frothing was witnessed throughout TLP campaign III. In fact, the amount of foaming/frothing before adding the defoamer was not much larger and the need of defoamer for the AY102+AP101+recycle mixture is questionable. The foaming/frothing maximum height above the liquid level was one foot or less. The picture depicts the simulant boiling inside the acrylic section of the evaporator pot.

Figure 48. TLP Simulant Boiling in Clear Acrylic Section of Evaporator

The Campaign III TLP evaporation performed as well as the Campaign II operation, with respect to evaporation rates and times of operation. However, the evaporation during Campaign III was stopped earlier than required because a target density of 1.365 kg/L at 20°C was used instead of the actual target of 1.397 kg/L, as determined by the OLI/ESP model (Duignan et al., 2004b). That is, the target was 1.365 kg/L, but this was at the evaporator operating conditions of 50°C and 1 psia. Since pilot-scale TLP bottoms density was being measured at laboratory ambient conditions, then the evaporation should have continued until the density was 1.397 kg/L at 20°C and 1 atm. The main impact of the early shut down was that the sodium concentration, expected to attain 8 M, was approximately 11% under, i.e., 7.1 M. During Campaign II operation the pilot-scale TLP operation produced 523.1 liters of bottoms product at 8.2 M (this value can be found in the penultimate column of Table 46 and the row entitled “Na(average in M)”), and, as stated in the preceding section, Campaign III produced 567.5 liters of bottoms at 7.1 M

(see the third to the last column of Table 46). While the bottoms produced from each Campaign was kept separate when they were shipped to VSL for pilot-scale LAW melter testing, once the entire volume of bottoms is mixed together the resulting sodium concentration will be 7.6 M.

2.9.5.2 TLP Waste Products (Author – Zamecnik)

Table 46 shows the feed and bottoms concentrate compositions for both Campaigns II and III. The Campaign III concentrate composition was calculated by material balance and is compared to the material balance from Campaign II in the adjoining columns of the table. The Campaign II material balance results in a very good prediction of the concentrate composition, so the Campaign III material balance is also expected to be accurate. (Note that the Campaign II concentrate analysis from the microwave dissolution is not shown because these values have been determined to be suspect.) The Campaign III calculated concentrate is lower in Na and Al, slightly higher in K, and about the same in most of the other significant cations and anions. Therefore, the main difference in Campaign III was a lower concentration of Na and Al, which would be present as Na^+ $Al(OH)_4^-$. The sodium concentration in Campaign III was lower because the feed was only concentrated to a density of 1.365 kg/L, as explained in the preceding section. However, the aluminum would have been lower in Campaign III, than Campaign II, in any case because the feed concentration for Campaign III was lower.

Two measured values for the solids content of the Campaign III feed and concentrate are shown. As mentioned in Section 2.6.5.2, the accuracy of the analytical method for UDS is about ±0.22 wt%, both the feed and concentrate UDS values are less than the uncertainty. The bottoms values with the uncertainty are 0.07±0.22 and 0.15±0.22 wt%, which both include the estimated 0.28 wt%. Therefore, the data are inconclusive and it cannot be determined if dissolution of solids occurred (which is indicated by the lack of increase in the UDS upon concentration).

Table 46. Comparison of Campaigns II and III TLP Compositions

	----------Feed----------			----------Bottoms----------			
	Campaign III		**Campaign II**	**Campaign III**		**Campaign II**	
	Measured		Measured	Measured		Calculated	Measured	Calculated
Total Solids (wt%±0.11)	16.23	16.24	16.24	40.06	40.04	40.42	41.30	40.54
Undissolved Solids (wt%±0.22)	0.07	0.15	0.09	0.15	0.07	0.28	0.31	0.23
Supernate Solids (wt%±0.13)	16.10	16.18	16.16	39.97	40.00	40.25	41.12	40.41
Density (kg/L)	1.134		1.136	1.368		1.368	1.384	
Volume (L)	1706		1639			568	523	
Concentrations in mg/kg:								
Sample Preparation	dissolution		filtered			calc	filtered	calc
Ag	<50		<0.5			<124	<0.43	<1.4
Al	2900		3319			7220	8309	8537
B			80.7				198	208
Ba	<2.0		<0.04			<5.0	<0.03	<0.10
Ca	<6.6		1.95			<16	2.57	5.02
Cd	<2.4		<0.04			<6.0	<0.03	<0.09
Ce	<128		<15			<319	<12	<39
Co	<7.3		<0.08			<18	<0.06	<0.19
Cr	82.8		79.0			206	192	203
Cu	<8.3		0.143			<21	0.38	0.37
Fe	21.0		0.492			52.3	1.00	1.26
K	9480		8389			23603	23916	21579
La	<116		<0.33			<289	<0.27	<0.85
Li	1.0		4.09			2.5	9.37	10.5
Mg	<14		<0.02			<35	<0.02	<0.06
Mn	<1.5		<0.03			<3.7	<0.02	<0.08
Mo	<17		4.79			<41	11.1	12.3
Na	47684		51937			118722	125723	133596
Na (AA)			54930				145954	141295
Na (average)	47684		53433			118722	135838	137445
Na (average in M)	2.4		2.6			7.1	8.2	8.3
Nd	<43		<0.71			<107	<0.59	<1.8
Ni	<10		0.24			<26	0.56	0.62
P	371		355			924	574	912
Pb	<114		7.13			<284	17.3	18
S	502		587			1250	1377	1511
Si	0		36.7			0	113	94
Sr	8.0		0.01			19.92	0.06	0.04
Ti	<23		<0.10			<58	0.25	<0.26
Zn	<61		11.1			<152	27.3	29
Zr	<8.0		<0.14			<20	0.749	<0.36
bromide	<61		<88			<152	<72	<226
chloride	795		663			1979	1821	1705
fluoride	56.0		61.6			139	28.2	159
formate	521		551			1297	1171	1417
nitrate	37200		37500			92619	90318	96461
nitrite	12300		11884			30624	28974	30569
oxalate	374		342			931	831	881
phosphate	1220		1136			3038	1741	2921
sulfate	1570		1514			3909	3699	3895
ammonium	2730		879	<40			<72	

2.9.6 Pilot TLP Conclusions

2.9.6.1 Experimental Observations (Author – Adamson)

- The pilot-scale TLP evaporator operated as designed and concentrated the TLP feed simulant from a density of 1.135 Kg/L at 20°C and a sodium concentration of 2.4 M, to a final density of1.365 Kg/L at 20°C and a sodium concentration of 7.1 M.
- A small amount of foaming was observed before and after the addition of antifoam agent to the evaporator. During the evaporation process, the foaming/froth height remained around 1 ft (0.3 m) or less for the duration of the campaign. That is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.
- The two Demisters in series operated well with no significant differential pressure build-up across the Demisters during the TLP campaign III; there were no noticeable solids on the lower demister after the 11-hour test. However, condensation had to be purged from the instrumentation lines during the campaign.

2.9.6.2 Waste Products Observations (Author – Zamecnik)

- The composition of the products from the TLP matched what was expected from the mass balance.
- The concentration of aluminum in the TLP product from Campaign III was less than the result of Campaign II since the UF permeate contained less dissolved aluminum.
- No precipitation of additional solids beyond those in the feed was noted.

3.0 CONCLUSIONS

3.1 PILOT-SCALE FEP UNIT OPERATION

- A total of about 1112 kg of FEP feed, at a density of 1.04 g/ml and 0.6 M Na, was concentrated down to 170 kg, at a density of 1.26 g/ml and 4.3 M Na.
- The feed was evaporated under vacuum (1 psia (6.9 kPa)) at moderate temperatures (~ 50°C) and the entire evaporation process proceeded as designed.
- The evaporator was designed to evaporate around 0.4 gpm (1.5 lpm) of water and for this campaign the average evaporation rate was 0.52 gpm.
- No significant foaming was observed prior to the addition of antifoam agent. During the evaporation process, the froth height remained around 1 ft (0.3 m) that is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.
- During start-up and unsteady conditions, significant flashing resulted in feed splashing on the lower demister pad. These conditions are associated with much larger vapor flux and vapor velocities at the interface.
- As seen in Campaign II, a large portion of the dissolved oxalate in the feed was precipitated, probably as sodium oxalate.
- The oxalate concentration in the FEP feed in Campaign III was less than that in Campaign II, which is consistent with the higher oxalate concentration in the Campaign I slurry.
- About 25-40% of the dissolved Al in the feed to the FEP evaporator precipitated during mixing of the recycles, assumed to occur because of localized regions of low pH. Vigorous mixing when joining caustic and acidic recycle streams in the Plant Wash and Disposal System would help to minimize Al precipitation.
- The fraction of dissolved aluminum in Campaign III FEP concentrate (bottoms) was less than in Campaign II, resulting in more undissolved Al fed to the UFP.

3.2 PILOT-SCALE UFP UNIT OPERATION

- The average temperature-adjusted permeate flux when dewatering from ~3 to ~24 wt% UDS was 0.011 gpm/ft^2. The average temperature-adjusted permeate flux when dewatering from ~4 to 20 wt% UDS was 0.014 gpm/ft^2. The average, temperature-adjusted permeate flux when dewatering from ~4 to 17 wt% UDS was 0.018 gpm/ft^2.
- The turbidity of the permeate from dewatering and slurry washing, when measured directly after the sample was taken, was always lower 0.5 NTU. The Test Specification indicated a solids-free threshold of 2 NTU, therefore the measured values indicated the permeate was free of significant undissolved solids.
- Cleaning the filter with 2 M nitric acid was sufficient to increase the 0.1 M NaOH permeate flux to an order of magnitude larger than that of waste flux. However, it was not sufficient to return the filter to pre-test flux levels.

- The composition of the undissolved solid species in the washed sludges in Campaigns I-III were similar, as expected. The supernate portion species Na and K were higher in concentration in Campaigns II and III than in Campaign I due to the presence of the AP101 simulant.
- The aluminum in the washed slurry in Campaign III was higher due to there being more undissolved aluminum in the FEP concentrate than in Campaign II.
- Because of to higher undissolved aluminum in the FEP concentrate, the Campaign III permeate from the concentration step (IX feed) had less aluminum than in Campaign II.
- Ammonium in the first 0.01M NaOH UFP wash of Campaign III was mostly retained in the slurry, indicating that a slurry component has an affinity for ammonium. Most of the ammonium in the second wash was not retained.

3.3 PILOT-SCALE CIX UNIT OPERATION

- Pressure drops for the four cycles were low and the resin bed permeability was approximately the same as were measured for the 24-Inch Column Test (Fowley et al, 2004).
- The pressure drop across the columns for flow of simulant generally increased during the four cycles. [0.5 to 1.3 in. H_20, Table 38]
- SuperLig®644 effectively removed cesium from simulated waste and the analytical ability to measure cesium concentrations in five-molar sodium did allow verification of the waste acceptance criterion of 50% breakthrough from the lead column after 100 Bed Volumes of simulated waste were treated.
- SuperLig®644 effectively removed cesium from simulated waste, however, the analytical difficulty for measuring very low cesium concentrations in five-molar sodium did not allow verification of the waste acceptance criterion of 5.2 µg/L from the lag column after 100 BV of simulated waste were treated. This fact was known before the start of testing.
- The fraction of the original cesium that was removed by the lead column decreased from 99.6% for Cycle 1 to 98.2% for Cycle 4.
- The masses of cesium in and out of the resin beds for all four cycles balanced to within measurement uncertainty.

3.4 PILOT-SCALE TLP UNIT OPERATION

- The pilot-scale TLP evaporator operated as designed and concentrated TLP feed simulant from a density of 1.135 Kg/L at 20°C and a sodium concentration of 2.4 M, to a final density of 1.365 Kg/L at 20°C and a sodium concentration of 7.1 M.
- A small amount of foaming was observed before and after the addition of antifoam agent to the evaporator. During the evaporation process, the foaming/froth height remained around 1 ft (0.3 m) or less for the duration of the campaign. That is significantly less than the 5 ft (1.5 m) distance to the lower demister pad.

- The two Demisters in series operated well with no significant differential pressure build-up across the Demisters and there were no noticeable solids on the lower Demister after the 11-hour test.
- The composition of the products from the TLP matched what was expected from the mass balance.
- The concentration of aluminum in the TLP product was less than the result of Campaign II, since the UF permeate contained less dissolved aluminum.
- No precipitation of additional solids beyond those in the feed was noted.

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4.0 FUTURE WORK

As per the SIPP test specification (Longwell, 2003), the work discussed in this interim report is for Campaign III, which was only the third of four campaigns. Further work to be included in the immediate task will be Campaign IV, which will involve the testing of a different filter media, made by GKN. See the second footnote on page 16. Other work, not currently part of the SIPP scope, could include the testing of other simulated wastes, UFP filter cleaning, small and pilot-scale comparisons, etc.

Results of Campaign III indicate that aluminum precipitation will occur if the pH criterion for the PWD system remains at 12. Additional investigation is needed to establish a pH criterion that will both minimize the soda hydroxide additions and prevent aluminum precipitation. This work should be conducted using prototypic plant mixing system since precipitation and dissolution kinetics are impacted by the degree of mixing employed in the plant. Additionally, if pulse jet systems are employed it is likely that localized regions of low pH will occur potentially causing aluminum to precipitate and not redissolve.

Details on any future work will be reported in the final report, which follows the completion of the last SIPP campaign, i.e., Campaign IV.

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APPENDIX A: WTP DISCUSSION ON PRETREATMENT FACILITY WASTE PROCESSING RESIDENCE TIMES

----- Forwarded by Bond Calloway/WSRC/Srs on 03/16/2004 07:22 PM -----

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SUBJECT: PLANT RESIDENCE TIME DISCUSSION

<<PT Flow Diagram Rev 1b.vsd>> <<PT Tank Vol_App B.doc>>

Attached *(they have been removed)* above are the handouts from the discussion this afternoon. Four different holdup times were discussed during the meeting.

Note: The defined production rates for SIPP are 6.0 MT IHLW/day and 80 MT ILAW/day. Steady-state flowrates defined below are from the WTP Steady-State Flowsheet.

I. Holdup Time For Permeate After Ultrafiltration.

Two permeate vessel tank volumes (21,800 each) plus the CXP Feed Vessel available volume (78,000 batch -25,000 contingency) are used for a total available holdup volume of 96,600 gallons. At a steady-state permeate flowrate of 14.8 gpm, the residence time is 96,600/(14.8*60) = 109 hours (~4 1/2 days).

II. Holdup Time For Blended Feed With Concentrated Recycles Prior To Ultrafiltration.

Two UFP Preparation vessel tank volumes (48,300 each) are used for a total available holdup volume of 96,600 gallons. At a steady-state feed to UFP Feed vessels of 16.3 gpm, the residence time is 96,600/(16.3*60) = 99 hours (~4 days). This value is overly conservative and the residence time of blending the concentrated recycles with the blended feed is dependent on the dynamic nature of recycle generation, feed blending, and the processing of feed form the preparation vessel to the feed vessel. If the online UFP Feed vessel is considered full and the UF Prep vessels are both filled with blended feed and concentrated recycle, then the residence time of ~4 days will result. Further consideration suggests that the residence time using one UFP Preparation vessel tank volume should be used. This would give a residence time of 48,300/(16.3*60) = 49 hours (~2 days). Use the second value.

III. Holdup Time for Blended Recycles (HLW-SBS with UFP recycles) Prior to Evaporation.

Two evaporator feed tanks with an available volume of (50,000 batch - 10,000 contingency) are used for a total available holdup volume of 80,000 gallons. At a steady-state evaporator feed flowrate of 18.5 gpm, the residence time is 80,000/(18.5*60) = 72 hours (~3 days).

IV. Holdup Time For Recycles in the Evaporator.

One evaporator with a holdup volume of ~5500 gallons is used. At a steady-state concentrate flowrate of 1.8 gpm, the residence time is 5500/(1.8*60) = 51 hours (~2 days). It was noted that without the leaching process, there is no recycle leachate. Inclusion of the leaching recycle reduces the residence time in the evaporator because the concentrate flow rate is higher.

Comments are welcome.

Dave Harty
Pretreatment Process Operations, 371-3360

APPENDIX B: CAMPAIGN III SAMPLING MATRIX

This appendix contains a list of all the samples taken during Campaign III. Because of the large number of samples and the importance to document those that were taken, the tables have been put in a form, which is condensed. However, the tables are readable and their placement here should be useful to those wanting to better understand the data discussed in the body of this report.

Notes on the following Sample Tables

Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		ICC	Ion chrom. cations
ICPES	includes all elements present that can be analyzed by ICPES		IEC	Ion exclusion chrom.
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	AA	atomic absorption
	supernates	Cs, Rb	TS	total solids wt%
ICA	Ion chrom - anions	normal suite	UDS	undissolved solids wt%

Explanation of analyses:

DENS	density
RHEO	rheology
PSD	particle size distribution by Microtrac
XRD	X-ray diffraction - on filtered solids and blank ONLY IF SOLIDS PRESENT
TBOH	total base, free hydroxide, other base

DISMW: microwave acid dissolution
DISPER: sodium peroxide fusion / HCL uptake dissolution

Note on Analysis of Sample Compositions

All analyses except total solids, undissolved solids, supernate solids, density, and rheological measurements were performed by the WSRC/SRNL Analytical Development Section per the task plan specifications. The aforementioned analyses were performed by the SRNL Immobilization Technology Section at the Aiken County Technology Laboratory. Table B1 shows the methods used for analysis of each of the species measured.

Table B1 Analysis Methods Used

Analysis or Preparation	Analytical Method	Preparation Method
Slurry Sample Dissolution	Microwave acid (MW) or Sodium peroxide (PER) fusion/ HCl uptake	
Ag, Al, B, Ba, Ca, Cd, Ce, Co, Cr, Cu, Fe, La, Li, Mg, Mn, Mo, Nd, P, Pb, Re, S, Si, Sr, Ti, W, Zn, Zr	ICPES	both
Na	ICPES, also AA	MW
Ni	ICPES	MW
B	ICPES	PER
K	AA, also ICPES	MW
Cs	ICPMS, also AA	MW
Bi, Pr, Rb, Y	ICPMS	MW
bromide, chloride, fluoride, formate, nitrate, nitrite, phosphate, oxalate, sulfate	Anion Chromatography (IC)	none
acetate, citrate	Ion exclusion chromatography	none
ammonium	Cation Chromatography	none
organic carbon, inorganic carbon (TIC)	carbon analyzer	micronization
“total” oxalate	calculated from organic carbon minus formate	none
carbonate	calculated from TIC, also titration	none
total base, free hydroxide, other base	titration	precipitation of carbonate
total acid	titration	none
total solids, dissolved solids (solids in supernate fraction of slurry)	halogen lamp solids analyzer	none
undissolved solids	calculated from total and supernate solids	none
density	?	none
rheology	Haake rheometer	none

Table B2 Campaign III Sample Matrix (1 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
RECYCLE BLENDING			Campaign II UF Wash Water																					
			HLW SBS																					
			HLW Vessel Vent (PVP)																					
			HLW Canister Decon																					
			Campaign II Caustic Flushes																					
			Campaign II UF Acid Cleanings																					
			Campaign II UF Loop Flushes (PWD-33)																					
	Campaign II Cs IX Recycle: Displacement Solution Displaced by Pre-Elution Rinse (2)			NO ANALYSIS																				
	Campaign II Cs IX Recycle: Post-Elution Rinse Displaced + Regeneration Solution (5)			NO ANALYSIS																				
			COMBINED RECYCLES																					
		PWD	Generation of Synthetic Recycles																					
			HLW Canister Decon	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			NaNO3 (kg)																					
			HLW Vessel Vent (PVP)	NO SAMPLE																				
			DI water																					
			NaOH 50wt%																					
			Combined Canister Decon + PVP																					
			UF Loop Flush (PWD-33) from Campaign II	NO SAMPLE																				
			Combining of Recycles																					
		PWD-44		C3-PWD-44-ARC	NONE	mixing tank	50																	
			Add HLW Canister Decon + PVP water to a tank																					
			Add HLW Canister Decon + PVP 50wt% NaOH																					
			Add HLW Canister Decon NaNO3 (kg)																					
			Add HLW SBS to tank																					
			Add UF Loop Flush PWD-33																					
			Sum																					
		PWD-15		C3-PWD-15-ARC	NONE	mixing tank	250																	
			Add Campaign II Wash Permeate to a tank (use 2nd drum,~0.05M OH)																					
			Add 0.1M NaOH made from condensate																					
			Add from Campaign II Caustic Flush Drum 1																					
			Add from Campaign II Caustic Flush Drum 2																					
			Add from Campaign II Caustic Flush Drum 3																					
			Sum																					
		PWD-16		C3-PWD-16-ARC	NONE	mixing tank	250																	
			Add Campaign II Wash Permeate to a tank (use 1st drum,~0.1M OH)																					
			Add NaOH 50wt%																					
			Add from Campaign II Nitric Acid Cleaning Drum 1																					
			Add from Campaign II Nitric Acid Cleaning Drum 2																					
			Add from Campaign II Nitric Acid Cleaning Drum 3																					
			Sum																					
		Combine Recycles in (FEP Feed) Tank		C3-FEP-FEED-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
			Add PWD-44 to tank	C3-FEP-FEED-ARC	NONE	mixing tank	250																	
			Add PWD-15 to tank	C3-FEP-FEED-ANTF	NONE	mixing tank	100																	
			Add PWD-16 to tank	C3-FEP-FEED-ADS	42087	mixing tank	50						ICC											
			IX Recycles																					
			Sum																					
			RLD from Campaign II	C2-RLD-FINAL-AGED	42072		100						ICC											
FEP EVAPORATOR			Starting Volume																					
		Bottoms	After all antifoam additions	C3-FEP-B-START-ARC	NONE	bottoms tank	100																	
				C3-FEP-B-START-ANTF	NONE	bottoms tank	100																	
		Bottoms	At ~200 L fed	C3-FEP-B-200-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~400 L fed	C3-FEP-B-400-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~600 L fed	C3-FEP-B-600-ARC	NONE	bottoms tank	100																	
		Bottoms	At ~800 L fed	C3-FEP-B-800-ARC	NONE	bottoms tank	100																	
		Bottoms	Evaporation completed	C3-FEP-B-END-ACTL	NONE	bottoms tank	50									TS	UDS	DENS						
				C3-FEP-B-END-WET	42088	bottoms tank	50					ICA	ICC									TBOH		TIC/TOC
				C3-FEP-B-END-MW	42089	bottoms tank	50	DISMW		ICPES	ICPMS				AAK									
				C3-FEP-B-END-PER	42090	bottoms tank	50	DISPER		ICPES														
				C3-FEP-B-END-ARC	NONE	bottoms tank	500																	
				C3-FEP-B-END-ANTF	NONE	bottoms tank	100																	
		Primary Condensate	Composite	C3-FEP-PC-END-ARC	NONE		100																	
		Secondary Condensate	Composite	C3-FEP-SC-END-ARC	NONE		100																	
	COMBINE ALL FEP CONDENSATES																							
		Combined FEP Condensate = RLD Condensate		C3-RLD-FROM-FEP-ARC	NONE		1000																	
				C3-RLD-FROM-FEP-ADS	42093		100						ICC											

Table B2 Campaign III Sample Matrix (2 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
ULTRAFILTRATION		UFP	FEP Bottoms	see above for sample																				
			AY102 before Supernate Addition	C3-AY102-NOSUP-ACTL	NONE	mixing tank	50									TS	UDS							
				C3-AY102-NOSUP-ARC	NONE	mixing tank	50																	
			AY102 after final supernate addition	C3-AY102-SOL-ACTL	NONE	mixing tank	50									TS	UDS	DENS						
				C3-AY102-ARC	NONE		250																	
			AP101	C3-AP101-ARC	NONE	mixing tank	250																	
		COMBINE AY-102, AP-101 & FEP BOTTOMS																						
			Starting Volume of Feed:																					
			Fill feed tank to:																					
		UFP Feed	before start of run	C3-UF-START-ACTL	NONE	recirc line	100									TS	UDS	DENS						
				C3-UF-START-ARC	NONE	recirc line	1000																	
			First 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-159-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-317-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON1-476-ARC	NONE	recirc line	50																	
			Second 1/2 of Batch																					
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON2-159-ARC	NONE	recirc line	50																	
		Concentrate Sample	at ~ this vol permeate collected	C3-UF-CON2-317-ARC	NONE	recirc line	50																	
		Concentrate Sample	all permeate removed, @ >20wt% solids	C3-UF-CON2-476-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C3-UF-CON2-476-ARC	NONE	recirc line	250																	
				C3-UF-CON2-476-ANTF	NONE	recirc line	100																	
	CONCENTRATION	Concentrate	volume in feed tank (L)																					
	COMPLETE	Permeate Composite	ALL PERMEATE COMPOSITE	C3-IX-FEED-ADS	42095	filtrate tank	100			ICPES	ICPMS	ICA	ICC	IEC	AAK							TBOH		TIC/TOC
		to IX	total volume of permeate (L)	C3-IX-FEED-ACTL	NONE	or IX feed tk	100									TS	UDS	DENS						
				C3-IX-FEED-ARC	NONE		1000																	
				C3-IX-FEED-ANTF	NONE		100																	
	DILUTE SLURRY BACK TO 20WT% WITH PERMEATE IF NECESSARY																							
				C3-UF-CON2-ADJ-ACTL	NONE	recirc line	50									TS	UDS	DENS						
	FIRST WASH		RLD Wash water (L)																					
WASHING		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-70-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W1-118-ACTL	NONE	recirc line	50									TS	UDS	DENS						
				C3-UF-W1-118-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-70-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE1-118-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C3-WPE1-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 1st wash permeate	C3-WPE1-CMP-ARC	NONE	filtrate drum	1000																	
				C3-WPE1-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C3-WPE1-CMP-ADS	42096	filtrate drum	50						ICC									TBASE		
	2ND WASH		RLD Wash water (L)																					
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-5-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-27-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-48-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-70-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-91-ARC	NONE	recirc line	100																	
		Concentrate Sample	after ___ L permeate removed	C3-UF-W2-118-ACTL	NONE	recirc line	50									TS	UDS	DENS						
		(to HLW)		C3-UF-W2-118-WET	42094	recirc line	50					ICA	ICC	IEC								TBOH		TIC/TOC
				C3-UF-W2-118-MW	42097	recirc line	50	DISMW		ICPES	ICPMS				AAK									
				C3-UF-W2-118-PER	42098	recirc line	50	DISPER		ICPES														
				C3-UF-W2-118-ARC	NONE	recirc line	100																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-5-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-27-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-48-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-70-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-91-ARC	NONE	filtrate line	50																	
		Wash Permeate	after ___ L permeate removed	C3-WPE2-118-ARC	NONE	filtrate line	50																	
		Wash Permeate	~40 minutes after last sample	C3-WPE2-END-ARC	NONE	filtrate line	50																	
			(system running with permeate in recycle)																					
		Wash Permeate	composite of 2nd wash permeate	C3-WPE2-CMP-ARC	NONE	filtrate drum	1000																	
				C3-WPE2-CMP-ACTL	NONE	filtrate drum	50									TS	UDS	DENS						
				C3-WPE2-CMP-ADS	42099	filtrate drum	50						ICC									TBASE		
	END 2ND WASH	Concentrate	volume washed concentrate																					

Table B2 Campaign III Sample Matrix (3 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
CLEANING																								
	Loop Flush	"Flush" UF Feed Loop- offline		C3-LOOP-TO-C4-ACTL	NONE	carboy	50									TS	UDS	DENS						
		RLD Condensate	volume needed																					
		Concentrated Slurry	volume needed																					
		Save for Campaign III																						
	UF Caustic Flush 1	Flush UF System																						
		Caustic Flush 1	solution drained	C3-CAU-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-1-ADS	42101	transfer line	50															TBOH		
				C3-CAU-1-ARC	ARCHIVE	transfer line	1000																	
	HNO3 Cleaning	2 M HNO3 cleaning																						
	Cleaning #1	Acid Cleaning 1	solution drained	C3-NIT-1-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-1-ADS	42104	transfer line	50																TACID	
				C3-NIT-1-ARC	NONE	transfer line	1000																	
	Cleaning #2	Acid Cleaning 2	solution drained	C3-NIT-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-2-ADS	42104	transfer line	50																TACID	
				C3-NIT-2-ARC	NONE	transfer line	1000																	
	Cleaning #3	Acid Cleaning 3	solution drained	C3-NIT-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-NIT-3-ADS	42104	transfer line	50																TACID	
				C3-NIT-3-ARC	NONE	transfer line	1000																	
UF Caustic Flushes 2&3		Flush UF System																						
		Caustic Flush 2	solution drained	C3-CAU-2-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-2-ADS	42104	transfer line	50																TACID	
				C3-CAU-2-ARC	NONE	transfer line	1000																	
		Caustic Flush 3	solution drained	C3-CAU-3-ACTL	NONE	transfer line	50									TS	UDS	DENS						
				C3-CAU-3-ADS	42102	transfer line	50															TBOH	TACID	
				C3-CAU-3-ARC	NONE	transfer line	1000																	
		Drain System- Leave no Heel																						
ION EXCHANGE		ION EXCHANGE																						
		Cycle 3 Lead	Lead Column @ BV = 5	C3-IX-CY3-LEAD-5	42105		10				ICPMS													
			Lead Column @ BV = 40	C3-IX-CY3-LEAD-40	NONE		10																	
			Lead Column @ BV = 70	C3-IX-CY3-LEAD-70	NONE		10																	
			Lead Column @ BV = 115	C3-IX-CY3-LEAD-115	NONE		10																	
			Lead Column @ BV = 145	C3-IX-CY3-LEAD-145	NONE		10																	
			Lead Column @ BV = 175	C3-IX-CY3-LEAD-175	42105		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY3-LEAD-180	42105		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY3-LEAD-185	42105		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY3-LEAD-180	42105		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY3-LEAD-185	42105		10				ICPMS													
			Lead Column @ BV = 200	C3-IX-CY3-LEAD-200	42105		10				ICPMS													
			Lead Column @ BV = 205	C3-IX-CY3-LEAD-205	42105		10				ICPMS													
			Lead Column @ BV = END	C3-IX-CY3-LEAD-END	42105		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY3-LEAD-176	42105		10				ICPMS													
		Cycle 3 Lag	Lag Column @ BV = 5	C3-IX-CY3-LAG-5	42106		10				ICPMS													
			Lag Column @ BV = 5	C3-IX-CY3-LAG-5-BLK	NONE		100																	
			Lag Column @ BV = 40	C3-IX-CY3-LAG-40	NONE		10																	
			Lag Column @ BV = 70	C3-IX-CY3-LAG-70	NONE		10																	
			Lag Column @ BV = 115	C3-IX-CY3-LAG-115	NONE		10																	
			Lag Column @ BV = 145	C3-IX-CY3-LAG-145	NONE		10																	
			Lag Column @ BV = 175	C3-IX-CY3-LAG-175	42106		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY3-LAG-180	42106		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY3-LAG-185	42106		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY3-LAG-180	42106		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY3-LAG-185	42106		10				ICPMS													
			Lag Column @ BV = 200	C3-IX-CY3-LAG-200	42106		10				ICPMS													
			Lag Column @ BV = 205	C3-IX-CY3-LAG-205	42106		10				ICPMS													
			Lag Column @ BV = END	C3-IX-CY3-LAG-END	42106		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY3-LAG-176	42106		10				ICPMS													
E-1	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C3-IX-CY3-LAW-FROM-DIS	NONE		25																	
E-2	Displacement Solution Displaced by Pre-elution Rinse (to C4 recycle)			C3-IX-CY3-DIS-FROM-PRER	NONE		25																	
E-3		Pre-Elution Rinse Displaced by Eluant		C3-IX-CY3-PRER-FROM-ELU	NONE		25																	
E-4		HNO3 Eluate (to HLW)		C3-IX-CY3-HLWELUATE	NONE		25																	
E-5a	Post Elution Rinse Displaced by Regeneration Solution (to C4 recycle)			C3-IX-CY3-POER-FROM-REG	NONE		25																	
E-5b		0.25M NaOH Regeneration Solution (to C4 recycle)		C3-IX-CY4-REG	NONE		25																	
E-6	0.25M NaOH Regeneration Solution retained on Column (would go to C4 TLP)			C3-IX-CY4-TO-TLP	NONE		25																	
		Cycle 4 Lead	Lead Column @ BV = 5	C3-IX-CY4-LEAD-5	42107		10				ICPMS													
			Lead Column @ BV = 70	C3-IX-CY4-LEAD-70	NONE		10																	
			Lead Column @ BV = 115	C3-IX-CY4-LEAD-115	NONE		10																	
			Lead Column @ BV = 175	C3-IX-CY4-LEAD-175	42107		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY4-LEAD-180	42107		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY4-LEAD-185	42107		10				ICPMS													
			Lead Column @ BV = 180	C3-IX-CY4-LEAD-180	42107		10				ICPMS													
			Lead Column @ BV = 185	C3-IX-CY4-LEAD-185	42107		10				ICPMS													
			Lead Column @ BV = 200	C3-IX-CY4-LEAD-200	42107		10				ICPMS													
			Lead Column @ BV = 205	C3-IX-CY4-LEAD-205	42107		10				ICPMS													
			Lead Column @ BV = END	C3-IX-CY4-LEAD-END	42107		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY4-LEAD-176	42107		10				ICPMS													

Table B2 Campaign III Sample Matrix (4 of 4 pages)

					ADS	Sample	Sample	Sample	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Sample	Travel Copy	Location	Vol mL	Prep	pH	ICPES	ICPMS	ICA	ICC	IEC	AA	TS	UDS	DENS	RHEO	PSD	XRD	TB - -	TACID	TIC/TOC
		Cycle 4 Lag	Lag Column @ BV = 5	C3-IX-CY4-LAG-5	42108		10				ICPMS													
			Lag Column @ BV = 70	C3-IX-CY4-LAG-70	NONE		10																	
			Lag Column @ BV = 115	C3-IX-CY4-LAG-115	NONE		10																	
			Lag Column @ BV = 175	C3-IX-CY4-LAG-175	NONE		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY4-LAG-180	42108		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY4-LAG-185	42108		10				ICPMS													
			Lag Column @ BV = 180	C3-IX-CY4-LAG-180	42108		10				ICPMS													
			Lag Column @ BV = 185	C3-IX-CY4-LAG-185	42108		10				ICPMS													
			Lag Column @ BV = 200	C3-IX-CY4-LAG-200	42108		10				ICPMS													
			Lag Column @ BV = 205	C3-IX-CY4-LAG-205	42108		10				ICPMS													
			Lag Column @ BV = END	C3-IX-CY4-LAG-END	42108		10				ICPMS													
			BLANK (10 mL of C3-IX-CY3-LAG-5-BLK)	C3-IX-CY4-LAG-176	42108		10				ICPMS													
E-1	LAW Effluent Displaced by 0.1M NaOH Displacement Solution (to C3 IX Feed Tank)			C3-IX-CY4-LAW-FROM-DIS	NONE		25																	
E-2	Displacement Solution Displaced by Pre-elution Rinse (to C4 recycle)			C3-IX-CY4-DIS-FROM-PRER	NONE		25																	
E-3		Pre-Elution Rinse Displaced by Eluant		C3-IX-CY4-PRER-FROM-ELU	NONE		25																	
E-4			HNO3 Eluate (to HLW)	C3-IX-CY4-HLWELUATE	NONE		25																	
E-5a	Post Elution Rinse Displaced by Regeneration Solution (to C4 recycle)			C3-IX-CY4-POER-FROM-REG	NONE		25																	
E-5b		0.25M NaOH Regeneration Solution (to C4 recycle)		C3-IX-CY4-REG	NONE		25																	
E-6	0.25M NaOH Regeneration Solution retained on Column (would go to C4 TLP)			C3-IX-CY4-TO-TLP	NONE		25																	
	IX PRODUCTS	IX Product to TLP	IX PRODUCT	C3-IX-PROD-ACTL	NONE	tank	100									TS	UDS	DENS						
				C3-IX-PROD-ARC	NONE	tank	500																	
				C3-IX-PROD-ADS	42110	tank	50						ICC											
				C3-IX-PROD-ANTF	NONE	tank	100																	
		Displacement solution displaced by pre-elution rinse (E-2)		Analyze in Campaign IV if needed																				
		Post-elution rinse displaced by regeneration solution (E-5a)		Analyze in Campaign IV if needed																				
			Regeneration solution (E-5b)	Analyze in Campaign IV if needed																				
TLP EVAPORATOR			LAW Feed (IX product)																					
			LAW SBS																					
		IX 0.25M NaOH Regeneration Solution from Campaign 2																						
	EVAPORATE	Evaporator Feed Mixture		C3-TLP-FEED-ACTL	NONE	feed tank	50									TS	UDS	DENS						
				C3-TLP-FEED-WET	42111	feed tank	50					ICA	ICC									TBOH		TIC/TOC
				C3-TLP-FEED-MW	42112	feed tank	50	DISMW		ICPES	ICPMS				AAK									
				C3-TLP-FEED-ARC	NONE	feed tank	1000																	
		Bottoms	After all antifoam additions	C3-TLP-B-START-ARC	NONE	bottoms tank	100																	
				C3-TLP-B-START-ANTF	NONE	bottoms tank	100																	
		Bottoms	At ~200 L fed	C3-TLP-B-200-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~400 L fed	C3-TLP-B-400-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~600 L fed	C3-TLP-B-600-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~800 L fed	C3-TLP-B-800-ARC	NONE	bottoms tank	50																	
		Bottoms	At ~1000 L fed	C3-TLP-B-1000-ARC	NONE	bottoms tank	50																	
		Bottoms	Evaporation completed	C3-TLP-B-END-ACTL	NONE	bottoms tank	100									TS	UDS	DENS						
				C3-TLP-B-END-ADS	42113	bottoms tank	50						ICC											
				C3-TLP-B-END-ARC	NONE	bottoms tank	100																	
		Primary Condensate	Composite	C3-TLP-PC-END-ARC	NONE		100																	
		Secondary Condensate	Composite	C3-TLP-SC-END-ARC	NONE		100																	
	COMBINE TLP CONDENSATES																							
		Combined TLP Condensate = RLD Condensate		C3-RLD-FROM-TLP-ADS	42114	storage tank	50						ICC											
		(Primary + Secondary)		C3-RLD-FROM-TLP-ACTL	NONE		50									TS		DENS						
				C3-RLD-FROM-TLP-ARC	NONE		1000																	
	COMBINE FEP & TLP CONDENSATES		Combined condensate	C3-RLD-COMP-ARC	NONE	storage tank	1000																	
				C3-RLD-COMP-ADS	42115	storage tank	50						ICC											

Notes: Time Dep Sample — Time dependent sample. These samples are to be observed daily for about 5 days for evidence of precipitation of solids. If solids form, they will be analyzed by XRD. A filtrate blank will also be analyzed.

Explanation of analyses:

pH	pH		Ion chrom. cations	ammonium	DENS	density
ICPES	includes all elements present that can be analyzed by ICPES		Ion exclusion chrom.	citrate, acetate	RHEO	rheology
ICPMS	sludges	Cs, Rb, Bi, Y, Pr	atomic absorption	Cs, K, Na	PSD	particle size distribution by Microtrac
	supernates	Cs, Rb	total solids wt%		XRD	X-ray diffraction
ICA	Ion chrom - anions	normal suite	undissolved solids wt%		TBOH	total base, free hydroxide, other base

G. T. Wright, 773A

D. J. Green, 773-A
D. B. Moore-Shedrow, 773-A
J. E. Marra, 773-A
C. R. Wolfe, 773-A
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S. T. Wach, 773-42A

D. B. Burns, 786-5A
T. B. Calloway, 999-W
S. D. Fink, 773-A
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Appendix J: Overall Chemical Compositions of SIPP Campaign II Process Streams

As explained throughout this report, the SIPP task contained four campaigns, which the first was just the operation of the ultrafiltration process and the remaining three would operate all four unit operations, i.e., FEP, UFP, CIX, and TLP. As was also discussed, the pre-task steady-state OLI/ESP computational modeling of the SIPP process showed that in performing Campaign II, III, and IV the product streams became chemically equivalent very fast; the differences in stream composition between Campaign III and IV were less then 5%. (Of course, this small difference cannot be fully shown experimentally because just before beginning the last campaign, the operation of Campaign IV was changed by the Hanford Project to specifically test the new GKN filter, therefore, the CIX and TLP unit operation were not used.)

The first full SIPP campaign was Campaign II and, as such, it was targeted to have its product streams chemically analyzed most extensively. Furthermore, since Campaigns III and IV were expected to be chemically similar, the number samples was greatly reduced to minimize cost to the project. For those campaigns only a minimum number of samples were taken to insure proper operation the plan tests. However, measurements made for Campaign II were extensive to capture inter-unit-operations chemically histories.

This Appendix indicates were taken and what were the results in the overall process. Figure J1 shows the overall SIPP operation for the FEP and UFP unit operations of Campaign II and sample points. Figure J2 shows the overall SIPP operation for the CIX and TLP unit operations of Campaign II and sample points. These figures are followed by a full table of analyzed results, Table J1. Matching the numbers in the figures to the columns in Table J1 will give the results at a particular sample point.

Table J1 shows the measured compositions of most of the process streams, including density and solids measurements, and the approximate stream volume. In some cases for slurry samples, only a total slurry (dissolved sample) analysis was performed; in other cases, analysis of the supernate liquid from a (lab) filtered sample was also performed. Dissolutions were either by a microwave acid method or the sodium peroxide fusion / HCl uptake method or by both. For streams very dilute in undissolved solids (such as UFP cleaning solutions or TLP feed), only the supernate was analyzed because the dissolution method introduces more uncertainty in the elemental analyses than the small amount of undissolved solids adds to the total amount of an element. Anion and ammonium analyses were performed on either a supernate (lab filtered) sample or on the total sample (slurry) that was diluted then filtered prior to analysis. The first method measures only the anions actually dissolved in the supernate portion of the sample, whereas the second method can also measure some contribution of undissolved anions due to dissolution upon dilution. However, while this method will get *some* of the undissolved material, it is not designed or optimized to get all of an undissolved anion. An example is oxalate: sodium oxalate can be undissolved if present above its saturation concentration, but *may* dissolve when diluted with water prior to analysis.

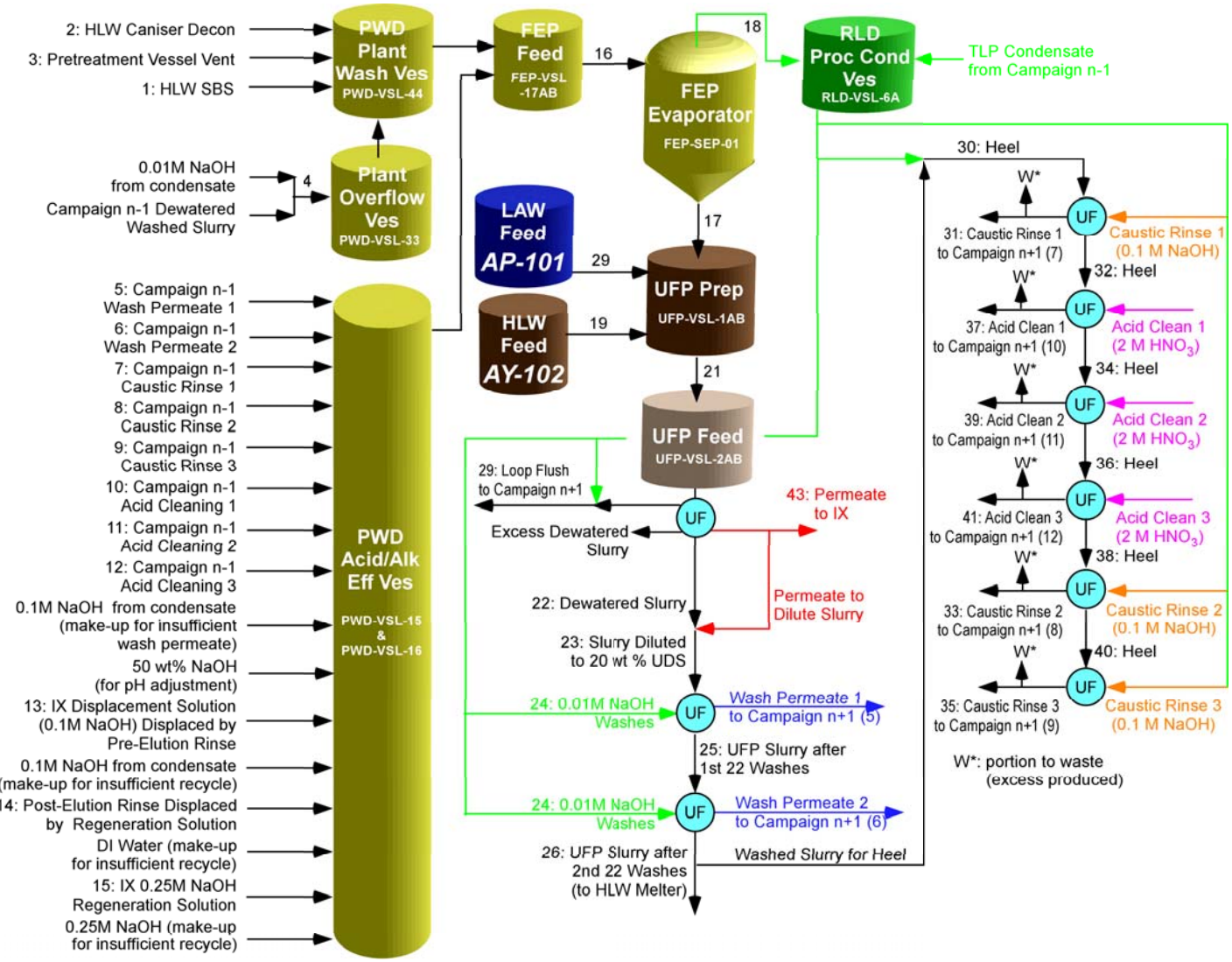

Figure J1. Product samples taken during Campaign II: FEP & UFP. The numbers refer to column results in Appendix J

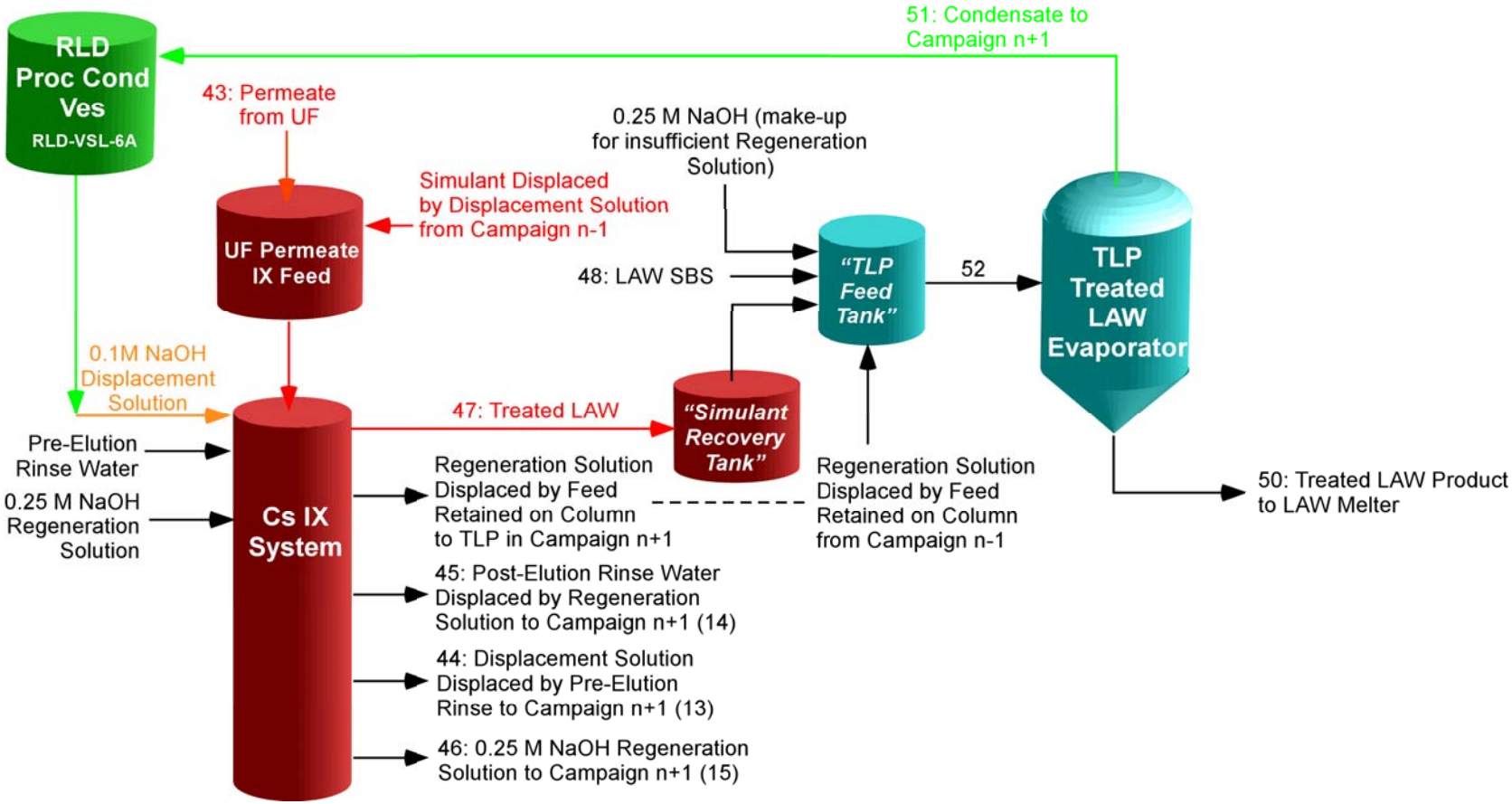

Figure J2. Product samples taken during Campaign II: CIX & TLP. The numbers refer to column of results in Appendix J

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	RECYCLES TO FEP EVAPORATOR						
	1	1	1	2	3	4	5	6
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	HLW-SBS-QUENCHER RECYCLE	HLW-SBS-QUENCHER RECYCLE	HLW-SBS-QUENCHER RECYCLE	HLW CANISTER DECON SOLUTION	PRETREATMENT VESSEL VENT SOLUTION	LOOP FLUSH FROM PREVIOUS CAMPAIGN	WASH PERMEATE FROM 1ST 22 WASHES FROM PREVIOUS CAMPAIGN	WASH PERMEATE FROM 2ND 22 WASHES FROM PREVIOUS CAMPAIGN
Volume of Stream (L)	**190.8**			**114.7**	**220.7**	**13.1**	**169.3**	**169.3**
Total Solids wt%	NM					8.39	3.73	10.94
Undissolved Solids wt%	NM					7.42	0.00	0.00
Supernate Solids wt%	NM					1.05	3.73	10.94
Density kg/L	1.010					1.063		
pH	NM					NM		
Dissolution or Preparation Method (for elements only)	As-Received	aqua regia	filtered				none	none
Comments	(Filtered after diluting to instrument range)	Measurement of total sample composition	Analysis is of sample minus undissolved solids	Simulant used	Simulant used	Composition is diluted washed slurry from previous campaign; combine 4.5L slurry + 8.6L 0.01M NaOH		
Elements by ICPES								
Units	**mg/L**	**mg/kg**	**mg/L**				**mg/L**	**mg/L**
Ag	<0.3	<7.50	<0.3				<0.6	<0.6
Al	16.6	18.9	0.669				3860	1040
B	522	599	506				<0.12	0.621
Ba	0.145	<0.50	1.81				<0.04	<0.04
Ca	9.01	9.22	5.89				<0.06	<0.06
Cd	0.380	0.738	0.0377				<0.04	<0.04
Ce	<0.7	<17.5	<0.7				<1.4	<1.4
Co	<0.08	<2.00	<0.08				<0.16	<0.16
Cr	5.96	12.3	3.69				94.0	26.0
Cu	1.46	<0.75	1.09				<0.06	<0.06
Fe	83.2	114	1.42				<0.08	<0.08
La	2.51	2.58	<0.1				<0.2	<0.2
Li	109	109	106				<0.4	<0.4
Mg	34.7	35.7	28.6				<0.01	<0.01
Mn	5.31	5.89	0.253				<0.02	<0.02
Mo	<0.1	<2.50	<0.1				<0.2	<0.2
Na	992	979	978	10166	2300		44200	14100
Nd	1.45	<22.5	<0.9				<1.8	<1.8
Ni	0.468	1.59	0.255				0.387	<0.12
P	0.932	<20.0	<0.8				740	139
Pb	1.67	<20.0	<0.8				<1.6	<1.6
Re	3.69	3.73	3.74					
S	117	122	121				385	102
Si	70.0	58.9	14.6				8.18	2.70
Sr	17.5	17.6	8.38				0.0767	0.0188
Ti	1.80	1.72	<0.03				<0.06	<0.06
V	<0.4	<10.0	<0.4					
W							44.0	12.0
Zn	18.9	20.4	0.751				<0.04	<0.04
Zr	0.336	0.796	<0.03				<0.06	<0.06
Elements by ICPMS (same units as ICPES)								
Rb	0.670							
Y								0.0110
Cs								
Pr								0.263
Bi								
Re								
Elements by Atomic Absorption (same units as ICPES)								
Cs							0.860	
K	<3.75						1000	
Na	918						52400	
Anions by Ion Chromatography								
units	**mg/L**						**mg/L**	**mg/L**
bromide	<10						27.0	<100
chloride	332						97.0	21.0
fluoride	43.0						36.0	7.00
formate	<10						165	10.0
nitrate	<10			17598			216	36.0
nitrite	<10						3170	528
oxalate	34.0						5530	4440
phosphate	991						2740	266
sulfate	287						1250	225
acetate	NM						35.0	101
citrate	NM						<10	<10
formate	NM						189	46.0
ammonium	NM							
Wet Chemistry								
total base M				0.149	0.1			
free hydroxide M				0.149	0.1			
total acid M								
carbonate by titration								
Carbon Analyses (unfiltered sample)								
units							**mg/L**	**mg/L**
total inorganic carbon (carbonate)							1180	355
total organic carbon (oxalate + citrate + acetate + formate)							210	205

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	7	7	8	9	8+9	10	11	12
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	CAUSTIC RINSE 1 FROM PREVIOUS CAMPAIGN	CAUSTIC RINSE 1 FROM PREVIOUS CAMPAIGN	CAUSTIC RINSE 2 FROM PREVIOUS CAMPAIGN	CAUSTIC RINSE 3 FROM PREVIOUS CAMPAIGN	CAUSTIC RINSES 1 & 2 COMBINED FROM PREVIOUS CAMPAIGN	NITRIC ACID CLEANING 1 FROM PREVIOUS CAMPAIGN	NITRIC ACID CLEANING 2 FROM PREVIOUS CAMPAIGN	NITRIC ACID CLEANING 3 FROM PREVIOUS CAMPAIGN
Volume of Stream (L)	**18.2**		**49.5**	**49.5**	**99.0**	**37.4**	**42.5**	**42.5**
Total Solids wt%	9.71				0.79	0.99	0.09	
Undissolved Solids wt%	8.27				0.00	0.99	0.09	
Supernate Solids wt%	1.57				0.79	0.00	0.00	
Density kg/L								
pH								
Dissolution or Preparation Method (for elements only)	microwave acid	Na peroxide fusion/ HCl uptake			microwave acid	none	none	none
Comments	Measurement of total sample composition	Measurement of total sample composition	Composition not measured	Composition not measured	Measurement of total sample composition			
Elements by ICPES								
Units	**mg/kg**	**mg/kg**			**mg/kg**	**mg/L**	**mg/L**	**mg/L**
Ag	129	410			<15.0	12.8	2.82	0.727
Al	5370	6680			<25.0	256	42.0	8.00
B		50.0				4.00	0	<0.12
Ba	191	190			<1.00	11.4	1.73	0.321
Ca	780	1070			<1.00	37.7	6.14	0.155
Cd	30.0	20.0			<1.00	1.35	0.239	0.0414
Ce	179	250			<35.0	11.6	1.82	<1.4
Co	<13.0	30.0			<4.00	0.377	<0.16	<0.16
Cr	292	310			<2.00	16.0	3.00	1.00
Cu	50.0	50.0			<1.00	2.40	0.505	0.108
Fe	21700	21500			9.00	1050	200	40.0
La	173	190			<5.00	<12	<12	<12
Li	<33.0	<40.0			<10.0	8.91	1.60	0.257
Mg	229	230			0.250	<0.4	<0.4	<0.4
Mn	4810	4750			2.00	10.9	2.02	0.376
Mo	<16.0	<20.0			<5.00	219	42.0	8.00
Na	9280				2110	<0.2	<0.2	<0.2
Nd	538	500			<45.0	1230	224	41.0
Ni	713				3.00	25.6	4.65	<1.8
P	351	350			<40.0	33.0	6.00	1.00
Pb	920	1110			<40.0	17.0	5.00	2.00
Re						47.0	9.00	<1.6
S	<164	260			<50.0	8.47	<2	<2
Si	7740	6310			722	98.0	20.0	5.00
Sr	180	190			0	9.00	4.00	1.00
Ti	5.00	10.0			<1.00	0.113	<0.06	<0.06
V						<0.8	<0.8	<0.8
W	<82.0	<100			<25.0	<1	<1	<1
Zn	46.0	180			1.00	3.61	0.643	0.0943
Zr	297	300			1.00	0.246	1.83	0.971
Elements by ICPMS (same units as ICPES)								
Rb								
Y	0.352				0.0160			
Cs	36.1				0.0220			
Pr	0.635				0.138			
Bi	124				0.0620			
Re								
Elements by Atomic Absorption (same units as ICPES)								
Cs	<16.4				<4.95	<0.1	<0.1	<0.1
K	39.2				<7.43	5.00	1.00	0.170
Na	9090				2070	1200	206	40.2
Anions by Ion Chromatography								
units	**mg/kg**				**mg/kg**			
bromide	<79				<100			
chloride	12.0				<20			
fluoride	7.00				<20			
formate	11.0				<100			
nitrate	23.0				12500			
nitrite	198				<100			
oxalate	1400				<100			
phosphate	328				<100			
sulfate	98.0				<50			
acetate								
citrate								
formate								
ammonium								
Wet Chemistry								
total base M								
free hydroxide M								
total acid M						1.56	1.95	1.96
carbonate by titration								
Carbon Analyses (unfiltered sample)								
units								
total inorganic carbon (carbonate)								
total organic carbon (oxalate + citrate + acetate + formate)								

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

											FEP FEED		
		10+11+12		13		14		15	15		16	16	
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty		COMBINED (3) NITRIC ACID CLEANINGS FROM PREVIOUS CAMPAIGN		IX DISPLACEMENT SOLUTION (0.1 M NaOH) DISPLACED BY PRE-ELUTION RINSE (water) FROM PREVIOUS CAMPAIGN		POST-ELUTION RINSE (water) DISPLACED BY REGENERATION SOLUTION (0.25 M NaOH) FROM PREVIOUS CAMPAIGN		IX REGENERATION SOLUTION RECYCLE FROM PREVIOUS CAMPAIGN	IX REGENERATION SOLUTION RECYCLE FROM PREVIOUS CAMPAIGN		FEP FEED	FEP FEED	
Volume of Stream (L)		**122.4**		**none**		**none**		**none**			**1118.2**		
Total Solids wt%											4.69		
Undissolved Solids wt%											0.17		
Supernate Solids wt%											4.53		
Density kg/L											1.037		
pH													
Dissolution or Preparation Method (for elements only)		microwave acid									microwave acid	Na peroxide fusion/ HCl uptake	
Comments		Measurement of total sample composition									Measurement of total sample composition	Measurement of total sample composition	
Elements by ICPES													
Units		**mg/kg**									**mg/kg**	**mg/kg**	
Ag		21.0									<60.0	<33.0	
Al		302									870	920	
B												<141	
Ba		9.00									5.19	<1.55	
Ca		32.0									<6.00	60.0	
Cd		2.00									<4.00	<6.00	
Ce		<33.0									<140	<126	
Co		<4.00									<16.0	20.0	
Cr		15.0									33.0	51.0	
Cu		2.00									<6.00	16.0	
Fe		1020									746	835	
La		7.00									<20.0	<12.1	
Li		<9.00									<40.0	27.8	
Mg		10.0									14.1	12.5	
Mn		212									156	151	
Mo		5.00									<20.0	<23.0	
Na		1240									14550		
Nd		<42.0									<180	<72.0	
Ni		35.0									20.8		
P		<38.0									<160	208	
Pb		<38.0									<160	<255	
Re													
S		<47.0									<200	219	
Si		878									2000	217	
Sr		8.00									11.9	13.6	
Ti		<1.00									7.37	<4.50	
V											<80.1		
W		<24.0									<100	<105	
Zn		2.00									4.90	<16.5	
Zr		13.0									23.2	<20.0	
Elements by ICPMS (same units as ICPES)													
Rb											0.371		
Y											1.17		
Cs		1.64									0.559		
Pr		0.120									3.66		
Bi		5.56											
Re													
Elements by Atomic Absorption (same units as ICPES)													
Cs		<4.72									<20		
K		<7.08									<30		
Na		1180									15500		
Anions by Ion Chromatography												**mg/L**	
units												**mg/L**	
bromide												32.0	
chloride												83.0	
fluoride												11.0	
formate												39.0	
nitrate												15000	
nitrite												487	
oxalate												1520	
phosphate												563	
sulfate												257	
acetate													
citrate													
formate													
ammonium													
Wet Chemistry													
total base M													
free hydroxide M													
total acid M													
carbonate by titration												<0.02	
Carbon Analyses (unfiltered sample)													
units													
total inorganic carbon (carbonate)												300	
total organic carbon (oxalate + citrate + acetate + formate)												290	

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	FEP BOTTOMS CONCENTRATE			FEP COND	SIMULANTS			
	17	17	17	18	19	19	20	20
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	FEP BOTTOMS CONCENTRATE	FEP BOTTOMS CONCENTRATE	FEP BOTTOMS CONCENTRATE	CONDENDATE FROM FEP EVAPORATOR TO RLD CONDENSATE	AY-102 SIMULANT FEED TO ULTRAFILTRATION	AY-102 SIMULANT FEED TO ULTRAFILTRATION	AP-101 SIMULANT FEED TO ULTRAFILTRATION	AP-101 SIMULANT FEED TO ULTRAFILTRATION
Volume of Stream (L)	**139.0**			**1014.0**	**252.4**		**671.5**	
Total Solids wt%	28.52	29.37		<0.1	26.85	26.75	31.94	
Undissolved Solids wt%	2.79	3.26	to left are	<0.1	11.83	11.67	0.00	
Supernate Solids wt%	26.47	26.99	duplicate		17.04	17.07	31.94	
Density kg/L	1.260	1.261	measurements	0.998	1.240		1.279	
pH		13.0		9.4				
Dissolution or Preparation Method (for elements only)	microwave acid	Na peroxide fusion/ HCl uptake	filtered		microwave acid	Na peroxide fusion/ HCl uptake	microwave acid	Na peroxide fusion/ HCl uptake
Comments	Measurement of total sample composition	Measurement of total sample composition	Analysis is of sample minus undissolved solids		Measurement of total sample composition	Measurement of total sample composition	Measurement of total sample composition	Measurement of total sample composition
Elements by ICPES								
Units	**mg/kg**	**mg/kg**	**mg/L**	**mg/L**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Ag	89.0	75.4	<0.6	<0.6	82.0	503	<45.8	29.2
Al	5230	5470	4640	<1	12900	14100	5840	5590
B		554	690	7.00		<133		<111
Ba	37.8	<1.45	<0.04	<0.04	236	206	<3.05	<1.20
Ca	56.0	220	<0.06	<0.06	912	1073	<4.58	18.0
Cd	6.17	<5.75	<0.04	<0.04	37.7	6.87	<3.05	<4.75
Ce	<101	<120	<1.4	<1.4	<96.0	295	<107	<99.0
Co	<11.6	<199	<0.16	<0.16	<10.9	<202	<12.2	<162
Cr	168	188	150	2.28	510	511	140	141
Cu	13.1	6.52	0.139	<0.06	62.8	66.0	<4.58	0
Fe	4441	4532	<0.08	<0.08	28892	28400	59.7	55.2
La	18.6	47.6	<0.2	<0.2	79.3	246	<15.3	10.9
Li	100	111	8.86	<0.4	<27.3	<20.0	<30.5	<16.5
Mg	77.4	82.3	0.0226	0.0210	306	301	5.60	4.31
Mn	942	940	<0.02	<0.02	6300	6160	<1.53	2.35
Mo	<14.4	<22.0	0.479	<0.2	<13.7	<22.0	18.3	<18.0
Na	94200		107000	30.0	67970		98985	
Nd	<130	84.4	<1.8	<1.8	245	683	<137	<57.0
Ni	161	909	0.357	<0.12	928		9.16	279
P	889	<245	1100	<1.6	1410	1290	210	<200
Pb	177		<1.6	<1.6	1340	1285	<122	
Re	<14.4							
S	465	720	790	<2	719	725	1250	1150
Si	981	1394	37.9	17.2	6831	8884	<2234	257
Sr	63.9	66.6	0.402	<0.012	225	233	<0.92	0.350
Ti	9.14	4.58	<0.06	<0.06	8.15	6.25	3.93	<3.55
V	<57.6				<54.7		<61.1	<83.0
W	<72.0	<100	90.0	<1	<68.3	<99.0	<76.4	
Zn	36.6	<15.7	1.86	<0.04	65.6	29.5	4.65	<12.9
Zr	68.0	62.2	0.0820	<0.06	390	128	<4.58	<16.0
Elements by ICPMS (same units as ICPES)								
Rb	1.00				3.71		4.74	
Y	7.12				41.0		0.0569	
Cs	12.1				15.1		4.71	
Pr	24.0				137		0.0174	
Bi	0.0448				5.59		0.0450	
Re								
Elements by Atomic Absorption (same units as ICPES)								
Cs	<14.4		13.4	<0.1	<13.7		<15.3	
K	242		305	<0.15	301		23900	
Na	92500		114000	4.14	74000		101000	
Anions by Ion Chromatography			**mg/L**	**mg/L**				
units	**mg/L**		**mg/L**	**mg/L**			**mg/L**	
bromide			53.0	<10			<100	
chloride			609	<2			1530	
fluoride			145	<2			28.0	
formate			408	<10			1380	
nitrate			119000	<10			105000	
nitrite			3740	<10			33400	
oxalate			1180	<10			1550	
phosphate			4240	<10			1150	
sulfate			1960	<5			3740	
acetate							1350	
citrate							<81	
formate							1120	
ammonium								
Wet Chemistry								
total base M	1.94							
free hydroxide M	0.359							
total acid M								
carbonate by titration	0.346							
Carbon Analyses (unfiltered sample)								
units	**mg/L**							
total inorganic carbon (carbonate)	1900							
total organic carbon (oxalate + citrate + acetate + formate)	1000							

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	ULTRAFILTER FEED				DEWATERED SLURRY			ADJUSTED SLURRY			WASH WATER	
	21	21	21		22	22		23	23		24	
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	ULTRAFILTER FEED (AY-102 + AP-101 + FEP BOTTOMS)	ULTRAFILTER FEED (AY-102 + AP-101 + FEP BOTTOMS)	ULTRAFILTER FEED (AY-102 + AP-101 + FEP BOTTOMS)		UFP SLURRY AFTER DEWATERING	UFP SLURRY AFTER DEWATERING		UFP SLURRY TO WASHING	UFP SLURRY TO WASHING		WATER FOR WASHING SLURRY FROM RLD CONDENSATE	
Volume of Stream (L)	**1038.3**				**117.0**			**117.0**			**282.5**	
Total Solids wt%	30.59		28.31		44.94	45.80		42.93	42.13			
Undissolved Solids wt%	3.22		0.00		23.50	23.51		21.49	20.11			
Supernate Solids wt%	28.28		28.31		28.03	29.14		27.31	27.56			
Density kg/L	1.276		1.250			1.470		1.410				
pH	13.6											
Dissolution or Preparation Method (for elements only)	microwave acid	Na peroxide fusion/ HCl uptake	filtered		microwave acid	Na peroxide fusion/ HCl uptake						
Comments	Measurement of total sample composition	Measurement of total sample composition	Analysis is of sample minus undissolved solids		Measurement of total sample composition	Measurement of total sample composition		Permeate added back in to dilute to ~20 wt% UDS, then volume reduced back to 117L			C2: C2 FEP condensate C3: C2 FEP + TLP + C3 FEP condensates C4: C2 FEP + TLP + C3 FEP + TLP condensates	
Elements by ICPES												
Units	**mg/kg**	**mg/kg**			**mg/kg**	**mg/kg**						
Ag	77.1	123	<0.532		110	990						
Al	6600	7800	7300		15700	19400						
B		<116	82.6			<151						
Ba	53.3	36.4	<0.022		429	458						
Ca	156	325	2.46		1810	1910						
Cd	11.9	<4.95	<0.02		80.2	61.0						
Ce	<94.0	<104	<0.864		<132	551						
Co	<10.8	0	<0.042		<15.1	<46.0						
Cr	230	244	161		780	764						
Cu	13.2	10.3	0.0649		127	141						
Fe	7429	7441	0.646		56200	55300						
La	<13.4	65.9	<0.188		126	478						
Li	<26.9	<17.2	1.23		90.8	91.0						
Mg	86.0	82.1	<0.012		650	627						
Mn	1630	1600	0.0397		12400	12200						
Mo	<13.4	<19.0	9.38		<18.9	<25.0						
Na	88825		111000		90600							
Nd	<121	188	<0.406		393	1370						
Ni	231		0.194		1840							
P	600	582	805		640	703						
Pb	372	328	1.86		2720	2530						
Re												
S	1050	884	1080		923	801						
Si	1115	2545	59.3		14041	17600						
Sr	47.1	63.0	<0.436		424	478						
Ti	<4.03	4.36	0.0685		16.4	12.0						
V	<53.8		<0.058		<75.7							
W	<67.2	<86.0	38.8		<94.6	<113						
Zn	22.4	<13.5	3.03		157	126						
Zr	98.2	32.6	0.363		728	762						
Elements by ICPMS (same units as ICPES)	**mg/kg**		**mg/L**		**mg/kg**							
Rb	3.26		5.12		42.7							
Y	7.92				94.1							
Cs	3.56		6.25		2.97							
Pr	26.7				294							
Bi	0.0563											
Re	NM											
Elements by Atomic Absorption (same units as ICPES)												
Cs	<13.4		5.67		<18.9							
K	14900		21000		13000							
Na	91200		122000		91500							
Anions by Ion Chromatography												
units	**mg/kg**	**mg/kg**	**mg/L**		**mg/kg**							
bromide	<42	<100	<10		<29							
chloride	973	925	1140		738							
fluoride	64.0	53.0	38.0		52.0							
formate	868	999	1120		700							
nitrate	73600	63600	85900		49700							
nitrite	40500	20200	22900		14100							
oxalate	3480	3610	733		23800							
phosphate	1890	1960	2390		1070							
sulfate	2730	2570	3170		2080							
acetate	1030		1210		723							
citrate	<189		<100		<52							
formate	840		941		622							
ammonium												
Wet Chemistry												
total base M												
free hydroxide M												
total acid M												
carbonate by titration												
Carbon Analyses (unfiltered sample)												
units			**mg/L**		**mg/kg**							
total inorganic carbon (carbonate)			4790		4920							
total organic carbon (oxalate + citrate + acetate + formate)			4010		8780							

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	PARTIALLY WASHED SLURRY		WASHED SLURRY			WASH PERMEATES		LOOP FLUSH
	25	25	26	26	26	27	28	29
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	UFP SLURRY AFTER FIRST 22 WASHES	UFP SLURRY AFTER FIRST 22 WASHES	UFP SLURRY AFTER SECOND 22 WASHES TO HLW VITRIFICATION	UFP SLURRY AFTER SECOND 22 WASHES TO HLW VITRIFICATION	UFP SLURRY AFTER SECOND 22 WASHES TO HLW VITRIFICATION	WASH PERMEATE FROM 1ST 22 WASHES TO NEXT CAMPAIGN	WASH PERMEATE FROM 2ND 22 WASHES TO NEXT CAMPAIGN	LOOP FLUSH TO NEXT CAMPAIGN
Volume of Stream (L)	**117.0**		**117.0**			**144.3**	**144.3**	**13.1**
Total Solids wt%			26.43	26.41	26.85	20.66	8.89	10.42
Undissolved Solids wt%			22.24	22.18	22.23	0.00		8.16
Supernate Solids wt%			5.39	5.44	5.94	20.66	8.89	2.46
Density kg/L			1.200			1.177	1.071	1.081
pH						12.0	12.3	
Dissolution or Preparation Method (for elements only)	microwave acid	Na peroxide fusion/ HCl uptake	microwave acid	Na peroxide fusion/ HCl uptake				
Comments	Measurement of total sample composition	Measurement of total sample composition	Measurement of total sample composition	Measurement of total sample composition				Composition is diluted washed slurry from this campaign; combine 4.5L slurry + 8.6L RLD condensate
Elements by ICPES								
Units	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**		**mg/L**	**mg/L**	
Ag	93.9	944	90.3	804		<0.6	<0.6	
Al	14300	16300	12400	13100		4950	1850	
B		<117		<150		63.0	20.0	
Ba	447	460	408	384		<0.04	<0.04	
Ca	1810	1923	1890	1914		<0.06	<0.06	
Cd	77.5	65.0	74.2	47.0		<0.04	<0.04	
Ce	327	546	123	497		<1.4	<1.4	
Co	<14.5	<36.0	<13.3	<45.0		<0.16	<0.16	
Cr	690	704	620	573		120	50.0	
Cu	131	126	133	113		0.190	<0.06	
Fe	52800	54478	55000	45800		0.979	0.185	
La	353	462	128	386		<0.2	<0.2	
Li	89.2	86.0	95.5	78.0		1.48	1.71	
Mg	610	619	640	509		<0.01	<0.01	
Mn	11700	11900	12200	10100		<0.02	<0.02	
Mo	<18.1	<20.0	<16.7	<25.0		6.88	2.35	
Na	47200		28300			73700	30400	
Nd	988	1300	372	1150		<1.8	<1.8	
Ni	1770		1680			0.217	0.145	
P	320	361	240	319		540	140	
Pb	3440	2570	2670	2170		1.70	<1.6	
Re								
S	493	482	194	489		840	290	
Si	13490	17100	14917	14600		41.8	22.1	
Sr	439	471	446	410		0.0475	0.0174	
Ti	10.2	13.0	14.8	11.0		<0.06	<0.06	
V	<72.5		<66.7					
W	<90.7	<87.0	<83.4	<112		40.0	10.0	
Zn	152	131	145	133		1.43	0.0818	
Zr	712	653	718	652		0.436	0.0872	
Elements by ICPMS (same units as ICPES)								
Rb			31.8			3.30	1.13	
Y			96.6					
Cs						4.01	1.41	
Pr			311					
Bi								
Re								
Elements by Atomic Absorption (same units as ICPES)								
Cs	<18.1		<16.7			5.43	1.69	
K	5770		3180			12000	4000	
Na	47100		27600			77000	27800	
Anions by Ion Chromatography								
units						**mg/L**	**mg/L**	
bromide						-10.0	-10.0	
chloride						878	284	
fluoride						26.0	-2.00	
formate						949	236	
nitrate						74000	19100	
nitrite						19800	5480	
oxalate						2030	6060	
phosphate						1700	430	
sulfate						2430	803	
acetate						825	257	
citrate						-100	-100	
formate						654	268	
ammonium								
Wet Chemistry								
total base M						1.25	0.671	
free hydroxide M						0.958	0.314	
total acid M								
carbonate by titration								
Carbon Analyses (unfiltered sample)								
units						**mg/kg**	**mg/L**	
total inorganic carbon (carbonate)						2570	2020	
total organic carbon (oxalate + citrate + acetate + formate)						4390	2680	

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	UFP HEEL		CAUSTIC RINSES (note more volume made than needed for next campaign)												
	30		31	31		32		33		34		35		36	
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	HEEL IN UFP FEED TANK AFTER LOOP FLUSH		CAUSTIC RINSE 1 RECYCLE TO NEXT CAMPAIGN	CAUSTIC RINSE 1 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER RINSE 1		CAUSTIC RINSE 2 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER RINSE 2		CAUSTIC RINSE 3 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER RINSE 3	
Volume of Stream (L)	**21.6**		**94.6**			**21.6**		**94.6**		**21.6**		**94.6**		**none**	
Total Solids wt%			7.46			7.46		0.66		0.66		0.81			
Undissolved Solids wt%			5.09			5.09		0.13		0.13		0.10			
Supernate Solids wt%			2.50			2.50		0.53		0.53		0.71			
Density kg/L			1.057			1.057		1.016		1.016		1.004			
pH															
Dissolution or Preparation Method (for elements only)			microwave acid	filtered				filtered				filtered			
Comments	Composition is 9.1 L washed slurry + 12.5 L RLD condensate		Measurement of total sample composition	Analysis is of sample minus undissolved solids		Same as caustic rinse 1 to left		Analysis is of sample minus undissolved solids		Same as caustic rinse 2 to left		Analysis is of sample minus undissolved solids			
Elements by ICPES															
Units			**mg/kg**	**mg/L**				**mg/L**				**mg/L**			
Ag			128	<0.532				0.676				<0.6			
Al			3420	404				12.0				3.60			
B				3.01				<0.18				<0.18			
Ba			116	<0.022				0.536				0.164			
Ca			346	2.62				8.33				7.03			
Cd			20.3	<0.02				0.0758				<0.04			
Ce			<117	<0.864				<17.28				<17.28			
Co			<13.4	<0.042				<0.086				0.102			
Cr			170	12.9				0.928				0.271			
Cu			35.9	<0.03				0.135				<0.06			
Fe			13970	<0.074				63.4				18.4			
La			<16.7	<0.188				<0.376				<0.376			
Li			<33.3	2.11				<0.19				<0.19			
Mg			155	0.0271				2.03				1.49			
Mn			3026	<0.018				13.3				3.93			
Mo			<16.7	<1.78				<0.356				<0.356			
Na			9850	5860				1320				1820			
Nd			<150	<0.406				2.01				<0.812			
Ni			463	<0.1				2.12				0.703			
P			<134	19.3				<1.246				<1.246			
Pb			660	<1.7				2.82				<1.6			
Re			<16.7												
S			<166	43.5				<2.078				<2.078			
Si			3140	18.6				18.4				15.4			
Sr			108	0.0184				<0.87				<0.87			
Ti			6.72	<0.058				0.572				0.185			
V			<66.6					<0.116				<0.116			
W			<83.1	1.85											
Zn			36.6	<0.05				0.261				0.102			
Zr			191	<0.112				<0.16				<0.16			
Elements by ICPMS (same units as ICPES)															
Rb															
Y															
Cs															
Pr															
Bi															
Re															
Elements by Atomic Absorption (same units as ICPES)															
Cs			<16.63	0.255				0.135				<0.1			
K			1010	762				7.66				3.01			
Na			10000	8800				1380				1930			
Anions by Ion Chromatography															
units				**mg/L**				**mg/L**				**mg/L**			
bromide				<10				<10				<10			
chloride				35.0				<2				<2			
fluoride				7.00				<2				<2			
formate				54.0				<10				<10			
nitrate				8720				31100				8900			
nitrite				732				<10				<10			
oxalate				4300				<10				<10			
phosphate				57.0				<10				<10			
sulfate				110				<5				<5			
acetate															
citrate															
formate															
ammonium															
Wet Chemistry															
total base M			0.226												
free hydroxide M			0.119												
total acid M								0.449				0.0623			
carbonate by titration															
Carbon Analyses (unfiltered sample)															
units															
total inorganic carbon (carbonate)															
total organic carbon (oxalate + citrate + acetate + formate)															

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	NITRIC ACID WASHES														
	37	37		38		39	39		40		41	41		42	
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	NITRIC ACID CLEANING 1 RECYCLE TO NEXT CAMPAIGN	NITRIC ACID CLEANING 1 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER NITRIC ACID CLEANING 1		NITRIC ACID CLEANING 2 RECYCLE TO NEXT CAMPAIGN	NITRIC ACID CLEANING 2 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER NITRIC ACID CLEANING 2		NITRIC ACID CLEANING 3 RECYCLE TO NEXT CAMPAIGN	NITRIC ACID CLEANING 3 RECYCLE TO NEXT CAMPAIGN		HEEL AFTER NITRIC ACID CLEANING 3	
Volume of Stream (L)	**94.6**			**21.6**		**94.6**			**21.6**		**94.6**			**21.6**	
Total Solids wt%	2.36					0.67					0.13				
Undissolved Solids wt%	0.12					0.00									
Supernate Solids wt%	2.24					0.67					0.13				
Density kg/L	1.051					1.055					1.055				
pH															
Dissolution or Preparation Method (for elements only)	microwave acid	filtered				microwave acid	filtered				none	none			
Comments	Measurement of total sample composition	Analysis is of sample minus undissolved solids		Same as acid cleaning 1 to left		Measurement of total sample composition	Analysis is of sample minus undissolved solids		Same as acid cleaning 2 to left					Same as acid cleaning 3 to left (no heel actually left for next campaign)	
Elements by ICPES															
Units	**mg/kg**	**mg/L**				**mg/kg**	**mg/L**				**mg/L**	**mg/L**			
Ag	174	2.03				96.9	0.770				1.18	2.20			
Al	653	476				160	129				36.4	37.4			
B		8.73					1.82				<0.984				
Ba	20.6	22.4				5.94	5.58				1.60	1.60			
Ca	<4.90	98.3				<4.20	30.6				13.2	5.60			
Cd	3.47	3.70				<1.40	0.918				0.260	0.300			
Ce	<114	26.6				<60.0	6.73				1.69	<1.68			
Co	<13.0	<0.042				<3.00	<0.042				<0.042	<0.56			
Cr	33.3	34.0				6.36	8.70				2.62	2.60			
Cu	7.68	6.13				<2.10	1.66				0.492	0.500			
Fe	2450	2490				622	655				182	181			
La	<16.3	21.2				<13.1	5.68				1.55	1.60			
Li	<32.5	4.07				<6.65	1.09				0.336	0.300			
Mg	25.1	29.3				4.62	8.80				3.33	2.10			
Mn	525	533				135	141				39.3	39.1			
Mo	<16.3	<1.78				<125	<1.78				<1.78	<0.3			
Na	2410	2480				589	730				217	209			
Nd	<147	61.8				<28.5	16.3				4.61	4.40			
Ni	87.0	83.7				20.8	21.3				6.25	6.20			
P	<130	6.25				<43.2	3.82				1.49	<1.78			
Pb	<130	121				<118	29.5				9.03	8.60			
Re															
S	162	16.4				<72.0	5.01				3.10	1.90			
Si	<1430	247				1330	<1520				25.6	27.0			
Sr	19.6	21.7				5.63	5.84				1.70	1.60			
Ti	53.1	0.298				<4.10	<0.058				<0.058	<0.06			
V	<65.0					<10.3									
W	<81.2	<0.218					<0.218				<0.218	<1.4			
Zn	4.79	7.00				<3.50	2.18				0.633	0.600			
Zr	30.1	12.9				19.1	6.59				2.00	2.50			
Elements by ICPMS (same units as ICPES)															
Rb															
Y															
Cs															
Pr															
Bi															
Re															
Elements by Atomic Absorption (same units as ICPES)															
Cs	<16.23	0.100					<0.1				<0.1				
K	242	272				<286	79.3				20.9				
Na	2350	2570					766				201				
Anions by Ion Chromatography															
units															
bromide															
chloride															
fluoride															
formate															
nitrate															
nitrite															
oxalate															
phosphate															
sulfate															
acetate															
citrate															
formate															
ammonium															
Wet Chemistry															
total base M															
free hydroxide M															
total acid M	1.20					1.61					1.74				
carbonate by titration															
Carbon Analyses (unfiltered sample)															
units															
total inorganic carbon (carbonate)															
total organic carbon (oxalate + citrate + acetate + formate)															

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	PERMEATE/IX FEED		IX RECYCLES TO NEXT CAMPAIGN				TLP EVAPOR
	43	43	44	45	46	46	47
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	PERMEATE FROM SLURRY DEWATERING/ IX FEED	PERMEATE FROM SLURRY DEWATERING/ IX FEED	IX DISPLACEMENT SOLUTION (0.1 M NaOH) DISPLACED BY PRE-ELUTION RINSE (water) TO NEXT CAMPAIGN	POST-ELUTION RINSE (water) DISPLACED BY REGENERATION SOLUTION (0.25 M NaOH) TO NEXT CAMPAIGN	IX REGENERATION SOLUTION RECYCLE TO NEXT CAMPAIGN	IX REGENERATION SOLUTION RECYCLE TO NEXT CAMPAIGN	IX PRODUCT TO TLP EVAPORATOR
Volume of Stream (L)	**922.9**		**negligible produced**	**19.0**	**22.5**		**856.0**
Total Solids wt%	28.36	28.09	0.70		0.00		27.93
Undissolved Solids wt%	0.00	0.00	0.00		0.00		
Supernate Solids wt%	28.36	28.09	0.70		0.00		27.93
Density kg/L	1.230	1.250					1.247
pH							
Dissolution or Preparation Method (for elements only)	none		filtered		filtered		
Comments	Volume reduced by permeate added back to dewatered slurry to make UDS ~20 wt%.	20 L used, so final permeate volume ~903 L. Actual permeate to IX ~884 L due to losses.	**Volume needed for next campaign was 36.7 L. 0.1 M NaOH used instead.** Analysis is of sample minus undissolved solids.	**Volume needed for next campaign was 36.7 L. DI water used to make up extra needed.**	Analysis is of sample minus undissolved solids	**Volume needed for next campaign was 43.0 L. 0.25 M NaOH used to make up extra needed.**	
Elements by ICPES							
Units	**mg/L**						
Ag	<0.6		<0.532	<0.532	<0.532		<0.6
Al	7050		96.6	2.85	7.24		7190
B	87.1		5.13	<0.984	2.20		79.5
Ba	<0.04		<0.022	<0.022	<0.022		<0.044
Ca	<0.06		<0.06	<0.06	<0.06		0.382
Cd	<0.04		<0.02	<0.02	<0.02		<0.04
Ce	<1.4		<0.864	<0.864	<0.864		<17.28
Co	<0.16		<0.042	<0.042	<0.042		<0.086
Cr	165		1.88	0.257	0.208		160
Cu	0.373		0.0307	<0.03	<0.03		0.279
Fe	1.76		<0.074	<0.074	<0.074		1.33
La	<0.2		<0.188	<0.188	<0.188		<0.376
Li	1.15		<0.096	<0.096	<0.096		1.07
Mg	<0.01		<0.012	<0.012	<0.012		<0.026
Mn	0.0288		<0.018	<0.018	<0.018		<0.034
Mo	9.31		<0.178	<0.178	<0.178		9.74
Na	119000		4440	149	498		110000
Nd	<1.8		<0.406	<0.406	<0.406		<0.812
Ni	0.376		<0.1	<0.1	<0.1		0.302
P	800		10.8	<0.624	1.49		775
Pb	1.68		<1.7	<1.7	<1.7		15.3
Re	0.585						
S	1200		39.6	<1.04	1.49		1152
Si	54.2		6.06	1.22	2.08		57.0
Sr	0.0691		<0.006	<0.006	<0.006		0.0715
Ti	0.0887		<0.058	<0.058	<0.058		<0.116
V	<0.8						
W	50.3		0.476	<0.218	<0.218		
Zn	3.05		<0.05	<0.05	<0.05		3.05
Zr	0.863		<0.112	<0.112	<0.112		0.514
Elements by ICPMS (same units as ICPES)							
Rb	4.93		0.330	0.0420			4.86
Y	<0.01						
Cs	5.91		0.324	0.887	0.0324	0.0336	0.00301
Pr	<0.01						
Bi	<0.01						
Re							0.572
Elements by Atomic Absorption (same units as ICPES)							
Cs	7.38		0.415	0.785	0.140		0.355
K	21200		1110	15.9	0.572		18900
Na	106500		4320	97.9	400		109000
Anions by Ion Chromatography							
units	**mg/L**						**mg/L**
bromide	<10						<100
chloride	1210						1090
fluoride	29.0						48.0
formate	1220						1020
nitrate	25200						74400
nitrite	85300						22400
oxalate	746						690
phosphate	2470						2210
sulfate	3390						2860
acetate	1280						1280
citrate	<100						<100
formate	1010						1020
ammonium							
Wet Chemistry							
total base M			0.131		0.00661		0.309
free hydroxide M			0.102		<0.002		0.138
total acid M				0.0177			0.0363
carbonate by titration							2346
Carbon Analyses (unfiltered sample)							
units	**mg/kg**						
total inorganic carbon (carbonate)	7750						
total organic carbon (oxalate + citrate + acetate + formate)	2000						

Table J1. Overall Chemical Compositions of SIPP Campaign II Process Streams

	ATOR FEEDS					TLP FEED		TLP PRODUCT			TLP CONDENSATE
	47		48	48		49		50	50		51
BLANK cells mean 'not measured'. Volumes will not balance due to measurement uncertainty	IX PRODUCT TO TLP EVAPORATOR		LAW SBS CONDENSATE	LAW SBS CONDENSATE		TLP EVAPORATOR FEED		TLP BOTTOMS CONCENTRATE TO LAW MELTER	TLP BOTTOMS CONCENTRATE TO LAW MELTER		TLP CONDENDATE TO RLD SYSTEM
Volume of Stream (L)			**783.0**			**1639.0**		**523.0**			**1116.0**
Total Solids wt%			0.26			16.24		41.30			0.00
Undissolved Solids wt%			0.17			0.09		0.31			0.00
Supernate Solids wt%			0.09			16.16		41.12			0.00
Density kg/L			1.030	1.002		1.136		1.384			0.997
pH			8.1								10.7
Dissolution or Preparation Method (for elements only)			aqua regia			filtered		microwave acid	filtered		
Comments			Measurement of total sample composition			Analysis is of sample minus undissolved solids		Measurement of total sample composition	Analysis is of sample minus undissolved solids		
Elements by ICPES											
Units			**mg/kg**			**mg/L**		**mg/kg**	**mg/L**		
Ag			<3.89			<0.6		<7.45	<0.6		<0.6
Al			7.53			3770		4810	11500		<0.862
B			132			91.7			274		3.31
Ba			<0.26			<0.044		<0.55	<0.044		<0.044
Ca			<0.39			2.22		29.7	3.56		<0.12
Cd			<0.26			<0.04		<0.50	<0.04		<0.04
Ce			<9.9			<17.28		<8.65	<17.28		<17.28
Co			<1.04			<0.086		<1.10	<0.086		<0.086
Cr			5.26			89.8		131	266		4.90
Cu			<0.39			0.162		<0.75	0.528		<0.06
Fe			11.7			0.558		20.3	1.39		<0.15
La			<1.29			<0.376		<4.65	<0.376		<0.376
Li			11.5			4.65		10.1	13.0		0.702
Mg			3.56			<0.026		4.09	<0.026		0.0377
Mn			<0.12			<0.034		<0.45	<0.034		<0.034
Mo			<1.29			5.44		10.0	15.3		<0.356
Na			587			59000		121000	174000		303
Nd			<11.6			<0.812		<2.45	<0.812		<0.196
Ni			0.343			0.275		<10.1	0.769		<0.812
P			<10.4			403		1.76	795		<0.12
Pb			<10.4			8.09		980	24.0		<1.246
Re			21.8								
S			78.0			667		<19.9	1906		<1.6
Si			21.8			41.7		1440	157		<2.078
Sr			<0.07			0.0164		260	0.0806		29.5
Ti			1.15			<0.116		0.170	0.345		<0.012
V			<5.19					4.90			<0.116
W			25.2								
Zn			1.29			12.6		31.4	37.8		<0.1
Zr			1.29			<0.16		3.14	1.04		<0.16
Elements by ICPMS (same units as ICPES)											
Rb	4.58					2.73		0.214	7.35		<
Y								0.00137	2.00E-05		<
Cs	0.00204		0.0724			0.168		0.357	0.380		<
Pr								4.90E-04	0.0148		<
Bi									0.0234		<
Re			6.98			9.41		0.810	28.0		<
Elements by Atomic Absorption (same units as ICPES)											
Cs						0.505		0.985	1.03		0.110
K			123			9530		34500	33100		0.346
Na			589			62400		190000	202000		17.4
Anions by Ion Chromatography											
units			**mg/L**			**mg/L**		**mg/L**	**mg/L**		
bromide			<86			<100		<100	<100		<100
chloride			627			753		2470	2520		<20
fluoride			146			70.0		51.0	39.0		<20
formate			33.0			626		1730	1620		<100
nitrate			135			42600		135000	125000		<100
nitrite			2580			13500		43200	40100		<100
oxalate			<86			389		1200	1150		<100
phosphate			<86			1290		3100	2410		<100
sulfate			233			1720		5490	5120		<50
acetate											<10
citrate											<10
formate											5.00
ammonium			1990			998		<100	<100		467
Wet Chemistry											
total base M						0.162					
free hydroxide M						0.0636					
total acid M						0.0282					
carbonate by titration						1081					
Carbon Analyses (unfiltered sample)											
units						**mg/L**		**mg/kg**	**mg/L**		**mg/L**
total inorganic carbon (carbonate)						4030		10800	12000		21.0
total organic carbon (oxalate + citrate + acetate + formate)						1360		4300	2800		34.3

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